THE NEW ST. PAUL'S PHASE 1A

APPENDIX 3A

CLINICAL SPECIFICATIONS AND FUNCTIONAL SPACE REQUIREMENTS

APPENDIX 3A - CLINICAL SPECIFICATIONS AND FUNCTIONAL SPACE REQUIREMENTS

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THE NEW ST. PAUL'S PHASE 1A

PART 1 - PROJECT OVERVIEW

APPENDIX 3A - CLINICAL SPECIFICATIONS AND FUNCTIONAL SPACE REQUIREMENTS

PROJECT OVERVIEW

1.1 BACKGROUND

1.1.1 The BC health system delivers excellent outcomes for many British Columbians across multiple service platforms. However, achieving an exceptional health care experience and consistent results have been challenging for several populations. Distinct populations such as those living with multiple chronic complex conditions are particularly affected by gaps in the system.

1.1.2 The dual pressures of increasing demand for health services and rising expenditures have compounded the health system's limitations. As in most other jurisdictions globally, it is the combined pressure of cost and demand that has created the burning platform; the health system is unsustainable and a new direction is essential. This presents the crux of the opportunity: 1) the system will pivot to maintain and expand quality services; 2) change is required to match available resources; and 3) a more accessible and understandable health system for Patients is imperative.

1.1.3 Providence Health Care Society (PHC) is uniquely positioned for the transformation agenda, and the redevelopment of SPH is the timely opportunity for a system-wide change. As the flagship facility of PHC's 125-year history of innovative and compassionate care across multiple environments, SPH manages large segments of the key populations flagged for particular attention by the Ministry of Health (the Ministry). As a smaller sub-system within the VCH structure it is feasible to completely redesign the acute care hospital and campus elements. The new model will inform future redevelopment opportunities elsewhere in BC.

1.1.4 A new campus will also replace the ailing infrastructure of the current SPH. The hospital's existing facilities have major infrastructure issues, such as seismic risk, presence of Hazardous Materials (HAZMAT) and challenges to accessibility standards. In addition, the size and configuration of the Clinical Spaces inhibit the delivery of best-practice care.

1.1.5 Furthermore, the investment from the Roman Catholic Archdiocese of Vancouver into the New St Paul's Hospital (NSPH) is an extraordinary contribution. It will represent the largest non-governmental contribution to a capital health care project in BC's history, and likely in Canada. This multiplies the value for tax dollars invested in the NSPH to an unprecedented level.

1.1.6 Collectively, the prospect of a greenfield build, free of the constraints typical of an urban environment, is a rare opportunity to completely rebuild an important health care resource for BC while realizing tremendous value for tax dollars. Most importantly, we are compelled to reimagine a new Health Campus as the rallying point for a retooled and sustainable system of care.

1.2 PROJECT VISION, GUIDING PRINCIPLES AND CLINICAL OBJECTIVES

1.2.1 Project Vision

1.2.1.1 St. Paul's redevelopment is at the forefront of helping to realize the Ministry's vision for the transformation of B.C.'s health care system. The nucleus of this transformation is the reimagining and creation of a new St. Paul's Health Campus within an integrated continuum of community-based services containing a core acute care hospital.

1.2.2 Guiding Principles and Clinical Objectives

1.2.2.1 Transformation of care requires not only system-wide change of services but also an appropriate physical environment to enable the transformation, to meet today's needs and to sustain them as future requirements evolve. Grounded in a robust engagement strategy for Patients, families and providers the following guiding principles and objectives emerged:

1.2.2.1(1) Focus on delivering the best Patient experience and health outcomes.

1.2.2.1(1)(a) To provide timely access to values-based, culturally and spiritually sensitive care and services as evidenced through both Patient experience and health outcomes- across primary, community and acute care.

1.2.2.1(1)(b) To enhance Person and Family-Centred Care through a more understandable health system engaging Patients as full partners.

1.2.2.1(1)(c) To enhance multi-disciplinary and cost-effective excellence in care, particularly for complex, chronic condition populations.

1.2.2.1(2) Strive to be at the forefront of exceptional care.

1.2.2.1(2)(a) To implement leading system models and best evidence-based practices, wrapping services around Patient populations more effectively than the current medical model.

1.2.2.1(2)(b) To implement flexible design for unanticipated demand, regional master planning, and maximal operational efficiency to reduce waste and maximize clinical resilience.

1.2.2.1(3) Design spaces that promote wellness for Patients and providers.

1.2.2.1(3)(a) To create a work environment that protects and enhances the physical and emotional safety of Patients, families and providers.

1.2.2.1(4) Integrate care, research, and teaching.

1.2.2.1(4)(a) To integrate programs together to improve the experience for Patients, learners and care providers through responsible information sharing.

1.2.2.1(4)(b) To drive innovation through intentional initiatives and support to take front-line ideas to action.

1.2.2.1(4)(c) To accelerate the practical application of medical breakthroughs.

1.2.2.1(5) Enable a learning organization.

1.2.2.1(5)(a) To support a leading culture of Person- and Family Centered Care innovation and excellence.

1.2.2.1(5)(b) To pursue data-driven quality improvement.

1.2.2.1(5)(c) To create a vibrant environment that attracts and retains the best and brightest care providers and researchers.

1.2.2.1(6) Leverage technology to improve quality and efficiency.

1.2.2.1(6)(a) To invest in cost-effective technology solutions consistent with an Advanced Digital Hospital that improve quality and value, including telemedicine solutions, integrated Electronic Medical Record (EMR), real-time quality metrics tracking, automated transportation of materials and wearable technology.

1.2.2.1(7) Foster partnerships to bring greater value to our Patients.

1.2.2.1(7)(a) To further the mandate of PHC and partner organizations through shared initiatives, metrics and accountability for performance benchmarks while advancing our combined learning and academic missions.

1.2.3 Key Design Objectives

1.2.3.1 To adopt Evidence-Based Design (EBD) principles benchmarked against the latest industry and sustainability standards.

1.2.3.2 To enable flexibility of service delivery and integration of services while retaining clinical excellence.

1.2.3.3 To maximize natural light, access and views to nature.

1.2.3.4 To provide a physically and spiritually healing environment that respects community values, including the healing traditions of the Musqueam, Squamish and Tsleil-Waututh First Nations.

1.2.3.5 To design space to optimize collaboration between Patients, care providers, learners, and researchers.

1.2.3.6 To create a healthy building to Leadership in Energy and Environmental Design (LEED) Gold standard and foster a safe environment for Patients, Staff and visitors to mitigate potential adverse events.

1.2.3.7 To incorporate Lean and other design methodologies to reduce waste and improve efficiencies, flows and access.

1.2.3.8 To enable modern and future technology to support care, learning, and innovation.

1.2.3.9 To simplify flows for all Patients, clinical and support activities that reflects intuitive Wayfinding and complies with Code Plus, Physical Design Components for an Elder-Friendly Hospital, latest edition.

1.2.3.10 To minimize the footprint for public movement and access to health services incorporate a vertically stacked central hub and spoke design.

1.2.3.11 To create horizontal and vertical adjacencies between inpatient and outpatients, maximizing natural light penetration.

1.2.3.12 To provide separate public entrances for vulnerable populations that include seniors, mental health and substance use patients.

1.2.4 Integrated Health Campus

1.2.4.1 For Patients and families, the redevelopment of SPH will offer an integrated care model that blends community and primary care services with a new Health Campus where Patients will be able to move seamlessly through the system. The approach will encompass the factors involved in disease causation, and the most effective and efficient therapeutic approaches to chronic disease management in both hospital and community settings.

1.2.4.2 The new and integrated campus will provide Patients with a system of care pathways that will position a culture of innovation, scientific inquiry and knowledge translation. The transformation of strong independent teams from across the system to work in formalized collaboration presents a tremendous opportunity. It aims to build on successful models and re-organize services to

produce an accessible health care system across the continuum and improve access and coordination of services focused on Patient needs.

1.2.4.3 Integrated clinical pathways will be designed to keep Patients healthy and support them through illness and back to health. Care delivery will also be strengthened through the presence of clinical research and teaching supporting the campus, continuing PHC's strong history of academic excellence and innovation. The campus will incorporate innovative programs that will reflect the Owner's commitment to important sectors of society, particularly those with complex chronic disease, frailty, substance use and mental health challenges.

1.2.5 New Acute Care Hospital

1.2.5.1 The Facility will see significant improvements, including:

1.2.5.1(1) A new, central location within the core of Vancouver, easily accessible by transit and major transportation routes; it will also be designed to be accessible and attractive to pedestrian traffic with improved navigation to and from services on the site.

1.2.5.1(2) A flexible design on a larger footprint, allowing for appropriate spacing and distribution of facilities, while still maximizing greenspace, environmental sustainability, flow and natural light to enhance Person- and Family-Centred Care and wellness.

1.2.5.1(3) Improved inter-professional care due to the grouping of services within the hospital and connecting to additional specialized services available on the new Health Campus; providing streamlined, same-day, same-site service where possible.

1.2.5.1(4) Within the Facility, grouping of services will support interdependencies and gain efficiencies, including:

1.2.5.1(4)(a) Surgical and Interventional Platform:

1.2.5.1.4.(a).1 Deployment of standardized, surgical and interventional service platform redesign, leveraging universal interventional suites to improve space utilization and improve efficiencies relating to Staff interaction within these spaces.

1.2.5.1(4)(b) Creation of combined pre-/post-recovery areas:

1.2.5.1.4.(b).1 Supporting best practice design for surgical and interventional services as well as minimizing the amount of movement of Patients, Staff and resources to support Patients.

1.2.5.1(4)(c) Grouping of obstetrical Operating Rooms (OR) and maternity services:

1.2.5.1.4.(c).1 To provide timely, efficient and appropriate services, facilitating the sharing of clinical information and easing navigation for providers, Patients and families.

1.2.5.1(4)(d) Grouping of all critical care services:

1.2.5.1.4.(d).1 To achieve economies of scale.

1.2.5.1(5) Through the implementation of these design and service delivery improvements, as well as the planned engagement with research and academic partners the new acute care hospital is also intended to realize improved integration of teaching, research and clinical service delivery.

1.2.6 Research Centre

1.2.6.1 Research forms an integral part of the activity, mission and culture of SPH and will be reflected in the development of the new Health Campus with:

1.2.6.1(1) Research activity and shared space embedded in clinical environment.

1.2.6.1(2) The current site master plan contemplates a Clinical Support and Research Centre (CSRC) located adjacent and linked to the NSPH in the development of the wider Health Campus. The CSRC will contain laboratory space for wet and dry activities, with embedded amenity space for social support and interaction of the research community, administration and technical support space and Front of House Reception, meeting and conferencing facilities. The CSRC will be delivered as part of a separate project phase.

1.2.6.2 The intent is that the CSRC will work as an integrated whole providing an environment within which clinical care, research and learning can work seamlessly and in a mutually supportive framework.

1.2.7 Professional Offices and Provider Amenity Facilities

1.2.7.1 The final phase of the new Health Campus (not in the scope of this Project) and fully integrated with the other campus elements from a physical and operational perspective, will provide a flexible mixed-use professional office building and other provider amenities including a fitness centre and childcare centre.

1.3 CURRENT CLINICAL PROGRAMS

1.3.1 The following is a summary of current SPH programs and their unique program characteristics:

1.3.1.1 Emergency Services

1.3.1.1(1) Largest provider of emergency services to the disenfranchised populations in the province.

1.3.1.1(2) Leaders in emergency care for complex medical populations including those with multiple chronic diseases: HIV, kidney, heart.

1.3.1.1(3) Provincial innovator in strategies to manage ED congestion: diagnostic treatment unit, rapid assessment zone.

1.3.1.1(4) Fastest door-to-physician time in Western Canada for the past three years (WEDOC).

1.3.1.1(5) The only extra-corporeal cardiopulmonary resuscitation program in Canada for Patients with refractory cardiac arrest.

1.3.1.2 Intensive Care

1.3.1.2(1) Leading provincial resource serving critically ill pregnant and postpartum women in BC.

1.3.1.2(2) Leading centre caring for critically ill marginalized and vulnerable populations.

1.3.1.2(3) Provincial referral centre for severely ill Patients with kidney, heart and lung problems.

1.3.1.3 Heart and Lung

1.3.1.3(1) Provincial referral centre for heart failure: medical, reconstructive surgical (including transplant), mechanical circulatory support for acute and chronic heart failure.

1.3.1.3(2) Leaders of the provincial pacemaker quality program.

1.3.1.3(3) World leader in structural heart disease, leading innovation and application of transcatheter valve therapy.

1.3.1.3(4) Global leader in inherited arrhythmia, including founding the Canada-wide Hearts in Rhythm Organization (HiRO).

1.3.1.3(5) Provincial hub for adult congenital heart disease – with the only clinic in BC equipped with a shared care model supporting the medical, surgical, and psychosocial problems of this growing population.

1.3.1.3(6) Provincial referral centre for the most complex lung disease Patients in the province, including several multidisciplinary clinics that are unique in BC: chronic obstructive pulmonary disease, asthma, lung cancer, cystic fibrosis, interstitial lung disease and systemic sclerosis.

1.3.1.3(7) One of two major respiratory medicine teaching centres in the province.

1.3.1.3(8) One of the largest and most successful lung research programs in the country (Centre for Heart Lung Innovation) and the largest lung research program in the province.

1.3.1.4 Renal Health

1.3.1.4(1) Innovators of multidisciplinary kidney care, including the most comprehensive integrated clinic for kidney, diabetes, and cardiac care.

1.3.1.4(2) Outreach programs to the Sunshine Coast, Squamish and Whitehorse care for populations who would otherwise have barriers to access.

1.3.1.4(3) First pan-Canadian hub for Patient Oriented Research on Kidney Disease.

1.3.1.5 Medicine

1.3.1.5(1) Focus on high complexity, interdisciplinary care with learners from BC's leading academic institutions.

1.3.1.5(2) Many Patients transferred from smaller communities throughout the province.

1.3.1.5(3) Leaders in hypertension, cardiovascular disease, social determinants of health and medical education.

1.3.1.5(4) Outreach and telemedicine clinics in rural and remote areas of BC for specialist care for populations who would otherwise have barriers to access due to travel, work absence and financial constraints.

1.3.1.5(5) Hematopathology is a provincial referral centre for the Inherited Bleeding and Red Cell Disorders program.

1.3.1.5(6) Home to the most efficient hospital –based GI endoscopy unit in BC.

1.3.1.5(7) Leaders in unique collaborative clinics serving BC: combined respirology and rheumatology; dermatology and rheumatology; and pregnancy in rheumatic disease.

1.3.1.6 Surgery

1.3.1.6(1) Most comprehensive regional and cardiac anesthesia programs in BC.

1.3.1.6(2) Leading provincial multidisciplinary pain service.

1.3.1.6(3) Largest colorectal program in BC, including the provincial multidisciplinary conference for all rectal cancer Patients in the province.

1.3.1.6(4) Only collaborative teaching and care program with a shared care vascular surgery and IR program in BC.

1.3.1.6(5) Major provincial referral centre for urology, including collaboration with the colorectal service for complex cancer resection and reconstruction. Second largest kidney transplant service in Canada.

1.3.1.6(6) Largest provincial referral centre for peripheral nerve and brachial plexus reconstruction, and only facial reanimation service in the province.

1.3.1.6(7) Largest volume complex elbow and wrist reconstruction service in the province and is home to BC's most complex foot and ankle reconstruction.

1.3.1.6(8) Home to BC's Adult Cochlear Implant (CI) and Auditory Brainstem Implant Program, and the only centre serving deaf and hard-of-hearing adults.

1.3.1.6(9) Major provincial referral centre for sinonasal disorders.

1.3.1.6(10) Home to BC's Centre for Pelvic Floor Competency.

1.3.1.7 Maternity

1.3.1.7(1) The only hospital in the province resourced to manage pregnancy and complex heart, kidney and bowel problems.

1.3.1.7(2) Unique partnership with BC Women's and Children's Hospital for BC's most complex maternity cases.

1.3.1.8 Mental Health

1.3.1.8(1) Founding site and provincial leaders scaling the FOUNDRY model supporting youth and young adults with health and wellness needs.

1.3.1.8(2) Largest provider of care and leaders in accessibility for populations with mental health problems and social and substance use challenges.

1.3.1.8(3) Home to the region's only geriatric psychiatry unit focused on serious mental health disorders with associated cognitive and behavioural problems.

1.3.1.9 Urban Health

1.3.1.9(1) Provincial referral centre for acutely ill HIV positive Patients and the highest volume centre providing HIV/ AIDS care in Canada.

1.3.1.9(2) Provincial and national leader in harm reduction strategies for substance use.

1.3.1.9(3) Provincial leader in culturally safe and sensitive services for Indigenous health, including on-site cultural services and healing ceremonies in an All Nations Sacred Space.

1.3.1.10 Elder Services

1.3.1.10(1) Uniquely comprehensive elder care services spanning the continuum of care from home to acute services.

1.3.1.10(2) Provincial leaders in coordinated, integrated specialty elder care.

1.3.1.10(3) Innovators in telemedicine for elder populations who would otherwise have barriers to access.

1.3.1.11 Medical Imaging

1.3.1.11(1) Most prolific cardiac imaging department in Canada, and global leader in cardiac imaging for structural heart disease.

1.3.1.11(2) Leading provider of cardiac Magnetic Resonance Imaging (MRI) in the province.

1.3.1.11(3) Largest musculoskeletal ultrasound program in the province.

1.3.1.12 Pathology and Laboratory

1.3.1.12(1) Home to the provincial renal pathology program.

1.3.1.12(2) Home to the provincial cardiovascular pathology program and heart tissue registry.

1.3.1.12(3) Global leaders in assay and biomarker development for clinical (applied) proteomics.

1.3.1.13 Family Practice and Primary Care

1.3.1.13(1) Unique collaboration with primary care providers in multiple clinical areas: Urban Health; Mental Health; Foot and Ankle Screening and Triage Clinic; Elder Care; and Palliative Care.

1.3.1.13(2) More than 280 family practitioners with privileges at PHC.

1.3.1.14 Research, Academics and Teaching

1.3.1.14(1) Globally recognized resource for biobanking in heart and lung.

1.3.1.14(2) Leading translational research centre for lung disease in BC and globally.

1.3.1.14(3) Nationally recognized clinical outcomes research unit, with multidisciplinary collaboration.

1.3.1.14(4) Internationally impactful clinical trials results, including the SALOME trial studying the effectiveness of long term opioid treatment in heroin addiction.

1.3.1.14(5) Home to the federally funded national clinical trials network in HIV.

1.3.1.14(6) Global leaders in HIV/ AIDS treatment, innovating to produce the Treatment as Prevention strategy that has been adopted by the United Nations.

1.3.1.14(7) BC's largest and leading integrated research, education and clinical care centre in substance use.

1.4 FUTURE CLINICAL COMPONENTS

1.4.1 Program requirements and space analysis for the Functional Components within the scope of the Facility will be reviewed according to the following schedule:

1.4.1.1 Component A, Emergency Services

1.4.1.2 Component B, Critical Care Complex

1.4.1.3 Component C, Inpatient Care

1.4.1.4 Component D, Renal Outpatient

1.4.1.5 Component E, Maternity Centre

1.4.1.6 Component F, Urban Health and Integrated Mental Health and Substance Use

1.4.1.7 Component G, Surgical and Interventional Services

1.4.1.8 Component H, Outpatient Care Centre

1.4.1.9 Component I, Medical Imaging

1.4.1.10 Component J, Clinical Support Services

1.4.1.11 Component K, Centre for Healthy Aging

1.4.1.12 Component L, Rehabilitation Centre

1.4.1.13 Component M, Main Entrance and Public Services

1.4.1.14 Component N, Education and Learning

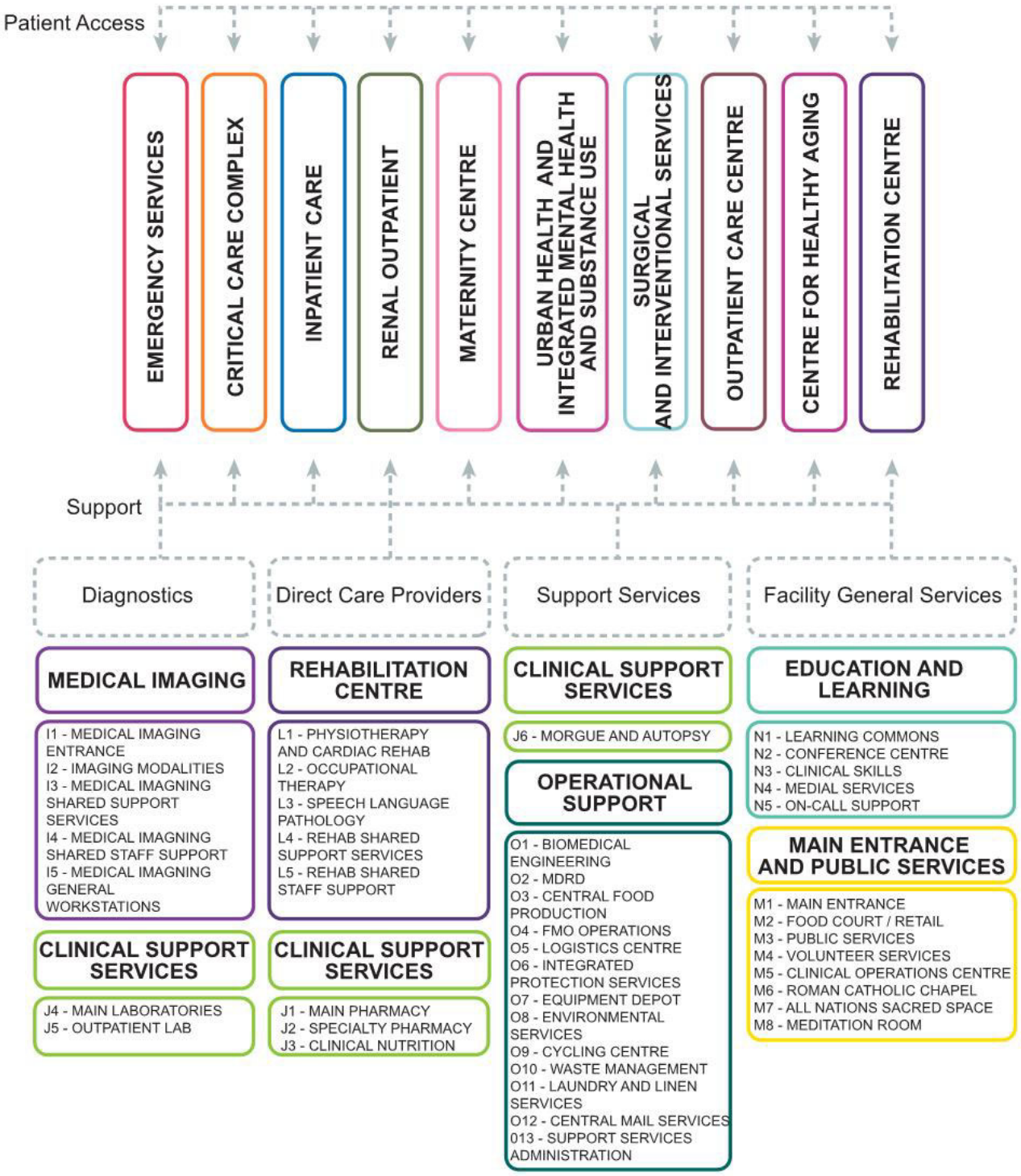
1.4.1.15 Component O, Operational Support

1.4.2 The new St. Paul's Hospital Phase 1A Project Functional Components area summary table is shown below.

ST. PAUL'S HOSPITAL PHASE 1A PROJECT AREA SUMMARY	
Component	**Total NSM**
A. Emergency Services	2,702.50
B. Critical Care Complex	3,587.50
C. Inpatient Care	18,857.60
D. Renal Outpatient	2,112.50
E. Maternity Centre	2,548.50
F. Urban Health and Integrated Mental Health and Substance Use	4,504.20
G. Surgical and Interventional Services	7,620.10
H. Outpatient Care Centre	5,346.00
I. Medical Imaging	3,343.90
J. Clinical Support Services	4,378.20
K. Centre for Healthy Aging	1,041.50
L. Rehabilitation Centre	1,229.50
M. Main Entrance and Public Services	2,109.20
N. Education and Learning	2,251.50
O. Operational Support	5,268.60
GRAND TOTAL	**66,901.30**

1.4.3 The following diagram illustrates the various care and support Components which form the basis of this Appendix and how they interrelate. Each Functional Component is described in more detail in its associated Part 2 - Functional Components.

CARE AND SUPPORT COMPONENTS



1.5 INTEGRATED APPROACH TO CLINICAL PLANNING

1.5.1 Future programs and services have been planned based on projected demand for services by the clinical team. During this planning, an integrated facility design approach has been central to the process and an emphasis has been placed on the Patient experience, clinical flow, intuitive Wayfinding, natural light and critical adjacencies of internal functions.

1.5.2 The engagement strategy sought to share accurate and timely information about the Project, identify stakeholder interests and concerns, obtain meaningful feedback, ideas and recommendations from stakeholders and broaden stakeholder understanding of and support for the project and to proactively manage issues early in the process.

1.5.3 Key stakeholders for the project include Patients and their families; executive and key leads with the Ministry, VCH and PHC; physicians, program leads and nursing, medical, allied health and support Staff; post-secondary academic institutions and researchers; local First Nations and Indigenous organizations; elected officials; City of Vancouver; local and provincial non-profit organizations; St. Paul's Foundation; members of the public and community advocates; and many others.

1.5.4 The seven (7) flows of medicine have been followed for the integrated facility design: Patients, providers, supplies, medications, information, equipment and families flows throughout the Facility in order to provide optimum efficiency and effectiveness of services and reduce waste.

1.5.5 Prior to preparation of this Appendix, three (3) major phases of planning have occurred; the development of the Clinical Services Plan (CSP), development of the Functional Program and preparation of Indicative Design of the Facility. The current slate of programs was divided into 15 Components with unique clinical needs, occupancy and adjacencies.

1.5.6 Fundamental to the successful redevelopment of St. Paul's is an effective process to strengthen primary and community care for the populations we serve. In partnership, PHC, VCH and the Division of Family Practice will build a model of primary care to meet the needs of the populations served. The model advances a Primary Care Network that is closely linked to a larger Integrated Health Care System that achieves the quadruple aim of improved population health, improved Patient and provider experience of care and improves the cost of care.

1.5.7 The planning horizon for both the CSP and the Functional Program is 2030. The CSP indicates that while some volume of care will be redirected to primary care and community settings, Patients who do require admission will be of higher acuity and may have multiple co-morbidities, which will be addressed in a coordinated manner. As such, a modest increase in clinical capacity is anticipated. The functional program was written from a program based, operational perspective incorporating the academic clinical grouping structure reflective of the Patient's journey through the care system.

1.5.8 The key functional content was then translated in to space requirements in a Schedule of Accommodations (SoA), taking into account international best practice planning standards including CSA Z8000 Canadian Healthcare Facilities, considering in particular:

1.5.8.1 The number and purpose of both primary and support spaces required to ensure the optimal functioning of the department at projected activity and throughput levels. This takes into account:

1.5.8.1(1) LEAN thinking including on-stage/off-stage functionality.

1.5.8.1(2) Optimal target asset utilization including consideration of throughput and operational schedules.

1.5.8.2 Space standards for all spaces taking into account clinical room loading of fixed and mobile/movable fittings and equipment, number of people and all critical dimensions to ensure safe and efficient operation and functionality.

1.6 MODELS OF CARE

1.6.1 The background for the SPH models of care is derived from the following 5 priorities identified by the Ministry, which inform the vision for the NSPH:

1.6.1.1 Priority 1 - Establish Primary Care Networks;

1.6.1.2 Priority 2 - Services for Patients Who Are Medically Complex and/or Frail Seniors;

1.6.1.3 Priority 3 - Services for Patients Who Are Medically Complex and Require Support with Mental Health and/or Substance Use;

1.6.1.4 Priority 4 - Services for Patients Requiring Surgery; and

1.6.1.5 Priority 5 - Providing Quality Sustainable Rural Health Services.

1.6.2 The new St Paul's Hospital is a generational opportunity to redesign the care model, shifting from silos of care in the medical model to greater integration across populations. Blending and building on the vision of the diverse range of NSPH stakeholders produces a compelling care model that will benefit the populations St. Paul's serves. Dedication to the care experience is essential, exposing care gaps and directing quality initiatives appropriately. The commitment is to do this effectively for all Patients and with special intention for the specific groups identified by the Ministry due to their vulnerability.

1.6.3 By reorganizing services into integrated care programs, the Facility will neighbour services in a way that is simpler for Patients, improves quality of the services and will organically propel innovation by juxtaposing specialty care teams that have not traditionally shared clinical environments. It encourages consideration for how new fields like genomic medicine can be folded into care through the exciting future of personalized medicine. It demands that St. Paul's connect services at home, in the community and on the campus into a single resilient and flexible system.

1.6.4 In realizing the Ministry's strategic initiatives, St. Paul's will maintain its traditional departmental and divisional structure and reorganize clinic services into dynamic integrated care programs. Formally linked to Primary Care Networks in the community, each integrated care program will have two (2) guiding objectives:

1.6.4.1 To wrap services around Patient populations better than the current medical model; and

1.6.4.2 To strengthen clinic services on the campus – particularly for complex, chronic condition populations that benefit from: multi-specialty, team-based care and coordination; specialized equipment; advanced diagnostics; and sterile procedural space.

1.6.5 Clinics will no longer primarily support the acute hospital. Rather, the Outpatient Care Centre will be outward facing to the community, backstopped by the acute hospital to reduce reliance on acute services and mandate formal linkages across the system for both scheduled and unscheduled services, shared accountability for outcomes and an unprecedented level of coordination across services.

1.6.6 In contrast to the campus-delivered domain of specialized care, the community-delivered integrated care programs will be led by primary care physicians and nurse practitioners with smaller teams of allied health professionals, and few specialists depending on the needs of the population. This shared community-campus structure for integrated care programs will improve access and coordination across the health continuum, making it the dominant and more cost effective health care delivery vehicle relative to hospital-based services.

1.6.7 This model represents a shift in care and, although universal, it will be applied most rapidly to four key populations: elders' care and healthy aging; mental health; substance use; complex and chronic multi-morbid care. Scaling this model to other programs will achieve better clustering of services for Patients across the health continuum.

1.6.8 In considering how St. Paul's best brings value to the Patients the integration of quality, innovation and clinical research enterprise will be essential to success. Getting this right will mean regular and organic exchange of ideas at the intersection of clinical and research flows and enhance the speed of knowledge translation into the clinical arena. In the new system this would look less like 'bench to bedside' and more like 'bench to Person' wherever they may be – at home, the outpatient clinic, the operating table or the inpatient bed.

1.6.9 Acknowledging that future models of care will continue to evolve through an emergent design process drawing on the above strategic initiatives established by the Ministry, the future key initiatives for the NSPH are:

1.6.9.1 Primary and community care integration: The New St Paul's

1.6.9.1(1) In partnership with VCH and the Division of Family Practice, PHC will build a model of primary care to meet the needs of the population in the local health areas served. This model is an

essential part of St. Paul's transformation as it rebuilds on the new Station Street site and can be scaled to other areas and populations. The model advances a Primary Care Network (PCN) that is integrated with the larger health system that achieves the IHI Quadruple Aim goals of improving the health of populations, improving the Patient experience of care and reducing the per capita cost of health care, in addition to improving the provider experience. The Ministry has defined a Primary Care Network as a community based group of full service family practices (Patient medical homes; PMH) formally linked with health authority delivered primary care services. It is imperative that the new Health Campus is tightly integrated with the Primary Care Networks to coordinate care for Patients who visit the campus (or virtually connect) for specialized services. The NSPH has programmed primary and community care integration in four specific initiatives:

1.6.9.1(1)(a) Create a new primary care clinic in the West End.

1.6.9.1(1)(b) Support the development of a Primary Care Network in the West End.

1.6.9.1(1)(c) Create a primary care clinic at the NSPH for urgent and short-term care. The primary care clinic will be located in the clinic space closely linked to the Primary Care Triage and Access Centre and to the PCN in the West End.

1.6.9.1(1)(d) Create a Primary Care Triage and Access Centre adjacent to the ED developed in partnership with existing primary care clinics, Vancouver Division of Family Practice, VCH, 811 and BC Emergency Health Services (BCEHS).

1.6.9.2 Centre for Healthy Aging: Model of Care (MOC) for the medically complex and frail

1.6.9.2(1) The NSPH will include a Centre for Healthy Aging, focusing on clinics designed to manage increasing complexity and multi-morbidity for this important and growing population. This will be an inter-professional, multispecialty clinic environment related to frail and vulnerable older adults who are living in the community, aiming to generate strong care plans and support to community-based services. Capacity for short stay assessment and treatment will reduce admission requirements to the acute hospital.

1.6.9.3 Living with complex and chronic disease: Strategy supporting multi-morbidity

1.6.9.3(1) Multi-morbidity is commonly defined as having three (3) or more chronic diseases (e.g., the common triad of renal, cardiac disease

and diabetes). On average, admitted Patients at St. Paul's have at least five chronic diseases that are active and affecting their quality of life and function. A significant proportion of medically multi-morbid Patients also have comorbid mental health diagnoses and/or substance use disorders that can make their care challenging. The importance of inter-professional collaboration between primary care providers and specialists (internists, heart, lung, kidney and others) in a shared clinical space is recognized in the new model, which outlines Specialized Care Programs that include specialist services in the community.

1.6.9.3(2) St. Paul's Hospital has an excellent Clinical Teaching Unit (CTU) program which admits the majority of acutely ill medical Patients from the ED and accepts complex Patients who need specialized assessment and management from across British Columbia. The CTU attending Staff is largely General Internal Medicine (GIM) specialists and Geriatricians who are well equipped to work in inter-professional teams for these complex Patients. They have a generalist and holistic view and are comfortable managing multi-morbidity and the resulting functional decline Patients experience when hospitalized with acute illness. Strong relationships with the Consult Liaison Psychiatry Service and Addiction Medicine Consult Service strengthen care plans for Patients with active psychiatric and addiction issues. Similarly, since individuals with consequences of substance use present throughout the hospital, the Addiction Medicine Consult Service also supports care of these Patients throughout medical, surgical, mental health and other hospital environments.

1.6.9.3(2)(a) Mental Health and Interdisciplinary Substance Use: Model for integrated care - Building on PHC's rich history of meeting the needs of the communities St. Paul's serves, with an emphasis on the marginalized and socially excluded, St. Paul's supports a strengths-based and trauma-informed MOC, rooted in the belief that all Patients can and will hope for recovery and healthy lives.

1.6.9.3(2)(b) Addressing Intersectionality: Multiple specialties, one care experience - Moving care administration away from singular program structures towards services that are based on the expressed needs of Patients will enable PHC to address the intersecting social identities and health challenges of populations facing mental illness, social exclusion, substance use and its consequences, including chronic medical conditions and communicable diseases. St. Paul's recognizes that

gender, race, class, age, pathology, addiction and exposure to communicable diseases interact on multiple and often simultaneous levels. Thus, offering care for mental health, substance use and chronic medical conditions in isolation of each other fails to recognize the inextricable links of other medical or social elements that intersect to affect a Patient's ability to achieve their maximum potential.

1.6.9.3(2)(c) Interdisciplinary Substance Use Team - St. Paul's recognizes the need for evidence based substance use care and treatment modalities. Models of care for individuals with substance use challenges often will differ markedly from traditional approaches where substance use is not present. The Interdisciplinary Substance Use team is supported by the BC Centre on Substance Use which hosts PHC-based fellowship training for physicians, nurses and social workers in evidence-based substance use care and will enable us to fully integrate with community-based services across the spectrum from and focus on providing the highly specialized care for which St. Paul's is known.

1.6.9.3(3) Part of the transformation for the NSPH will be creating integrated outpatient service for people with severe, complex mental health and substance use disorders in combination with complex medical/psychosocial needs. This consolidated outpatient service is an integrated multi-specialist outpatient clinic that addresses both morbidity and the intersectionality of mental illness, substance use, communicable disease and the urban health risks faced by our Patient population. Clinical practice will be grounded in and directed by a thorough understanding of the neurological, biological, psychological and social effects of trauma and interpersonal violence and the prevalence of these experiences in Persons who require services. Throughout the program, cultural humility and cultural safety will be key elements of care, including the interweaving of traditional, psychosocial and biomedical modalities.

1.6.9.3(4) Though integrated specialized care will be strengthened in the community and through integrated outpatient services, Patients will continue to present to the acute hospital in crisis. Inter-professional teams, based on existing best-practices such as the current St. Paul's Immunodeficiency Clinic, will place a proactive 'team around a Patient', rather than relying on a repetitive cycle of referrals. The

Most Responsible Provider (MRP) will be determined based on primary diagnosis and Patient needs, rather than where the Patient is located in the hospital. The team-based approach further addresses intersectionality by meeting clients' complexity at the door, better integrating primary and secondary care services.

1.6.9.4 Surgical and Interventional Services: MOC for interventional procedures at the NSPH.

1.6.9.4(1) A central theme for future surgical invasive procedures is linking Surgical and Interventional Services with Primary Care Networks, particularly for Patients with medical complexity and/or frailty. Important objectives for the integrated model focusing on home and community services include supporting Patients waiting for care, preparing for procedures, recovery from surgery and procedures and leveraging telemedicine and new technologies to extend telemedicine.

1.6.9.4(2) To achieve high quality surgical and procedural care, the Specialized Care Programs will require the participation of our surgeons and proceduralists in collaboration with other specialists and providers to an unprecedented level. In the community this may mean clinics in partnership with Primary Care Networks with particular disease prevalence. On campus it will mean improved alignment of surgical subspecialties with medical and allied health disciplines serving shared Patient populations through Specialized Care Programs.

1.6.9.4(3) The challenge is to share services across invasive services where possible to reduce space requirements, such as registration and access to the Medical Device Reprocessing Department (MDRD), while recognizing the importance of separating the operations of different types of procedures to optimize efficient use of surgical resources. Minimizing variability is a cornerstone of operational efficiency, including average procedural, turnover and recovery times. Increased complexity in procedure or Patient multi-morbidity tends to increase variability, and thereby reduce efficiency when mixed with routine, low variability cases. The proposed conceptual model aims to create a flexible procedural space that separates Patient flows by procedure type (inpatient, outpatient, cardiac/vascular procedures) while preserving a strategy for growth for each procedure type. Anticipated costs will be reduced through economies of scale: shared registration, MDRD and flexible pre- and post-procedure Anesthetic Care Unit Patient Bays and Rooms. Interventional Suites and Operating Rooms in Surgical and Major Procedures Zone, General Procedure Suites in the Scopes and Minor Procedures Zone and Operating Room-C-Section in the

Maternity Centre will all be connected to the MDRD through Clean and Dirty MDRD Elevators.

1.6.9.5 Telemedicine: MOC for rural, remote and local accessibility

1.6.9.5(1) Telemedicine is a key enabler to achieving the NSPH strategic objectives and a central principle which aims to improve systemic cost-effectiveness. The NSPH offers the opportunity to use virtual links, already commonplace, to dramatically improve Patient care across the system. St. Paul's provides health care at the cutting edge of specialty care and innovation, with local primary care providers and rural health providers who excel in providing holistic Person- and Family-Centred Care built on the tenants of generalism. The NSPH allow the Patients to benefit from the strengths of both domains of the health care system. This will be achieved through technology to build and strengthen human connections and relationships.

1.7 DOCUMENT ORGANIZATION AND CONTENTS

1.7.1 Appendix 3A – Clinical Specifications, Part 1 – The Project Overview provides background and information about the Health Campus, its current clinical programs and future clinical Components, integrated approach to clinical planning, models of care and a general description of the document organization and contents.

1.7.2 Appendix 3A – Clinical Specifications, Part 2 – The Functional Components outlines the Overview, Functional Description, Operational Considerations, Design Criteria, External and Internal Relationships diagrams and Schedule of Accommodations for each of the respective Components.

1.7.2.1 The information for each Functional Component is organized as follows:

1.7.2.1(1) An overview provides a summary of the Component and planning parameters and assumptions.

1.7.2.1(2) A functional description outlines the Functional Component's key purpose(s) and major functional content.

1.7.2.1(3) Operational considerations include service delivery principles and methods outlining Patient and Family Management Processes and Flows, Patient Information Management, Care Provider Work Processes and Flows, Clinical and Logistical Support Processes and Flows, Anticipated Trends in Service Delivery as well as operational Workflow diagrams, Hours of Operation and peak time staffing Workloads specific to each Component.

1.7.2.1(3)(a) Workflow diagrams describe the journey of the Patient and providers through service areas of a Component.

1.7.2.1(4) Functional Platform Design Criteria cites key design, configuration and technology features pertaining to the Component.

1.7.2.1(5) External Relationships and circulations diagrams describe the Care Platform's external relationships with other Care Platforms including any critical adjacencies by priority.

1.7.2.1(5)(a) In the context of adjacency relationships, two (2) terms will be used throughout this document:

1.7.2.1.5.(a).1 Direct Access; and

1.7.2.1.5.(a).2 Convenient Access.

1.7.2.1(5)(b) In the context of Design Criteria, the word "adjacent" means next to, adjoining or contiguous with.

1.7.2.1(6) Internal Relationships and circulations diagrams indicate the basic criteria and concepts for the spatial organization and environmental design of the Component, including zones/blocks of spaces identified in the Schedule of Accommodations and General Circulation, flows and access points.

1.7.2.1(7) The Schedule of Accommodations details the room-by-room requirements with the type, quantity, Net Square Metres (NSM) and remarks providing additional internal space features for each space.

1.7.2.1(7)(a) Rooms are organized into specific zones according to their Component and their general role in delivering services.

1.7.2.1(7)(b) Any spaces that will be accessed through another space appear as indented under that room or space in the Schedule of Accommodations.

1.7.2.1(7)(c) Project Co will be solely responsible to determine the appropriate grossing factors including Component and building grossing factors, for the design of the Facility so as to meet the functional and technical requirements of Schedule 3 [Design and Constructions Specifications].

THE NEW ST. PAUL'S PHASE 1A

PART 2 - FUNCTIONAL COMPONENTS

THE NEW ST. PAUL'S PHASE 1A

A. EMERGENCY SERVICES

APPENDIX 3A - CLINICAL SPECIFICATIONS AND FUNCTIONAL SPACE REQUIREMENTS

A. EMERGENCY SERVICES

2.1 OVERVIEW

2.1.1 The Emergency Department (ED), a Level 3 trauma center, will provide a full range of urgent and emergent care for medical, surgical, cardiac and renal conditions, injuries, infectious diseases, mental health crises and substance use emergencies for everyone within the downtown and surrounding areas, including residents, workers or visitors to the City.

2.1.2 Although it is anticipated that the Facility will remain a Level 3 trauma center, it is expected that Patients with any type of presentation can be treated in the ED.

2.1.3 Patients who present to the ED will be assured access to appropriate and timely care.

2.1.4 The following external partnerships will be integrated into ED:

2.1.4.1 British Columbia Institute of Technology (BCIT) - supports nurses in obtaining their Specialty, Emergency Nursing through the BCIT Health Sciences Program.

2.1.4.2 University of British Columbia (UBC) - medicine/nursing and allied health students.

2.1.4.3 Community - community care teams will be integrated into the emergency. Family practice care will be readily available for referrals. This also includes detox and substance use programs.

2.1.4.4 BCEHS - BC Emergency Health Services.

2.1.4.5 VPD - Vancouver Police Department and Vancouver Fire and Rescue Services.

2.1.5 The purpose of the Facility's Emergency Services is to:

2.1.5.1 Create ED of the 21st century, an academic environment that delivers quality compassionate care and collaboration.

2.1.5.2 Provide a center of excellence in Patient care and a world class urban emergency center with global recognition and high standard of care.

2.1.5.3 A culturally responsive department that provides quality and safety for Patients, families and Staff.

2.1.5.4 Optimized Patient flow - forward flow and the ability to be flexible and rapidly adapt to the needs and presentation of Patients.

2.1.5.5 Ensure Patients do not dwell or circle back by creating a linear and forward-flowing movement of Patients.

2.1.5.6 Provide respect and a high level of service for Staff – a place where everyone wants to come and work, facilitating Staff retention and recruitment.

2.1.5.7 Build a welcoming and effective teaching space with a large number of learners, residents and researchers engaged within this Component.

2.2 FUNCTIONAL DESCRIPTION

2.2.1 Scope of Services

2.2.1.1 The following programs will comprise the Emergency Services:

2.2.1.1(1) Emergency Department

2.2.1.1(1)(a) Ambulance Garage;

2.2.1.1(1)(b) ED Entrance and Triage/Reception;

2.2.1.1(1)(c) Resuscitation Room;

2.2.1.1(1)(d) Pods 1, 2 and 3;

2.2.1.1(1)(e) Pod 4 (Mental Health);

2.2.1.1(1)(f) Clinical Decision Unit (CDU); and

2.2.1.1(1)(g) Medical Imaging.

2.2.1.1(2) Primary Care Triage and Access Centre

2.2.1.2 System Planning for Children's' health services is a major focus for Child Health BC which is a leader in the 'tiers of service' approach and has classified each Facility by their responsibilities and requirements. Although the ED will not have a dedicated pediatric zone, it will be designed with the capacity to provide services as a Tier 2 Facility. Tier 2 requires that: service is accessible to multiple communities and/or local health area; service providers generally serve adults as well as children and youth; service targets common, low complexity health needs; and service participates in regional and provincial child health quality improvement initiatives. Infants and children that present to the ED will be assessed, treated and discharged or referred to BC Children's Hospital.

2.2.1.3 The ED will be capable of decontamination in the event of a chemical, biological, radiological, nuclear and explosives (CBRNE) event.

2.2.1.4 The ED will be capable of responding to mass casualties in the event of an emergency disaster response event.

2.2.1.5 The Emergency Services Component will be provided with appropriate facilities and surge capacity to support its anticipated role in the management of an infectious disease outbreak.

2.2.1.6 Scope of Educational Activity

2.2.1.6(1) Education will be a key service activity of emergency for Patients, families and Staff and may be facilitated using tools such as the Patient Education System. Education is an integral component of most Patient and family encounters, orientation of new Staff and ongoing education for all Staff will occur frequently.

2.2.1.6(2) The Emergency Services will exist within an enhanced academic environment and education of Staff and students of all disciplines will be an integral role of the ED. It is anticipated that the ED may accommodate up to 15 learners at any one time.

2.2.1.6(3) Education will occur in Conference/Meeting Room-Medium and Office-Education. A centralized booking system will be implemented for the booking of Conference/Meeting Room-Medium. Teaching activities may include:

2.2.1.6(3)(a) Staff, student, and resident academic and skills teaching;

2.2.1.6(3)(b) Orientation;

2.2.1.6(3)(c) Patient and family teaching; and

2.2.1.6(3)(d) Multidisciplinary Patient care rounds.

2.2.1.6(4) In-service education including simulation will be conducted on a regular basis in the ED.

2.2.1.6(5) Teaching and supervision functions will be accommodated in the general work areas.

2.2.1.6(6) In addition to ongoing education and in-services for regular ED medical and nursing Staff, education will be supported for students from a variety of disciplines.

2.2.1.7 Scope of Research Activity

2.2.1.7(1) Clinical research activities will be integrated in the ED. Integration of researchers into the practice environment will support strong integrations between clinical research, education and clinical practice. Researchers will utilize Workstation-Touchdown and secure and/or locked storage space for data will be required.

2.2.2 Services provided

2.2.2.1 Ambulance Garage

2.2.2.1(1) The Ambulance Garage will have parking stalls for emergency vehicles and will accommodate additional emergency vehicles outside of the garage.

2.2.2.1(2) The Ambulance Garage and triage area of the ED will be designed to provide the capability to decontaminate Patients in the event of a disaster or disease outbreak.

2.2.2.2 ED Entrance and Triage/Reception

2.2.2.2(1) There will be two (2) designated entrances to the ED.

2.2.2.2(2) Patients and their families arriving by ambulance will enter through the Entrance Vestibule-Ambulance. For safety, no public traffic will be permitted in the garage.

2.2.2.2(3) The Entrance Vestibule-Walk-in will be a physically separate entrance to the ED available for walk-in Patients and their families.

2.2.2.2(4) All Patients whether arriving via ambulance, walk-in or direct referral will be assessed by an experienced emergency nurse, assigned a Canadian Triage Acuity Scale (CTAS) score based on acuity and directed to the appropriate care space to receive treatment.

2.2.2.2(5) An Angel's Cradle-Baby Drop-off will be included in this zone for discreet drop-off of an infant to provide a safe option for a parent who is unable or unwilling to care for their newborn. The Angel's Cradle-Baby Drop-off is a small door with a cradle compartment inside that will have Direct Access to the exterior and interior of the Facility and will provide a delayed notification to Staff of a drop-off.

2.2.2.3 Resuscitation Room

2.2.2.3(1) This zone will include an Exam/Treatment Room-Resuscitation with a capacity to manage two (2) Patients, requiring immediate assessment and treatment of life, limb or threatened organ emergencies simultaneously. The room will have space and infrastructure for a third bay to be equipped in the future.

2.2.2.3(2) The Exam/Treatment Room-Resuscitation will include space for two (2) teams of clinicians (up to 30 people), with provision for three (3) teams of clinicians in the future, and will include, at minimum, emergency carts and equipment as well as computers, imaging equipment, sterile scrub sinks, two (2) Automated Dispensing Cabinets (ADC) for medications and fridges.

2.2.2.3(3) The Family Room will be adjacent to the Exam/Treatment Room-Resuscitation for family waiting and private consultations. This room will, at minimum, include comfortable seating, a table, phone and a workstation.

2.2.2.4 Pods 1, 2 and 3

2.2.2.4(1) Pods 1, 2 and 3 will be designed into three (3) zones that are standardized and flexible to respond to variations in Patient activity for Patients presenting with a higher acuity.

2.2.2.5 Pod 4 (Mental Health)

2.2.2.5(1) Pod 4 will be dedicated for Patients presenting with behavioural health problems.

2.2.2.5(2) As clinically indicated, Patients will be transferred from Pod 4 to the Stabilization Unit where seamless and ongoing expert care will be provided to both Patients and their families.

2.2.2.5(3) This zone must be capable of being secured as well as lock down capability.

2.2.2.6 Clinical Decision Unit

2.2.2.6(1) The CDU will treat and monitor Patients who do not require inpatient admission and whose care can be safely managed and completed within 24 hours. This is an effective strategy to improve ED Patient flow and reduce short stay admissions without compromising Patient care. Findings to date indicate a successful reduction in the number of admissions for Patients without compromising Patient care outcomes.

2.2.2.6(2) The CDU will also treat and monitor Patients who require consultation assessment and/or admission. Patients who require hospital admission will be transferred from the CDU to the most appropriate Inpatient Unit (IPU).

2.2.2.7 Primary Care Triage and Access Centre

2.2.2.7(1) The Facility will have a Primary Care Triage and Access Centre where it is anticipated that lower acuity Patients will be assessed and treated.

2.2.2.7(2) The Primary Care Triage and Access Centre will provide treatment to Patients who have presented to the ED for minor illnesses and injuries but who may not require emergency care.

2.2.2.7(3) Patients who present to the ED will be safely directed to the Primary Care Triage and Access Centre adjacent to the ED.

2.2.2.7(4) Patients and care providers in the community can also (self-) refer to the centre.

2.2.2.7(5) Diverting Patients from the ED to the Primary Care Triage and Access Centre will reduce wait times for Patients and allow ED Staff to efficiently treat the more acute Patients in the ED.

2.2.2.7(6) While a small group of Patients will require short-term follow-up at the Primary Care Triage and Access Centre, attachment to a primary care provider in the community will be the best option.

2.3 OPERATIONAL CONSIDERATIONS

2.3.1 Service Delivery Principles and Methods

2.3.1.1 Patient and Family Management Processes and Flows

2.3.1.1(1) Patient

2.3.1.1(1)(a) As the “front door” to a number of inpatient admissions, the ED will play a pivotal role in assuring the clinical necessity of all inpatient admissions.

2.3.1.1(1)(b) For Patients that require admission to the Facility, the ED team will collaborate closely with admitting services such as medicine, cardiac, surgery, critical care and mental health to facilitate a seamless and safe transfer for Patients.

2.3.1.1(1)(c) For Patients who are discharged, the ED inter-professional team will work collaboratively with community and primary care partners to ensure a safe transition to home or other health care facilities with the provision of education regarding community supports.

2.3.1.1(1)(d) Services in the ED will be grouped into distinct zones of care to ensure Patients receive the appropriate care.

2.3.1.1(1)(e) Zoning of the ED will not only ensure that Patients will receive the right care in the right area, it will offer flexibility and support to all Patients, families and clinicians with Wayfinding that will ultimately expedite care and streamline flow within and outside the ED.

2.3.1.1(1)(f) Procedures performed in Exam/Treatment spaces will include but are not limited to: chest tube insertion, procedural sedation, cardioversion, endotracheal intubation, GI endoscopy, suturing, closed reduction, and incision and drainage of wounds.

2.3.1.1(1)(g) There are five categories of emergency services based on the CTAS.

2.3.1.1(1)(h) This division will be one of the criteria used in determining how Patients are segregated and then treated. The scale is as follows:

- 2.3.1.1.1.(h).1 CTAS 1 – Resuscitation conditions that are threats to life or limb, or at imminent risk of deterioration, and require immediate aggressive intervention;
- 2.3.1.1.1.(h).2 CTAS 2 – Emergent conditions that are a potential threat to life, limb or function, and require rapid medical intervention or delegated acts;
- 2.3.1.1.1.(h).3 CTAS 3 – Urgent conditions that could potentially progress to a serious problem and require emergency intervention. These conditions may be associated with significant discomfort or affected ability to function at work or in Activities of Daily Living (ADL);
- 2.3.1.1.1.(h).4 CTAS 4 – Semi-urgent conditions that relate to Patient age, distress, or potential for deterioration or complications that would benefit from intervention or reassurance within 1-2 hours; and
- 2.3.1.1.1.(h).5 CTAS 5 – Non-urgent conditions that are acute but non-urgent, as well as conditions which are part of a chronic problem with or without evidence of deterioration. The investigation or intervention for some of these illnesses or injuries can be delayed or referred to other areas of the Facility or health care system.

2.3.1.1(1)(i) Each ED pod will consist of Exam/Treatment Rooms with stretchers, Exam/Treatment Room-Recliner with recliners and Exam/Treatment Bays.

2.3.1.1(1)(j) To the maximum extent possible in each pod, generic or universally designed Exam/Treatment Rooms and Exam/Treatment Bays will be provided so Patients will be able to receive the same level of care.

2.3.1.1(1)(k) Patient presentation and CTAS flex will occur depending on the Staff resources and the acuity of the pod.

2.3.1.1(1)(l) All Patient presentations can be treated in any stretcher or recliner within each pod.

2.3.1.1(1)(m) Flexibility will be critical to efficient operations of the ED based on fluctuating workloads and evolving service deliveries.

2.3.1.1(1)(n) Consideration will be given to grouping all pods to meet the varying volume levels of Patients in each area.

2.3.1.1(2) Family

2.3.1.1(2)(a) A Family Room will be provided for family members of critically ill or deceased Patients to provide a temporary refuge for distressed family and/or friends.

2.3.1.1(2)(b) Each Exam/Treatment Room and Exam/Treatment Bay will allow for a family/visitor chair(s).

2.3.1.2 Patient Information Management

2.3.1.2(1) All Patient related information will be maintained on the Owner's EMR system. Wireless technology will enable data entry using a combination of fixed workstations and Workstation on Wheels (WOWs), mobile devices and tablets, adjacent to each Patient's bedside and at key Staff workstations. Access to the EMR will be controlled electronically with varying levels of security clearance determining a Staff member's access to different sections and their ability to enter and/or edit data.

2.3.1.3 Care Provider Work Processes and Flows

2.3.1.3(1) Staffing information will be a managed corporate service. Scheduling, including providing for sick and vacation relief will be conducted centrally, and off-site. Notices to individual Staff regarding their schedules will be communicated electronically.

2.3.1.3(2) At the start of shift, Staff will pick up a wireless communication device that is linkable and with the ability to view physiologic monitoring of the Patients they are assigned to. Devices will be returned at the end of each shift.

2.3.1.3(3) Patients seen in the ED will be assessed, treated and discharged by the inter-professional team with the appropriate follow-up.

2.3.1.3(4) The Staff in each pod will include physician, nurses, Electrocardiography (ECG) tech, lab tech, Patient navigator, scribes and Allied Health.

2.3.1.3(5) Supplies and equipment will be included in each pod for ease of use and storage by Staff.

2.3.1.3(6) Staff resource utilization will be maximized in that the most appropriate Staff Persons will perform tasks. For example, nurses will not spend time on non-nursing duties such as searching for supplies, thereby enabling them to focus on Patient care.

2.3.1.3(7) Staff will communicate utilizing a hands-free communication system.

2.3.1.3(8) Students

2.3.1.3(8)(a) Students from all professions will be integrated into all aspects of Patient, family and provider space.

2.3.1.3(8)(b) The Facility will be a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents. Work spaces will be enabled to have private, confidential conversations and be equipped with teaching capability.

2.3.1.4 Clinical and Logistical Support Processes and Flows

2.3.1.4(1) Medical Imaging

2.3.1.4(1)(a) Medical Imaging will be embedded in the ED, adjacent to the Exam/Treatment Room-Resuscitation and will include:

2.3.1.4.1.(a).1 Radiology workstations with access to the Picture Archiving and Communication System (PACS).

2.3.1.4.1.(a).2 Portable ECG machines will be brought to the Patient's bedside. Portable ECG machines will have designated alcoves in all clinical zones.

2.3.1.4(2) Laboratory Services

2.3.1.4(2)(a) Main Laboratories will be available to support the ED, including transfusion medicine to provide blood and blood products as needed.

2.3.1.4(2)(b) Staff will collect blood and other samples from Patients at the bedside.

2.3.1.4(2)(c) Specimens will be transported by a Pneumatic Tube System (PTS) to the Main Laboratories for testing.

2.3.1.4(2)(d) Specimens received from the ED will be given the highest priority to ensure shortest possible turnaround time for results.

2.3.1.4(2)(e) Point of Care Testing (POCT) will be used when indicated.

2.3.1.4(2)(f) Results will be available through the EMR system and be alerted to the assigned primary care nurse on a hand-held device.

2.3.1.4(3) Pharmacy Services

2.3.1.4(3)(a) Medication Rooms with ADCs will be dispersed throughout the ED.

2.3.1.4(4) Respiratory Therapy Services

2.3.1.4(4)(a) Respiratory Therapists (RT) are integral to the team and will provide support and treatment to Patients in the ED.

2.3.1.4(4)(b) Supplies and equipment required by a RT will be accessible in the ED.

2.3.1.4(5) Rehabilitation Services

2.3.1.4(5)(a) Physiotherapists (PT), Occupational Therapists (OT) and Speech Language Pathologists (SLP) will assess Patients as needed.

2.3.1.4(6) Language Services

2.3.1.4(6)(a) Interpreters will be provided as needed.

2.3.1.4(7) Biomedical Engineering

2.3.1.4(7)(a) Biomedical Engineering will conduct required maintenance and repair work in the ED to the maximum extent possible to avoid excessive Equipment movement and relocation.

2.3.1.4(8) Equipment and Instruments

2.3.1.4(8)(a) The Equipment Depot (as described in Component O) will store Equipment that can be quickly delivered to any area of the ED.

2.3.1.4(8)(b) Necessary Equipment will be kept in the ED for ease of use and storage. This local Equipment will be monitored and stocked by central supply and

cleaned as per Infection Prevention and Control (IPAC) protocols, including the separation of clean and soiled Equipment.

2.3.1.4(8)(c) Alcove-Local Equipment, Store-Central Equipment and Store-Local Equipment will also store Equipment.

2.3.1.4(8)(d) Real Time Location System (RTLS) tagging of Equipment will allow for tracking and monitoring.

2.3.1.4(8)(e) RTLS tagging will facilitate the assignment of Staff based on acuity and Patient demands, movement of Equipment, Patient movement within the ED and outside of the ED.

2.3.1.4(8)(f) Automated Guided Vehicles (AGV) will transport materials and supplies to and from the Component in Back of House space.

2.3.1.4(8)(g) MDRD will support the ED to provide sterile supplies, Equipment and instruments as required.

2.3.1.4(9) Consumable Supplies

2.3.1.4(9)(a) Inventories of consumable supplies will be maintained close to the Point of Care (POC) throughout the ED.

2.3.1.4(9)(b) Items will be maintained by minimum inventory levels that trigger a re-ordering response.

2.3.1.4(9)(c) Consumable supplies will be kept in the Store-Clean Supplies close to POC.

2.3.1.4(9)(d) Supplies will be located with Convenient Access to Staff activity area point of use.

2.3.1.4(9)(e) Material management will rely on automation. Reordering and resupplying will rely on the latest automated tracking and ordering management system as supplies are withdrawn from inventories.

2.3.1.4(9)(f) To the extent practicable, consumable supplies stored in different areas in this Component will be organized and stored in a common order and configuration, with each item having a standardized storage location.

2.3.1.4(9)(g) The intent of this standardization is to enable efficient locating of each supply item without Staff first having to reorient themselves to a new room configuration and to avoid long travel distances between supplies storage and point of use.

2.3.1.4(10) Laundry and Linen

2.3.1.4(10)(a) Clean linen for use will be stored at Alcove-Clean Linen in exchange carts.

2.3.1.4(10)(b) Storage and pathways for clean supplies, equipment and linen will be kept separate from soiled supplies, equipment and linen.

2.3.1.4(10)(c) Soiled linen will be placed in covered hampers and moved to a Disposal Hold for pick up and transportation to the loading dock by way of FM Service Elevators and AGVs.

2.3.1.4(11) Waste Management

2.3.1.4(11)(a) Waste products will be managed according to a system of segregation at the point of origin.

2.3.1.4(11)(b) Throughout the ED, waste management will begin at the POC.

2.3.1.4(11)(c) Waste products, recycling and bio-HAZMAT will be separated at POC and stored in holding areas for pick up by housekeeping Staff and transported by AGVs.

2.3.1.4(11)(d) Fluid and bodily waste will be discarded in bedpan disinfectors located in convenient Soiled Utility rooms.

2.3.1.4(11)(e) Waste containers will be monitored, removed and replaced by housekeeping Staff and transported using AGVs.

2.3.1.4(12) Food Services

2.3.1.4(12)(a) Generally, meal trays will not be provided except for Patients who may have an extended stay in the ED.

2.3.1.4(12)(b) Should full meals be required, orders will be electronically sent to Central Food Production (CFP) where trays will be prepared and delivered.

2.3.1.4(12)(c) All used meal ware will be picked up and returned to CFP for processing.

2.3.1.4(12)(d) Light snacks (sandwiches, fruit, muffins, etc.) and beverages will be available as needed and accessed by Staff and volunteers from Nourishment Rooms distributed throughout the ED.

2.3.1.4(12)(e) Nourishment Rooms will be stocked and maintained by CFP Staff.

2.3.1.4(12)(f) All food and utensils will be dispensed in a manner that prevents cross contamination.

2.3.1.4(12)(g) The Nourishment Room will be capable of being closed during an outbreak or contamination event.

2.3.1.4(12)(h) A separate hand hygiene sink will be supplied in addition to a utility sink.

2.3.1.4(12)(i) Cabinets with doors, counters, refrigerator and microwave will be included in the area.

2.3.1.5 Anticipated Trends in Service Delivery

2.3.1.5(1) The following lists trends expected within the planning horizon of this project, and that are expected to affect the nature and/or extent of functions accommodated within this Component. Effects of these trends will be reflected in the Component's design.

2.3.1.5(1)(a) Development of primary health care access centers offering urgent care with extended hours of operation, impacting on Emergency workloads in the future.

2.3.1.5(1)(b) CTAS 5 Patients (non-urgent) being designated as deferrable in the future.

2.3.1.5(1)(c) Increased acuity and complexity of Patients due to the aging population.

2.3.1.5(1)(d) Increased requirement for evaluation of Patients with artificial organs (e.g., Intravenous (IV) membrane oxygenators, monitoring of implanted devices, renal assist devices, ventricular assist device-related complications).

2.3.1.5(1)(e) Increased new drug delivery interventions (e.g., inhalable insulin, implantable pumps, nasal and

time-release analgesics, closed-loop implantable devices).

2.3.1.5(1)(f) Increased needs for decontamination and isolation.

2.3.1.5(1)(g) Increased need for security measures as societal violence increases.

2.3.1.5(1)(h) The trend towards Person- and Family-Centred Care within the environment will continue resulting in larger Exam/Treatment spaces and family support areas.

2.3.1.5(1)(i) The need to create environments that foster and maintain Patient privacy and confidentiality.

2.3.1.5(1)(j) Similar to the general population, the average age of the ED Patients is and will continue to increase.

2.3.1.5(1)(k) There has been a historical trend toward more complex Patient presentations, longer lengths of stay and higher Patient acuity:

- 2.3.1.5.1.(k).1 New initiatives and advances in health care affect the profile of Patients coming to the ED requiring care and treatment.
- 2.3.1.5.1.(k).2 Increasing numbers of Patients and special populations with special needs including those who are homeless, both adult and youth, those with mental health and substance use conditions, obese and bariatric Patients and those Patients who are brought in by police, demonstrating aberrant behaviours, related to addictions, substance abuse and/or psychosis and people with questionable medical status.
- 2.3.1.5.1.(k).3 Increasing numbers of Patients seen due to infectious outbreaks (H1N1).
- 2.3.1.5.1.(k).4 Increasing cultural diversity, with language barriers, diverse health beliefs and practices and differing expectations regarding health services.
- 2.3.1.5.1.(k).5 More knowledgeable consumers with higher expectations for timeliness and quality of care.

2.3.1.5(1)(l) The number of bariatric Patients is expected to increase.

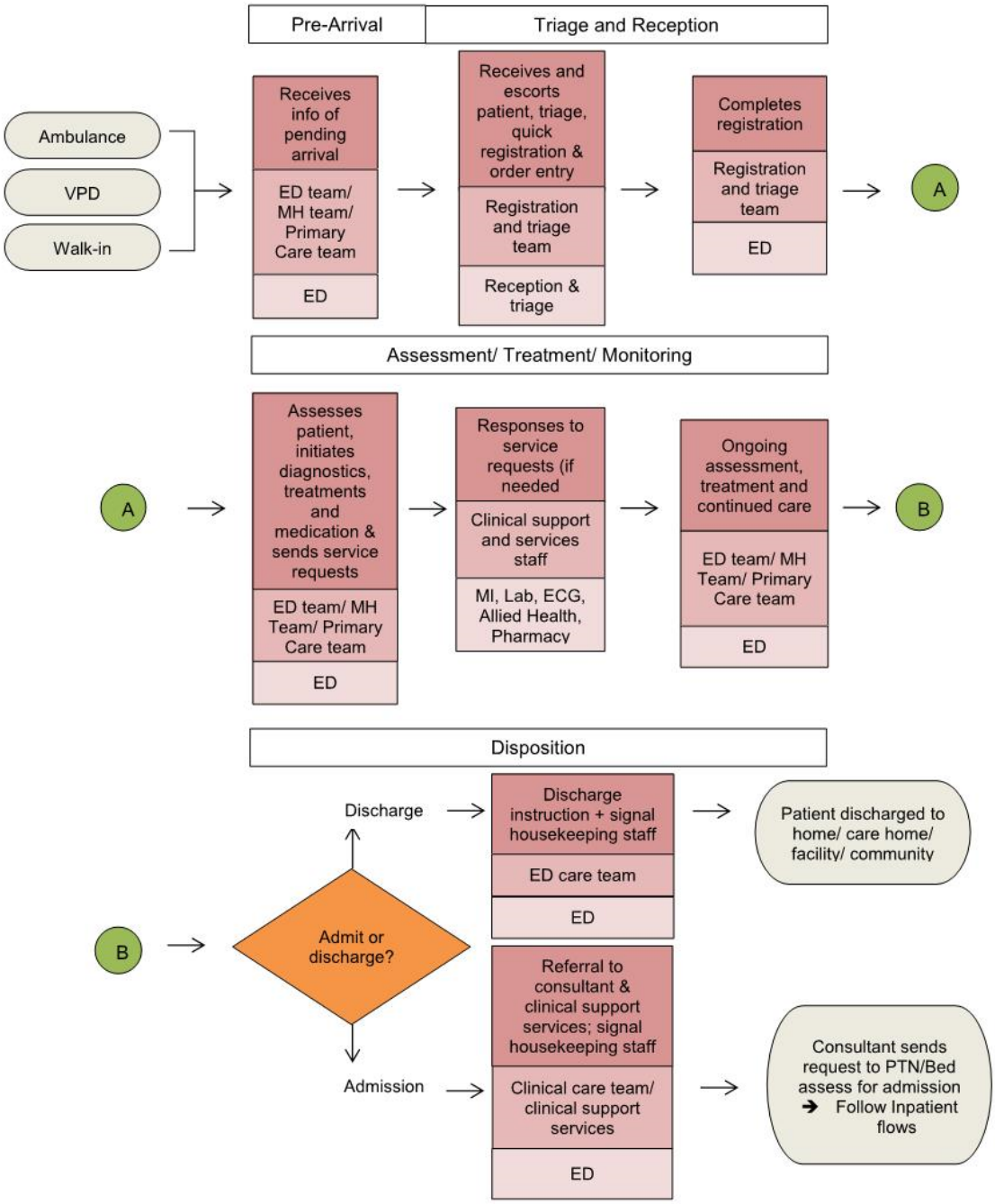
2.3.1.5(1)(m)	Direct computer access (with wired/wireless access) to Patient information including electronic charts, test results, etc.
2.3.1.5(1)(n)	Technology will increasingly perform a vital role in Patient related assembly and analysis; almost any data will be accessible by Staff at any terminal device with appropriate security clearance using standard and non-standard means e.g. biometric identification or passwords.
2.3.1.5(1)(o)	Technology coming to the Patients (in lieu of dedicated workstations) with bedside terminals and/or handheld devices with wireless access.
2.3.1.5(1)(p)	Use of hand-held computers and diagnostic equipment such as ultrasound and ECG machines.
2.3.1.5(1)(q)	POCT modules will become integrated into typical monitoring systems directly linking physiological monitoring to real time Patient record keeping.
2.3.1.5(1)(r)	Increased use of remote monitoring.
2.3.1.5(1)(s)	Telemedicine and simulation activities will increase.
2.3.1.5(1)(t)	Research shows healthy and efficient work environments improve Patient outcomes and improves Staff retention rates.
2.3.1.5(1)(u)	The trend to adopt evidence-based clinical pathways will continue, with standards becoming available in many cases.
2.3.1.5(1)(v)	The trend is to promote education and research activities right at the unit level as well as across the Facility.
2.3.1.5(1)(w)	The mean age of Staff is predicted to increase. There will continue to be the challenge of a shortage of health care professionals, requiring available Staff to assume broader responsibilities and requiring efforts in Staff retention, such as providing on unit education, safe work environments and Staff amenities (lounges, kitchenettes, lockers)

2.3.1.5(1)(x)	Infection Prevention and Control, pandemic planning and seasonal surges will remain a high priority.
2.3.1.5(1)(y)	Increased numbers of immunocompromised resulting in greater vulnerability to infection as well as increased likelihood of progressing to active disease from latent state (TB in particular).
2.3.1.5(1)(z)	Increasing prevalence of antibiotic resistant organisms especially in environmentally persistent pathogens.
2.3.1.5(1)(aa)	Alternate approaches to cleaning and disinfection including no touch techniques (hydrogen peroxide vapor, UV light etc.).

2.3.2 Workflows

2.3.2.1 The Emergency Services workflows are depicted in the following workflow diagram.

A. EMERGENCY SERVICES WORKFLOW DIAGRAM



2.3.3 Hours of Operation

2.3.3.1 All zones of Emergency Services will be operational 24 hours per day, 365 days per year.

2.3.4 Workloads

2.3.4.1 Staffing in the ED will include a defined baseline however Staff ratios will be flexible based on Patient acuity and demand.

2.3.4.2 The highest acuity Patients will receive 1:1 or 1:2 nurse to Patient ratios.

2.3.4.3 The maximum estimated workload for this Component is shown in the following table.

EMERGENCY SERVICES STAFF CATEGORY	PEAK SHIFT
Direct Care Team Staff	
Medical Director	1
Emergency Physician	7
Consultants	5
Patient Care Manager	1
Administrative Director	1
Administrative Assistant	1
Unit Clerk	5
Registered Nurse	20
Clinical Nurse Leaders	2
Psychiatrist Nurses	3
Addictions Nurse	1
Nurse Educator	1
Nurse Practitioner	1
Community Transition Nurse	1
Equipment Coordinator	1
ECG Technician	1
Social Worker (Acute)	1
Geriatric Nurse Clinician	1
Admitting Clerk	3
Health Records Staff	0
Housekeeper	4
Laboratory Assistant	2
Medical Imaging Technologist + Sonographer	7
Logistics Staff	1

EMERGENCY SERVICES STAFF CATEGORY	PEAK SHIFT
Medical Imaging Clerk	1
Clinical Pharmacy Specialist	1
Respiratory Therapist	1
Security	4
Porter Ward Aide	4
Subtotal, Direct Care Team Staff	**82**
Other	
Volunteer	3
Resident	6
Medical Student	2
Other Students	5
Police Officers	4
Ambulance Attendant	4
Subtotal, Other	**24**
DAYTIME PEAK TOTAL	**106**

2.4 DESIGN CRITERIA

2.4.1 General Requirements

2.4.1.1 Zones of activity within the Component include the following:

2.4.1.1(1) Emergency Department

2.4.1.1(1)(a) Ambulance Garage;

2.4.1.1(1)(b) ED Entrance and Triage/Reception;

2.4.1.1(1)(c) Resuscitation Room;

2.4.1.1(1)(d) Pods 1/2/3;

2.4.1.1(1)(e) Pod 4 (Mental Health);

2.4.1.1(1)(f) CDU; and

2.4.1.1(1)(g) Medical Imaging.

2.4.1.1(2) Primary Care Triage and Access Centre

2.4.1.2 The ED will have Direct Access to Critical Care Complex and Surgical and Major Procedures Zone via Patient Transfer/Staff Service Elevators.

2.4.1.3 The ED will have Direct Access to the Stabilization Unit.

2.4.1.4 The ED will have Direct Access to the Main Entrance lobby on the same floor.

2.4.1.5 The key principle in the layout of the ED spaces is to provide the flexibility to operate the Component effectively during times of low, average and peak workloads. This includes the ability to function with varying levels of staffing. For example, during the low periods not all treatment spaces will be used and a reduced staffing complement needs the ability to cover the Component and use the space efficiently. One means of achieving this flexibility is to organize the general Exam/Treatment Rooms so that the number in use can expand and collapse efficiently without having to relocate Patients from room to room.

2.4.1.6 Another key principle in the layout of the ED is visibility. Staff require Line of Sight to key areas such as the Resuscitation Room entrance, acute treatment areas, Patient monitors and Secure Rooms. Staff also require the ability to see each other in circulation spaces.

2.4.1.7 Clear delineation between the Facility Main Entrance, Ambulance ED Entrance and the dedicated public ED entrance is required to avoid confusion. The location of the dedicated public ED entrance will be obvious to arriving Patients and families. It will be visually and logically distinct from the Facility Main Entrance, which will serve as the after hours entrance for other Components and services in the Facility.

2.4.1.8 The ED Entrance and Triage/Reception area will be designed to accommodate separation of walk-in Patients from ambulance Patients.

2.4.1.9 The ED will be located:

2.4.1.9(1) At grade level complete with an exterior covered drop-off area with Direct Access into the Component;

2.4.1.9(2) With clear separation from the adjacent short-term surface parking stalls; and

2.4.1.9(3) With Convenient Access to, but with clear delineation from, the Facility Main Entrance.

2.4.1.10 Provide space at the Entrance Vestibule-Walk-in to facilitate pre-screening Patient triage in the event of a pandemic or local outbreak of contagious diseases. Guidelines will address the following:

2.4.1.10(1) The ED layout will provide a one-way flow for entering and exiting the Component.

2.4.1.10(2) Pods 1, 2, 3 and 4 (Mental Health) will be for emergency Patients with varying levels of acuity.

2.4.1.10(3) Unless Patient acuity changes or care necessitates a move, Patients will not move between zones.

2.4.1.11 Hand hygiene sinks will be distributed throughout the Component to meet Infection Prevention and Control and hand hygiene needs.

2.4.1.12 Provide Waiting areas with distinct zones to provide separation between Patients who are immunocompromised and other Patients.

2.4.1.13 The Care Team Stations will serve as the ‘hub’ of the Component and therefore require Line of Sight, at minimum, to the Exam/Treatment Rooms, Bays and corridors. Provide sound attenuation as described in Appendix 3C [Acoustic and Noise Control Measures] to facilitate nursing, physician, clerical and allied interactions. Additionally, the clinicians working in the four (4) Pods will require a design that facilitates interactions and Line of Sight between a minimum of two (2) Pods.

2.4.1.14 Inter-professional care teams will utilize the Care Team Stations equipped with touch down workstations, PACS, central monitoring and communication systems.

2.4.1.15 Staff support spaces will have Convenient Access to the Care Team Stations.

2.4.1.16 Medication Rooms, Store-Clean Supplies, Soiled Utility and Soiled Equipment Hold rooms will be located central to the Care Team Stations and Patient treatment spaces in the ED pods to optimize flow and promote Infection Prevention and Control protocols.

2.4.1.17 Medication Rooms and Store-Clean Supplies will be adjacent. Medication Rooms will have one (1) door from the corridor and another door connecting to the Store-Clean Supplies, so Staff can easily retrieve supplies for the setup of IV medications. Store-Clean Supplies will have another door from the corridor.

2.4.1.18 Store-Local Equipment and Store-Central Equipment will be grouped with Medication Room and Store-Clean Supplies.

2.4.1.19 Soiled Equipment Hold and Soiled Utility will be located adjacent to each other with a door between the two rooms, in addition to the doors connecting these spaces to the corridor. The primary function of Soiled Utility is to provide a space to dispose of the full spectrum of clinical waste including bedpan disinfectors and assorted bins for cytotoxic and biomedical waste (e.g. used blood bags), perform limited soiled activities such as gross decontamination/rinsing/soaking of surgical type instruments, and temporarily store clinical specimens. The primary function of the Soiled Equipment Hold is to sequester and marshal soiled equipment and provide a dedicated space to clean them. The design will allow for one way flow from soiled to clean, separate soiled and clean to prevent cross-contamination and provide a dedicated unobstructed cleaning zone, with Convenient Access from all clinical spaces in the area it is intended to serve. Cleaned equipment will be moved to the Store-Local Equipment or Store-Central Equipment in a different and physically separate location away from Soiled Utility and Soiled Equipment Hold.

2.4.1.20 Equipment located in the ED will be stored strategically in Equipment alcoves throughout the space. Additional Equipment will be accessible from the Equipment Depot; refer to Component O7.

2.4.1.21 Security and safety of Patients and Staff in the ED is paramount, particularly after hours. Access to all areas within the ED Component will be controlled and/or restricted and monitored by Staff at Registration/Triage and the Care Team Stations. Staff in any area of the ED will have access to a safe space, such as a Medication Room, at all times.

2.4.1.22 Simple and intuitive Wayfinding is important for public and Patients coming to the ED to avoid adding to what is often already a stressful situation. Vehicular access to the ED drop-off entrance will be direct and free of interference from other on-site traffic. There will also be convenient and logical access from the layby stalls adjacent to the ED to public underground parking.

2.4.1.23 Each pod/area in ED will have the capability to be locked down at appropriate and strategic locations to control access and mitigate security issues or threats and will include the use of security systems and/or wireless applications to secure the premises. During times of elevated risk, Staff can enter with access control.

2.4.1.24 The Housekeeping Closets will be distributed for Convenient Access from all pods.

2.4.1.25 Patient Washrooms will be adjacent to the treatment areas.

2.4.1.26 Each zone/pod of the ED will have access control so that each zone/pod can be secured or closed.

2.4.1.27 The planning and design will minimize opportunities for theft. Video surveillance will be incorporated and connected to the main security monitoring systems; the use of automated tools to monitor security such as algorithmic and/or artificial intelligence systems may be included.

2.4.1.28 Exam/Treatment Rooms

2.4.1.28(1) Exam/Treatment Rooms and Exam/Treatment Room-Recliner will be private with three (3) walls, breakaway glass doors and privacy curtains. Each Exam/Treatment Room will have nurse call and supply carts (primarily on the right side of the Patient where most treatment occurs), adequate lighting to perform physical examinations and/or suturing, a hand hygiene sink, lockable storage for Patients' personal belongings, family/visitor chair(s) on the left side of the Patient and space to bring in a procedure cart or mobile equipment such as an ECG machine.

2.4.1.28(2) Each Exam/Treatment Room will include wall mounted Personal Computer (PC) infrastructure, rails to support ceiling lifts, infrastructure for physiological monitoring, vacuum, diagnostic sets and ceiling mounted exam lights.

2.4.1.28(3) Primary Care Triage and Access Centre and Pod 4 (Mental Health) Exam/Treatment Rooms will not have Patient lifts and do not require rails.

2.4.1.28(4) All Exam/Treatment Rooms will have the infrastructure to support cardiac monitoring and to access EMRs, as well as provisions for telemedicine in the future.

2.4.1.28(5) One (1) Exam/Treatment Room-Bariatric-Airborne Isolation-VHF, two (2) Exam/Treatment Room-Airborne Isolation-VHF and five (5) Exam/Treatment Room-Airborne Isolation-Hybrid, all with Washroom-Patient Ensuite-Airborne Isolation will be provided in ED. One (1) Exam/Treatment Room-Airborne Isolation-Hybrid will be provided in Primary Care Triage and Access Centre area. Isolation protocols will apply at POC for handling clean linen, clean supplies and clean equipment. Isolation protocols will also apply to the soiled holding areas and waste removal. These rooms will be used to treat non-isolated Patients when not in use for negative pressure isolation. The design will enable the audible alarm to be silenced, and the door to be left open. Provide a light above the door located in the corridor outside the room to indicate when negative pressure is not maintained during this operation.

2.4.1.28(6) The Exam/Treatment Room-Airborne Isolation-Hybrid will be located in a low traffic area, purposefully sparse with no stored equipment and with Convenient Access to a corridor hand hygiene sink to allow Staff to don and doff their PPE and follow appropriate Infection Prevention and Control protocols.

2.4.1.28(7) Three (3) Exam/Treatment Room-Airborne Isolation will be designated as Viral Hemorrhagic Fever (VHF) Rooms in the ED. VHF Rooms will be located adjacent to an Exam/Treatment Room-VHF with a connecting door that can be used as an exit for Staff to doff PPE.

2.4.1.29 Medication Rooms

2.4.1.29(1) A Medication Room will be available in each pod/area in the ED.

2.4.1.29(2) Medication Rooms will serve as “safe” areas for Staff at times of an aggressive or unsafe situation.

2.4.1.29(3) Medication Rooms will be distraction free areas and will be located adjacent to the Care Team Stations and Store-Clean Supplies.

2.4.1.29(4) Medication Rooms will be provided with access control and Line of Sight from the Care Team Station. Medication Rooms will include one or two (2) ADC towers with attached fridge, utility sink, hand hygiene sink, adequate counter space for medication preparation, storage for consumables, waste and recyclable receptacles.

2.4.1.29(5) Each Medication Room will be designed to accommodate a minimum of three (3) Staff at one time.

2.4.1.29(6) Emergency alarms and overhead emergency announcements will annunciate in the Medication Rooms.

2.4.1.29(7) Medication Room doors require glazing for visibility.

2.4.1.29(8) Pharmacy Staff will stock and supply medications from the Main Pharmacy Component.

2.4.1.30 Outbreak Control Zone

2.4.1.30(1) In case of an airborne infection pandemic outbreak, an Outbreak Control Zone containing a minimum of ten (10) beds in CDU will have negative pressurization capability to isolate the CDU from the surrounding areas. This 10-bed Outbreak Control Zone will meet the following requirements:

2.4.1.30(1)(a) Include support spaces including Medication Room-Small, Store-Clean Supplies, Soiled Utility and Soiled Equipment Hold;

2.4.1.30(1)(b) The Outbreak Control Zone will not have the ED Shared Support Services and ED Shared Staff Support areas located within the zone in order to support full operations of the Component;

2.4.1.30(1)(c) The building system will enable the Outbreak Control Zone to be capable of creating negative pressure within the zone relative to adjacent areas;

2.4.1.30(1)(d) The Outbreak Control Zone will contain space that can be converted into an anteroom (e.g., double set of powered doors) adjacent to each entrance to the zone and will be equipped with a hand hygiene sink and space for Personal Protective Equipment (PPE) storage. The anteroom will be large enough to accommodate a stretcher when both sets of doors are closed; and

2.4.1.30(1)(e) Both sets of power doors will have automatic opening with access control. Access control will be located on the entry side of the first set of doors and on the exit side of the second set of doors far enough away from the doors to allow them to open before a stretcher is present. Under normal operations, the doors will remain open.

2.4.2 Emergency Department

2.4.2.1 ED Entrance and Triage/Reception

2.4.2.1(1) The ED Entrance and Triage/Reception function is intended to act as the first point of contact for Persons arriving at the ED. This area will have high visibility, be secure and will be designed to respect Patient privacy.

2.4.2.1(2) Two (2) separate entrance vestibules to the ED will be provided. The main entrance to the ED will be the Entrance Vestibule-Walk-in for the public, which will have Line of Sight from the ED public vehicular pick-up and drop-off area. The other entrance is the Entrance Vestibule-Ambulance for Patients arriving by ambulance and police arriving with forensic Patients, or those in a state of psychosis. Provide a Line of Sight from the Registration/Triage to the Entrance Vestibule-Walk-in and the Entrance Vestibule-Ambulance. The vestibules will not be visible from Persons in the Waiting areas.

2.4.2.1(3) Each entrance vestibule will be equipped with glazed automatic doors that can be controlled by Security. There will be an IP video surveillance camera and an emergency call bell or phone to the

security desk to request admission, if locked. For video door intercom, remote release requirements, refer to Appendix 3P [Security Operation Matrix].

2.4.2.1(4) The two (2) entrances to the ED will be located such that ambulance and police traffic is separated from public vehicle and walk-in traffic. There will be clear signage and prominent Wayfinding for vehicles (public and emergency personnel) and pedestrians.

2.4.2.1(5) The ED Entrance and Triage/Reception will have four (4) adjacent EMS Holding Bays for Patient transfer, thereby reducing ambulance delays.

2.4.2.1(6) Entrance Vestibule-Walk-in

2.4.2.1(6)(a) Entrance Vestibule-Walk-in will be in a location that discourages use as a general non-emergency entrance or main entrance and enables the use of digital signage/kiosks to provide direction to Patients and visitors.

2.4.2.1(6)(b) Entrance Vestibule-Walk-in will permit arriving Patients to be re-directed outside in order to be brought in via the Decontamination Room, as required.

2.4.2.1(6)(c) The Entrance Vestibule-Walk-in requires adequate space to accommodate pre-screening activities in the event of a pandemic outbreak to accommodate two (2) Staff with a portable desk, and Equipment including portable Vital Signs Monitor (VSM). Access to the ED Entrance Vestibule-Walk-in will be secured via access control. Remote lock/unlock control will be provided from the Security Control and Registration/Triage.

2.4.2.1(7) Entrance Vestibule-Ambulance

2.4.2.1(7)(a) Entrance Vestibule-Ambulance will provide Direct Access into the ED from the Ambulance Garage.

2.4.2.1(7)(b) Entrance Vestibule-Ambulance will include ease of access and egress for ambulance, police and fire emergency Staff.

2.4.2.1(7)(c) Entrance Vestibule-Ambulance will be adjacent to the Resuscitation Room. All visits through the Entrance Vestibule-Ambulance will be separated

from walk-in Patients with no Line of Sight. Walk-in and Ambulance Patients will not cross paths.

2.4.2.1(8) Waiting Areas

2.4.2.1(8)(a) The two (2) Waiting areas will be sized to each accommodate approximately twenty (20) seats, room for four (4) Patients in wheelchairs and to include a Patient entertainment/education system and public Wi-Fi access.

2.4.2.1(8)(b) The Waiting areas will be separated into smaller clusters, including an area for Patients presenting with infectious respiratory conditions.

2.4.2.1(8)(c) The Waiting areas will have Line of Sight from Registration/Triage and Control-Security Staff.

2.4.2.1(8)(d) Two (2) Washroom-Public are to be located adjacent to the Waiting area to serve both public and Patients who are waiting.

2.4.2.1(9) Registration/Triage

2.4.2.1(9)(a) The Registration/Triage function will be located with Line of Sight to the Entrance Vestibule-Walk-in and the Entrance Vestibule-Ambulance for immediate visual assessment of Patients as they arrive.

2.4.2.1(9)(b) The Registration/Triage area will have Line of Sight to both the entrance to the Resuscitation Room and Waiting areas.

2.4.2.1(9)(c) The Registration/Triage area will accommodate technology and space for six (6) Staff members and for Patients and families who are being assessed and triaged.

2.4.2.1(9)(d) The Registration/Triage area will be adjacent to a Decontamination Room with Anteroom-Decontamination Entry and Anteroom-Decontamination Exit, one (1) Consult/Interview Room with dual egress and one (1) dedicated Exam Room-ECG for immediate testing, assessments and treatment.

2.4.2.1(9)(e) Admission to the treatment areas from Registration/Triage and the Waiting areas will be controlled through automatic doors operated by

Staff located at the Registration/Triage and Control-Security areas.

2.4.2.1(10) Decontamination Room

2.4.2.1(10)(a) Decontamination Room will be designed to CSA standards and requirements in Schedule 3.

2.4.2.1(10)(b) Provide a Decontamination Room with three (3) shower heads and floor drain, an Anteroom-Decontamination Entry and Anteroom-Decontamination Exit and a dedicated Entrance Vestibule-Decontamination located adjacent to Registration/Triage. It will accommodate a stretcher, wheelchair, ambulant Patients and Staff.

2.4.2.1(10)(c) Each shower will have the capacity to decontaminate a Patient.

2.4.2.1(10)(d) The doors to the Decontamination Room, Entrance Vestibule-Decontamination and Anteroom-Decontamination Entry and Anteroom-Decontamination Exit will have glass for viewing.

2.4.2.1(10)(e) The Entrance Vestibule-Decontamination, Anteroom-Decontamination Entry and Anteroom-Decontamination Exit will include a clinical observation camera. The anterooms will also include cabinets and counters for storage of supplies and will have a hand hygiene sink.

2.4.2.1(10)(f) The Decontamination Room will have Direct Access from Entrance Vestibule-Decontamination. This entrance will be accessed from the Ambulance Garage and from an exterior public walkway. This public entrance to the Entrance Vestibule-Decontamination will be no closer than 3.0 m to the ED Walk-in entrance.

2.4.2.1(10)(g) A clear pathway from the Entrance Vestibule-Walk-in to the exterior entry into Decontamination Room through Entrance Vestibule-Decontamination is required.

2.4.2.1(10)(h) Decontamination Room will be negative pressure relative to the adjoining spaces.

2.4.2.1(11) Emergency Medical Services (EMS) Holding Area

2.4.2.1(11)(a) EMS Holding area for ambulance cases that are waiting for triage and/or bed will include four (4) EMS Holding Bays.

2.4.2.1(11)(b) EMS Holding Bay will be located adjacent to the Entrance Vestibule-Ambulance and Registration/Triage.

2.4.2.1(12) Crisis Interview Room

2.4.2.1(12)(a) This room will require dual egress and Nurse Call for Code White.

2.4.2.1(13) Control-Security

2.4.2.1(13)(a) Control-Security will be adjacent to the Waiting areas and Walk-in Entrance Vestibule for screening and visibility purposes.

2.4.2.1(13)(b) Control-Security will have Line of Sight to Waiting and Registration/Triage areas and Washroom-Public and will contribute to the controlled entry to the Component.

2.4.2.1(14) Family Room

2.4.2.1(14)(a) Family Room will be provided for family members of critically ill or deceased Patients and be adjacent to the Resuscitation Room zone. The function of the Family Room is to provide a temporary refuge for distressed family/friends. It is not intended for prolonged use.

2.4.2.1(15) Angel's Cradle-Baby Drop-off

2.4.2.1(15)(a) An Angel's Cradle-Baby Drop-off will be provided in one of the exterior walls of the ED for easy and discreet drop-off of infants into the cradle. An audible alarm will enunciate at the Registration/Triage area.

2.4.2.2 Resuscitation Room

2.4.2.2(1) The route used by Staff to transport a Patient from the Ambulance Garage to the Resuscitation Room will facilitate the quick movement of the Patient in critical condition on a stretcher surrounded by a medical team. The route will avoid passing through any public spaces or areas where Patients are grouped or waiting and minimize corners and maneuvering to enter the room.

2.4.2.2(2) The Resuscitation Room will have Line of Sight and Convenient Access for Staff from other areas of the Component during a 'Code Call' to provide back-up support to the clinical team.

2.4.2.2(3) Exam/Treatment Room-Resuscitation and ED Medical Imaging will be adjacent.

2.4.2.2(4) Exam/Treatment Room-Resuscitation will accommodate two (2) treatment bays, with provision for a third bay in future, including the requisite equipment and space for families and Staff to move easily.

2.4.2.2(5) Each bay will accommodate a team of four to eight (4-8) Staff, medical-surgical supplies, storage cabinets, instruments, monitoring equipment, resuscitation equipment, charting station and Information Management and Information Technology (IM/IT) equipment for monitoring Patients and during traumas.

2.4.2.2(6) Exam/Treatment Room-Resuscitation will require one (1) Alcove-Scrub Station with four (4) scrub positions.

2.4.2.2(7) There will be a full-length cubicle curtain on the inside of Exam/Treatment Room-Resuscitation door opening into the corridor to provide Patient privacy.

2.4.2.2(8) Exam/Treatment Room-Resuscitation will be configured to accommodate the following:

- 2.4.2.2(8)(a) Medical gases, suction and monitoring;
- 2.4.2.2(8)(b) Ceiling-mounted X-ray Equipment;
- 2.4.2.2(8)(c) Ceiling-mounted Equipment booms to allow unencumbered access to the stretcher bed;
- 2.4.2.2(8)(d) Ceiling mounted bariatric lifts;
- 2.4.2.2(8)(e) Procedure lights over each stretcher bay;
- 2.4.2.2(8)(f) PC workstations per trauma room and PACS viewing stations;
- 2.4.2.2(8)(g) A medication preparation and supply area with sink; and
- 2.4.2.2(8)(h) Space for mobile storage cabinets for supplies.

2.4.2.2(9) The Resuscitation Room will be plumbed for City water supply and drain box for portable Reverse Osmosis (RO) for hemodialysis.

2.4.2.2(10) A clinical observation camera will provide viewing of the Resuscitation Room, at minimum, from the Conference/Meeting Room-Medium and Office-Education for educational purposes.

2.4.2.3 Pods 1, 2 and 3

2.4.2.3(1) Pods 1, 2 and 3 will be grouped with Direct Access from ED Entrance and Triage/Reception area.

2.4.2.3(2) Pods 1, 2 and 3 will include Exam/Treatment Rooms capable of supporting complex emergency care. All Exam/Treatment Rooms will be equipped with hand hygiene sinks, supplies, nurse call, ceiling lifts and sliding glass breakaway doors.

2.4.2.3(3) Pods 1, 2 and 3 will have five (5) Exam/Treatment Room-Airborne Isolation-Hybrid rooms and two (2) Exam/Treatment Room-Airborne Isolation-VHF rooms.

2.4.2.3(4) An Exam/Treatment Room-Bariatric-Airborne Isolation-VHF will accommodate bariatric Patients and will have double headwall for surge or infectious outbreak situations.

2.4.2.3(5) One (1) Exam/Treatment Room-Bariatric-Airborne Isolation-VHF, one (1) Exam/Treatment Room-Airborne Isolation-VHF and two (2) Exam/Treatment Rooms will require plumbing for City water supply and drain box with portable RO machine for hemodialysis.

2.4.2.3(6) Two (2) Care Team Stations, a Medication Room, Soiled Utility, Soiled Equipment Hold and Store-Clean Supplies will be centrally located within each Pod. A Store-Central Equipment will also be included in each Pod.

2.4.2.3(7) Pods 1, 2 and 3 will have similar layouts with the centre of each pod as open as possible to provide maximum flexibility. Each Pod will have a Waiting area, three (3) Exam/Treatment Bays and five (5) Exam/Treatment Room-Recliner at the entry to the Pod.

2.4.2.3(8) Pod 1 will include an Exam Room-Ophthalmology and Pod 3 will include an Exam/Treatment Room-EYE, an Exam/Treatment Room-ENT and an Exam/Treatment Room-OB/GYN.

2.4.2.3(9) Specialty Exam/Treatment Rooms in Pod 1 and Pod 3 including Ophthalmology, EYE, ENT and OB/GYN will be enclosed with four (4) walls and a solid door at the front wall.

2.4.2.3(10) Exam/Treatment Room-OB/GYN will be configured for privacy and have an adjacent Washroom/Shower-Patient.

2.4.2.4 Pod 4 (Mental Health)

2.4.2.4(1) Pod 4 will be located within ED and requires Direct Access through Back of House circulation to the Stabilization Unit and the IPU Med/Psych Unit for rapid and safe Patient transport.

2.4.2.4(2) Access to Pod 4 from Entrance Vestibule-Ambulance will not go through other areas.

2.4.2.4(3) Pod 4 will include a Waiting Area, one (1) Exam/Treatment Bay, ten (10) Exam/Treatment Rooms plus two (2) Secure Rooms and a Crisis Interview Room.

2.4.2.4(4) At the entrance of Pod 4, provide a video intercommunication system with remote release of the doors for Staff to communicate with and allow visitors to enter the unit from the Care Team Stations.

2.4.2.4(5) Provide Convenient Access to Pod 4 from the Patient Transfer/Staff Service Elevators during a Code White for Staff, including security Staff.

2.4.2.4(6) The Pod 4 layout will promote visibility from the Care Team Stations to all Patient areas and will eliminate blind spots and dead-end corridors. The Care Team Stations and Medication Room will have dual egress and allow Staff to exit from these spaces into the adjacent corridors. The Medication Room will be located between the Care Team Stations and include glazing to enable Staff visibility to the adjoining spaces.

2.4.2.4(7) Pod 4 will include two (2) Secure Rooms for holding Patients with more challenging behaviours while maintaining Patient and Staff safety. These rooms will be designed in compliance with the Provincial Quality, Health and Safety Standards and Guidelines for Secure Rooms in Designated Mental Health Facilities under the BC Mental Health Act, Ministry of Health, Province of British Columbia and Schedule 3 [Design and Construction Specifications].

2.4.2.4(8) All Secure Rooms will be located adjacent to a Care Team Station with Line of Sight from the Care Team Station to the door of the Anteroom-Secure. Secure Rooms require a window to the outside.

2.4.2.4(9) Secure Rooms will share an Anteroom-Secure. The shared anteroom will allow for a team of six to eight (6-8) people to enter with a crash cart, stretcher and equipment and will have built-in storage for nursing touch down and care supplies. There will be an Alcove-Hand Hygiene Sink outside the entrance to the Anteroom-Secure.

2.4.2.4(10) Secure Room design will allow Staff to enter straight into Anteroom-Secure and Secure Rooms from the corridor without turning corners.

2.4.2.4(11) The Secure Rooms will be located in a quieter area of the Pod to minimize the exposure of agitated Patients to others.

2.4.2.4(12) The Secure Rooms will include a video intercommunication system and a clinical observation camera.

2.4.2.4(13) A Washroom/Shower-Patient Ensuite-Small will be located adjacent to the Anteroom-Secure.

2.4.2.4(14) One Crisis Interview Room will be included with dual egress through a corridor with a clinical observation camera and nurse call system (Code White). Visibility into this room will be provided via a sidelight window or glazing in the door to permit views into the room from the corridor.

2.4.2.4(15) The Care Team Station will be the first point of contact in this zone. It will have Line of Sight to the Anteroom-Secure as well as to the entry into the Crisis Interview Room.

2.4.2.4(16) All Exam/Treatment Rooms will have anti-barricade glass break away doors and will include protective headwall specifically designed for behavioural health environment that can be secured when necessary for Patient safety.

2.4.2.4(17) Exam/Treatment Rooms and Exam/Treatment Bay in Pod 4 will have self-harm precautions designed in the spaces as per requirements in Schedule 3 [Design and Construction Specifications] and Appendix 3N [Safety and Risk Reduction Matrix].

2.4.2.5 Clinical Decision Unit (CDU)

2.4.2.5(1) The CDU will have Convenient Access to ED Entrance and Triage/Reception area and Pods 1, 2 and 3 and will function as a standalone unit.

2.4.2.5(2) The CDU will have ten (10) Exam/Treatment Rooms.

2.4.2.5(3) Ten (10) CDU Exam/Treatment Rooms are for Patients who require consultant assessment and/or admission to the Facility.

2.4.2.5(4) The CDU will also include a Care Team Station, a Consult/Interview Room, a Consultant Workroom, a Medication Room, a Soiled Utility room, a Soiled Equipment Hold and a Store-Clean Supplies.

2.4.2.6 Medical Imaging

2.4.2.6(1) The ED will feature a Medical Imaging zone which will include an Imaging-CT, two (2) Imaging-Digital Radiography rooms, an Imaging-Ultrasound room and a Reading Room-PACS.

2.4.2.6(2) Reading Room-PACS will require Convenient Access to Control-Imaging and Imaging-Ultrasound rooms to facilitate radiology Staff movement.

2.4.2.6(3) Imaging-CT and Reading Room-PACS will be located adjacent to Exam/Treatment Room-Resuscitation and enable Staff to quickly and efficiently transfer Patients from one space to the other without having to negotiate multiple doors or turns in the corridor.

2.4.2.6(4) Washroom-Patient will be located adjacent to Imaging-Ultrasound.

2.4.2.6(5) The Medical Imaging will be located to provide Convenient Access from all pods and will minimize Patient travel distances.

2.4.2.6(6) Simple and intuitive Wayfinding is required to allow ED Patients to self-direct from other areas in ED to the Medical Imaging Waiting area.

2.4.2.6(7) Access to other areas in ED will not go through the Medical Imaging zone.

2.4.2.7 ED Shared Staff Support

2.4.2.7(1) There will be a secured Staff entrance directly into Lounge-Staff and Lockers-Staff without passing through other areas of the ED. Lounge-Staff and Lockers-Staff will be located with Direct Access from the Patient Service Elevators through Back of House circulation.

2.4.2.7(2) Facilities such as the Lounge-Staff, Lockers-Staff, Conference/Meeting Room-Medium and offices can be located at the periphery of the Component. The Physician Workroom will be located close to the Patient care areas.

2.4.2.7(3) Given its extended hours of operation, ED Staff requires a Lounge-Staff area within or close to the Component. The Lounge-Staff will be located in the ED. The Lounge-Staff will have a space for Staff meals and rest.

2.4.2.7(4) Lounge-Staff will have windows for natural light and views of nature.

2.4.2.7(5) Lockers-Staff will have the capability to be divided into Male and Female locker rooms. The split between male and female and

distribution of lockers will be determined in consultation with the Owner. Two (2) Washroom/Shower-Staff will be located adjacent to but not accessed from within the Lockers-Staff.

2.4.2.7(6) Washroom-Staff will be equally distributed throughout the ED.

2.4.2.7(7) A Conference/Meeting Room-Medium with telemedicine capability will be in the ED; refer to Type 3 Multimedia Rooms requirements. This Conference/Meeting Room-Medium will have maximum occupancy of twenty-five (25) people.

2.4.2.7(8) The Conference/Meeting Room-Medium will be accessed from outside the ED from a public corridor for Convenient Access for outside users.

2.4.2.8 Ambulance Garage

2.4.2.8(1) The Ambulance Garage will accommodate Ambulance parking stalls within an at-grade, fully enclosed area. Provide additional parking spaces for emergency vehicles adjacent to the Ambulance Garage; refer to Schedule 3 [Design and Construction Specifications].

2.4.2.8(2) The Ambulance Garage will be secured and is intended for use only by authorized vehicles.

2.4.2.8(3) The Ambulance Garage will include storage for BC Ambulance Service cleaning and restocking supplies.

2.4.2.8(4) The Ambulance Garage will have Direct Access to ED Ambulance Entrance Vestibule to access Decontamination Room, Triage/Reception and Resuscitation Room.

2.4.2.8(5) The Ambulance Garage will be designed to serve as an emergency disaster response area; refer to Schedule 3 [Design and Construction Specifications].

2.4.2.8(6) The ED Ambulance Garage will accommodate a large volume of Patients to be assessed and transferred efficiently into the Component in an emergency disaster response event, which may involve mass casualties.

2.4.2.8(7) The triage area during an emergency disaster response event will be separate from the Decontamination Room.

2.4.2.8(8) Disaster response event capabilities in Ambulance Garage includes the following:

2.4.2.8(8)(a) Provision for multiple decontaminations before entry into the ED through external decontamination showers located inside the Ambulance Garage;

2.4.2.8(8)(b) Provision of decontamination on entry in the Decontamination Room;

2.4.2.8(8)(c) Storage for PPE and decontamination equipment;

2.4.2.8(8)(d) Storage for Powered Air Purifying Respirators (PAPR) and battery recharging; and

2.4.2.8(8)(e) Storage for emergency supplies on wire racks.

2.4.3 Primary Care Triage and Access Centre

2.4.3.1 The Primary Care Triage and Access Centre will have Convenient Access to the ED for ease of referral but will be managed separately from the ED.

2.4.3.2 This centre will have Convenient Access from the Facility Main Entrance where Patients can self-refer. The Primary Care Triage and Access Centre will be designed as a self-contained unit with all support functions including Medication Room-Small, Store-Clean Supplies, Soiled Utility, Washroom-Patient and Primary Care Staff Support.

2.4.3.3 The Primary Care Triage and Access Centre will include eight (8) Exam/Treatment Rooms including one (1) Exam/Treatment Room-Airborne Isolation-Hybrid.

2.4.3.4 The Exam/Treatment Room-Airborne Isolation-Hybrid will be adjacent to the Registration/Triage.

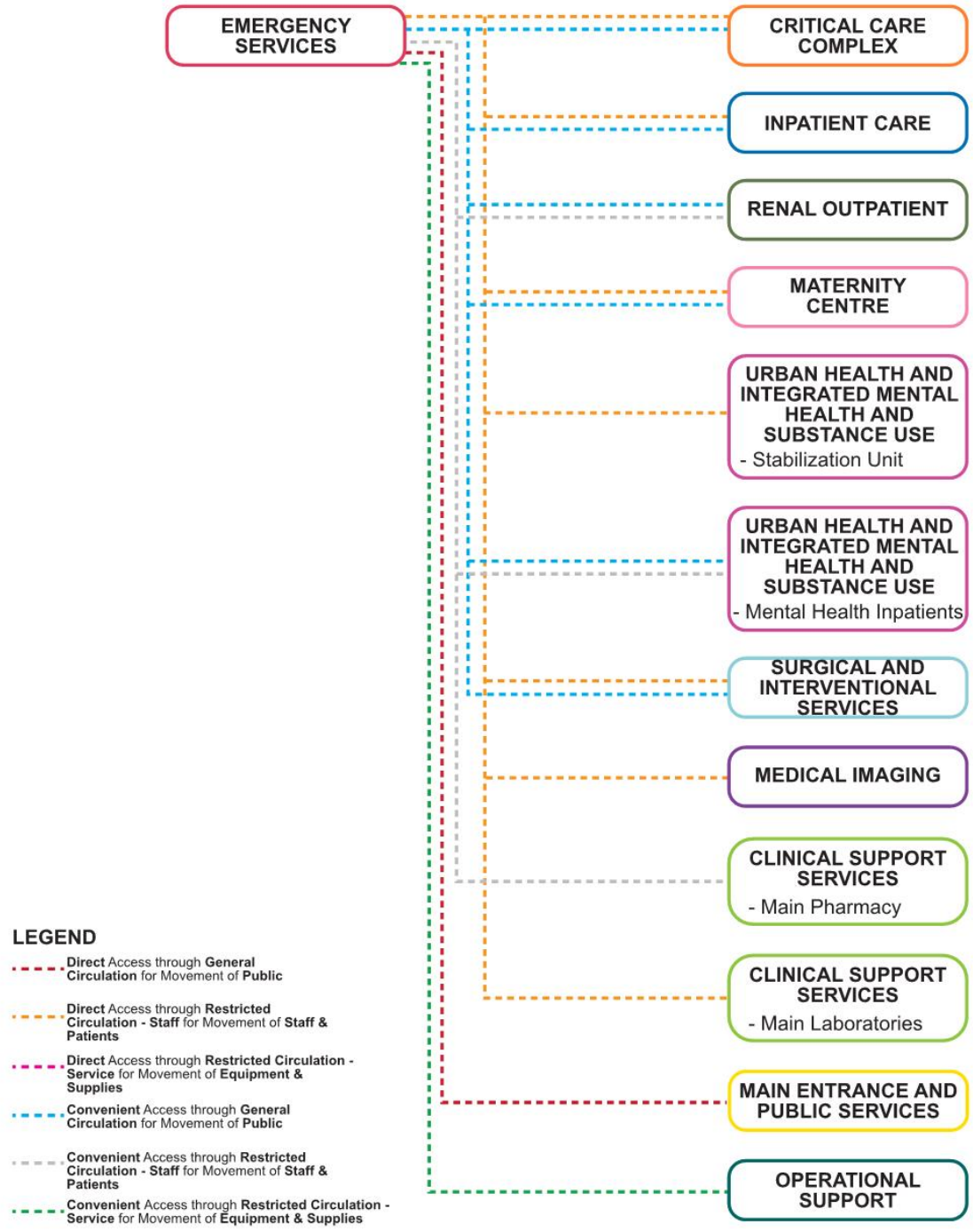
2.4.3.5 This area will also include a Waiting area, a Registration/Triage and an Inter-Professional Team Room.

2.4.3.6 The Inter-Professional Team Room will be located centrally between Exam/Treatment Rooms. Visibility from Inter-Professional Team Room to Exam/Treatment Rooms will be maximized.

2.5 EXTERNAL RELATIONSHIPS

2.5.1 The following diagram indicates other Functional Components that have a functional relationship with this Component.

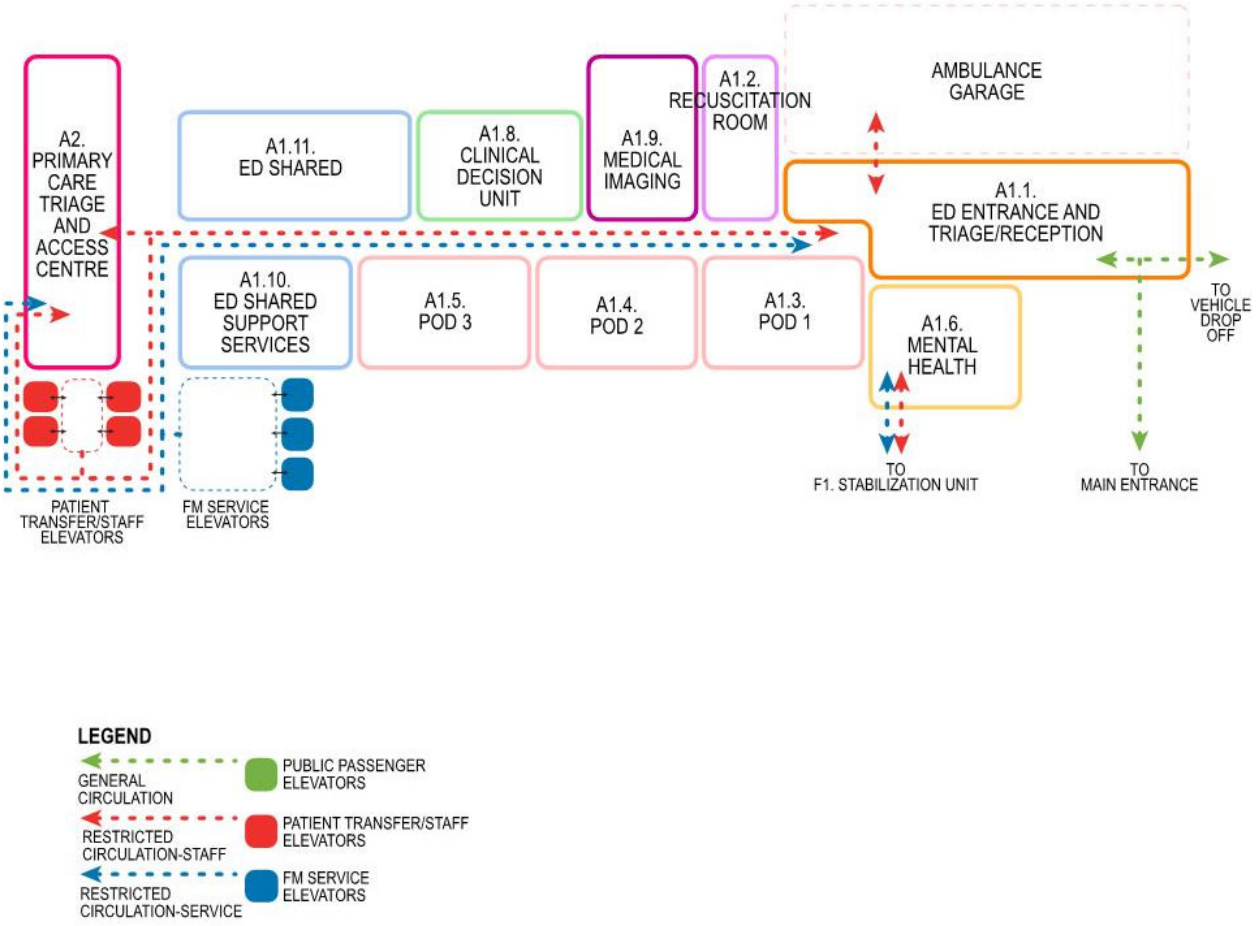
A. EMERGENCY SERVICES EXTERNAL RELATIONSHIPS AND CIRCULATIONS



2.6 INTERNAL RELATIONSHIPS

2.6.1 The following diagram indicates internal functional relationships within this Component.

A. EMERGENCY SERVICES INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



2.7 SCHEDULE OF ACCOMMODATIONS

2.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Emergency Services

A1 - EMERGENCY DEPARTMENT	2485.50
A2 - PRIMARY CARE TRIAGE AND ACCESS CENTRE	217.00
EMERGENCY SERVICES PROGRAMMED SPACE NSM:	**2,702.50**

Ref No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
A1 - EMERGENCY DEPARTMENT					
A1.1 - ED Entrance and Triage/Reception					
A1.1.1	Entrance Vestibule-Walk-in	1	8.50	8.50	Incl. provision for future metal detector in ED Entrance and Triage/Reception area outside Entrance Vestibule-Walk-in. Direct Access to Emergency Drop Off and Pick Up area.
A1.1.2	Alcove-Wheelchair	1	2.50	2.50	Adjacent to Entrance Vestibule-Walk-in.
A1.1.3	Entrance Vestibule-Ambulance	1	11.00	11.00	
A1.1.4	Alcove-Hand Hygiene Sink	3	1.00	3.00	Located at entrance to ED Entrance and Triage/Reception.
A1.1.5	Control-Security	1	9.00	9.00	Incl. 3 workstations, monitoring equipment, cabinets, counter, fully enclosed with interior windows and 1 transaction window, charging station, located at Emergency Department main entrance.
A1.1.6	Workstation-VPD/BCEHS	1	9.00	9.00	Incl. 2 workstations, charging station.
A1.1.7	Waiting	2	18.00	36.00	Incl. seating for 10 including 2 in wheelchairs, adjacent to Entrance Vestibule-Walk-in and Washroom-Public.
A1.1.8	Registration/Triage	1	45.00	45.00	Incl. 6 workstations (2 registration, 4 triage), low counter to accommodate wheelchairs, cabinets, fully enclosed with interior windows and 6 transaction windows, wall mounted displays, multi-function printer, Line of Sight to Waiting, Entrance Vestibule-Walk-in and Entrance Vestibule-Ambulance.
A1.1.9	EMS Holding Bay	4	7.50	30.00	Open bay with privacy curtains.
A1.1.10	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation, dual egress.
A1.1.11	Crisis Interview Room	1	11.00	11.00	Incl. dual egress, Direct Access to Ambulance Garage, accommodate stretcher.
A1.1.12	Exam Room-ECG	1	10.00	10.00	Incl. 1 touch down workstation, counters, cabinets.

Ref No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
A1.1.13	Family Room	1	10.50	10.50	Incl. seating for 4, 1 workstation.
A1.1.14	Decontamination Room	1	10.00	10.00	Incl. 3 shower heads, cabinets, floor drain.
A1.1.15	Anteroom-Decontamination Entry	1	5.00	5.00	Incl. cabinets, observation window into Decontamination Room.
A1.1.16	Anteroom-Decontamination Exit	1	5.00	5.00	Incl. cabinets, observation window into Decontamination Room.
A1.1.17	Entrance Vestibule-Decontamination	1	7.00	7.00	Incl. observation window into Decontamination Room.
A1.1.18	Angel's Cradle-Baby Drop-off	1	3.00	3.00	Direct Access from exterior and interior of Emergency Department.
A1.1.19	Store-Clean Supplies	1	12.00	12.00	
A1.1.20	Store-Ambulance Garage	1	9.50	9.50	Incl. cabinets, shelving.
A1.1.21	Soiled Utility	1	10.00	10.00	Incl. counters, shelving, plaster trap sink.
A1.1.22	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
A1.1.23	Washroom-Public	2	4.50	9.00	2-piece, infant change table, accessible for Persons with Disabilities.
A1.1.24	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, adjacent to Registration/Triage.
A1.1.25	Alcove-Blanket Warmer	1	1.50	1.50	
A1.2 - Resuscitation Room					
A1.2.1	Exam/Treatment Room-Resuscitation	1	105.00	105.00	Incl. 2 stretcher bays with provision for future third stretcher bay, 2 sets of City Water Supply and Drain Box (Portable RO required), 2 ceiling lifts with complex ceiling coverage, cabinets, 2 touch down workstations, lead lined.
A1.2.2	Alcove-Scrub Station	1	3.00	3.00	Located at entrance to Resuscitation Room.
A1.2.3	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, adjacent to Exam/Treatment Room-Resuscitation.
A1.2.4	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Resuscitation Room.
A1.2.5	Alcove-Blanket Warmer	1	1.50	1.50	
A1.3 - Pod 1					
A1.3.0	Waiting	1	9.00	9.00	Incl. seating for 6.
A1.3.1	Exam/Treatment Room-Bariatric-Airborne Isolation-VHF	1	16.00	16.00	Incl. lockable Patient storage, 1 touch down workstation, 1 set of City Water Supply and Drain Box (Portable RO required), ceiling lift, adjacent to Exam/Treatment Room-VHF.
A1.3.2	Anteroom-Airborne Isolation-VHF	1	5.00	5.00	Incl. cabinets.
A1.3.3	Washroom/Shower-Patient Ensuite-Bariatric-Airborne Isolation-VHF	1	7.00	7.00	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.

Ref No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
A1.3.4	Exam/Treatment Room-VHF	1	12.00	12.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift, adjacent to Exam/Treatment Room-Bariatric-Airborne Isolation-VHF.
A1.3.5	Exam/Treatment Room-Airborne Isolation-Hybrid	2	12.00	24.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift.
A1.3.6	Washroom-Patient Ensuite-Airborne Isolation	2	4.50	9.00	3-piece incl. shower, accessible for Persons with Disabilities.
A1.3.7	Exam/Treatment Room	6	12.00	72.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift. 1 set of City Water Supply and Drain Box (Portable RO required) in 1 room only.
A1.3.8	Exam/Treatment Room-Recliner	5	12.00	60.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift.
A1.3.9	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Pod 1.
A1.3.10	Care Team Station	2	16.00	32.00	Incl. 4 workstations, cabinets, charging station, dual egress.
A1.3.11	Alcove-Hand Hygiene Sink	2	1.00	2.00	Located within 6 m of Care Team Station entrance.
A1.3.12	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
A1.3.13	Medication Room-Medium	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
A1.3.14	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
A1.3.15	Alcove-Local Equipment	1	1.50	1.50	
A1.3.16	Alcove-Clean Linen	1	2.50	2.50	
A1.3.17	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
A1.3.18	Alcove-Imaging Equipment-Large	1	3.00	3.00	
A1.3.19	Alcove-Stretcher	1	2.50	2.50	
A1.3.20	Store-Clean Supplies	1	12.00	12.00	
A1.3.21	Soiled Utility	1	10.00	10.00	Incl. counters, shelving, plaster trap sink.
A1.3.22	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities.
A1.3.23	Exam/Treatment Bay	3	7.50	22.50	Incl. 1 touch down workstation, ceiling lift, walled on 3 sides with privacy curtains.
A1.3.24	Exam Room-Ophthalmology	1	9.00	9.00	Incl. 1 touch down workstation, specialized Ophthalmology sink.
A1.3.25	Soiled Equipment Hold	1	10.00	10.00	
A1.4 - Pod 2					
A1.4.0	Waiting	1	9.00	9.00	Incl. seating for 6.
A1.4.1	Exam/Treatment Room-Airborne Isolation-VHF	1	12.00	12.00	Incl. lockable Patient storage, 1 touch down workstation, 1 set of City Water Supply and Drain Box (Portable RO required), ceiling lift, adjacent to Exam/Treatment Room-VHF.
A1.4.2	Anteroom-Airborne Isolation-VHF	1	5.00	5.00	Incl. cabinets.

Ref No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
A1.4.3	Washroom-Patient Ensuite-Airborne Isolation-VHF	1	4.50	4.50	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.
A1.4.4	Exam/Treatment Room-VHF	1	12.00	12.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift, adjacent to Exam/Treatment Room-Airborne Isolation-VHF.
A1.4.5	Exam/Treatment Room-Airborne Isolation-Hybrid	2	12.00	24.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift.
A1.4.6	Washroom-Patient Ensuite-Airborne Isolation	2	4.50	9.00	3-piece incl. shower, accessible for Persons with Disabilities.
A1.4.7	Exam/Treatment Room	6	12.00	72.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift. 1 set of City Water Supply and Drain Box (Portable RO required) in 1 room only.
A1.4.8	Exam/Treatment Room-Recliner	5	12.00	60.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift.
A1.4.9	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Pod 2.
A1.4.10	Care Team Station	2	16.00	32.00	Incl. 4 workstations, cabinets, charging station, dual egress.
A1.4.11	Alcove-Hand Hygiene Sink	2	1.00	2.00	Located within 6 m of Care Team Station entrance.
A1.4.12	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
A1.4.13	Medication Room-Medium	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
A1.4.14	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets.
A1.4.15	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
A1.4.16	Alcove-Local Equipment	1	1.50	1.50	
A1.4.17	Alcove-Clean Linen	1	2.50	2.50	
A1.4.18	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
A1.4.19	Alcove-Imaging Equipment-C-Arm	1	3.00	3.00	Incl. power and data, for Mini Mobile C-Arm.
A1.4.20	Alcove-Stretcher	1	2.50	2.50	
A1.4.21	Store-Clean Supplies	1	12.00	12.00	
A1.4.22	Soiled Utility	1	10.00	10.00	Incl. counters, shelving, plaster trap sink.
A1.4.23	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities.
A1.4.24	Exam/Treatment Bay	3	7.50	22.50	Incl. 1 touch down workstation, ceiling lift, walled on 3 sides with privacy curtains.
A1.4.25	Soiled Equipment Hold	1	10.00	10.00	
A1.5 - Pod 3					
A1.5.0	Waiting	1	9.00	9.00	Incl. seating for 6.
A1.5.1	Exam/Treatment Room-Airborne Isolation-VHF	1	12.00	12.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift, adjacent to Exam/Treatment Room-VHF.
A1.5.2	Anteroom-Airborne Isolation-VHF	1	5.00	5.00	Incl. cabinets.

Ref No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
A1.5.3	Washroom-Patient Ensuite-Airborne Isolation-VHF	1	4.50	4.50	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.
A1.5.4	Exam/Treatment Room-VHF	1	12.00	12.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift, adjacent to Exam/Treatment Room-Airborne Isolation-VHF.
A1.5.5	Exam/Treatment Room-Airborne Isolation-Hybrid	1	12.00	12.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift.
A1.5.6	Washroom-Patient Ensuite-Airborne Isolation	1	4.50	4.50	3-piece incl. shower, accessible for Persons with Disabilities.
A1.5.7	Exam/Treatment Room	4	12.00	48.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift.
A1.5.8	Exam/Treatment Room-ENT	1	14.00	14.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift.
A1.5.9	Exam/Treatment Room-OB/GYN	1	12.00	12.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift.
A1.5.10	Washroom/Shower-Patient	1	5.50	5.50	3-piece incl. shower stall, accessible for Persons with Disabilities, adjacent to Exam/Treatment Room-OB/GYN.
A1.5.11	Exam/Treatment Room-EYE	1	12.00	12.00	Incl. lockable Patient storage, 1 touch down workstation, specialized Ophthalmology sink, ceiling lift.
A1.5.12	Exam/Treatment Room-Recliner	5	12.00	60.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift.
A1.5.13	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Pod 3.
A1.5.14	Care Team Station	2	16.00	32.00	Incl. 4 workstations, cabinets, charging station, dual egress.
A1.5.15	Alcove-Hand Hygiene Sink	2	1.00	2.00	Located within 6 m of Care Team Station entrance.
A1.5.16	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
A1.5.17	Medication Room-Medium	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
A1.5.18	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
A1.5.19	Alcove-Local Equipment	1	1.50	1.50	
A1.5.20	Alcove-Clean Linen	1	2.50	2.50	
A1.5.21	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
A1.5.22	Alcove-Imaging Equipment-Large	1	3.00	3.00	
A1.5.23	Alcove-Stretcher	1	2.50	2.50	
A1.5.24	Store-Clean Supplies	1	12.00	12.00	
A1.5.25	Soiled Utility	1	10.00	10.00	Incl. counters, shelving, plaster trap sink.
A1.5.26	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
A1.5.27	Exam/Treatment Bay	3	7.50	22.50	Incl. 1 touch down workstation, ceiling lift, walled on 3 sides with privacy curtains.
A1.5.28	Soiled Equipment Hold	1	10.00	10.00	
A1.6 - Pod 4 (Mental Health)					

Ref No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
A1.6.0	Waiting	1	9.00	9.00	Incl. seating for 6.
A1.6.1	Crisis Interview Room	1	11.00	11.00	Incl. dual egress.
A1.6.2	Exam/Treatment Room-MH	10	12.00	120.00	Incl. lockable Patient storage, 1 touch down workstation.
A1.6.3	Secure Room	2	14.00	28.00	
A1.6.4	Anteroom-Secure	1	9.00	9.00	Incl. counter, lockable cabinets, Direct Access and observation window into each Secure Room and Washroom/Shower-Patient Ensuite-Small.
A1.6.5	Washroom/Shower-Patient Ensuite-Small	1	4.50	4.50	3-piece incl. shower.
A1.6.6	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Pod 4 (Mental Health).
A1.6.7	Care Team Station	2	16.00	32.00	Incl. 4 workstations, cabinets, charging station, dual egress.
A1.6.8	Alcove-Hand Hygiene Sink	2	1.00	2.00	Located within 6 m of Care Team Station entrance.
A1.6.9	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
A1.6.10	Medication Room-Medium	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, shelving, located between two Care Team Stations with dual egress and interior windows.
A1.6.11	Office-4 Shared	1	20.00	20.00	Incl. 4 workstations.
A1.6.12	Alcove-Blanket Warmer	1	1.50	1.50	
A1.6.13	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
A1.6.14	Store-Clean Supplies	1	12.00	12.00	
A1.6.15	Soiled Utility	1	10.00	10.00	Incl. counters, shelving, plaster trap sink.
A1.6.16	Washroom/Shower-Patient	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
A1.6.17	Washroom-Staff	1	3.00	3.00	2-piece.
A1.6.18	Exam/Treatment Bay	1	7.50	7.50	Incl. 1 touch down workstation, ceiling lift, walled on 3 sides with privacy curtains.
A1.6.19	Soiled Equipment Hold	1	10.00	10.00	
A1.7 - Not Used					
A1.7.1	Not Used	0	00.00	00.00	
A1.7.2	Not Used	0	00.00	00.00	
A1.7.3	Not Used	0	00.00	00.00	
A1.7.4	Not Used	0	00.00	00.00	
A1.7.5	Not Used	0	00.00	00.00	
A1.7.6	Not Used	0	00.00	00.00	
A1.7.7	Not Used	0	00.00	00.00	

Ref No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
A1.7.8	Not Used	0	00.00	00.00	
A1.7.9	Not Used	0	00.00	00.00	
A1.7.10	Not Used	0	00.00	00.00	
A1.7.11	Not Used	0	00.00	00.00	
A1.8 - Clinical Decision Unit					
A1.8.0	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
A1.8.1	Exam/Treatment Room	10	12.00	120.00	Incl. lockable Patient storage, 1 touch down workstation, ceiling lift.
A1.8.2	Alcove-Hand Hygiene Sink	2	1.00	2.00	One located at entrance to Clinical Decision Unit, one centralized in Clinical Decision Unit.
A1.8.3	Care Team Station	1	16.00	16.00	Incl. 4 workstations, cabinets, charging station, dual egress.
A1.8.4	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of Care Team Station entrance.
A1.8.5	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
A1.8.6	Medication Room-Small	1	8.00	8.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
A1.8.7	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets.
A1.8.8	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
A1.8.9	Alcove-Clean Linen	1	2.50	2.50	
A1.8.10	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
A1.8.11	Store-Clean Supplies	1	12.00	12.00	
A1.8.12	Soiled Utility	1	10.00	10.00	Incl. counters, shelving, plaster trap sink.
A1.8.13	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
A1.8.14	Consultant Workroom	1	36.00	36.00	Incl. 8 workstations, wall mounted displays.
A1.9 - Medical Imaging					
A1.9.1	Waiting	1	7.50	7.50	Incl. seating for 4 including 1 in wheelchair.
A1.9.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Medical Imaging.
A1.9.3	Change Cubicle-Patient	1	3.50	3.50	
A1.9.4	Stretcher Hold/CT Prep	1	9.50	9.50	2 open bays with privacy curtains.
A1.9.5	Imaging-CT	1	40.00	40.00	Incl. counters, cabinets, shelving, ceiling lift with complex ceiling coverage, lead lined, located adjacent to Exam/Treatment Room-Resuscitation.
A1.9.6	Control-Imaging	1	12.00	12.00	Incl. 2 workstations, cabinets, lead lined, adjacent to Imaging-CT, window between Control-Imaging and Imaging-CT.

Ref No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
A1.9.7	Imaging-Digital Radiography	2	30.00	60.00	Incl. cabinets, ceiling lift with complex ceiling coverage, Control-Imaging with 1 workstation, lead lined, window between Control-Imaging and Imaging-Digital Radiography with Line of Sight to the whole room.
A1.9.8	Imaging-Ultrasound	1	13.00	13.00	Incl. 1 touch down workstation, cabinets, ceiling lift,
A1.9.9	Reading Room-PACS	1	12.00	12.00	Incl. 2 PACS workstations, located in A1.9 - Medical Imaging adjacent to Exam/Treatment Room-Resuscitation with Convenient Access to Control-Imaging and Imaging-Ultrasound.
A1.9.10	Workstation-Touchdown	1	2.50	2.50	Incl. 1 touch down workstation.
A1.9.11	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
A1.9.12	Alcove-Wheelchair	2	2.50	5.00	
A1.9.13	Store-General	1	3.50	3.50	Incl. shelving.
A1.9.14	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities, adjacent to Imaging-Ultrasound.
A1.9.15	Not Used	1	0.00	0.00	
A1.10 - ED Shared Support Services					
A1.10.1	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
A1.10.2	Store-Central Equipment	3	10.00	30.00	Incl. shelving, charging station. One located in A1.3 - Pod 1, one located in A1.4 - Pod 2, one located in A1.5 - Pod 3.
A1.10.3	Store-Local Equipment	2	12.00	24.00	Incl. shelving, charging station, distributed in Emergency Department.
A1.10.4	Store-Stretcher/Backboard	1	3.00	3.00	
A1.10.5	Store-Stretcher	1	12.00	12.00	Located in a central location adjacent to Patient Elevators.
A1.10.6	Store-Stretcher	2	7.50	15.00	Distributed in Emergency Department.
A1.10.7	Disposal Hold	2	10.00	20.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
A1.10.8	Soiled Equipment Hold	1	10.00	10.00	Located in A1.8 - Clinical Decision Unit.
A1.10.9	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
A1.11 - ED Shared Staff Support					
A1.11.1	Not Used	0	00.00	00.00	

Ref No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
A1.11.2	Conference/Meeting Room-Medium	1	44.00	44.00	Incl. counters, cabinets, accommodates 25 Persons, capability to view Exam/Treatment Room-Resuscitation activities through clinical observation camera.
A1.11.3	Office-Private	3	9.50	28.50	Incl. 1 workstation.
A1.11.4	Office-Education	1	12.00	12.00	Incl. 2 workstations, capability to view Exam/Treatment Room-Resuscitation activities through clinical observation camera.
A1.11.5	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
A1.11.6	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
A1.11.7	Physician Workroom	1	31.50	31.50	Incl. seating, counter, cabinets, 60 purse lockers, mail slots, 6 touch down workstations.
A1.11.8	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
A1.11.9	Lockers-Staff	1	34.00	34.00	Incl. 96 Z-lockers, 2 shoe racks, split into male and female if required, adjacent to Lounge-Staff.
A1.11.10	Washroom/Shower-Staff	2	4.50	9.00	3-piece incl. shower.
A1.11.11	Washroom-Staff-Accessible	2	4.50	9.00	2-piece, accessible for Persons with Disabilities.
A1.11.12	Washroom-Staff	1	3.00	3.00	2-piece.
	TOTAL NSM: Emergency Department	**2,485.50**			
A2 - PRIMARY CARE TRIAGE AND ACCESS CENTRE					
A2.1 - Primary Care Entrance					
A2.1.1	Registration/Triage	1	9.00	9.00	Incl. 2 workstations (1 registration, 1 triage), low counter to accommodate wheelchairs, cabinets, fully enclosed with interior windows and 2 transaction windows, wall mounted displays, multi-function printer, Line of Sight to Waiting and Primary Care entrance.
A2.1.2	Waiting	1	16.50	16.50	Incl. seating for 10 including 1 in wheelchair, Convenient Access to Vehicle Drop Off and Pick Up area.
A2.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Primary Care.
A2.2 - Primary Care					
A2.2.1	Exam/Treatment Room-Airborne Isolation-Hybrid	1	12.00	12.00	Incl. lockable Patient storage, 1 touch down workstation.
A2.2.2	Exam/Treatment Room	7	12.00	84.00	Incl. lockable Patient storage, 1 touch down workstation.
A2.2.3	Medication Room-Small	1	8.00	8.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
A2.2.4	Store-Clean Supplies	1	12.00	12.00	

Ref No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
A2.2.5	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
A2.2.6	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
A2.3 - Primary Care Staff Support					
A2.3.1	Inter-Professional Team Room	1	24.00	24.00	Incl. 8 touch down workstations, glass walls.
A2.3.2	Office-Private	1	9.50	9.50	Incl. 1 workstation.
A2.3.3	Office-3 Shared	1	16.00	16.00	Incl. 3 workstations.
A2.3.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
A2.3.5	Washroom-Staff-Accessible	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
	TOTAL NSM: Primary Care			**217.00**	
	TOTAL NSM: EMERGENCY SERVICES			**2,702.50**	

THE NEW ST. PAUL'S PHASE 1A

B. CRITICAL CARE COMPLEX

B. CRITICAL CARE COMPLEX

3.1 OVERVIEW

3.1.1 Bringing forward the rich history of Canada's very first Intensive Care Unit (ICU) and specialized cardiac services, including heart transplant, PHC's Critical Care program will be combined into one complex equipped to care for Patients who are the most critically ill with extremely sophisticated needs. Patients will come from Vancouver, the lower Mainland and across the province, including the Yukon Territory.

3.1.2 The Critical Care Complex Component is the consolidation of the current individual critical care programs into one complex.

3.1.3 The purpose for the Critical Care Complex Component is to achieve the following:

3.1.3.1 Remove the inherent redundancies in operations in the current model by standardizing the equipment, clinical protocols, technology and organization of the units to increase the agility of care delivery and to improve overall service and delivery outcomes.

3.2 FUNCTIONAL DESCRIPTION

3.2.1 Scope of Services

3.2.1.1 Critical Care Complex will include the following programs:

3.2.1.1(1) ICU;

3.2.1.1(2) High Acuity Unit (HAU);

3.2.1.1(3) Cardiac Surgery Intensive Care Unit (CSICU); and

3.2.1.1(4) Cardiac Intensive Care Unit (CICU).

3.2.1.2 Scope of Educational Activity

3.2.1.2(1) Critical Care Complex will continue to be a world-class teaching unit providing clinical experiences to support teaching programs for health care professionals as well as students from all disciplines and roles. In-service education and Patient teaching programs will be conducted on a regular basis throughout the Patient and Clinical Spaces as well as in Conference/Meeting Rooms equipped with computer/TV/video links for students and academics.

3.2.1.2(2) Critical Care Complex will generally provide clinical resources in support of teaching programs. It is estimated that there could be up to twenty-five (25) non-Staff people involved with education programs in the Component at any one time.

3.2.1.3 Scope of Research Activity

3.2.1.3(1) Clinical research activities will be integrated into the work conducted within the Critical Care Complex Component. Researchers will utilize Workstation-Touchdown and no additional space requirements will be needed to support research activities. Integration of researchers into the practice environment will support strong integrations between clinical research, education and clinical practice.

3.2.2 Services provided

3.2.2.1 Care and treatment of Patients with complex and severe multisystem organ failure;

3.2.2.2 Advanced and specialized ventilator management;

3.2.2.3 Advanced hemodynamic monitoring (i.e. pulmonary artery catheters, focused trans-thoracic echocardiogram);

3.2.2.4 Cardiorespiratory arrest management;

3.2.2.5 Hemodialysis (continuous and intermittent);

3.2.2.6 Extracorporeal therapies including: extracorporeal cardiopulmonary resuscitation (ECPR), extracorporeal membrane oxygenation (ECMO) and extracorporeal carbon dioxide removal (ECCOR2);

3.2.2.7 Obstetrical Patients who become critically ill at BC Women's Hospital will be transferred to the Facility,

3.2.2.8 Critical Care Complex will provide the highest level of care for the cardiac surgical Patient population and will be integral to the functioning of the cardiac program, including the heart transplant program;

3.2.2.9 Patients will be transferred directly from cardiac OR to Critical Care Complex where they will receive expert care within a rapid surgical recovery model;

3.2.2.10 Specialized treatments and diagnostics to support cardiac transplantation will also be offered in this space;

3.2.2.11 Cardiac surgery Patients may be supported by the following modalities:

3.2.2.11(1) Intra-Aortic Balloon Pump

3.2.2.11(2) Mechanical Circulatory Support including Ventricular Assist Devices (VADs);

3.2.2.11(3) Extra corporeal membrane oxygenation (ECMO); and

3.2.2.11(4) Continuous Renal Replacement Therapy (CRRT).

3.2.2.12 Patients admitted to Critical Care Complex will benefit from a quaternary level unit that offers some services not available anywhere else in the province;

3.2.2.13 Critical Care Complex will provide quaternary level care that is both innovative and specialized (including acute heart failure management, pre-transplant assessment, mechanical circulatory assist devices and advanced arrhythmia management);

3.2.2.14 Critical Care Complex will offer enhanced monitoring and observation capabilities as well as complex and innovative therapeutics and interventions, as above;

3.2.2.15 Critical Care Complex will provide acuity-adaptable rooms that will accommodate flexing nursing levels depending on the Patients' acuity; and

3.2.2.16 A Patient's condition can fluctuate rapidly resulting in the need for a system and environment that is responsive to such changes in acuity.

3.3 OPERATIONAL CONSIDERATIONS

3.3.1 Service Delivery Principles and Methods

3.3.1.1 Patient and Family Management Processes and Flows

3.3.1.1(1) Patient

3.3.1.1(1)(a) The following list specifies the minimum set of functions that will be accommodated within the Functional Component's spaces:

3.3.1.1.1.(a).1 Critical Care Complex will be a 55-bed complex comprised of a 27-bed and a 28-bed unit with the capacity to expand to two (2) 30-bed units in the future.

3.3.1.1.1.(a).2 Critical Care Complex will provide innovations in care for Patients through the use of acuity adaptable single occupancy Patient Rooms that are able to support critically ill Patients; and team-based care delivered by Staff that can flex to adapt to the changes in Patient care needs.

3.3.1.1.1.(a).3 Admissions and discharges will be determined by the critical care team and designate to ensure that resources are provided to the most acutely ill.

3.3.1.1.1.(a).4 Critical Care Complex will be designed to respond to changes in Patients' acuity, minimizing transfers and allowing Patient care to be provided in one place with the appropriate care team.

3.3.1.1.1.(a).5 The care provided will be Person- and Family-Centred Care and will be delivered by an inter-professional team of specialized clinicians, including medical, nursing and allied health professionals.

3.3.1.1.1.(a).6 Procedures and treatments, to the extent possible, will be provided within the Patient's room to minimize Patient transfers.

3.3.1.1.1.(a).7 Once Patients no longer fit the criteria to remain in the Critical Care Complex, they will be transferred to an IPU.

3.3.1.1(1)(b) Treatment in the Critical Care Complex Component includes:

3.3.1.1.1.(b).1 Life support systems;

3.3.1.1.1.(b).2 Computerized cardiac equipment such as advanced hemodynamic monitoring and implanted cardiac electronic devices;

3.3.1.1.1.(b).3 Mechanical ventilation; and

3.3.1.1.1.(b).4 Hemodialysis, ultrafiltration and Renal Replacement Therapy.

3.3.1.1(1)(c) Care activity in the Component will include:

3.3.1.1.1.(c).1 Conducting bedside consultations between Patients, family, and members of their inter-professional team;

3.3.1.1.1.(c).2 Developing goals of care;

3.3.1.1.1.(c).3 Symptom management, including minor procedures;

3.3.1.1.1.(c).4 Facilitating Patients' access to diagnostic and treatment services located elsewhere in the Facility;

3.3.1.1.1.(c).5 Delivering medications according to each Patient's scheduled or immediate needs;

3.3.1.1.1.(c).6 Conducting discharge planning including activation focusing on returning the Patient to their highest level of functioning;

3.3.1.1.1.(c).7 Conducting shift reports and participating in inter-professional team conferences;

3.3.1.1.1.(c).8 Documenting each Patient's progress and health status using an EMR;

3.3.1.1.1.(c).9 Addressing each Patient's nutritional needs by providing meals at the bedside and nutritional consultations; and

3.3.1.1.1.(c).10 Educating Patients and members of their support network.

3.3.1.1(1)(d) Providing assistance to Patients' personal needs as necessary (e.g., feeding and maintaining hygiene) includes:

- 3.3.1.1.1.(d).1 Accommodating participation by lay members of a Patient's support network in providing care;
- 3.3.1.1.1.(d).2 Providing respite and relaxation opportunities for both Patients and their visitors;
- 3.3.1.1.1.(d).3 Accommodating in-service education, demonstration and practice for new Staff, and recurrent training for existing Staff on Patient care protocols;
- 3.3.1.1.1.(d).4 Managing all functions conducted in the Component including scheduling and managing Staff, controlling inventories of consumable supplies, scheduling rounds, conducting service quality evaluations, maintaining standards of maintenance and cleanliness in all areas of the Component and communicating with Staff on Facility-wide and professional topics;
- 3.3.1.1.1.(d).5 Collecting and documenting Patient historical medical information using an EMR;
- 3.3.1.1.1.(d).6 Planning and implementing care, including examinations and treatments;
- 3.3.1.1.1.(d).7 Facilitating Patient comfort, mobilization and reactivation;
- 3.3.1.1.1.(d).8 Responding to code blue (cardiac arrests) within the Component and in the rest of the Facility;
- 3.3.1.1.1.(d).9 Ordering medical diagnostic and treatment procedures;
- 3.3.1.1.1.(d).10 Preparing Patients for diagnostic and treatment services;
- 3.3.1.1.1.(d).11 Prescribing and administering medications, in consultation with pharmacists;
- 3.3.1.1.1.(d).12 Providing family and/or visitor support and consultation;
- 3.3.1.1.1.(d).13 Participating in daily interdisciplinary Patient conferences and rounds;
- 3.3.1.1.1.(d).14 Providing clinical academic training for Staff, students and residents, including classroom education;
- 3.3.1.1.1.(d).15 Communicating within the Component and with external units and facilities;
- 3.3.1.1.1.(d).16 Liaising with community agencies and services;

3.3.1.1.1.(d).17 Coordinating, implementing, communicating, administering, scheduling, and evaluating the overall operations of the Component;

3.3.1.1.1.(d).18 Sterile procedures, including invasive procedures and guided ultrasound procedures, performed in all Patients' rooms will include, but are not limited to:

(d).18.1 Thoracoscopy;
(d).18.2 Central line insertion;
(d).18.3 PA Catheter;
(d).18.4 Transvenous Pacemaker insertion;
(d).18.5 Tracheotomy;
(d).18.6 Lung biopsies;
(d).18.7 A-line insertion;
(d).18.8 Intubation;
(d).18.9 Lumbar punctures;
(d).18.10 ECMO initialization;
(d).18.11 Chest tube insertion;
(d).18.12 Abdominal drain insertion;
(d).18.13 Bladder pressure monitoring;
(d).18.14 Intra-aortic Balloon insertions;
(d).18.15 Thoracentesis;
(d).18.16 Re – Sternotomy;
(d).18.17 Cerebral oximetry monitoring;
(d).18.18 Targeted temperature management;
(d).18.19 Pericardialcentesis; and
(d).18.20 Anesthesia induction and monitoring.

3.3.1.1.1.(d).19 Bronchoscopy procedures will be performed in AIRs; and

3.3.1.1.1.(d).20 Private spaces will be available for discussions amongst professionals and families.

3.3.1.1(1)(e) Patient Management Processes

3.3.1.1.1.(e).1 Entrance

(e).1.1 The entrance will include a staffed reception desk, Waiting area, Washroom-Public and quiet Family Respite Room.
(e).1.2 Staff in the Reception, adjacent to the visitor entrance, will monitor and control visitor access to the Component.
(e).1.3 Volunteers may also be available at the reception desk.

3.3.1.1.1.(e).2 Reception/Admission/Discharge

(e).2.1 Patients admitted to the Critical Care Complex will be either unscheduled

Patients from the ED, external transfers from other health care facilities, Patients requiring a higher level of care via inter-hospital transfers from general medical/surgical units or Patients coming from the Surgical and Major Procedures Zone.

(e).2.2 Patients will be transported to Critical Care Complex through non-public corridors and Patient Transfer/Staff Service Elevators, with Direct Access provided from the ED and the Surgical and Major Procedures Zone.

(e).2.3 Access routes will be quick, safe and efficient to facilitate the transfer of Patients. A non-public entrance and corridor will also be used to transport deceased Patients to the Morgue.

(e).2.4 Patients who arrive through the ED will be initially resuscitated and/or stabilized before transfer to the Critical Care Complex. Line insertion, airway insertion, and initiation of mechanical ventilation may occur in ED. Consultation for admission with the critical care team and designate will be done prior to the transfer of the Patient.

(e).2.5 Patients arriving to the Critical Care Complex will go directly to an assigned room.

(e).2.6 RTLS ID tag will be used to allow for positive identification of Patients and will be linked to medication administration, laboratory, procedures, and diagnostic systems to ensure the right Patient.

3.3.1.1.1.(e).3 Patient Room

(e).3.1 Upon the Patient’s arrival in the Critical Care Complex, as many as five (5) to ten (10) members of the interdisciplinary team may be involved in the initial stabilization of the Patient.

(e).3.2 A formal handover process will occur.

(e).3.3 All care will occur at the Patient’s bedside with the exception of some

diagnostic imaging procedures, such as CT scans.

(e).3.4 Patient Rooms will be able to support extensive invasive monitoring, hemodialysis, and full respiratory support functions.

(e).3.5 To accommodate rapid changes in Patient acuity, Patient Rooms will have Line of Sight from the Care Team Station.

3.3.1.1.1.(e).4 Allied Health Support

(e).4.1 Patients within the Critical Care Complex will have care needs that require an integrated inter-professional team. Therefore, Respiratory Therapy (RT) and other allied health services require a stronger presence in this setting than on a generic IPU. As a result of this clinical necessity, a Testing/Assembly Area and supervisor office will be provided for Respiratory Services within the Component in addition to storage and assembly spaces for the equipment necessary to fulfill their clinical activities.

(e).4.2 Additional allied health care team members will use Workstation-Touchdown throughout the Component.

3.3.1.1(1)(f) Language Services

3.3.1.1.1.(f).1 Interpreters will be provided as needed.

3.3.1.1(2) Family

3.3.1.1(2)(a) Provisions for family members will be made within the Patient's room as well as within the Component.

3.3.1.1(2)(b) Each of the units will have two (2) Family Respite Rooms and two (2) Lounge-Family/Visitor for family to use and private spaces for discussions amongst professionals and families.

3.3.1.2 Patient Information Management

3.3.1.2(1) All Patient related information will be maintained on the EMR system. Wireless technology will enable data entry using a combination of fixed workstation and WOWs located close to each Patient's bedside and at key Staff workstations, and mobile devices and/or tablets. Access to the EMR will be controlled electronically with varying levels of security clearance determining a Staff member's access to different sections and their ability to enter and edit data.

3.3.1.2(2) Staffing information will be a managed corporate service. Scheduling, including providing for sick and vacation relief will be conducted centrally, and off-site. Notices to individual Staff regarding their schedules will be communicated electronically.

3.3.1.3 Care Provider Work Processes and Flows

3.3.1.3(1) Start/End of Shift

3.3.1.3(1)(a) At the start of shift, Staff will pick up a wireless communication device that is linkable and with the ability to view physiological monitoring of the Patients assigned.

3.3.1.3(1)(b) When the shift is completed, Staff will return the wireless communication device before leaving the unit.

3.3.1.3(2) Care Delivery

3.3.1.3(2)(a) Staffing in the Critical Care Complex will vary depending on acuity; the highest acuity Patients will receive a 1:1 or 1:2 nurse to Patient ratio. Patients will be directly observed from Alcove-Touchdown/Charting between Patient Rooms, allowing one nurse to observe two (2) Patients at once to assist with cross-coverage.

3.3.1.3(2)(b) In addition to professional care, an increased emphasis will be placed on family-involved/centred approach to care in support of holistic care of the Patient. To facilitate this approach, families will be provided space in the Patients' rooms and in designated family areas on the Component.

3.3.1.3(3) Communications

3.3.1.3(3)(a) An integrated, linked Nurse Call System and handheld wireless communication device, with ability to link and receive physiologic monitoring will be required for Critical Care Complex.

3.3.1.3(3)(b) RTLS tagging will enable Staff tracking to optimize Staff assignments. RTLS tagging will enable the assignment of Staff based on acuity and Patient demands.

3.3.1.3(3)(c) Electronic Patient information tracking boards will be available at all Care Team Stations. The Patient information tracking boards will have the availability of Patient information, appointments, care team details and other relevant information as deemed necessary.

3.3.1.3(3)(d) There will be downtime and disaster communication systems in place for events of power failure, wireless failure and emergency/disaster situations. Emergency (color) codes may be communicated via wireless and wired network devices.

3.3.1.3(4) Pneumatic Tube System

3.3.1.3(4)(a) Each Care Team Station will be provided with a PTS.

3.3.1.3(5) Maximized Use of Staff Resources

3.3.1.3(5)(a) Staff resource utilization will be maximized in that the most appropriate Staff Persons will perform tasks. For example, nurses will not spend time in non-nursing duties such as searching for supplies, thereby allowing them to focus on care of the Patients in their charge.

3.3.1.3(6) Students

3.3.1.3(6)(a) Medical, Nursing and RT Allied Health students will be integrated into all aspects of Patient, family and provider space in the Component.

3.3.1.3(6)(b) The Facility will be a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents. Work spaces will be enabled to have private, confidential conversations and be equipped with teaching capability.

3.3.1.4 Clinical and Logistical Support Processes and Flows

3.3.1.4(1) Medical Imaging

3.3.1.4(1)(a) Mobile X-ray and ultrasound will be brought to Patients' bedside. Dedicated alcoves or rooms for storage of mobile imaging equipment and recharging batteries are required and these spaces will require adequate ventilation.

3.3.1.4(1)(b) In addition to mobile diagnostic imaging services, Patients will be transported to the main Medical Imaging Component for other modalities as required.

3.3.1.4(1)(c) All imaging will be able to be viewed through PACS at the Care Team Stations, Patient bedsides or Alcove-Touchdown/Charting.

3.3.1.4(2) Laboratory Services

3.3.1.4(2)(a) Nursing Staff will mainly be responsible for the collection of routine and Statim (STAT) laboratory tests as most Patients will have lines that can be used for obtaining blood samples. Laboratory tests will be transported to the Main Laboratories via the PTS. Specimens received from the Component will be given the highest priority to ensure shortest possible turnaround times for results.

3.3.1.4(2)(b) Results will be available through the EMR system and be alerted to the assigned primary care nurse hand-held device.

3.3.1.4(3) Pharmacy Services

3.3.1.4(3)(a) Medication Rooms with ADCs will be dispersed throughout the Component.

3.3.1.4(3)(b) Patient-specific medications will be stored in Patient Rooms.

3.3.1.4(4) Respiratory Therapy Services

3.3.1.4(4)(a) Patients rely heavily on clinical work provided by RT services. Proximity of RT to Patients is essential. RT services will be performed at the bedside when possible.

3.3.1.4(4)(b) Respiratory Services will require work space for their clinicians within the Component.

3.3.1.4(4)(c) Touchdown space will be allotted in the Component for allied health professionals.

3.3.1.4(4)(d) A Testing/Assembly Area and supervisor office will be provided adjacent to the Critical Care Complex Component.

3.3.1.4(4)(e) Storage and assembly spaces will be available for dedicated Equipment, separate areas for clean and soiled Equipment and supplies within the Component.

3.3.1.4(5) Rehabilitation Services

3.3.1.4(5)(a) Rehabilitation Staff will provide assessments and therapy at the Patient's bedside.

3.3.1.4(6) Biomedical Engineering

3.3.1.4(6)(a) Equipment storage on the unit will have power and data for recharging equipment batteries.

3.3.1.4(6)(b) Biomedical Engineering will conduct required maintenance and repair work in the Critical Care Complex to the maximum extent possible to avoid excessive equipment movement and relocation.

3.3.1.4(7) Equipment and Instruments

3.3.1.4(7)(a) The Equipment Depot located in Operational Support will store Equipment that can be quickly brought to the Critical Care Complex Component. RTLS tagging of supplies will allow for tracking and replenishment.

3.3.1.4(7)(b) Necessary and frequently used Equipment will be kept in the Component for ease of use; this will be monitored and stocked by Central Supply and cleaned as per IPAC protocols.

3.3.1.4(7)(c) Equipment storage rooms and alcoves will also store local Equipment.

3.3.1.4(7)(d) RTLS tagging of Equipment will allow for tracking and monitoring.

3.3.1.4(7)(e) AGVs will transport materials and supplies to and from the Component in the Back of House space..

3.3.1.4(8) Consumable Supplies

3.3.1.4(8)(a) Consumable supplies will be kept in a clean POC supply cabinet or Store-Clean Supplies close to POC. Items will be maintained with a minimum

inventory level, which will trigger a re-ordering process.

3.3.1.4(8)(b) RTLS tagging of supplies will allow for tracking and replenishment.

3.3.1.4(8)(c) MDRD will support the unit to provide sterile supplies, equipment and instruments as required.

3.3.1.4(8)(d) To the extent practicable, consumable supplies stored in different areas in this Component will be organized and stored in a common order and configuration, with each item having a standardized storage location. The intent of this standard is to enable efficient locating of each supply item without Staff first having to reorient themselves to a new room configuration and to avoid long travel distances between supplies storage and point of use.

3.3.1.4(8)(e) Material management will rely on automation. Reordering and resupplying will rely on a latest automated tracking and ordering management system as supplies are withdrawn from inventories. Asset-tagging/inventory-tagging systems may be used to automate inventory replenishment.

3.3.1.4(9) Laundry and Linen

3.3.1.4(9)(a) Clean linen for use will be stored in Alcove-Clean Linen in exchange carts.

3.3.1.4(9)(b) Soiled linen will be placed in hampers and moved to a Disposal Hold for pick up and transportation to the loading dock by way of FM Service Elevators. Storage and pathways for clean supplies and linen will be kept separate from soiled supplies, equipment and linen.

3.3.1.4(10) Waste Management

3.3.1.4(10)(a) Waste products, recycling and bio-HAZMAT will be separated at POC and stored in holding areas for pick up by housekeeping Staff and transported by AGV's.

3.3.1.4(10)(b) Waste containers will be monitored, removed and replaced by housekeeping Staff and transported using AGVs.

3.3.1.4(11) Food Services

3.3.1.4(11)(a) In addition to Total Parenteral Nutrition (TPN) and liquid diets, a few Patients in the Component will require full meal (tray) service provided centrally by CFP and served from Complete Nourishment on the unit. Food carts will be sent back to Complete Nourishment on the unit.

3.3.1.5 Anticipated Trends in Service Delivery

3.3.1.5(1) The following lists trends expected within the planning horizon of this project, and that are expected to affect the nature and/or extent of functions accommodated within this Component. Effects of these trends will be reflected in the Component's design.

3.3.1.5(1)(a) The aging population will put increasing pressure on the Component due to the prevalence of comorbidities and longer lengths of stay.

3.3.1.5(1)(b) Increasing numbers of trauma, cancer and chronic ventilation Patients who will require critical care.

3.3.1.5(1)(c) The trend will continue toward increasing need for higher levels of monitoring and care of critically ill Patients, especially for Patients who have undergone complex surgery, who have developed cancer, or respiratory illnesses or who have contracted an infectious disease.

3.3.1.5(1)(d) Increasing demands on critical care beds will necessitate the need to expand "outreach" services outside of the unit.

3.3.1.5(1)(e) The decentralization of more diagnostic and treatment services to the IPUs is predicted as advances in technology will bring more critical systems and related technology into Critical Care Complex Units and directly to the Patient's bedside.

3.3.1.5(1)(f) Technology will increasingly perform a vital role in Patient related data assembly/analysis; almost any data will be accessible by Staff at any terminal device with appropriate security clearance using standard and non-standard means e.g. biometric identification or passwords; Use of bedside and portable diagnostics will increase.

3.3.1.5(1)(g) POCT modules will become integrated into typical monitoring systems directly linking physiological monitoring to real time Patient record keeping.

3.3.1.5(1)(h) Telemedicine including from the Patient's bedside will increasingly provide outreach opportunities among health care facilities province-wide.

3.3.1.5(1)(i) The trend will continue towards working in interdisciplinary teams under the leadership of intensivists.

3.3.1.5(1)(j) Research shows healthy and efficient work environments improve Patient outcomes and improves Staff retention rates.

3.3.1.5(1)(k) The trend to adopt evidence-based clinical pathways will continue, with standards becoming available in many cases.

3.3.1.5(1)(l) The trend is to promote education and research activities right at the Component level as well as across the Facility.

3.3.1.5(1)(m) The mean age of Staff working on the IPUs is predicted to increase. There will continue to be the challenge of a shortage of critical care physicians and health care professionals, requiring available Staff to assume broader responsibilities and requiring efforts in Staff retention, such as providing on unit education, safe work environments and Staff amenities (lounges, kitchenettes, lockers).

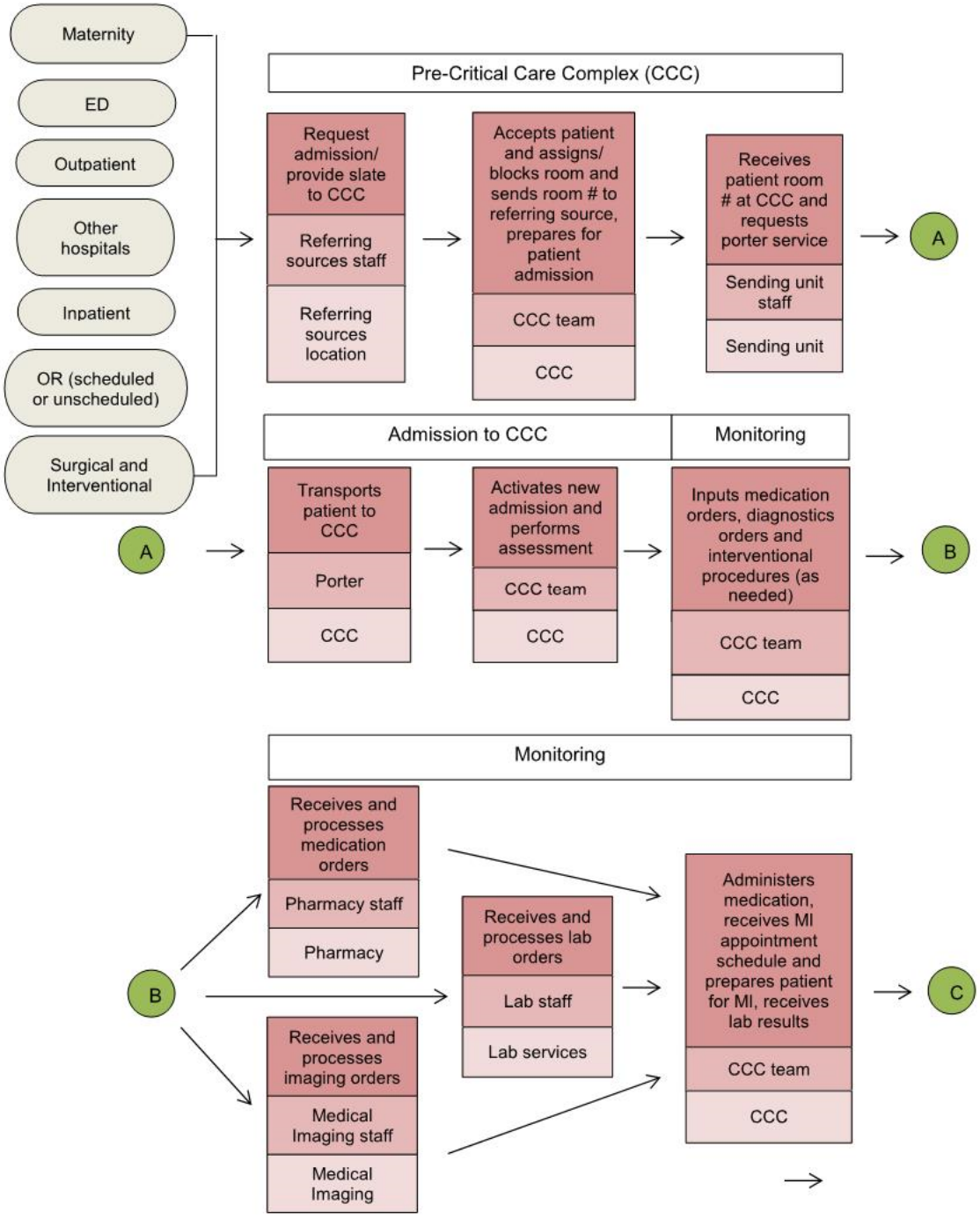
3.3.1.5(1)(n) Infection Prevention and Control will remain a high priority in all areas of the Facility.

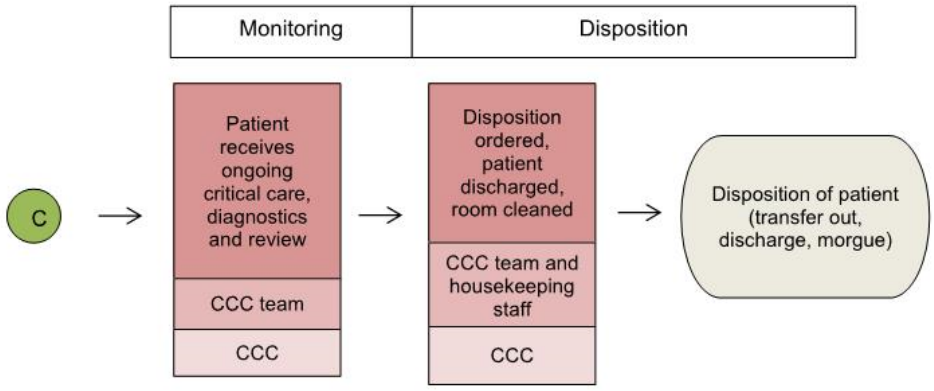
- 3.3.1.5.1.(n).1 Increased numbers of immunocompromised resulting in greater vulnerability to infection as well as increased likelihood of progressing to active disease from latent state (TB in particular).
- 3.3.1.5.1.(n).2 Increasing prevalence of antibiotic resistant organisms, particularly in environmentally persistent pathogens.
- 3.3.1.5.1.(n).3 Alternate approaches to cleaning and disinfection including no touch techniques (hydrogen peroxide vapor, UV light etc.

3.3.2 Workflows

3.3.2.1 The Critical Care Complex workflows are depicted in the following workflow diagram.

B. CRITICAL CARE COMPLEX WORKFLOW DIAGRAM





3.3.3 Hours of Operation

3.3.3.1 The Critical Care Complex Component will be operational 24 hours a day, 365 days per year.

3.3.4 Workloads

3.3.4.1 Staffing in the Critical Care Complex Component will vary depending on acuity; the highest acuity Patients will receive a 1:1 or 1:2 nurse to Patient ratio. Patients will be directly observed from Alcove-Touchdown/Charting between Patient Rooms, allowing one nurse to observe two (2) Patients at once to assist with cross-coverage.

3.3.4.2 The maximum estimated workload for this Component is shown in the following table which summarizes the project annual activity for the 55-bed Critical Care Complex.

CRITICAL CARE COMPLEX STAFF CATEGORY	PEAK SHIFT
Direct Care Team Staff	
Medical Director	3
Program Director	1
Administration Assistant	2
Physician Consultants	6
Physicians	5
Patient Care Manager	1
Unit Clerk	2
Clinical Nurse Specialist	3
Nurse Practitioner	1
Clinical Nurse Educators	3
Critical Care Nurse	42
Respiratory Therapist	10
Clinical Pharmacist	2

CRITICAL CARE COMPLEX STAFF CATEGORY	PEAK SHIFT
Physiotherapist	3
Occupational Therapist	1
Speech Language Pathologist	1
Social Worker	2
Spiritual Care	1
Rehab Aide	2
Social Worker	2
Dietician	2
Housekeeper	4
Informatics Nurses	3
ICU Outreach Nurse	1
Clinical Pharmacists	2
Porter Ward Aide	2
Subtotal, Direct Care Team Staff	**107**
Other	
Volunteer	4
Resident	15
Student	25
Subtotal, Other	**44**
DAYTIME PEAK TOTAL	**151**

3.4 DESIGN CRITERIA

3.4.1 General Requirements

3.4.1.1 Zones of activity within the Component include the following:

3.4.1.1(1) Critical Care Complex Unit 01 and 02; and

3.4.1.1(2) Respiratory Services.

3.4.1.2 The Critical Care Complex Component will provide the specialized space, equipment and resources to accommodate Patient care, education, research, interdisciplinary teams, and administrative Staff needs as part of an integrated Critical Care Complex Component.

3.4.1.3 The Critical Care Complex will have two (2) Critical Care Complex Units including AIRs, bariatric rooms and a RT Area.

3.4.1.4 The Critical Care Complex Units will be adjacent and located on a single floor.

3.4.1.5 If locating Critical Care Complex Units on one floor is not feasible, they will be located on two (2) consecutive floors stacked vertically above one another.

3.4.1.6 A minimum of one (1) Critical Care Complex Unit will be adjacent to Surgical and Major Procedures Zone.

3.4.1.7 Patient Rooms designated as VHF Rooms will not be located adjacent to Surgical and Interventional Services Component.

3.4.1.8 The Critical Care Complex will have Convenient Access to Maternity Care Unit and Medical Imaging. If the Critical Care Complex Units are stacked vertically, one (1) Critical Care Complex Unit will have Direct Access to the Maternity Centre through Back of House circulation.

3.4.1.9 Direct Access will be provided from Critical Care Complex to Emergency Services and IPU care through Patient Transfer/Staff Service Elevators.

3.4.1.10 Critical Care Complex requires Convenient Access to Renal Outpatient, Main Pharmacy, Main Laboratories, Morgue and Autopsy and MDRD. The design will provide safe and efficient flow to these areas for Patients and Staff.

3.4.1.11 The Critical Care Complex will be a 55-bed Component comprised of 27-bed Critical Care Complex Unit 01 and 28-bed Critical Care Complex Unit 02 with the capacity to expand the Component to two (2) 30-bed units in the future.

3.4.1.12 Each of the future 30-bed Critical Care Complex Units will be capable of being divided into groupings of four (4) to six (6) beds.

3.4.1.13 One Critical Care Complex Unit includes one (1) Patient Room-Critical Care-Bariatric-Airborne Isolation, three (3) Patient Room-Critical Care-Airborne Isolation and two (2) Patient Room-Critical Care-Airborne Isolation-Hybrid. The

other Critical Care Complex Unit includes one (1) Patient Room-Critical Care-Bariatric-Airborne Isolation, two (2) Patient Room-Critical Care-Airborne Isolation-VHF, two (2) Patient Room-Critical Care-VHF, one (1) Patient Room-Critical Care-Airborne Isolation and two (2) Patient Room-Critical Care-Airborne Isolation-Hybrid. The intent of Patient Room-Critical Care-Airborne Isolation-Hybrid is to act as an AIR, without the space allocated to a fully constructed anteroom to ensure maximum day-to-day flexibility of the Patient Room and to not limit the Staffs' visibility into the room when not required to isolate a Patient.

3.4.1.14 The corridor immediately outside any Patient Room-Critical Care-Airborne Isolation-Hybrid will be a low traffic area purposefully sparse with no stored equipment and with Convenient Access to a corridor hand hygiene sink to allow Staff to don and doff their PPE and follow appropriate Infection Prevention and Control protocols.

3.4.1.15 The Airborne Isolation, Airborne Isolation-Hybrid and Airborne Isolation-VHF Patient Rooms will be grouped together located close to the Patient Transfer/Staff Service Elevators and away from the Public Passenger Elevators. The path of travel to transfer a Patient to these Patient Rooms will not pass the Public Passenger Elevators and Waiting or Reception areas.

3.4.1.16 There will be two (2) Patient Room-Critical Care-Airborne Isolation-VHF in Critical Care Complex Unit 02. VHF Rooms will be located adjacent to Patient Room-Critical Care-VHF with a connecting door that can be used as an exit room to allow Staff to doff their PPE and follow appropriate Infection Prevention and Control protocols.

3.4.1.17 Critical Care Complex Unit pod layout will minimize travel distances and maximize nurse-Patient Line of Sight by locating frequently utilized Staff work areas and support spaces close to Patient Rooms.

3.4.1.18 The security provisions will be designed so that the public does not have free access into the unit, but that families are accommodated (within reason) and made to feel welcomed.

3.4.1.19 All entry points to Critical Care Complex Units will be secure and require access control. An intercom system between each unit entrance and Staff work area will be provided so that Staff can interview visitors to ensure appropriate entry into the area. These intercoms will have video capability and the ability to allow remote entry (i.e. unlock doors) and be programmable to allow Staff to easily redirect the intercom between areas.

3.4.1.20 The internal zones of each Critical Care Complex Unit will be designed to provide the following key relationships:

3.4.1.20(1) The primary Staff work areas (e.g. Care Team Station) will be close to the unit entrance for control of individuals coming into the unit.

3.4.1.20(2) Patient Rooms will be grouped with the Staff work area (e.g. Care Team Station) while recognizing that Alcove-Touchdown/Charting work areas will be provided to ensure that Staff have workspaces at each Patient location.

3.4.1.20(3) The unit entrance and Waiting area will be enclosed and separated from the inpatient areas. The Waiting area will be located adjacent to Reception in the unit entrance.

3.4.1.21 Critical Care Complex Units will be designed to allow for Patients to be continually observed and monitored enabling Line of Sight in both sitting and standing positions, therefore at all times by Staff from Alcove-Touchdown/Charting through an interior window with integral blinds.

3.4.1.22 Line of Sight for Staff to be maximized to Patient Rooms from Care Team Stations and between Patient Rooms with an interior window with integral blinds.

3.4.1.23 Standardization in design is required to promote a reduction or minimization of Patient injuries and Staff errors. All Recurrent Rooms will be standardized in order to maximize flexibility of use and reduce risk by promoting Staff familiarity with the placement of supplies and equipment; refer to Schedule 3 [Design and Construction Specifications] section 3.6 Standardization.

3.4.1.24 All Patient Rooms within one type will be standardized and equipped with medical gases, suction, ceiling lifts and supplies in the same location.

3.4.1.25 For shared work spaces such as Medication Rooms, a standardized layout is required to permit instant familiarity and reduce the potential for error.

3.4.1.26 Each Critical Care Complex Unit will have its own dedicated support services and family areas.

3.4.1.27 The Critical Care Complex Roof Garden will be provided and accessed from Critical Care Complex Units 01 and 02; refer to Schedule 3 [Design and Construction Specifications] section 4.17.4 Critical Care Roof Garden.

3.4.1.28 Outbreak Control Zone

3.4.1.28(1) In case of an airborne infection pandemic outbreak, an Outbreak Control Zone containing a minimum of 15 beds in each Critical Care Complex Unit will have negative pressurization capability to isolate half of the unit from the surrounding areas. Each 15-bed Outbreak Control Zone will meet the following requirements:

3.4.1.28(1)(a) Provide support spaces including Medication Room-Medium, Store-Clean Supplies, Soiled Utility and Soiled Equipment Hold;

3.4.1.28(1)(b) The Outbreak Control Zone will not have the unit support services and Staff support areas inside the

zone in order to support full operations of the entire Component;

3.4.1.28(1)(c) The Outbreak Control Zone will be bounded by construction that allows the mechanical ventilation systems to create negative pressure within a zone relative to adjacent floor areas;

3.4.1.28(1)(d) The Outbreak Control Zone will contain space that can be converted into an anteroom (e.g., double set of powered doors) adjacent to each entrance to the zone and will be equipped with a hand hygiene sink and space for PPE storage. The anteroom will be large enough to accommodate a stretcher when both sets of doors are closed;

3.4.1.28(1)(e) Both sets of power doors will have automatic opening with access control. Access control will be located on the entry side of the first set of doors and on the exit side of the second set of doors far enough away from the doors to allow them to open before a stretcher is present. Under normal operations, the doors will remain open but will be closed when the Outbreak Control Zone is in use; and

3.4.1.28(1)(f) All Patient Room-Critical Care-Airborne Isolation-VHF, Anteroom-Airborne Isolation-VHF, Washroom/Shower-Inpatient Ensuite-Airborne Isolation-VHF, Patient Room-Critical Care-VHF and Washroom/Shower-Inpatient Ensuite-VHF will be located within the bounds of the Outbreak Control Zone in Critical Care Complex Unit 02.

3.4.2 Critical Care Complex Unit 01 and 02

3.4.2.1 Reception and Waiting

3.4.2.1(1) Reception will be located at the public entry to the Unit so that Staff can control access and provide information to visitors and Staff. The space will include two (2) workstations.

3.4.2.1(2) Each Critical Care Complex Unit Entrance area will have Direct Access to Public Passenger Elevators.

3.4.2.1(3) Critical Care Complex Unit entry will have a Waiting area for families and visitors. This area will be equipped with a Patient entertainment/education system and a hand hygiene sink. Waiting area will be adjacent to a Washroom-Public.

3.4.2.2 Patient Room-Critical Care

3.4.2.2(1) All Patient Rooms will be standardized to a common design. The intent of this requirement is to facilitate Staff moving from room to room without having to reorient themselves with respect to frequently accessed key features like hand hygiene sinks, supplies storage, medical gases and suction, call annunciator cancel buttons, ceiling lift controls, ceiling lift sling storage and transfer belts.

3.4.2.2(2) Provide access to PPE adjacent to each Patient Room entrance.

3.4.2.2(3) All Patient Rooms will have three (3) zones: Family Zone, Patient Zone and Staff Zone:

3.4.2.2(3)(a) The Family Zone will foster face-to-face dialogue between the Patient and their family member, while the Patient is lying in their bed. The family zone will include seating, sleeping and work area that does not interfere with Patient care.

3.4.2.2(3)(b) The Patient Zone will have space for a bed, equipment (i.e., monitor, ventilator, supply cart), furnishings (i.e., side chairs, recliner chair, over bed table), Staff and visitors; and lockable storage for Patients' personal belongings. Patient Zone will provide adequate space at the sides, head and end of the bed to accommodate life support and monitoring equipment, a large number of Staff, and to allow access around the Patient's head to manage critical airway, breathing, and circulation pathways. In addition, mobile imaging equipment is required at the Patient bedside on both left and right sides, without having to move the bed.

3.4.2.2(3)(c) The Staff Zone will include a hand hygiene sink and a workstation that does not interfere with Patient care functions.

3.4.2.2(4) Each Patient Room-Critical Care will have a minimum width of 4.2 metres.

3.4.2.2(5) All Patient Rooms will be enclosed with sliding doors to be without floor tracks, and be provided with emergency swing breakout at the corridor to allow for maximum accessibility and observation.

3.4.2.2(6) Interior windows with integral blinds are required between all Patient Rooms and Alcove-Touchdown/Charting to provide privacy.

3.4.2.2(7) Interior windows with integral blinds will be provided between adjacent Patient Rooms to facilitate Line of Sight from Staff at the Patient's bedside to the head of the Patient in the adjacent Patient Room.

3.4.2.2(8) Each Patient Room will have windows to allow for an exterior view from the Patient bedhead.

3.4.2.2(9) Patient specific medications will be stored in a lockable drawer in Patient Rooms.

3.4.2.2(10) There will be a magnetic whiteboard in the room for Staff, family and Patient that communicates the goals of care, nurse in charge, doctor in charge and other pertinent information as required.

3.4.2.2(11) All Patient Rooms will have the necessary services to provide in-room hemodialysis without the need for portable RO.

3.4.2.2(12) The Patient Room-Critical Care-Training Room will be standardized with the Patient Room-Critical Care for surge capacity.

3.4.2.2(13) All Anteroom-Bariatric-Airborne Isolation, Anteroom-Airborne Isolation-VHF and Anteroom-Airborne Isolation will include hand hygiene sink, storage for PPE supplies and hamper. Line of Sight to the Patients head and to the Patients monitor will be provided from the Anterooms.

3.4.2.2(14) All Anteroom-Bariatric-Airborne Isolation, Anteroom-Airborne Isolation-VHF and Anteroom-Airborne Isolation will be to the side of each Patient Room and not in front of the Patient Room. Provide a window from the Anteroom into the adjacent Patient Room.

3.4.2.2(15) All types of Washroom/Shower-Inpatient Ensuite will be outboard with toilet, sink, shower and ceiling lifts. All washrooms will accommodate wheelchairs, IV poles, scooters and bariatric Patients with sufficient door widths.

3.4.2.3 Alcove-Touchdown/Charting

3.4.2.3(1) Both Units will be designed to provide direct, one-to-one observation from Alcove-Touchdown/Charting to Patient Rooms. Step-down facilities may be planned to increase observation as needed using portable Staff work areas.

3.4.2.3(2) An Alcove-Touchdown/Charting will be shared between two (2) Patient Rooms to provide Line of Sight to a Patient’s head and Patient’s monitor in both rooms. Line of Sight is required from both a sitting and a standing position.

3.4.2.3(3) There will be a station monitor(s) at each Alcove-Touchdown/Charting allowing Staff to monitor and manage the bedside monitor inside the Patient Rooms.

3.4.2.3(4) The Alcove-Touchdown/Charting will be designed ergonomically with maximum flexibility in supporting organizational and operational changes.

3.4.2.4 Care Team Station

3.4.2.4(1) There will be two (2) Care Team Stations in each Critical Care Complex Unit.

3.4.2.4(2) Line of Sight is required from the Care Team Station to the entry door into a minimum of six (6) adjacent Patient Rooms.

3.4.2.4(3) Where possible, the design of the Care Team Stations will include space for low-level storage of Equipment underneath the standing height counters.

3.4.2.4(4) The physical environment will facilitate care team collaboration.

3.4.2.5 Pneumatic Tube Station

3.4.2.5(1) PTS will be located centrally with Direct Access to Care Team Stations.

3.4.2.6 Medication Room

3.4.2.6(1) Medication Rooms will be located centrally with Convenient Access to Care Team Stations.

3.4.2.6(2) Acoustical considerations will be included for Medication Rooms to ensure a quiet environment is provided and distractions are limited when handling medications and to ensure alarms and code calls are able to be heard by Staff; refer to Appendix 3C [Acoustic and Noise Control Measures].

3.4.2.6(3) Provide Medication Room doors with glazing for visibility; refer to Appendix 3M [Door Requirements Matrix].

3.4.2.7 Family Areas

3.4.2.7(1) There will be Waiting areas, Family Respite Rooms, Lounge-Family/Visitor and Nourishment Rooms in the Units to accommodate family needs.

3.4.2.7(2) A Family Respite Room will be provided for discussion between Staff and Patients' families. Family Respite Room to be located adjacent to Lounge-Family/Visitor and Nourishment Room.

3.4.2.7(3) Each Unit has a visitor zone with sleeping and eating facilities discretely located away from the Patient zones.

3.4.2.7(4) All Washroom-Public will have Convenient Access to Family Respite Rooms, Lounge-Family/Visitor and Nourishment Rooms.

3.4.3 Critical Care Complex Unit 01 and 02 Support Services and Staff Support

3.4.3.1 The placement of equipment and supplies storage will reduce travel distances for Staff to/from the Patient. Minimal volumes of commonly used items are stored in the Patient Room. More highly rationed items will be stored in support service areas located close to the Care Team Station. Unique items will be generally stored in the Equipment Depot (See Component O) unless an item's use will be confined to the unit.

3.4.3.2 Support services and storage including Soiled Utility, Disposal Hold, Equipment storage and Store-Clean Supplies will be located centrally with Convenient Access to Patient Rooms to optimize flow and promote best Infection Prevention and Control protocols.

3.4.3.3 Medication Rooms and Store-Clean Supplies will be adjacent. Medication Rooms will have one (1) door from the corridor and another door connecting to the Store-Clean Supplies, so Staff can easily retrieve supplies for the setup of IV medications. Store-Clean Supplies will have another door from the corridor.

3.4.3.4 Store-Local Equipment and Store-Central Equipment will be grouped with Medication Room and Store-Clean Supplies.

3.4.3.5 Soiled Equipment Hold and Soiled Utility will be located adjacent to each other with a door between the two rooms, in addition to the doors connecting these spaces to the corridor. The primary function of Soiled Utility is to provide a space to dispose of the full spectrum of clinical waste including bedpan disinfectors and assorted bins for cytotoxic and biomedical waste (e.g. used blood bags), perform limited soiled activities such as gross decontamination/rinsing/soaking of surgical type instruments, and temporarily store clinical specimens. The primary function of the Soiled Equipment Hold is to sequester and marshal soiled Equipment and provide a dedicated space to clean them. The design will allow for one way flow from soiled to clean, separate soiled and clean to prevent cross-contamination and provide a dedicated unobstructed cleaning zone, with Convenient Access from all clinical spaces in the area it is intended to serve. Cleaned equipment will be moved to the Store-Local Equipment or Store-Central Equipment in a different and physically separate location away from Soiled Utility and Soiled Equipment Hold.

3.4.3.6 Additional facilities on this Component will include Conference/Meeting Rooms and Staff support facilities.

3.4.3.7 Staff areas will be discrete from Patient areas to allow for security, privacy, and confidentiality.

3.4.3.8 Lounge-Staff, Lockers-Staff rooms and Washroom/Shower-Staff will be located adjacent to each other.

3.4.3.9 All Washroom-Staff will be placed with Convenient Access to Staff work areas.

3.4.4 Respiratory Services

3.4.4.1 Cleaning, testing and storage facilities for RT Services will be readily accessible and located adjacent to Critical Care Complex Units.

3.4.4.2 Respiratory Services will be located centrally to be accessible to both Critical Care Complex Units without passing through another Unit.

3.4.4.3 Report Room and Testing/Assembly Area in Respiratory Services will be located adjacent to each other.

3.4.5 Critical Care Complex General Workstations (Future Expansion)

3.4.5.1 Critical Care Complex Unit 01 Future Expansion

3.4.5.1(1) The 27-bed Critical Care Complex Unit 01 may be expanded to include thirty (30) Patient Rooms in the future. The Unit will be designed to easily convert an open area for twelve (12) General Workstations to add up to two (2) Patient Room-Critical Care with Washroom/Shower-Inpatient Ensuite and Alcove-Touchdown/Charting. The Patient Room-Critical Care-Training Room can be converted and added to the Patient bed count in future.

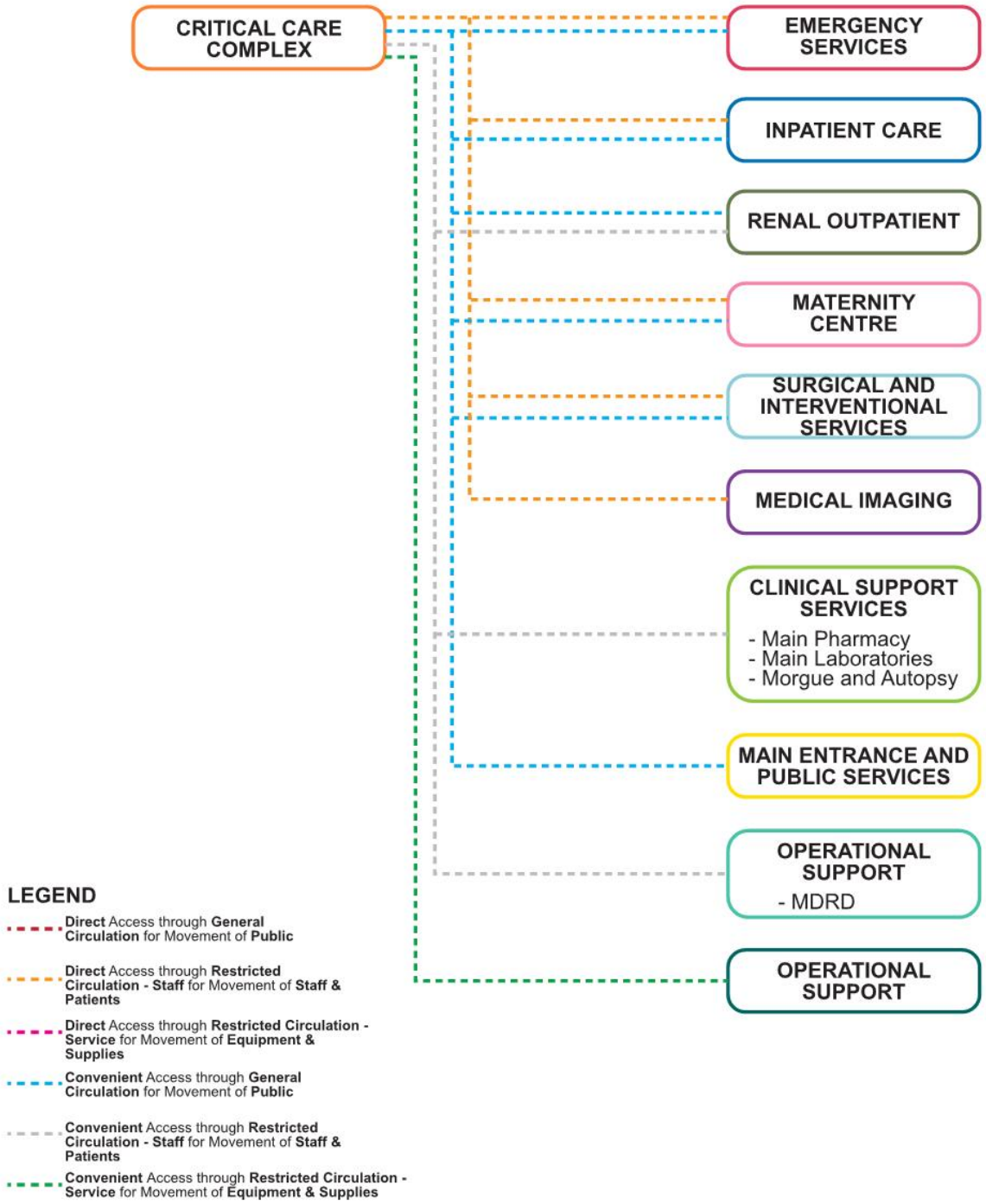
3.4.5.2 Critical Care Complex Unit 02 Future Expansion

3.4.5.2(1) The 28-bed Critical Care Complex Unit 02 may be expanded to include thirty (30) Patient Rooms in the future. The Unit will be designed to easily convert an open area for twelve (12) General Workstations, to add up to two (2) Patient Room-Critical Care with Washroom/Shower-Inpatient Ensuite and Alcove-Touchdown/Charting.

3.5 EXTERNAL RELATIONSHIPS

3.5.1 The following diagram indicates other Functional Components that have a functional relationship with this Component.

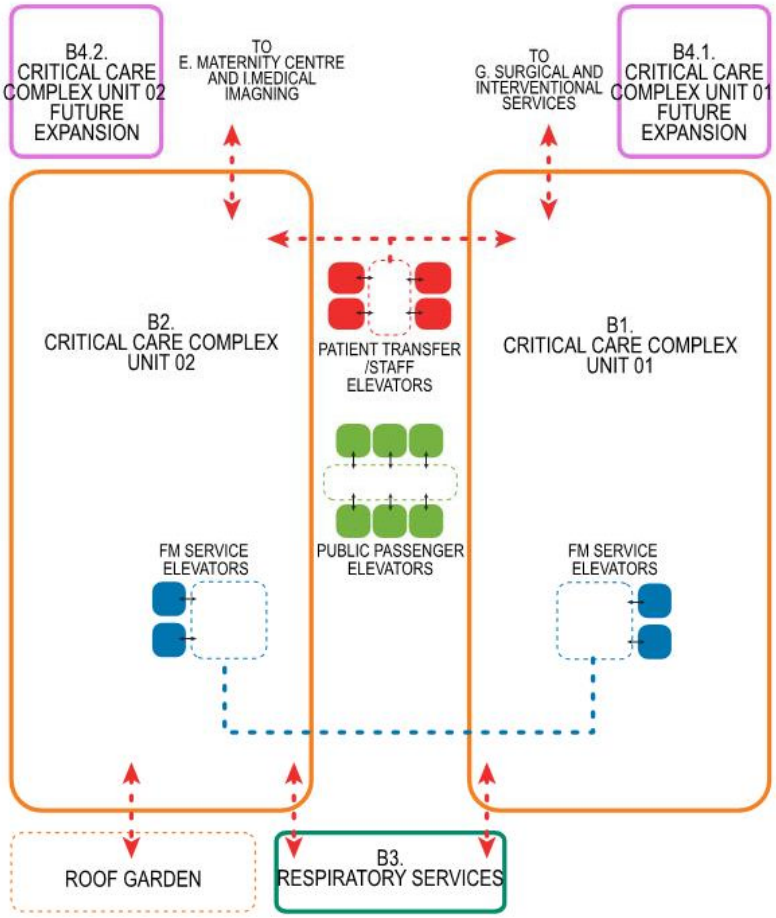
B. CRITICAL CARE COMPLEX EXTERNAL RELATIONSHIPS AND CIRCULATIONS

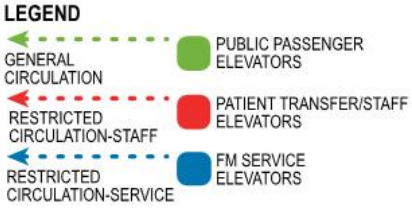


3.6 INTERNAL RELATIONSHIPS

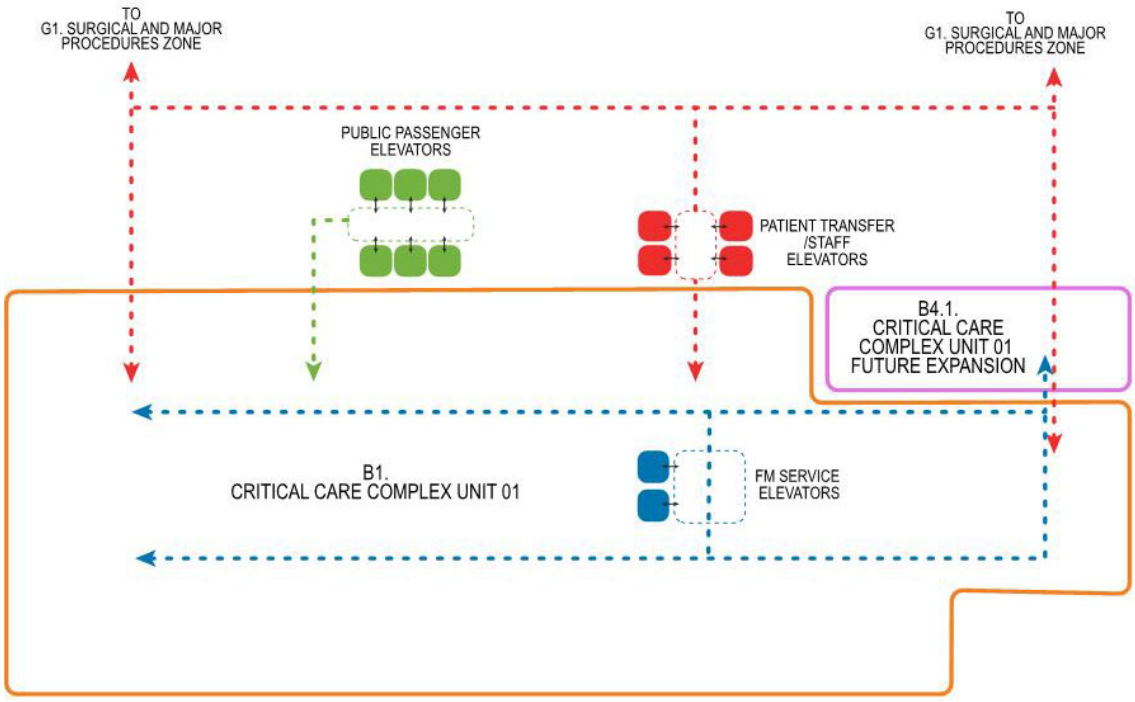
3.6.1 The following diagrams indicate internal functional relationships within this Component.

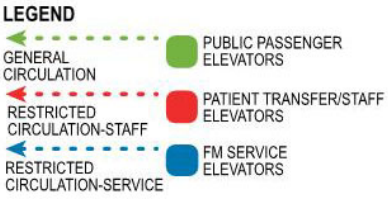
B. CRITICAL CARE COMPLEX INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



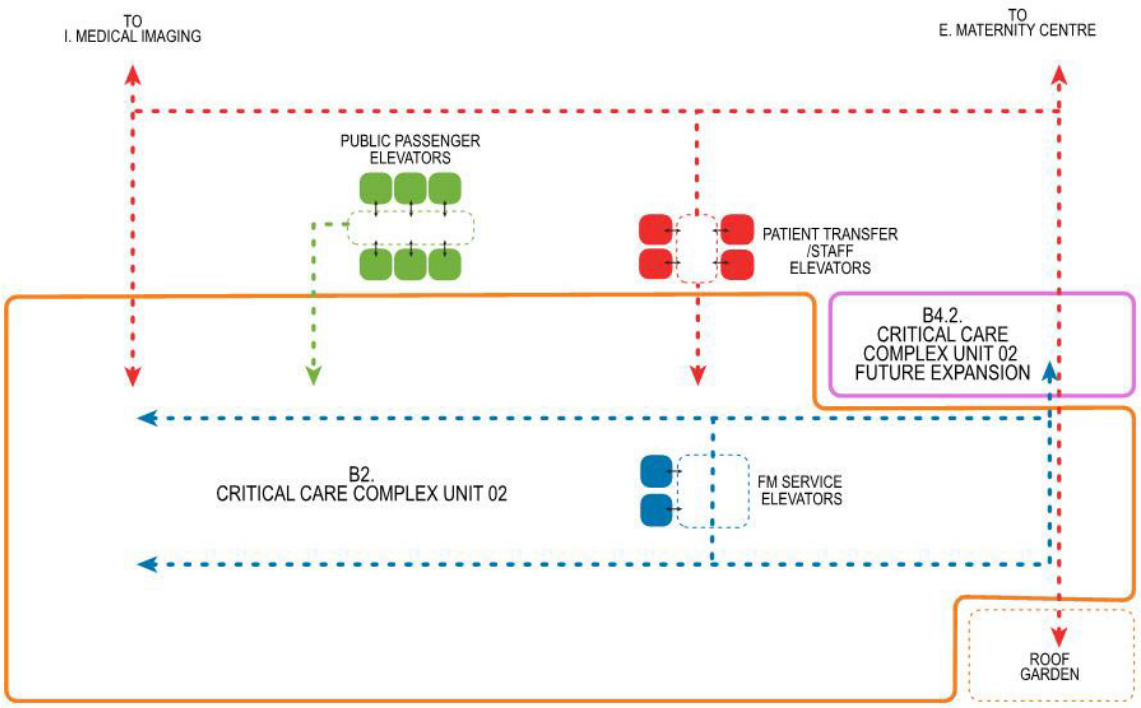


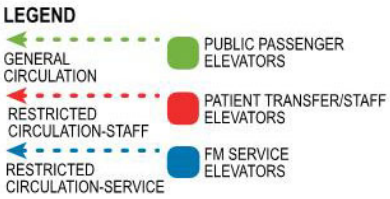
B1. CRITICAL CARE COMPLEX UNIT 01 INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES





B2. CRITICAL CARE COMPLEX UNIT 02 INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES





APPENDIX 3A - CLINICAL SPECIFICATIONS AND FUNCTIONAL SPACE REQUIREMENTS

3.7 SCHEDULE OF ACCOMMODATIONS

3.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Critical Care Complex

B1 - CRITICAL CARE COMPLEX UNIT 01	1694.00
B2 - CRITICAL CARE COMPLEX UNIT 02	1691.00
B3 - RESPIRATORY SERVICES	72.50
B4 - CRITICAL CARE COMPLEX GENERAL WORKSTATIONS	130.00
CRITICAL CARE COMPLEX PROGRAMMED SPACE NSM:	**3,587.50**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
B1 - CRITICAL CARE COMPLEX UNIT 01					
B1.1 - Critical Care Complex Unit 01 Entrance					
B1.1.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets.
B1.1.2	Waiting	1	13.50	13.50	Incl. seating for 8 including 1 in wheelchair, Direct Access to Public Passenger Elevators and Washroom-Public.
B1.1.3	Alcove-Crash Cart	1	1.50	1.50	
B1.1.4	Alcove-Vending Machine	1	1.50	1.50	
B1.1.5	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Critical Care Complex Unit 01.
B1.1.6	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
B1.2 - Critical Care Complex Unit 01 Inpatient					
B1.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
B1.2.2	Patient Room-Critical Care-Bariatric-Airborne Isolation	1	31.00	31.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, interior window for Line of Sight to adjacent Patient Rooms, provision for bariatric bed.
B1.2.3	Anteroom-Bariatric-Airborne Isolation	1	7.50	7.50	Incl. cabinets.
B1.2.4	Washroom/Shower-Inpatient Ensuite-Bariatric-Airborne Isolation	1	5.50	5.50	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.
B1.2.5	Patient Room-Critical Care-Airborne Isolation	3	26.00	78.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, interior window for Line of Sight to adjacent Patient Rooms.
B1.2.6	Anteroom-Airborne Isolation	3	7.50	22.50	Incl. cabinets.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
B1.2.7	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	5	5.50	27.50	3-piece incl. shower, accessible for Persons with Disabilities. 2 located in B1.2.24 Patient Room-Critical Care-Airborne Isolation-Hybrid.
B1.2.8	Patient Room-Critical Care	21	26.00	546.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, interior window for Line of Sight to adjacent Patient Rooms.
B1.2.9	Washroom/Shower-Inpatient Ensuite	21	5.50	115.50	3-piece incl. shower, accessible for Persons with Disabilities.
B1.2.10	Patient Room-Critical Care-Training Room	1	26.00	26.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, interior window for Line of Sight to adjacent Patient Rooms.
B1.2.11	Washroom/Shower-Inpatient Ensuite-Training Room	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
B1.2.12	Alcove-Touchdown/Charting	28	1.00	28.00	Incl. 1 touch down workstation, observation window into Patient Room-Critical Care.
B1.2.13	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
B1.2.14	Care Team Station	2	36.00	72.00	Incl. 8 workstations, cabinets, charging station, dual egress.
B1.2.15	Alcove-Hand Hygiene Sink	2	1.00	2.00	Located within 6 m of each Care Team Station entrance.
B1.2.16	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
B1.2.17	Medication Room-Medium	4	12.00	48.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
B1.2.18	Team Space-Allied Health	1	22.50	22.50	Incl. 5 workstations.
B1.2.19	Family Respite Room	2	12.00	24.00	Incl. seating for 4.
B1.2.20	Lounge-Family/Visitor	2	15.00	30.00	Incl. seating for 6.
B1.2.21	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
B1.2.22	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
B1.2.23	Washroom-Public	2	4.50	9.00	2-piece, accessible for Persons with Disabilities.
B1.2.24	Patient Room-Critical Care-Airborne Isolation-Hybrid	2	26.00	52.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, interior window for Line of Sight to adjacent Patient Rooms.
B1.3 - Critical Care Complex Unit 01 Support Services					
B1.3.1	Complete Nourishment	1	16.00	16.00	Incl. emergency eyewash.
B1.3.2	Alcove-Blanket Warmer	2	1.50	3.00	Adjacent to Alcove-Clean Linen.
B1.3.3	Alcove-Local Equipment	4	1.50	6.00	Distributed in Critical Care Complex Unit 01.
B1.3.4	Alcove-Clean Linen	4	2.50	10.00	
B1.3.5	Alcove-Crash Cart	2	1.50	3.00	Centrally located.
B1.3.6	Alcove-Imaging Equipment-Small	1	1.50	1.50	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
B1.3.7	Alcove-Imaging Equipment-Large	2	3.00	6.00	
B1.3.8	Alcove-Imaging Equipment-C-Arm	1	3.00	3.00	
B1.3.9	Alcove-Stretcher	2	2.50	5.00	Distributed in Critical Care Complex Unit 01.
B1.3.10	Alcove-Wheelchair	1	2.50	2.50	Centrally located.
B1.3.11	Store-Central Equipment	2	16.00	32.00	Incl. shelving, charging station, distributed in Critical Care Complex Unit 01.
B1.3.12	Store-Clean Supplies	2	20.00	40.00	Distributed in Critical Care Complex Unit 01.
B1.3.13	Store-Local Equipment	1	32.00	32.00	Incl. shelving, charging station.
B1.3.14	Soiled Equipment Hold	2	15.00	30.00	
B1.3.15	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
B1.3.16	Disposal Hold	2	12.00	24.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
B1.3.17	Housekeeping Closet	2	7.00	14.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
B1.4 - Critical Care Complex Unit 01 Staff Support					
B1.4.1	Conference/Meeting Room-Medium	1	44.00	44.00	Incl. counters, cabinets, accommodates 25 Persons.
B1.4.2	Office-Private	2	9.50	19.00	Incl. 1 workstation.
B1.4.3	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
B1.4.4	Office-4 Shared	1	20.00	20.00	Incl. 4 workstations.
B1.4.5	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
B1.4.6	On-Call Room	4	7.00	28.00	Incl. 1 touch down workstation, 1 full locker.
B1.4.7	Washroom/Shower-Staff-Large	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities, adjacent to On-Call Rooms.
B1.4.8	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
B1.4.9	Lockers-Staff	1	40.00	40.00	Incl. 80 Z-lockers, 3 shoe racks, split into male and female if required, adjacent to Lounge-Staff.
B1.4.10	Washroom/Shower-Staff	2	4.50	9.00	3-piece incl. shower.
B1.4.11	Washroom-Staff	2	3.00	6.00	2-piece, distributed in Critical Care Complex Unit 01.
	TOTAL NSM: Critical Care Complex Unit 01			**1,694.00**	
B2 - CRITICAL CARE COMPLEX UNIT 02					

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
B2.1 - Critical Care Complex Unit 02 Entrance					
B2.1.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets.
B2.1.2	Waiting	1	13.50	13.50	Incl. seating for 8 including 1 in wheelchair, Direct Access to Public Passenger Elevators and Washroom-Public.
B2.1.3	Alcove-Crash Cart	1	1.50	1.50	
B2.1.4	Alcove-Vending Machine	1	1.50	1.50	
B2.1.5	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Critical Care Complex Unit 02.
B2.1.6	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
B2.2 - Critical Care Complex Unit 02 Inpatient					
B2.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
B2.2.2	Patient Room-Critical Care-Bariatric-Airborne Isolation	1	31.00	31.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, interior window for Line of Sight to adjacent Patient Rooms, provision for bariatric bed.
B2.2.3	Anteroom-Bariatric-Airborne Isolation	1	7.50	7.50	Incl. cabinets.
B2.2.4	Washroom/Shower-Inpatient Ensuite-Bariatric-Airborne Isolation	1	5.50	5.50	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.
B2.2.5	Patient Room-Critical Care-Airborne Isolation-VHF	2	26.00	52.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, interior window for Line of Sight to adjacent Patient Rooms, adjacent to Patient Room-Critical Care-VHF.
B2.2.6	Anteroom-Airborne Isolation-VHF	2	7.50	15.00	Incl. cabinets.
B2.2.7	Washroom/Shower-Inpatient Ensuite-Airborne Isolation-VHF	2	5.50	11.00	3-piece incl. shower, accessible for Persons with Disabilities.
B2.2.8	Patient Room-Critical Care-VHF	2	26.00	52.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, interior window for Line of Sight to adjacent Patient Rooms, adjacent to Patient Room-Critical Care-Airborne Isolation-VHF.
B2.2.9	Washroom/Shower-Inpatient Ensuite-VHF	2	5.50	11.00	3-piece incl. shower, accessible for Persons with Disabilities.
B2.2.10	Patient Room-Critical Care-Airborne Isolation	1	26.00	26.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, interior window for Line of Sight to adjacent Patient Rooms.
B2.2.11	Anteroom-Airborne Isolation	1	7.50	7.50	Incl. cabinets.
B2.2.12	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	3	5.50	16.50	3-piece incl. shower, accessible for Persons with Disabilities. 2 located in B2.2.27 Patient Room-Critical Care-Airborne Isolation-Hybrid.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
B2.2.13	Patient Room-Critical Care	20	26.00	520.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, interior window for Line of Sight to adjacent Patient Rooms.
B2.2.14	Washroom/Shower-Inpatient Ensuite	20	5.50	110.00	3-piece incl. shower, accessible for Persons with Disabilities.
B2.2.15	Alcove-Touchdown/Charting	28	1.00	28.00	Incl. 1 touch down workstation, observation window into Patient Room-Critical Care.
B2.2.16	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
B2.2.17	Care Team Station	2	36.00	72.00	Incl. 8 workstations, cabinets, charging station, dual egress.
B2.2.18	Alcove-Hand Hygiene Sink	2	1.00	2.00	Located within 6 m of each Care Team Station entrance.
B2.2.19	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
B2.2.20	Medication Room-Medium	4	12.00	48.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
B2.2.21	Team Space-Allied Health	1	22.50	22.50	Incl. 5 workstations.
B2.2.22	Family Respite Room	2	12.00	24.00	Incl. seating for 4.
B2.2.23	Lounge-Family/Visitor	2	15.00	30.00	Incl. seating for 6.
B2.2.24	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
B2.2.25	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
B2.2.26	Washroom-Public	2	4.50	9.00	2-piece, accessible for Persons with Disabilities.
B2.2.27	Patient Room-Critical Care-Airborne Isolation-Hybrid	2	26.00	52.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, interior window for Line of Sight to adjacent Patient Rooms.
B2.3 - Critical Care Complex Unit 02 Support Services					
B2.3.1	Complete Nourishment	1	16.00	16.00	Incl. emergency eyewash.
B2.3.2	Alcove-Blanket Warmer	2	1.50	3.00	Adjacent to Alcove-Clean Linen.
B2.3.3	Alcove-Local Equipment	4	1.50	6.00	Distributed in Critical Care Complex Unit 02.
B2.3.4	Alcove-Clean Linen	4	2.50	10.00	
B2.3.5	Alcove-Crash Cart	2	1.50	3.00	Centrally located.
B2.3.6	Alcove-Imaging Equipment-Small	1	1.50	1.50	
B2.3.7	Alcove-Imaging Equipment-Large	1	3.00	3.00	
B2.3.8	Alcove-Imaging Equipment-C-Arm	1	3.00	3.00	
B2.3.9	Alcove-Stretcher	2	2.50	5.00	Distributed in Critical Care Complex Unit 02.
B2.3.10	Alcove-Wheelchair	1	2.50	2.50	Centrally located.
B2.3.11	Store-Central Equipment	2	16.00	32.00	Incl. shelving, charging station, distributed in Critical Care Complex Unit 02.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
B2.3.12	Store-Clean Supplies	2	20.00	40.00	Distributed in Critical Care Complex Unit 02.
B2.3.13	Store-Local Equipment	1	32.00	32.00	Incl. shelving, charging station.
B2.3.14	Soiled Equipment Hold	2	15.00	30.00	
B2.3.15	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
B2.3.16	Disposal Hold	2	12.00	24.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
B2.3.17	Housekeeping Closet	2	7.00	14.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
B2.4 - Critical Care Complex Unit 02 Staff Support					
B2.4.1	Conference/Meeting Room-Medium	1	44.00	44.00	Incl. counters, cabinets, accommodates 25 Persons.
B2.4.2	Office-Private	2	9.50	19.00	Incl. 1 workstation.
B2.4.3	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
B2.4.4	Office-4 Shared	1	20.00	20.00	Incl. 4 workstations.
B2.4.5	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
B2.4.6	On-Call Room	4	7.00	28.00	Incl. 1 touch down workstation, 1 full locker.
B2.4.7	Washroom/Shower-Staff-Large	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities, adjacent to On-Call Rooms.
B2.4.8	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
B2.4.9	Lockers-Staff	1	40.00	40.00	Incl. 80 Z-lockers, 3 shoe racks, split into male and female if required, adjacent to Lounge-Staff.
B2.4.10	Washroom/Shower-Staff	2	4.50	9.00	3-piece incl. shower.
B2.4.11	Washroom-Staff	2	3.00	6.00	2-piece, distributed in Critical Care Complex Unit 02.
	TOTAL NSM: Critical Care Complex Unit 02			**1,691.00**	
B3 - RESPIRATORY SERVICES					
B3.1	Report Room	1	16.00	16.00	Incl. 4 workstations.
B3.2	Testing/Assembly Area	1	35.00	35.00	Incl. 2 workstations, workbenches for 3, cabinets, shelving.
B3.3	Office-private	1	9.50	9.50	Incl. 1 workstation.
B3.4	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
	TOTAL NSM: Respiratory Services			**72.50**	
B4 - CRITICAL CARE COMPLEX GENERAL WORKSTATIONS					

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
B4.1 - Critical Care Complex Unit 01 General Workstations					
B4.1.1	Workstation-General	1	65.00	65.00	Incl. 12 Workstations at 4.5 nsm each, combined into one area.
B4.2 - Critical Care Complex Unit 02 General Workstations					
B4.2.1	Workstation-General	1	65.00	65.00	Incl. 12 Workstations at 4.5 nsm each, combined into one area.
	TOTAL NSM: Critical Care Complex General Workstations			**130.00**	
	TOTAL NSM: CRITICAL CARE COMPLEX			**3,587.50**	

3.7.2 The following table lists the number of spaces, Net Areas and space contents for Critical Care Complex Future Expansion.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
B4 - CRITICAL CARE COMPLEX GENERAL WORKSTATIONS					
B4.1 - Critical Care Complex Unit 01 Future Expansion					
B4.1.1	Patient Room-Critical Care-Future Expansion	2	26.00	52.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, interior window for Line of Sight to adjacent Patient Rooms.
B4.1.2	Washroom/Shower-Inpatient Ensuite-Future Expansion	2	5.50	11.00	3-piece incl. shower, accessible for Persons with Disabilities.
B4.1.3	Alcove-Touchdown/Charting-Future Expansion	2	1.00	2.00	Incl. 1 touch down workstation, observation window into Patient Room-Critical Care.
B4.2 - Critical Care Complex Unit 02 Future Expansion					
B4.2.1	Patient Room-Critical Care-Future Expansion	2	26.00	52.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, interior window for Line of Sight to adjacent Patient Rooms.
B4.2.2	Washroom/Shower-Inpatient Ensuite-Future Expansion	2	5.50	11.00	3-piece incl. shower, accessible for Persons with Disabilities.
B4.2.3	Alcove-Touchdown/Charting-Future Expansion	2	1.00	2.00	Incl. 1 touch down workstation, observation window into Patient Room-Critical Care.
	TOTAL NSM: CRITICAL CARE COMPLEX FUTURE EXPANSION			**130.00**	

THE NEW ST. PAUL'S PHASE 1A

C. INPATIENT CARE

4. C. INPATIENT CARE

4.1 OVERVIEW

4.1.1 The generic IPUs exist for the purpose of providing continuous medical, nursing and allied health care to acute care Patients who cannot be discharged either to home or to another health care facility.

4.1.2 Comprehensive care services will address disease and injury conditions, protecting and/or restoring functional abilities, symptom management, spiritual care and discharge planning including plans for ongoing follow up and continuing care.

4.1.3 The following clinical programs are provided in the IPUs, but are not limited to:

4.1.3.1 CTU;

4.1.3.2 Heart and lung;

4.1.3.3 Surgery;

4.1.3.4 Trauma services;

4.1.3.5 Medicine;

4.1.3.6 Urban Health Acute Care Unit; and

4.1.3.7 Palliative.

4.1.4 Subspecialty programs also included in the IPUs include:

4.1.4.1 Renal;

4.1.4.2 Medical Psychiatric (MedPsych) Unit; and

4.1.4.3 Eating Disorders.

4.1.5 Clinical Teaching Unit (CTU)

4.1.5.1 The CTU supports training UBC Faculty of Medicine (FoM) medical students and resident physicians from many different UBC FoM residency training programs. The CTU teams are leaders in Patient experience and clinical outcomes providing exceptional care while advancing health education.

4.1.5.2 The CTU program will continue to expand. This service has a significant impact on space due to the needs of learners for education and collaboration.

4.1.5.3 CTU provides full scope of medical services with high use of diagnostic tests both on and off the Component.

4.1.6 Heart and Lung

4.1.6.1 The Heart and Lung program is the leader in providing high quality integrated seamless care for cardiac and respiratory conditions.

4.1.6.2 Cardiac services support the Segment Elevation Myocardial Infarction (STEMI) program. In collaboration with the BC Ambulance Service, the cardiac services provide STEMI revascularization.

4.1.7 Surgery

4.1.7.1 Surgical services support the UBC Faculty of Medicine (FoM) residency program through involvement in the training of junior and senior residents from various UBC residency programs.

4.1.7.2 The surgery services provide emergency and scheduled services for several specialties including: GI disorders, colorectal surgery, surgical oncology, head and neck surgery, endocrine surgery, gynecology, ophthalmology, orthopedic surgery, plastic surgery, urology and vascular surgery.

4.1.8 Trauma Services

4.1.8.1 SPH as a designated level 3 Trauma centre is recognized by Accreditation Canada. These accreditation standards form the basis for the trauma program and will be integrated into the design and operation of trauma services.

4.1.9 Medicine

4.1.9.1 Medicine provides comprehensive general medicine care to complex Patient populations, with co-existing cardiac, lung, respiratory and neurological disease, acute kidney injury, geriatric syndromes, hematological disorders, substance use disorders and infectious diseases. Included in these populations are Patients with CF, Patients who are receiving chemotherapy, and post stroke Patients. In addition, the Medicine program are leaders in providing acute care to the elderly.

4.1.9.2 The Acute Care for the Elderly (ACE) Unit focuses on Patient centred care to prevent decline in physical, cognitive and psychosocial functioning with a focus on early rehabilitation.

4.1.10 Urban Health Acute Care Unit

4.1.10.1 The Urban Health Acute Care Unit offers time limited, goal focused acute medical care to Patients of all genders who are experiencing HIV associated medical issues, acute infections secondary to substance use or entrenched street living and supports all Patients with acute medical needs who also have active alcohol or substance use disorders.

4.1.11 Palliative

4.1.11.1 The palliative care team plays a significant role in providing palliative care outreach services and providing consultation across the Facility.

4.1.12 Renal Unit

4.1.12.1 Renal Unit service provides comprehensive services to people living with kidney diseases. Services are provided to Patients with acute and chronic kidney conditions throughout the continuum from prevention to transplantation and follow up care.

4.1.13 MedPsych Unit

4.1.13.1 The service provided in the MedPsych Unit will support those Patients with concurrent acute mental and medical illnesses.

4.1.14 Eating Disorders

4.1.14.1 The Provincial Adult Specialized Tertiary Eating Disorders Program provides intensive specialized tertiary day hospital, inpatient programming and transition and consultation services to adults (17+) from anywhere in British Columbia who have a diagnosis of Anorexia, Bulimia or Other Specified Feeding and Eating Disorder (OSFED). Treatment decision-making is a collaborative process involving the Patient, their identified support providers and the care team.

4.1.14.2 The purpose of this program is to provide excellent, Person- and Family-Centred Care, evidence-based eating disorders treatment for adults requiring specialized tertiary level care. Patient triage utilizes the Provincial Guidelines for the treatment of eating disorders to ensure that each Patient is matched to the right intervention at the right time.

4.1.14.3 Continuous Quality Improvement (CQI) research is used to monitor the efficacy and outcomes of all of our treatment interventions in all Patients.

4.1.14.4 Collaboration with community treatment providers and provincially accessible education is also a mainstay of our program.

4.2 FUNCTIONAL DESCRIPTION

4.2.1 Scope of Services

4.2.1.1 The Facility is planned for 380 single occupancy Patient Rooms that span general medical, surgical and subspecialty programs including twenty (20) RO plumbed Renal Unit Patient Rooms, eight (8) Eating Disorders Patient Rooms and twenty-four (24) MedPsych Patient Rooms.

4.2.1.2 Although specifications assume a “typical” generic IPU, unique needs of sub-specialties will result in some variations between units.

4.2.1.3 Given these variations, the intent remains to provide highly flexible IPUs capable of adapting to changes in Patient care and modalities spanning the lifetime of the Facility.

4.2.1.4 Limitations may not allow for a true “universal room” but every attempt will be made with the space available to provide the features of a universal room.

4.2.1.5 Patient Rooms will be capable of accommodating changes over the life of the building in Patient care delivery models and advances in technology and equipment.

4.2.1.6 The promotion of “flexibility” does not preclude the designation of beds for special purposes or for design modifications to enhance functionality, such as providing care for Patients admitted with airborne infectious disease in AIRs or Patients with bariatric needs who will require specially equipped rooms to facilitate improved care.

4.2.1.7 Ideally, Patients admitted to the IPUs will remain in the same room for their acute phase. When Patients no longer need the level of care provided on the IPUs, they will be discharged to the most appropriate setting.

4.2.1.8 Patients admitted to medicine, surgery, heart and lung, palliative, urban health, and CTU will be accommodated on the generic IPUs.

4.2.1.9 The medical and CTU services focus on adult (17+) Patients who:

4.2.1.9(1) No longer need critical care;

4.2.1.9(2) Have single and complex multisystem diagnoses; Have an unclear diagnosis where multiple investigations are required;

4.2.1.9(3) Have complex multiple comorbidities; and

4.2.1.9(4) Patients who need access to specialists that are unavailable at other sites.

4.2.1.10 Patients admitted to CTU will be grouped and managed by one of the six (6) CTU teams. The Internal Medicine team is led by an attending physician and in some cases an attending physician and nurse practitioner. Each team is comprised of a senior resident, junior residents and medical students.

4.2.1.11 The non-surgical Heart and Lung service focuses on Patients:

4.2.1.11(1) Who require treatment for electrophysiology;

4.2.1.11(2) Admitted for management of medical cardiology issues; and

4.2.1.11(3) With cardiovascular disease, requiring cardiac monitoring and/or intervention.

4.2.1.12 The Patient population also includes Patients requiring pre and post care related to the following procedures:

4.2.1.12(1) Coronary angiogram/percutaneous intervention;

4.2.1.12(2) Balloon valvuloplasty;

4.2.1.12(3) TAVI; and

4.2.1.12(4) Device implantation.

4.2.1.13 Heart and Lung services provide regional STEMI revascularization services. Emergency Health Services have the capacity to diagnose a STEMI based on the 12 lead ECG in the pre hospital phase. The ECG is then transmitted to the ED and the Interventional Suite for physician verification. Once the diagnosis is confirmed, the Cath lab team is activated to prepare for the emergency procedure.

4.2.1.14 The Heart and Lung services provide care for Patients with complex respiratory conditions such as chronic obstructive lung disease, asthma, lung cancer, CF, interstitial lung disease and systemic sclerosis among others.

4.2.1.15 The surgical service focuses on adult Patients (17+) with surgical needs requiring hospitalization, surgical intervention or specialized outpatient services. The general surgical service focuses on: pre-operative and post-operative Patients, and Patients with complex multi and single system issues.

4.2.1.16 Many surgical Patients are admitted the day of surgery and go through the surgical daycare experience. Advances in technology has allowed the service to transition the Patient home the same day. Therefore, only the very sick and acute surgical Patient is required to be admitted.

4.2.1.17 Emergency surgery is done regardless of bed availability. Unscheduled, urgent and emergent surgeries are accommodated on a daily basis.

4.2.1.18 The focus of palliative care is acute symptom management. It is a service that investigates, diagnoses, and treats complex pain and other symptoms associated with life threatening illnesses.

4.2.1.19 A palliative approach to care can be used for all people living with progressive, chronic illnesses that may take their lives including cancer, organ failure (heart, lung, kidney), neurological degenerative diseases (dementia, ALS, Parkinson's) and frailty.

4.2.1.20 The Urban Health Acute Care Unit provides inter-disciplinary treatment to Patients of all genders who are experiencing HIV associated medical issues, acute infections secondary to substance use or entrenched street living and supports all Patients with acute medical needs who also have active alcohol or substance use disorders.

4.2.1.21 Patients admitted to sub-specialty programs will be treated on units with the following accommodations:

4.2.1.22 The Renal Unit program provides both inpatient services and a consultative service which includes acute dialysis and Plasma Exchange (PLEX), performed alone or in combination for rare conditions. There are three (3) subprograms, which include:

4.2.1.22(1) Chronic Kidney Disease Care;

4.2.1.22(2) Dialysis Care; and

4.2.1.22(3) Transplantation.

4.2.1.23 The MedPsych Unit will offer specialized inpatient care for Patients with co-morbid-medical and psychiatric illness. These Patients are not admitted to a general psychiatric unit because of complex medical needs and concurrent active psychiatric symptoms.

4.2.1.24 The Eating Disorders program provides planned voluntary admission to day-hospital and inpatient specialized, tertiary level treatment for a diagnosis of Anorexia, Bulimia or OSFED.

4.2.1.24(1) The program offers the following scope of services:

4.2.1.24(1)(a) Referral and Intake;

4.2.1.24(1)(b) Multidisciplinary assessment and care planning;

4.2.1.24(1)(c) Multidisciplinary treatment services: specialized day hospital programs; specialized inpatient program; transitional day hospital program; transitional services; research; multidisciplinary provincial consultation;

4.2.1.24(1)(d) Provincial education and consultation services; and

4.2.1.24(1)(e) Patient and Family Advisory Committee.

4.2.1.24(2) Patient population served:

4.2.1.24(2)(a) Adults (17+) from anywhere in British Columbia who have a diagnosis of Anorexia, Bulimia or OSFED who are assessed as requiring, and who voluntarily agree to, a planned specialized tertiary level course of treatment.

4.2.1.24(2)(b) At times, Patients may be admitted as an involuntary Patient and some Patients may be managed on extended leave under the BC Mental Health Act.

4.2.1.25 Scope of Educational Activity

4.2.1.25(1) The IPUs will accommodate education and learning opportunities for Staff and students of all disciplines. In-service education and Patient teaching programs will also be conducted on a regular basis on the units. IPU's Patient/clinical care spaces as well as Conference/Meeting Rooms will be used for training and education sessions.

4.2.1.25(2) Each of the 32-bed IPU's will generally provide clinical resources in support of teaching programs for fifty to fifty-five (50-55) students at any given time.

4.2.1.25(3) A wide range of individual and small group clinical teaching activities will be accommodated directly in the Patient Rooms.

4.2.1.25(4) Large education sessions will be accommodated in Conference/Meeting Rooms on each level of the IPUs (IPU 64-Bed Group), as well as other Conference/Meeting Rooms in the Facility.

4.2.1.25(5) Scope of Educational and Consultation Activity for Eating Disorders includes:

4.2.1.25(5)(a) Province-wide education programs for clinicians/service providers through webinars.

4.2.1.25(5)(b) In-Person group-based education for families of Patients with eating disorders.

4.2.1.25(5)(c) In-Person and webinar based Peer Support Forums.

4.2.1.25(5)(d) Lecture based teaching to medical students and medical residents from Internal Medicine, Psychiatry and Family Practice.

4.2.1.26 Scope of Research Activity

4.2.1.26(1) Clinical research activities will be integrated into the work conducted within the generic IPUs. Clinical researchers are part of the multidisciplinary care team.

4.2.1.26(2) Touchdown workstations will be provided in the IPUs for use by clinical researchers.

4.2.1.26(3) Scope of Research Activity for eating disorders includes:

4.2.1.26(3)(a) Clinical research is an integral part of the clinical program and research clinicians are part of the multidisciplinary care team.

4.2.1.27 Scope Exclusions

4.2.1.27(1) The following list specifies inpatient services/requirements that are understood to occur in other Functional Components in the Facility:

4.2.1.27(1)(a) Critical Care Complex;

4.2.1.27(1)(b) Maternity Centre;

4.2.1.27(1)(c) Patients requiring balloon pump and ECMO; and

4.2.1.27(1)(d) Burns and Bone Marrow Transplants (BMT).

4.2.1.27(2) Scope Exclusions for eating disorders include the following:

4.2.1.27(2)(a) Youth under 17 years of age;

4.2.1.27(2)(b) Unplanned admissions or transfers, such as admission from the ED or transfer from a mental health unit; and

4.2.1.27(2)(c) Medically unstable Patients who require specific medical equipment interventions i.e. oxygen, severe re-feeding intervention, cardiac care, or require blood products.

4.2.2 Services provided

4.2.2.1 On opening day, the Facility will provide ten (10) 32-bed Generic Units, a 28-bed Generic Unit to include twenty (20) Patient Rooms for a Renal Unit, a 24-bed MedPsych Unit and an 8-bed Eating Disorders Inpatient Unit.

4.2.2.2 The following specification outlines the requirements for the IPUs.

4.2.2.2(1) Generic IPU

4.2.2.2(1)(a) This area will provide facilities for the delivery of secondary, tertiary and selected quaternary acute care services in a specialized adult academic and research centre.

4.2.2.2(1)(b) A range of medical and surgical services will be provided to the adult (age of 17 plus a day) groups of Patients.

4.2.2.2(1)(c) Rehabilitation is integrated from admission to the Facility on to discharge and as such, clinicians will have the appropriate resources and tools to assist Patients and space for PT/SLP and OT will be included on IPUs. This space is a Conference/Meeting Room-Xlarge-Dividable which will be a dividable multifunction space used for therapy and rehabilitation meetings and as a dining space.

4.2.2.2(1)(d) Acuity for all Patient populations is expected to increase and there will be fluctuations in census throughout the year requiring flexibility of Patient flows.

4.2.2.2(1)(e) All Patient Rooms will be single occupancy rooms with exterior windows and private Washroom/Shower-Inpatient Ensuite.

4.2.2.2(1)(f) Typically, the inpatient services will be grouped as follows:

- 4.2.2.2.1.(f).1 32-bed units each formed into two (2) 16-bed pods with shared support services.
- 4.2.2.2.1.(f).2 Each 16-bed pod will be served by clinical support accommodation including, at minimum, Medication Rooms, Equipment rooms, Store-Clean Supplies, Soiled Utility and an enclosed Care Team Station.
- 4.2.2.2.1.(f).3 Each 32-bed unit will be served by Staff amenities
- 4.2.2.2.1.(f).4 Each pair of units i.e. 64-beds will share support services accommodation.

4.2.2.2(1)(g) IPUs will be standardized in design to improve flexibility, processes and Wayfinding.

4.2.2.2(1)(h) Patient Rooms will have a standardized layout including Staff zone, Patient zone and family zone.

4.2.2.2(1)(i) Single Patient Rooms will provide improved healing and Patient experience, increased family and caregiver support and reduced adverse clinical incidents with greater flexibility leading to improved utilization.

4.2.2.2(1)(j) IPUs will comprise “on” and “off” stage zones, separating Back of House support activities from Patient care services to enhance overall operational efficiency and Patient and family experience.

4.2.2.2(2) Renal Unit

4.2.2.2(2)(a) Patients admitted to renal sub-specialty programs will be treated on the Renal Unit with the following requirements:

- 4.2.2.2.2.(a).1 Patients who require admission because of acute or chronic kidney disease or renal transplantation will be admitted into a Patient Room supplied with services for hemodialysis, peritoneal dialysis and monitoring capabilities specific to renal beds.

4.2.2.2.2.(a).2 All Patient Rooms will be single occupancy rooms with exterior windows and private Washroom/Shower-Inpatient Ensuite.

4.2.2.2.2.(a).3 There will be four (4) Patient Bay-Daycare along with all other support services and amenities of a typical renal Patient Room.

4.2.2.2.2.(a).4 All Patient Rooms including the Patient Bay-Daycare will require the infrastructure to support hemodialysis and Telemetry.

4.2.2.2.2.(a).5 Hemodialysis requires a RO water supply to every room with hemodialysis capabilities.

4.2.2.2.2.(a).6 Two (2) of the Patient Rooms in the Renal Unit will be Patient Room-Airborne Isolation-Hybrid and will have built-in observation windows and integral blinds.

4.2.2.2.2.(a).7 One Patient Room will be a Patient Room-Airborne Isolation-Lead Lined with an Anteroom-Airborne Isolation-Lead Lined for lead apron storage. This room is to be plumbed for dialysis.

4.2.2.2.2.(a).8 The four (4) Patient Bay-Daycare will be grouped in one area, serviced by a 3-piece accessible Washroom/Shower-Patient.

4.2.2.2.2.(a).9 All individual Patient Bay-Daycare will be separated for privacy and Infection Prevention and Control purposes.

4.2.2.2(3) MedPsych Unit

4.2.2.2(3)(a) The MedPsych Unit provides medical and psychiatric care for adult inpatients in a secured inpatient setting for Patients who have both unstable medical and psychiatric illness. Due to the medical and psychiatric complexity of care these Patients require a unit environment not supplied by a standard medical or psychiatric unit. These Patients are not candidates for a Mental Health Inpatients Unit or an inpatient medical unit.

4.2.2.2(3)(b) The Patient population of the MedPsych unit includes:

4.2.2.2.3.(b).1 Substance use detoxification when in active Alcohol Withdrawal and Delirium;

4.2.2.2.3.(b).2 Patients who require feeding tubes for a reason other than an eating disorder;

4.2.2.2.3.(b).3 Patients with an eating disorder who require medical stabilization; and

4.2.2.2.3.(b).4 Patients who require oxygen, blood products, Telemetry or the provision of other medical care not provided on a mental health unit.

4.2.2.2(4) Eating Disorders Program

4.2.2.2(4)(a) The Specialized Provincial Tertiary Eating Disorders Day Hospital and Inpatient programs focus on the delivery of excellent, evidence-based eating disorders treatment for adults with diagnosis of Anorexia, Bulimia or Other Specified Feeding and Eating Disorders (OSFED) requiring specialized tertiary and specialized levels care.

4.2.2.2(4)(b) The Day Hospital provides group therapy through one (1) Group Therapy Room, one (1) Multipurpose Room-Large and two (2) Dining/Activity Areas, as well as individualized treatment through four (4) Consult/Interview Rooms and two (2) Exam Rooms.

4.2.2.2(4)(c) Patients who require the specialized inpatient services of the Eating Disorders program will be admitted to a sub-unit of eight (8) single occupancy mental health Patient Rooms, without ensuite washrooms or showers.

4.2.2.2(4)(d) Shared washing and showering facilities will be provided to serve the eight (8) Patient Rooms.

4.2.2.2(4)(e) The Patients in the Eating Disorders Inpatient Unit will use a separate Lounge/Living Room-Patient and an ADL Kitchen/Dining/Activity Area with access control.

4.2.2.2(4)(f) Patients receiving treatment at the Specialized Provincial Tertiary Eating Disorders Program come from and return to primary care and community services in their local community. To support success, the program is designed as a continuum of tertiary level inpatient treatment and intensive day hospital program. Patients are assessed and matched to a program: inpatient treatment or intensive day hospital treatment or transitions program services. Patients receive transition programs services to monitor their treatment path.

4.2.2.2(4)(g) The continuum of tertiary level treatment services is organized in the following sequence:

4.2.2.2.4.(g).1 Readiness Program - for Patients waiting to be admitted to the Discovery Program - Patients are deemed medically stable. Patients attend this weekly group to prepare for Discovery. Average length of stay is sixty-six (66) days.

4.2.2.2.4.(g).2 Discovery Program – Intensive Day Hospital Treatment Program and requires residency at Vista House (operated by Vancouver Coastal Health) – Patients are deemed medically stable. Average length of stay is ninety (90) days.

4.2.2.2.4.(g).3 Follow-Up Program - for Patients who have completed Discovery. Once a week maintenance group for a maximum of six (6) months post completion of discovery.

4.2.2.2.4.(g).4 IPU – voluntary planned inpatient treatment; secured unit; may require involuntary admission. Average length of stay is forty-five (45) days. Intensive, interdisciplinary treatment for Patients who require medical and psychiatric/behavioural stability. Care provided is multidisciplinary with weekly rounds. All Patient meals on the unit are supported by Staff for supervision.

4.2.2.2.4.(g).5 Transitions program - for Patients transitioning to and from Tertiary care as well as transitioning back to community-based eating disorders services and their primary care provider. This may involve a combination of Psychiatry, Internal Medicine, Psychology, Case Management, Occupational Therapy (OT), Registered Dietician and Meal Support. Average length of stay is three (3) months.

4.2.2.2(4)(h) Provincial education and consultation services:

4.2.2.2.4.(h).1 The Provincial Adult Tertiary Eating Disorder Program runs a monthly telemedicine education series that is broadcast via webinar throughout the province.

4.2.2.2.4.(h).2 Staff in the program also provide multidisciplinary consultation via the RACE (Rapid Access to Consultative Expertise) line and offer case conferencing via telemedicine provincially.

4.2.2.2.4.(h).3 There is also active participation with stakeholders from Patients and families,

community providers and the Ministry on education initiatives based on education and prevention of eating disorders, weight bias and comorbid substance use issues.

4.3 OPERATIONAL CONSIDERATIONS

4.3.1 Service Delivery Principles and Methods

4.3.1.1 Patient and Family Management Processes and Flows

4.3.1.1(1) Patient

4.3.1.1(1)(a) Care delivery will be based on a Person- and Family-Centred Care approach supported by an inter-professional care team. A Registered Nurse (RN) will be assigned for all of the nursing care provided for one to four (4) Patients during the day shift and night shift. Each 16-bed pod will be nursed based on Patient acuity and care needs.

4.3.1.1(1)(b) Reception, Admission and Discharge

4.3.1.1.1.(b).1 Patients will be admitted on an IPU via pre-arrangement through access and bed control, an unscheduled admission through the ED and Critical Care Complex Components or via an inter-hospital transfer. Emphasis will be placed on a Person- and Family-Centred Care approach by reducing the number of internal moves experienced by Patients and bringing services to Patients and families where practical.

4.3.1.1.1.(b).2 Patients admitted through the ED will typically be documented (registered and admitted) while in the ED and transported directly to their assigned room.

4.3.1.1.1.(b).3 Patients requiring mobility assistance will be either escorted or transported in a wheelchair or stretcher by Staff from the Facility's portering services.

4.3.1.1.1.(b).4 On admission, direct admit Patients will report to the unit Care Team Station (32-bed level). The Care Team Stations will act as the unit clerk and charge nurse base of operations.

4.3.1.1.1.(b).5 Patients will be placed on the most appropriate inpatient level according to their most important need and care teams will travel to the Patient area.

4.3.1.1.1.(b).6 This communication centre will include the Patient care unit clerk, Charge Nurse's workstation, providing daily flow management of 32-beds, Workstation-Touchdown for providers and a Care Team Station-Enclosed. Each 32-beds IPU will include two (2) Care Team Stations that act as the reception/access control point for the unit.

4.3.1.1.1.(b).7 The Care Team Station will be the coordination centre for the unit, handling admissions, discharges, answering incoming calls, and be the Staff and provider access location for Patient assignment and information distribution. There will be regular face-to-face contact with the unit clerk and the nurses on the respective units.

4.3.1.1(1)(c) Care

4.3.1.1.1.(c).1 Patients and families will be greeted on arrival to the unit and taken to an assigned Patient Room. While in Facility, physicians, nurses, pharmacists, support Staff as well as allied health professionals, will coordinate and provide Patient care.

4.3.1.1.1.(c).2 Patients, whose conditions become increasingly acute, will be assessed by the critical care outreach team and if a higher level of care is required, will be transferred accompanied by members of the critical care outreach team to the Critical Care Complex Component.

4.3.1.1.1.(c).3 Patients will be admitted to a specific room based on their dependence level.

4.3.1.1.1.(c).4 The Core Care Team and the defined MOC is utilized 24/7 with the Core Care Team covering activity seven (7) days a week.

4.3.1.1.1.(c).5 The Patient, family, RN and the Most Responsible Provider share accountability and are jointly responsible for the plan of care that guides activity for the entire length of the Patient's stay. They are jointly involved and dedicated to achieving the Patient's goals.

4.3.1.1.1.(c).6 The hour-by-hour plan for the day is managed by adherence to Standard Work/ Clinical Pathways/ Protocols/ Reliable Methods and executing predictable

contingency plans when variation is encountered.

4.3.1.1.1.(c).7 The plan of care is communicated to the Allied Health team in real time by updating the plan immediately following action.

4.3.1.1(2) Family

4.3.1.1(2)(a) Families visiting a Patient will access the unit via a Public Passenger Elevator. Family members and visitors will have access to the Lounge-Family/Visitor, Alcove-Vending Machine and Washroom-Public close to the entrance to the unit.

4.3.1.1(2)(b) Family involvement in care is encouraged and accommodation within the Patient Room will be provided to allow a family member to sleep in the Patient Room.

4.3.1.1(3) Service Delivery Principles and Methods Eating Disorders

4.3.1.1(3)(a) Innovative, Evidence-based and Outcomes focussed.

4.3.1.1(3)(b) Person and Family Centred Care:

- 4.3.1.1.3.(b).1 Treatment decision-making is a collaborative process involving the Patient, their identified support providers and the care team;
- 4.3.1.1.3.(b).2 Involvement of the Eating Disorders Patient and Family Advisory Committee;
- 4.3.1.1.3.(b).3 Peer Support Forums; and
- 4.3.1.1.3.(b).4 Family and Friends Education Day.

4.3.1.1(3)(c) Trauma Informed:

- 4.3.1.1.3.(c).1 Safety - This includes creating spaces where people feel culturally, emotionally, and physically safe as well as an awareness of an individual’s discomfort or unease.
- 4.3.1.1.3.(c).2 Transparency and trustworthiness - This includes providing full and accurate information about what's happening and what's likely to happen next.
- 4.3.1.1.3.(c).3 Choice - This includes the recognition of the need for an approach that honors the individual's dignity.
- 4.3.1.1.3.(c).4 Collaboration and mutuality - This includes the recognition that healing happens in relationships and partnerships with shared decision-making.

4.3.1.1.3.(c).5 Empowerment - This includes the recognition of an individual's strengths. These strengths are built on and validated.

4.3.1.1(3)(d) Enabling integration and Continuity of Care:

4.3.1.1.3.(d).1 The Primary Care Networks and specialized services in the community will enable us, in partnership with health authorities, to better plan, deliver and coordinate services for adults with eating disorders.

4.3.1.1.3.(d).2 Key enablers include:

(d).2.1 Care coordinated through shared or linked EMRs.

(d).2.2 Shared care through the use of telemedicine options including access to appropriate telephone or video conferencing consults.

4.3.1.1(3)(e) Patient and Family Management Processes and Flows Eating Disorders

4.3.1.1.3.(e).1 Referral and Intake

(e).1.1 As a specialized provincial tertiary resource, the program receives reviews and provides a disposition for referrals from across the province.

(e).1.2 If the referral is accepted, the Patient has an initial intake interview with the intake clinician.

(e).1.3 If the referral is declined, the referrer is provided with other resources for the Patient, family and primary care provider.

(e).1.4 Initial assessment and care planning are comprised of three parts which occur sequentially:

(e).1.4.1 Medical assessment with Internal Medicine.

(e).1.4.2 Psychiatric assessment with Psychiatry.

(e).1.4.3 Research assessment with clinical researcher.

4.3.1.1.3.(e).2 Admission (Eating Disorders Day Hospital Programs)

(e).2.1 After the assessment, the Patient is assigned to a care coordinator to track their treatment pathway. Patients maintain services with their community programs and may enter

into transition services to enhance their readiness for treatment. Individuals start the Eating Disorders Day Hospital Program by participating in a weekly Readiness group. Length of stay in this phase is four to six (4-6) weeks.

4.3.1.1.3.(e).3 Treatment (Intensive Day Hospital)

(e).3.1 Patients attend the day programs, four (4) days per week. Average length of stay is twelve to fifteen (12-15) weeks. The day programs are comprised of group programming, meal support, and individual on-going assessment and consultation with the following clinicians:

(e).3.1.1 Psychiatrist;
(e).3.1.2 Dietician;
(e).3.1.3 OT;
(e).3.1.4 Psychologist; and
(e).3.1.5 Social Worker

4.3.1.1.3.(e).4 Admission and Treatment (IPU)

(e).4.1 The IPU provides specialized, intensive inpatient treatment with an average length of stay of forty-five (45) days. While the majority of the admission to the program is voluntary, there are times when it is required to change the status to involuntary. This inpatient program will be located on a secured unit.

(e).4.2 The IPU utilizes group programming, meal support, and individual on-going assessment and consultation with the following clinicians:

(e).4.2.1 Psychiatrist;
(e).4.2.2 Dietician;
(e).4.2.3 OT;
(e).4.2.4 Psychologist;
(e).4.2.5 Psychiatrist;
(e).4.2.6 Internal Medicine;
(e).4.2.7 Social Worker; and
(e).4.2.8 Clinical Researcher.

4.3.1.1.3.(e).5 Discharge (IPU)

(e).5.1 Discharge plans are coordinated with Patients and their community eating disorder providers. Patients meet with services providers from all disciplines

to consolidate the work done and plan next steps in care-repeat inpatient admission; day hospital; or community follow-up.

4.3.1.1.3.(e).6 Transitions Program

(e).6.1 Patients completing hospital or inpatient care are followed in the transition program to help consolidate gains made in the more intensive programs and to triage further care needs. Patients may be seen by a combination of psychiatry, internal medicine, case manager, psychology, registered dietician, social work and OT.

4.3.1.2 Patient Information Management

4.3.1.2(1) Patient Rooms and Care Team Stations will accommodate documentation capabilities for paper (downtime) and electronic charts/records.

4.3.1.2(2) EMR will be automated with access to information by means of computer terminals located at all Staff work areas distributed throughout each unit. Computer charting will occur at the Patient bedside, through the use of hand-held wireless devices and/or WOW's. All Patient related information will be maintained on the EMR.

4.3.1.2(3) Ordering and scheduling of tests, procedures, and medications will be managed through terminals in the Staff work areas or through mobile devices.

4.3.1.2(4) Patient information will be available throughout the unit wirelessly or through computer terminal positions at the bedsides, Care Team Stations and Alcove-Touchdown/Charting.

4.3.1.2(5) Electronic Patient information tracking boards will be available at each of the 16-bed level for the Generic Units, as well as for the Renal Unit beds, the Eating Disorders Inpatient beds, Urban Health Acute Care Unit beds and MedPsych Unit beds.

4.3.1.2(6) Staff will communicate utilizing a hands-free communication system.

4.3.1.3 Care Provider Work Processes and Flows

4.3.1.3(1) Staffing information will be a managed corporate service. Scheduling, including providing for sick and vacation relief will be

conducted centrally, and off-site. Notices to individual Staff regarding their schedules will be communicated electronically.

4.3.1.3(2) At the start of shift, Staff will pick up wireless communication device that is linkable and with the ability to view physiologic monitoring of the Patients they are assigned to.

4.3.1.3(3) The MOC will operate with an Allied Health team consisting of three (3) segmented groups. The Allied Health team activity is built on a foundation of standard work and optimizing role, scope and function.

4.3.1.3(4) The Allied Health team membership is constructed with a triad of shared accountability of the Patient and family, the Most Responsible Provider (i.e. admitting physician), and the RN.

4.3.1.3(5) The Allied Health team is supported by additional care providers as defined by the plan of care. In this way, the team is inter-professional in nature and adds value to the Patient’s defined goals and overall plan of care.

4.3.1.3(6) Staff will communicate utilizing a hand-free communication system.

4.3.1.3(7) Staff resource utilization will be maximized in that the most appropriate Staff Persons will perform tasks. For example, nurses will not spend time in non-nursing duties such as searching for supplies, thereby allowing them to focus on care of the Patients in their charge.

4.3.1.3(8) The Clinical professional service team members (e.g., Physiotherapy (PT), OT, Speech Language Pathology (SLP), respiratory care, laboratory, pharmacy, education, spiritual care, etc.) will travel to the IPUs from their central location as required. Social workers will be on the units.

4.3.1.3(9) There is an increased focus on the acute-community partnership in providing coordinated care for Patients once they are ready for discharge to home or other destination. Home health services are designed to support an individual's independence whether the services are provided in the home, in outpatient clinics, or in the community setting. This philosophy aligns with the medical service belief that 'Home is Best' - the best place for anyone to recuperate from illness, manage a long term condition or live out their final days (this focus does not apply to Eating Disorders).

4.3.1.3(10) Care Provider Work Processes and Flows Eating Disorders

4.3.1.3(10)(a) The Provincial Adult Specialized Tertiary Eating Disorders Program provides planned admissions, planned lengths of stay, as well as planned

transitions and planned discharges. The service is designed to support individual's functional recovery and the focus is ensuring the Patient received the right care in the right program at the right time.

4.3.1.3(10)(b) To maximize use of Staff resources, the Program shares consultative expertise with Psychiatry and Internal Medicine and shares allied health Staff with the Urban Health and Integrated Mental Health and Substance Use program.

4.3.1.3(10)(c) All Eating Disorders Staff work across Eating Disorders Day Hospital Program, Eating Disorders Inpatient and transition services.

4.3.1.3(10)(d) Eating Disorders Day Hospital Program

- 4.3.1.3.10.(d).1 The MOC will operate with a Care Coordinator, Day Hospital Program Group Facilitators, supported by additional care providers as defined by the Eating Disorders program model and the Patient's goals and plan of care.
- 4.3.1.3.10.(d).2 Additional Care Providers are: Dietician, OT, Psychologist, Psychiatrist, Internal Medicine, Social Worker and Clinical Researcher.

4.3.1.3(10)(e) IPU

- 4.3.1.3.10.(e).1 The Core Care Team activity is built on a foundation of standard work and optimizing role, scope and function.
- 4.3.1.3.10.(e).2 The Core Care Team membership is constructed with a triad of shared accountability of the Patient and family, the most responsible health care provider (i.e. admitting physician), and the (RN and/or Registered Psychiatric Nurse.
- 4.3.1.3.10.(e).3 The allied health team is supported by additional care providers as defined by the Eating Disorders program model and the Patient's goals and plan of care.
- 4.3.1.3.10.(e).4 Additional Care Providers are: Dietician, OT, Psychologist, Psychiatrist, Internal Medicine, Social Worker, and Clinical Researcher.
- 4.3.1.3.10.(e).5 Staff resource utilization will be maximized in that the most appropriate Staff Persons will perform tasks.

4.3.1.3(10)(f) Transitions Program

4.3.1.3.10.(f).1 The MOC will operate with an Intake Coordinator, Care Coordinator, and Day Hospital Program Group Facilitators, supported by additional care providers as defined by the Eating Disorders program model and the Patient's goals and plan of care.

4.3.1.3.10.(f).2 Additional Care Providers are Dietician, OT, Psychologist, Psychiatrist, Internal Medicine, Social Worker and Clinical Researcher.

4.3.1.3(11) Students

4.3.1.3(11)(a) Students from all professions will be integrated into all aspects of Patient, family and provider space.

4.3.1.3(11)(b) The Facility is a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents. Work spaces will be enabled to have private, confidential conversations and be equipped with teaching capability.

4.3.1.3(11)(c) Students from all disciplines train on the Eating Disorders unit.

4.3.1.4 Clinical and Logistical Support Processes and Flows

4.3.1.4(1) Medical Imaging

4.3.1.4(1)(a) Patients will be transported to the Medical Imaging department for testing.

4.3.1.4(1)(b) When clinically necessary, medical imaging will occur at the Patient's bedside by mobile Equipment brought to the Patient's bedside.

4.3.1.4(2) Laboratory Services

4.3.1.4(2)(a) Main Laboratories will be available to support all IPUs including Eating Disorders Inpatient.

4.3.1.4(2)(b) Results will be available through the EMR system.

4.3.1.4(2)(c) POCT will be used where appropriate.

4.3.1.4(2)(d) Storage for phlebotomy carts will be available on every 32-bed unit with the exception of Renal Unit.

4.3.1.4(2)(e) There will be phlebotomy carts on the Eating Disorders unit, the Urban Health and Acute Care Unit and the MedPsych Unit.

4.3.1.4(3) Pharmacy Services

4.3.1.4(3)(a) Medication Rooms with ADCs will be dispersed throughout all IPUs.

4.3.1.4(4) Respiratory Therapy Services

4.3.1.4(4)(a) Clinical services that will be provided at Patient bedside or in dedicated therapy and treatment rooms within each unit will include RT.

4.3.1.4(5) Allied Health Services

4.3.1.4(5)(a) Clinical services that will be provided at the Patient bedside or in dedicated therapy and treatment rooms within each unit include PT, nutrition, OT, SLP and pharmacy.

4.3.1.4(6) Equipment and Instruments

4.3.1.4(6)(a) The IPU design will consider mechanisms to ensure the elimination of corridor clutter. Supply rooms and alcoves will be designed to ensure ease of use for all items stored there to prevent the movement of these items into the corridor.

4.3.1.4(6)(b) The Equipment Depot (See Component O) will store all excess Equipment that can be quickly brought to any area.

4.3.1.4(6)(c) Necessary Equipment will be kept on the unit for ease of usage and storage; this will be monitored and stocked by central supply and cleaned as per IPAC protocols.

4.3.1.4(6)(d) RTLS tagging of Equipment will allow for tracking and monitoring.

4.3.1.4(6)(e) Equipment Rooms (ER) will also store Equipment.

4.3.1.4(6)(f) AGVs will transport materials and supplies to and from the Component in the Back of House space.

4.3.1.4(6)(g) Trends in clinical equipment include: wireless updating of drug libraries in infusion pumps, audible Patient alarms for immediate clinical notification, bedpan disinfectors in Patient Rooms,

technology allowing certain processes and care to come to the bedside, ceiling lift systems, POCT, automated dispensing medication systems. In addition, there will be Patient care spaces that require physiological monitors, both hardwired and ambulatory.

4.3.1.4(7) Consumable Supplies

4.3.1.4(7)(a) Consumable supplies will be kept in the Store-Clean Supplies close to POC. Items will be maintained with minimum inventory levels, which will trigger a re-ordering process. RTLS tagging of supplies will allow for tracking and replenishment.

4.3.1.4(7)(b) MDRD will support the IPUs to provide sterile supplies/equipment/instruments as required.

4.3.1.4(7)(c) To the extent practicable, consumable supplies stored in treatment areas will be organized and stored in a common order and configuration. The intent of this standard is to enable efficient locating of each supply item without Staff first having to reorient themselves to a new room configuration and to avoid long travel distances between supplies storage and point of use.

4.3.1.4(7)(d) Material management will rely on automation. Consumption, reordering and resupplying will rely on the latest automated tracking and ordering management system as supplies are withdrawn from inventories. AGVs will transport materials and supplies to FM Service Elevator lobbies from the Logistics level.

4.3.1.4(8) Laundry and Linen

4.3.1.4(8)(a) Clean linen will be stocked in Alcove-Clean Linen outside Patient Rooms.

4.3.1.4(8)(b) Soiled linen will be placed in hampers and moved to a Disposal Hold for pick up and transportation to the loading dock by way of FM Service Elevators.

4.3.1.4(8)(c) Storage and pathways for clean supplies, equipment and linen will be kept separate from soiled supplies, equipment and linen.

4.3.1.4(8)(d) Eating Disorders:

4.3.1.4.8.(d).1 The Eating Disorders Inpatient will be equipped with a washer/dryer for Patients to wash and dry their personal linen.

4.3.1.4.8.(d).2 Clean Linen will be stocked in secured Alcove-Clean Linen outside Patient Rooms.

4.3.1.4(9) Waste Management

4.3.1.4(9)(a) Waste products, recycling and bio-HAZMAT will be separated at POC and stored in holding areas for pick up by housekeeping Staff.

4.3.1.4(9)(b) Clinical and other waste will be removed from Patient Rooms to Disposal Holds located on each IPU.

4.3.1.4(9)(c) There will be bedpan disinfectors in Patient Rooms for Infection Prevention and Control.

4.3.1.4(9)(d) Waste containers will be monitored, removed and replaced by housekeeping Staff and transported using AGVs.

4.3.1.4(10) Language Services

4.3.1.4(10)(a) Interpreters will be provided as needed.

4.3.1.4(11) Food Services

4.3.1.4(11)(a) Food for meal assembly in the Nutrition Centres will be delivered chilled in food carts from the CFP, held, heated, assembled on trays and delivered and served to Patients.

4.3.1.4(11)(b) Soiled food trays will be picked up by the food service Staff and returned to the Nutrition Centres for reprocessing.

4.3.1.4(11)(c) Eating Disorders:

4.3.1.4.11.(c).1 For the Eating Disorders Day Hospital Program, prepared trays will be brought by food services Staff from the Nutrition Centre in the adjacent IPU and served to Patients in the Dining/Activity Area.

4.3.1.4.11.(c).2 For the Eating Disorders Inpatient, prepared trays will be brought by food services Staff from the Nutrition Centre in the adjacent IPU and served to Patients in the ADL Kitchen/Dining/Activity Area.

4.3.1.4.11.(c).3 Food trays will be retrieved by food services Staff and returned to the Nutrition Centre for reprocessing.

4.3.1.5 Anticipated Trends in Service Delivery

4.3.1.5(1) The following lists trends expected within the planning horizon of this project, and that are expected to affect the nature and/or extent of functions accommodated within the Inpatient Care Component. Effects of these trends will be reflected in the Component's design.

4.3.1.5(1)(a) The mean age of Staff working on the IPUs is predicted to increase. During the next twenty (20) years, shortages of key Staff positions are predicted to increase, including Staff in the highly trained, specialized professions.

4.3.1.5(1)(b) The IPUs will need to provide decentralized capability for managing infectious diseases.

4.3.1.5.1.(b).1 Increased numbers of immunocompromised resulting in greater vulnerability to infection as well as increased likelihood of progressing to active disease from latent state (TB in particular).

4.3.1.5.1.(b).2 Increasing prevalence of antibiotic resistant organisms, particularly in environmentally persistent pathogens.

4.3.1.5.1.(b).3 Alternate approaches to cleaning and disinfection including no touch techniques (hydrogen peroxide vapor, UV light etc.).

4.3.1.5(1)(c) Increased acuity levels and increasingly complex co-morbidity will be seen in Patients admitted to the IPUs.

4.3.1.5(1)(d) Medical/surgical specialties are now becoming increasingly specialized and more complex surgery will continue to develop.

4.3.1.5(1)(e) The number of bariatric Patients admitted is expected to increase.

4.3.1.5(1)(f) The parallel development of day and short stay care for a greater range of procedures, both invasive and non-invasive, will accentuate the trend in changes in acuity levels in inpatient care.

4.3.1.5(1)(g)	It is anticipated that for medical/surgical specialties there will be a trend to increasing numbers of tertiary referrals.
4.3.1.5(1)(h)	Increasingly, interdisciplinary teams will actively involve community partners in the provision of care.
4.3.1.5(1)(i)	Number of Patients going through Patient Rooms is increasing, but lengths of stay are decreasing.
4.3.1.5(1)(j)	Telemedicine will increasingly provide outreach opportunities to and from health care facilities province-wide.
4.3.1.5(1)(k)	The trend to adopt evidence-based clinical pathways will continue, with standards becoming available in many more types of cases.
4.3.1.5(1)(l)	The nature of the geriatric population requiring inpatient care will become increasingly more complex with a great number of co-morbidities and will require more specialized environments and expertise.
4.3.1.5(1)(m)	The volume of complex geriatric cases will increase; however, length of stay is expected to decrease with changes in models of care. Interdisciplinary teams, involving physicians, specialist nurses, specialized allied Staff, and community partners, will provide geriatric medicine inpatient services.
4.3.1.5(1)(n)	The number of Patients with mental illness and/or substance abuse problems is expected to increase.
4.3.1.5(1)(o)	The number of Patients surviving an overdose and requiring critical care, followed by longer term inpatient medical care and rehabilitation with increase.
4.3.1.5(1)(p)	Patient Rooms will be capable of accommodating a range of acuity levels or a single Patient’s changing acuity level with little or no changes to the room’s configuration or supplies/equipment content. This feature will reduce the need for in-hospital Patient transfers.

4.3.1.5(1)(q) Invasive procedures that may be performed at the bedside include central line insertion, nasogastric tube insertion, peripheral IV insertion, wound care, chest tube insertion. In future more, complex treatments/ procedures may be performed within the non-surgical heart and lung service such as pericardialcentesis, continuous vasoactive or inotropic drug infusions, arterial lines, management of arterial hemostasis devices.

4.3.1.5(1)(r) Decentralization of more diagnostic and treatment services to the IPUs is predicted as equipment becomes smaller and more mobile.

4.3.1.5(1)(s) The mean age of Patients admitted to the Facility is predicted to increase as is the incidence of comorbidity, Patients with complex health issues and Patients with dementia.

4.3.1.5(1)(t) Infection Prevention and Control will remain a high priority in all areas of the Facility.

4.3.1.5(1)(u) Food services will become more responsive to each Patient's needs as opposed to provision on a fixed schedule.

4.3.1.5(1)(v) Person- and Family-Centred Care, trauma informed care and cultural safety and humility will increasingly inform how we deliver care.

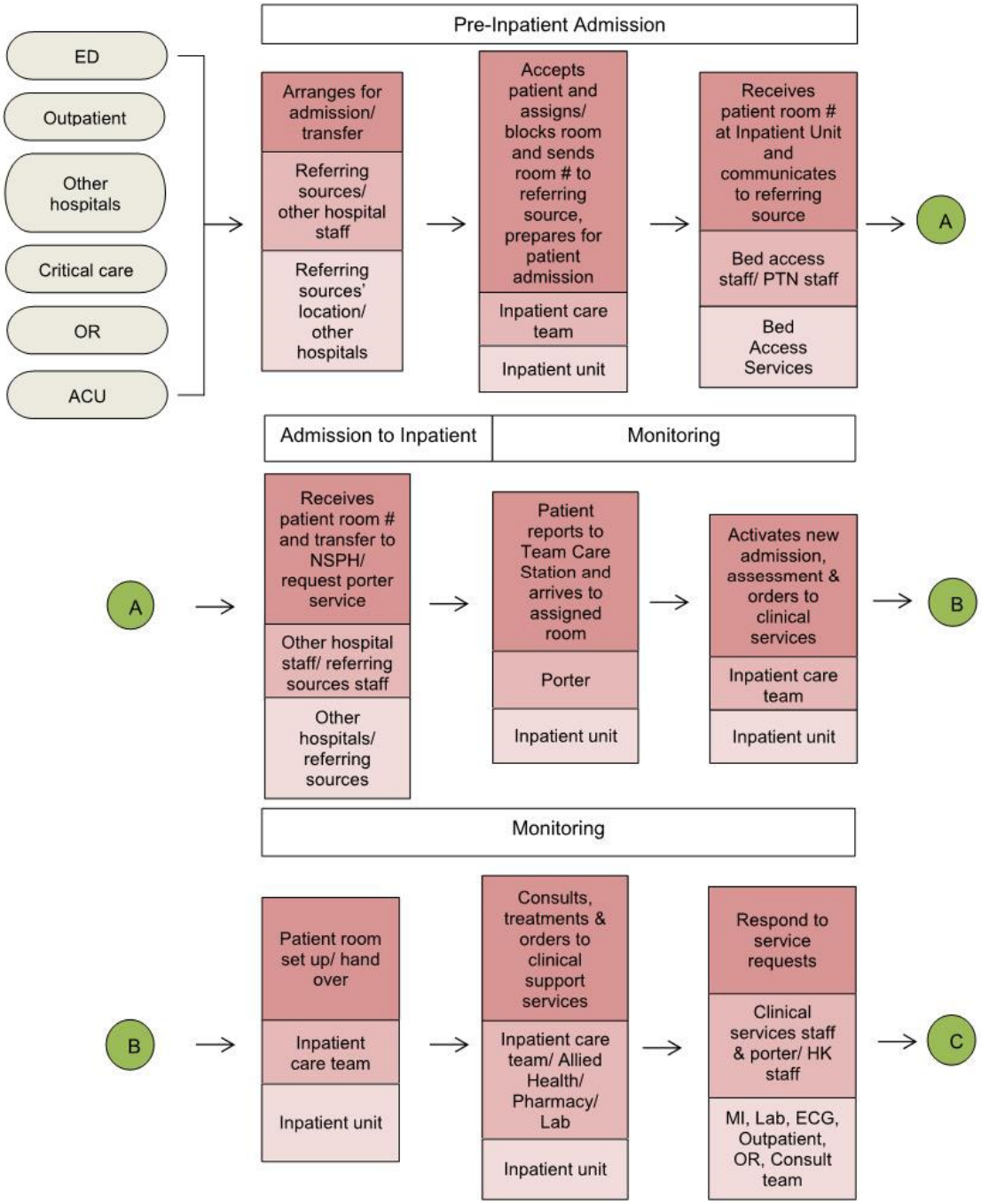
4.3.1.5(1)(w) Eating Disorders:

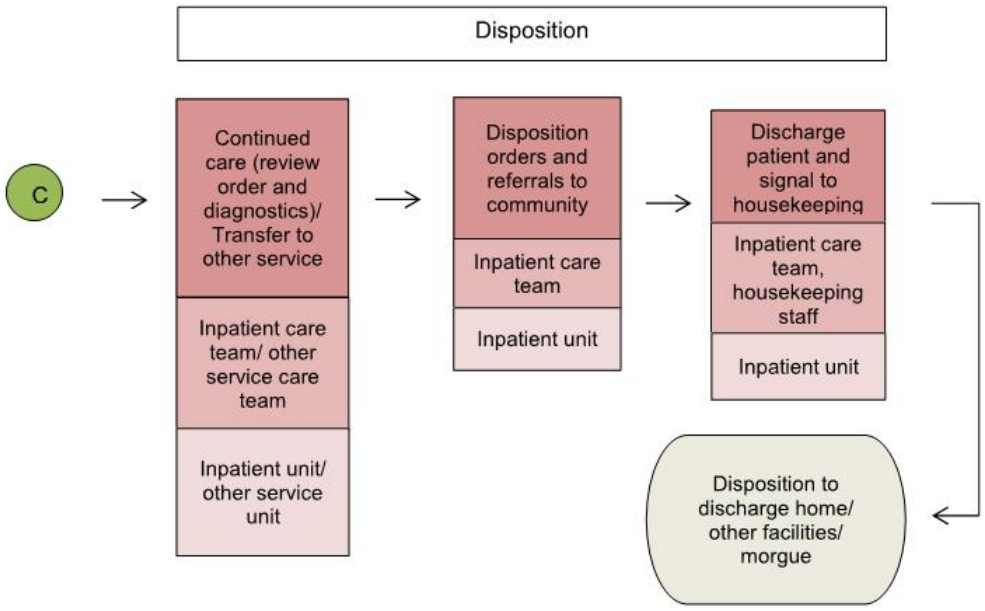
- 4.3.1.5.1.(w).1 As a provincial service, the trend in service delivery is to invest in telemedicine to better support care, education and consultation across the province.
- 4.3.1.5.1.(w).2 Person- and Family-Centred Care, trauma informed care and cultural safety and humility will increasingly inform how we deliver care.
- 4.3.1.5.1.(w).3 Peer and Family Navigators/Support Workers will become a part of the care team.

4.3.2 Workflows

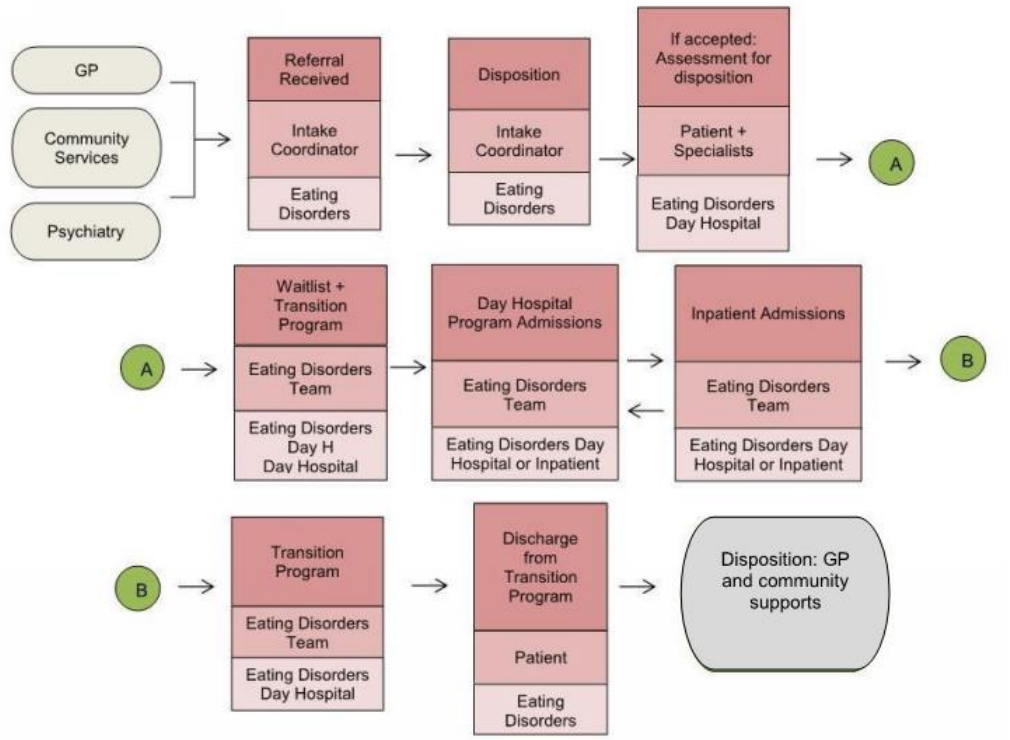
4.3.2.1 The Inpatient Care workflows are depicted in the following workflow diagrams.

C. INPATIENT CARE WORKFLOW DIAGRAM





C4.2.2/C4.2.3 EATING DISORDERS WORKFLOW DIAGRAM



4.3.3 Hours of Operation

4.3.3.1 IPUs including Renal, Urban Health Acute Care Unit, Eating Disorders Inpatient and MedPsych Unit will be operational 24 hours a day, 365 days per year.

4.3.3.2 The Eating Disorders Outpatient and Day Hospital Programs will operate weekdays 0800 - 1600 hours.

4.3.4 Workloads

4.3.4.1 The maximum estimated workload for this Component is shown in the following table.

INPATIENT CARE STAFF CATEGORY	PEAK SHIFT
Direct Care Team for 64-bed unit	
Physicians	8
Program Director	1
Patient Care Manager	1
Clinical Nurse Educator	2
Clinical Nurse Specialist	1
Nurse Practitioner	4
Clinical Nurse Leader	2
Registered Nurse	16
Licensed Practical Nurse	4
Care Aide	4
Clinical Pharmacist	2
Social Worker	4
Physiotherapist	4
Occupational Therapist	4
Rehabilitation Assistant	2
Speech Language Pathologist	2
Respiratory Therapist	2
Dietician	4
Unit Clerk	4
Porter/Ward Aides	4
Housekeeper	4
Subtotal, Direct Care Team Staff	**79**
Other	
Residents	24
Students	32

INPATIENT CARE STAFF CATEGORY	PEAK SHIFT
Other	5
Subtotal, Other	**61**
DAYTIME PEAK TOTAL, 64 BED UNIT	**140**

4.3.4.2 The maximum estimated workload for Eating Disorders is shown in the following table.

EATING DISORDERS STAFF CATEGORY	PEAK SHIFT
Direct Care Team: Eating Disorders Inpatient Unit	
Physicians	3
Medical Resident	2
Clinical Nurse Leader/Charge Nurse	1
Nurse	3
Acute Care Aide/MH Worker	1
Occupational Therapist	1
Psychologist	2
Speech Language Pathologist	1
Social Worker	1
Dietician	1
Unit Clerk	1
Housekeeper	1
Subtotal, Direct Care Team Staff: Eating Disorders Inpatient Unit	**18**
Other	
Student	5
Volunteer	2
Other	2
Subtotal, Other	**9**
Shared Staff	
Program Director	1
Clinical Nurse Specialist	1
Nurse Educator	1
Spiritual Care	1
Music Therapist	1

EATING DISORDERS STAFF CATEGORY	PEAK SHIFT
Program Clerk	2
Medical Director	1
Physician Consultants	3
Patient Care Manager	1
Administration Assistant	1
Data Analyst	1
Clinical Pharmacist	1
Subtotal, Shared Staff (not included in daytime peak)	**15**
TOTAL: Eating Disorders Inpatient Unit	**27**
Direct Care Team: Eating Disorders Day Hospital Program (not captured in Inpatient Unit)	
Physician	5
Medical Resident	1
Nurse Care Coordinator	1
Triage/Intake Nurse	1
Social Worker	1
Dietician	4
Psychologist	4
Occupational Therapy	1
Clinical Researcher	2
Unit Clerk	2
Housekeeper	1
Subtotal, Direct Care Team Staff	**23**
Other	
Student	5
Subtotal, Other	**5**
TOTAL: Eating Disorders Day Hospital Program	**28**
DAYTIME PEAK TOTAL, EATING DISORDERS	**55**

4.4 DESIGN CRITERIA

4.4.1 General Requirements

4.4.1.1 Zones of activity within the Component include the following:

4.4.1.1(1) IPU 64-Bed Group 01

4.4.1.1(2) IPU 64-Bed Group 02

4.4.1.1(3) IPU 64-Bed Group 03 (IPU 05 Generic and IPU 06 Renal/Generic)

4.4.1.1(4) IPU 64-Bed Group 04 (IPU 07 Urban Health Acute Care Unit, IPU 08 MedPsych/Eating Disorders)

4.4.1.1(5) IPU 64-Bed Group 05

4.4.1.1(6) IPU 64-Bed Group 06

4.4.1.2 The Facility will have 64-beds arranged per IPU floor in four (4) pods of sixteen (16) beds.

4.4.1.3 IPUs 01, 02, 03, 04, 05, 09, 10, 11 and 12 Generic and IPU 07 Urban Health Acute Care Unit are 32-bed units each. A 32-bed unit will serve similar Patient types, Staff will have similar skill sets and the day to day operations will be managed by one Staff lead.

4.4.1.4 Within the 32-bed unit with two (2) pods of sixteen (16) beds, the Patient Rooms will be arranged in pods with all frequently used support rooms (at minimum, including Medication Rooms, Soiled Utility rooms, Store-Clean Supplies and Soiled Equipment Hold) with Convenient Access from each individual pod. The pods' design will allow the 32-bed unit to function as one unit. The design will allow for access to appropriate hand hygiene sinks and PPE located adjacent to each Patient Room entrance.

4.4.1.5 Two (2) pods of sixteen (16) beds each will be located adjacent to each other and provide access through General Circulation for Patient/Staff/visitors to move from one (1) pod of sixteen (16) beds to another pod of sixteen (16) beds without exiting the 32-bed unit. Each pod of sixteen (16) beds will have a dedicated entrance and main access to each pod will not go through another pod.

4.4.1.6 Convenient Access from each pod of sixteen (16) beds to shared spaces (such as Team Space-Allied Health, Lounge-Staff, Store-Office Support, Washroom-Staff, Disposal Hold, Housekeeping Closet and Offices) within the 32-bed unit will be provided.

4.4.1.7 Each inpatient area will provide the specialized space, equipment, resources to accommodate Patient care, education, research, interdisciplinary teams, and administrative Staff needs as part of an integrated medical/surgical unit. It will include airborne isolation and bariatric rooms.

4.4.1.8 On each generic 64-bed group floor, there will be a Patient Room-Bariatric-Airborne Isolation-Hybrid and three (3) Patient Room-Airborne Isolation-Hybrid

on one 32-bed unit and four (4) Patient Room-Airborne Isolation-Hybrid on the other 32-bed unit. The intent of Patient Room-Airborne Isolation-Hybrid is to act as an AIR, without the space allocated to a fully constructed anteroom to ensure maximum day-to-day flexibility of the Patient Room and to not limit the Staffs' visibility into the room when not required to isolate a Patient.

4.4.1.9 The corridor immediately outside any Airborne Isolation-Hybrid room will be a low traffic area purposefully sparse with no stored equipment and with Convenient Access to a corridor hand hygiene sink to allow Staff to don and doff their PPE and follow appropriate Infection Prevention and Control protocols.

4.4.1.10 All bariatric Patient Room doors will accommodate the movement of a bariatric bed in and out of the Patient Room. The bariatric Patient Rooms will be capable of accommodating special equipment such as bariatric beds/stretchers, seating for family members, required by bariatric Patients.

4.4.1.11 The Patient Room-Airborne Isolation-Hybrid and Patient Room-Bariatric-Airborne Isolation-Hybrid will be dispersed on the unit and located close to the Patient Transfer/Staff Service Elevators. The path of travel for Staff to transfer a Patient to these rooms will not pass through the Public Passenger Elevator lobby.

4.4.1.12 The layout of 64-bed IPU areas will be standardized on all floors. Views and natural light will be maximized for Patients, Staff and visitors.

4.4.1.13 Patient Rooms will have Patient controlled ambient lighting and temperature control. Task Lighting will also be required for both settings, so Staff may perform tasks and chart while Patients enjoy a darkened environment.

4.4.1.14 Clinical indicator signage will be installed outside each Patient Room with visibility for Staff, visitor and family approaching the Patient Room. This signage will communicate codes used to identify Patients who require special recognition of the potential harm they may pose to Staff, Patients and visitors and/or potentially other clinical indicators (e.g., NPO, ARO, etc.).

4.4.1.15 There will be a magnetic whiteboard in the room for Staff, family and Patient that communicates the goals of care, nurse in charge, doctor in charge and other pertinent information as required.

4.4.1.16 Patient Rooms will have three (3) zones; family zone, Patient zone and Staff zone.

4.4.1.16(1) The family zone will foster face-to-face dialogue between the Patient and their family member, while the Patient is lying in their bed. The Family Zone will include seating/sleeping/work area that does not interfere with Patient care activities.

4.4.1.16(2) The Patient Zone will have space for a bed, equipment (i.e., monitor, supply cart), furnishings (i.e., side chairs, recliner chair, over bed table), Staff and visitors, a lockable drawer for Patient specific medications, and lockable storage for Patients' personal

belongings. Each Patient zone will have a modular bank of medical gases, nurse call and emergency electrical outlets. Patient bed areas will have access to natural light and views. Patient Rooms will be designed to minimize the risk of falls and will be equipped with ceiling lifts that can transfer Patients directly on to the Washroom/Shower-Inpatient Ensuite. Washroom/Shower-Inpatient Ensuite will all be outboard and designed to enable caregiver support.

4.4.1.16(3) The Staff zone will include hand hygiene sink and a workstation that does not interfere with Patient care functions.

4.4.1.17 Inpatient pod layout will minimize Staff travel distance and maximize nurse-Patient Line of Sight by locating frequently utilized Staff work areas and support spaces close to the Patient bed spaces.

4.4.1.18 Interdisciplinary team interactions will be enhanced with team space on the unit. Spaces of the unit will allow for all key members of the interdisciplinary care team to work collaboratively.

4.4.1.19 There will be four (4) Care Team Stations, one (1) per each 16-bed pod for each IPU.

4.4.1.20 Alcove-Touchdown/Charting will be located adjacent to the Patient Rooms. Patient monitoring will occur at the Care Team Stations and Alcove-Touchdown/Charting.

4.4.1.21 The Alcove-Touchdown/Charting will be designed ergonomically with maximum flexibility in supporting organizational and operational changes. It will be designed to accommodate the storage and charging of WOWs.

4.4.1.22 Support spaces and storage will be located on each floor to support Convenient Access for Staff and decrease time spent searching for supplies and equipment.

4.4.1.23 In addition to the private rooms, the Facility will support Person- and Family-Centred Care through the provision of appropriate Waiting areas and Lounge-Family/Visitor.

4.4.1.24 Additional facilities on each floor will include, at minimum: Conference/Meeting Rooms, storage space and Staff support facilities.

4.4.1.25 Each Care Team Station will have infrastructure for central monitoring capability.

4.4.1.26 All Patients will be monitored from one of the Care Team Stations. Maximizing the Staff’s ability to view the entrances into all Patient Rooms from the Care Team Stations is required.

4.4.1.27 Each of the two (2) Care Team Stations will be arranged around a Care Team Station-Enclosed to provide work flexibility and options for Staff.

4.4.1.28 At each unit entrance, there will be intercoms for visitors to communicate with Staff at various locations. They will have video capability and the ability to allow remote entry (i.e. unlock doors) and be programmable to allow Staff to easily redirect the intercom between Care Team Stations.

4.4.1.29 Provide infrastructure for the Physiological Monitoring System (including Ambulatory Telemetry coverage, central station monitor, bedside monitor, and station monitor) in all IPU floors to support the acuity-adaptable design.

4.4.1.30 Each Care Team Station will have electronic Patient information tracking boards, positioned for Staff to view them from inside their work area and with no visibility for the public. Patient information tracking boards will serve to communicate Patient's clinical information for the Staff workflow management on unit.

4.4.1.31 At each Care Team Station there will be a central station monitor, positioned for the Staff to view from a sitting position, facing their work desks and with no visibility of the monitor for the public.

4.4.1.32 Each Care Team Station will be designed to allow charging for number of devices used on each IPU floor (including personal communication devices, tablets, etc.).

4.4.1.33 Patient information will be available throughout the unit wirelessly with mobile devices or through computer terminal positions at the Patient bedsides.

4.4.1.34 Clinical documentation by Staff will take place in the Patient Rooms, Alcove-Touchdown/Charting and/or the Care Team Stations.

4.4.1.35 Medication Rooms will be located centrally with Convenient Access to Care Team Stations.

4.4.1.36 Medication Rooms and Store-Clean Supplies will be adjacent. Medication Rooms will have one (1) door from the corridor and another door connecting to the Store-Clean Supplies, so Staff can easily retrieve supplies for the setup of IV medications. Store-Clean Supplies will have another door from the corridor.

4.4.1.37 Store-Central Equipment will be grouped with Medication Room and Store-Clean Supplies.

4.4.1.38 Medication Room doors require glazing for visibility.

4.4.1.39 Pneumatic Tube Stations will be located centrally with Direct Access to Care Team Stations.

4.4.1.40 Support services and storage including Soiled Utility, Disposal Hold, Store-General, Store-Central Equipment, Store-Local Equipment and Store-Clean Supplies will be located centrally with Convenient Access to Patient Room area to optimize flow and promote best Infection Prevention and Control protocols.

4.4.1.41 Soiled Equipment Hold and Soiled Utility will be located adjacent to each other with a door between the two rooms, in addition to the doors connecting these spaces to the corridor. The primary function of Soiled Utility is to provide a space to dispose of the full spectrum of clinical waste including bedpan disinfectors and assorted bins for cytotoxic and biomedical waste (e.g. used blood bags), perform limited soiled activities such as gross decontamination/rinsing/soaking of surgical type instruments, and temporarily store clinical specimens. The primary function of the Soiled Equipment Hold is to sequester and marshal soiled equipment and provide a dedicated space to clean them. The design will allow for one way flow from soiled to clean, separate soiled and clean to prevent cross-contamination and provide a dedicated unobstructed cleaning zone, with Convenient Access from all clinical spaces in the area it is intended to serve. Cleaned equipment will be moved to the Store-Local Equipment or Store-Central Equipment in a different and physically separate location away from Soiled Utility and Soiled Equipment Hold.

4.4.1.42 All alcoves to have power and data for future flexibility. Supply alcoves to be deep enough to accommodate exchange linen carts, supply carts and equipment so that corridors remain clear.

4.4.1.43 Provide hand hygiene sinks distributed appropriately in all clinical areas as per Infection Prevention and Control protocols. Provide a hand hygiene sink at each 32-bed unit entrance.

4.4.1.44 Washroom-Staff will have Convenient Access to Staff work areas.

4.4.1.45 The presence of mobility aids including canes, crutches, walkers, wheelchairs, stretchers and motorized chairs/scooters will be anticipated in all Patient accessible areas throughout the Component.

4.4.1.46 Staff support areas will be accessed from Back of House circulation. The Lounge-Staff will be in the unit and have natural light, space for Staff meals and rest. Lounge-Staff, Lockers-Staff and Washroom/Shower-Staff will be located adjacent to each other.

4.4.1.47 The physical environment will facilitate team collaboration.

4.4.1.48 Two (2) Conference/Meeting Rooms will be provided on each level, shared between 64-bed units and utilized for purposes such as team collaboration, teaching, rehabilitation gym, and possible space for dining for Patients or other clinical needs as required by the unit. Both Conference/Meeting Rooms will have an operable partition and each side of the room will have its own IM/IT system and entrance door. Where both Conference/Meeting Room-Xlarge-Dividable and Conference/Meeting Room-Large-Dividable are programmed on a unit, the Conference/Meeting Room-Xlarge-Dividable will be used as the rehabilitation gym and will have access to the Store-Rehab Therapy.

4.4.1.49 Outbreak Control Zone

4.4.1.49(1) In case of an airborne infection pandemic outbreak, two (2) Outbreak Control Zones containing 16-bed pods on each IPU 64-bed floor (one on each 32-bed unit) will have negative pressurization capability to isolate half of the unit from the surrounding areas. Each 16-bed Outbreak Control Zone will meet the following requirements:

4.4.1.49(1)(a) Provide support spaces including Medication Room-Large, Store-Clean Supplies, Soiled Utility and Soiled Equipment Hold within the Outbreak Control Zone.

4.4.1.49(1)(b) The shared support services and shared Staff support areas will be outside the Outbreak Control Zone.

4.4.1.49(1)(c) The Outbreak Control Zone will be bounded by construction that allows the mechanical ventilation systems to create negative pressure within a zone relative to adjacent areas.

4.4.1.49(1)(d) The Outbreak Control Zone will contain space that can be converted into an anteroom (e.g., double set of powered doors) adjacent to each entrance to the zone and will be equipped with a hand hygiene sink and space for PPE storage. The anteroom will be large enough to accommodate a stretcher when both sets of doors are closed.

4.4.1.49(1)(e) Both sets of power doors will have automatic opening and access control. Access control will be located on the entry side of the first set of doors and on the exit side of the second set of doors far enough away from the doors to allow them to open before a stretcher is present. Under normal operations, the doors will remain open but will be closed when the Outbreak Control Zone is in use.

4.4.2 IPU 64-Bed Group 03

4.4.2.1 IPU 06 Renal/Generic

4.4.2.1(1) This unit will have Direct Access to Renal Outpatient located on the same floor through a Back of House corridor. Alternatively, if a Back of House corridor is not provided, doors that can be remotely locked and unlocked by Staff will be required to restrict public flow through the corridor during Patient transfer between Renal Inpatient Services and Renal Outpatient Services.

4.4.2.1(2) The IPU Renal/Generic Unit has twenty-eight (28) Patient Rooms with outboard Washroom/Shower-Inpatient Ensuite and four (4) Patient Bay-Daycare with individual RO water supply and drain box.

4.4.2.1(3) The Renal Unit will include one (1) Patient Room-Airborne Isolation-Lead Lined with an Anteroom-Airborne Isolation-Lead Lined and two (2) Patient Room-Airborne Isolation-Hybrid.

4.4.2.1(4) The Generic Unit will include seven (7) Patient Rooms with outboard Washroom/Shower-Inpatient Ensuite and a Patient Room-Airborne Isolation-Hybrid-Lead Lined with a Washroom/Shower-Inpatient Ensuite-Airborne Isolation-Lead Lined.

4.4.2.1(5) The Patient Room-Airborne Isolation-Lead Lined, Patient Room-Airborne Isolation-Hybrid and Patient Room-Airborne Isolation-Hybrid-Lead Lined will be located close to the Patient Transfer/Staff Service and away from the Public Passenger Elevators. The path of travel for Staff to transfer a Patient to these rooms will not pass through the Public Passenger Elevator lobby, Waiting or Reception areas.

4.4.2.1(6) The Renal Unit will include one (1) Procedure Room-Renal and one (1) Washroom/Shower-Patient located adjacent to four (4) Patient Bay-Daycare.

4.4.3 IPU 64-Bed Group 04

4.4.3.1 IPU 07 Urban Health Acute Care Unit

4.4.3.1(1) The requirements for this unit will be similar to other IPU Generic Units. All Washroom/Shower-Inpatient Ensuite in this unit will be outboard.

4.4.3.1(2) There are requirements on this unit for more intensive Infection Prevention and Control protocols, including Patient decontamination and bed-bug extermination.

4.4.3.1(3) There is a requirement for Patients to be able to clean, decontaminate and securely and safely store clothes and other possessions.

4.4.3.1(4) Because this unit follows a harm reduction approach, there is a requirement for Patients to be able to safely and securely store harm reduction supplies and Naloxone kits.

4.4.3.1(5) Due to the requirement to share Staff support space (Conference/Meeting Rooms and workstation space), the Urban

Health Acute Care Unit will be located on the same floor as MedPsych Unit and Eating Disorders.

4.4.3.2 IPU 08 MedPsych/Eating Disorders

4.4.3.2(1) IPU 08 MedPsych Unit

4.4.3.2(1)(a) The MedPsych Unit will be a locked unit with controlled access and egress. Refer to Schedule 3 [Design and Construction Specifications] for video door intercom and remote release door requirements.

4.4.3.2(1)(b) From an IPAC perspective, the MedPsych Unit will have the same standards and requirements as an IPU for managing an infectious Patient or group of Patients.

4.4.3.2(1)(c) From a Patient/Staff safety perspective, there will be no need to segregate or lock down any area within the MedPsych Unit.

4.4.3.2(1)(d) The MedPsych Unit will meet the safety and security design requirements of the Mental Health Inpatients Unit, including those for Mental Health Areas as described in Schedule 3 [Design and Construction Specifications].

4.4.3.2(1)(e) MedPsych Unit will be grouped with Eating Disorders Day Hospital Program and Eating Disorders Inpatient on the same floor.

4.4.3.2(1)(f) Direct Access for Staff will be provided between Eating Disorders Inpatient Unit and MedPsych Unit through shared services between the units such as Care Team Station-Enclosed and Medication Room.

4.4.3.2(1)(g) Direct Access will also be provided to Mental Health Inpatient units located on the same floor via a Back of House corridor. Alternatively, if a Back of House corridor is not provided, doors that can be remotely locked and unlocked by Staff will be required to restrict public flow through the corridor during Patient transfer between the MedPsych Unit and the Mental Health Inpatient units.

4.4.3.2(1)(h) Provide a 24-bed unit with outboard Washroom/ Shower-Inpatient Ensuite and four (4) Patient Room-Airborne Isolation-Hybrid rooms.

4.4.3.2(1)(i)	The Patient Room-Airborne Isolation-Hybrid rooms will be located adjacent to the Patient Transfer/ Staff Service Elevators and away from the Public Passenger Elevators. The path of travel for Staff to transfer a Patient to these rooms will not pass through the Public Passenger Elevator lobby, Waiting or Reception areas.
4.4.3.2(1)(j)	The MedPsych Unit requires a security vestibule that strictly controls the movement of Patients and visitors in and out of this Component. The vestibule will mitigate the risk of Patients escaping while ensuring privacy and safety. The vestibule will have Line of Sight from the Care Team Station. The number of entries and exits from the unit will be limited to control visitor access and provide security. Visitor entry will be separated from the Patient and Staff entry to provide security without limiting Patient movement.
4.4.3.2(1)(k)	The security vestibule at the entrance will be used by Staff to conduct safety checks prior to visitors being allowed to enter the unit. The security vestibule will be equipped with a hand hygiene sink and Alcove-Lockers-Visitor to provide an opportunity for visitors to store belongings before entering the unit. The vestibule will be large enough to accommodate a stretcher when both sets of doors are closed.
4.4.3.2(1)(l)	Ceiling lifts will be recessed in the ceiling to be Ligature Resistant. Mobile lift equipment will also be stored in a locked equipment storage room.
4.4.3.2(1)(m)	The Care Team Station will be located centrally within the unit; allowing observation of unit entry points and Patient corridors.
4.4.3.2(1)(n)	The Care Team Station will include a section that is open and a section that is fully enclosed in glass for Staff safety and confidentiality.
4.4.3.2(1)(o)	Gathering areas such the Lounge-Family/Visitor will be located near the Care Team Station area to provide professional overview.
4.4.3.2(1)(p)	Consult/Interview Room will have dual egress and a panic duress button.

4.4.3.2(2) Eating Disorders Day Hospital Program

4.4.3.2(2)(a) Eating Disorders Day Hospital Program participants arrive in the morning and leave in the afternoon; therefore the Eating Disorders Day Hospital Program will have its own dedicated Patient entrance that is not secured during the day. Access to the Program will not be through any other unit. Eating Disorders Day Hospital Program will be located adjacent to Eating Disorders Inpatient and have Direct Access to it through a public corridor as well as Back of House circulation.

4.4.3.2(2)(b) This is a Day Hospital Program which will provide group therapy through a variety of spaces such as a Group Therapy Room, a Multipurpose Room and two (2) Dining/Activity Areas. The two (2) Washroom-Patient will include Ligature Resistant and Anti-Barricade features and be equipped with an Overdose Notification System. One Washroom-Patient will be used for urine screens.

4.4.3.2(2)(c) There are requirements on this unit for more intensive Infection Prevention and Control protocols, including Patient decontamination and bed bug extermination.

4.4.3.2(2)(d) Dining/Activity Areas in the Eating Disorders Day Hospital Program will be supported by the Nutrition Centre, which is part of C4.3 - 64-Bed Shared Support Services located on the same floor.

4.4.3.2(3) Eating Disorders Inpatient

4.4.3.2(3)(a) This is a secure unit with restricted egress.

4.4.3.2(3)(b) Eating Disorders Inpatient Unit will be grouped with Eating Disorders Day Hospital Program and MedPsych Unit. The Eating Disorders Inpatient Unit will meet the safety and security design requirements of the Mental Health Inpatient unit including those for Mental Health Areas as described in Schedule 3 [Design and Construction Specifications].

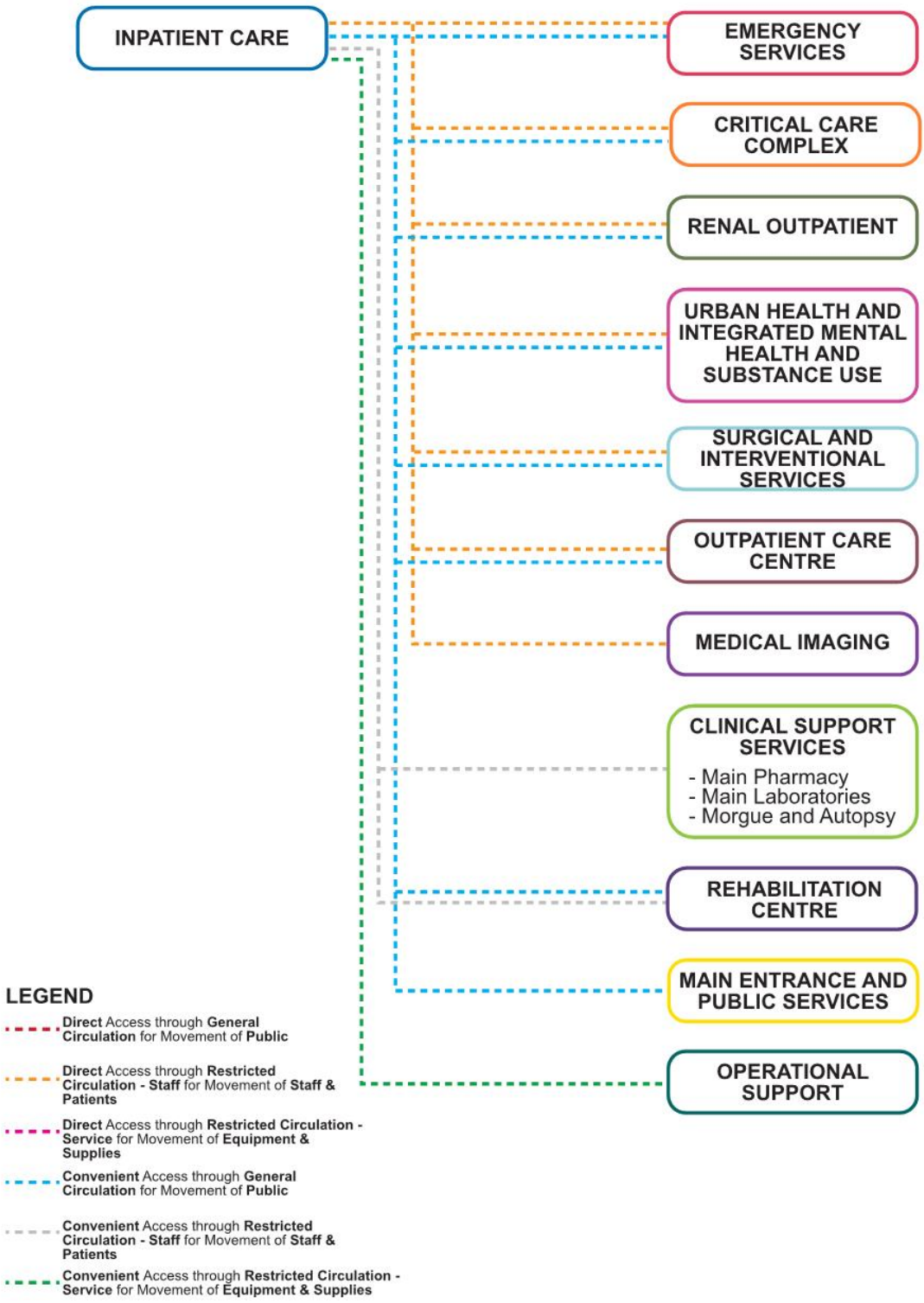
4.4.3.2(3)(c) Access to this unit will not go through any other unit, however it will be acceptable to pass through the Eating Disorders Day Hospital Program to

	access the Eating Disorders Inpatient, only if the access is via Back of House circulation.
4.4.3.2(3)(d)	A security vestibule with double set of powered doors will not be required at the entrance. A hand hygiene sink and Alcove-Lockers-Visitor at the entrance will provide an opportunity for visitors to store belongings before entering the unit.
4.4.3.2(3)(e)	Direct Access will be provided between Eating Disorders Inpatient Unit and MedPsych Unit through shared services between two (2) units such as Care Team Station-Enclosed and Medication Room.
4.4.3.2(3)(f)	Provide seven (7) Patient Room-Eating Disorders and a Patient Room-Eating Disorders Accessible, all without Washroom/Shower-Inpatient Ensuite.
4.4.3.2(3)(g)	A Washroom/Shower-Eating Disorders-Shared accessible from the main Patient corridor is required, and will only be used by Patients under supervision of Staff. The Washroom/Shower will include two (2) toilet stalls and sinks and a shower stall and will have Ligature Resistant and Anti-Barricade doors. The door to the shared washroom will be Ligature Resistant and Anti-Barricade and will be lockable by Staff when not in use.
4.4.3.2(3)(h)	The Sensory Modulation Room will be located adjacent to the Lounge-Family/Visitor.
4.4.3.2(3)(i)	To promote Patient education and therapy in this area, a Group Therapy Room as well a Lounge/Living Room-Patient will be provided.
4.4.3.2(3)(j)	ADL Kitchen/Dining/Activity Area in the Eating Disorders Inpatient will be supported by the Nutrition Centre, which is part of C4.3 - 64-Bed Shared Support Services located on the same floor.

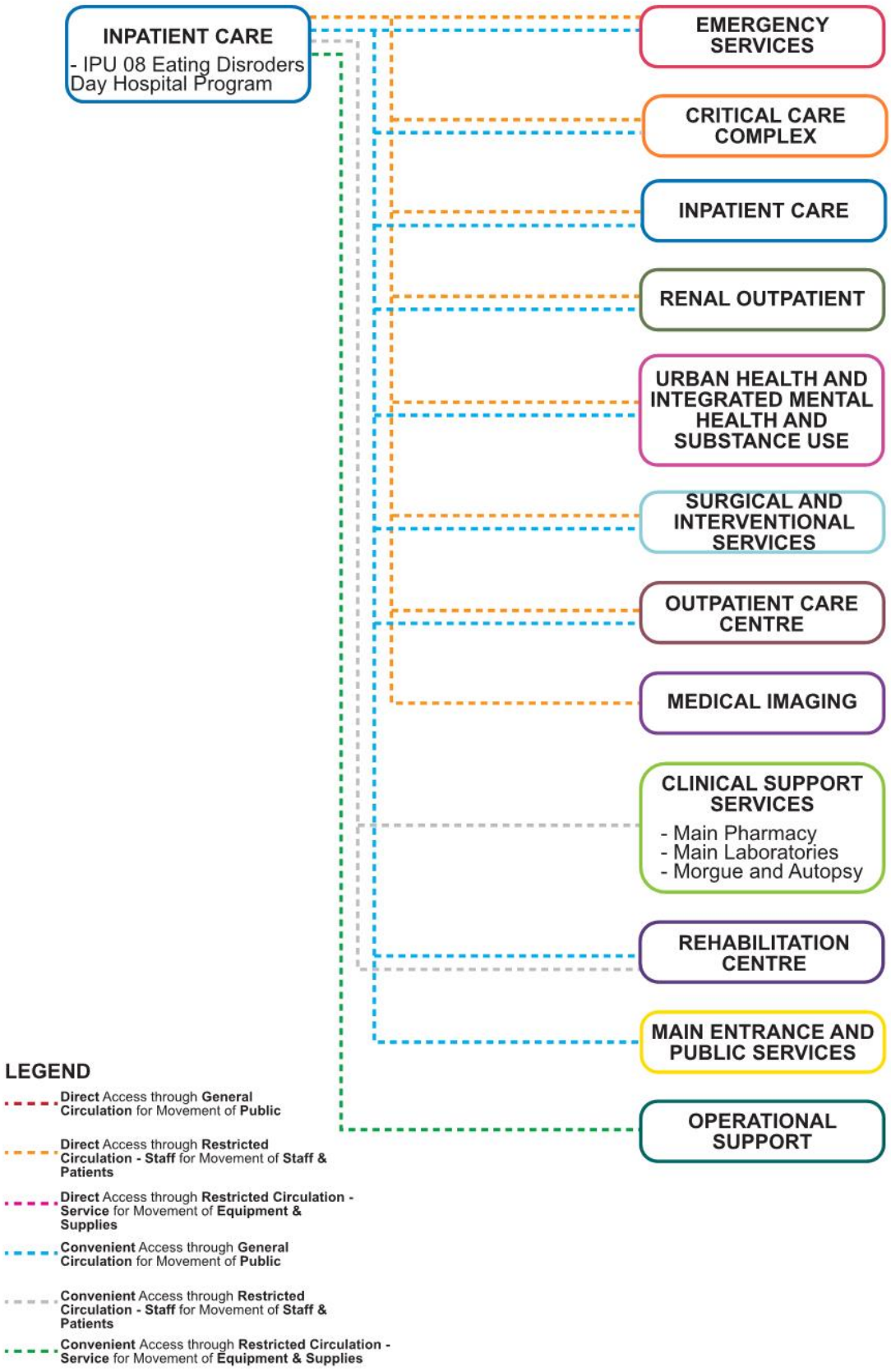
4.5 EXTERNAL RELATIONSHIPS

4.5.1 The following diagrams indicate other Functional Components that have a functional relationship with this Component.

C. INPATIENT CARE TYPICAL IPU 64-BED GROUP EXTERNAL RELATIONSHIPS AND CIRCULATIONS



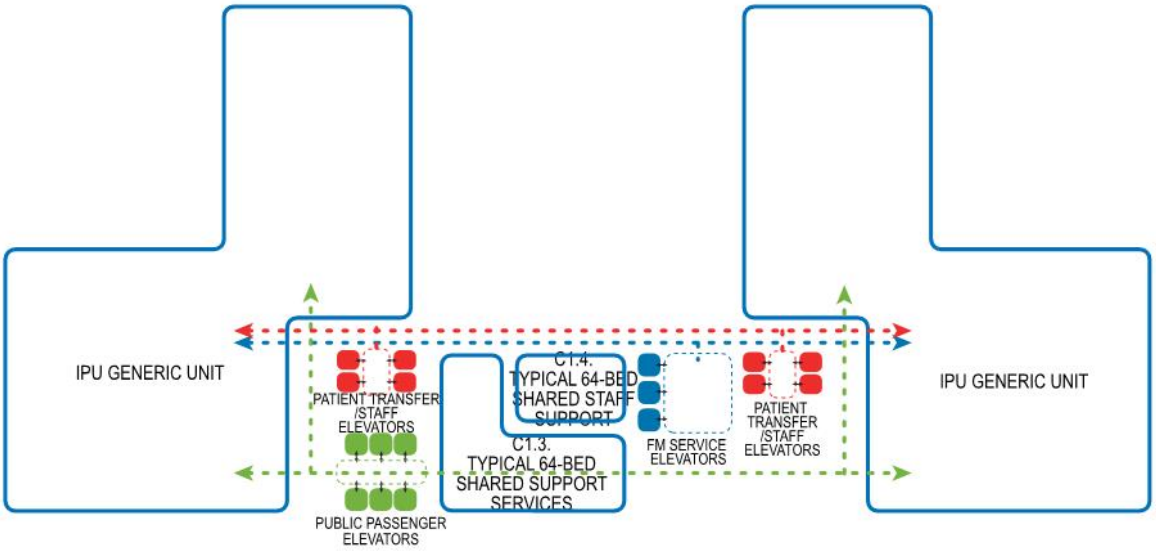
C4.2.2. IPU 08 EATING DISORDERS DAY HOSPITAL PROGRAM EXTERNAL RELATIONSHIPS AND CIRCULATIONS



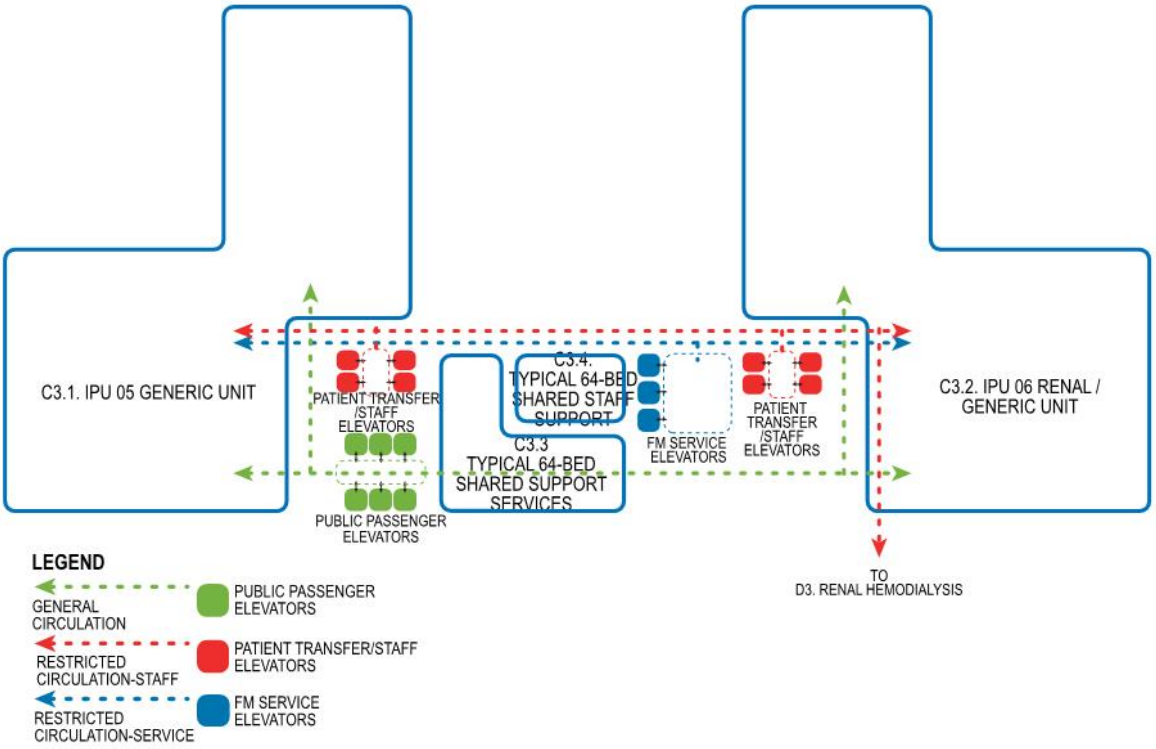
4.6 INTERNAL RELATIONSHIPS

4.6.1 The following diagrams indicate internal functional relationships within this Component.

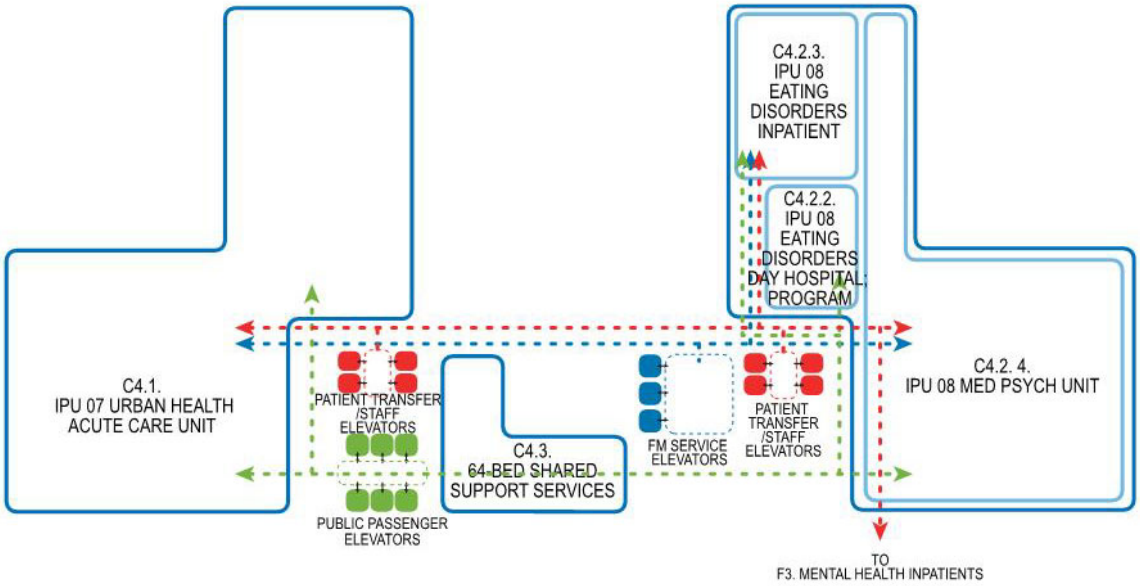
C. INPATIENT CARE GENERIC IPU 64-BED GROUP INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES

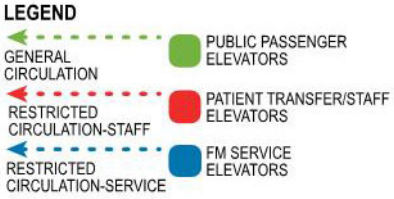


C3. INPATIENT CARE IPU 64-BED GROUP 03 INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



C4. INPATIENT CARE IPU 64-BED GROUP 04 INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES





4.7 SCHEDULE OF ACCOMMODATIONS

4.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Inpatient Care

C1 - IPU 64-BED GROUP 01	3143.70
C2 - IPU 64-BED GROUP 02	3140.70
C3 - IPU 64-BED GROUP 03	3141.60
C4 - IPU 64-BED GROUP 04	3147.20
C5 - IPU 64-BED GROUP 05	3140.70
C6 - IPU 64-BED GROUP 06	3143.70
INPATIENT CARE PROGRAMMED SPACE NSM:	**18,857.60**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C1 - IPU 64-BED GROUP 01					
C1.1 - IPU 01 Generic					
C1.1.1 - IPU 01 Generic Unit Entrance					
C1.1.1.1	Alcove-Vending Machine	1	1.50	1.50	
C1.1.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 01 Generic Unit.
C1.1.1.3	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C1.1.2 - IPU 01 Generic Unit					
C1.1.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
C1.1.2.2	Patient Room-Bariatric-Airborne Isolation-Hybrid	1	28.00	28.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, provision for bariatric bed.
C1.1.2.3	Washroom/Shower-Inpatient Ensuite-Bariatric-Airborne Isolation	1	7.00	7.00	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.
C1.1.2.4	Patient Room-Airborne Isolation-Hybrid	3	21.40	64.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C1.1.2.5	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	3	5.50	16.50	3-piece incl. shower, accessible for Persons with Disabilities.
C1.1.2.6	Patient Room	28	21.40	599.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C1.1.2.7	Washroom/Shower-Inpatient Ensuite	28	5.50	154.0	3-piece incl. shower, accessible for Persons with Disabilities.
C1.1.2.8	Alcove-Touchdown/Charting	16	1.00	16.00	Incl. 1 touch down workstation.
C1.1.2.9	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C1.1.2.10	Care Team Station	4	16.00	64.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C1.1.2.11	Care Team Station-Enclosed	2	28.00	56.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.
C1.1.2.12	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
C1.1.2.13	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of each Care Team Station entrance.
C1.1.2.14	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
C1.1.2.15	Team Space-Allied Health	1	18.00	18.00	Incl. 4 workstations.
C1.1.2.16	Lounge-Family/Visitor	2	20.00	40.00	Incl. seating for 8.
C1.1.2.17	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
C1.1.2.18	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
C1.1.3 - IPU 01 Generic Unit Support Services					
C1.1.3.1	Alcove-Blanket Warmer	2	1.50	3.00	1 for each 16-bed pod, adjacent to Alcove-Clean Linen.
C1.1.3.2	Alcove-Local Equipment	6	1.50	9.00	Distributed in IPU 01 Generic Unit.
C1.1.3.3	Alcove-Clean Linen	3	2.50	7.50	1 for each 16-bed pod, 1 for two 16-bed pods for isolation.
C1.1.3.4	Alcove-Stretcher	4	2.50	10.00	2 for each 16-bed pod.
C1.1.3.5	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
C1.1.3.6	Store-Clean Supplies	2	20.00	40.00	
C1.1.3.7	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C1.1.3.8	Soiled Equipment Hold	2	10.00	20.00	
C1.1.3.9	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
C1.1.3.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C1.1.4 - IPU 01 Generic Unit Staff Support					
C1.1.4.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C1.1.4.2	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
C1.1.4.3	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
C1.1.4.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
C1.1.4.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C1.1.4.6	Washroom-Staff	3	3.00	9.00	2-piece.
C1.2 - IPU 02 Generic					
C1.2.1 - IPU 02 Generic Unit Entrance					
C1.2.1.1	Alcove-Vending Machine	1	1.50	1.50	
C1.2.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 02 Generic Unit.
C1.2.1.3	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C1.2.2 - IPU 02 Generic Unit					
C1.2.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
C1.2.2.2	Patient Room-Airborne Isolation-Hybrid	4	21.40	85.60	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C1.2.2.3	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	4	5.50	22.00	3-piece incl. shower, accessible for Persons with Disabilities.
C1.2.2.4	Patient Room	28	21.40	599.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C1.2.2.5	Washroom/Shower-Inpatient Ensuite	28	5.50	154.00	3-piece incl. shower, accessible for Persons with Disabilities.
C1.2.2.6	Alcove-Touchdown/Charting	16	1.00	16.00	Incl. 1 touch down workstation.
C1.2.2.7	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
C1.2.2.8	Care Team Station	4	16.00	64.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C1.2.2.9	Care Team Station-Enclosed	2	28.00	56.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.
C1.2.2.10	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
C1.2.2.11	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of each Care Team Station entrance.
C1.2.2.12	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
C1.2.2.13	Team Space-Allied Health	1	27.00	27.00	Incl. 6 workstations.
C1.2.2.14	Lounge-Family/Visitor	2	20.00	40.00	Incl. seating for 8.
C1.2.2.15	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
C1.2.2.16	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
C1.2.3 - IPU 02 Generic Unit Support Services					
C1.2.3.1	Alcove-Blanket Warmer	2	1.50	3.00	1 for each 16-bed pod, adjacent to Alcove-Clean Linen.
C1.2.3.2	Alcove-Local Equipment	6	1.50	9.00	Distributed in IPU 02 Generic Unit.
C1.2.3.3	Alcove-Clean Linen	3	2.50	7.50	1 for each 16-bed pod, 1 for two 16-bed pods for isolation.
C1.2.3.4	Alcove-Stretcher	4	2.50	10.00	2 for each 16-bed pod.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C1.2.3.5	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
C1.2.3.6	Store-Clean Supplies	2	20.00	40.00	
C1.2.3.7	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C1.2.3.8	Soiled Equipment Hold	2	10.00	20.00	
C1.2.3.9	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
C1.2.3.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C1.2.4 - IPU 02 Generic Unit Staff Support					
C1.2.4.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C1.2.4.2	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
C1.2.4.3	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
C1.2.4.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
C1.2.4.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
C1.2.4.6	Washroom-Staff	3	3.00	9.00	2-piece.
C1.3 - 64-Bed Shared Support Services					
C1.3.1	Conference/Meeting Room-Xlarge-Dividable	1	88.00	88.00	Incl. counters, cabinets, accommodates 50 Persons, dividable into two separate rooms by an operable partition.
C1.3.2	Store-General	1	6.00	6.00	Incl. shelving.
C1.3.3	Conference/Meeting Room-Large-Dividable	1	60.00	60.00	Incl. counters, cabinets, accommodates 35 Persons, dividable into two separate rooms by an operable partition.
C1.3.4	Store-Rehab Therapy	1	8.50	8.50	Incl. shelving.
C1.3.5	Nutrition Centre	1	42.00	42.00	Incl. emergency eyewash.
C1.3.6	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
C1.3.7	Alcove-Imaging Equipment-Large	1	3.00	3.00	
C1.3.8	Alcove-Stretcher	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
C1.3.9	Alcove-Wheelchair	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
C1.3.10	Store-Local Equipment	1	16.00	16.00	Incl. shelving, charging station.
C1.3.11	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C1.4 - 64-Bed Shared Staff Support					
C1.4.1	Lockers-Staff	2	28.00	56.00	Incl. 80 Z-lockers, 1 shoe rack.
C1.4.2	Washroom/Shower-Staff	4	4.50	18.00	3-piece incl. shower.
C1.4.3	Washroom-Staff	4	3.00	12.00	2-piece.
	TOTAL NSM: IPU 64-Bed Group 01			**3,143.70**	
C2 - IPU 64-BED GROUP 02					
C2.1 - IPU 03 Generic					
C2.1.1 - IPU 03 Generic Unit Entrance					
C2.1.1.1	Alcove-Vending Machine	1	1.50	1.50	
C2.1.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 03 Generic Unit.
C2.1.1.3	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C2.1.2 - IPU 03 Generic Unit					
C2.1.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
C2.1.2.2	Patient Room-Bariatric-Airborne Isolation-Hybrid	1	28.00	28.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, provision for bariatric bed.
C2.1.2.3	Washroom/Shower-Inpatient Ensuite-Bariatric-Airborne Isolation	1	7.00	7.00	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.
C2.1.2.4	Patient Room-Airborne Isolation-Hybrid	3	21.40	64.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C2.1.2.5	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	3	5.50	16.50	3-piece incl. shower, accessible for Persons with Disabilities.
C2.1.2.6	Patient Room	28	21.40	599.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C2.1.2.7	Washroom/Shower-Inpatient Ensuite	28	5.50	154.0	3-piece incl. shower, accessible for Persons with Disabilities.
C2.1.2.8	Alcove-Touchdown/Charting	16	1.00	16.00	Incl. 1 touch down workstation.
C2.1.2.9	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
C2.1.2.10	Care Team Station	4	16.00	64.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C2.1.2.11	Care Team Station-Enclosed	2	28.00	56.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.
C2.1.2.12	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
C2.1.2.13	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of each Care Team Station entrance.
C2.1.2.14	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C2.1.2.15	Team Space-Allied Health	1	18.00	18.00	Incl. 4 workstations.
C2.1.2.16	Lounge-Family/Visitor	2	20.00	40.00	Incl. seating for 8.
C2.1.2.17	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
C2.1.2.18	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
C2.1.3 - IPU 03 Generic Unit Support Services					
C2.1.3.1	Alcove-Blanket Warmer	2	1.50	3.00	1 for each 16-bed pod, adjacent to Alcove-Clean Linen.
C2.1.3.2	Alcove-Local Equipment	6	1.50	9.00	Distributed in IPU 03 Generic Unit.
C2.1.3.3	Alcove-Clean Linen	3	2.50	7.50	1 for each 16-bed pod, 1 for two 16-bed pods for isolation.
C2.1.3.4	Alcove-Stretcher	4	2.50	10.00	2 for each 16-bed pod.
C2.1.3.5	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
C2.1.3.6	Store-Clean Supplies	2	20.00	40.00	
C2.1.3.7	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C2.1.3.8	Soiled Equipment Hold	2	10.00	20.00	
C2.1.3.9	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
C2.1.3.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C2.1.4 - IPU 03 Generic Unit Staff Support					
C2.1.4.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C2.1.4.2	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
C2.1.4.3	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
C2.1.4.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
C2.1.4.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
C2.1.4.6	Washroom-Staff	3	3.00	9.00	2-piece.
C2.2 - IPU 04 Generic					
C2.2.1 - IPU 04 Generic Unit Entrance					
C2.2.1.1	Alcove-Vending Machine	1	1.50	1.50	
C2.2.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 04 Generic Unit.
C2.2.1.3	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C2.2.2 - IPU 04 Generic Unit					

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C2.2.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
C2.2.2.2	Patient Room-Airborne Isolation-Hybrid	4	21.40	85.60	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C2.2.2.3	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	4	5.50	22.00	3-piece incl. shower, accessible for Persons with Disabilities.
C2.2.2.4	Patient Room	28	21.40	599.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C2.2.2.5	Washroom/Shower-Inpatient Ensuite	28	5.50	154.00	3-piece incl. shower, accessible for Persons with Disabilities.
C2.2.2.6	Alcove-Touchdown/Charting	16	1.00	16.00	Incl. 1 touch down workstation.
C2.2.2.7	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
C2.2.2.8	Care Team Station	4	16.00	64.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C2.2.2.9	Care Team Station-Enclosed	2	28.00	56.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.
C2.2.2.10	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
C2.2.2.11	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of each Care Team Station entrance.
C2.2.2.12	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
C2.2.2.13	Team Space-Allied Health	1	27.00	27.00	Incl. 6 workstations.
C2.2.2.14	Lounge-Family/Visitor	2	20.00	40.00	Incl. seating for 8.
C2.2.2.15	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
C2.2.2.16	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
C2.2.3 - IPU 04 Generic Unit Support Services					
C2.2.3.1	Alcove-Blanket Warmer	2	1.50	3.00	1 for each 16-bed pod, adjacent to Alcove-Clean Linen.
C2.2.3.2	Alcove-Local Equipment	6	1.50	9.00	Distributed in IPU 04 Generic Unit.
C2.2.3.3	Alcove-Clean Linen	3	2.50	7.50	1 for each 16-bed pod, 1 for two 16-bed pods for isolation.
C2.2.3.4	Alcove-Stretcher	4	2.50	10.00	2 for each 16-bed pod.
C2.2.3.5	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
C2.2.3.6	Store-Clean Supplies	2	20.00	40.00	
C2.2.3.7	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C2.2.3.8	Soiled Equipment Hold	2	10.00	20.00	
C2.2.3.9	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C2.2.3.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C2.2.4 - IPU 04 Generic Unit Staff Support					
C2.2.4.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C2.2.4.2	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
C2.2.4.3	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
C2.2.4.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
C2.2.4.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
C2.2.4.6	Washroom-Staff	3	3.00	9.00	2-piece.
C2.3 - 64-Bed Shared Support Services					
C2.3.1	Conference/Meeting Room-Xlarge-Dividable	1	88.00	88.00	Incl. counters, cabinets, accommodates 50 Persons, dividable into two separate rooms by an operable partition.
C2.3.2	Store-General	1	6.00	6.00	Incl. shelving.
C2.3.3	Conference/Meeting Room-Large-Dividable	1	60.00	60.00	Incl. counters, cabinets, accommodates 35 Persons, dividable into two separate rooms by an operable partition.
C2.3.4	Store-Rehab Therapy	1	8.50	8.50	Incl. shelving.
C2.3.5	Nutrition Centre	1	42.00	42.00	Incl. emergency eyewash.
C2.3.6	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
C2.3.7	Alcove-Stretcher	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
C2.3.8	Alcove-Wheelchair	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
C2.3.9	Store-Local Equipment	1	16.00	16.00	Incl. shelving, charging station.
C2.3.10	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C2.4 - 64-Bed Shared Staff Support					
C2.4.1	Lockers-Staff	2	28.00	56.00	Incl. 80 Z-lockers, 1 shoe rack.
C2.4.2	Washroom/Shower-Staff	4	4.50	18.00	3-piece incl. shower.
C2.4.3	Washroom-Staff	4	3.00	12.00	2-piece.
	TOTAL NSM: IPU 64-Bed Group 02			**3,140.70**	
C3 - IPU 64-BED GROUP 03					
C3.1 - IPU 05 Generic					

APPENDIX 3A - CLINICAL SPECIFICATIONS AND FUNCTIONAL SPACE REQUIREMENTS

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C3.1.1 - IPU 05 Generic Unit Entrance					
C3.1.1.1	Alcove-Vending Machine	1	1.50	1.50	
C3.1.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 05 Generic Unit.
C3.1.1.3	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C3.1.2 - IPU 05 Generic Unit					
C3.1.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
C3.1.2.2	Patient Room-Bariatric-Airborne Isolation-Hybrid	1	28.00	28.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, provision for bariatric bed.
C3.1.2.3	Washroom/Shower-Inpatient Ensuite-Bariatric-Airborne Isolation	1	7.00	7.00	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.
C3.1.2.4	Patient Room-Airborne Isolation-Hybrid	4	21.40	85.60	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C3.1.2.5	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	4	5.50	22.00	3-piece incl. shower, accessible for Persons with Disabilities.
C3.1.2.6	Patient Room	27	21.40	577.80	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C3.1.2.7	Washroom/Shower-Inpatient Ensuite	27	5.50	148.50	3-piece incl. shower, accessible for Persons with Disabilities.
C3.1.2.8	Alcove-Touchdown/Charting	16	1.00	16.00	Incl. 1 touch down workstation.
C3.1.2.9	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
C3.1.2.10	Care Team Station	4	16.00	64.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C3.1.2.11	Care Team Station-Enclosed	2	28.00	56.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.
C3.1.2.12	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
C3.1.2.13	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of each Care Team Station entrance.
C3.1.2.14	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
C3.1.2.15	Team Space-Allied Health	1	18.00	18.00	Incl. 4 workstations.
C3.1.2.16	Lounge-Family/Visitor	2	20.00	40.00	Incl. seating for 8.
C3.1.2.17	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
C3.1.2.18	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
C3.1.3 - IPU 05 Generic Unit Support Services					
C3.1.3.1	Alcove-Blanket Warmer	2	1.50	3.00	1 for each 16-bed pod, adjacent to Alcove-Clean Linen.
C3.1.3.2	Alcove-Local Equipment	6	1.50	9.00	Distributed in IPU 05 Generic Unit.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C3.1.3.3	Alcove-Clean Linen	3	2.50	7.50	1 for each 16-bed pod, 1 for two 16-bed pods for isolation.
C3.1.3.4	Alcove-Stretcher	4	2.50	10.00	2 for each 16-bed pod.
C3.1.3.5	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
C3.1.3.6	Store-Clean Supplies	2	20.00	40.00	
C3.1.3.7	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C3.1.3.8	Soiled Equipment Hold	2	10.00	20.00	
C3.1.3.9	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
C3.1.3.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C3.1.4 - IPU 05 Generic Unit Staff Support					
C3.1.4.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C3.1.4.2	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
C3.1.4.3	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
C3.1.4.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
C3.1.4.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
C3.1.4.6	Washroom-Staff	3	3.00	9.00	2-piece.
C3.2 - IPU 06 Renal/Generic					
C3.2.1 - IPU 06 Renal/Generic Unit Entrance					
C3.2.1.1	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 06 Renal/Generic Unit.
C3.2.1.2	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C3.2.2 - IPU 06 Renal Unit					
C3.2.2.1	Patient Room-Airborne Isolation-Lead Lined	1	21.40	21.40	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, lead lined.
C3.2.2.2	Anteroom-Airborne Isolation-Lead Lined	1	7.50	7.50	Incl. cabinets, lead lined.
C3.2.2.3	Washroom/Shower-Inpatient Ensuite-Airborne Isolation-Lead Lined	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities, lead lined.
C3.2.2.4	Patient Room-Airborne Isolation-Hybrid	2	21.40	42.80	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box.
C3.2.2.5	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	2	5.50	11.00	3-piece incl. shower, accessible for Persons with Disabilities.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C3.2.2.6	Patient Room	17	21.40	363.80	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box.
C3.2.2.7	Washroom/Shower-Inpatient Ensuite	17	5.50	93.50	3-piece incl. shower, accessible for Persons with Disabilities.
C3.2.3 - IPU 06 Renal Daycare Unit					
C3.2.3.1	Patient Bay-Daycare	4	16.50	66.00	Incl. 1 touch down workstation, cabinets, 1 half locker, RO Water Supply and Drain Box, walled on 3 sides with privacy curtains.
C3.2.3.2	Care Team Station	1	36.00	36.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C3.2.3.3	Washroom/Shower-Patient	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
C3.2.4 - IPU 06 Generic Unit					
C3.2.4.1	Patient Room-Airborne Isolation-Hybrid-Lead Lined	1	21.40	21.40	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box, lead lined.
C3.2.4.2	Washroom/Shower-Inpatient Ensuite-Airborne Isolation-Lead Lined	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities, lead lined.
C3.2.4.3	Patient Room	7	21.40	149.80	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, RO Water Supply and Drain Box.
C3.2.4.4	Washroom/Shower-Inpatient Ensuite	7	5.50	38.50	3-piece incl. shower, accessible for Persons with Disabilities.
C3.2.5 - IPU 06 Renal/Generic Unit					
C3.2.5.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
C3.2.5.2	Procedure Room-Renal	1	23.00	23.00	Incl. 1 touch down workstation, counters, cabinets, adjacent to Patient Bay-Daycare.
C3.2.5.3	Alcove-Touchdown/Charting	16	1.00	16.00	Incl. 1 touch down workstation.
C3.2.5.4	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
C3.2.5.5	Care Team Station	4	16.00	64.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C3.2.5.6	Care Team Station-Enclosed	2	28.00	56.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.
C3.2.5.7	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
C3.2.5.8	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of each Care Team Station entrance.
C3.2.5.9	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
C3.2.5.10	Team Space-Allied Health	1	27.00	27.00	Incl. 6 workstations.
C3.2.5.11	Lounge-Family/Visitor	2	20.00	40.00	Incl. seating for 8.
C3.2.5.12	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C3.2.6 - IPU 06 Renal/Generic Unit Support Services					
C3.2.6.1	Alcove-Blanket Warmer	2	1.50	3.00	1 for each 16-bed pod, adjacent to Alcove-Clean Linen.
C3.2.6.2	Alcove-Local Equipment	6	1.50	9.00	Distributed in IPU 06 Renal/Generic Unit.
C3.2.6.3	Alcove-Clean Linen	3	2.50	7.50	1 for each 16-bed pod, 1 for two 16-bed pods for isolation.
C3.2.6.4	Alcove-Stretcher	4	2.50	10.00	2 for each 16-bed pod.
C3.2.6.5	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
C3.2.6.6	Store-Clean Supplies	2	20.00	40.00	
C3.2.6.7	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C3.2.6.8	Soiled Equipment Hold	2	10.00	20.00	
C3.2.6.9	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
C3.2.6.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C3.2.7 - IPU 06 Renal/Generic Unit Staff Support					
C3.2.7.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C3.2.7.2	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
C3.2.7.3	Office-4 Shared	1	20.00	20.00	Incl. 4 workstations.
C3.2.7.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
C3.2.7.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
C3.2.7.6	Washroom-Staff	3	3.00	9.00	2 pieces.
C3.3 - 64-Bed Shared Support Services					
C3.3.1	Conference/Meeting Room-Xlarge-Dividable	1	88.00	88.00	Incl. counters, cabinets, accommodates 50 Persons, dividable into two separate rooms by an operable partition.
C3.3.2	Store-General	1	6.00	6.00	Incl. shelving.
C3.3.3	Conference/Meeting Room-Large-Dividable	1	60.00	60.00	Incl. counters, cabinets, accommodates 35 Persons, dividable into two separate rooms by an operable partition.
C3.3.4	Store-Rehab Therapy	1	8.50	8.50	Incl. shelving.
C3.3.5	Nutrition Centre	1	42.00	42.00	Incl. emergency eyewash.
C3.3.6	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
C3.3.7	Alcove-Stretcher	2	2.50	5.00	Centrally located adjacent to Patient Elevators.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C3.3.8	Alcove-Wheelchair	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
C3.3.9	Store-Local Equipment	1	16.00	16.00	Incl. shelving, charging station.
C3.3.10	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C3.4 - 64-Bed Shared Staff Support					
C3.4.1	Lockers-Staff	2	28.00	56.00	Incl. 80 Z-lockers, 1 shoe rack.
C3.4.2	Washroom/Shower-Staff	4	4.50	18.00	3-piece incl. shower.
C3.4.3	Washroom-Staff	4	3.00	12.00	2-piece.
	TOTAL NSM: IPU 64-Bed Group 03			**3,141.60**	
C4 - IPU 64-BED GROUP 04					
C4.1 - IPU 07 Urban Health Acute Care Unit					
C4.1.1 - IPU 07 Urban Health Acute Care Unit Entrance					
C4.1.1.1	Alcove-Vending Machine	1	1.50	1.50	
C4.1.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 07 Urban Health Unit.
C4.1.1.3	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C4.1.2 - IPU 07 Urban Health Acute Care Unit					
C4.1.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
C4.1.2.2	Patient Room-Bariatric-Airborne Isolation-Hybrid	1	28.00	28.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, provision for bariatric bed.
C4.1.2.3	Washroom/Shower-Inpatient Ensuite-Bariatric-Airborne Isolation	1	7.00	7.00	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.
C4.1.2.4	Patient Room-Airborne Isolation-Hybrid	5	21.40	107.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C4.1.2.5	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	5	5.50	27.50	3-piece incl. shower, accessible for Persons with Disabilities.
C4.1.2.6	Patient Room	26	21.40	556.40	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C4.1.2.7	Washroom/Shower-Inpatient Ensuite	26	5.50	143.00	3-piece incl. shower, accessible for Persons with Disabilities.
C4.1.2.8	Alcove-Touchdown/Charting	16	1.00	16.00	Incl. 1 touch down workstation.
C4.1.2.9	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
C4.1.2.10	Care Team Station	4	16.00	64.00	Incl. 4 workstations, cabinets, charging station, dual egress.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C4.1.2.11	Care Team Station-Enclosed	2	28.00	56.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.
C4.1.2.12	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
C4.1.2.13	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of each Care Team Station entrance.
C4.1.2.14	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
C4.1.2.15	Team Space-Allied Health	1	18.00	18.00	Incl. 4 workstations.
C4.1.2.16	Lounge-Family/Visitor	2	20.00	40.00	Incl. seating for 8.
C4.1.2.17	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
C4.1.2.18	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
C4.1.5 - IPU 07 Urban Health Acute Care Unit Support Services					
C4.1.5.1	Alcove-Blanket Warmer	2	1.50	3.00	1 for each 16-bed pod, adjacent to Alcove-Clean Linen.
C4.1.5.2	Alcove-Local Equipment	5	1.50	7.50	Distributed in IPU 07 Urban Health Unit.
C4.1.5.3	Alcove-Clean Linen	3	2.50	7.50	1 for each 16-bed pod, 1 for two 16-bed pods for isolation.
C4.1.5.4	Alcove-Stretcher	4	2.50	10.00	2 for each 16-bed pod.
C4.1.5.5	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
C4.1.5.6	Store-Clean Supplies	2	20.00	40.00	
C4.1.5.7	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C4.1.5.8	Soiled Equipment Hold	2	10.00	20.00	
C4.1.5.9	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
C4.1.5.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C4.1.6 - IPU 07 Urban Health Acute Care Unit Staff Support					
C4.1.6.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C4.1.6.2	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
C4.1.6.3	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
C4.1.6.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
C4.1.6.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations, 40 Z-lockers, 1 shoe rack.
C4.1.6.6	Washroom-Staff	3	3.00	9.00	2-piece.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C4.2 - IPU 08 MedPsych/Eating Disorders					
C4.2.1 - IPU 08 Eating Disorders/MedPsych Unit Entrance					
C4.2.1.1	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 08 Eating Disorders/MedPsych Unit.
C4.2.1.2	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C4.2.2 - IPU 08 Eating Disorders Day Hospital Program					
C4.2.2.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets.
C4.2.2.2	Consult/Interview Room	4	10.00	40.00	Incl. seating for 4, 1 touch down workstation.
C4.2.2.3	Exam Room	2	12.00	24.00	Incl. 1 touch down workstation, counters, cabinets.
C4.2.2.4	Group Therapy Room	1	15.00	15.00	Incl. seating for 8, counters, cabinets.
C4.2.2.5	Multipurpose Room-Large	1	24.00	24.00	Incl. seating for 16.
C4.2.2.6	Dining/Activity Area	1	32.40	32.40	Incl. seating for 8, full kitchen.
C4.2.2.7	Dining/Activity Area	1	25.40	25.40	Incl. seating for 8, kitchenette.
C4.2.2.8	Workstation	15	4.50	67.50	Incl. 1 workstation, combined into one area.
C4.2.2.9	Office-Private	2	9.50	19.00	Incl. 1 workstation.
C4.2.2.10	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities.
C4.2.2.11	Washroom-Staff	1	3.00	3.00	2-piece.
C4.2.3 - IPU 08 Eating Disorders Inpatient					
C4.2.3.1	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation.
C4.2.3.2	Patient Room-Eating Disorders Accessible	1	18.00	18.00	Incl. lockable Patient wardrobe, cabinets, accessible for Persons with Disabilities.
C4.2.3.3	Patient Room-Eating Disorders	7	14.00	98.00	Incl. lockable Patient wardrobe, cabinets.
C4.2.3.4	Washroom/Shower-Eating Disorders-Shared	1	20.00	20.00	Incl. 2 toilet stalls and 2 sinks, 1 shower, accessible for Persons with Disabilities.
C4.2.3.5	Alcove-Touchdown/Charting	2	1.00	2.00	Incl. 1 touch down workstation.
C4.2.3.6	Care Team Station	1	16.00	16.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C4.2.3.7	Care Team Station-Enclosed	1	28.00	28.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations, shared between Eating Disorders Inpatient and MedPsych Unit.
C4.2.3.8	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
C4.2.3.9	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.
C4.2.3.10	Medication Room-Large	1	16.00	16.00	Incl. 2 touch down workstations, counters, cabinets, shelving, shared between Eating Disorders Inpatient and MedPsych Unit.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C4.2.3.11	Lounge-Family/Visitor	1	20.00	20.00	Incl. seating for 8.
C4.2.3.12	Lounge/Living Room-Patient	1	15.00	15.00	Incl. seating for 6.
C4.2.3.13	ADL Kitchen/Dining/Activity Area	1	22.40	22.40	Incl. ADL kitchen, seating for 8, adjustable wheelchair accessible counter, cabinets. Provide a side folding polycarbonate grille.
C4.2.3.14	Not Used.	0	0.00	0.00	
C4.2.3.15	Sensory Modulation Room	1	10.00	10.00	Incl. space for 2-3 people for low stimulation, cabinets.
C4.2.3.16	Group Therapy Room	1	24.00	24.00	Incl. seating for 12.
C4.2.3.17	Utility-Personal Laundry	1	5.50	5.50	Incl. counter, cabinets.
C4.2.3.18	Alcove-Clean Linen	1	2.50	2.50	
C4.2.3.19	Alcove-Lockers-Visitor	1	3.00	3.00	Incl. 16 half lockers, located at unit front entrance.
C4.2.3.20	Store-Clean Supplies	1	20.00	20.00	Shared between Eating Disorders Inpatient and MedPsych Unit.
C4.2.3.21	Store-Patients' Property	1	6.00	6.00	Incl. cabinets, shelving.
C4.2.3.22	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
C4.2.3.23	Washroom-Staff	1	3.00	3.00	2-piece.
C4.2.4 - IPU 08 MedPsych Unit					
C4.2.4.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation, dual egress.
C4.2.4.2	Patient Room-MedPsych-Airborne Isolation-Hybrid	4	21.40	85.60	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift in 1 Patient Room-MedPsych-Airborne Isolation-Hybrid.
C4.2.4.3	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	4	5.50	22.00	3-piece incl. shower, accessible for Persons with Disabilities.
C4.2.4.4	Patient Room-MedPsych	20	21.40	428.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift in 1 Patient Room-MedPsych.
C4.2.4.5	Washroom/Shower-Inpatient Ensuite	20	5.50	110.00	3-piece incl. shower, accessible for Persons with Disabilities.
C4.2.4.6	Alcove-Touchdown/Charting	6	1.00	6.00	Incl. 1 touch down workstation.
C4.2.4.7	Alcove-Hand Hygiene Sink	3	1.00	3.00	Distributed within the unit.
C4.2.4.8	Care Team Station	3	16.00	48.00	Incl. 4 workstations, cabinets, charging station, dual egress, fully enclosed with interior windows and 2 transaction windows.
C4.2.4.9	Care Team Station-Enclosed	1	28.00	28.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.
C4.2.4.10	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
C4.2.4.11	Alcove-Hand Hygiene Sink	3	1.00	3.00	Located within 6 m of Care Team Station entrance.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C4.2.4.12	Medication Room-Large	1	16.00	16.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
C4.2.4.13	Lounge-Family/Visitor	1	20.00	20.00	Incl. seating for 8.
C4.2.4.14	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
C4.2.4.15	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
C4.2.4.16	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
C4.2.4.17	Alcove-Local Equipment	4	1.50	6.00	Distributed in IPU 08 MedPsych Unit.
C4.2.4.18	Alcove-Clean Linen	2	2.50	5.00	
C4.2.4.19	Alcove-Stretcher	2	2.50	5.00	2 for each 16-bed pod.
C4.2.4.20	Alcove-Lockers-Visitor	1	3.00	3.00	Incl. 16 half lockers, located at unit front entrance Vestibule.
C4.2.4.21	Store-Central Equipment	1	12.00	12.00	Incl. shelving, charging station.
C4.2.4.22	Store-Clean Supplies	1	20.00	20.00	
C4.2.4.23	Soiled Equipment Hold	1	10.00	10.00	
C4.2.4.24	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
C4.2.4.25	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C4.2.4.26	Office-3 Shared	1	16.00	16.00	Incl. 3 workstations.
C4.2.4.27	Washroom-Staff	1	3.00	3.00	2-piece.
C4.2.5 - IPU 08 Eating Disorders/MedPsych Unit Support Services					
C4.2.5.1	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C4.2.5.2	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C4.2.6 - IPU 08 Eating Disorders/MedPsych Unit Staff Support					
C4.2.6.1	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations, 40 Z-lockers, 1 shoe rack.
C4.2.6.2	Washroom-Staff	1	3.00	3.00	2-piece.
C4.2.6.3	Washroom/Shower-Staff	1	4.50	4.50	3-piece incl. shower.
C4.3 - 64-Bed Shared Support Services					
C4.3.1	Conference/Meeting Room-Large-Dividable	1	60.00	60.00	Incl. counters, cabinets, accommodates 35 Persons, dividable into two separate rooms by an operable partition.
C4.3.2	Store-Rehab Therapy	1	6.00	6.00	Incl. shelving.
C4.3.3	Nutrition Centre	1	42.00	42.00	Incl. emergency eyewash.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C4.3.4	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
C4.3.5	Alcove-Stretcher	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
C4.3.6	Alcove-Wheelchair	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
C4.3.7	Store-Local Equipment	1	16.00	16.00	Incl. shelving, charging station.
C4.3.8	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
	TOTAL NSM: IPU 64-Bed Group 04			**3,147.20**	
C5 - IPU 64-BED GROUP 05					
C5.1 - IPU 09 Generic					
C5.1.1 - IPU 09 Generic Unit Entrance					
C5.1.1.1	Alcove-Vending Machine	1	1.50	1.50	
C5.1.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 09 Generic Unit.
C5.1.1.3	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C5.1.2 - IPU 09 Generic Unit					
C5.1.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
C5.1.2.2	Patient Room-Bariatric-Airborne Isolation-Hybrid	1	28.00	28.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, provision for bariatric bed.
C5.1.2.3	Washroom/Shower-Inpatient Ensuite-Bariatric-Airborne Isolation	1	7.00	7.00	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.
C5.1.2.4	Patient Room-Airborne Isolation-Hybrid	3	21.40	64.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C5.1.2.5	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	3	5.50	16.50	3-piece incl. shower, accessible for Persons with Disabilities.
C5.1.2.6	Patient Room	28	21.40	599.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C5.1.2.7	Washroom/Shower-Inpatient Ensuite	28	5.50	154.0	3-piece incl. shower, accessible for Persons with Disabilities.
C5.1.2.8	Alcove-Touchdown/Charting	16	1.00	16.00	Incl. 1 touch down workstation.
C5.1.2.9	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
C5.1.2.10	Care Team Station	4	16.00	64.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C5.1.2.11	Care Team Station-Enclosed	2	28.00	56.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C5.1.2.12	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
C5.1.2.13	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of Care Team Station entrance.
C5.1.2.14	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
C5.1.2.15	Team Space-Allied Health	1	18.00	18.00	Incl. 4 workstations.
C5.1.2.16	Lounge-Family/Visitor	2	20.00	40.00	Incl. seating for 8.
C5.1.2.17	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
C5.1.2.18	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
C5.1.3 - IPU 09 Generic Unit Support Services					
C5.1.3.1	Alcove-Blanket Warmer	2	1.50	3.00	1 for each 16-bed pod, adjacent to Alcove-Clean Linen.
C5.1.3.2	Alcove-Local Equipment	6	1.50	9.00	Distributed in IPU 09 Generic Unit.
C5.1.3.3	Alcove-Clean Linen	3	2.50	7.50	1 for each 16-bed pod, 1 for two 16-bed pods for isolation.
C5.1.3.4	Alcove-Stretcher	4	2.50	10.00	2 for each 16-bed pod.
C5.1.3.5	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
C5.1.3.6	Store-Clean Supplies	2	20.00	40.00	
C5.1.3.7	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C5.1.3.8	Soiled Equipment Hold	2	10.00	20.00	
C5.1.3.9	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
C5.1.3.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C5.1.4 - IPU 09 Generic Unit Staff Support					
C5.1.4.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C5.1.4.2	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
C5.1.4.3	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
C5.1.4.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
C5.1.4.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
C5.1.4.6	Washroom-Staff	3	3.00	9.00	2-piece.
C5.2 - IPU 10 Generic					
C5.2.1 - IPU 10 Generic Unit Entrance					

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C5.2.1.1	Alcove-Vending Machine	1	1.50	1.50	
C5.2.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 10 Generic Unit.
C5.2.1.3	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C5.2.2 - IPU 10 Generic Unit					
C5.2.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
C5.2.2.2	Patient Room-Airborne Isolation-Hybrid	4	21.40	85.60	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C5.2.2.3	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	4	5.50	22.00	3-piece incl. shower, accessible for Persons with Disabilities.
C5.2.2.4	Patient Room	28	21.40	599.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C5.2.2.5	Washroom/Shower-Inpatient Ensuite	28	5.50	154.00	3-piece incl. shower, accessible for Persons with Disabilities.
C5.2.2.6	Alcove-Touchdown/Charting	16	1.00	16.00	Incl. 1 touch down workstation.
C5.2.2.7	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
C5.2.2.8	Care Team Station	4	16.00	64.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C5.2.2.9	Care Team Station-Enclosed	2	28.00	56.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.
C5.2.2.10	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
C5.2.2.11	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of Care Team Station entrance.
C5.2.2.12	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
C5.2.2.13	Team Space-Allied Health	1	27.00	27.00	Incl. 6 workstations.
C5.2.2.14	Lounge-Family/Visitor	2	20.00	40.00	Incl. seating for 8.
C5.2.2.15	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
C5.2.2.16	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
C5.2.3 - IPU 10 Generic Unit Support Services					
C5.2.3.1	Alcove-Blanket Warmer	2	1.50	3.00	1 for each 16-bed pod, adjacent to Alcove-Clean Linen.
C5.2.3.2	Alcove-Local Equipment	6	1.50	9.00	Distributed in IPU 10 Generic Unit.
C5.2.3.3	Alcove-Clean Linen	3	2.50	7.50	1 for each 16-bed pod, 1 for two 16-bed pods for isolation.
C5.2.3.4	Alcove-Stretcher	4	2.50	10.00	2 for each 16-bed pod.
C5.2.3.5	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
C5.2.3.6	Store-Clean Supplies	2	20.00	40.00	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C5.2.3.7	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C5.2.3.8	Soiled Equipment Hold	2	10.00	20.00	
C5.2.3.9	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
C5.2.3.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C5.2.4 - IPU 10 Generic Unit Staff Support					
C5.2.4.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C5.2.4.2	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
C5.2.4.3	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
C5.2.4.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
C5.2.4.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
C5.2.4.6	Washroom-Staff	3	3.00	9.00	2-piece.
C5.3 - 64-Bed Shared Support Services					
C5.3.1	Conference/Meeting Room-Xlarge-Dividable	1	88.00	88.00	Incl. counters, cabinets, accommodates 50 Persons, dividable into two separate rooms by an operable partition.
C5.3.2	Store-General	1	6.00	6.00	Incl. shelving.
C5.3.3	Conference/Meeting Room-Large-Dividable	1	60.00	60.00	Incl. counters, cabinets, accommodates 35 Persons, dividable into two separate rooms by an operable partition.
C5.3.4	Store-Rehab Therapy	1	8.50	8.50	Incl. shelving.
C5.3.5	Nutrition Centre	1	42.00	42.00	Incl. emergency eyewash.
C5.3.6	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
C5.3.7	Alcove-Stretcher	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
C5.3.8	Alcove-Wheelchair	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
C5.3.9	Store-Local Equipment	1	16.00	16.00	Incl. shelving, charging station.
C5.3.10	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C5.4 - 64-Bed Shared Staff Support					
C5.4.1	Lockers-Staff	2	28.00	56.00	Incl. 80 Z-lockers, 1 shoe rack.
C5.4.2	Washroom/Shower-Staff	4	4.50	18.00	3-piece incl. shower.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C5.4.3	Washroom-Staff	4	3.00	12.00	2-piece.
	TOTAL NSM: IPU 64-Bed Group 05			**3,140.70**	
C6 - IPU 64-BED GROUP 06					
C6.1 - IPU 11 Generic					
C6.1.1 - IPU 11 Generic Unit Entrance					
C6.1.1.1	Alcove-Vending Machine	1	1.50	1.50	
C6.1.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 11 Generic Unit.
C6.1.1.3	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C6.1.2 - IPU 11 Generic Unit					
C6.1.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
C6.1.2.2	Patient Room-Bariatric-Airborne Isolation-Hybrid	1	28.00	28.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, provision for bariatric bed.
C6.1.2.3	Washroom/Shower-Inpatient Ensuite-Bariatric-Airborne Isolation	1	7.00	7.00	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.
C6.1.2.4	Patient Room-Airborne Isolation-Hybrid	3	21.40	64.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C6.1.2.5	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	3	5.50	16.50	3-piece incl. shower, accessible for Persons with Disabilities.
C6.1.2.6	Patient Room	28	21.40	599.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C6.1.2.7	Washroom/Shower-Inpatient Ensuite	28	5.50	154.0	3-piece incl. shower, accessible for Persons with Disabilities.
C6.1.2.8	Alcove-Touchdown/Charting	16	1.00	16.00	Incl. 1 touch down workstation.
C6.1.2.9	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
C6.1.2.10	Care Team Station	4	16.00	64.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C6.1.2.11	Care Team Station-Enclosed	2	28.00	56.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.
C6.1.2.12	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
C6.1.2.13	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of Care Team Station entrance.
C6.1.2.14	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
C6.1.2.15	Team Space-Allied Health	1	18.00	18.00	Incl. 4 workstations.
C6.1.2.16	Lounge-Family/Visitor	2	20.00	40.00	Incl. seating for 8.
C6.1.2.17	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C6.1.2.18	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
C6.1.3 - IPU 11 Generic Unit Support Services					
C6.1.3.1	Alcove-Blanket Warmer	2	1.50	3.00	1 for each 16-bed pod, adjacent to Alcove-Clean Linen.
C6.1.3.2	Alcove-Local Equipment	6	1.50	9.00	Distributed in IPU 11 Generic Unit.
C6.1.3.3	Alcove-Clean Linen	3	2.50	7.50	1 for each 16-bed pod, 1 for two 16-bed pods for isolation.
C6.1.3.4	Alcove-Stretcher	4	2.50	10.00	2 for each 16-bed pod.
C6.1.3.5	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
C6.1.3.6	Store-Clean Supplies	2	20.00	40.00	
C6.1.3.7	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C6.1.3.8	Soiled Equipment Hold	2	10.00	20.00	
C6.1.3.9	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
C6.1.3.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C6.1.4 - IPU 11 Generic Unit Staff Support					
C6.1.4.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C6.1.4.2	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
C6.1.4.3	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
C6.1.4.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
C6.1.4.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
C6.1.4.6	Washroom-Staff	3	3.00	9.00	2-piece.
C6.2 - IPU 12 Generic					
C6.2.1 - IPU 12 Generic Unit Entrance					
C6.2.1.1	Alcove-Vending Machine	1	1.50	1.50	
C6.2.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to IPU 12 Generic Unit.
C6.2.1.3	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
C6.2.2 - IPU 12 Generic Unit					
C6.2.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
C6.2.2.2	Patient Room-Airborne Isolation-Hybrid	4	21.40	85.60	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C6.2.2.3	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	4	5.50	22.00	3-piece incl. shower, accessible for Persons with Disabilities.
C6.2.2.4	Patient Room	28	21.40	599.20	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift.
C6.2.2.5	Washroom/Shower-Inpatient Ensuite	28	5.50	154.00	3-piece incl. shower, accessible for Persons with Disabilities.
C6.2.2.6	Alcove-Touchdown/Charting	16	1.00	16.00	Incl. 1 touch down workstation.
C6.2.2.7	Alcove-Hand Hygiene Sink	4	1.00	4.00	Distributed within the unit.
C6.2.2.8	Care Team Station	4	16.00	64.00	Incl. 4 workstations, cabinets, charging station, dual egress.
C6.2.2.9	Care Team Station-Enclosed	2	28.00	56.00	Incl. 6 workstations, cabinets, dual egress, fully enclosed with interior windows, adjacent to two Care Team Stations.
C6.2.2.10	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
C6.2.2.11	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of Care Team Station entrance.
C6.2.2.12	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
C6.2.2.13	Team Space-Allied Health	1	27.00	27.00	Incl. 6 workstations.
C6.2.2.14	Lounge-Family/Visitor	2	20.00	40.00	Incl. seating for 8.
C6.2.2.15	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
C6.2.2.16	Phlebotomy Room	1	8.00	8.00	Incl. counters, cabinets, charging station.
C6.2.3 - IPU 12 Generic Unit Support Services					
C6.2.3.1	Alcove-Blanket Warmer	2	1.50	3.00	1 for each 16-bed pod, adjacent to Alcove-Clean Linen.
C6.2.3.2	Alcove-Local Equipment	6	1.50	9.00	Distributed in IPU 12 Generic Unit.
C6.2.3.3	Alcove-Clean Linen	3	2.50	7.50	1 for each 16-bed pod, 1 for two 16-bed pods for isolation.
C6.2.3.4	Alcove-Stretcher	4	2.50	10.00	2 for each 16-bed pod.
C6.2.3.5	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
C6.2.3.6	Store-Clean Supplies	2	20.00	40.00	
C6.2.3.7	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C6.2.3.8	Soiled Equipment Hold	2	10.00	20.00	
C6.2.3.9	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
C6.2.3.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
C6.2.4 - IPU 12 Generic Unit Staff Support					

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
C6.2.4.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
C6.2.4.2	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
C6.2.4.3	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
C6.2.4.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
C6.2.4.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
C6.2.4.6	Washroom-Staff	3	3.00	9.00	2-piece.
C6.3 - 64-Bed Shared Support Services					
C6.3.1	Conference/Meeting Room-Xlarge-Dividable	1	88.00	88.00	Incl. counters, cabinets, accommodates 50 Persons, dividable into two separate rooms by an operable partition.
C6.3.2	Store-General	1	6.00	6.00	Incl. shelving.
C6.3.3	Conference/Meeting Room-Large-Dividable	1	60.00	60.00	Incl. counters, cabinets, accommodates 35 Persons, dividable into two separate rooms by an operable partition.
C6.3.4	Store-Rehab Therapy	1	8.50	8.50	Incl. shelving.
C6.3.5	Nutrition Centre	1	42.00	42.00	Incl. emergency eyewash.
C6.3.6	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
C6.3.7	Alcove-Imaging Equipment-C-Arm	1	3.00	3.00	
C6.3.8	Alcove-Stretcher	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
C6.3.9	Alcove-Wheelchair	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
C6.3.10	Store-Local Equipment	1	16.00	16.00	Incl. shelving, charging station.
C6.3.11	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
C6.4 - 64-Bed Shared Staff Support					
C6.4.1	Lockers-Staff	2	28.00	56.00	Incl. 80 Z-lockers, 1 shoe rack.
C6.4.2	Washroom/Shower-Staff	4	4.50	18.00	3-piece incl. shower.
C6.4.3	Washroom-Staff	4	3.00	12.00	2-piece.
	TOTAL NSM: IPU 64-Bed Group 06			**3,143.70**	
	TOTAL NSM: INPATIENT CARE			**18,857.60**	

THE NEW ST. PAUL'S PHASE 1A

D. RENAL OUTPATIENT

D. RENAL OUTPATIENT

5.1 OVERVIEW

5.1.1 The PHC Renal Program provides comprehensive services to people living with kidney diseases. Both inpatient and outpatient services are provided, to Patients with acute and chronic kidney conditions throughout the continuum from prevention to transplantation and follow-up care. The populations served include those with impaired kidney function, those on dialysis (home-, community- and Facility-based) and those with kidney transplants. As much as possible, care for Patients with coexisting medical conditions is integrated on-site.

5.1.2 In this section, discussion will include the Renal Outpatient Services comprising of Renal Hemodialysis, Peritoneal Dialysis and the Renal Outpatient and Transplantation Clinic. Inpatient services for Patients with renal related admissions to Facility will be covered in the Inpatient Care section.

5.1.3 The Renal Hemodialysis program services both inpatients (acute and chronic) and outpatients, and offers numerous therapeutic options, tailored for Patient needs. These include assisted nocturnal extended dialysis, PLEX and combination PLEX and hemodialysis for rare diseases. An inter-professional team of vascular access surgeons, radiologists, specialized nurses and nephrologists comprise the Vascular Access Team.

5.1.4 The Peritoneal Dialysis program is the second largest in the province and is a predominantly outpatient program offering bedside and surgical tube placement, education and home-based training and support. All these services are funded and overseen by the B.C. Provincial Renal Agency (BCPRA), a branch of the Provincial Health Services Authority (PHSA). Note that many of the leaders of provincial committees and the agency are based at PHC who serve in leadership capacities nationally and internationally.

5.1.5 The purpose of the Renal program at the new St. Paul's is to offer integrated prevention and treatment programs for Patients living with kidney disease across British Columbia and the Yukon. These services will consist of the inpatient renal beds, a dialysis centre and outpatient clinic. Patients in the Renal program will move seamlessly across these departments throughout their care trajectory, sometimes requiring more than one service during one visit or treatment. Connecting these departments will facilitate care for Patients, efficiency for Staff and enhance the Renal program's established collaboration with other programs.

5.2 FUNCTIONAL DESCRIPTION

5.2.1 Scope of Services

5.2.1.1 The following programs will comprise the Renal Outpatient:

5.2.1.1(1) Renal Outpatient and Transplantation Clinic

5.2.1.1(2) Renal Hemodialysis

5.2.1.1(3) Peritoneal Dialysis

5.2.1.2 Renal Outpatient Services are delivered through an inter-professional team approach to Patient care that incorporates a full palette of allied health services including: dietary counselling, nursing care, pharmacy consultation, social work and specialist care.

5.2.1.3 Additional consultations with specialties outside of nephrology can also be added to the Patient visit, offering a holistic and integrated approach to Patient care, which strengthens the program and care delivery for a diverse yet specialized Patient population. The grouping of these services provides collaborative care across the spectrum of clinical needs.

5.2.1.4 Scope of Educational Activity

5.2.1.4(1) Clinical teaching will be accommodated in Stations. Formal lectures or continuing education programs will be accommodated in Conference/Meeting Rooms.

5.2.1.4(2) The renal program will provide ongoing support, education and treatment for Patients and their families using an inter-professional team of caregivers including RNs, renal technicians, dietitians, social workers, nurse practitioners, support Staff, nephrologists and pharmacists.

5.2.1.5 Scope of Research Activity

5.2.1.5(1) Clinical research activities will be integrated into the work conducted within the Renal Outpatient Services. This means that researchers and research associates will see Patients in all the Patient care spaces including the Waiting rooms. Researchers and research associates may need to consent, draw blood or take other samples, conduct tests and assessments as well as access Workstation-Touchdown.

5.2.1.6 Scope Exclusions

5.2.1.6(1) The following list specifies functions that are understood to occur in other Functional Components in the Facility or outside of the Facility:

5.2.1.6(1)(a) Inpatient renal beds will be discussed in the section pertaining to Inpatient Care (see Component C).

5.2.1.6(1)(b) Community Dialysis units which are located off site from St. Paul’s Hospital are excluded from the scope of this project.

5.2.2 Services provided

5.2.2.1 Renal Outpatient and Transplantation Clinic

5.2.2.1(1) Renal Outpatient and Transplantation Clinic include various renal specialties for Patients with chronic kidney disease who require inter-professional team-based care. In many cases, clinic visits are combined with professionals from other departments such as psychiatry, infectious diseases and endocrine as well as different specialties within renal such as Kidney Care Clinic (KCC) and Vascular Access to streamline access to care as well as the Patient and family experience.

5.2.2.1(2) Clinic programs within the renal Component include (but are not limited to): Renal transplant (pre-transplant donor and recipient clinics as well as post-transplant follow-up clinics); KCC; Integrated Care Clinic; Peritoneal Dialysis Clinic; Hemodialysis Clinic and Renal Vascular Access Clinic. A range of consultations, treatments, tests and education are provided in this setting.

5.2.2.1(3) Referrals can come from nephrologists' offices, inpatient or outpatient settings within the Facility or from renal programs around the province and beyond.

5.2.2.2 Renal Hemodialysis

5.2.2.2(1) Currently, the Renal Hemodialysis unit at St. Paul's Hospital is the largest in British Columbia, offering many different types of specialized treatments. It is presently the only centre in western Canada offering plasmapheresis Therapeutic Plasma Exchange (TPE) and combination therapy (simultaneous hemodialysis and TPE).

5.2.2.2(2) Patients will be referred to the centre from KCCs and Nephrologists' offices around the province and including the Yukon.

5.2.2.2(3) The Renal Hemodialysis unit will also receive referrals for Patients needing to come to St. Paul's for medical appointments and treatments such as kidney transplants among many others.

5.2.2.2(4) There will also continue to be a visitor dialysis service offered for tourists wishing to visit Vancouver.

5.2.2.2(5) Patients may also be referred through other clinics and Outpatient Services, the ED, Critical Care Complex programs or other IPUs.

5.2.2.3 Peritoneal Dialysis

5.2.2.3(1) Peritoneal Dialysis is a home-based renal replacement modality that Patients are taught to perform independently or with the help of a caregiver at home.

5.2.2.3(2) By grouping Peritoneal Dialysis and Renal Hemodialysis treatment modalities, the opportunity to enhance uptake of Peritoneal Dialysis will potentially increase. Peritoneal Dialysis is associated with improved Patient outcomes and lower health care costs over time as compared to in centre Renal Hemodialysis.

5.3 OPERATIONAL CONSIDERATIONS

5.3.1 Service Delivery Principles and Methods

5.3.1.1 Patient and Family Management Processes and Flows

5.3.1.1(1) Patient

5.3.1.1(1)(a) Patients will enter the Renal Outpatient Component for either one type of visit (i.e. Peritoneal Dialysis training or drop in visit, hemodialysis treatment or clinic visit) or for multiple visit types in sequence (i.e. KCC visit then a tour of the Renal Hemodialysis unit, hemodialysis treatment and clinic visit, KCC clinic visit then Vascular Access Clinic visit, Endocrinologist and Renal Post-Transplant clinic visit etc.). There are endless combinations of multiple visit types that can occur as well as consultations with other team members from other renal or non-renal specialties.

5.3.1.1(1)(b) Patients may come directly to the Renal Outpatient Component or via another setting such as lab, cardiac diagnostics, or radiology. They may also move between these settings during their visit and return to the Renal Outpatient Component for follow up care.

5.3.1.1(1)(c) Patients will participate in varying degrees of self-care in the renal program. Hand hygiene stations, wall-mounted fold-down scales close to Care Team Stations and equipment and supplies for self-care will need to be implemented in all renal service settings.

5.3.1.1(2) Family

5.3.1.1(2)(a) Family members and visitors will accompany Patients to their visit, join Patients later in the visit as well as come and go during visits to obtain refreshments etc.

5.3.1.1(2)(b) Family members and visitors may also participate in aspects of care as described above.

5.3.1.2 Patient Information Management

5.3.1.2(1) Patient information systems will be electronic with access to information by means of WOWs at all Staff work areas distributed throughout each unit.

5.3.1.2(2) Computer charting will occur at the Patient bedside, likely through the use of hand-held wireless devices. Ordering and scheduling of tests, procedures, and medications will be managed through terminals in the Staff work areas or through the hand-held devices.

5.3.1.2(3) Patient information will be available throughout the wireless network and/or wired through computer workstations at the bedsides and Care Team Stations.

5.3.1.2(4) Centralized electronic Patient scheduling, booking and check-in processes will be established for each Component through Patient portal app/website/registration kiosk.

5.3.1.2(5) Electronic Patient status board and Patient monitoring will be available for each Component (Renal Hemodialysis, Peritoneal Dialysis and Renal Outpatient and Transplantation Clinic).

5.3.1.3 Care Provider Work Processes and Flows

5.3.1.3(1) At the start of shift, Staff will pick up a wireless communication device that is linkable and with the ability to view physiologic monitoring of the Patients they are assigned to Renal care delivery is a collaborative multidisciplinary approach. The team is trained and equipped to address the complexities of renal functions, Peritoneal Dialysis, hemodialysis and renal transplant.

5.3.1.3(2) Staffing information will be a managed corporate service. Scheduling, including providing for sick and vacation relief will be conducted centrally, and off-site. Notices to individual Staff regarding their schedules will be communicated electronically.

5.3.1.3(3) On the Renal Hemodialysis unit, a staffing model of nursing including RNs, Nurse Practitioners, specialized renal nurses such as vascular access nurses, Patient educators, and nurse educators etc. will care for Patients who come to receive hemodialysis therapy.

5.3.1.3(4) The typical staffing ratio for an in-centre Renal Hemodialysis unit for nursing is 1:3 Patients.

5.3.1.3(5) With fluctuating acuity and Patient needs assignments can vary. In addition, for break relief and other times when coverage of a colleague's assignment is required, one nurse may need to visualize 6 Patients continuously.

5.3.1.3(6) The Renal Hemodialysis unit is also assigned a nephrologist who may have learners such as fellows and/or residents accompanying them to see Patients or seeing Patients independently with their support. Twice weekly, the nephrologist leads unit wide rounds on the Renal Hemodialysis unit. Additionally, other specialists may come and see Patients on the Renal Hemodialysis unit during their dialysis treatment.

5.3.1.3(7) Additional team members specific to the Renal Hemodialysis service include: renal technicians, renal biomedical engineers, porter/ward aides and clerical support Staff. The typical assignment for a renal technician on an in-centre Renal Hemodialysis unit is 1: 8 machines. This may fluctuate during high demand times such as Patient turnover.

5.3.1.3(8) The main function of the renal technicians is preparation, maintenance, cleaning and re-preparation of hemodialysis machines, TPE machines and portable RO devices. They are also responsible for some aspects of trouble-shooting and water testing.

5.3.1.3(9) The renal technicians also transport hemodialysis machines and portable RO devices and set them up on other units when off-unit hemodialysis is required. They require their own space to clean and prepare machines and store machines that are prepared and ready for use as well as aspects of the dialysis prescription such as jugs with varying amounts of electrolytes.

5.3.1.3(10) Renal biomedical engineers require a dedicated workspace to do preventative maintenance on machines as well as repairs and troubleshooting that require working inside the machines. Biomedical engineers are also responsible for water quality, maintenance and care of the RO system.

5.3.1.3(11) They require 24-hour access 7 days a week to the main RO.

5.3.1.3(12) Allied Health Clinical services that will be provided at the Patient bedside or in dedicated therapy and treatment spaces within each unit include: clinical pharmacy, PT, nutrition, OT, SLP, RT and Social Work.

5.3.1.3(13) Throughout the renal program, different models exist sometimes concurrently. For example, on Renal Hemodialysis, there are twice weekly inter-professional rounds as well as clinic visits for Patients who attend dialysis after hours. In most of the clinic models,

Patients are seen in clinic and then the inter-professional team rounds on all Patients together as a group afterwards to ensure everyone is aware of the plan and appropriate follow up occurs.

5.3.1.3(14) On the Peritoneal Dialysis Unit, Patients are seen by the inter-professional team during their Peritoneal Dialysis training which is offered during business hours. Patients are assigned to a nurse who will be their training nurse as well as their primary nurse for ongoing follow up in clinic or by phone. Dietitian, Nephrologist, Pharmacist and Social Worker see Patients during their two-week initial training period as well as in follow up clinic visits. In addition to Patient training, there is typically a nurse assigned to testing for Peritoneal Dialysis adequacy as well as for Patients who need to drop in with issues or concerns.

5.3.1.3(15) Peritoneal Dialysis team members require a workstation within the Patient care space as well as space to round as a group and workstations to conduct follow up.

5.3.1.3(16) In the Renal Outpatient and Transplantation Clinic, the same inter-professional team model is utilized as above. Patients will come into the clinic to see the care team and receive pre-clinic and post-clinic follow up care from their primary nurse and inter-professional care team remotely either by telephone or email. Patients are encouraged to receive copies of their bloodwork and other information to help them follow trends in their health. For this reason, the workstations in the Exam Rooms will require access to printers.

5.3.1.3(17) Team members will need workstations outside of the clinic setting to do independent work by telephone with their primary Patients as well as team meeting spaces.

5.3.1.3(18) Team members will be able to communicate utilizing a hands-free communication system.

5.3.1.3(19) An integrated, linked Nurse Call System with ability to link and receive physiologic monitoring will be required.

5.3.1.3(20) Students

5.3.1.3(20)(a) The Facility will be a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents. Work spaces will be enabled to have private, confidential conversations and be equipped with teaching capability.

5.3.1.3(20)(b) Students from all professions will be integrated into all aspects of Patient, family and provider space.

5.3.1.4 Clinical and Logistical Support Processes and Flows

5.3.1.4(1) Pharmacy services

5.3.1.4(1)(a) Medication rooms with ADCs will be dispersed throughout all Stations.

5.3.1.4(1)(b) Medications will be delivered to the point of administration in areas within the renal Component where medications are administered by the same mechanism as within the generic IPUs.

5.3.1.4(1)(c) Medications may also come with Patients who are admitted to other IPUs for administration during hemodialysis treatment.

5.3.1.4(1)(d) The Medication Rooms will be discretely located with Line of Sight from the Care Team Stations.

5.3.1.4(1)(e) Doors to Medication Rooms require glazing for visibility.

5.3.1.4(2) Language services

5.3.1.4(2)(a) Interpreters will be available upon request for Patient and families.

5.3.1.4(3) Equipment and Instruments

5.3.1.4(3)(a) Hemodialysis specific equipment such as hemodialysis machines, portable RO machines, TPE machines, dialysis bikes, transonic devices, ultrasound machines, Blood Circulation Machine (BCM) and wall-mounted (fold-down) scales are required for hemodialysis care. Each station will also require the appropriate monitoring equipment for BP, temperature and oximetry.

5.3.1.4(3)(b) A quota of smart pumps specifically calibrated for use on hemodialysis will be stored adjacent to hemodialysis stations and be maintained by the EQD.

5.3.1.4(3)(c) Peritoneal Dialysis specific equipment includes equipment and supplies for manual Peritoneal Dialysis as well as Cycler machines for continuous Peritoneal Dialysis treatments that Patients

typically set up at night and discontinue in the morning. In addition to these items, teaching tools for Patients and families and testing devices i.e. BCMs, Peritoneal Dialysis adequacy machines and wall mounted (fold-down) scales as well as storage for portable cycler machines that may be borrowed by Patients who travel.

5.3.1.4(3)(d) Each Hemodialysis and Peritoneal Dialysis station will need to be outfitted with medical gases, light controls, nurse call and Patient assessment equipment.

5.3.1.4(3)(e) Renal Outpatient and Transplantation Clinic specific equipment includes equipment and supplies for identified assessments, treatments and procedures, such as a skin screening lamp and liquid nitrogen for the Screen (dermatology and renal post-transplant clinic). The clinic will also require a wall-mounted (fold-down) scale that can accommodate Patients using mobility aids.

5.3.1.4(3)(f) The Equipment Depot (See Component O) will store all excess Equipment that can be quickly brought to any Patient area. Separation of clean and soiled with space to clean the Equipment is required.

5.3.1.4(3)(g) Necessary equipment will be kept on the unit for Convenient Access; this will be monitored and stocked by central supply and cleaned as per IPAC protocols.

5.3.1.4(3)(h) Store-Central Equipment, Store-Local Equipment and Alcove-Local Equipment will also store clean Equipment.

5.3.1.4(3)(i) RTLS tagging of Equipment will allow for tracking and monitoring.

5.3.1.4(3)(j) AGVs will transport materials and supplies to and from the Component in the Back of House space.

5.3.1.4(3)(k) Instruments such as line insertion trays, clamps, peritoneoscopes and suture trays will be processed by MDRD and returned to the respective unit for storage.

5.3.1.4(4) Consumable Supplies

5.3.1.4(4)(a) Consumable supplies will be kept close to the POC. Items will be maintained with a minimum inventory level, which will trigger a re-ordering process. RTLS tagging of supplies will allow for tracking and replenishment. Store-Clean Supplies will also store supplies.

5.3.1.4(5) Laundry and Linen Services

5.3.1.4(5)(a) Clean linen will be stocked in Alcove-Clean Linen. Storage and pathways for clean supplies, equipment and linen will be kept separate from soiled supplies, equipment and linen.

5.3.1.4(5)(b) Soiled linen will be placed in hampers and moved to Disposal Hold area for pick up and transportation to the loading dock by way of FM Service Elevators.

5.3.1.4(6) Waste Management

5.3.1.4(6)(a) Waste products, recycling and bio HAZMAT will be separated at POC and stored in holding areas until pick up by housekeeping Staff and transported by AGV's.

5.3.1.4(6)(b) Clinical and other waste will be removed from Patient care areas to Disposal Hold located on the unit.

5.3.1.4(6)(c) Waste containers will be monitored, removed and replaced by housekeeping Staff and transported by AGVs.

5.3.1.4(7) Food Services

5.3.1.4(7)(a) Light snacks (sandwiches, fruit, muffins, etc.) and beverages will be available as needed and accessed by Staff and volunteers from Nourishment Rooms distributed throughout Renal Outpatient.

5.3.1.5 Anticipated Trends in Service Delivery

5.3.1.5(1) The following lists trends that are expected to affect the nature and or functions accommodated within this Component. Effects of these trends will be reflected in the Component's design.

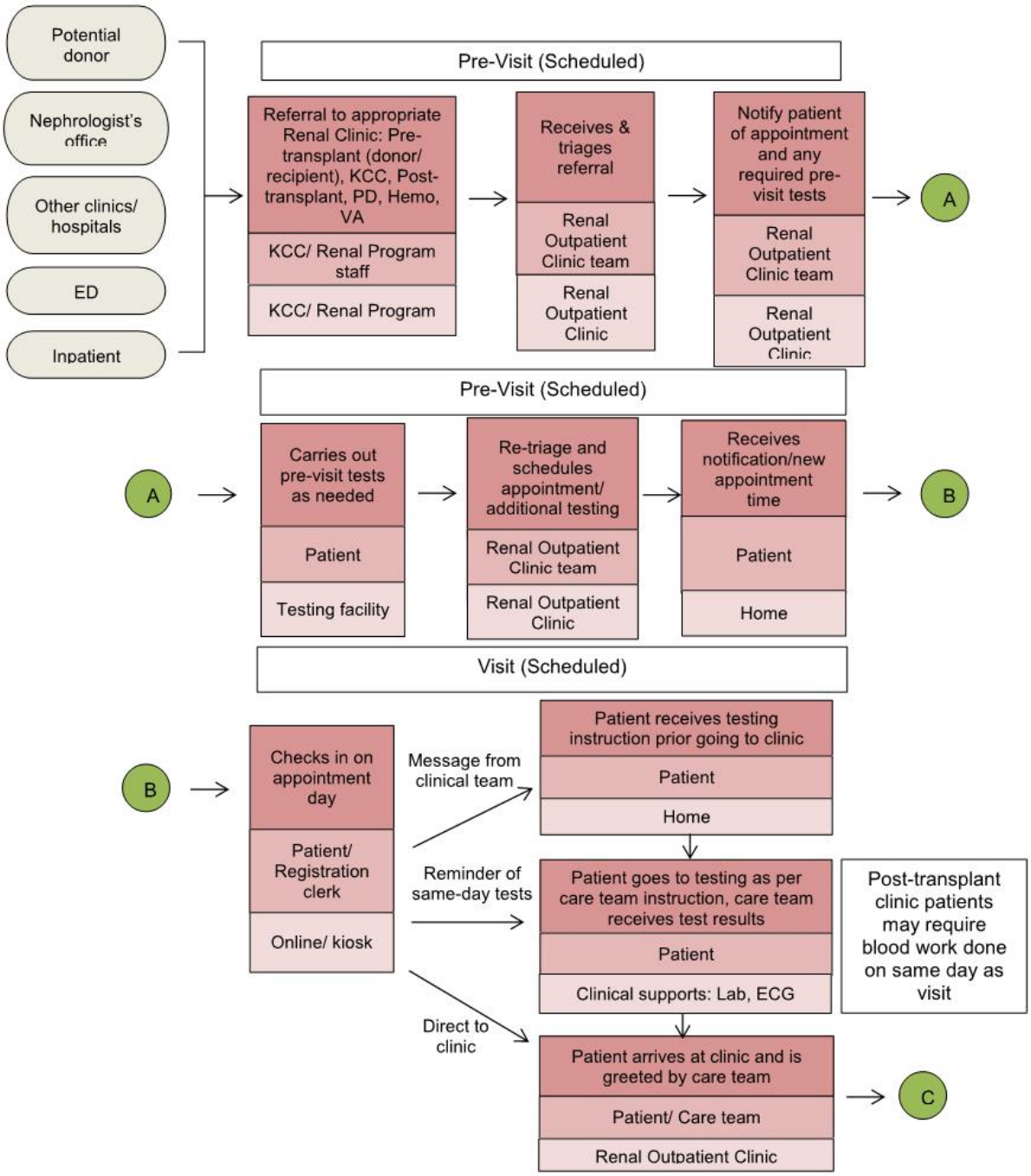
5.3.1.5(1)(a) Increased transplant activity.

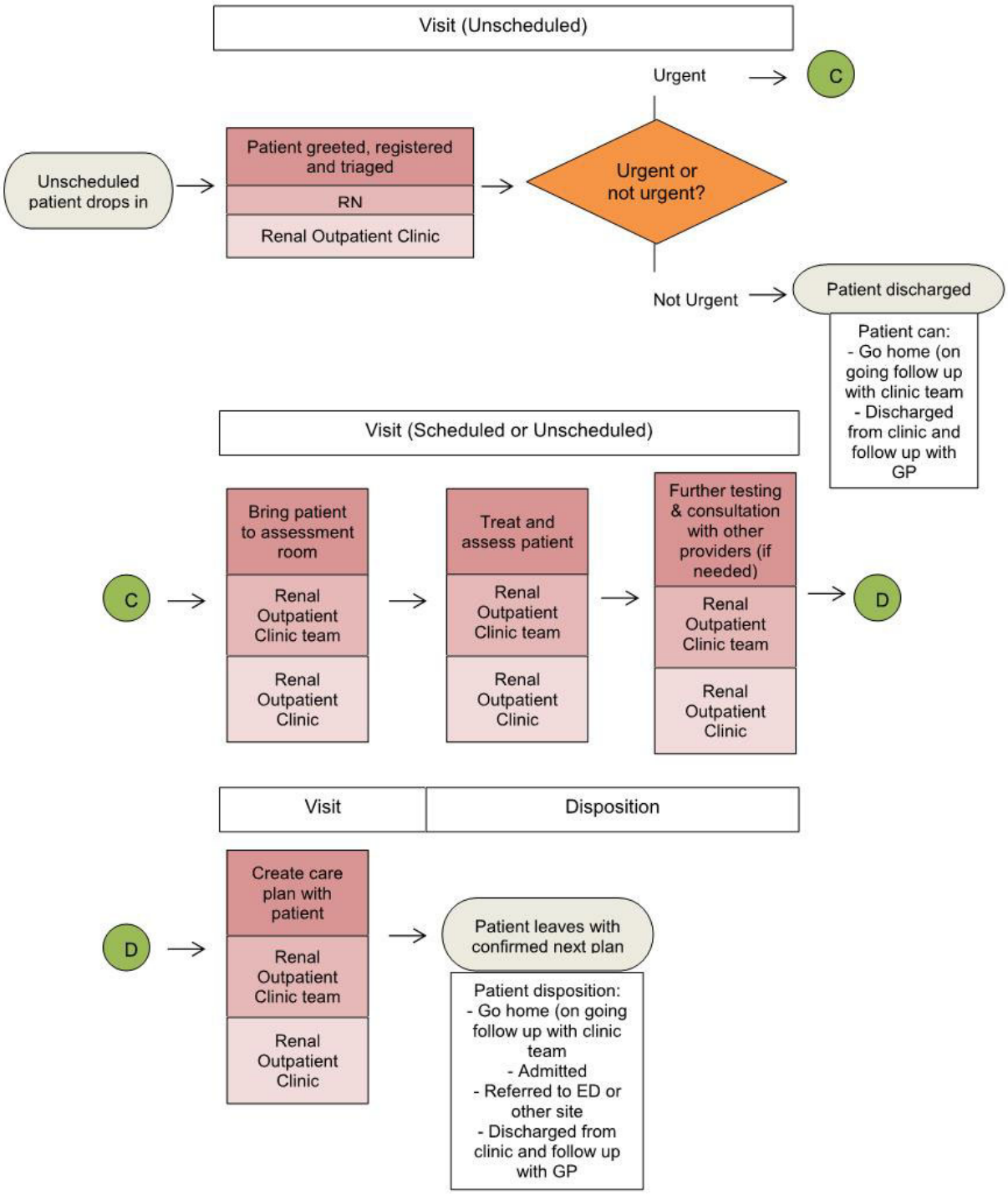
5.3.1.5(1)(b)	Aging population will put pressure on the renal program and increase needs for peritoneal and hemodialysis.
5.3.1.5(1)(c)	Increased numbers of immunocompromised resulting in greater vulnerability to infection as well as increased likelihood of progressing to active disease from latent state (TB in particular).
5.3.1.5(1)(d)	Increasing prevalence of antibiotic resistant organisms, particularly in environmentally persistent pathogens.
5.3.1.5(1)(e)	Alternate approaches to cleaning and disinfection including no touch techniques (hydrogen peroxide vapor, UV light etc.).

5.3.2 Workflows

5.3.2.1 The Renal Outpatient and Transplantation Clinic workflows are depicted in the following workflow diagram.

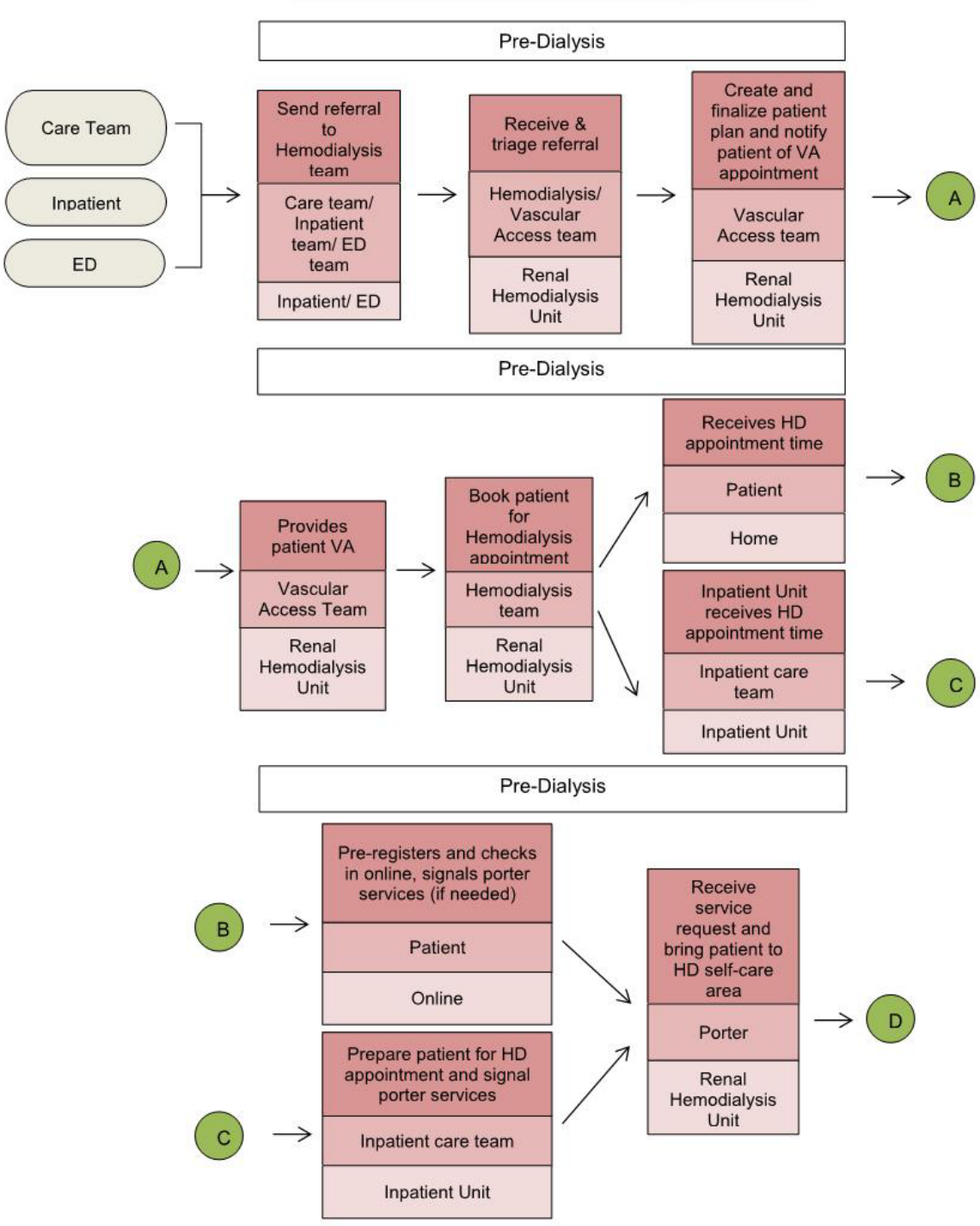
D2. RENAL OUTPATIENT AND TRANSPLANTATION CLINIC WORKFLOW DIAGRAM

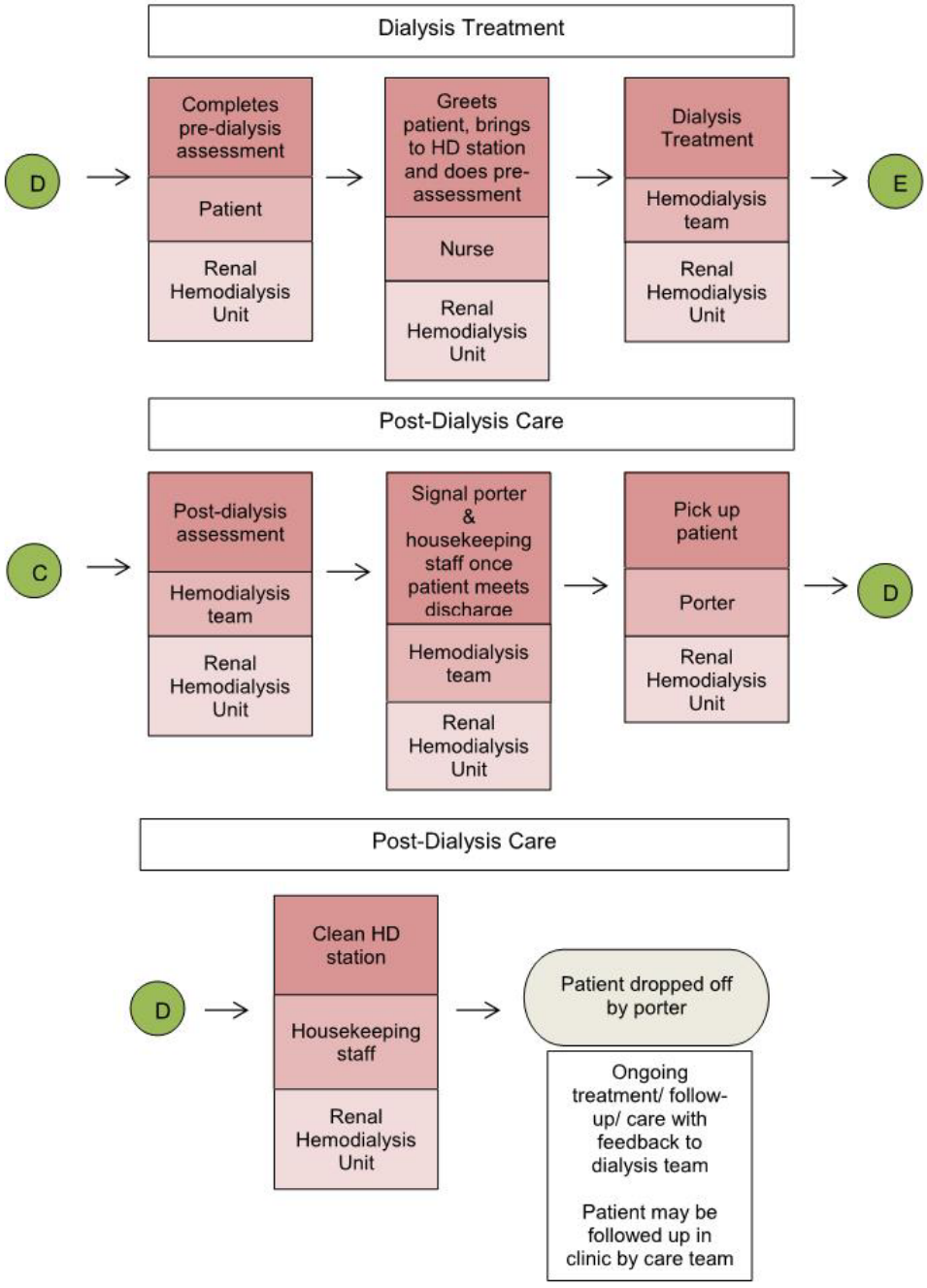



Visit (Unscheduled)
Urgent
C
Unscheduled patient drops in
Patient greeted, registered and triaged
RN
Renal Outpatient Clinic
Urgent or not urgent?
Not Urgent
Patient discharged
Patient can:
- Go home (on going follow up with clinic team
- Discharged from clinic and follow up with GP
Visit (Scheduled or Unscheduled)
C
Bring patient to assessment room
Renal Outpatient Clinic team
Renal Outpatient Clinic
Treat and assess patient
Renal Outpatient Clinic team
Renal Outpatient Clinic
Further testing & consultation with other providers (if needed)
Renal Outpatient Clinic team
Renal Outpatient Clinic
D
Visit
Disposition
D
Create care plan with patient
Renal Outpatient Clinic team
Renal Outpatient Clinic
Patient leaves with confirmed next plan
Patient disposition:
- Go home (on going follow up with clinic team
- Admitted
- Referred to ED or other site
- Discharged from clinic and follow up with GP

5.3.2.2 The Renal Hemodialysis Clinic workflows are depicted in the following workflow diagram.

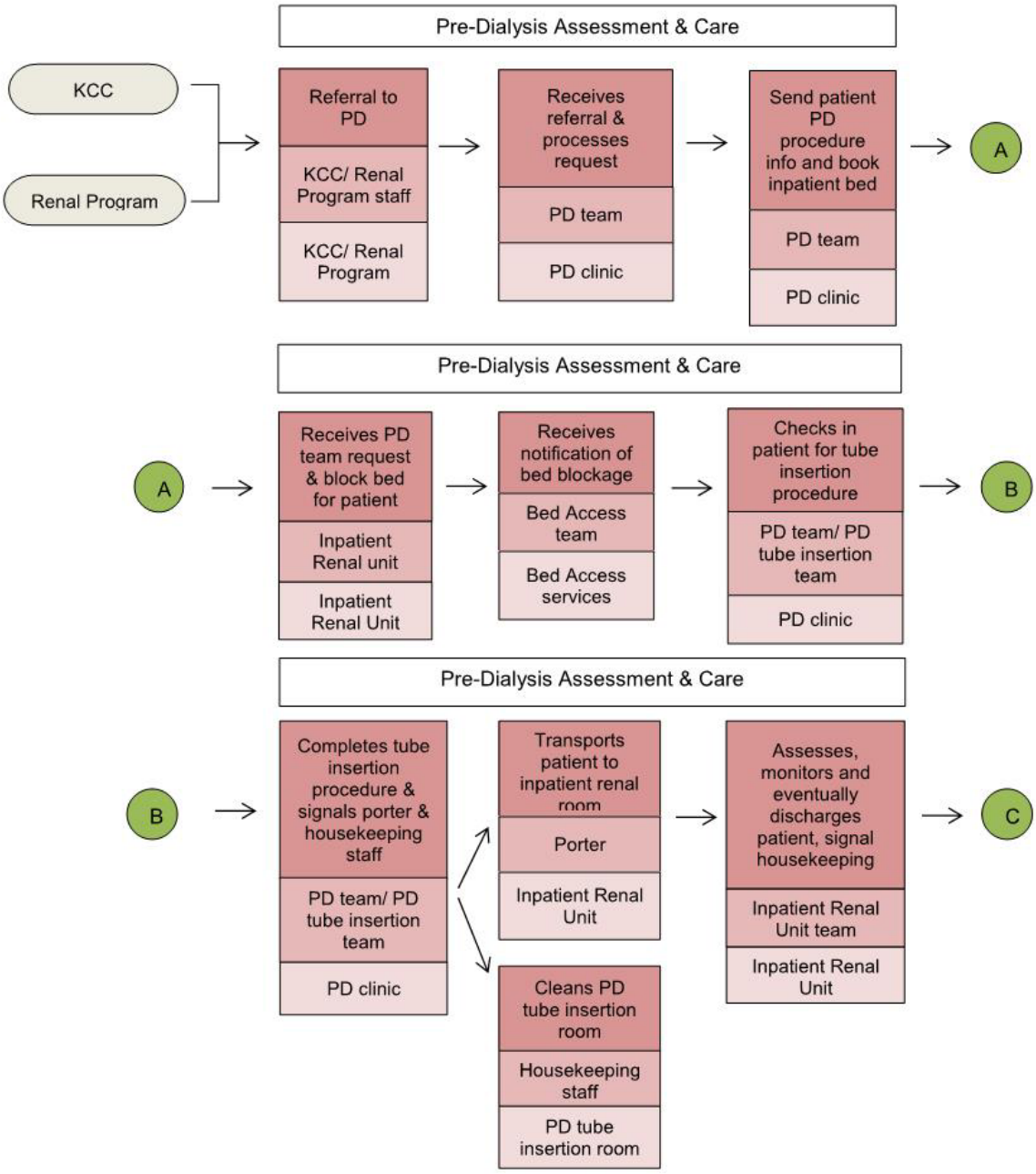
D3. RENAL HEMODIALYSIS WORKFLOW DIAGRAM

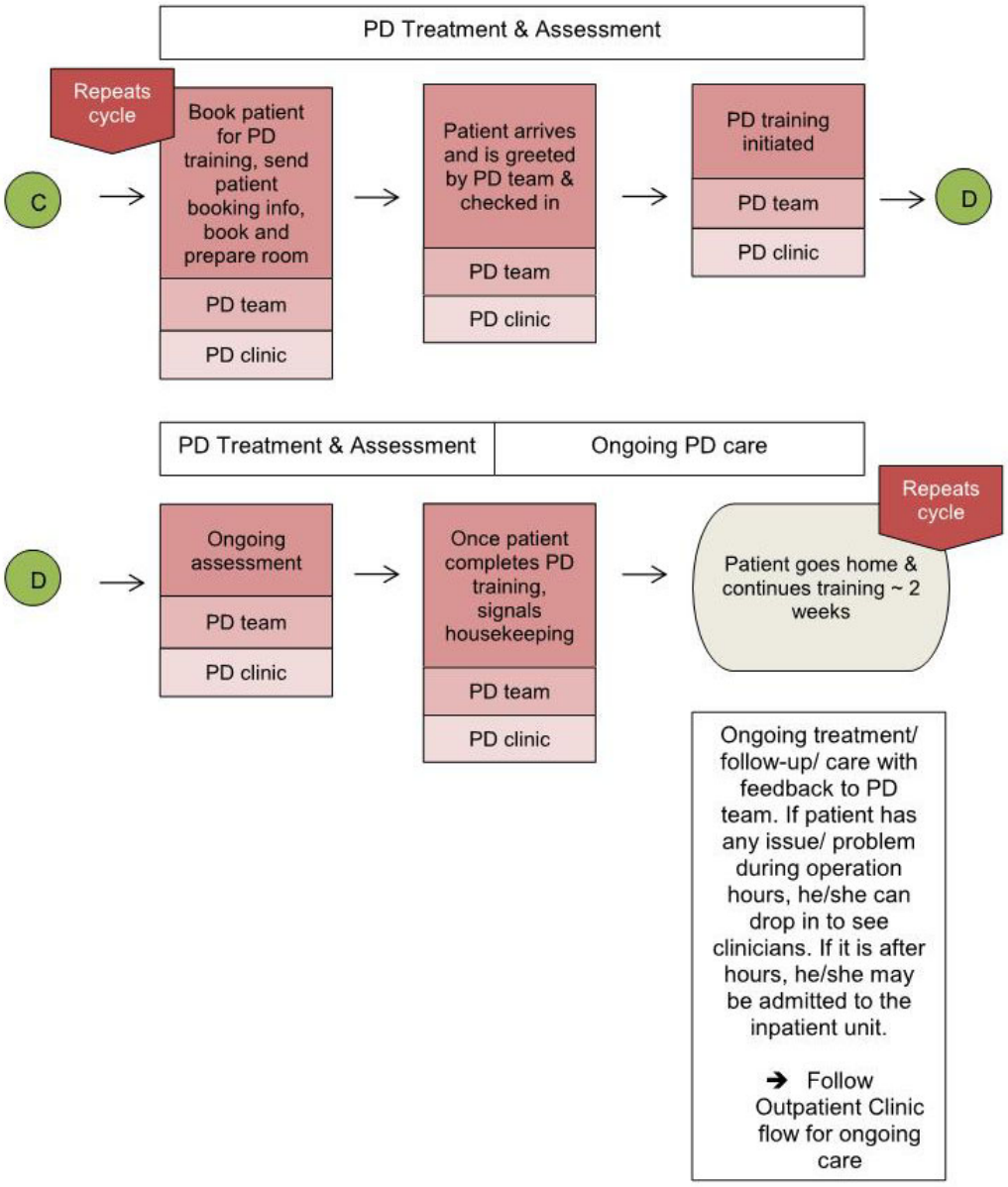



Dialysis Treatment
D
Completes pre-dialysis assessment
Patient
Renal Hemodialysis Unit
Greets patient, brings to HD station and does pre-assessment
Nurse
Renal Hemodialysis Unit
Dialysis Treatment
Hemodialysis team
Renal Hemodialysis Unit
E
Post-Dialysis Care
C
Post-dialysis assessment
Hemodialysis team
Renal Hemodialysis Unit
Signal porter & housekeeping staff once patient meets discharge
Hemodialysis team
Renal Hemodialysis Unit
Pick up patient
Porter
Renal Hemodialysis Unit
D
Post-Dialysis Care
D
Clean HD station
Housekeeping staff
Renal Hemodialysis Unit
Patient dropped off by porter
Ongoing treatment/ follow-up/ care with feedback to dialysis team
Patient may be followed up in clinic by care team

5.3.2.3 The Peritoneal Dialysis Clinic workflows are depicted in the following workflow diagram.

D4. PERITONEAL DIALYSIS WORKFLOW DIAGRAM




PD Treatment & Assessment
Repeats cycle
C
Book patient for PD training, send patient booking info, book and prepare room
PD team
PD clinic
Patient arrives and is greeted by PD team & checked in
PD team
PD clinic
PD training initiated
PD team
PD clinic
D
PD Treatment & Assessment
Ongoing PD care
Repeats cycle
D
Ongoing assessment
PD team
PD clinic
Once patient completes PD training, signals housekeeping
PD team
PD clinic
Patient goes home & continues training ~ 2 weeks
Ongoing treatment/ follow-up/ care with feedback to PD team. If patient has any issue/ problem during operation hours, he/she can drop in to see clinicians. If it is after hours, he/she may be admitted to the inpatient unit.
➔ Follow Outpatient Clinic flow for ongoing care

5.3.3 Hours of Operation

5.3.3.1 The Renal Outpatient and Transplantation Clinic is open during business hours from Monday to Friday and closed during statutory holidays. Hours for this area can be flexed to respond to Patient volumes.

5.3.3.2 The Renal Hemodialysis unit will be open 7 days per week. There is also an on-call service for urgent after hours dialysis needs.

5.3.3.3 The Peritoneal Dialysis centre is open 7 days per week for Patient training, scheduled testing, clinics and both booked and drop in appointments. Typical hours of operation are 0700 - 1700 hours. After hours telephone advice calls and drop-in Patients are directed to the inpatient renal unit.

5.3.4 Workloads

5.3.4.1 The maximum estimated workload for this Component is shown in the following table.

RENAL OUTPATIENT STAFF CATEGORY	PEAK SHIFT
Direct Care Team Staff	
Physician	6
Medical Resident	11
Clinical Pharmacist	6
Nurse Practitioner	2
Nurse Educator	4
Clinical Nurse Leader/Charge Nurse	2
Nurse	75
Renal Technologist	6
Social Worker	8
Spiritual Care	1
Dietician	7
Unit Clerk	2
Housekeeper	3
Learners	4
Subtotal, Direct Care Team Staff	**137**
Other	
Student	23
Volunteer	4
Researcher and Other	4

RENAL OUTPATIENT STAFF CATEGORY	PEAK SHIFT
Subtotal, Other	**31**
DAYTIME PEAK TOTAL	**168**
Shared Staff	
Program Director	1
Nurse Practitioner	1
Program Clerk	1
Medical Director	1
Physician Consultants	3
Patient Care Manager	3
Administration Assistant	1
Informatics Nurse	1
Outreach Nurse	1
Data Analyst	1
Quality Assurance	1
Pharmacy Technician	2
First Nations Support	1
Porter Ward Aide	4
Subtotal, Shared Staff (not included in daytime peak)	**22**

5.4 DESIGN CRITERIA

5.4.1 General Requirements

5.4.1.1 Zones of activity within the Component include the following:

5.4.1.1(1) Renal Outpatient Entrance

5.4.1.1(2) Renal Outpatient and Transplantation Clinic

5.4.1.1(3) Renal Hemodialysis

5.4.1.1(4) Peritoneal Dialysis

5.4.1.1(5) Renal Outpatient Operations Hub

5.4.1.2 Renal Outpatient including Renal Outpatient and Transplantation Clinic, Renal Hemodialysis, Peritoneal Dialysis and Renal Operations Hub will be grouped and located adjacent to Renal Inpatient Services on the same floor.

5.4.1.3 Renal Outpatient entrance will have Convenient Access from the Public Passenger Elevators for the high volume of Patients arriving 7 days/week.

5.4.1.4 Renal Outpatient including Renal Outpatient and Transplantation Clinic, Renal Hemodialysis, Peritoneal Dialysis and Renal Operations Hub requires Convenient Access to Medical Imaging, Main Pharmacy and Main Laboratories.

5.4.1.5 Views and natural light will be maximized in Renal Outpatient for Patients, Staff and visitors.

5.4.1.6 Renal Outpatient and Transplantation Clinic and Renal Hemodialysis Patients will require separate Waiting Areas. Each Waiting area will have Line of Sight from the associated Reception.

5.4.1.7 All dialysis treatment stations and training stations will be designed to provide Line of Sight for Staff from the associated Care Team Station.

5.4.1.8 Medication Rooms will be located centrally with Convenient Access to Care Team Stations.

5.4.1.9 Medication Room doors require glazing for visibility.

5.4.1.10 Pneumatic Tube Stations will be located centrally within the Care Team Stations.

5.4.1.11 Care Team Stations will require wall mounted displays.

5.4.1.12 Support services and storage including Soiled Utility, Disposal Hold, Equipment storage, Store-Clean Supplies and Housekeeping Closet will be located centrally with Convenient Access to all stations to optimize flow and promote best Infection Prevention and Control protocols.

5.4.1.13 Medication Rooms and Store-Clean Supplies will be adjacent. Medication Rooms will have one (1) door from the corridor and another door connecting to the Store-Clean Supplies, so Staff can easily retrieve supplies for the setup of IV medications. Store-Clean Supplies will have another door from the corridor.

5.4.1.14 Store-Local Equipment and Store-Central Equipment will be grouped with Medication Room and Store-Clean Supplies.

5.4.1.15 One (1) Soiled Utility will have Direct Access to Soiled Equipment Hold with a door between the two rooms, in addition to the doors connecting these spaces to the corridor. The primary function of Soiled Utility is to provide a space to dispose of the full spectrum of clinical waste including bedpan disinfectors and assorted bins for cytotoxic and biomedical waste (e.g. used blood bags), perform limited soiled activities such as gross decontamination/rinsing/soaking of surgical type instruments, and temporarily store clinical specimens. The primary function of the Soiled Equipment Hold is to sequester and marshal soiled equipment and clean them. The design will allow for one way flow from soiled to clean, separate soiled and clean to prevent cross-contamination and provide a dedicated unobstructed cleaning zone, with Convenient Access from all clinical spaces in the area it is

intended to serve. Cleaned equipment will be moved to the Store-Local Equipment or Store-Central Equipment in a different and physically separate location away from Soiled Utility and Soiled Equipment Hold.

5.4.1.16 Hand hygiene sinks will be directly accessible and distributed uniformly in all clinical areas as per Infection Prevention and Control protocols.

5.4.1.17 Patient washrooms need to be placed with Convenient Access to Treatment Stations.

5.4.1.18 Staff washrooms will be located with Convenient Access to Staff work areas.

5.4.1.19 The presence of mobility aids including canes, crutches, walkers, wheelchairs, stretchers and motorized chairs/scooters will be anticipated in all Patient accessible areas throughout the Component.

5.4.1.20 Provide one (1) workstation (no printer is required) for Patient and families within the Component Waiting area with access to internet.

5.4.1.21 All Stations (Hemodialysis and Peritoneal Dialysis), Exam Rooms and Consult/Interview Rooms will be standardized in order to maximize flexibility of use and reduce risk by promoting Staff familiarity with the placement of supplies and equipment.

5.4.1.22 All Recurrent Rooms within one type will be standardized with all supplies in the same location.

5.4.1.23 The corridor immediately outside any Exam Room-Hybrid, Hemodialysis Treatment Station-Bed-Airborne Isolation-Hybrid and Peritoneal-Dialysis Training Station-Bed-Airborne Isolation-Hybrid will be a low traffic area purposefully sparse with no stored equipment and with Convenient Access to a corridor hand hygiene sink to allow Staff to don and doff their PPE and follow appropriate Infection Prevention and Control protocols.

5.4.1.24 Treatment and Training Stations in Renal Hemodialysis and Peritoneal Dialysis will include ambient lighting which can be controlled by the Patient. Task Lighting will also be required in these areas for Staff to perform tasks such as charting while Patients enjoy a darkened environment.

5.4.1.25 Separations between Stations within both Renal Hemodialysis and Peritoneal Dialysis will require full height walls on three (3) sides of each Station with acoustic tile ceilings, which will allow for privacy and confidentiality but still allow for Staff to be able to hear Equipment alarms as per Appendix 3C [Acoustic and Noise Control Measures].

5.4.1.26 Staff support areas will be Back of House and separated from visitor and Patient areas.

5.4.1.27 The physical environment will facilitate team collaboration.

5.4.1.28 Telemedicine capacity will be provided in all care delivery spaces.

5.4.2 Renal Outpatient Entrance

5.4.2.1 Renal Outpatient Entrance will be centrally located with Direct Access to Renal Outpatient and Transplantation Clinic, Renal Hemodialysis and Peritoneal Dialysis.

5.4.2.2 This area will act as the front entrance to the Component. Outpatients will access the Component through this entrance.

5.4.2.3 Renal Outpatient Entrance will have Direct Access to Public Passenger Elevators.

5.4.2.4 Alcove-Vending Machine will be located adjacent to Renal Outpatient Entrance Waiting area.

5.4.3 Renal Outpatient and Transplantation Clinic

5.4.3.1 A Reception and greeting area will be located adjacent to the Patients, families and visitors Waiting area for Renal Outpatient and Transplantation Clinic and will also function as a security access point to the unit. The Waiting area will be equipped with a Patient entertainment/education system.

5.4.3.2 Renal Outpatient and Transplantation Clinic will include two (2) Consult/Interview Rooms, seventeen (17) Exam Rooms and one (1) Exam Room-Hybrid. One (1) Washroom-Patient will be located adjacent to Exam Room-Hybrid.

5.4.3.3 Standardized Exam Room layouts are intended to serve all Renal Outpatient and Transplantation Clinic programs interchangeably.

5.4.3.4 Each Exam Room will comprise of space for an exam table, a workstation, a hand hygiene sink and workspace as well as chairs for Patients and family that are accessible to Persons with Disabilities.

5.4.3.5 Hand hygiene sink and PPE to be located directly adjacent to the door for Direct Access upon room entry in Exam Rooms.

5.4.3.6 Renal Outpatient and Transplantation Clinic will include Consult/Interview Rooms designed to maximize use of space for clinicians that do not need to examine Patients physically.

5.4.3.7 Each Consult/Interview Room will comprise of space for a touch-down workstation, table and Patient and visitor chairs that are accessible to Persons with Disabilities.

5.4.3.8 Workstations will provide space for quiet work by telephone and/or telemedicine as well as group meetings such as post-clinic rounds.

5.4.3.9 Clinicians working with the donor population and clinicians working with the recipient population require separate designated space. The clinicians do not cross cover populations for confidentiality and conflict of interest reasons.

5.4.4 Renal Hemodialysis

5.4.4.1 Renal Outpatient Entrance will have a Waiting area for Patients, families and visitors at the entrance to the unit shared between Renal Hemodialysis and Peritoneal Dialysis units. This area will be equipped with a Patient entertainment/education system, a wall mounted scale and a hand hygiene sink.

5.4.4.2 Provide a Nourishment Room located at Renal Outpatient Entrance, which will be either accessible by Staff only or by both Patients and Staff.

5.4.4.3 Renal Hemodialysis requires Direct Access through Back of House circulation to Renal Inpatient Services for transport of inpatients. Alternatively, if a Back of House corridor is not provided, doors that can be remotely locked and unlocked by Staff will be required to restrict public flow through the corridor during Patient transfer between the Renal Inpatient Services and Renal Hemodialysis.

5.4.4.4 A Reception and greeting area will be located at the entrance to Renal Hemodialysis unit which will also serve the function for Staff to monitor access to and from the unit.

5.4.4.5 Renal Hemodialysis unit will include forty six (46) open bay Hemodialysis Treatment Stations for chairs and beds with separation consisting of walls on 3 sides with privacy curtains to allow for privacy and promote best Infection Prevention and Control protocols.

5.4.4.6 The Renal Hemodialysis unit will include two (2) Hemodialysis Treatment Station-Bed-Airborne Isolation-Hybrid. These rooms will be grouped and located adjacent to the Patient Transfer/Staff Service Elevators and away from the Public Passenger Elevators. The path of travel for Staff to transfer a Patient from the Patient Transfer/Staff Service Elevators to a Hemodialysis Treatment Station-Bed-Airborne Isolation-Hybrid will not pass through the Public Passenger Elevator lobby, Waiting or Reception areas.

5.4.4.7 Renal Hemodialysis unit will be divided into four (4) pods of twelve (12) Hemodialysis Treatment Stations (35 beds and 13 chairs) with support services shared between each twenty-four (24) Hemodialysis Treatment Stations.

5.4.4.8 The Renal Hemodialysis unit will also include four (4) Hemodialysis Home Training Stations-Chair.

5.4.4.9 RO Water plumbing and drain box will be provided for all Stations as well as multiple drain boxes in Workroom-Biomedical Engineering and Workroom-Dialysis Technicians; refer to Schedule of Accommodation Remarks for quantities of RO water supply and drain boxes.

5.4.4.10 The nurse assigned to each Patient will have Line of Sight to view the Patient, dialysis machine and other critical Equipment.

5.4.4.11 The design will promote the ability for Patients who are receiving dialysis at the Station to be able to see their assigned nurse at the Care Team Station.

5.4.4.12 Frequently utilized Staff work areas and support services will be located close to the Stations to minimize Staff travel distances to and from these frequently utilized spaces and the Patient.

5.4.4.13 Room for a visitor, nurse and up to four (4) additional care providers will be accommodated at each Patient Treatment Station.

5.4.4.14 Each Hemodialysis Treatment Station will be equipped with a Patient entertainment/education system that is easily cleaned and requires a headset to operate.

5.4.4.15 Each Hemodialysis treatment station will have medical gases, nurse call system, and one (1) half locker to store Patients' belongings.

5.4.4.16 Hemodialysis Treatment Stations need to accommodate TPE and hemodialysis machines or up to two (2) hemodialysis machines at a time on either side of the Patient, 2-4 infusion pumps and any medical/surgical equipment that could arrive with the Patient (chest tubes, pumps etc.). Provision for Staff to access all sides of the machine during treatment will be provided.

5.4.4.17 Provide clear space for safe Patient transfers to and from wheelchairs, beds or stretchers into the Hemodialysis Treatment Stations. Space is required for a portable scale, lift or commode chair to be moved beside the bed or chair if required. Inpatient beds will be comfortably maneuvered in and out of all bed Stations.

5.4.4.18 All Hemodialysis Treatment Station-Bed-Airborne Isolation-Hybrid and Hemodialysis Treatment Station-Bed require ceiling lifts for Patient transfer and repositioning.

5.4.4.19 Four (4) Care Team Stations will be placed centrally for each pod of twelve (12) Hemodialysis Treatment Stations. Provide visibility to all Station entry points from their associated Care Team Station. Provide Convenient Access from the Care Team Stations to all support services and supplies.

5.4.4.20 Care Team Stations will include charging for wireless devices.

5.4.4.21 Each group of three (3) Hemodialysis Treatment Stations will have access to a WOW and hand hygiene sink.

5.4.4.22 Two (2) Conference/Meeting Rooms in Renal Hemodialysis Unit will be used by the inter-professional team to conduct rounds, discuss or document a Patient’s condition/information and for teaching purposes.

5.4.4.23 Two (2) Nourishment Rooms with ice machines for Staff and Patient will be placed centrally for each twenty-four (24) Hemodialysis Treatment Stations.

5.4.4.24 Two (2) wall mounted scales will be placed centrally for each group of twenty-four (24) Hemodialysis Treatment Stations.

5.4.5 Peritoneal Dialysis

5.4.5.1 The Patients, families and visitors in Peritoneal Dialysis program will require access to a Waiting area shared with Renal Hemodialysis or Renal Outpatient and Transplantation Clinic.

5.4.5.2 Peritoneal Dialysis unit includes one (1) Peritoneal-Dialysis Training Station-Bed-Airborne Isolation-Hybrid, six (6) Peritoneal-Dialysis Training Station-Bed, one (1) Peritoneal-Dialysis Teaching Station-Open Bay and one (1) Peritoneal-Dialysis Drop-in Treatment Station.

5.4.5.3 The four (4) Hemodialysis Home Training Station-Chairs with separation consisting of walls on 3 sides with privacy curtains to allow for privacy and promote best Infection Prevention and Control protocols will be grouped with Peritoneal-Dialysis Training Stations.

5.4.5.4 Peritoneal-Dialysis Training Stations, Peritoneal-dialysis Teaching Station-Open Bay and Peritoneal-Dialysis Drop-in Treatment Station will fit a recliner that will be positioned in Trendelenburg/reverse Trendelenburg along with the other specified Equipment.

5.4.5.5 RO Water plumbing and drain box will be provided for all Stations.

5.4.5.6 Frequently utilized Staff work areas and support services will be located close to the Stations to minimize Staff travel distances to and from frequently used spaces and the Patient.

5.4.5.7 A Care Team Station will be centrally located within the unit and provide Line of Sight to the entry point of all Stations and Convenient Access to support services and supplies.

5.4.5.8 A Store-General will be provided for cycler machines within the space.

5.4.6 Renal Outpatient Operations HUB

5.4.6.1 Offices, Workstations and Store-Office Support in Renal Outpatient Operations HUB will be grouped together and located centrally with Convenient Access for Staff from the clinic areas.

5.4.6.2 Offices will provide privacy for Staff to have confidential conversations.

5.4.6.3 Seventy two (72) Workstations will be divided into six (6) separate rooms with ten (10) workstations in each room and one (1) separate room with (12) Workstations.

5.4.7 Renal Outpatient Shared Support Services

5.4.7.1 Renal Outpatient Shared Support Services will be located centrally with Convenient Access for Staff from the clinic areas.

5.4.7.2 RO Water plumbing, City water supply and drain boxes will be provided for the Workroom-Biomedical Engineering. A line of ready hemodialysis machines attached to plumbing will be stored in Workroom-Biomedical Engineering.

5.4.7.3 Workroom-Biomedical Engineering, Store-Local Equipment and Workroom-Dialysis Technicians will be grouped together with Convenient Access to Renal Hemodialysis through Back of House circulation.

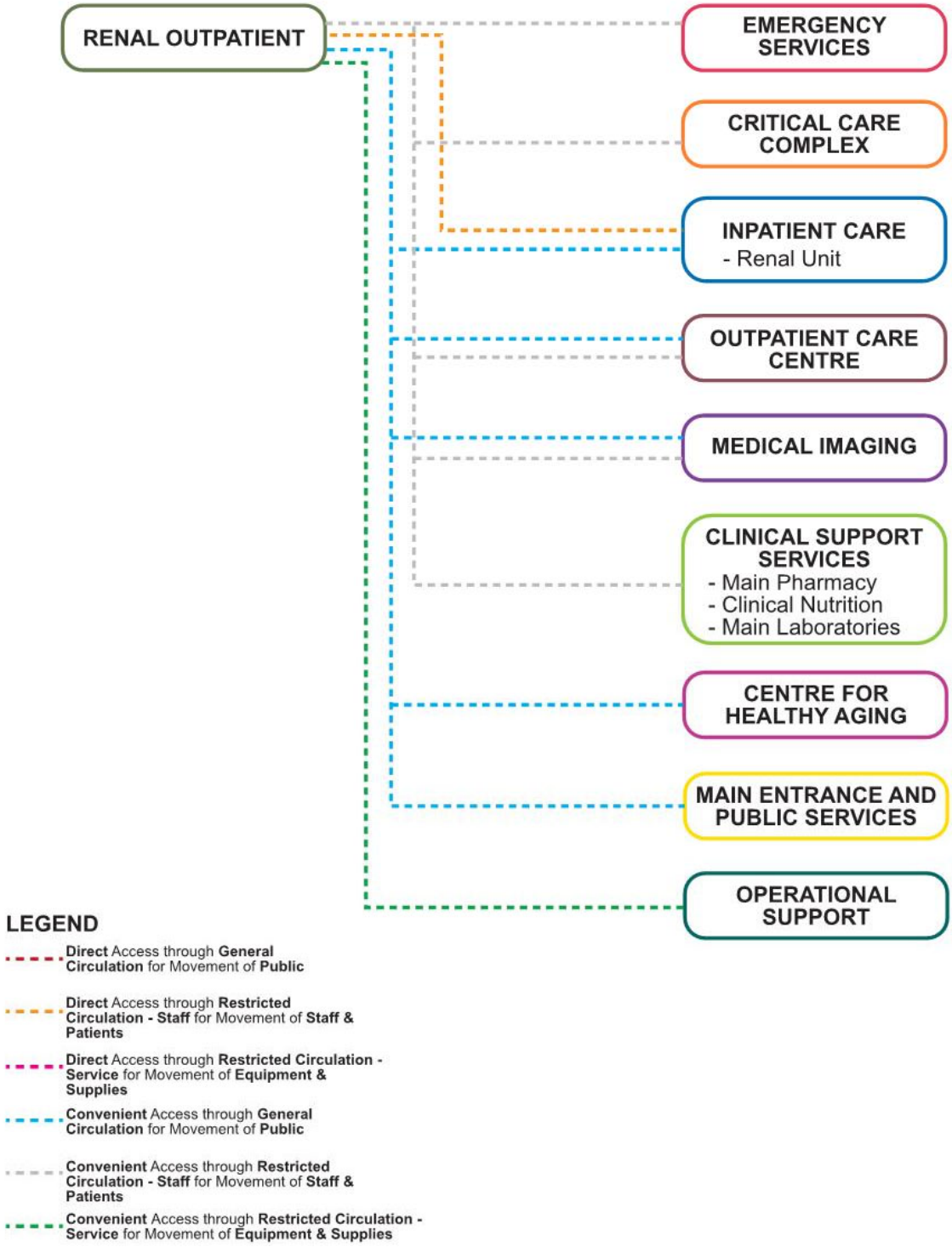
5.4.8 Renal Outpatient Shared Staff Support

5.4.8.1 Two (2) Washroom/Shower-Staff to be adjacent to the Lockers-Staff.

5.5 EXTERNAL RELATIONSHIPS

5.5.1 The following diagram indicates other Functional Components that have a functional relationship with this Component.

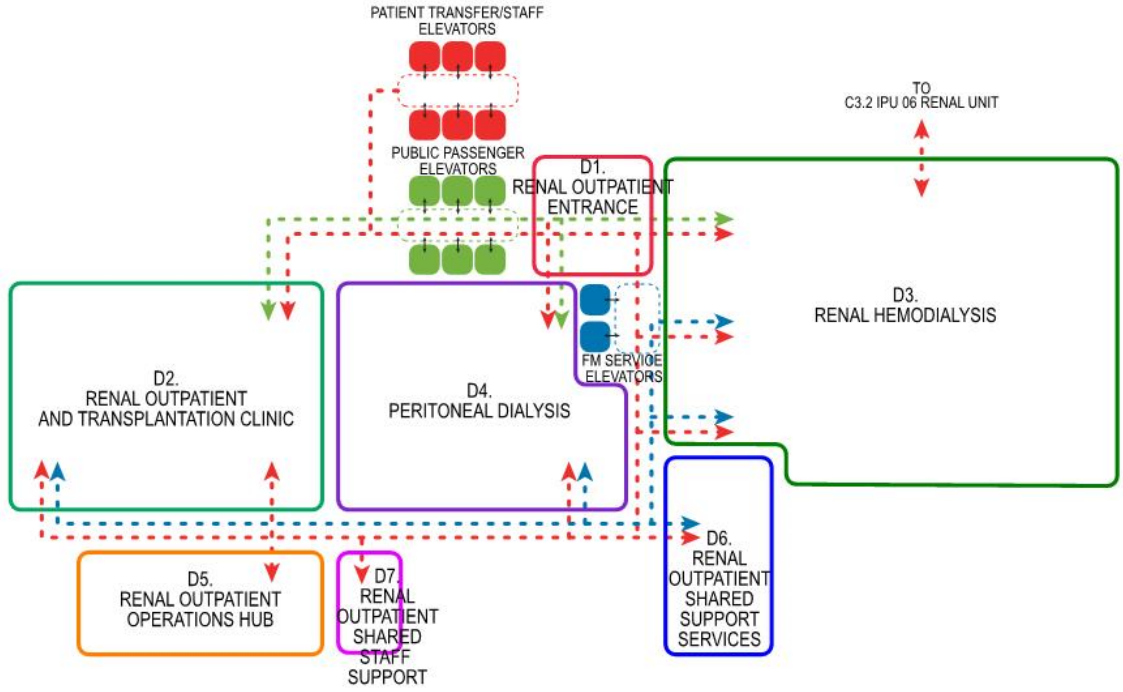
D. RENAL OUTPATIENT EXTERNAL RELATIONSHIPS AND CIRCULATIONS

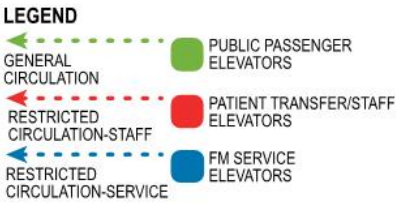


5.6 INTERNAL RELATIONSHIPS

5.6.1 The following diagram indicates internal functional relationships within this Component.

D. RENAL OUTPATIENT INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES





5.7 SCHEDULE OF ACCOMMODATIONS

5.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Renal Outpatient

D1 - RENAL OUTPATIENT ENTRANCE	61.00
D2 - RENAL OUTPATIENT AND TRANSPLANTATION CLINIC	387.50
D3 - RENAL HEMODIALYSIS	931.00
D4 - PERITONEAL DIALYSIS	240.50
D5 - RENAL OUTPATIENT OPERATIONS HUB	374.50
D6 - RENAL OUTPATIENT SHARED SUPPORT SERVICES	79.00
D7 - RENAL OUTPATIENT SHARED STAFF SUPPORT	39.00
RENAL OUTPATIENT PROGRAMMED SPACE NSM:	**2,112.50**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
D1 - RENAL OUTPATIENT ENTRANCE					
D1.1	Waiting	1	54.00	54.00	Incl. seating for 32 including 4 in wheelchairs, Direct Access to Public Passenger Elevators and Washroom-Public, adjacent to entrance to Renal Hemodialysis and Peritoneal Dialysis.
D1.2	Alcove-Vending Machine	1	1.50	1.50	
D1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Renal Outpatient.
D1.4	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
	TOTAL NSM: Renal Outpatient Entrance			**61.00**	
D2 - RENAL OUTPATIENT AND TRANSPLANTATION CLINIC					
D2.1 - Renal Outpatient and Transplantation Clinic Entrance					
D2.1.1	Reception	1	24.00	24.00	Incl. 4 workstations, cabinets, fully enclosed with interior windows and 2 transaction windows, Line of Sight to Waiting.
D2.1.2	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
D2.1.3	Waiting	1	45.00	45.00	Incl. seating for 28 including 2 in wheelchairs, Direct Access to Public Passenger Elevators, located inside Renal Outpatient Clinic area.
D2.1.4	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Renal Outpatient Clinic.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
D2.2 - Renal Outpatient and Transplantation Clinic					
D2.2.1	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation.
D2.2.2	Exam Room	17	12.00	204.00	Incl. 1 touch down workstation, counters, cabinets.
D2.2.3	Medication Room-Small	1	8.00	8.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
D2.2.4	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets.
D2.2.5	Washroom-Patient	4	4.50	18.00	2-piece, accessible for Persons with Disabilities.
D2.2.6	Exam Room Airborne Isolation-Hybrid	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets. cabinets, adjacent to one Washroom-Patient.
D2.3 - Renal Outpatient and Transplantation Clinic Support Services					
D2.3.1	Alcove-Clean Linen	1	2.50	2.50	
D2.3.2	Store-Central Equipment	1	16.00	16.00	Incl. shelving, charging station.
D2.3.3	Store-Clean Supplies	1	12.00	12.00	
D2.3.4	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
D2.4 - Renal Outpatient and Transplantation Clinic Staff Support					
D2.4.1	Washroom-Staff	2	3.00	6.00	2-piece.
	TOTAL NSM: Renal Outpatient and Transplantation Clinic			**387.50**	
D3 - RENAL HEMODIALYSIS					
D3.1 - Renal Hemodialysis Entrance					
D3.1.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets, fully enclosed with interior windows and 1 transaction window, Line of Sight to Waiting.
D3.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Renal Hemodialysis.
D3.2 - Renal Hemodialysis Clinic					
D3.2.1	Hemodialysis Treatment Station-Bed-Airborne Isolation-Hybrid	1	12.00	12.00	Incl. RO Water Supply and Drain Box, ceiling lift, 1 half locker. To accommodate bedside ultrasound.
D3.2.2	Washroom-Patient Ensuite-Airborne Isolation	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
D3.2.3	Hemodialysis Treatment Station-Bed-Airborne Isolation-Hybrid	1	12.00	12.00	Incl. RO Water Supply and Drain Box, ceiling lift, 1 half locker. To accommodate bedside ultrasound. Located adjacent to one Washroom-Patient.
D3.2.4	Hemodialysis Treatment Station-Bed	33	10.00	330.00	Incl. RO Water Supply and Drain Box, ceiling lift, 1 half locker, walled on 3 sides with privacy curtains. To accommodate bedside ultrasound.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
D3.2.5	Hemodialysis Treatment Station-Chair	13	7.50	97.50	Incl. RO Water Supply and Drain Box, 1 half locker, walled on 3 sides with privacy curtains. To accommodate bedside ultrasound.
D3.2.6	Hemodialysis Home Training Station-Chair	4	10.00	40.00	Walled on 3 sides with privacy curtains, RO Water Supply and Drain Box. To accommodate bedside ultrasound.
D3.2.7	Alcove-Hand Hygiene Sink	16	1.00	16.00	Distributed within the clinic with the ratio of one per three Treatment Stations.
D3.2.8	Alcove-Hand Hygiene Sink	1	1.00	1.00	Distributed within the clinic with the ratio of one per four Training Stations.
D3.2.9	Care Team Station	4	24.00	96.00	Incl. 6 workstations, cabinets, charging station, dual egress.
D3.2.10	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of each Care Team Station entrance.
D3.2.11	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
D3.2.12	Medication Room-Medium	2	12.00	24.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
D3.2.13	Nourishment Room	2	6.00	12.00	Incl. counters, cabinets.
D3.2.14	Washroom-Patient	3	4.50	13.50	2-piece, accessible for Persons with Disabilities.
D3.3 - Renal Hemodialysis Support Services					
D3.3.1	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
D3.3.2	Alcove-Local Equipment	12	1.50	18.00	Distributed in Renal Hemodialysis.
D3.3.3	Alcove-Clean Linen	2	2.50	5.00	
D3.3.4	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
D3.3.5	Alcove-Wheelchair	1	2.50	2.50	
D3.3.6	Store-Central Equipment	2	32.00	64.00	Incl. shelving, charging station.
D3.3.7	Store-Clean Supplies	1	12.00	12.00	
D3.3.8	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
D3.3.9	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
D3.3.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
D3.3.1	Soiled Equipment Hold	1	12.0	12.0	
D3.4 - Renal Hemodialysis Staff Support					
D3.4.1	Workroom-Dialysis Technicians	1	30.00	30.00	Incl. 1 workstation, workbenches for 2, cabinets, shelving, 12 RO Water Supply and Drain Boxes, 1 City Water Supply and Drain Box.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
D3.4.2	Conference/Meeting Room-Small	1	24.00	24.00	Accommodates 12 Persons.
D3.4.3	Conference/Meeting Room-Medium	1	44.00	44.00	Incl. counters, cabinets, accommodates 25 Persons.
D3.4.4	Washroom-Staff	3	3.00	9.00	2-piece.
	TOTAL NSM: Renal Hemodialysis			**931.00**	
D4 - PERITONEAL DIALYSIS					
D4.1 - Peritoneal Dialysis Clinic					
D4.1.1	Exam Room	3	12.00	36.00	Incl. 1 touch down workstation, counters, cabinets.
D4.1.2	Peritoneal-Dialysis Training Station-Bed-Airborne Isolation-Hybrid	1	12.00	12.00	Incl. RO Water Supply and Drain Box. Located adjacent to one Washroom-Patient.
D4.1.3	Peritoneal-Dialysis Training Station-Bed	6	12.00	72.00	Incl. RO Water Supply and Drain Box, walled on 3 sides with privacy curtains.
D4.1.4	Peritoneal-Dialysis Drop-in Treatment Station	1	12.00	12.00	Incl. RO Water Supply and Drain Box, 1 half locker, walled on 3 sides with privacy curtains.
D4.1.5	Peritoneal-Dialysis Teaching Station-Open Bay	1	12.00	12.00	Incl. RO Water Supply and Drain Box, walled on 3 sides with privacy curtains.
D4.1.6	Alcove-Hand Hygiene Sink	3	1.00	3.00	Distributed within the clinic with the ratio of one per three Training/ Treatment/ Teaching Stations.
D4.1.7	Care Team Station	1	24.00	24.00	Incl. 6 workstations, cabinets, charging station, dual egress.
D4.1.8	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.
D4.1.9	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
D4.1.10	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
D4.1.11	Washroom-Patient-Bariatric	1	5.50	5.50	2-piece, incl. toilet sized with provision for bariatric commode, accessible for Persons with Disabilities.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
D4.1.12	Washroom-Patient	3	4.50	13.50	2-piece, accessible for Persons with Disabilities.
D4.2 - Peritoneal Dialysis Support Services					
D4.2.1	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
D4.2.2	Alcove-Clean Linen	1	2.50	2.50	
D4.2.3	Alcove-Wheelchair	2	2.50	5.00	
D4.2.4	Store-Clean Supplies	1	12.00	12.00	
D4.2.5	Store-General	1	3.50	3.50	Incl. shelving.
D4.2.6	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
D4.3 - Peritoneal Dialysis Staff Support					
D4.3.1	Washroom-Staff	2	3.00	6.00	2-piece.
	TOTAL NSM: Peritoneal Dialysis			**240.50**	
D5 - RENAL OUTPATIENT OPERATIONS HUB					
D5.1	Office-Private	5	9.50	47.50	Incl. 1 workstation.
D5.2	Workstation	70	4.50	315.00	Incl. 1 workstation.
D5.3	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
D5.4	Workstation	2	4.00	8.00	Incl. 1 workstation.
	TOTAL NSM: Renal Outpatient Operations HUB			**374.50**	
D6 - RENAL OUTPATIENT SHARED SUPPORT SERVICES					
D6.1	Workroom-Biomedical Engineering	1	46.00	46.00	Incl. 2 workstations, workbenches for 2, cabinets, shelving, emergency eyewash, 8 RO Water Supply and Drain Boxes, floor drain, 1 City Water Supply and Drain Box.
D6.2	Store-Local Equipment	1	26.00	26.00	Incl. shelving, charging station.
D6.3	Not Used	0	0.00	0.00	
D6.4	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
	TOTAL NSM: Renal Outpatient Shared Support Services			**79.00**	
D7 - RENAL OUTPATIENT SHARED STAFF SUPPORT					
D7.1	Lockers-Staff	1	30.00	30.00	Incl. 84 Z-lockers, 1 shoe rack, split into male and female if required.
D7.2	Washroom/Shower-Staff	2	4.50	9.00	3-piece incl. shower.
	TOTAL NSM: Renal Outpatient Shared Staff Support			**39.00**	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
	TOTAL NSM: RENAL OUTPATIENT			2,112.50	

THE NEW ST. PAUL'S PHASE 1A

E. MATERNITY CENTRE

E. MATERNITY CENTRE

6.1 OVERVIEW

6.1.1 The Maternity Centre is comprised of Single Room Maternity Care (SRMC) for labour and delivery, non-delivery Patient Rooms for antenatal care and post C-section care, Obstetrical ORs, Neonatal Intensive Care Unit (NICU) and Pediatric Support Services, Fetal Monitoring Area, an Assessment and Triage Area and capacity for telemedicine for the remote monitoring and management of complex Patients around the province. The Maternity Centre provides comprehensive care to women during pregnancy, birth and post-partum, neonatal care for newborns requiring monitoring and interventions in the NICU and Pediatric Support Services. Women may have their delivery care provided by a FP, Obstetrician (OB), or a Midwife. Women may have family, doulas or other support people with them during their labour and delivery. Anesthesiologists will be available 24 hours a day.

6.1.2 The Maternity Centre will provide maternity and neonatal care to women and infants from across British Columbia. The Centre will provide safe and compassionate care to low risk women, women with mental health and/or substance use and other urban health issues, and, in close collaboration with BC Women's Hospital, specialized or quaternary level care for complex needs, such as cardiac, renal, gastro-intestinal, hematologic, and/or respiratory concerns that put mother and baby at higher risk for complications during pregnancy and delivery. St. Paul's cares for most of the highest risk maternity cases in the province, particularly cardiac and renal comorbid Patients, and those requiring critical care supports. The Maternity Centre will be an accredited Baby Friendly Initiative (BFI) unit that supports exclusive breastfeeding wherever possible.

6.1.3 The purpose of the Maternity Centre is to achieve the following:

6.1.3.1 The SPH Maternity Centre strives to be at the forefront of exemplary care across the continuum for all pregnant women and their families; from those considered low-risk to those who have a complex-level of medical and social needs. We are committed to providing universal excellence in the care of pregnant women and their families to ensure that they and their newborns are delivered and cared for with the safest and healthiest standards possible. The Maternity Centre will be a provincial leader in Person- and Family-Centred Care The philosophy of Person- and Family-Centred Care will be woven through every aspect of the Maternity Centre, NICU and Pediatric Support Services.

6.2 FUNCTIONAL DESCRIPTION

6.2.1 Scope of Services

6.2.1.1 The Maternity Centre will offer the following services:

6.2.1.1(1) Comprehensive services to low-risk women during pregnancy, birth and post-partum;

6.2.1.1(2) Compassionate, culturally safe and trauma-informed services to all women and families;

6.2.1.1(3) Specialized and quaternary services to women with complex medical needs that put mother and baby at higher risk for complications during pregnancy and delivery and evidence-based care for women with mental health and/or substance use disorder and other urban health issues;

6.2.1.1(4) Access to sub-specialty medical services and critical care technology and interventions; and

6.2.1.1(5) NICU and Pediatric Support Services will enable the mother and baby to stay together to the maximum extent possible. The aim is to move from a Level 2a to a Level 2b service that provides care for neonates less than 32 weeks gestational age and less than 1,500 grams birthweight who do not have surgical needs or other complex medical needs other than respiratory support.

6.2.1.2 Patient Population Served

6.2.1.2(1) Low risk women from across the province;

6.2.1.2(2) Women with high to highest risk complex medical needs, such as cardiac, renal, gastro-intestinal, hematologic, and/or respiratory concerns that put mother and baby at higher risk for complications during pregnancy and delivery and women with mental health and/or substance use disorders and other urban health issues, largely but not exclusively from the Downtown Eastside; and

6.2.1.2(3) The aim is to care for neonates less than 32 weeks gestational age and less than 1,500 grams birthweight in the NICU (Level 2b) and Pediatric Support Services.

6.2.1.3 Scope of Educational Activity

6.2.1.3(1) The Facility will be a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents.

6.2.1.3(2) A wide range of individual and small group clinical teaching activities will be accommodated directly in the clinical care areas. These include:

6.2.1.3(2)(a) Individualized Patient/family education at the bedside;

6.2.1.3(2)(b) Precepting and mentoring learners as per agreements with educational facilities;

6.2.1.3(2)(c) Orientation of new Staff; and

6.2.1.3(2)(d) Complex care rounds that include education around Patients currently on the unit or planning for delivery at NSPH. These involve multiple teams and sites.

6.2.1.3(3) Large formal lectures or large continuing education programs will not be accommodated on the unit.

6.2.1.3(4) In-service education and Patient teaching programs will be conducted on a regular basis throughout the Centre's Patient/clinical care spaces as well as in Staff Conference/Meeting Room and Consult/Interview Rooms equipped with audio/video links. These include:

6.2.1.3(4)(a) Simulation or mock emergency drills with the unit; and

6.2.1.3(4)(b) Basic Cardiac Life Support/Neonatal Resuscitation Program (NRP) training; Fetal Health Surveillance; and Acute Care Resuscitation of the Newborn (ACRORN).

6.2.1.4 Scope of Research Activity

6.2.1.4(1) The vision for the Maternity Centre research activity is to continue to:

6.2.1.4(1)(a) Collaborate on national and international research studies;

6.2.1.4(1)(b) Collaborate across sub-specialities to provide the best evidence based care for pregnant women;

6.2.1.4(1)(c) Continue to contribute to the research education of medical students/residents by providing projects and supervision;

6.2.1.4(1)(d) Support investigator driven research studies; and

6.2.1.4(1)(e) Have workstations to accommodate all world class research/trainees.

6.2.1.5 Scope Exclusions

6.2.1.5(1) Women requiring long term pre- and post-partum parenting assessment and support.

6.2.1.5(2) Pregnant women or post-partum women who need mechanical support for ventilation will require immediate transfer to Critical Care Complex.

6.2.1.5(3) The following outpatient clinics have not been included in the functional planning for the Maternity Centre. Future planning for these will be undertaken as part of the planning for the Outpatient Care Centre and the Clinical Support and Research Centre:

6.2.1.5(3)(a) Primary Care Maternity Clinic – Family Practice and Midwifery;

6.2.1.5(3)(b) Reproductive Mental Health Clinic;

6.2.1.5(3)(c) Obstetrics Clinic;

6.2.1.5(3)(d) Maternal Fetal Medicine Clinic (MFM Clinic);

6.2.1.5(3)(e) Obstetrical Internal Medicine Clinic (OBIM Clinic);

6.2.1.5(3)(f) Complex maternal disease clinics (cardiac, renal, GI, other);

6.2.1.5(3)(g) Rapid Access Pediatric Clinic; and

6.2.1.5(3)(h) Lactation/Breastfeeding Clinic.

6.2.2 Services provided

6.2.2.1 Comprehensive birthing services will be provided in the Maternity Centre, including prenatal education, fetal monitoring, assessment and triage, antenatal services, labour and delivery, post-partum care, obstetrical surgical services and neonatal intensive care services:

6.2.2.1(1) Prenatal Education

6.2.2.1(1)(a) The Maternity Centre will offer prenatal programming in the form of classes. Classes include a tour of the Maternity Centre and a description of how the family journey may occur at the time of labour and birth. The benefits of these classes are: informed Patients who understand their birth and pain relief options and therefore experience reduced anxiety; a potentially shorter labour period; reduction in trauma during birth; and a decrease in overall morbidity and mortality rates among newborn infants. There is furthermore a hypothesis that attendance at prenatal classes reduces reliance on the acute system for emerging care.

6.2.2.1(1)(b) The Maternity Centre will offer Postnatal Care Education to all families in individual or group format prior to discharge with a focus on breastfeeding

support, safer sleeping and immediate postnatal period issues.

6.2.2.1(2) Fetal Monitoring

6.2.2.1(2)(a) Area for scheduled and unscheduled fetal monitoring for antepartum Patients with risk factors, pre-op assessments for scheduled caesarean sections and outpatient inductions of labour.

6.2.2.1(3) Assessment and Triage

6.2.2.1(3)(a) Medical assessment for ante-natal and post-partum obstetrical concerns, such as premature ruptured membranes, or assessment to determine stage of labour.

6.2.2.1(4) Ante-Natal Services

6.2.2.1(4)(a) Observation, medical and surgical management of obstetrical antepartum issues, complex or critical medical maternal issues such as preeclampsia, antepartum hemorrhage, active maternal cardiac disease.

6.2.2.1(5) Labour and Delivery

6.2.2.1(5)(a) Management of low to the highest risk labour and delivery.

6.2.2.1(5)(b) Support for physiologic birth wherever possible using birthing aides, positioning and water immersion.

6.2.2.1(5)(c) Interventions in labour/delivery including assisted vaginal birth.

6.2.2.1(5)(d) Comprehensive pain management.

6.2.2.1(6) Post-Partum Care

6.2.2.1(6)(a) Routine and complex post-partum care following delivery.

6.2.2.1(6)(b) Infant feeding support that focuses on informing women about breastfeeding and supporting their breastfeeding goals.

6.2.2.1(7) Obstetrical ORs

6.2.2.1(7)(a) Procedures include planned C-sections, cervical cerclage, repair of complex tears, removal of retained placenta, bladder repair, post-partum dilation and curettage and management of post-partum hemorrhage, and contingent on dedicated Anesthesiology support, minor gynecological procedures such as dilatation and curettage, hysteroscopy, laparoscopy, and surgical management of Bartholin's cyst or abscess.

6.2.2.1(8) NICU and Pediatric Support Services

6.2.2.1(8)(a) The aim is to move from a Level 2a to a Level 2b service that provides care for neonates less than 32 weeks gestational age and less than 1,500 grams birthweight in order to keep the mother and baby dyad together.

6.2.2.1(8)(b) Care for infants to be transferred from other facilities for a different level of care or to be closer to their family/home.

6.2.2.1(8)(c) Bilirubin Readmission to take care of babies that need phototherapy to treat neonatal jaundice, care of apprehended or abandoned infants and infants whose parents are temporarily unable to care for them.

6.2.2.1(9) Lactation Services

6.2.2.1(9)(a) The Maternity Centre will provide pre and post-partum education and support on breastfeeding and will offer post-partum breastfeeding Clinics to all Patients.

6.2.2.1(9)(b) The Maternity Centre will provide support to parents from trained Lactation Consultants and specialist RNs.

6.2.2.1(9)(c) The Maternity Centre will be an accredited BFI site, where exclusive breastfeeding is supported and will:

- 6.2.2.1.9.(c).1 Have a written breastfeeding policy that is routinely communicated to all Staff.
- 6.2.2.1.9.(c).2 Train all health care Staff in the skills necessary to implement this policy.
- 6.2.2.1.9.(c).3 Inform all pregnant women about the benefits and management of breastfeeding.
- 6.2.2.1.9.(c).4 Help mothers initiate breastfeeding within 30 minutes of birth.
- 6.2.2.1.9.(c).5 Show mothers how to breastfeed and how to maintain lactation even when they are separated from their infants.

6.2.2.1.9.(c).6 Give newborn infants no other food or drink other than breastmilk unless requested by the family, after the benefits of breastfeeding have been explained.

6.2.2.1.9.(c).7 Practice rooming in to allow mothers and infants to remain together 24 hours a day when this is beneficial to both mother and infant.

6.2.2.1.9.(c).8 Encourage breastfeeding on demand.

6.2.2.1.9.(c).9 Give no artificial teats or pacifiers (soothers)to breastfeeding infants unless requested by the parents.

6.2.2.1.9.(c).10 Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the Facility.

6.2.2.1(9)(d) Support will be provided to women who are unable to or choose not to breastfeed, for example because they are taking a medication that is a contraindication to breastfeeding. Access to donor milk and/or formula will be provided.

6.2.2.1(9)(e) A Breastfeeding Room will be available for Staff while on shift.

6.3 OPERATIONAL CONSIDERATIONS

6.3.1 Service Delivery Principles and Methods

6.3.1.1 Service Delivery Principles

6.3.1.1(1) The following principles guide how women and their families are cared for in the Maternity Centre:

6.3.1.1(1)(a) Person- and Family Centered Care - Believing that Patient’s values, needs and autonomy are to be respected and participation and collaboration from partners and families are encouraged. The Maternity Centre strives to maximize mother-infant bonding and family togetherness.

6.3.1.1(1)(b) Baby Friendly Care - Educating our Staff and Patients about the benefits of exclusive breastfeeding when this is the choice of the mother, ensuring that all efforts are made to secure immediate skin-to-skin contact after birth, encouraging breastfeeding as the ideal and avoiding the use of non-medically prescribed top ups using formula milk.

6.3.1.1(1)(c) Culturally and emotionally sensitive care - By seeking to empower women during their birth by treating them with dignity and cultural consideration and honouring the Truth and Reconciliation Calls to Action for Indigenous populations. The Maternity Centre is committed to providing trauma-informed and resiliency focused care, creating a sanctuary for women and their families during pregnancy and childbirth.

6.3.1.1(1)(d) Supporting safe outcomes - By striving to offer various labour strategies to support the potential for physiologic birth and to design a clinical environment that optimizes this goal. Staff at the Maternity Centre believe in being wholly prepared for any eventuality during the birthing process.

6.3.1.1(1)(e) Comprehensive and collaborative - By meeting the physical, social, and mental health needs of pregnant Patients and collaborating with multiple disciplines to achieve this goal and desire to have healthy outcomes for women and their infants. The Maternity Centre works in close collaboration with BC Women’s Hospital in clinically complex cases in order to optimize outcomes.

6.3.1.1(1)(f) Innovative and evidence-based - By striving to learn from past experiences, change with emerging evidence, and challenge old thoughts. The Maternity Centre strives to generate new research to guide future evidence-based practices.

6.3.1.1(1)(g) Excellence in teaching - As a clinical education centre for many campuses and across many disciplines, by striving to provide mentorship, evidence-based learning and invaluable experiences for students, while maintaining respect and dignity for Patients at a vulnerable period in their lives.

6.3.1.1(1)(h) Continuity of care - By striving to provide a seamless linkage to community, community-based clinics, primary care and follow-up consultative expertise as required.

6.3.1.2 Patient and Family Management Processes and Flows

6.3.1.2(1) Patient

6.3.1.2(1)(a) Referral and Registration Process

6.3.1.2.1.(a).1 Scheduled maternity Patients are referred by their obstetrical care provider for outpatient, labour/delivery, inpatient or surgical services.

6.3.1.2.1.(a).2 Pre-registration will occur at the Care Team Station. Capability for self-registration remotely is included. Registration and various pre-natal forms are sent by the Care Provider's office at 20, 28 and 36 weeks' gestation; or they may be provided to the Unit Clerk and/or Nursing Staff on arrival to the unit.

6.3.1.2(1)(b) Fetal Monitoring

6.3.1.2(1)(c) Arrival/Assessment

6.3.1.2.1.(c).1 Patients may arrive in one of several ways:

(c).1.1 Labouring Patients may arrive directly at the Maternity Centre.

(c).1.2 Labouring Patients who arrive after hours may arrive via the Main Entrance and proceed directly to the Maternity Centre.

(c).1.3 Labouring Patients that arrive via BCEHS are triaged to the Maternity Centre via the ED.

(c).1.4 Labouring Patients that arrive at the ED entrance are directed to the Maternity Centre for triaging and the Maternity Centre is informed of an incoming Patient immediately.

(c).1.5 High-risk maternity Patients are transferred from another hospital for higher level of inpatient, labour/delivery or surgical care.

6.3.1.2.1.(c).2 Upon arrival at the Maternity Centre, the Patient is registered. The Patient is then assessed and an appropriate disposition is made - admission, discharge, transfer or diversion. All maternity Patients are triaged through the Assessment and Triage Area, pending disposition.

6.3.1.2.1.(c).3 Women who have a planned C-section are screened through their OB’s office prior to admission. The OB’s office completes the admission paperwork and forwards it to the Maternity Centre. On the day of the scheduled C-section, the Patient is admitted

by the Unit Coordinator and is directed to the OR.

6.3.1.2.1.(c).4 Neonates requiring intervention and a higher level of care will be transferred directly to the NICU and Pediatric Support Services from the OR or SRMC. The admission process will occur upon admission to the unit.

6.3.1.2.1.(c).5 Babies re-admitted for neonatal jaundice will be admitted directly to the NICU and Pediatric Support Services with their parents under the care of the pediatrician to the most appropriate bed. Any babies admitted from the community will be admitted to a Patient Room-NICU-Airborne Isolation-Hybrid. The admission process will occur upon transfer or admission to the unit.

6.3.1.2(1)(d) Labour and Delivery

6.3.1.2.1.(d).1 Normal deliveries will be managed in the standard Patient Room-SRMC including all phases of labour, delivery and post-partum care through to discharge. If the baby is in distress at birth, resuscitation and stabilization will be provided either in Patient Room-SRMC or in the Patient Room-NICU, which will be appropriately equipped to care for both mother and infant in the same space.

6.3.1.2.1.(d).2 Women who are diagnosed with high risk factors for delivery and low-risk women when there are no Patient Room-SRMC spaces available will be cared for in the Patient Room-Ante-Natal/Post-Section. Patients will be monitored throughout their labour by nursing Staff, physicians and/or midwife within the individual rooms.

6.3.1.2.1.(d).3 The Staff of the Maternity Centre will attend the labouring woman’s needs by providing comprehensive and individualized labour care. This will be accomplished by offering Patient and family choice, flexibility in room environment, and supportive labour care throughout the birth experience.

6.3.1.2(1)(e) C-Section and Post-Partum Surgery

6.3.1.2.1.(e).1 The majority of emergency and scheduled (either elective, low risk or complex high risk) C-section deliveries will be managed in the Obstetrical ORs in the Maternity Centre, with

the mother and baby returning to Patient Room Ante-Natal/Post Section for post-partum care.

6.3.1.2.1.(e).2 Some High risk scheduled or emergency C-sections will be performed in an OR on the Surgical and Interventional Services.

6.3.1.2.1.(e).3 Women who require post-partum surgery may have their surgery in one of the Obstetrical ORs in the Maternity Centre or in an OR on the Surgical and Interventional Services.

6.3.1.2.1.(e).4 If C-section is required, the mother and baby are cared for in a C-section Recovery Bay immediately after the C-section delivery, and then returned to their Patient Room-SRMC or are transferred to a Patient Room-Ante-Natal/Post-Section until discharge. Mothers delivering by caesarean section will be recovered with their babies whenever possible.

6.3.1.2(1)(f) NICU and Pediatric Support Services

6.3.1.2.1.(f).1 If the baby requires intensive care, the mother (if medically stable) and baby are transferred to single room care in the NICU and Pediatric Support Services.

6.3.1.2.1.(f).2 Newborn babies and possibly their mothers may be transferred to the NICU and Pediatric Support Services from the Maternity Care Unit, the Obstetrical OR, the ED, the main OR or Critical Care Complex.

6.3.1.2.1.(f).3 Newborn babies requiring specialist services, surgery or high intensity ventilator support will be transferred to the BC Children's Hospital's NICU.

6.3.1.2.1.(f).4 Patient Room-NICU will have the flexibility to be utilised as nursery rooms for babies who do not have continuous or on-going maternal or family care.

6.3.1.2.1.(f).5 Patient Room-NICU will have the flexibility to enable mothers to be cared for alongside their infants.

6.3.1.2(1)(g) Discharge

6.3.1.2.1.(g).1 Mother and infant are usually discharged together, but one may be discharged prior to the other, as clinically indicated and appropriate.

6.3.1.2.1.(g).2 For all Patients, discharge orders are required from the MRP. Discharge planning starts at admission. Nurses, midwives, physicians and allied health professionals will provide education and follow up instructions as needed. Referrals will be made to Public Health for Patients who meet the criteria. In addition, referrals will be made as needed to home care and other home and community care services, as needed for ongoing care.

6.3.1.2.1.(g).3 Maternity Services

(g).3.1 Admitted maternity Patients will be discharged when treated or recovered. Mother and baby are discharged together unless the baby requires intensive care.

(g).3.2 If the mother's condition warrants, she will be transferred closer to home to a community hospital for further care or transferred to a higher level of care.

6.3.1.2.1.(g).4 NICU and Pediatric Support Services

(g).4.1 Babies in the NICU and Pediatric Support Services will be discharged home or transferred to nursery care closer to home.

6.3.1.2(2) Family

6.3.1.2(2)(a) Maternal and newborn care will be guided by a Person- and Family-Centred Care model that promotes the initiation of skin-to-skin contact between mother and baby as soon as possible upon delivery and accommodates continuous rooming in of mother or guardian and/or partner/family/support Person. This approach has been demonstrated to reduce length of stay, promote successful lactation and breastfeeding, and may have long-term positive effects on neuro-development of the newborn.

6.3.1.2(2)(b) The mother and her support Person(s) are considered an integral part of the care team. The mother is an active participant on this team and is central to decision making in both the Maternity Centre and NICU and Pediatric Support Services.

6.3.1.2(2)(c) Mother and her family or support Person(s) will receive instruction and support to provide as much hands-on care as possible. This approach has been

demonstrated to reduce length of stay, promote successful lactation and breastfeeding, and may have long-term positive effects on neuro-development of the newborn.

6.3.1.2(2)(d) Family or support Person(s) may attend the Patient Room-SRMC, Obstetrical OR or NICU and Pediatric Support Services with the mother or mother-baby dyad in the case of NICU and Pediatric Support Services.

6.3.1.2(2)(e) One support Person designated by the mother may be present in the Obstetrical OR.

6.3.1.2(2)(f) The support Person present in the Obstetrical OR will change clothing in a designated area in order to be ready to accompany the Patient in the Obstetrical OR.

6.3.1.2(2)(g) Family and friends will be in the Waiting areas, the Patient Room-SRMC or non-delivery rooms and will have Convenient Access to a dedicated lounge area.

6.3.1.3 Patient Information Management

6.3.1.3(1) It is anticipated that electronic technology, including electronic clinical information systems, capability for self-registration remotely, and closed loop medication management will be used to manage most aspects of each Patient's care.

6.3.1.3(2) All Patient related information will be maintained in the EMR.

6.3.1.3(3) EMR will be automated with access to information wirelessly or by means of computer terminal located at all Staff work areas distributed through the Maternity Care Unit and NICU and Pediatric Support Services. Computer charting will occur at the bedside, likely through the use of hand-held wireless devices. Ordering and scheduling of tests, procedures and medications will be managed through the same terminals in the Staff work areas or though hand-held devices.

6.3.1.3(4) All Care Team Stations will accommodate documentation capabilities for maintaining both paper and electronic charts/records.

6.3.1.3(5) The ability to access and manage Electronic Fetal Monitoring (EFM) and physiological monitoring is required. Monitoring capabilities will extend in to all areas of the unit.

6.3.1.3(6) Electronic Patient status boards and Patient (fetal and maternal) monitoring will be available at each Care Team Station.

6.3.1.3(7) Staff will be able to communicate utilizing hands-free communication system.

6.3.1.3(8) Electronic tracking devices are required for mothers and babies for security.

6.3.1.4 Care Provider Work Processes and Flows

6.3.1.4(1) Staffing information will be a managed corporate service. Scheduling, including providing for sick and vacation relief will be conducted centrally, and off-site. Notices to individual Staff regarding their schedules will be communicated electronically.

6.3.1.4(2) At the start of shift, Staff will pick up a wireless communication device that is linkable and with the ability to view physiologic monitoring of the Patients they are assigned to.

6.3.1.4(3) An integrated, linked Nurse Call System with ability to link and receive physiologic monitoring will be required for the Unit.

6.3.1.4(4) Staff will be able to communicate utilizing a hands-free communication system.

6.3.1.4(5) A Patient presenting in labour or with a concern to the assessment zone will be triaged by a nursing Staff member and either admitted to a Patient Room-SRMC or an Obstetrical OR within the Centre. The MRP of the expectant mother will be called or paged to attend the Patient.

6.3.1.4(6) For planning purposes, it is understood that there can be a surge of Patients at any time, reflecting the unpredictability associated with obstetrics. Staff and physical resources will be able to respond accordingly.

6.3.1.4(7) An interdisciplinary and multi-team approach to care will be carried out in the various zones and clinical areas. Workstations at the Care Team Stations, rooms for visiting professionals and for interviewing/counselling will achieve an ordered use of space.

6.3.1.4(8) Minimize nurse transit time and maximize nurse to Patient sightlines by applying Lean principles and locating frequently utilized Staff work areas and support spaces close to the Assessment Area, SRMC, Obstetrical OR and NICU and Pediatric Support Services spaces.

6.3.1.4(9) Care providers require a Staff Conference/Meeting room with audio-visual capabilities where all members of the multidisciplinary team, including those from other sites, can discuss a Patient’s care.

6.3.1.4(10) Interdisciplinary conversations occur several times per day on the unit and will be private and not overheard by Patients, family members or care providers not involved in the care plan. Activities in the Care Team Stations will not disturb Patients; therefore, the Care Team Stations will be designed with appropriate sound control measures as per as per Appendix 3C [Acoustic and Noise Control Measures].

6.3.1.4(11) Multidisciplinary sign over (this includes nurses, OB's and residents) is central to care at the Maternity Centre. It occurs twice per day. There will be an area to accommodate this. Patient board will be visible to the care team and will protect Patient privacy.

6.3.1.4(12) The Medication Room will be discreetly located with Line of Sight from the Care Team Station and will be securable with a separate lockable narcotic cabinet.

6.3.1.4(13) Medical imaging examinations (e.g., mobile ultrasound - either low resolution for rapid clinical care or high resolution for complex procedures) will be carried out at the bedside. A dedicated alcove or room for storage of mobile Equipment and recharging batteries will be provided.

6.3.1.4(14) Neonatal resuscitation teams require immediate access to the Maternity Centre and NICU and Pediatric Support Services for STAT calls.

6.3.1.4(15) Students

6.3.1.4(15)(a) Students from all professions will be integrated into all aspects of Patient, family and provider space.

6.3.1.5 Clinical and Logistical Support Processes and Flows

6.3.1.5(1) Codes Support

6.3.1.5(1)(a) The Maternity Centre will be supported by the Facility Code Blue Team for all adult codes.

6.3.1.5(1)(b) RTs will attend if Code Pink (Maternal) call is made, participating in the NRP if required.

6.3.1.5(1)(c) RTs will attend if a Code Pink (Neonate) call is made.

6.3.1.5(2) Anesthesia Services

6.3.1.5(2)(a) Dedicated 24-hour Anesthesiology coverage will be available for scheduled C-sections, emergency C-sections and labour interventions.

6.3.1.5(2)(b) Anesthesiology coverage will also be called for from Surgical and Interventional Services making Direct Access to the Maternity Centre critical.

6.3.1.5(3) Medical Imaging

6.3.1.5(3)(a) Portable ultrasound will be used in the Fetal Monitoring Area, the Patient Room-SRMC and the Obstetrical ORs for fetal monitoring, fetal positioning and assessment, and anesthesia technical procedures, as required.

6.3.1.5(3)(b) Patients will be transported to the Medical Imaging Component for further imaging as required.

6.3.1.5(3)(c) Access to spiral CT, Doppler US will be provided 7 days a week during day hours.

6.3.1.5(3)(d) Electronic image viewing will be available at each Care Team Station.

6.3.1.5(4) Laboratory Services

6.3.1.5(4)(a) The Main Laboratories, including transfusion medicine, will be available to support the Maternity Centre and NICU and Pediatric Support Services.

6.3.1.5(4)(b) Convenient Access to transfusion medicine is required to provide blood products on a STAT (turnaround time (TAT) 20 minutes) or urgent (TAT 60 minutes) basis as required.

6.3.1.5(4)(c) Laboratory Staff will be responsible for taking blood while nursing Staff will continue to collect other specimen as required 24/7.

6.3.1.5(4)(d) Specimen will be transported to the Main Laboratories for testing via the conveyance system or porters.

6.3.1.5(4)(e) With the potential for new positive identification technology, identification of both Patient and specimen will be electronically matched.

6.3.1.5(4)(f) Results will be made available through the EMR.

6.3.1.5(5) Pharmacy Services

6.3.1.5(5)(a) Pharmacy services will be provided on a 24/7 basis from the Main Pharmacy that will be located remotely from the Maternity Centre and NICU and Pediatric Support Services. Medications will be distributed from

the main pharmacy to Medication Rooms on the unit. The NICU and Pediatric Support Services will have access to high acuity medications that are needed for acute management and stabilization of a sick newborn, including appropriate neonatal anesthetic medications intubation, surfactant and antibiotics. There is a requirement to be able to access medications before the baby is entered into the EMR.

6.3.1.5(5)(b) Pharmacy will mix all high-risk medications. Pharmacy will also be responsible for Neonatal TPN and breastmilk additives.

6.3.1.5(5)(c) A unit dose distribution system and ADCs will be utilized.

6.3.1.5(5)(d) Anesthesia medications will be obtained from a controlled access cabinet within the Medication Room located in the Obstetrical OR zone.

6.3.1.5(5)(e) Patient specific medications will be stored in the Patient Room.

6.3.1.5(6) Respiratory Therapy Services

6.3.1.5(6)(a) RTs are called when a newborn is having trouble breathing or requires ventilation. RT Staff will also attend high-risk deliveries, if required.

6.3.1.5(6)(b) RTs will attend if a Code Pink call is made, participating in the NRP, and support maternity Patients having ongoing respiratory issues.

6.3.1.5(6)(c) RTs are also members of the Code Blue team and will be ACLS trained.

6.3.1.5(7) Allied Health

6.3.1.5(7)(a) Allied Health Clinical Services that will be provided at the Patient bedside or in dedicated therapy and treatment spaces within each unit include: clinical pharmacy, Physiotherapy, nutrition, OT, SLP, RT and Social Work.

6.3.1.5(8) Integrated Protection Services

6.3.1.5(8)(a) The Maternity Centre will have the physical capability of immediate controlled access in a Code Amber situation. Panic buttons will be provided at Care Team Stations.

6.3.1.5(8)(b) Access to the Maternity Centre will be secured with access control for care providers, and video intercom entry for Patients and family members accepted by the Patient.

6.3.1.5(9) Language Services

6.3.1.5(9)(a) Interpreters will be provided as needed, within 10 minutes of request for telephonic interpreters.

6.3.1.5(10) Equipment and Instruments/ Biomedical Engineering

6.3.1.5(10)(a) Sterile supplies and Equipment for C-sections and other procedures will be supplied to the unit from the MDRD, with soiled Equipment returning to the MDRD for reprocessing.

6.3.1.5(10)(b) Additional sterile supplies and disposables will be brought to the unit from dedicated central storage.

6.3.1.5(10)(c) Sufficient equipment and supplies will be stored at the unit level for normal operation with automatic monitoring of inventory and re-supply using Smart technology.

6.3.1.5(10)(d) The Equipment Depot (See Component O) will store all additional Equipment that can be quickly brought to the Maternity Centre by multi-skilled worker or AGVs.

6.3.1.5(10)(e) Necessary equipment will be kept on the unit for ease of use and storage; this will be monitored and stocked by central supply and cleaned as per IPAC protocols.

6.3.1.5(10)(f) Access to cell saver and technician are required for both scheduled and emergent situations.

6.3.1.5(10)(g) RTLS tagging of Equipment will allow for tracking and monitoring.

6.3.1.5(11) Consumable Supplies

6.3.1.5(11)(a) Consumable supplies will be kept in the Store-Clean Supplies close to POC. Items will be maintained with a minimum inventory level, which will trigger a re-ordering process. RTLS tagging of supplies will allow for tracking and replenishment. Store-Clean Supplies will also store supplies. AGVs will be employed to transport materials and supplies to FM Service Elevator lobbies from the Logistics level.

6.3.1.5(12) Laundry and Linen Services

6.3.1.5(12)(a) Clean linen will be delivered daily to meet the specific needs of the program; linen will be delivered to the designated Store-Clean Supplies as well as designated Alcove-Clean Linen located within the Maternity Centre and NICU and Pediatric Support Services.

6.3.1.5(12)(b) The NICU and Pediatric Support Services will be equipped with a washer/dryer to wash and dry neonate clothing and linens.

6.3.1.5(12)(c) Soiled linen will be placed in hampers and removed from the Component via housekeeping Staff and transported by AGV.

6.3.1.5(12)(d) Sterile pack for C-sections will be delivered directly to the Obstetrical ORs by an outside vendor and used packs will be picked up on a scheduled basis. An inventory of sterile packs will be maintained by the vendor.

6.3.1.5(12)(e) Storage and pathways for clean supplies, equipment and linen will be kept separate from soiled supplies, equipment and linen.

6.3.1.5(13) Waste Management

6.3.1.5(13)(a) Waste products, recycling and bio-HAZMAT will be separated at POC and stored in holding areas until pick-up by housekeeping Staff and transported by AGV’s.

6.3.1.5(13)(b) Clinical and other waste will be removed from Patient Rooms by housekeeping to Disposal Holds located on the unit.

6.3.1.5(13)(c) Waste containers will be monitored, removed and replaced by housekeeping Staff and transported by AGVs.

6.3.1.5(14) Food Services

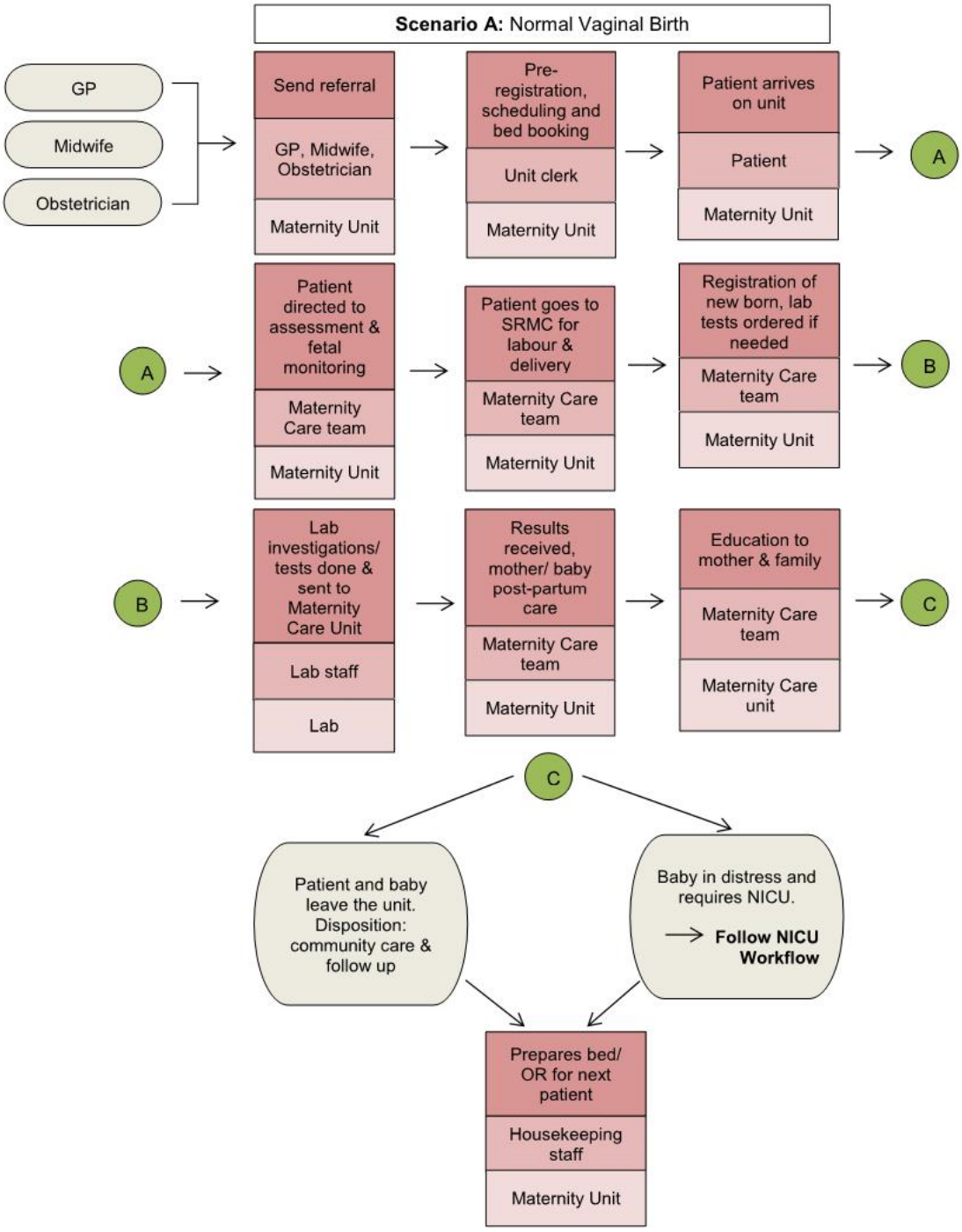
6.3.1.5(14)(a) Food for meal assembly in the Nutrition Centre will be delivered chilled in food carts from the CFP, held, heated, assembled on trays and delivered and served to the Patients.

6.3.1.5(14)(b)	Food trays will be retrieved by Food Services Staff and returned to the Nutrition Centre for processing.

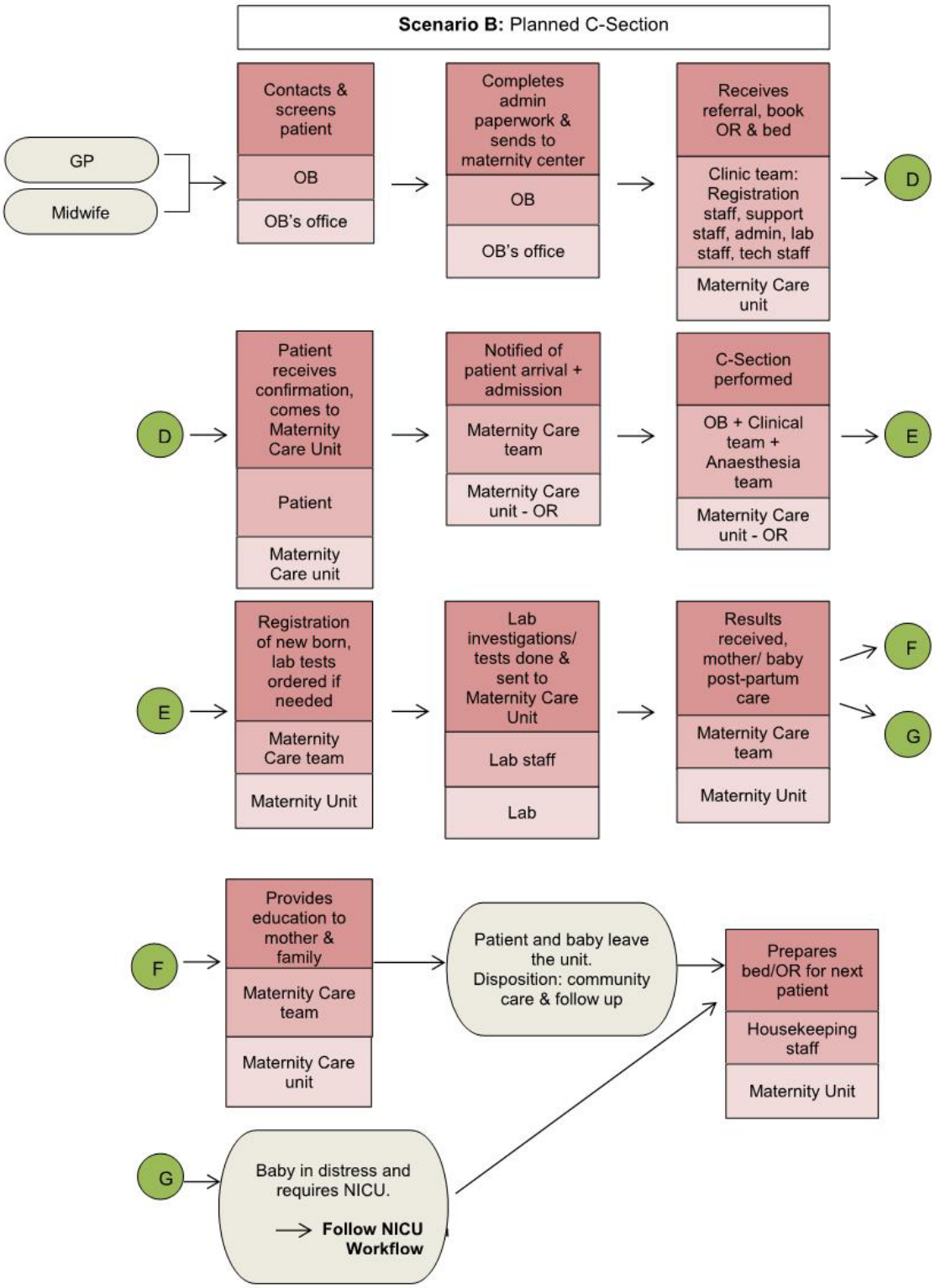
6.3.2 Workflows

6.3.2.1 The Maternity Centre workflows are depicted in the following workflow diagrams.

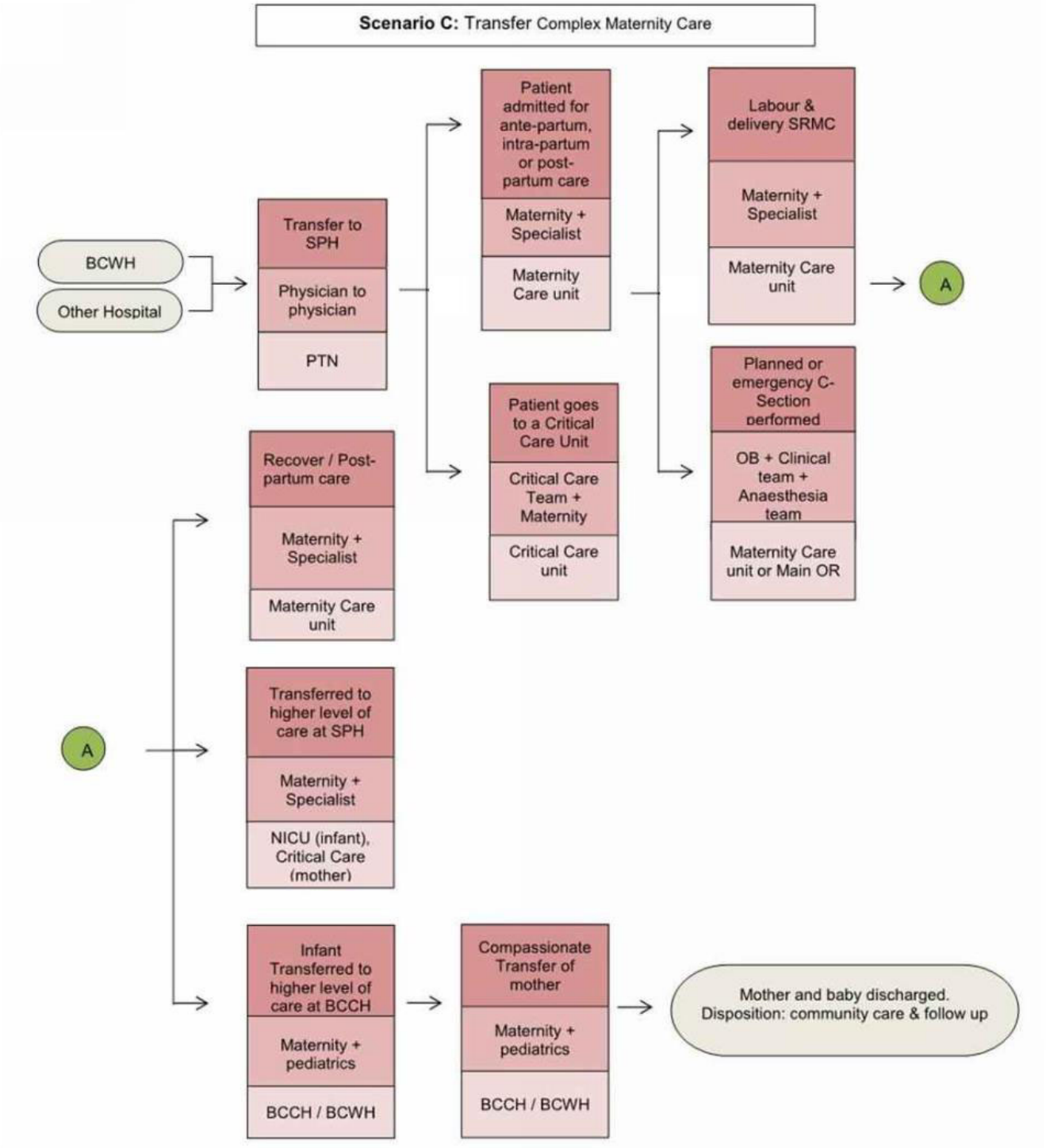
E2. MATERNITY CARE UNIT WORKFLOW DIAGRAM - SCENARIO A: NORMAL VAGINAL BIRTH



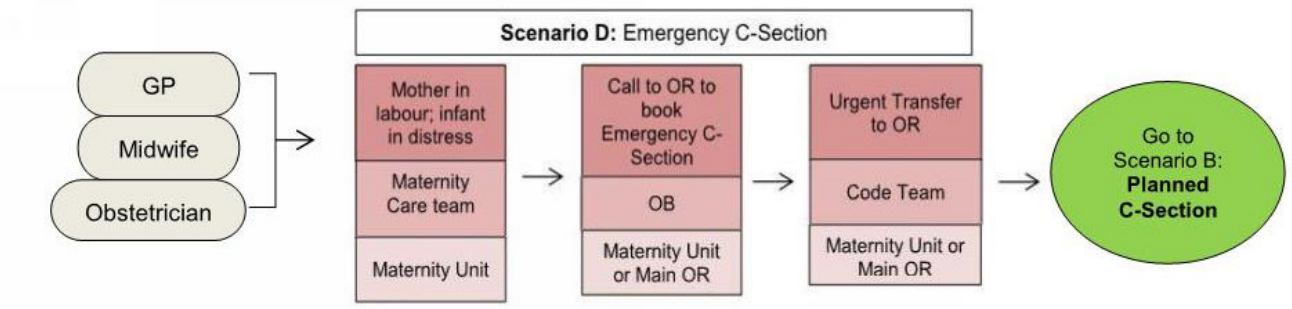
E2. MATERNITY CARE UNIT WORKFLOW DIAGRAM - SCENARIO B: PLANNED C-SECTION



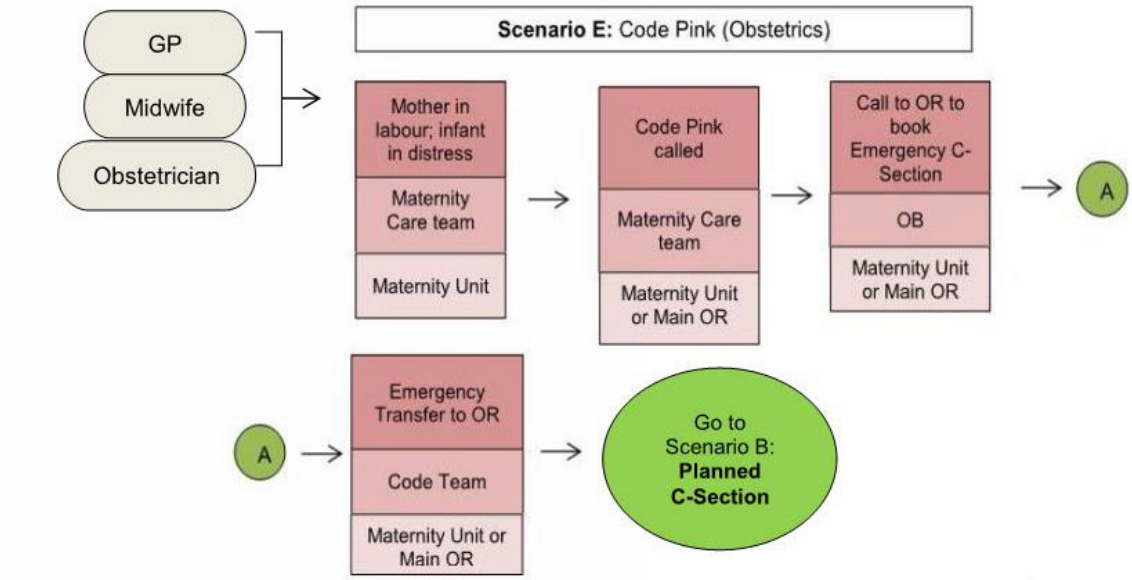
E2. MATERNITY CARE UNIT WORKFLOW DIAGRAM - SCENARIO C: TRANSFER COMPLEX MATERNITY CARE



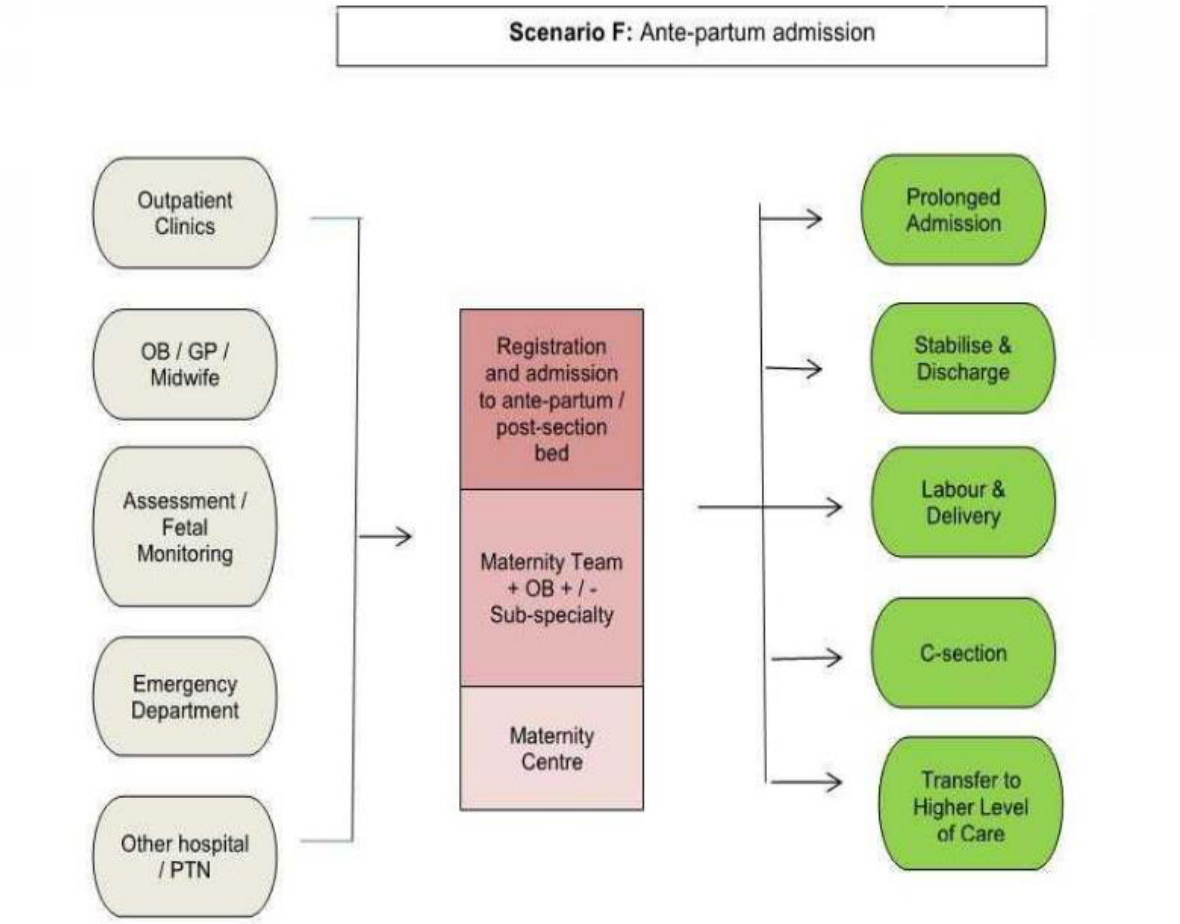
E2. MATERNITY CARE UNIT WORKFLOW DIAGRAM - SCENARIO D: EMERGENCY C-SECTION



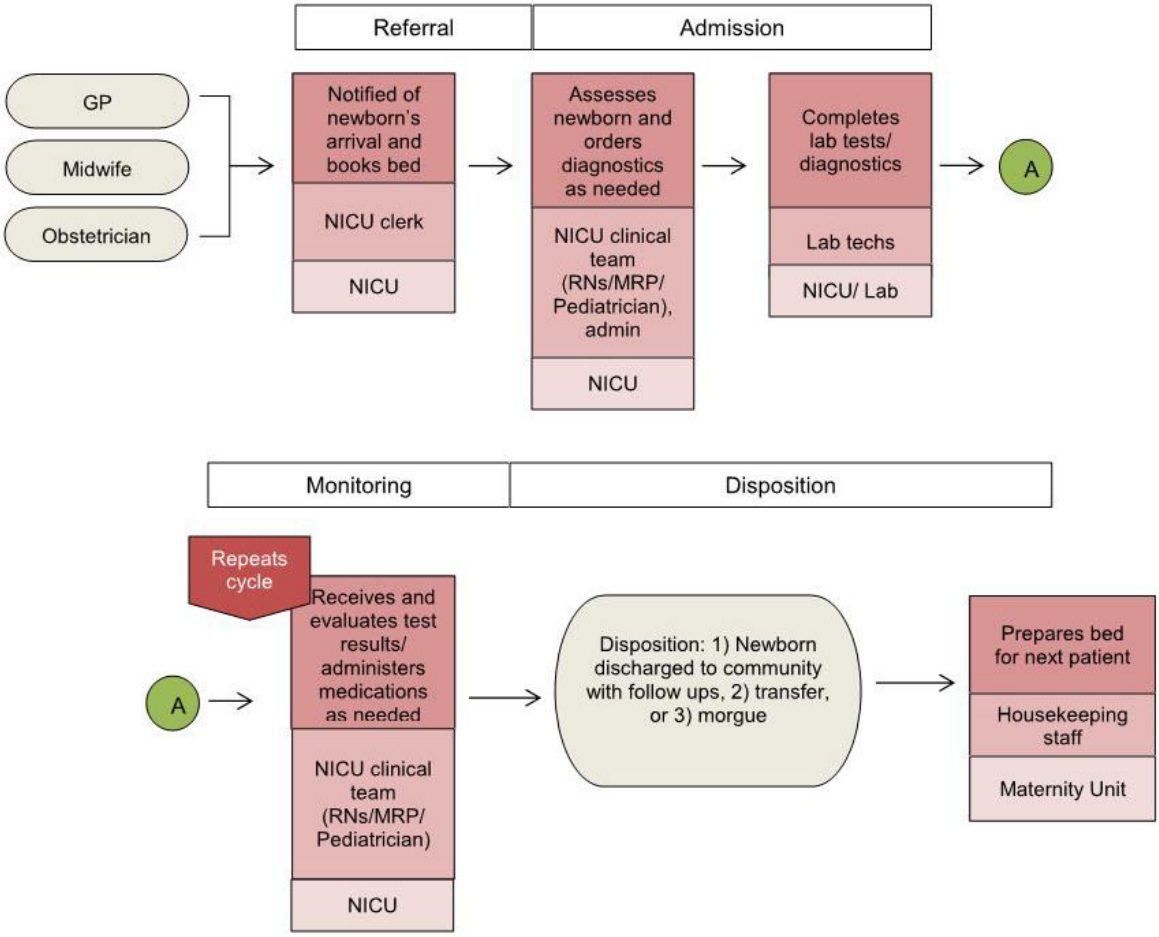
E2. MATERNITY CARE UNIT WORKFLOW DIAGRAM - SCENARIO E: CODE PINK (OBSTETRICS)



E2. MATERNITY CARE UNIT WORKFLOW DIAGRAM - SCENARIO F: ANTE-PARTUM ADMISSION



E3. NICU AND PEDIATRIC SUPPORT SERVICES WORKFLOW DIAGRAM



6.3.3 Hours of Operation

6.3.3.1 The Maternity Centre and NICU and Pediatric Support Services will be operational 24 hours per day, 365 days per year.

6.3.4 Workloads

6.3.4.1 The maximum estimated workload for this Component is shown in the following table.

MATERNITY CENTRE STAFF CATEGORY	PEAK SHIFT
Direct Care Team Staff: Maternity	
Physician	15
Medical Resident	15
Midwife	2
Clinical Nurse Specialist	1
Clinical Nurse Educator	2
Clinical Nurse Leader/Charge Nurse	2
Nurse	20
Respiratory Therapist	1
Cardiology Technologist	1
Renal Technologist	1
Social Worker	2
Lactation Consultant	1
Spiritual Care	1
Dietician	1
Unit Clerk	2
Housekeeper	3
Subtotal, Direct Care Team Staff: Maternity	**70**
Other	
Student	15
Volunteer	1
Researcher and Other	1
Subtotal, Other	**17**
Shared Staff	
Program Director	1
Medical Director	2
Physician Consultants	5

MATERNITY CENTRE STAFF CATEGORY	PEAK SHIFT
Patient Care Manager	1
Administration Assistant	1
Outreach Nurse	1
Quality Assurance	1
Clinical Pharmacist	1
First Nations Support	2
Porter Ward Aide	4
Subtotal, Shared Staff (not included in daytime peak)	**19**
TOTAL: Maternity	**87**
Direct Care Team Staff: NICU and Pediatric Support Services	
Physician	3
Medical Resident	4
Nurse Educator	1
Clinical Nurse Leader/Charge Nurse	1
Nurse	10
Respiratory Therapist	1
Social Worker	1
Spiritual Care	1
Unit Clerk	1
Housekeeper	1
Subtotal, Direct Care Team Staff: NICU and Pediatric Support Services	**24**
Other	
Student	3
Volunteer	1
Researcher and Other	1
Subtotal, Other	**5**
TOTAL: NICU and Pediatric Support Services	**29**
DAYTIME PEAK TOTAL: Maternity Centre (Maternity and NICU and Pediatric Support Services)	**116**

6.4 DESIGN CRITERIA

6.4.1 General Requirements

6.4.1.1 The Maternity Centre requires the technology and security features necessary to ensure Patient and Staff safety without those features detracting from the healing environment.

6.4.1.2 Provide infrastructure for electronic wall mounted displays in the Waiting area as determined in consultation with the Owner.

6.4.1.3 Maternity Centre will be designed to consider both Universal Design and flexibility. Recurrent Rooms such as the Patient Room-NICU, Patient Room-Ante-Natal/Post-Section and Patient Room-SRMC require standardization; refer to Schedule 3 [Design and Construction Specifications] section 3.6 Standardization.

6.4.1.4 Wall, floor and ceiling surfaces, as well as furnishings, will be carefully designed and selected to create a calm and safe environment for Patients. The design of Millwork, colour schemes and lighting will promote a therapeutic environment.

6.4.1.5 The design will incorporate Indigenous design elements to support cultural safety for Indigenous women and their families.

6.4.1.6 The Facility will be a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents. Work spaces will be enabled to have private, confidential conversations and be equipped with teaching capability.

6.4.1.7 Conference/Meeting Room-Medium, Consult/Interview Rooms and offices will have acoustic considerations to allow for privacy of conversations and recording or dictation as per Appendix 3C [Acoustic and Noise Control Measures].

6.4.1.8 Conference/Meeting Room-Medium requires IM/IT recording and teaching capability.

6.4.1.9 Technology will be hidden away as much as possible when not in use, but easily accessible for urgent access, using Millwork adjacent to the head of bed and infant headwall.

6.4.1.10 Patient Rooms will be sound attenuated to prevent sound transmission between rooms. Rooms will be constructed with a high level of sound isolation; refer to Appendix 3C [Acoustic and Noise Control Measures].

6.4.1.11 Since intense light can be harmful to an infant’s developing retina, lighting will be adjustable.

6.4.1.12 Windows will be provided to maximize views and natural light in Maternity Care Unit and NICU and Pediatric Support Services for Patients, Staff and visitors while ensuring privacy for Patients/families.

6.4.1.13 Provide clear and Convenient Access to the Maternity Centre for Patients arriving during the day and after hours from the underground parking, Main Entrance and Public Passenger Elevators.

6.4.1.14 Provide simple and intuitive Wayfinding for Patients and public coming to the Maternity Centre.

6.4.1.15 Zones of activity within the Component include the following:

6.4.1.15(1) Maternity Centre Entrance

6.4.1.15(2) Maternity Care Unit

6.4.1.15(2)(a) Assessment and Triage Area/Fetal Monitoring Area

6.4.1.15(2)(b) Delivery/Inpatients

6.4.1.15(2)(c) C-Section and Procedures

6.4.1.15(3) NICU and Pediatric Support Services

6.4.1.15(4) Maternity Centre General Workstations

6.4.1.16 Maternity Care Unit and NICU and Pediatric Support Services will have Convenient Access to ED via Patient Transfer/Staff Service Elevators.

6.4.1.17 Staff in the Maternity Centre C-Section and Procedures area will have Direct Access through Back of House circulation to the semi-restricted circulation (racetrack) of the Surgical and Interventional Services Component by means of a convenience stair and Patient Transfer/Staff Service Elevators.

6.4.1.18 Maternity Care Unit and NICU and Pediatric Support Services require Convenient Access to Main Pharmacy and Main Laboratories, including Transfusion Medicine.

6.4.1.19 C-Section and Procedures Sterile Core-Equipment/Supplies will have Direct Access to MDRD Clean Elevator Loading Area via Clean MDRD Elevators. C-Section and Procedures will have Direct Access to MDRD Workroom-Decontamination via Dirty MDRD Elevators. Staging and loading of case carts into Dirty MDRD Elevators will not block circulation or access to the elevators or other areas in the Maternity Centre.

6.4.1.20 Direct Access between the Maternity Care Unit and NICU and Pediatric Support Services is required in addition to Direct Access to each from the Maternity Centre Entrance zone through General Circulation.

6.4.1.21 The unit layout will follow Lean design principles to reduce travel distance to/from the Patient bedside and enable Staff visual supervision from Care Team Stations and Reception/Registration.

6.4.1.22 Minimize Staff travel distances and maximize Staff-Patient Line of Sight by applying Lean principles and locating frequently utilized Staff areas and support spaces close to Patient spaces.

6.4.1.23 Medication Rooms will be located centrally with Convenient Access to Care Team Stations.

6.4.1.24 Medication Room doors require glazing for visibility.

6.4.1.25 Care Team Station design will allow for collaboration among Staff.

6.4.1.26 The design will maximize the Line of Sight from Care Team Stations to the entry point into all Patient Rooms.

6.4.1.27 Pneumatic Tube Stations will be located centrally within Care Team Stations.

6.4.1.28 Support Services and Storage including Soiled Utility, Disposal Hold, Equipment storage and Store-Clean Supplies will be located centrally with Convenient Access to Patient Rooms to optimize flow and promote best Infection Prevention and Control protocols.

6.4.1.29 Medication Rooms and Store-Clean Supplies will be adjacent. Medication Rooms will have one (1) door from the corridor and another door connecting to the Store-Clean Supplies, so Staff can easily retrieve supplies for the setup of IV medications. Store-Clean Supplies will have another door from the corridor.

6.4.1.30 Store-Local Equipment and Store-Central Equipment will be grouped with Medication Room and Store-Clean Supplies.

6.4.1.31 Soiled Equipment Hold and Soiled Utility will be located adjacent to each other with a door between the two rooms, in addition to the doors connecting these spaces to the corridor. The primary function of Soiled Utility is to provide a space to dispose of the full spectrum of clinical waste including bedpan disinfectors and assorted bins for cytotoxic and biomedical waste (e.g. used blood bags), perform limited soiled activities such as gross decontamination/rinsing/soaking of surgical type instruments, and temporarily store clinical specimens. The primary function of the Soiled Equipment Hold is to sequester and marshal soiled equipment and provide a dedicated space to clean them. The design will allow for one way flow from soiled to clean, separate soiled and clean to prevent cross-contamination and provide a dedicated unobstructed cleaning zone, with Convenient Access from all clinical spaces in the area it is intended to serve. Cleaned equipment will be moved to the Store-Local Equipment or Store-Central Equipment in a different and physically separate location away from Soiled Utility and Soiled Equipment Hold.

6.4.1.32 Provide hand hygiene sinks which are directly accessible and distributed appropriately in all clinical areas as per Infection Prevention and Control protocols.

6.4.1.33 On-Call Rooms will be in a quiet Back of House area of the Maternity Centre to provide privacy for Staff using these rooms.

6.4.1.34 Washroom-Staff will be placed with Convenient Access to Staff work areas.

6.4.1.35 Delivery of supplies, medications, linens, and food to the Maternity Care Unit and NICU and Pediatric Support Services will be via multi-skilled workers and transported through AGV and dedicated FM Service Elevators.

6.4.1.36 For Staff safety, there will be no blind corners or areas where Staff may become entrapped. Staff work areas will avoid Staff isolation or be equipped with appropriate communication mechanisms for Staff to be able to summon help.

6.4.1.37 Staff support areas will be Back of House, separated from visitor and Patient areas.

6.4.1.38 Patient and Staff access to the ORs will be from a semi-restricted zone corridor. Sterile supplies coming from the MDRD or outside vendors will be stored in the Sterile Core-Equipment/Supplies. Scrub stations will be located immediately outside the entrance to each of the ORs in the semi-restricted zone. The restricted zone includes the Operating Room-C-Section and Sterile Core-Equipment/Supplies.

6.4.1.39 The Recovery Bay-C-Section will be directly adjacent to the Operating Room-C-Section such that transporting the Patient from an OR to the Recovery Bay-C-Section will occur in the semi-restricted corridor.

6.4.1.40 Each zone of activity of this Component will have access control, remote door release and IP video surveillance.

6.4.1.41 At the public entrances and/or area that divides the zones of activity, there will be intercoms for visitors to communicate with Staff. They will have video capability and the ability to allow remote entry (i.e., unlock doors), and be programmable to allow Staff to easily redirect the intercom between zones of activity.

6.4.1.42 Visitor access/egress to and from the Component will always be restricted by Staff and controlled though the security systems as described in Schedule 3 [Design and Construction Specifications]. There will be the capacity for Staff to lock down the unit at times of heightened security risk.

6.4.1.43 There will be IP video surveillance covering areas such as corridors, Maternity Centre Entrance area, emergency egress and Staff corridors that will display on monitors at each Care Team Station. The Care Team Station displays will be linked with the IP video surveillance system and the final surveillance requirements will be as determined with the Owner.

6.4.1.44 Provide spaces and alcoves for cleaning and stocking large pieces of biomedical Equipment in this Component. Adequate space to complete this task and store excess Equipment is vital for proper functioning of the unit.

6.4.1.45 Telemedicine capacity will be enabled in all care delivery spaces. The system will have the ability to share clinical data for immediate consultation.

6.4.1.46 Design all work areas ergonomically with maximum flexibility to facilitate the use and storage of WOW and/or adjustable PC workstation. The physical space design will be capable of supporting organizational and operational changes.

6.4.1.47 Clinical documentation will take place at the Patient Rooms, Alcove-Touchdown/ Charting, and/or the Care Team Stations.

6.4.1.48 Patient information will be available throughout the unit wirelessly with handheld devices and through computer terminal positions at POC.

6.4.1.49 Each Care Team Station will be designed to allow charging for a number of handheld devices used in the Maternity Centre, including personal communication devices and tablets, etc.

6.4.1.50 At each Care Team Station there will be a central station monitor, positioned for the Staff to view from a sitting position, facing their work desks and with no visibility of the monitor for the public.

6.4.1.51 Each Care Team Station will have a Patient status board, positioned with Line of Sight from Staff inside the Care Team Station and will not be visible to the public. This status board serves to communicate Patient's clinical information for workflow management in the Maternity Centre. Status boards will display such information as clinical notifications, results availability, clinical alerts, care provider assignment, assigned bed occupancy and turnover status.

6.4.1.52 Station monitors will be located at each Alcove-Touchdown/Charting, allowing Staff to monitor and manage all monitors inside the Patient Room. The Alcove-Touchdown/Charting will be designed ergonomically with maximum flexibility.

6.4.1.53 Fetal Ambulatory Telemetry will be provided in all areas of the Maternity Centre, with continuous coverage.

6.4.1.54 Clinical indicator signage will be installed outside each Patient Room with visibility for Staff, visitor and family approaching the Patient Room. This signage will communicate codes used to identify Patients who require special recognition of the potential harm they may pose to Staff, Patients and visitors and/or potentially other clinical indicators (e.g., NPO, ARO, etc.).

6.4.1.55 The corridor immediately outside any Procedure Room-Airborne Isolation-Hybrid, Patient Room-SRMC-Bariatric-Airborne Isolation-Hybrid, Patient Room-Ante-Natal/Post-Section-Airborne Isolation-Hybrid and Patient Room-NICU-Airborne Isolation-Hybrid will be a low traffic area purposefully sparse with no stored equipment. Hand hygiene sinks will be appropriately distributed throughout the corridors to allow Staff to don and doff their PPE and follow appropriate Infection Prevention and Control protocols.

6.4.1.56 A Lounge-Family/Visitor and an adjacent Nourishment Room will be provided within the Maternity Centre clinical areas. It will be located with Convenient Access to both the Maternity Care Unit and NICU and Pediatric Support Services as it will be shared between the two zones.

6.4.1.57 A Conference/Meeting Room-Medium will be accessible to Staff who will be coming from outside the Maternity Centre and will be located with Convenient Access through General Circulation outside this Component to reduce the amount of travel through the Maternity Centre required to access it.

6.4.2 Maternity Centre Entrance

6.4.2.1 The Maternity Centre Entrance will be the controlled entry point into the Maternity Centre and will function as a comfortable waiting area and main entrance for Maternity Centre visitors and families as a welcoming first point of contact.

6.4.2.2 The Maternity Centre Entrance will have high visibility with simple Wayfinding for public arriving from the Public Passenger Elevators to immediately orient themselves and locate the Component entrance. Convenient Access for Patients, public and visitors travelling to the unit from Public Passenger Elevators is required. Provide Convenient Access through Back of House circulation for Patients transferring from another Component and/or arriving on a stretcher via the Patient Transfer/Staff Service Elevators.

6.4.2.3 The Maternity Centre Entrance will have a controlled access doorway, secured 24 hours, with card access, doors with operators, video intercom and remote release with restricted egress. Together with access to IP video surveillance of the area outside the Component from the Care Team Stations, Staff will be able to safely monitor and control access to the Maternity Centre.

6.4.2.4 A Waiting area will be included inside the Maternity Centre Entrance with an adjacent Washroom-Public.

6.4.2.5 The Maternity Centre Entrance will include a Reception/Registration adjacent to the main entrance doorway to act as a welcoming first point of contact for visitors, and for Staff to provide them direction and access. At Reception/Registration, Patients and families will either self-register or will be registered by Staff and directed either to wait in the Waiting area or to proceed to one of the clinical areas within the Maternity Centre.

6.4.2.6 Reception/Registration will be designed to include the following:

6.4.2.6(1) Reception/Registration desk inside the Maternity Centre Entrance area to accommodate two (2) Staff with two (2) doors for dual egress into an adjacent safe area as determined in consultation with the Owner;

6.4.2.6(2) Infrastructure for a registration kiosk to be located in the Waiting area for Patient electronic self-registration; and

6.4.2.6(3) Spatial privacy between the registration and Waiting area for Patients and families who are registering.

6.4.2.7 Provide Staff the ability to control access to the Component through systems such as access control, remote release for doors and video intercom system. Staff at Reception/Registration and Care Team Stations will monitor and control access to the following zones:

6.4.2.7(1) Assessment and Triage Area;

6.4.2.7(2) Fetal Monitoring Area;

6.4.2.7(3) Delivery/Inpatients;

6.4.2.7(4) C-Section and Procedures; and

6.4.2.7(5) NICU and Pediatric Support Services.

6.4.2.8 A Breastfeeding Room will be provided inside the Maternity Centre Entrance for visitor and Staff access. This room will be equipped with comforts such as dimming lights, comfortable chairs, a pump(s) and pump supplies, a hand hygiene sink.

6.4.3 Maternity Care Unit

6.4.3.1 Assessment and Triage Area/Fetal Monitoring Area

6.4.3.1(1) This area will comprise two (2) separate areas: Assessment and Triage Area and Fetal Monitoring Area.

6.4.3.1(2) Assessment and Triage Area and Fetal Monitoring Area will share one (1) Consult/Interview Room.

6.4.3.1(3) Assessment and Triage Area

6.4.3.1(3)(a) The Assessment and Triage Area will have secure access from the Maternity Centre Entrance area. Access to this area will be monitored and provided by access control and remote release of the doors from Reception/Registration and Care Team Station within this area.

6.4.3.1(3)(b) The Assessment and Triage Area will comprise three (3) Procedure Rooms and one (1) Procedure Room-Airborne Isolation-Hybrid with a dedicated Washroom-Patient Ensuite-Airborne Isolation.

6.4.3.1(3)(c) The Procedure Rooms will be fully equipped with monitoring equipment for the maternal Patient and the unborn infant and require adequate space for

other equipment such as lights, exam tables, stretchers, delivery cart, etc.

6.4.3.1(3)(d) The Assessment and Triage Area will have an open Care Team Station with dual egress that will accommodate two (2) Staff. It will also have Line of Sight to entry point into the Procedure Rooms.

6.4.3.1(3)(e) This area will include one (1) Alcove-Microscope and Supplies and an adjacent Washroom-Patient with a cabinet to pass urine through between these rooms.

6.4.3.1(3)(f) The design will enable Patients to be moved rapidly in case of impending delivery or an emergency from the Assessment and Triage Area to both the Delivery/Inpatients or C-Section and Procedures areas.

6.4.3.1(4) Fetal Monitoring Area

6.4.3.1(4)(a) The Fetal Monitoring Area will have secure access from the Maternity Centre Entrance area. Access to this area will be monitored and provided either by access control including remote release from Reception/Registration and Care Team Station within this area.

6.4.3.1(4)(b) The Fetal Monitoring Area will provide scheduled and unscheduled fetal monitoring for antepartum Patients with risk factors, pre-op assessments for scheduled caesarean sections, and outpatient inductions of labour.

6.4.3.1(4)(c) The Fetal Monitoring will comprise four (4) Fetal Monitoring Bays. Each Fetal Monitoring Bay will include a stretcher, individual electronic fetal monitor, a chair for family and a chair/stool for the Staff.

6.4.3.1(4)(d) The Fetal Monitoring Area will have an open Care Team Station with dual egress that will accommodate two (2) Staff. It will also have Line of Sight to Fetal Monitoring Bays.

6.4.3.1(4)(e) This area will include one (1) Washroom-Patient adjacent to the Care Team Station with a sample pass through between these spaces.

6.4.3.1(4)(f) The design will enable Patients to be moved rapidly in case of impending delivery or an emergency from the Assessment and Triage Area to both the Delivery/Inpatients or C-Section and Procedures areas.

6.4.3.2 Delivery/Inpatients

6.4.3.2(1) The Maternity Care Unit will have fifteen (15) Patient Room-SRMC and ten (10) Patient Room-Ante-Natal/Post-Section in total. All Patient Rooms will have outboard Inpatient Ensuite Washroom/Shower.

6.4.3.2(2) One (1) Patient Room-SRMC will be a Patient Room-SRMC-Bariatric-Airborne Isolation-Hybrid. One (1) Patient Room-Ante-Natal/Post-Section will also be a Patient Room-Ante-Natal/Post-Section-Airborne Isolation-Hybrid.

6.4.3.2(3) Rooms will not be painted yellow or any shade of yellow-beige or green.

6.4.3.2(4) Patient specific medications will be stored in a lockable drawer in Patient Rooms.

6.4.3.2(5) There will be a magnetic whiteboard in the Patient Room for Staff, family and Patient that communicates the goals of care, nurse in charge, doctor in charge and other pertinent information as required.

6.4.3.2(6) The Maternity Care Unit will group the Patient Room-SRMC together along with support spaces required for the operations of those rooms. The Patient Room-Ante-Natal/Post-Section will also be grouped together with required support spaces.

6.4.3.2(7) The SRMC model is central to obstetrical care provided at St. Paul's. Every effort will be made to not move Patients who deliver vaginally. They will ideally stay in the same room during their entire birth/postpartum stay. Patients who start in Patient Room-SRMC but deliver by caesarean section in the Operating Room-C-Section, will be moved to an ante-partum/post-section room.

6.4.3.2(8) The Delivery/Inpatient area will have secure access from the Maternity Centre Entrance area. Access to this area will be monitored and provided by access control and remote release of the doors from Reception/Registration and Care Team Stations within this area.

6.4.3.2(9) In addition to the process of normal delivery, the Patient Room-SRMC may be used for:

6.4.3.2(9)(a) Induction of labour; and

6.4.3.2(9)(b) NICU and Pediatric Support Services care for infants requiring observation/intervention less frequently than every four (4) hours (e.g., sugar baby) in order to keep mother and infant together.

6.4.3.2(10) The Patient Room-Ante-Natal/Post-Section may be used for:

6.4.3.2(10)(a) Ante-natal monitoring and care;

6.4.3.2(10)(b) Post-partum care following a C-section or post-partum surgery; and

6.4.3.2(10)(c) Recovery of gynecological surgery Patients.

6.4.3.2(11) These rooms will also be able to accommodate a potential delivery of a high-risk Patient, and critical care of an acutely ill Patient.

6.4.3.2(12) There will be a dedicated fridge in every Patient Room-Ante-Natal/Post-Section.

6.4.3.2(13) Each Patient Room-Ante-Natal/Post-Section will be able to accommodate a mother in a hospital bed and two (2) infants in incubators/infant warmers/bassinettes.

6.4.3.2(14) Three (3) headwalls in all Patient Room-Ante-Natal/Post-Section will be located on the same wall to accommodate a mother between two (2) infants.

6.4.3.2(15) Each Patient Room-Ante-Natal/Post-Section will contain advanced maternal monitoring equipment that can be programmed to communicate with the Care Team Stations and the Critical Care Complex area. When is use, monitors will be positioned where they provide maximum viewing in both sitting and standing positions for Staff anywhere in the room.

6.4.3.2(16) Inside each Patient Room-Ante-Natal/Post-Section, there will be bedside Fetal Monitoring and Physiological Monitoring capability for mother and twin infants. When is use, monitors will be positioned where they provide maximum viewing in both sitting and standing positions for Staff anywhere in the room.

6.4.3.2(17) The Care Team Stations will be located centrally and designed to provide Line of Sight from the Care Team Stations to the entry point into the Patient Rooms.

6.4.3.2(18) Consider the ability for Patients and their families to see Staff from both the Patient Room-SRMC and the Patient Room-Ante-

Natal/Post-Section in order to reassure them that nursing care is close at hand.

6.4.3.2(19) The design will balance the requirements of providing Staff with Line of Sight from the corridor to the head of the Patient while lying in bed and ensuring privacy for Patients and families.

6.4.3.2(20) Single Room Maternity Care

6.4.3.2(20)(a) All rooms will be designed to accommodate twin deliveries ≥ 32 weeks gestation and include neonatal headwalls designed to optimize equipment for neonatal resuscitation. Each room will have three (3) sets of medical gasses on the wall; refer to Appendix 3K [Medical Gas Matrix].

6.4.3.2(20)(b) Support for up to two (2) infants, including monitoring, medical gasses, warming and resuscitation, is required in the room. Neonatal bedheads and resuscitation equipment will be established in a location that that allows for unimpeded access around the infant for the Code Team and their Equipment and does not disrupt or compromise the activity of other members of the multidisciplinary team.

6.4.3.2(20)(c) These rooms will be designed with higher risk monitoring and telemetry equipment concealed in custom built cabinetry that can easily be accessed by opening a cabinet door.

6.4.3.2(20)(d) Each room will contain advanced maternal monitoring equipment that can be programmed to communicate with the Care Team Stations and with Critical Care Complex area.

6.4.3.2(20)(e) Low risk birthing supplies such as a fetal doptone and birthing ball will be included in each room.

6.4.3.2(20)(f) Delivery and nursing supply carts will be stored and concealed inside the room.

6.4.3.2(20)(g) There will be ample storage in every room including space for the neonatal resuscitation machine, bassinette and delivery care supplies. This essential equipment will be stored in cabinets contained within each room to limit the movement in and out of the room for the clinical team.

6.4.3.2(20)(h)	There will be a dedicated fridge in every Patient Room-SRMC.
6.4.3.2(20)(i)	Provide ample seating throughout the room and include furniture that converts to a bed for the Patient's partner to encourage family togetherness.
6.4.3.2(20)(j)	Lighting will be dimmable and controlled by the Patient and her family in addition to the care providers.
6.4.3.2(20)(k)	Patient Rooms will have the ability to control and adjust the amount of natural light that enters the room, including the ability to block out natural light and be dark during the day so mothers and parents can sleep when baby sleeps.
6.4.3.2(20)(l)	Patient Room-SRMC will be designed to allow adequate space for the family members, Staff performing emergency obstetrical procedures (e.g. forceps) and neonatal resuscitation. The design will respect privacy of the woman, during a very vulnerable time in her life.
6.4.3.2(20)(m)	Each Patient Room-SRMC will include a deep soaker tub. The soaker tub will be accessible from a minimum of two (2) sides with minimum 1000mm clearance on each side to enable Staff to access the tub in the event of a labouring woman needing to be rapidly evacuated from the tub.
6.4.3.2(20)(n)	The tub location will provide convenient access to emergency call and patient/nurse call buttons and medical gases including nitrous oxide and oxygen used for pain relief.
6.4.3.2(20)(o)	The tub will be located so that the labouring woman can be easily and quickly transferred from the tub to the bed.
6.4.3.2(20)(p)	The tub will be located so that the privacy of the labouring woman is maintained.
6.4.3.2(20)(q)	The Patient Room-SRMC will be escalating care suites that can be used for labouring, delivery, recovery, and antepartum/post-partum care. There will be space and power for portable directable exam lighting. Additional lighting will be required

so Staff may perform tasks and chart while Patients enjoy a darkened environment; refer to Appendix 3O [Electrical IM/IT Matrix].

6.4.3.2(20)(r) The Patient Room-SRMC will change around the Patient as needed, without the need to move Patients to a higher acuity area. The flexible design of the room will be capable of supporting all levels of intervention, excluding C-sections.

6.4.3.2(20)(s) The Patient Room-SRMC will have three (3) headwalls located on the same wall to accommodate a mother between two (2) infants.

6.4.3.2(20)(t) Inside each Patient Room-SRMC, there will be a bedside fetal monitor and Physiological Monitor capability for mother and twin infants. Monitors will be positioned at where they provide maximum viewing in both sitting and standing positions for Staff anywhere in the room.

6.4.3.2(20)(u) Water immersion in labour (this does not include water birth) will be available in all Patient Room-SRMC.

6.4.3.2(20)(v) The Patient Room-SRMC layout will be such that the neonatal resuscitation area is in an open, accessible location to accommodate the Code Team.

6.4.3.2(20)(w) The Patient Room-SRMC area will be located with Convenient Access to C-Section and Procedures zone.

6.4.3.3 C-Section and Procedures

6.4.3.3(1) C-Section and Procedures zone to be located adjacent to Patient Room-SRMC.

6.4.3.3(2) The C-Section and Procedures area will have secure access from the Maternity Centre Entrance area. Access to this area will be monitored and provided by access control and remote release from Reception/Registration and Care Team Station within this area.

6.4.3.3(3) C-Section and Procedures zone will have a Change Cubicle-Patient and lockers to be located at the entry.

6.4.3.3(4) This zone of activity includes two (2) Operating Room-C-Section.

6.4.3.3(5) Provide Convenient Access from C-Section and Procedures zone to the Lockers-Staff.

6.4.3.3(6) A Care Team Station will be provided within this zone with Line of Sight to the three (3) Recovery Bay-C-Section.

6.4.3.3(7) Except for the Operating Room-C-Section and Sterile Core-Equipment/Supplies, which are a restricted zone, the C-Section and Procedures zone will be considered a semi-restricted zone.

6.4.3.3(8) Convenient Access to Surgical and Interventional Services will be provided in case of complications on delivery, in this case one floor separation and convenience stairs.

6.4.3.3(9) Neonatal headwalls and resuscitation equipment within the Operating Room-C-Section will be established in a location that allows for unimpeded access around the infant for the Code Team and their Equipment and does not disrupt or compromise the activity of other members of the multidisciplinary team.

6.4.4 NICU and Pediatric Support Services

6.4.4.1 NICU and Pediatric Support Services will be grouped with Maternity Care Unit and have Direct Access to C-Section and Procedures zone.

6.4.4.2 Visitors to the NICU and Pediatric Support Services will have Direct Access from the Maternity Centre Entrance to the NICU and Pediatric Support Services entry without passing by any Patient Room-SRMC or Patient Room-Ante-Natal/Post-Section.

6.4.4.3 The NICU and Pediatric Support Services area will have secure access from the Maternity Centre Entrance area. Access to this area will be monitored and provided by access control and remote release from Reception/Registration and Care Team Station within this area.

6.4.4.4 There will be one (1) Consult/Interview Room located directly outside the secure access to ensure outpatients coming for pediatric consultations do not enter the secure NICU and Pediatric Support Services area.

6.4.4.5 There will be eight (8) private Patient Room-NICU and two (2) Patient Room-NICU-Airborne Isolation-Hybrid in this area and all will include outboard Washroom/Shower-Inpatient Ensuite.

6.4.4.6 Two (2) Patient Room-NICU-Airborne Isolation-Hybrid will be located close to the Patient Transfer/Staff Service Elevators.

6.4.4.7 There will be 2-way voice communication between each Patient Room-NICU-Airborne Isolation-Hybrid, its associated Alcove-Touchdown/Charting and its associated Care Team Station. There will also be an intercom at the door of these rooms to allow for communication without entering the Patient Room.

6.4.4.8 Each Patient Room-NICU will have glass breakaway doors and a shared Alcove-Touchdown/Charting with Line of Sight into the two (2) rooms.

6.4.4.9 NICU Patient Rooms will be designed for family privacy within the room through such means as a sliding door to divide the family zone from the infant care zone. Provide parental privacy for undisturbed sleep and privacy as a family. Curtains will not be acceptable.

6.4.4.10 Alcove-Touchdown/Charting will be designed with dimmable lighting and windows with integral blinds to facilitate assessment without disturbing babies or parents and will have power and data for electronic health record access.

6.4.4.11 Each Patient Room-NICU will be able to accommodate a mother in a hospital bed and two (2) infants in incubators/infant warmers/bassinettes. Each room will have three (3) sets of medical gasses and suction and will also have the capacity to accommodate two (2) baby warmers, two (2) neonatal resuscitation machines and three (3) Physiological monitors.

6.4.4.12 Three (3) headwalls in all Patient Room-NICU will be located to accommodate a mother and two (2) infants.

6.4.4.13 Each Patient Room-NICU will have a dedicated two-drawer refrigerator for milk and medications.

6.4.4.14 There will be space and power for portable, directable Task Lighting. Lighting will be required so Staff may perform tasks and chart while Patients enjoy a darkened environment; refer to Appendix 3O [Electrical IM/IT Matrix].

6.4.4.15 There will be an infant care zone, a zone for the mother on a hospital bed, a family zone and a care team zone to accommodate a maximum of 8-10 care providers. Flexibility in zoning is required to accommodate future changes in the provision of care.

6.4.4.16 The Patient Room-NICU design will be flexible to accommodate the following options:

6.4.4.16(1) The room will be equipped with a double sleeper sofa in the family zone (behind the sliding door), and two (2) incubators/infant warmers/bassinettes in the infant care zone to accommodate two (2) rooming parents caring for two (2) infants.

6.4.4.16(2) The room will be equipped with a recliner chair in the family zone (behind the sliding door), and a hospital bed and two (2) incubators/infant warmers/bassinettes in the infant care zone to accommodate a rooming partner supporting a bed-bound mother and two (2) infants.

6.4.4.17 The NICU and Pediatric Support Services is equipped to provide phototherapy and observation for those infants requiring bilirubin admission and care.

6.4.4.18 A centralized Care Team Station will maximize observation and Line of Sight from the Care Team Station to the entry points into all Patient Room-NICU.

6.4.4.19 The Care Team Station in the NICU and Pediatric Support Services will also have Line of Sight to the NICU and Pediatric Support Services entry point onto the unit. Line of Sight to the Patient Room-NICU takes priority over Line of Sight to the NICU and Pediatric Support Services entry.

6.4.4.20 Care Team Station design will allow for collaboration amongst Staff.

6.4.4.21 Care Team Stations require electronic wall mounted displays.

6.4.4.22 Inside each Patient Room-NICU, there will be a bedside physiological monitor that can be used on a least two (2) Patients simultaneously mounted on the wall, positioned where it provides maximum viewing in both sitting and standing positions for Staff anywhere in the room.

6.4.4.23 The design of each Patient Room-NICU will meet the clinical requirements of premature and vulnerable babies regarding temperature and air quality, dimmable lighting and acoustical control and sound dampening while emphasizing Person- and Family-Centred Care as per Schedule 3 [Design and Construction Specifications] and Appendix 3C [Acoustic and Noise Control Measures].

6.4.4.24 The Patient Room-NICU will meet the clinical requirements of the post-partum mother, including the accommodation of a C-section Patient on a hospital bed, removable shower head in the washroom for peri-care, and power for Equipment such as a breast pump.

6.4.4.25 Circadian lighting will be installed in each Patient Room-NICU.

6.4.4.26 Patient Room-NICU will have the ability to control and adjust the amount of natural light that enters the room, including the ability to block out natural light and be dark during the day, so mothers and parents can sleep when baby sleeps.

6.4.4.27 Each Patient Room-NICU will have 2 zones for lighting:

6.4.4.27(1) Family zone

6.4.4.27(2) Infant care zone

6.4.4.28 Patient Rooms will not be painted yellow or any shade of yellow-beige or green.

6.4.4.29 Infant Nutrition Prep/Breast Milk Bank will have Convenient Access to Care Team Station and Medication Room-Large.

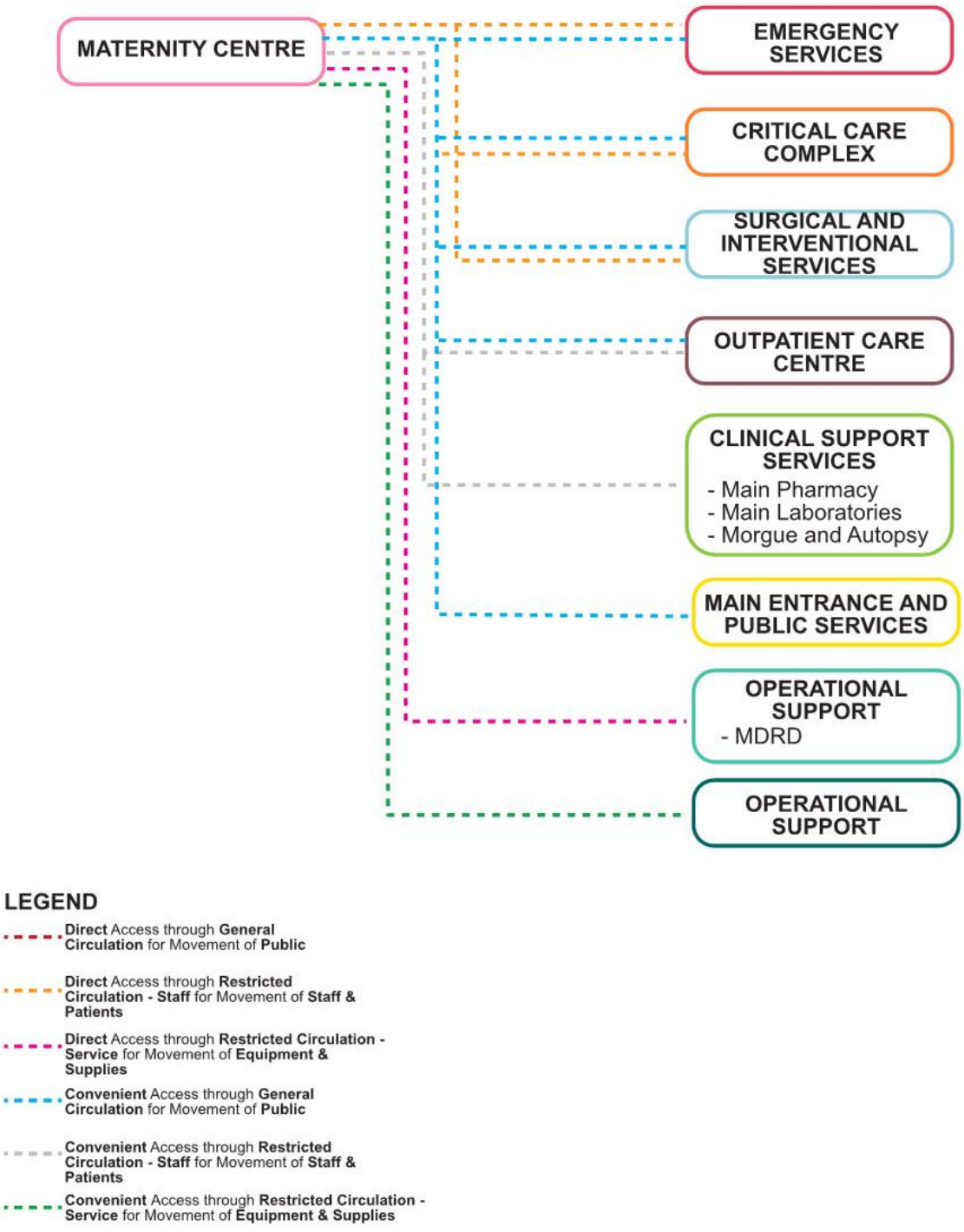
6.4.5 Maternity Centre General Workstations (Future Expansion)

6.4.5.1 The Maternity Care Centre will be designed to easily convert from an open area for thirty-seven (37) General Workstations into five (5) Patient Room-SRMC and Inpatient Ensuite Washroom/Tub in the future.

6.5 EXTERNAL RELATIONSHIPS

6.5.1 The following diagram indicates other Functional Components that have a functional relationship with this Component.

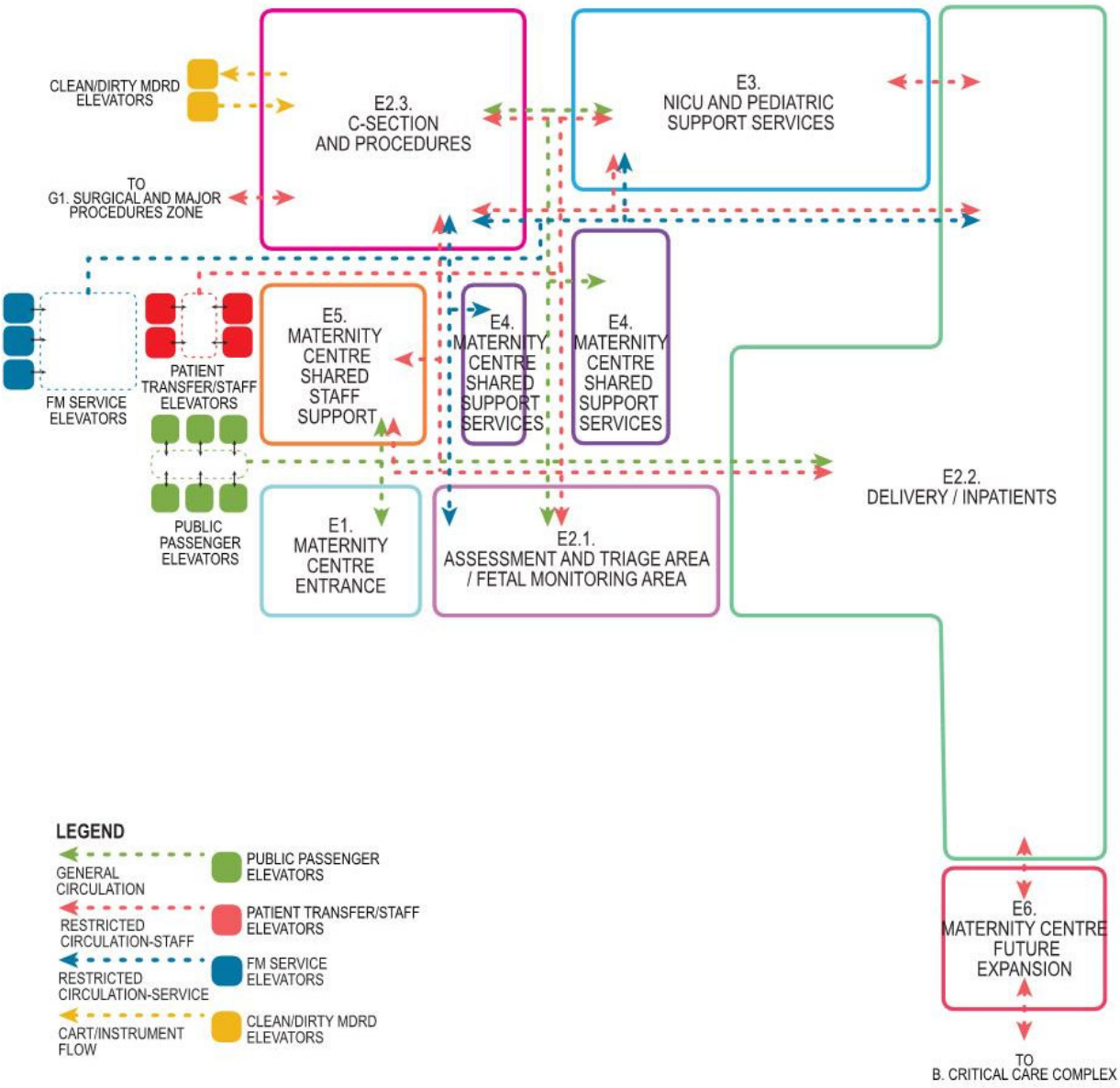
E. MATERNITY CENTRE EXTERNAL RELATIONSHIPS AND CIRCULATIONS



6.6 INTERNAL RELATIONSHIPS

6.6.1 The following diagram indicates internal functional relationships within this Component.

E. MATERNITY CENTRE INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



6.7 SCHEDULE OF ACCOMMODATIONS

6.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Maternity Centre

E1 - MATERNITY CENTRE ENTRANCE	54.00
E2 - MATERNITY CARE UNIT	1513.00
E3 - NICU AND PEDIATRIC SUPPORT SERVICES	407.00
E4 - MATERNITY CENTRE SHARED SUPPORT SERVICES	91.50
E5 - MATERNITY CENTRE SHARED STAFF SUPPORT	283.00
E6 - MATERNITY CENTRE GENERAL WORKSTATIONS	200.00
MATERNITY CENTRE PROGRAMMED SPACE NSM:	**2,548.50**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
E1 - MATERNITY CENTRE ENTRANCE					
E1.0	Reception/Registration	1	8.00	8.00	Incl. 2 workstations, cabinets, dual egress, 1 transaction window to outside the Component.
E1.1	Waiting	1	24.00	24.00	Incl. seating for 15 including 1 in wheelchair.
E1.2	Breastfeeding Room	1	7.50	7.50	Incl. seating for 2, infant change table, counters, cabinets, interior window with window coverings.
E1.3	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
E1.4	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Maternity Centre.
E1.5	Alcove-Stretcher	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
E1.6	Alcove-Wheelchair	1	2.50	2.50	Centrally located adjacent to Patient Elevators.
E1.7	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
	TOTAL NSM: Maternity Centre Entrance			**54.00**	
E2 - MATERNITY CARE UNIT					
E2.1 - Assessment and Triage Area/Fetal Monitoring Area					
E2.1.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation, dual egress.
E2.1.2	Procedure Room-Airborne Isolation-Hybrid	1	16.50	16.50	Incl. 1 touch down workstation, counters, cabinets.
E2.1.3	Washroom-Patient Ensuite-Airborne Isolation	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
E2.1.4	Procedure Room	3	16.50	49.50	Incl. 1 touch down workstation, counters, cabinets.
E2.1.5	Fetal Monitoring Bay	4	9.50	38.00	Incl. 1 touch down workstation, cabinets, walled on 3 sides with privacy curtains.
E2.1.6	Care Team Station	2	8.00	16.00	Incl. 2 workstations, cabinets, charging station, dual egress.
E2.1.7	Alcove-Hand Hygiene Sink	2	1.00	2.00	Located within 6 m of each Care Team Station entrance.
E2.1.8	Not Used	0	0.00	0.00	
E2.1.9	Alcove-Microscope & Supplies	1	5.00	5.00	Incl. counters, cabinets.
E2.1.10	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities. Incl. sample pass through.
E2.2 - Delivery/Inpatients					
E2.2.1	Patient Room-SRMC-Bariatric-Airborne Isolation-Hybrid	1	37.00	37.00	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, area for neonate stabilization and infant bassinet, provision for bariatric bed, 2-sided access deep soaker tub.
E2.2.2	Washroom/Shower-Inpatient Ensuite-Bariatric-Airborne Isolation	1	7.00	7.00	3-piece incl. toilet sized with provision for bariatric commode, shower, accessible for Persons with Disabilities.
E2.2.3	Patient Room-SRMC	14	34.50	483.00	Incl. lockable Patient wardrobe, counters, cabinets, area for neonate stabilization and infant bassinet, 2-sided access deep soaker tub.
E2.2.4	Washroom/Shower-Inpatient Ensuite	14	5.50	77.00	3-piece incl. shower, accessible for Persons with Disabilities.
E2.2.5	Patient Room-Ante-Natal/Post-Section-Airborne Isolation-Hybrid	1	21.40	21.40	Incl. lockable Patient wardrobe, counters, cabinets, ceiling lift, area for infant bassinet.
E2.2.6	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
E2.2.7	Patient Room-Ante-Natal/Post-Section	9	21.40	192.60	Incl. lockable Patient wardrobe, counters, cabinets, area for infant bassinet.
E2.2.8	Washroom/Shower-Inpatient Ensuite	9	5.50	49.50	3-piece incl. shower, accessible for Persons with Disabilities.
E2.2.9	Alcove-Hand Hygiene Sink	3	1.00	3.00	Distributed within the unit.
E2.2.10	Care Team Station	2	8.00	16.00	Incl. 2 workstations, cabinets, charging station, dual egress.
E2.2.11	Alcove-Hand Hygiene Sink	2	1.00	2.00	Located within 6 m of each Care Team Station entrance.
E2.2.12	Care Team Station	1	36.00	36.00	Incl. 9 workstations, cabinets, charging station, dual egress.
E2.2.13	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
E2.2.14	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
E2.2.15	Medication Room-Large	2	16.00	32.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
E2.3 - C-Section and Procedures					
E2.3.1	Operating Room-C-Section	2	60.00	120.00	Incl. 1 touch down workstation, ceiling lift with complex ceiling coverage, infant resuscitation area.
E2.3.2	Alcove-Scrub Station	2	3.00	6.00	Shared between two Operating Room-C-Section.
E2.3.3	Recovery Bay-C-Section	3	9.50	28.50	Walled on 3 sides with privacy curtains.
E2.3.4	Sterile Core-Equipment/Supplies	1	36.00	36.00	Incl. 1 workstation.
E2.3.5	Care Team Station	1	12.00	12.00	Incl. 3 workstations, cabinets, charging station, dual egress.
E2.3.6	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.
E2.3.7	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
E2.3.8	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
E2.3.9	Lockers-Patient	1	1.00	1.00	Incl. 6 half lockers in an alcove.
E2.3.10	Washroom/Change Room-Patient	1	4.50	4.50	2 pieces, accessible for Persons with Disabilities, also used as a Change Room.
E2.4 - Maternity Care Unit Support Services					
E2.4.1	Alcove-Blanket Warmer	2	1.50	3.00	Adjacent to Alcove-Clean Linen.
E2.4.2	Alcove-Clean Linen	3	2.50	7.50	
E2.4.3	Alcove-Imaging Equipment-Large	1	3.00	3.00	
E2.4.4	Alcove-Stretcher	1	2.50	2.50	
E2.4.5	Store-Central Equipment	3	12.00	36.00	Incl. shelving, charging station, 2 infant nutrition carts, 2 milk refrigerators, 4 bottle warmers.
E2.4.6	Store-Local Equipment	2	12.00	24.00	Incl. shelving, charging station.
E2.4.7	Store-Clean Supplies	3	10.00	30.00	Distributed in Maternity Care Unit.
E2.4.8	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
E2.4.9	Soiled Equipment Hold	2	10.00	20.00	
E2.4.10	Soiled Utility	3	12.00	36.00	Incl. counters, shelving.
E2.4.11	Housekeeping Closet	1	7.00	7.00	Incl. cabinets premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
E2.4.12	Alcove-Infant Nutrition Cart	4	1.50	6.00	Distributed in Maternity Care Unit. Incl. 1

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
					infant nutrition cart, 1 milk refrigerator, 2 bottle warmers.
	TOTAL NSM: Maternity Care Unit			**1,513.00**	
E3 - NICU AND PEDIATRIC SUPPORT SERVICES					
E3.1 - NICU and Pediatric Support Services Inpatient					
E3.1.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
E3.1.2	Patient Room-NICU-Airborne Isolation-Hybrid	2	20.00	40.00	Incl. lockable Patient wardrobe, counters, cabinets.
E3.1.3	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	2	5.50	11.00	3-piece incl. shower, accessible for Persons with Disabilities.
E3.1.4	Patient Room-NICU	8	20.00	160.00	Incl. lockable Patient wardrobe, counters, cabinets.
E3.1.5	Washroom/Shower-Inpatient Ensuite	8	5.50	44.00	3-piece incl. shower, accessible for Persons with Disabilities.
E3.1.6	Alcove-Touchdown/Charting	10	1.00	10.00	Incl. 1 touch down workstation, observation window into Patient Room-NICU.
E3.1.7	Alcove-Hand Hygiene Sink	1	1.00	1.00	Centrally located.
E3.1.8	Care Team Station	1	16.00	16.00	Incl. 4 workstations, cabinets, charging station, dual egress.
E3.1.9	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.
E3.1.10	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
E3.1.11	Medication Room-Large	1	16.00	16.00	Incl. 2 touch down workstations, counters, cabinets, shelving.
E3.1.12	Infant Nutrition Prep/Breast Milk Bank	1	16.00	16.00	Include counters, cabinets.
E3.2 NICU and Pediatric Support Services					
E3.2.1	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
E3.2.2	Alcove-Clean Linen	1	2.50	2.50	
E3.2.3	Store-Central Equipment	1	12.00	12.00	Incl. shelving, charging station.
E3.2.4	Store-Local Equipment	1	12.00	12.00	Incl. shelving, charging station.
E3.2.5	Store-Clean Supplies	1	12.00	12.00	Centrally located.
E3.2.6	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
E3.2.7	Soiled Equipment Hold	1	10.00	10.00	
E3.2.8	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
E3.2.9	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
					carts, ladders, floor cleaning machine and cleaning supplies.
	TOTAL NSM: NICU and Pediatric Support Services			**407.00**	
E4 - MATERNITY CENTRE SHARED SUPPORT SERVICES					
E4.1	Nutrition Centre	1	42.00	42.00	Incl. emergency eyewash.
E4.2	Lounge-Family/Visitor	1	24.00	24.00	Incl. seating for 10, shared between Maternity Care Unit and NICU and Pediatric Support Services.
E4.3	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets, adjacent to Lounge-Family/Visitor.
E4.4	Washroom-Public	1	4.50	4.50	2-piece, accessible for Persons with Disabilities, adjacent to Lounge-Family/Visitor.
E4.5	Alcove-Local Equipment	10	1.50	15.00	Distributed in Maternity Centre.
	TOTAL NSM: Maternity Centre Shared Support Services			**91.50**	
E5 - MATERNITY CENTRE SHARED STAFF SUPPORT					
E5.1	Conference/Meeting Room-Medium	1	44.00	44.00	Incl. counters, cabinets, accommodates 25 Persons.
E5.2	Office-Private	3	9.50	28.50	Incl. 1 workstation.
E5.3	Office-3 Shared	3	16.00	48.00	Incl. 3 workstations.
E5.4	Dictation Room	1	4.50	4.50	Incl. 1 workstation.
E5.5	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
E5.6	On-Call Room	5	7.00	35.00	Incl. 1 touch down workstation, 1 full locker.
E5.7	On-Call Room-Large	3	9.00	27.00	Incl. 1 touch down workstation, 1 full locker.
E5.8	Lounge-Staff	1	32.00	32.00	Incl. seating for 4, kitchenette, mail slots, 2 touch down workstations.
E5.9	Lockers-Staff	1	30.00	30.00	Incl. 80 Z-lockers, 3 shoe racks, adjacent to C-Section and Procedures. Design will allow for appropriate split into male and female and accommodate additional door and circulation space required by the split.
E5.10	Washroom/Shower-Staff	4	4.50	18.00	3-piece incl. shower, two to be located within Lockers-Staff, two to be located adjacent to On-Call Room and On-Call Room-Large.
E5.11	Washroom-Staff	3	3.00	9.00	2-piece, distributed in Maternity Care Unit.
E5.12	Washroom-Staff	1	3.00	3.00	2-piece, located in NICU and Pediatric Support Services.
	TOTAL NSM: Maternity Centre Shared Staff Support			**283.00**	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
E6 - MATERNITY CENTRE GENERAL WORKSTATIONS					
E6.1	Workstation-General	1	200.00	200.00	Incl. 37 Workstations at 4.5 nsm each, combined into one area.
	TOTAL NSM: Maternity Centre General Workstations			**200.00**	
	TOTAL NSM: MATERNITY CENTRE			**2,548.50**	

6.7.2 The following table lists the number of spaces, Net Areas and space contents for Maternity Centre Future Expansion.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
E6 - MATERNITY CENTRE GENERAL WORKSTATIONS					
E6.1	Patient Room-SRMC-Future Expansion	5	32.00	160.00	Incl. lockable Patient wardrobe, counters, cabinets, area for neonate stabilization and infant bassinet.
E6.2	Washroom/Tub-Inpatient Ensuite-Future Expansion	5	8.00	40.00	4-piece incl. shower, 2-sided access deep soaker tub, accessible for Persons with Disabilities.
	TOTAL NSM: MATERNITY CENTRE FUTURE EXPANSION			**200.00**	

THE NEW ST. PAUL'S PHASE 1A

F. URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE

F. URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE

7.1 OVERVIEW

7.1.1 The programs in the Component provide services for Patients with complex needs associated with HIV and/or HCV infection, as well as for Patients with complex, acute mental health needs, substance use disorders and/or concurrent disorders. Many of these Patients also experience other health and psychosocial challenges, including chronic and other infectious diseases, chronic pain, poverty related health issues, homelessness/tenuous housing and other deficits in the social determinants of health.

7.1.2 Using a trauma-informed and culturally safe care model, Patients with complex needs associated with HIV and/or HCV infection, will receive comprehensive assessment, diagnosis and care planning, inpatient stabilization and treatment of acute symptoms, and on-going treatment with integrated, specialized primary care and specialist services that address their HIV/HCV needs and the intersectionality of mental illness, substance use, chronic diseases, and other health risks faced by this Patient population. These services also require close links to, or integration with, HIV/HCV clinical researchers.

7.1.3 Services will be provided by interdisciplinary teams with a full range of clinical Staff including HIV Speciality Family Practitioners, HIV/HCV specialists, Infectious Disease Specialists, Nursing, Social Work, Psychiatry, Addiction Medicine, Counselling, Dieticians, Peers and Indigenous Health Workers. Sub-specialties including neurology, endocrinology, dermatology and respiratory will provide specialist care in the clinic setting.

7.1.4 Using a trauma-informed and culturally safe care model, Patients with complex, acute mental health needs, substance use disorders and/or concurrent disorders will receive comprehensive assessment, diagnosis and care planning, inpatient stabilization and treatment of acute symptoms, and on-going treatment with integrated, specialized outpatient services that address both the morbidity and the intersectionality of mental illness, substance use, communicable disease, and other urban health risks faced by our Patient population. These services also require close links to, or integration with, existing primary care and community care services.

7.1.5 The purpose of these clinical programs is to collaboratively rise to the challenge of mental health, substance use, HIV/HCV and the health burdens related to poverty and urban living, while working in partnership with Patients and their families to improve the lives of people impacted by HIV/HCV, mental health and/or substance use disorders, and reduce the impact of infectious diseases, mental illness, substance misuse and related harms. During the next few years of care transformation, the HIV/HCV and Integrated programs aim to further integrate clinical care, teaching and clinical research across the spectrum of care from primary care to highly specialized services.

7.1.6 The philosophy of these clinical programs is that hospitalization will be an exception for people living with mental illness, substance use disorders and/or HIV/HCV, rather than an expectation. Integration of Person-Centered Care plans to create a ‘circle of care’ around Patients will enable us to share information with those people and services involved in the Patient’s life, expedite discharge and prevent admission.

7.2 FUNCTIONAL DESCRIPTION

7.2.1 Scope of Services

7.2.1.1 The Component is comprised of the following:

7.2.1.1(1) Stabilization Unit;

7.2.1.1(2) Outpatient Services comprised of the following clinics:

7.2.1.1(2)(a) John Ruedy Clinic

7.2.1.1(2)(b) HIV/HCV Specialist Services

7.2.1.1(2)(c) Rapid Access Addiction Clinic (RAAC)

7.2.1.1(2)(d) Brief Intervention Clinic (BIC)

7.2.1.1(3) Urban Health Acute Care Unit;

7.2.1.1(4) Mental Health Inpatients; and

7.2.1.1(5) Transitional Care Centre.

7.2.1.2 Patient Population Served

7.2.1.2(1) The clinical programs in this Component focus on adult Patients with a complex acute HIV/HCV, mental health, substance use or concurrent disorder. A large proportion of Patients live in Vancouver's Downtown Eastside and City Centre and experience deprivation including homelessness or unstable housing, poverty, poor food security and violence. Many Patients have a history of psychosocial trauma and often present with unregulated behaviours.

7.2.1.2(2) Stabilization Unit

7.2.1.2(2)(a) The Stabilization Unit focuses on Patients who are experiencing a severe exacerbation of their mental illness or substance-induced psychosis.

7.2.1.2(3) Outpatient Services

7.2.1.2(3)(a) Outpatient Services focus on: adults Patients with either HIV or HCV mono-infection and those with dual HIV/HCV infection, particularly those with complex care needs. These may be complex HIV/HCV needs or complex medical/psychosocial needs that require a team-based care approach.

7.2.1.2(3)(b) Adult Patients with complex or high acuity mental health needs and/or substance use disorders who would benefit from team-based care aimed at stabilizing their condition(s) before transfer to community/primary care.

7.2.1.2(4) Urban Health Acute Care Unit

7.2.1.2(4)(a) The Urban Health Acute Care Unit focuses on adult Patients with HIV/HCV acute medical needs, complex infections related to substance use or street entrenchment and active substance use disorders requiring stabilization. The unit also provides inpatient care to pregnant women with active substance use disorder who require stabilization of their substance use in pregnancy. This unit also supports the Addiction Medicine Consult Team that provides consultation for Patients in the ED or admitted to an inpatient bed.

7.2.1.2(5) Mental Health Inpatients

7.2.1.2(5)(a) The Mental Health Inpatients focuses on adult Patients who face severe mental illnesses with or without a substance use disorder, often combined with other challenges such as poverty, homelessness and other deficiencies in the social determinants of health.

7.2.1.2(6) Transitional Care Centre

7.2.1.2(6)(a) The Transitional Care Centre provides supported, short term accommodation for people discharged from either Emergency or Inpatient Care.

7.2.1.3 Scope of Clinical Activity

7.2.1.3(1) This Component is comprised of inpatient and outpatient services. Services are provided by interdisciplinary teams having a full range of clinical Staff (e.g., nursing, social work, OT, psychology, psychiatry, general practice physicians, recreation therapy, peer recovery facilitators, spiritual care, Patient/family educators, PT, and dietary counseling and diet support). Patients are treated by inter-professional teams that address their longitudinal health care needs through the following:

7.2.1.3(1)(a) Inpatient stabilization of acute symptoms and inter-professional assessment and treatment of HIV,

HCV, mental health, substance use and concurrent disorders.

7.2.1.3(1)(b) Comprehensive inpatient assessment, diagnosis and care planning, in concert with community-based services.

7.2.1.3(1)(c) Integrated, specialist outpatient services that address both morbidity and the intersectionality of HIV, HCV, mental illness, substance use, concurrent disorder and the deficits in the social determinants of health association with urban deprivation, including longitudinal primary care for Patients with complex needs.

7.2.1.3(1)(d) Transitional accommodation after the Patient is discharged from NSPH in order to bridge the individual to primary and community care and/or to a safe living place.

7.2.1.4 Scope of Educational Activity

7.2.1.4(1) The Facility will be a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents.

7.2.1.4(2) The programs in this Component will provide opportunities for Staff and student education. In-service education will also be conducted on a regular basis. Teaching and supervision functions will be accommodated in the general work areas and will not require specialized or dedicated facilities.

7.2.1.4(3) A wide range of individual and small group clinical teaching activities will be accommodated directly in the clinical care areas. These include:

7.2.1.4(3)(a) Individualized Patient/family education;

7.2.1.4(3)(b) Precepting and mentoring learners as per agreements with educational facilities;

7.2.1.4(3)(c) Orientation of new Staff;

7.2.1.4(3)(d) Addictions Fellowship program;

7.2.1.4(3)(e) HIV/HCV training programs; and

7.2.1.4(3)(f) Infectious Disease Fellowship Program.

7.2.1.4(4) In-service and inter-professional teaching and education will be conducted on a regular basis in the Staff Conference/Meeting Room.

7.2.1.5 Scope of Research Activity

7.2.1.5(1) Clinical research is a vital activity of the programs in this Component and will include the BC Centre for Excellence in HIV/HCV, the BC Centre on Substance Use and CARMHA – the Centre for Applied Research in Mental Health and Addiction. Consult/Interview Rooms and Exam Rooms within the Outpatient Services will be used for clinical trials serving these groups.

7.2.1.6 Scope Exclusions

7.2.1.6(1) Conducting electroconvulsive therapy (ECT) will not be provided in this Component. Refer to Component G, Surgical and Interventional Services.

7.2.2 Services provided

7.2.2.1 Stabilization Unit

7.2.2.1(1) The Stabilization Unit will be adjacent to the ED, providing for a seamless transition of care between one area and the next.

7.2.2.1(2) Patient access to the Stabilization Unit is from either the ED or the Walk-In and VPD/BCEHS Entrances.

7.2.2.1(3) The Stabilization Unit will provide stabilization of acute symptoms for Patients who face severe mental illnesses or a severe substance use disorder or both, combined with other challenges such as poverty, homelessness and other deficiencies in the social determinants of health.

7.2.2.1(4) The Stabilization Unit will be divided into two (2) sub-units to allow for grouping of Patients.

7.2.2.2 Outpatient Services

7.2.2.2(1) Outpatient Services will have Direct Access via a Dedicated Outpatient Entrance.

7.2.2.2(2) The Outpatient Services will provide services at the high intensity level of care for Patients who require wrap-around, team-based care from multiple health care providers. HIV/HCV Specialist Services will be provided for Patients with complex needs associated with HIV and/or HCV infection.

7.2.2.2(3) The John Ruedy Clinic will provide specialist longitudinal Primary Care for complex HIV positive Patients.

7.2.2.2(4) Rapid, wrap around mental health, substance use and concurrent disorder treatment and care will be provided through the Rapid Access Addiction Clinic and Brief Intervention Clinic.

7.2.2.2(5) A small number of Patients will receive longitudinal care from either Addiction Medicine specialists or Psychiatrists delivering psychotherapy.

7.2.2.2(6) At Outpatient Services, Patients will be stabilized and supported through to their re-integration into primary care and community services.

7.2.2.2(7) Outpatient Services will include Outpatient Antimicrobial Therapy (OPAT).

7.2.2.3 Mental Health Inpatients

7.2.2.3(1) Patients are admitted to the Mental Health Inpatients directly from the ED, or they are transferred from the Stabilization Unit.

7.2.2.3(2) The Mental Health Inpatients will provide comprehensive assessment, diagnosis and care planning for Patients who face severe mental illnesses with or without a substance use disorder combined with other challenges such as poverty, homelessness and other deficiencies in the social determinants of health.

7.2.2.3(3) The Mental Health Inpatients will be divided into three (3) secured sub-units of Patient Rooms to allow for grouping of Patients.

7.2.2.4 Urban Health Acute Care Unit

7.2.2.4(1) The Urban Health Acute Care Unit, including the Addiction Medicine Consult Team (AMCT), is located in the Inpatient medicine Component, adjacent to the Eating Disorders Day Hospital Program and Inpatient Unit, the MedPsych Unit and Mental Health Inpatients (refer to Component C).

7.2.2.5 Transitional Care Centre

7.2.2.5(1) The Transitional Care Centre provides temporary, short stay accommodation for Patients who i) no longer require an acute care bed; or ii) have attended the ED but do not require admission; and iii) are accessing Outpatient Services. All three groups will require support in their transition to primary/community care services and long term housing solutions.

7.2.2.5(2) There is no SPH clinical involvement in this centre, as clients have been medically cleared and discharged. Support will be provided by community-based service providers.

7.3 OPERATIONAL CONSIDERATIONS

7.3.1 Service Delivery Principles and Methods

7.3.1.1 Service Delivery Principles

7.3.1.1(1) The aligned Primary Care Networks in the Vancouver community will enable us, in partnership with VCH, to plan, deliver and coordinate services for people living with HIV/HCV, mental illness, substance use disorder(s) and/or Urban Health issues.

7.3.1.1(2) Key VCH enablers include:

7.3.1.1(2)(a) Care organized through shared or linked Electronic Medical Health Record (i.e. PARIS).

7.3.1.1(2)(b) Responsive access with same-day, as well as prescheduled appointments and emergency response contingent on need.

7.3.1.1(2)(c) Use of telemedicine options including access to appropriate telephone or video conferencing consults.

7.3.1.1(2)(d) Access to appropriate Patient self-management, group care services and support for family caregivers.

7.3.1.1(2)(e) Extended hours of operation and appropriate arrangements for 24/7 on-call response.

7.3.1.1(3) Using a trauma-informed, the MOC will provide Patients the ability and right to make choices in their care and their treatment goals. As such, a range of therapies and activities, relevant to the Patient and consistent with their treatment goals, will be offered.

7.3.1.1(4) The Stabilization Unit and Mental Health Inpatients Service will be function-based and recovery-based and organized according to the level of care required.

7.3.1.1(5) For the Stabilization Unit and Mental Health Inpatients care, MRP will be dependent on primary diagnoses, not program of admission.

7.3.1.1(6) Outpatient Services will be built around:

7.3.1.1(6)(a) Effective and proactive case finding in collaboration with linked Primary Care Networks, as well as through acute care and community settings; this will be done in partnership with VCH.

7.3.1.1(6)(b) Efficient consultant services to and referral processes from linked Primary Care Networks and EDs, including intake and assessment processes.

7.3.1.1(6)(c) Evidence-based care pathways to reduce care deviations and create more stability.

7.3.1.1(6)(d) Effective rapid mobilization of services to meet the changing needs of the Patients (including Patient-centred pathways to medical specialist, surgical and interventional services and/or ED services).

7.3.1.1(6)(e) Embedded peer program to enable access, navigation and re-integration in community and Primary Care Network

7.3.1.2 Patient and Family Management Processes and Flows

7.3.1.2(1) Patient

7.3.1.2(1)(a) Patients seeking care and treatment through the clinical programs in this Component will transition from and to community services provided by primary and community health care partners, not-for-profit partners and housing providers.

7.3.1.2(1)(b) Emergency Department (See Component A. Emergency)

7.3.1.2.1.(b).1 The ED facilitates rapid assessment and diagnostics for associated problems such as injury, drug and alcohol toxicity and medical comorbidity.

7.3.1.2.1.(b).2 The first touch point for many of the Patients will be the ED. Patients are likely to arrive with first responders, escorted by first responders, or they will present independently in acute crisis or in an unstable state in need of assessment and treatment by the emergency physicians and inter-professional team.

7.3.1.2.1.(b).3 Depending on presentation and acuity, Patients will be immediately assessed at triage and directed to the most appropriate treatment area in the ED; or

7.3.1.2.1.(b).4 Patients may be immediately directed to the Stabilization Unit, if the Patient is a known Patient, requires immediate interventions, and has no medical condition as assessed with ABC.

7.3.1.2.1.(b).5 A significant level of security is required for both Patients and Staff in this area.

7.3.1.2(1)(c) Walk-in and VPD/BCEHS Entrance

7.3.1.2.1.(c).1 Patients being recalled under Section 28 of the Mental Health Act and not requiring triage by the ED may bypass the ED and use the VPD/BCEHS Entrance.

7.3.1.2.1.(c).2 Patients will be immediately assessed to confirm if an admission is required and then admitted to the most appropriate inpatient service - the Stabilization Unit or the Mental Health Inpatients.

7.3.1.2.1.(c).3 A significant level of security is required for both Patients and Staff in the Walk-in and VPD/BCEHS Entrance.

7.3.1.2(1)(d) Stabilization Unit

7.3.1.2.1.(d).1 Following assessment and medical stabilization in the ED, Patients with mental health and/or substance use needs may be admitted to the Stabilization Unit.

7.3.1.2.1.(d).2 Patients admitted to the Stabilization Unit are often acutely psychotic, with unpredictable and often aggressive behaviours. Safety is paramount for management of unpredictable and aggressive behaviour.

7.3.1.2.1.(d).3 The Stabilization Unit will have sub-units; Patients will be admitted to the most appropriate sub-unit, based on presenting condition and treatment/intervention required.

7.3.1.2.1.(d).4 Physician to physician consultation and physician acceptance is required before admission.

7.3.1.2.1.(d).5 A co-MRP model between Emergency, Psychiatry and Addictions Medicine will allow for the stabilization of both medical and psychiatric conditions, such as drug-induced psychosis.

7.3.1.2.1.(d).6 Admission Process:

(d).6.1 Admission orders are typically entered when the Patient is seen in consultation in the ED.

(d).6.2 The admission orders include certification under the Mental Health Act and the completion of the required forms.

(d).6.3 If the Patient requires chemical and/or physical restraint, the Patient may be admitted to a Secure Room.

(d).6.4 The Registered Psychiatric Nurse (RPN)/RN conducts a Patient assessment and admission on arrival to the unit. This includes collection of structured information which forms the nursing baseline. This assessment can trigger referrals to allied health professionals.

(d).6.5 The RPN/RN admission includes informing the Patient that they are certified under the Mental Health Act.

(d).6.6 Patient belongings, including valuables are secured in designated Store-Patients' Property.

(d).6.7 Orientation to the Patient Room and to the unit is conducted.

(d).6.8 The Unit Clerk notifies the Primary Care Provider of the admission.

(d).6.9 The required Mental Health Act Forms of are completed and signed.

7.3.1.2.1.(d).7 Patient Care

(d).7.1 Patients in the Stabilization Unit will receive care from an inter-disciplinary team from emergency, psychiatry and/or addictions medicine. The unit will be staffed with both RPNs and RNs.

(d).7.2 To the extent possible, Patients in the Stabilization Unit will follow clinical care pathways based on order sets, a group of evidence-based care Components for a given condition. Order sets are used to promote standards of care, improve quality and reduce health care process variability.

(d).7.3 In the Stabilization Unit, Patients will receive further assessment and treatment with specialized services and resources. The Stabilization Unit will be located adjacent to the ED to ensure optimal flow between the two (2) areas and improve the overall Patient experience.

7.3.1.2.1.(d).8 Patients are admitted to the Stabilization Unit typically following this trajectory:

(d).8.1 Admitted with an acute mental health condition, typically through the ED or Walk-in and VPD/BCEHS Entrance.

(d).8.2 Assessment, diagnosis and acute management, which may include detoxification.

(d).8.3 Stabilization of acute symptoms.

(d).8.4 Discharge to community with primary and community care support.

(d).8.5 Discharge to the Transitional Care Centre.

(d).8.6 Discharge to community, with support from the Outpatient Services.

(d).8.7 Transfer to the Mental Health Inpatients unit.

(d).8.8 Discharge planning is part of care planning and begins at admission with the establishment of clinical criteria for discharge and an estimated discharge date.

(d).8.9 Care and discharge planning is collaborative and involves not only the Patient and family, but also primary care and community care; it may also involve team members from the Outpatient Services and/or the Transitional Care Centre.

(d).8.10 With Convenient Access to the Transitional Care Centre and Outpatient Services, the Stabilization Unit will ensure Patients are assessed, treated and, when discharged, connected rapidly to the most appropriate services and level of care they require.

7.3.1.2(1)(e) Outpatient Services

7.3.1.2.1.(e).1 Patients will be referred to the clinics by community care providers, community support agencies and inpatient care providers, with the most appropriate care stream facilitated by the Clinic intake Staff. Patients may also self-refer or be referred directly from the ED.

7.3.1.2.1.(e).2 For complex Patients who have difficulties managing appointments, they will have

access to ancillary services such as higher acuity tests, lab work, diagnostic imaging, as well as ECT (in Scopes and Minor Procedures Zone in Component G) and OPAT, in order to maintain their health and reduce risk of crisis.

7.3.1.2.1.(e).3 John Ruedy Primary Care Patients visit the clinic on a minimum 3-month schedule and as primary care needs arise between routine appointments. The clinic is the Patient's primary care home.

7.3.1.2.1.(e).4 HIV/HCV/Infectious Disease Patients will be referred to the HIV/HCV Specialist services by other care providers and will be seen by HIV/HCV Specialist physicians with the support of the JRC interdisciplinary team.

7.3.1.2(1)(f) Mental Health Inpatients

7.3.1.2.1.(f).1 Patients who are stabilized yet require further inpatient care will be admitted to the Mental Health Inpatients unit.

7.3.1.2.1.(f).2 The unit is intended for short-term inpatient care for Patients with a severe mental illness, with or without addiction issues, who are in the acute phase of their illness.

7.3.1.2.1.(f).3 Patients in the Mental Health Inpatients unit with a concurrent disorder will have either Psychiatry or Addiction Medicine as MRP, with access to consultation by the secondary discipline (either psychiatry or addictions medicine).

7.3.1.2.1.(f).4 Adjacent to the Mental Health Inpatients unit will be an IPU Med/Psych Unit to support Patients who have both an acute mental illness or concurrent disorder and an acute medical condition (refer to Component C).

7.3.1.2.1.(f).5 The Mental Health Inpatients unit will have three (3) sub-units; Patients will be admitted to the most appropriate sub-unit, based on presenting condition and treatment/intervention required.

7.3.1.2.1.(f).6 Physician to physician consultation and physician acceptance is required before admission.

7.3.1.2.1.(f).7 Exclusion Criteria:

(f).7.1 Patients with only substance use disorders will be treated on an inpatient medical unit and assessed

by the Addiction Medicine Consult Team.

7.3.1.2.1.(f).8 Admission Process:

(f).8.1 Most Patients are admitted from the ED. Admission orders are typically written/entered when the Patient is seen in consultation in the ED.

(f).8.2 The admission orders include certification under the Mental Health Act and the completion of the required Forms.

(f).8.3 If the Patient requires chemical and/or physical restraint, the Patient may be admitted to a Secure Room,

(f).8.4 The RPN/RN conducts a Patient assessment and admission on arrival to the unit. This includes collection of structured information which forms the nursing baseline. This assessment can trigger referrals to allied health professionals.

(f).8.5 The RPN/RN admission includes informing the Patient that they are certified under the Mental Health Act.

(f).8.6 Patient belongings, including valuables, are secured in designated Store-Patients' Property.

(f).8.7 Orientation to the Patient Room and to the unit is conducted.

(f).8.8 The Unit Clerk notifies the Primary Care Provider of the admissions.

(f).8.9 The required Mental Health Act Forms of are completed and signed.

(f).8.10 Patients may be transferred to the Mental Health Inpatients unit from the Stabilization Unit.

(f).8.11 Patients may be transferred to the Mental Health Inpatients unit from the IPU Med/Psych Unit.

(f).8.12 Patients may be transferred to the Mental Health Inpatients unit from another mental health unit.

(f).8.13 Patients may be transferred to the Mental Health Inpatients unit from a medical unit.

(f).8.14 A physician to physician consultation occurs prior to acceptance and

transfer to the Mental Health Inpatients unit.

7.3.1.2.1.(f).9 Patient Care

(f).9.1 Patients in the Mental Health Inpatients unit may receive care from an inter-disciplinary team from psychiatry and addictions medicine.

(f).9.2 To the extent possible, Patients in the Mental Health Inpatients unit will follow clinical care pathways based on order sets, a group of evidence-based care Components for a given condition. Order sets are used to promote standards of care, improve quality and reduce health care process variability.

7.3.1.2.1.(f).10 Patients are admitted to the Mental Health Inpatients unit typically following this trajectory:

(f).10.1 Admitted with an acute mental health condition or a concurrent disorder, usually through the ED or transferred from the Stabilization Unit.

(f).10.2 Assessment, diagnosis and management of acute symptoms; which may include allied health support by social work or OT.

(f).10.3 Discharge to community with primary and community care support.

(f).10.4 Discharge to the Transitional Care Centre.

(f).10.5 Discharge to community, with support from the Outpatient Services.

(f).10.6 Discharge planning is part of care planning and begins at admission with the establishment of clinical criteria for discharge and an estimated discharge date.

(f).10.7 Care and discharge planning is collaborative and involves not only the Patient and family, but also primary care and community care; it may also involve team members from the Outpatient Services and/or the Transitional Care Centre.

7.3.1.2(1)(g) Transitional Care Centre

7.3.1.2.1.(g).1 The Transitional Care Centre is located adjacent to the ED and the Stabilization Unit.

7.3.1.2.1.(g).2 Patients who are discharged from the ED or from an IPU and require up to seventy-two (72) hours to transition safely or sustainably to primary and community care may stay at the Transitional Care Centre.

7.3.1.2.1.(g).3 Services and supports at the Transitional Care Centre will be provided by community clinicians and teams.

7.3.1.2.1.(g).4 Patients will have access to community-based inter-professional teams who will come to the centre to facilitate transition to and maximize the potential for sustained Patient follow-up in primary and community care.

7.3.1.2.1.(g).5 In the Transitional Care Centre, Patients will also have support with practical issues, such as arranging transportation and housing.

7.3.1.2(2) Family

7.3.1.2(2)(a) PHC is committed to providing Person- and Family-Centred Care and working with Patients and families as partners. Families are an integral part of the Patient journey and families will be involved in every step of the planning and delivery of care, as appropriate.

7.3.1.2(2)(b) Patient families will be integrated as part of the care team by ensuring that there are family zones in the IPUs.

7.3.1.3 Patient Information Management

7.3.1.3(1) All Patient related information will be maintained on the EMR system. Wireless technology will enable data entry using a combination of fixed workstation/WOWs, located close to each Patient's bedside and at key Staff workstations, and mobile devices/tablets. Access to the EMR will be controlled electronically with varying levels of security clearance determining a Person's access to different sections and their ability to enter/edit data.

7.3.1.3(2) Patient information systems will be electronic, with access to information by means of computer terminals located at all Staff work areas distributed throughout each inpatient and outpatient services.

7.3.1.3(3) Computer charting will occur at the Patient bedside, and in Consult/Interview Rooms, Exam Rooms and Procedure Rooms in both inpatient and outpatient clinics using hand-held wireless devices or computer terminals.

7.3.1.3(4) Ordering and scheduling of tests, procedures, and medications will be managed through terminals in the clinical areas or through the hand-held devices.

7.3.1.3(5) Patient Rooms, Consult/Interview Rooms, Exam Rooms, Procedure Rooms, and Care Team Stations will accommodate documentation capabilities for maintaining both paper and electronic charts/records

7.3.1.3(6) Patient information will be available throughout the IPUs and Outpatient Services wirelessly or through computer terminals.

7.3.1.3(7) Centralized electronic Patient scheduling, booking and check-in processes will be established for each Component.

7.3.1.3(8) All Staff will have personal communications devices to avoid use of the central paging system.

7.3.1.3(9) Electronic Patient status board and Patient monitoring will be available at Care Team Stations and strategic locations to be determined by the care team for both IPUs and outpatients' clinics.

7.3.1.4 Care Provider Work Processes and Flows

7.3.1.4(1) Start/end of shift

7.3.1.4(1)(a) Staffing information will be a managed corporate service. Scheduling, including providing for sick and vacation relief will be conducted centrally, and off-site. Notices to individual Staff regarding their schedules will be communicated electronically.

7.3.1.4(1)(b) At the start of shift, Staff will pick up a handheld wireless communication device that is linkable and with the ability to view physiologic monitoring of the Patients they are assigned to if required.

7.3.1.4(1)(c) An integrated, linked Nurse Call System with ability to link and receive physiologic monitoring (where appropriate) will be required for the Stabilization and Mental Health Inpatients units.

7.3.1.4(1)(d) Staff will be able to communicate utilizing hands-free communication system.

7.3.1.4(1)(e) When the shift is completed, Staff will return handheld wireless communication before leaving the Facility.

7.3.1.4(2) Communications

7.3.1.4(2)(a) Communication will include verbal, electronic and written. Handheld wireless devices with the ability to link documents and Patient records and receive physiologic monitoring will be available to all clinicians caring for Patients. Electronic devices will have the capability to link and communicate with clinicians outside the Urban Health and Integrated Mental Health and Substance Use program in alternate locations (consults).

7.3.1.4(2)(b) RTLS tagging will enable the assignment of Staff based on acuity and Patient demands, movement of Equipment, Patient movement within and outside of the Urban Health and Integrated Mental Health and Substance Use program.

7.3.1.4(2)(c) Public areas require electronic wall mounted displays.

7.3.1.4(2)(d) Electronic Patient Information boards with specific Patient information will be available.

7.3.1.4(2)(e) Electronic communication will link with housekeeping.

7.3.1.4(2)(f) Electronic and verbal communication linked with Ambulance and Emergency Services will be readily available at the VPD/BCEHS Entrance Care Team Station.

7.3.1.4(2)(g) All Patient Exam Rooms will have physiologic monitoring capability. Portable physiologic monitors will be readily available to deploy to any Patient position.

7.3.1.4(3) Maximized Use of Staff Resources

7.3.1.4(3)(a) The goal is to ensure all members of the care team work together collectively, collaboratively and to their full scopes of practice.

7.3.1.4(3)(b) Staff resource utilization will be maximized in that the most appropriate Staff Persons will perform tasks.

7.3.1.4(3)(c) The clinical programs within this Component are committed to a goal of creating the blend of skill sets within each clinical team and on each unit that best matches the needs of the Patient population being served.

7.3.1.5 Clinical and Logistical Support Processes and Flows

7.3.1.5(1) Medical Imaging

7.3.1.5(1)(a) Medical Imaging Equipment will be brought to the Patient when clinically indicated through mobile equipment.

7.3.1.5(1)(b) When clinically necessary, Patients will be transported to the Medical Imaging Component for testing.

7.3.1.5(2) Laboratory Services

7.3.1.5(2)(a) The Main Laboratories will be available to support these clinical programs.

7.3.1.5(2)(b) POCT will be used where appropriate.

7.3.1.5(3) Respiratory Therapy Services

7.3.1.5(3)(a) Clinical services that will be provided at Patient bedside or in dedicated therapy and treatment spaces within each unit or clinic include RT.

7.3.1.5(4) Allied Health

7.3.1.5(4)(a) Allied Health Clinical services that will be provided at the Patient bedside or in dedicated therapy and treatment spaces within each unit or clinic include: clinical pharmacy, PT, nutrition, OT, SLP, RT and Social Work.

7.3.1.5(5) Language Services

7.3.1.5(5)(a) Interpreters will be available upon request for Patient and families.

7.3.1.5(6) Integrated Protection Services

7.3.1.5(6)(a) Integrated Protection Services (IPS) Staff will provide a front-line presence at the Walk-in and VPD/BCEHS Entrances, and will attend to all issues related to visitor, Staff, and Patient security.

7.3.1.5(7) Equipment and Instruments

7.3.1.5(7)(a) The Equipment Depot (See Component O) will store Equipment that can be quickly brought to any area of the Urban Health and Integrated Mental Health and Substance Use Program.

7.3.1.5(7)(b) Necessary and frequently used Equipment will be kept in these clinical program areas for Convenient Access; these will be monitored and stocked by central supply and cleaned as per IPAC protocols, including the separation of clean and soiled Equipment.

7.3.1.5(7)(c) Alcove-Local Equipment will also store Equipment.

7.3.1.5(7)(d) RTLS tagging of Equipment will allow for tracking and monitoring.

7.3.1.5(7)(e) AGVs will transport materials and supplies to and from the Component in the Back of House space.

7.3.1.5(8) Consumable Supplies

7.3.1.5(8)(a) Consumable supplies will be kept close to the POC. Items will be maintained with a minimum inventory level, which will trigger a re-ordering process.

7.3.1.5(8)(b) RTLS tagging of supplies will allow for tracking and replenishment. Store-Clean Supplies will also store supplies. AGVs will transport materials and supplies to and from the Component in the Back of House space.

7.3.1.5(9) Laundry and Linen Services

7.3.1.5(9)(a) Clean linen will be stocked in secured Alcove-Clean Linen in the IPUs and in the outpatient clinics.

7.3.1.5(9)(b) Soiled linen will be secured in hampers and removed by housekeeping Staff and transported by AGVs.

7.3.1.5(9)(c) Storage and pathways for clean supplies, equipment and linen will be kept separate from soiled supplies, equipment and linen.

7.3.1.5(10) Waste Management

7.3.1.5(10)(a) Waste products, recycling and bio-HAZMAT will be separated at POC and secured in holding areas until pick up by housekeeping Staff and transported by AGV's

7.3.1.5(10)(b) Waste containers will be monitored, removed and replaced by housekeeping Staff and transported using AGVs.

7.3.1.5(11) Food Services

7.3.1.5(11)(a) Clinical services that will be provided at Patient bedside or in dedicated therapy and treatment spaces within each unit or clinic include clinical nutrition.

7.3.1.5(11)(b) For inpatient mental health units, food will be delivered from the CFP, stored, heated and distributed to the Patients either in their rooms or in dining spaces by food services Staff.

7.3.1.5(11)(c) Food trays will be retrieved by Food Services Staff and returned to the Servery on the unit for reprocessing.

7.3.1.6 Anticipated Trends in Service Delivery

7.3.1.6(1) Mental illness, substance use and related harms, including HIV and HCV, continue to affect the health and wellness of a large proportion of the population treated at SPH. Visits related to mental health and substance use at SPH have increased by 76% over the last five (5) years.

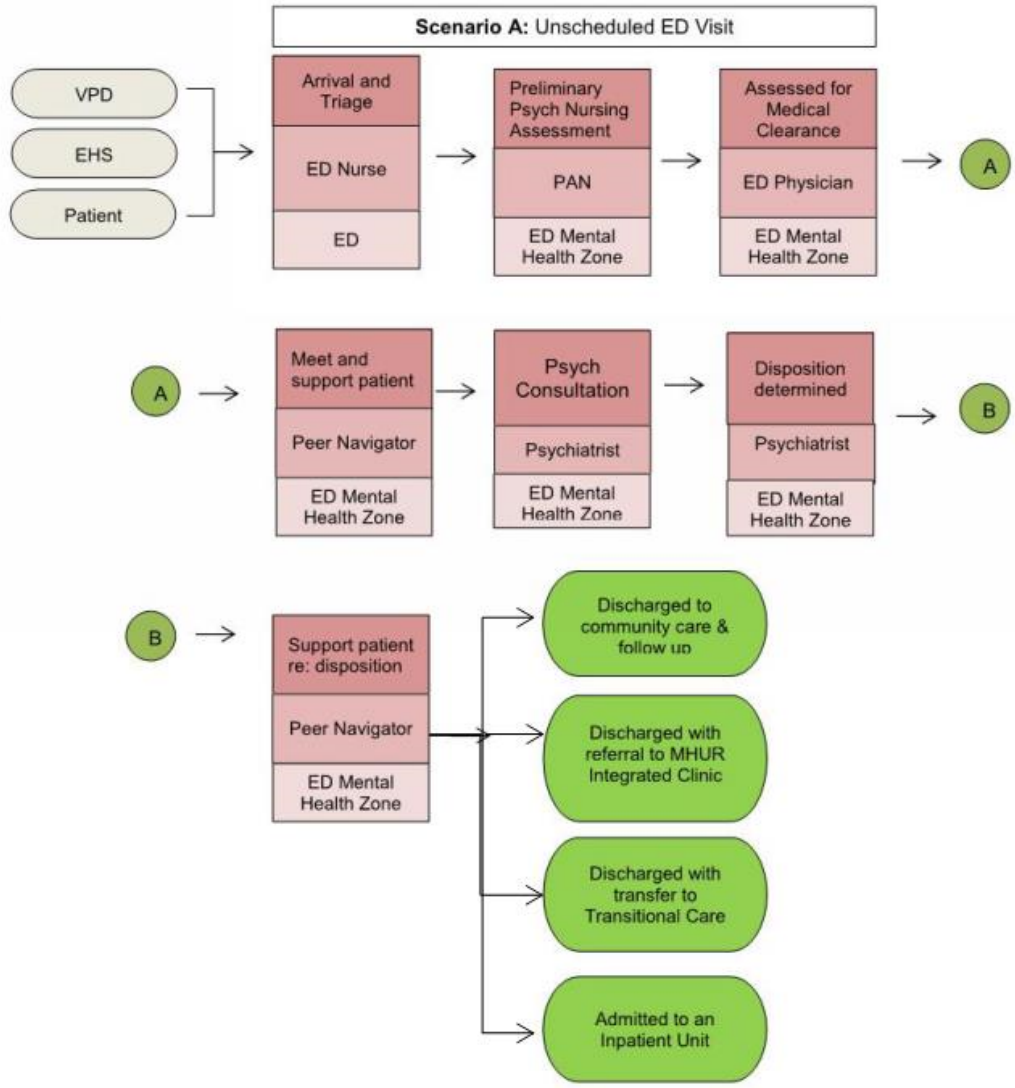
7.3.1.6(2) In the future, inpatient and outpatient services will be provided to those Patients who have increasingly complex care needs including medical diagnoses, addictions, behavioural issues and increasingly complex mental health diagnoses.

7.3.1.6(3) The Stabilization Unit and Mental Health Inpatients unit will accommodate those who pose a significant danger to themselves or others, requiring a higher level of safety and security in the Facility design.

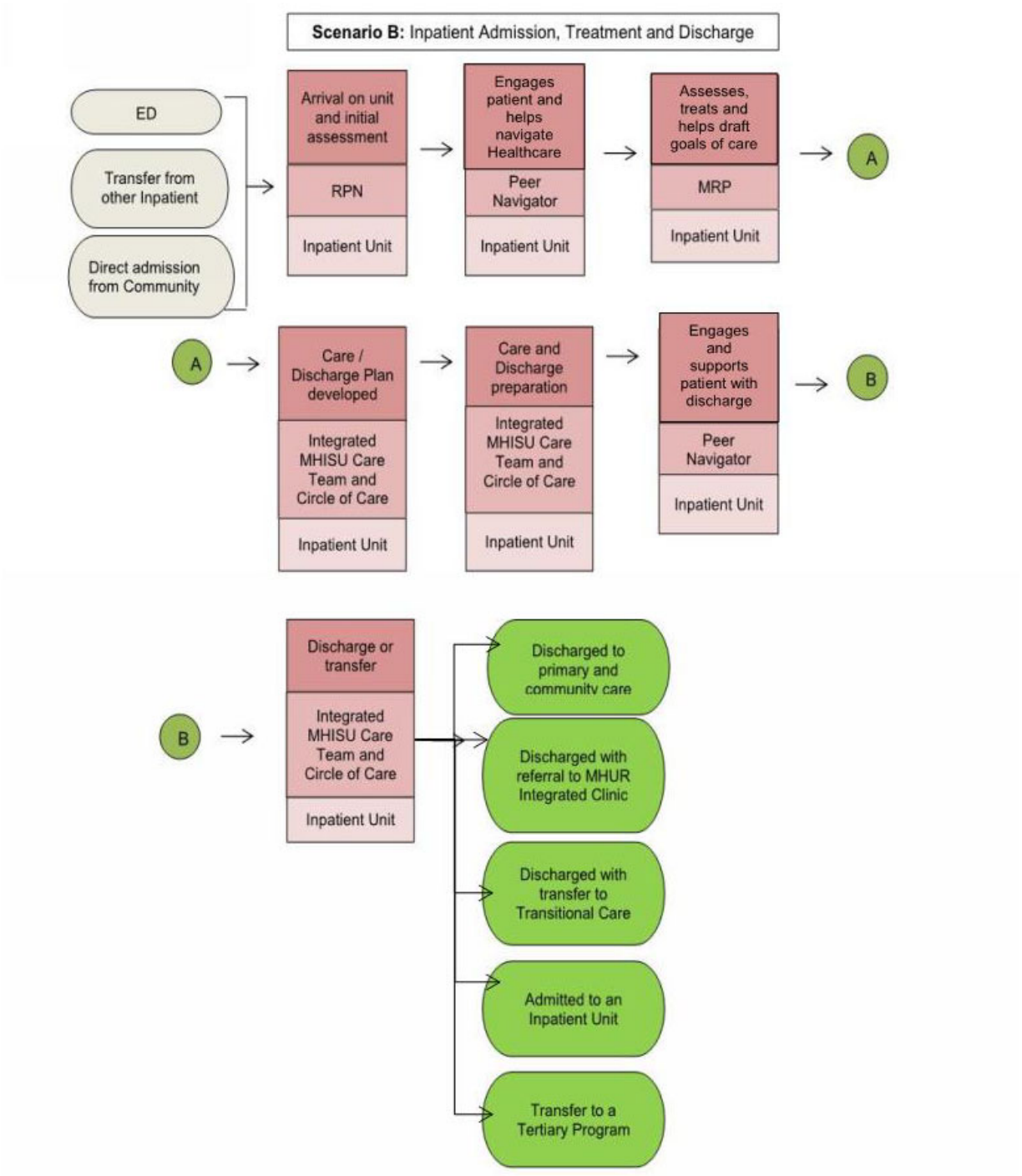
7.3.2 Workflows

7.3.2.1 The Urban Health and Integrated Mental Health and Substance Use workflows are depicted in the following workflow diagrams.

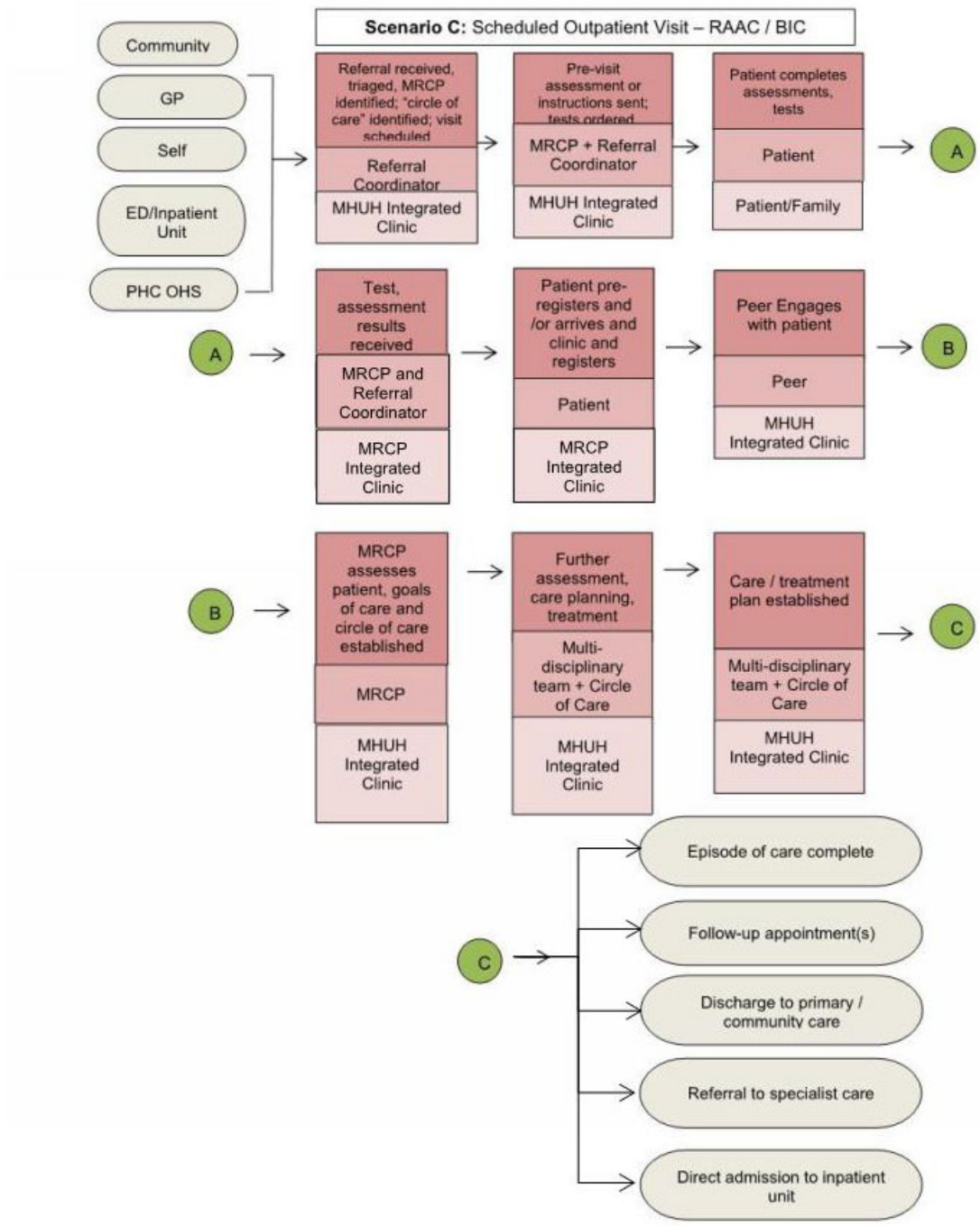
F. URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE WORKFLOW DIAGRAM SCENARIO A: UNSCHEDULED ED VISIT



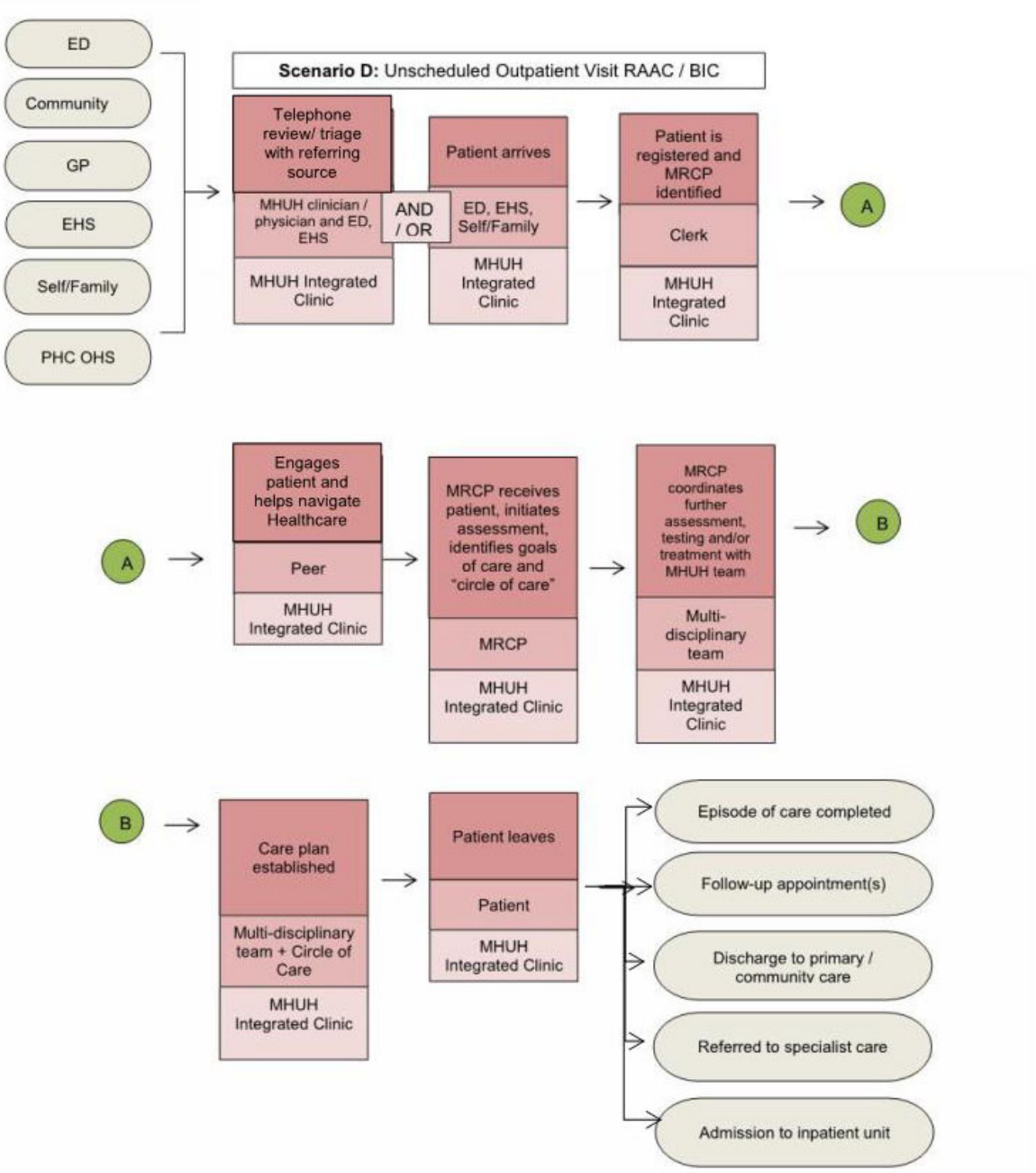
F. URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE WORKFLOW DIAGRAM SCENARIO B: INPATIENT ADMISSION, TREATMENT AND DISCHARGE



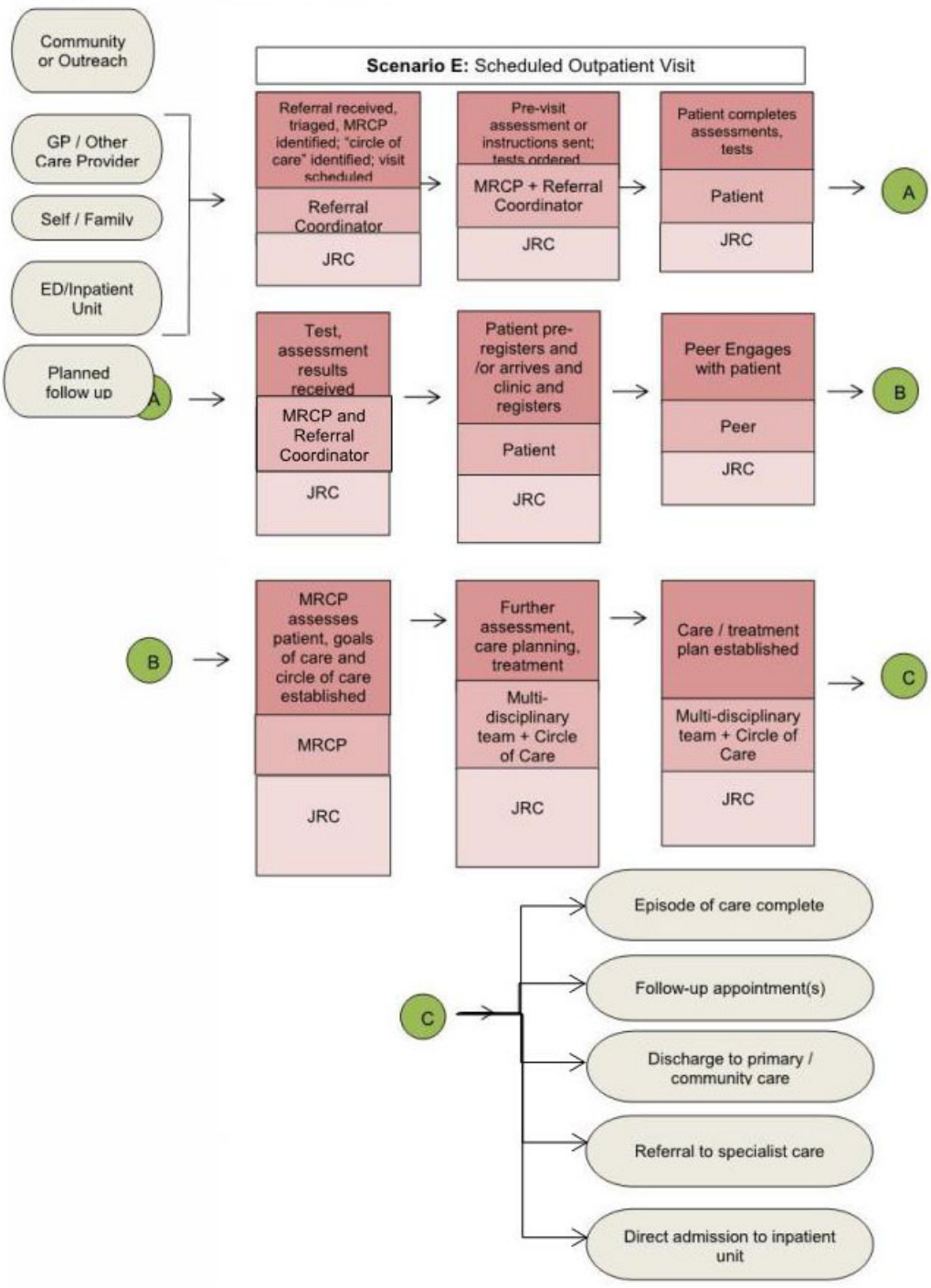
F. URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE WORKFLOW DIAGRAM SCENARIO C: SCHEDULED OUTPATIENT VISIT - RAAC / BIC



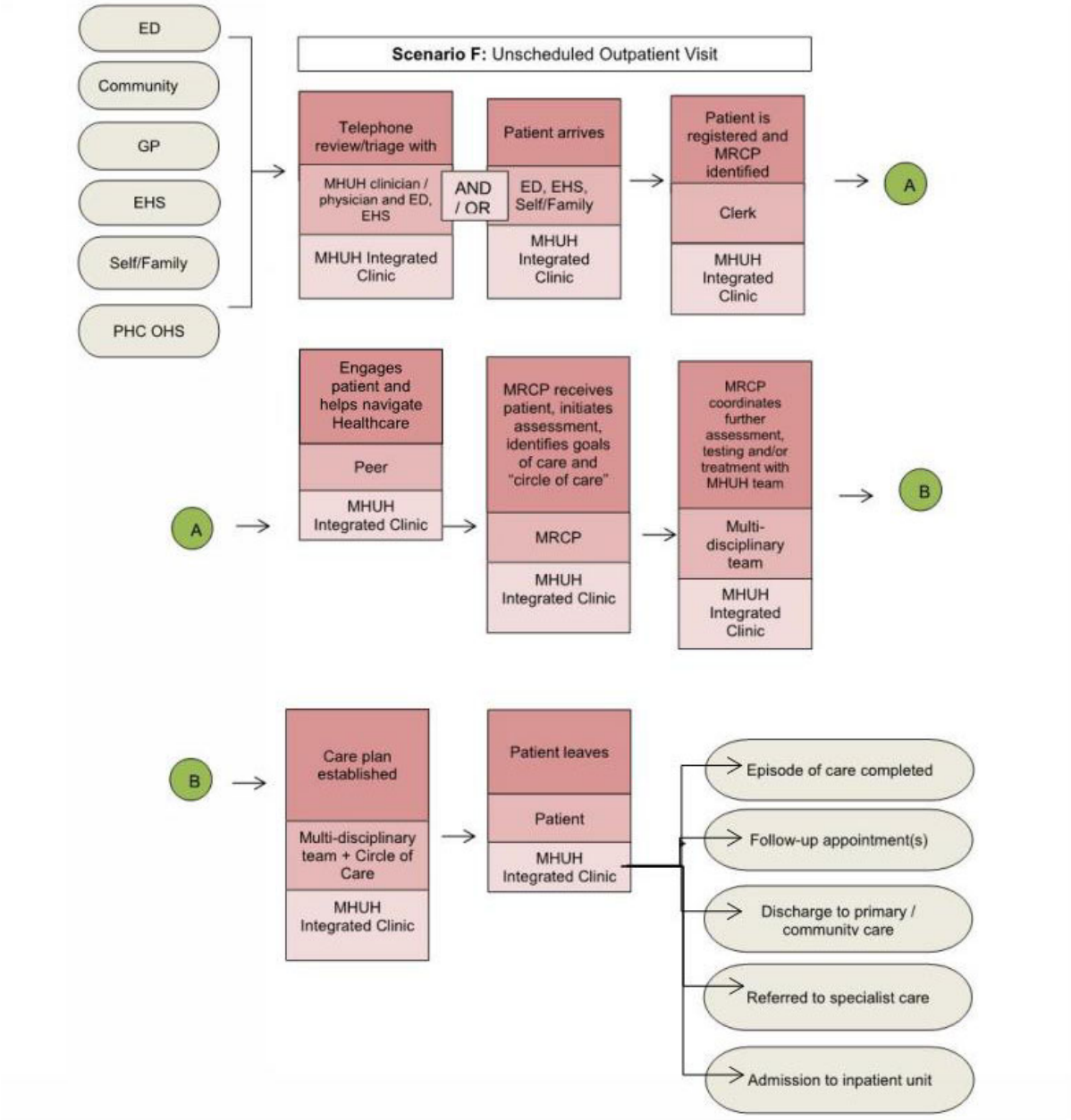
F. URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE WORKFLOW DIAGRAM
SCENARIO D: UNSCHEDULED OUTPATIENT VISIT - RAAC / BIC



F. URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE WORKFLOW DIAGRAM SCENARIO E: SCHEDULED OUTPATIENT VISIT



F. URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE WORKFLOW DIAGRAM
SCENARIO F: UNSCHEDULED OUTPATIENT VISIT



7.3.3 Hours of Operation

7.3.3.1 The Stabilization Unit, Mental Health Inpatients and Transitional Care Centre will be operational 24 hours per day, 365 days per year.

7.3.3.2 Outpatient services require extended hours of operation and appropriate arrangements for 24/7 on-call response.

7.3.4 Workloads

7.3.4.1 Staffing in the clinical programs will include a defined baseline however Staff ratios will be flexible based on Patient acuity, complexity and demand.

7.3.4.2 The maximum estimated workload for this Component is shown in the following table.

URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE	PEAK SHIFT
Direct Care Team Staff: Stabilization Unit	
Physician	4
Medical Resident	3
Clinical Pharmacist	1
Nurse Practitioner	1
Nurse Educator	1
Clinical Nurse Leader/Charge Nurse	1
Nurse	5
Acute Care Aide/MH Worker	1
Other Technologist	1
Social Worker	1
Unit Clerk	1
Housekeeper	1
Subtotal, Direct Care Team Staff: Stabilization Unit	**21**
Other	
Student	9
Researcher and Other	2
Subtotal, Other	**11**
TOTAL: Stabilization Unit	**32**

URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE	PEAK SHIFT
Direct Care Team Staff: Outpatient Services	
Physician	4
Medical Resident	12
Clinical Pharmacist	3
Nurse Practitioner	2
Nurse Educator	1
Clinical Nurse Leader/Charge Nurse	1
Nurse	14
Acute Care Aide/MH Worker	3
Psychologist	3
Social Worker	5
Spiritual Care	1
Dietician	1
Unit Clerk	3
Housekeeper	1
Subtotal, Direct Care Team Staff: Outpatient Services	**54**
Other	
Student	9
Volunteer	2
Researcher and Other	12
Subtotal, Other	**23**
TOTAL: Outpatient Services	**77**
Direct Care Team Staff: Mental Health Inpatients	
Physician	8
Medical Resident	12
Clinical Pharmacist	2
Nurse Practitioner	2
Clinical Nurse Specialist	2
Nurse Educator	2
Clinical Nurse Leader/Charge Nurse	2
Nurse	12

URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE	PEAK SHIFT
Acute Care Aide/MH Worker	2
Other Technologist	2
Occupational Therapist	4
Psychologist	2
Speech Language Pathologist	2
Social Worker	4
Spiritual Care	2
Music Therapist/Art Therapist	2
Dietician	2
Unit Clerk	4
Housekeeper	2
Subtotal, Direct Care Team Staff: Mental Health Inpatients	**64**
Other	
Student	24
Volunteer	4
Researcher and Other	4
Subtotal, Other	**32**
Shared Staff: Mental Health Inpatients	
Program Director	2
Nurse Practitioner	2
Clinical Nurse Specialist	2
Program Clerk	2
Medical Director	4
Physician Consultants	8
Patient Care Manager	2
Administration Assistant	2
Informatics Nurse	2
Outreach Nurse	2
Data Analyst	2
Quality Assurance	2
Clinical Pharmacist	2
Pharmacy Technician	4
First Nations Support	2

URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE	PEAK SHIFT
Porter Ward Aide	2
Subtotal, Shared Staff (not included in daytime peak)	**42**
TOTAL: Mental Health Inpatients	**96**
DAYTIME PEAK TOTAL: Urban Health and Integrated Mental Health and Substance Use (Stabilization Unit, Outpatient Services, Mental Health Inpatients)	**205**

7.4 DESIGN CRITERIA

7.4.1 General Requirements

7.4.1.1 Zones of activity within the Component include the following:

7.4.1.1(1) Dedicated Outpatient Entrance

7.4.1.1(2) Stabilization Unit

7.4.1.1(2)(a) Walk-in and VPD/BCEHS Entrances

7.4.1.1(3) Outpatient Services

7.4.1.1(4) Mental Health Inpatients

7.4.1.1(5) Transitional Care Centre

7.4.1.1(6) Mental Health Inpatient Unit Exterior Courtyard

7.4.1.2 Simple and intuitive Wayfinding is important for Patients and public coming to the clinical programs in this Component.

7.4.1.3 The design will create an environment that promotes well-being and supports healing by incorporating the following criteria:

7.4.1.3(1) Non-institutional and welcoming environment;

7.4.1.3(2) Single Patient Rooms with private ensuite washrooms;

7.4.1.3(3) Moveable seating in therapeutic spaces;

7.4.1.3(4) Low noise levels and acoustics to reduce noise as per Appendix 3C [Acoustic and Noise Control Measures];

7.4.1.3(5) Natural light throughout;

7.4.1.3(6) Adjustable, multi-level lighting;

7.4.1.3(7) Realistic artwork depicting the natural world;

7.4.1.3(8) Views of nature throughout; and

7.4.1.3(9) Mental Health Inpatients access to the Mental Health Inpatient Unit Exterior Courtyard.

7.4.1.4 Non-institutional and welcoming environment

7.4.1.4(1) The physical layouts and design features will minimize institutional aspects and maximize non-institutional aspects in order to provide a more therapeutic healing environment that will promote quicker recovery.

7.4.1.4(2) The physical layouts and design features will promote, protect and maintain safe independent function. A large proportion of the population served experiences cognitive, functional and mobility deficits and therefore the physical layouts and design features will comply with Code Plus, Physical Design Components for an Elder-Friendly Hospital, latest edition recommendations in order to create a supportive environment that reduces the stress of cognitive and functional burden and that encourages safe independent function.

7.4.1.4(3) The design will provide an environment that:

7.4.1.4(3)(a) Is empowering, safe and responsive environment for Patients;

7.4.1.4(3)(b) Reduces the risk of Patients being triggered; and

7.4.1.4(3)(c) Facilitates the de-escalation of anxiety, agitation and aggression.

7.4.1.5 Normalization of Safety and Security

7.4.1.5(1) Many Patients have experienced trauma including traumatic experiences in institutional settings. Safety and security will be maintained without creating an environment that triggers Patients.

7.4.1.5(2) Security features will be normalized in the environment to be least intrusive for Patients and families (see Crime Prevention through Environmental Design (CPTED) Principles).

7.4.1.6 Patient access and control over the environment

7.4.1.6(1) Where possible, Patients will retain autonomy and control over their environment.

7.4.1.6(2) Patient autonomy and control will be achieved through the access control system, which allows for a graduated range of access to the

unit and ensures that the individual Patient room is as private as possible.

7.4.1.6(3) In Patient Rooms, Patients will have control over the lighting, temperature and control of natural light and privacy through control of integral blinds.

7.4.1.6(4) Staff will have the ability to override Patient control if the device in question is being improperly used or is not supporting delivery of the Patient's care plan.

7.4.1.7 Staff Safety and Security

7.4.1.7(1) All interior doors in this Component are to have windows with integral blinds, unless otherwise specified.

7.4.1.7(2) Hot water temperature coming out of taps cannot be so hot as to be used to harm Patient, family, visitor or care provider.

7.4.1.7(3) Where floor drains are provided, they will be designed such that they cannot be tampered with and easily clogged. They will be easily and quickly washable.

7.4.1.7(4) Patient and family social/living areas will be designed as an open plan layout to allow for a potential incident to be seen better and allow clinical Staff to apply timely routines and procedures to de-escalate situations.

7.4.1.7(5) Staff will have access to areas where they cannot be interrupted by Patients. These areas will allow for focused attention on work or for decompression. These areas will be non-hierarchical and available for all disciplines including students.

7.4.1.7(6) Staff will have the ability to discretely access workspace and clinical support areas (i.e. Medication Rooms, Store-Clean Supplies and Soiled Utility rooms) though an on-stage/off-stage design.

7.4.1.7(7) Off-stage routes will be separated from the regular public/Patient path of access (on-stage) to optimize Staff safety and to ensure that Staff have options regarding their interaction with Patients and Patients' families.

7.4.1.8 Line of Sight

7.4.1.8(1) Line of Sight is critical in maintaining a passively secure environment. While each Component clinical area has its own requirements regarding Line of Sight to be determined based on the design, circulation throughout the program clinical areas will be free of visual obstruction (i.e. structural columns, protrusions or

recesses that create a space in which someone could conceal themselves). At minimum:

7.4.1.8(1)(a) The design will allow for Line of Sight from Care Team Stations and Reception areas to public and Patient entrances, lobbies and Waiting areas.

7.4.1.8(1)(b) The design will allow for Line of Sight from Care Team Stations to the door of the Anteroom-Secure.

7.4.1.9 The entrance areas and Care Team Stations are to create a first impression of welcome, comfort and healing.

7.4.1.10 Care Team Station design will allow for collaboration among Staff.

7.4.1.11 Care Team Stations require electronic wall mounted displays.

7.4.1.12 Medication Rooms will be located centrally with Convenient Access to Care Team Stations.

7.4.1.13 Medication Rooms will have dual egress and doors require glazing for visibility.

7.4.1.14 Pneumatic Tube Stations will be located centrally with Direct Access to Care Team Stations.

7.4.1.15 Support services and storage including Soiled Utility, Disposal Hold, Equipment storage and Store-Clean Supplies will be located centrally with Convenient Access to Patient Rooms to optimize flow and promote best Infection Prevention and Control protocols.

7.4.1.16 Medication Rooms and Store-Clean Supplies will be adjacent. Medication Rooms will have one (1) door from the corridor and another door connecting to the Store-Clean Supplies, so Staff can easily retrieve supplies for the setup of IV medications. Store-Clean Supplies will have another door from the corridor.

7.4.1.17 Alcove-Local Equipment will be grouped with Medication Room and Store-Clean Supplies.

7.4.1.18 The primary function of Soiled Utility is to provide a space to dispose of the full spectrum of clinical waste including bedpan disinfectors and assorted bins for cytotoxic and biomedical waste (e.g. used blood bags), perform limited soiled activities such as gross decontamination/rinsing/soaking of surgical type instruments, and temporarily store clinical specimens. In the Urban Health and Integrated Mental Health and Substance Use, Soiled Utility will also provide space to sequester and marshal soiled equipment and clean them. The design will allow for one way flow from soiled to clean, separate soiled and clean to prevent cross-contamination and provide a dedicated unobstructed cleaning zone, with Convenient Access from all clinical spaces in the area it is intended to

serve. Cleaned equipment will be moved to the Alcove-Local Equipment in a different and physically separate location away from Soiled Utility.

7.4.1.19 Hand hygiene sinks will be directly accessible and distributed appropriately in all clinical areas as per Infection Prevention and Control protocols.

7.4.1.20 Patient Washrooms will have Convenient Access to Patient Rooms.

7.4.1.21 Washroom-Staff will have Convenient Access to Staff work areas.

7.4.1.22 The presence of mobility aids including canes, crutches, walkers, wheelchairs, stretchers and motorized chairs/scooters will be anticipated in all Patient accessible areas throughout the Component.

7.4.1.23 Staff areas will be Back of House, separated from visitor and Patient areas.

7.4.1.24 The physical environment will facilitate team collaboration.

7.4.1.25 Telemedicine capability will be enabled in all care delivery spaces.

7.4.1.26 The Facility will be a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents. Work spaces will be enabled to have private, confidential conversations and be equipped with teaching capability.

7.4.1.27 Conference/Meeting Rooms, Consult/Interview Rooms, Staff offices and Team Space-Allied Health will have acoustic considerations to allow for privacy of conversations and recording/dictation as per Appendix 3C [Acoustic and Noise Control Measures].

7.4.1.28 All Conference/Meeting Rooms and similar rooms require IM/IT recording and teaching capability.

7.4.1.29 The corridor immediately outside any Exam Room-Large-Airborne Isolation-Hybrid and Patient Room-MH Accessible-Airborne Isolation-Hybrid will be a low traffic area purposefully sparse with no stored equipment and with Convenient Access to a corridor hand hygiene sink to allow Staff to don and doff their PPE and follow appropriate Infection Prevention and Control protocols.

7.4.2 Dedicated Outpatient Entrance

7.4.2.1 The Dedicated Outpatient Entrance will provide Patient and public access to Outpatient Services through a public stairway and UH and MHISU Public Passenger Elevator.

7.4.2.2 It may (but is not required to) provide public access to the Stabilization Unit (see Stabilization Unit Entrance below).

7.4.2.3 The Dedicated Outpatient Entrance will have Direct Access to the Facility exterior with vehicle drop-off/pick-up area.

7.4.3 Stabilization Unit

7.4.3.1 The Stabilization Unit will be located on Level 1 adjacent and with Direct Access to ED through Back of House circulation for rapid and safe Patient transport.

7.4.3.2 The entrance to the Stabilization Unit is divided into:

7.4.3.2(1) A controlled Entrance Vestibule-Walk-in that provides Patient, public and Staff access to the Stabilization Unit.

7.4.3.2(2) A controlled Entrance Vestibule-VPD/BCEHS that provides dedicated access to the Stabilization Unit for VPD and BCEHS to bypass the ED and convey Patients directly to the Unit when appropriate.

7.4.3.2(2)(a) Dedicated police and ambulance stalls will be provided adjacent to the VPD/BCEHS Entrance.

7.4.3.2(2)(b) The VPD/BCEHS Entrance will also provide Direct Access between the Stabilization Unit and ED to facilitate secure movement of Patients and Staff between the two (2) Components. Access between the Stabilization Unit and the ED will be via a corridor with controlled access.

7.4.3.2(3) The Walk-in and VPD/BCEHS Entrances will share a Care Team Station and a separate enclosed Control-Security. The Care Team Station will have Line of Sight to both Entrance Vestibule-Walk-in and Entrance Vestibule-VPD/BCEHS.

7.4.3.2(3)(a) Adjacent to the Care Team Station will be:

7.4.3.2.3.(a).1 A secure Waiting area with Alcove-Lockers-Visitor to store belongings and Washroom-Public.

7.4.3.2.3.(a).2 A Consult/Interview Room with dual egress.

7.4.3.3 All visits through the Entrance Vestibule-Walk-in will be separated from Entrance Vestibule-VPD/BCEHS. The Entrance Vestibule-VPD/BCEHS will not be visible from Persons in the Waiting area.

7.4.3.4 Stabilization Unit will have Direct Access to Outpatient Services, Mental Health Inpatients and IPS through Patient Transfer/Staff Service Elevators. The required Direct Access to Outpatient Services and Mental Health Inpatient for Staff and/or Patient transfers may be via the UH and IMHSU Public Passenger Elevators, provided:

7.4.3.4(1) the elevators and lobbies are appropriately sized to accommodate the transfer of a Patient on a stretcher accompanied by a minimum of two (2) Staff, and

7.4.3.4(2) have a minimum rated speed of 1.78 mps.

7.4.3.5 The Stabilization Unit is a secure unit with restricted egress.

7.4.3.6 Staff at the Care Team Station and Control-Security will control the access to the unit. There will be controlled access to and monitoring of the Stabilization Unit. The entrance will be controlled and monitored through IP video surveillance system along with remote door release.

7.4.3.7 Patient Waiting areas will have Line of Sight from the main entry Care Team Station.

7.4.3.8 Consult/Interview Rooms will have Line of Sight from Care Team Stations.

7.4.3.9 Procedure Rooms will have Convenient Access to Care Team Stations.

7.4.3.10 All Consult/Interview Rooms, Procedure Rooms and Office-Private will have dual egress for the safety of Staff.

7.4.3.11 The Stabilization Unit will be designed as a race track to ensure that there are no dead ends where Patients or Staff may be trapped, nor blind spots or alcoves where Patients or Staff will not be visible either by Line of Sight or by IP video surveillance.

7.4.3.12 The Stabilization Unit will contain two (2) Care Zones. In addition to the Care Team Station in the entrance, each Care Zone will have a Care Team Station.

7.4.3.13 Care Zone 01 will include eight (8) Patient Room-MH and one (1) Patient Room-MH Accessible-Airborne Isolation-Hybrid. Care Zone 02 will include eight (8) Patient Room-MH and one (1) Patient Room-MH Accessible. The Patient Room-MH Accessible-Airborne Isolation-Hybrid will be located close to the Patient Transfer/Staff Service and away from the UH and IMHSU Public Passenger Elevator. The path of travel to transfer a Patient to this room will not pass the UH and IMHSU Public Passenger Elevator and Waiting/Reception areas.

7.4.3.14 In each care zone, seven (7) Patient Rooms including Patient Room-MH Accessible-Airborne Isolation-Hybrid and Patient Room-MH Accessible have Washroom/Shower-Inpatient Ensuite. Two (2) Patient Rooms do not have Washroom/Shower-Inpatient Ensuite for Patient safety to take account of the vulnerability of the diverse Patient groups admitted.

7.4.3.15 One (1) Washroom/Shower-Patient will be located outside the Patient Rooms. Patients are to be monitored by Staff during use to ensure their safety.

7.4.3.16 There will be controls at the Care Team Station to shut off water to groups of plumbing fixtures.

7.4.3.17 Patient Rooms will be designed with Ligature Resistant and Anti-Barricade features.

7.4.3.18 Patient specific medications will be stored in a lockable drawer in Patient Rooms.

7.4.3.19 There will be a magnetic whiteboard in the Patient Room for Staff, family and Patient that communicates the goals of care, nurse in charge, doctor in charge and other pertinent information as required.

7.4.3.20 Patient Rooms will be equipped with medical gasses that can be safely secured; refer to Schedule 3 Section Headwalls in Mental Health Areas.

7.4.3.21 All Washroom/Shower-Inpatient Ensuite-Airborne Isolation, Washroom/Shower-Inpatient Ensuite, Washroom/Shower-Inpatient Ensuite-Small and Washroom/Shower-Patient will be Ligature Resistant and Anti-Barricade and be monitored with an Overdose Notification System that will alert Staff if no movement is detected in an occupied washroom.

7.4.3.22 Each Care Zone will also have four (4) Secure Rooms. All eight (8) Secure Rooms may be grouped together.

7.4.3.23 All Secure Rooms will be located adjacent to a Care Team Station with Line of Sight from the Care Team Station to the door of the Anteroom-Secure.

7.4.3.24 Secure Rooms will be separated away from Patient Rooms and Lounge/Living Room-Patient.

7.4.3.25 The Secure Rooms will be located close to the Patient Transfer/Staff Service Elevators and away from the UH and IMHSU Public Passenger Elevator. The path of travel for Staff to transfer a Patient to a Secure Room is to be discreet to be dignified for the Patient. It will not pass the Public Passenger Elevator lobby, Waiting/Reception areas, or in front of Patient Rooms, Lounge/Living Room Patient, Dining/Activity Area or Multipurpose Room.

7.4.3.26 The two (2) Secure Rooms will share an Anteroom-Secure. The shared anteroom will allow for team of 6-8 people enter with a crash cart, stretcher and equipment and will have Millwork and built-in storage for nursing touch down and care supplies. There will be an Alcove-Hand Hygiene Sink outside the entrance to the Anteroom-Secure.

7.4.3.27 Secure Room design will allow Staff to enter straight into Anteroom-Secure and Secure Rooms from the corridor without turning corners.

7.4.3.28 The Care Team Station in each Care Zone is comprised of two (2) zones, one completely secured in glass and the other enclosed with glass and transaction windows. The counter that accommodates the care team is partially open while the other space is completely enclosed to allow for team rounds, private conversation, documentation, dictation and be able to maintain confidentiality of conversations.

7.4.3.29 The two (2) Care Team Stations will be optimally placed for Staff to have Line of Sight for each of the two (2) Care Zones as well as shared clinical areas, entrances to the unit, and the Secure Rooms. Care Team Stations will have off-stage Convenient Access to the Secure Rooms that will be grouped together off a dedicated corridor, away from the day spaces and Patient Rooms.

7.4.3.30 Team Space-Allied Health will be located adjacent to the Care Team Stations.

7.4.3.31 All alcoves on Patient accessible corridors will be secured to prevent tampering of supplies and equipment by Patients.

7.4.3.32 Staff will have access to Patient Transfer/Staff Service Elevator for Staff use and facilities services.

7.4.3.33 All entrances to the unit will have a security vestibule with a double set of powered doors. The entrance/vestibule will be designed to be welcoming and convey, normalization, comfort and hope. The security vestibule will be equipped with a hand hygiene sink. The vestibule will be large enough to accommodate a stretcher when both sets of doors are closed.

7.4.3.34 Each entrance/vestibule will have Line of Sight from a Care Team Station.

7.4.4 Outpatient Services

7.4.4.1 The Outpatient Services will have Direct Access to Stabilization Unit, and Convenient Access to ED through Patient Transfer/Staff Service Elevators. It will also have Convenient Access to Specialty Pharmacy through Public Passenger Elevators. The required Direct Access to Stabilization Unit for Staff and/or Patient transfers may be via the UH and IMHSU Public Passenger Elevators, provided:

7.4.4.1(1) the elevators and lobbies are appropriately sized to accommodate the transfer of a Patient on a stretcher accompanied by a minimum of two (2) Staff, and

7.4.4.1(2) have a minimum rated speed of 1.78 mps.

7.4.4.2 The Outpatient Services design will stream and separate Patient populations with distinct needs and provide balance between Staff and Patient safety, ease of access and a calming environment. There will be no dead-end corridors in clinical zones.

7.4.4.3 The Outpatient Services will have Direct Access from the Dedicated Outpatient Entrance through dedicated UH and IMHSU Public Passenger Elevator and stairs.

7.4.4.4 The Outpatient Services will comprise of three (3) main zones:

7.4.4.4(1) Front of House Outpatient Services Entrance;

7.4.4.4(2) Patient Care areas including Module 1 Patient Care Area, Module 2 Patient Care Area, Treatment Initiation Zone (TIZ), Outpatient Services Shared Support Services; and

7.4.4.4(3) Back of House Outpatient Services Shared Staff Support.

7.4.4.5 Natural light and views throughout the Outpatient Services will be maximized.

7.4.4.6 All Washroom-Public and Washroom-Patient will have an Overdose Notification System to alert Staff if no movement is detected in an occupied washroom in case of an overdose. Washroom doors will be Anti-Barricade, to enable Staff to fully access the washroom and its occupant in an emergency. Washrooms will have wall mounted sharps containers and space for harm reduction supplies.

7.4.4.7 A separate Back of House entrance for Outpatient Services Shared Support Services and Shared Staff Support will be provided.

7.4.4.8 Outpatient Services Entrance

7.4.4.8(1) The UH and IMHSU Public Passenger Elevator and stairs will open onto Outpatient Services Entrance.

7.4.4.8(2) Waiting areas will be distributed within this zone, providing separation for different types of Patients:

7.4.4.8(2)(a) Waiting-Regular: waiting area for self-regulating Patients with booked appointments;

7.4.4.8(2)(b) Waiting-Quiet: a quiet zone for anxious and vulnerable Patients who have booked an appointment or are dropping in;

7.4.4.8(2)(c) Waiting-Lounge: a sleeping area with no access to natural light for vulnerable Patients who have booked an appointment or are dropping in; and

7.4.4.8(2)(d) Waiting-Active: a larger active zone for Patients who are agitated, and/or have difficulty with self-regulation, and/or a potential risk to others who have booked an appointment or are dropping in. Waiting-Active will be located adjacent to a Front of House corridor for agitated and potentially aggressive Patients who need to pace.

7.4.4.8(3) Waiting-Quiet will be located close to a Care Team Station and away from the Outpatient Services Entrance in order to provide a space of refuge for vulnerable clients. Line of Sight from Care Team Station to Waiting-Quiet will be provided.

7.4.4.8(4) The Outpatient Services Entrance will include two (2) Consult/Interview Room-Peer Support. Consult/Interview Room-Peer Support-JRC will be adjacent and have Line of Sight to Waiting-Lounge. Consult/Interview Room-Peer Support-RAAC will be adjacent and have Line of Sight to Waiting-Active.

7.4.4.8(5) Each Consult/Interview Room-Peer Support will be divided into two (2) areas separated by a partial wall and window for Line of Sight between the two areas. Front area will be used for seating and

access to coffee/snacks, brochures and safety supplies. Back area will be used for private consultation/interview and have dual egress.

7.4.4.8(6) All Waiting areas will have Convenient Access to Washroom-Public.

7.4.4.9 Module 1 Patient Care Area

7.4.4.9(1) The Module 1 Patient Care Area will have Direct Access from Outpatient Services Entrance.

7.4.4.9(2) Reception-Module 1 will be located at the entrance to Module 1 Patient Care Area to control Patient access to this area. This Reception will have Line of Sight to Waiting-Regular, Waiting-Lounge, Consult/Interview Room-Peer Support-JRC, Washroom-Public and UH and IMHSU Public Passenger Elevator and stairs.

7.4.4.9(3) This area will have an enclosed centralized Care Team Station with Line of Sight to Module 1 Patient Care Area corridors and will be used as confidential collaboration space for the multidisciplinary team.

7.4.4.9(4) The Module 1 Patient Care Area will contain thirteen (13) Consult/Interview Rooms, eight (8) Exam Rooms and one (1) Exam Room-Large-Airborne Isolation-Hybrid. All Consult/Interview Rooms and Exam Rooms will have dual egress.

7.4.4.9(5) The Exam Room-Large-Airborne Isolation-Hybrid will be located close to the Patient Transfer/Staff Service Elevators and away from the UH and IMHSU Public Passenger Elevator. The path of travel to transfer a Patient to this room will not pass the UH and IMHSU Public Passenger Elevator and Outpatient Services Entrance.

7.4.4.9(6) The Module 1 Patient Care Area will include a Multipurpose Room containing a kitchenette. This Multipurpose Room will be located close to the Outpatient Services Entrance for Patients attending psycho-education groups.

7.4.4.9(7) The Phlebotomy Room and Medication Room-Medium will be centralized and shared between both Module 1 and 2 Patient Care Areas.

7.4.4.9(8) Each Washroom-Patient will include a lockable sample pass through to the corridor and will have Convenient Access to the Phlebotomy Room and one (1) Exam Room.

7.4.4.10 Module 2 Patient Care Area

7.4.4.10(1) The Module 2 Patient Care Area will have Direct Access from Outpatient Services Entrance.

7.4.4.10(2) Reception-Module 2 will be located at the entrance to Module 2 Patient Care Area to control Patient access to this area. This Reception will have Line of Sight to Waiting-Active, Consult/Interview Room-Peer Support-RAAC.

7.4.4.10(3) This area will have an enclosed centralized Care Team Station with Line of Sight to Module 2 Patient Care Area corridors and will be used as confidential collaboration space for the multidisciplinary team.

7.4.4.10(4) The Module 2 Patient Care Area will contain thirteen (13) Consult/Interview Rooms and nine (9) Exam Rooms. All Consult/Interview Rooms and Exam Rooms will have dual egress.

7.4.4.10(5) The Module 2 Patient Care Area will include a Multipurpose Room. This Multipurpose Room will be located close to the Outpatient Services Entrance for Patients attending psycho-education groups.

7.4.4.10(6) Each Washroom-Patient will include a lockable sample pass through to the corridor and will have Convenient Access to the Phlebotomy Room and one (1) Exam Room.

7.4.4.11 Treatment Initiation Zone (TIZ)

7.4.4.11(1) TIZ will have Convenient Access from Outpatient Services Entrance.

7.4.4.11(2) TIZ will have Convenient Access to a Care Team Station and Medication Room-Medium.

7.4.4.11(3) TIZ will be an enclosed space with dual egress, away from natural light sources, with sensory modulation capabilities including dimmable lights and sound attenuation. This area will have one (1) main frosted glass sliding door lockable from outside TIZ.

7.4.4.11(4) TIZ will include six (6) Treatment Bay-Recliner, Exam Room and a Washroom-Patient.

7.4.4.11(5) Treatment Bay-Recliner will be divided into two (2) groups to provide a separate and safe treatment space for women and gender-variant Patients. One (1) group with include four (4) Treatment Bays and the other group with include two (2) Treatment Bays.

7.4.4.11(6) Exam Room will have dual egress with one (1) door to TIZ and one (1) door to a corridor outside TIZ.

7.4.5 Mental Health Inpatients

7.4.5.1 Mental Health Inpatients will have Direct Access to IPU MedPsych Unit, Stabilization Unit and IPS through Patient Transfer/Staff Service Elevators, dedicated Mental Health Elevators or by a Back of House corridor link on the same level.

7.4.5.2 Mental Health Inpatients is a secure unit with restricted egress.

7.4.5.3 Mental Health Inpatients will provide a safe and secure environment with its own Mental Health Inpatients Exterior Courtyard.

7.4.5.4 The Mental Health Inpatients unit will be designed as three (3) secured sub-units with restricted access with sixteen (16) Patient Rooms in each sub-unit.

7.4.5.5 All three (3) sub-units will also function together as a single integrated unit.

7.4.5.6 Mental Health IPU Shared Entrance will be shared between all three (3) subunits. Each sub-unit will have its own entrance from this Mental Health IPU Shared Entrance for Patient and visitor access to maintain privacy and dignity. Staff will have Direct Access to all sub-units and will not need to pass through one (1) secured sub-unit to get to another secured sub-unit, via Back of House circulation space.

7.4.5.7 The entrance to each sub-unit will have a security vestibule with double set of powered doors. The Entrance Vestibule will be designed to convey welcome, normalization, comfort and hope. The vestibule will be equipped with a hand hygiene station. The vestibule will be large enough to accommodate a stretcher when both sets of doors are closed.

7.4.5.8 Mental Health IPU Shared Entrance will be used by Staff or peers to have a conversation with families and visitors before they enter each sub-unit. The Lounge-Family/Visitor in this area will function as a space where families and visitors can wait for entry onto the sub-unit. Shared Entrance will have an Alcove-Lockers-Visitor for personal items, so that families and visitors leave their belongings in the vestibule space.

7.4.5.9 Each security vestibule will have Line of Sight from a Care Team Station.

7.4.5.10 Each sub-unit will contain fifteen (15) Patient Rooms with Washroom/Shower-Inpatient Ensuite-Small and one (1) accessible Patient Room with an accessible Washroom/Shower-Inpatient Ensuite and ceiling lift.

7.4.5.11 Each sub-unit will be divided into two (2) groups of eight (8) beds each. Groups of eight (8) beds will be located across from each other (Patient Rooms in one sub-unit will not be located in one (1) single row of sixteen (16) Patient Rooms).

7.4.5.12 There will be one (1) Patient Room-MH Accessible-Airborne Isolation-Hybrid in Mental Health IPU 01 Unit and one (1) in Mental Health IPU 03 Unit. The rooms will be located close to the Patient Transfer/Staff Service Elevators and away

from the UH and IMHSU Public Passenger Elevator. The path of travel for Staff to transfer a Patient to these rooms will not pass through the UH and IMHSU Public Passenger Elevator lobby and Waiting/Reception areas.

7.4.5.13 Patient specific medications will be stored in a lockable drawer in Patient Rooms.

7.4.5.14 The Patient Rooms do not require medical gases.

7.4.5.15 Patient care rooms will have Ligature Resistant design features; refer to Appendix 3N [Safety and Risk Reduction Matrix].

7.4.5.16 Washroom/Shower-Inpatient Ensuite will be Ligature Resistant and Anti-Barricade.

7.4.5.17 A water shut off control for Washroom/Shower-Inpatient Ensuite will be located at the Care Team Station.

7.4.5.18 The therapy zone in each unit will provide access to rooms such as Quiet Room-Patient, Lounge/Living Room-Patient and Multipurpose Room used for therapy, Patient and family education, interaction with the learners, among other functions. The spaces in the therapy zone will be capable of being secured after hours to reduce the requirement for supervision.

7.4.5.19 Consult/Interview Rooms will have Line of Sight from Care Team Stations.

7.4.5.20 The workspace zone in each unit will have offices and workstations for physicians, Staff, students and community partners. Access to this workspace zone will be available both from the unit itself and from off the unit, allowing clinical team members to access the workspace zone without having to come into the clinical area of the unit.

7.4.5.21 Mental Health Inpatients will include four (4) Secure Rooms. One (1) will be located in the MH IPU 01 Unit, two (2) will be located in the MH IPU 02 Unit and one (1) will be located in the MH IPU 03 Unit.

7.4.5.22 All Secure Rooms will be located adjacent to a Care Team Station with Line of Sight from the Care Team Station to the door of the Anteroom-Secure.

7.4.5.23 The Secure Rooms will have Convenient Access to the Patient Transfer/Staff Service Elevators and away from the UH and IMHSU Public Passenger Elevator. The path of travel to transfer a Patient to a Secure Room will be discreet and will not pass through the UH and IMHSU Public Passenger Elevator lobby and Lounge-Family/Visitor to be dignified for the Patient.

7.4.5.24 Secure Rooms will be separated and at a distance from Patient Rooms, Lounge/Living Room-Patient, Lounge-Family/Visitor and Quiet Room-Patient.

7.4.5.25 Two (2) Secure Rooms will share an Anteroom-Secure. The shared anteroom will allow for team of 6-8 people enter with a crash cart, stretcher and equipment

and will have built-in storage for nursing touch down and care supplies. There will be an Alcove-Hand Hygiene Sink outside the entrance to the Anteroom-Secure.

7.4.5.26 Secure Room design will allow Staff to enter straight into Anteroom-Secure and Secure Rooms from the corridor without turning corners.

7.4.6 Transitional Care Centre

7.4.6.1 The Transitional Care Centre will be located on Level 1 adjacent to, but not within, the Stabilization Unit area.

7.4.6.2 The Transitional Care Centre consists of (4) Bedroom-2 Single Beds and one (1) Bedroom-Special Needs.

7.4.6.3 Two (2) Washroom/Shower-Patient will be included to provide overnight accommodation with bathroom and shower facilities.

7.4.6.4 This space also includes a common Dining/Activity Area and Nourishment Room, a Disposal Hold room, a Consult/Interview Room, a Workstation and Store-General.

7.4.6.5 The Dining/Activity Area will be located centrally within the Transitional Care Centre. The main entrance to the Transitional Care Centre will be adjacent to the Dining/Activity Area.

7.4.6.6 The Dining/Activity Area will have Convenient Access to all Bedrooms and will be adjacent to the Bedroom-Special Needs.

7.4.7 Mental Health Inpatient Unit Exterior Courtyard

7.4.7.1 The Mental Health Inpatients Exterior Courtyard will provide a therapeutic function through design and programmed activities; as such, it will include features that create an environment that promotes physical and mental wellbeing.

7.4.7.2 The Mental Health Inpatient Unit Exterior Courtyard will provide areas for the following types of activities:

7.4.7.2(1) Positive distraction through stimulating the senses of sight, sound, smell, touch;

7.4.7.2(2) Reading, resting, meditation, contemplation and reflection;

7.4.7.2(3) Informal gatherings, socializing and conversation among Patients;

7.4.7.2(4) Patient visits from family and other visitors;

7.4.7.2(5) Physical movement, including walking, yoga, tai chi and exercise;

7.4.7.2(6) Horticultural therapy, including planting, tending and harvesting flowers, vegetables, herbs and traditional Indigenous medicines;

7.4.7.2(7) Therapeutic group activities; and

7.4.7.2(8) Indigenous cultural and ceremonial activities, such as drumming.

7.4.7.3 To encourage use, the Exterior Courtyard:

7.4.7.3(1) Will provide a well-defined and inviting entrance and exit.

7.4.7.3(2) Will be wheelchair accessible and easy to navigate by people with limited cognitive, functional and physical abilities.

7.4.7.3(3) Will provide areas that are sheltered from inclement weather and provide shade.

7.4.7.4 For safety and security, the Mental Health Inpatient Unit Exterior Courtyard:

7.4.7.4(1) Will be enclosed with perimeter security screen.

7.4.7.4(2) Will not have Line of Sight into Patient Rooms.

7.4.7.4(3) All areas will be visible to Staff without any corners and blind spots. Video monitoring of the Mental Health Inpatient Unit Exterior Courtyard will also be provided.

7.4.7.4(4) Staff Assist (nurse call) and Panic/Duress Button, hardwired, will be provided.

7.4.7.4(5) Outdoor lighting will be designed in a manner to prevent shadows and to be activated immediately when entering the Exterior Courtyard.

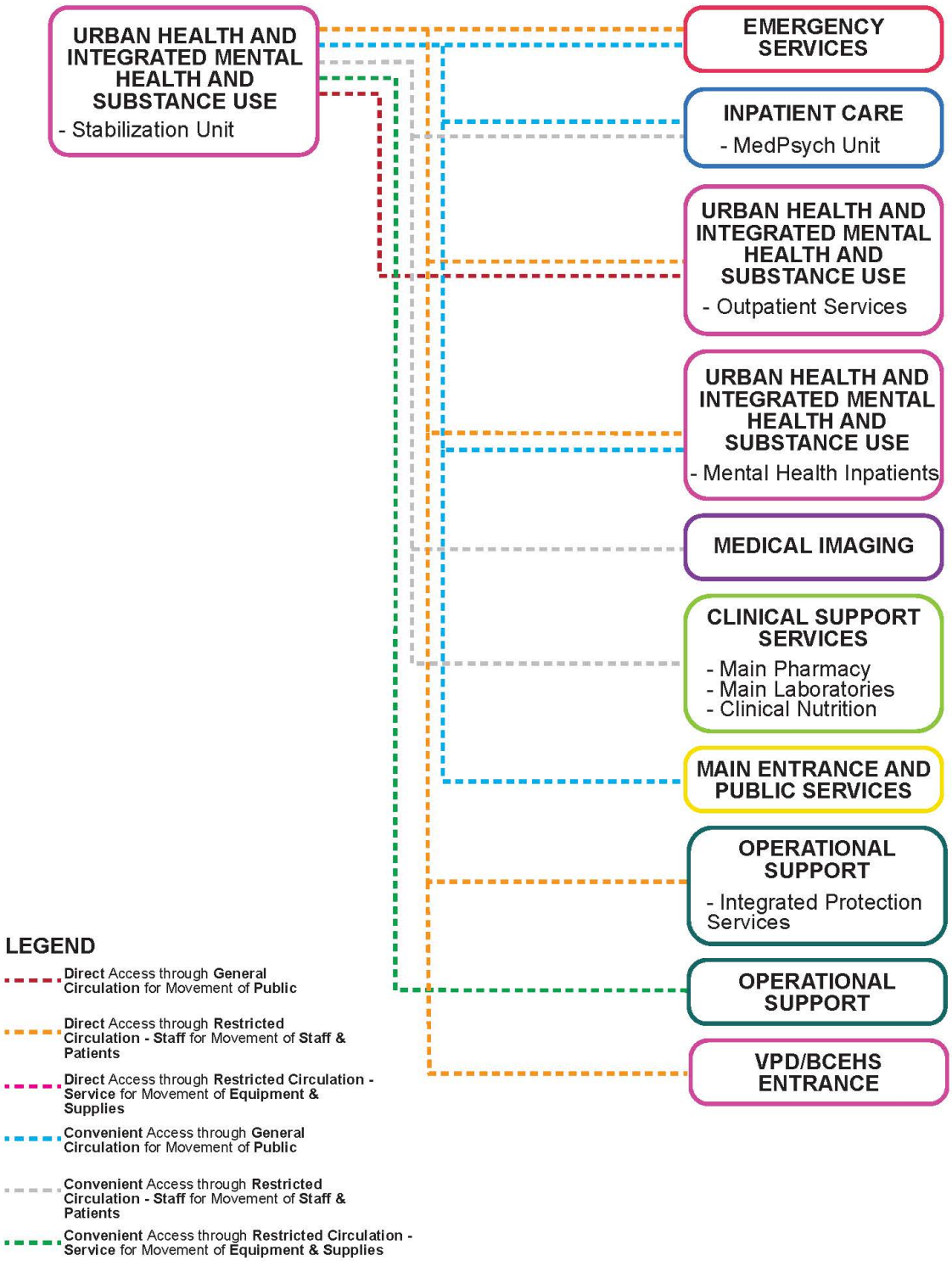
7.4.7.4(6) Furniture placement will prevent climbing onto the Security Screens.

7.4.7.4(7) Trees will be provided in the outdoor spaces. However, they will be placed in locations where they cannot be used to facilitate elopement (e.g. they may not be placed next to the enclosure or next to the building walls nor the Security Screens).

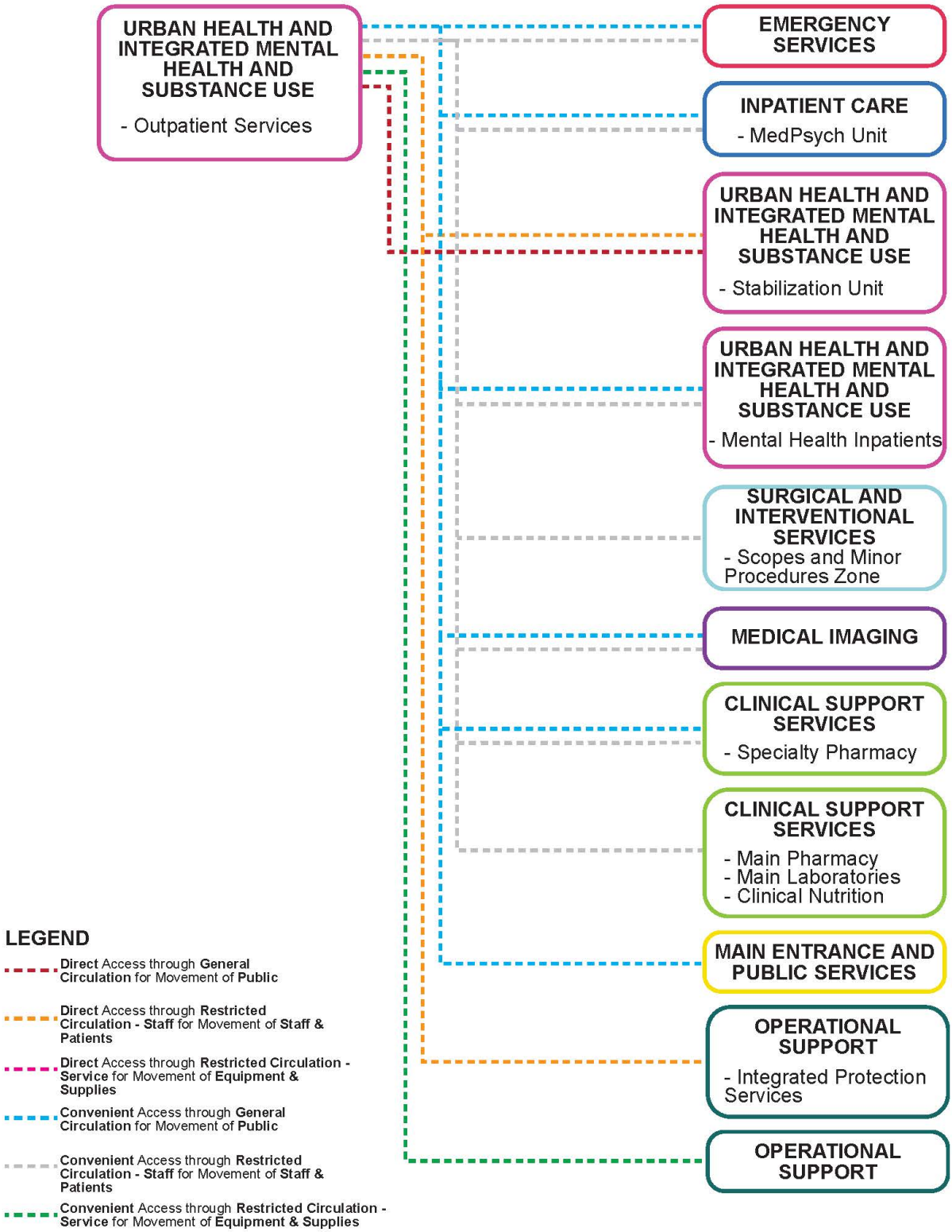
7.5 EXTERNAL RELATIONSHIPS

7.5.1 The following diagrams indicate other Functional Components that have a functional relationship with this Component.

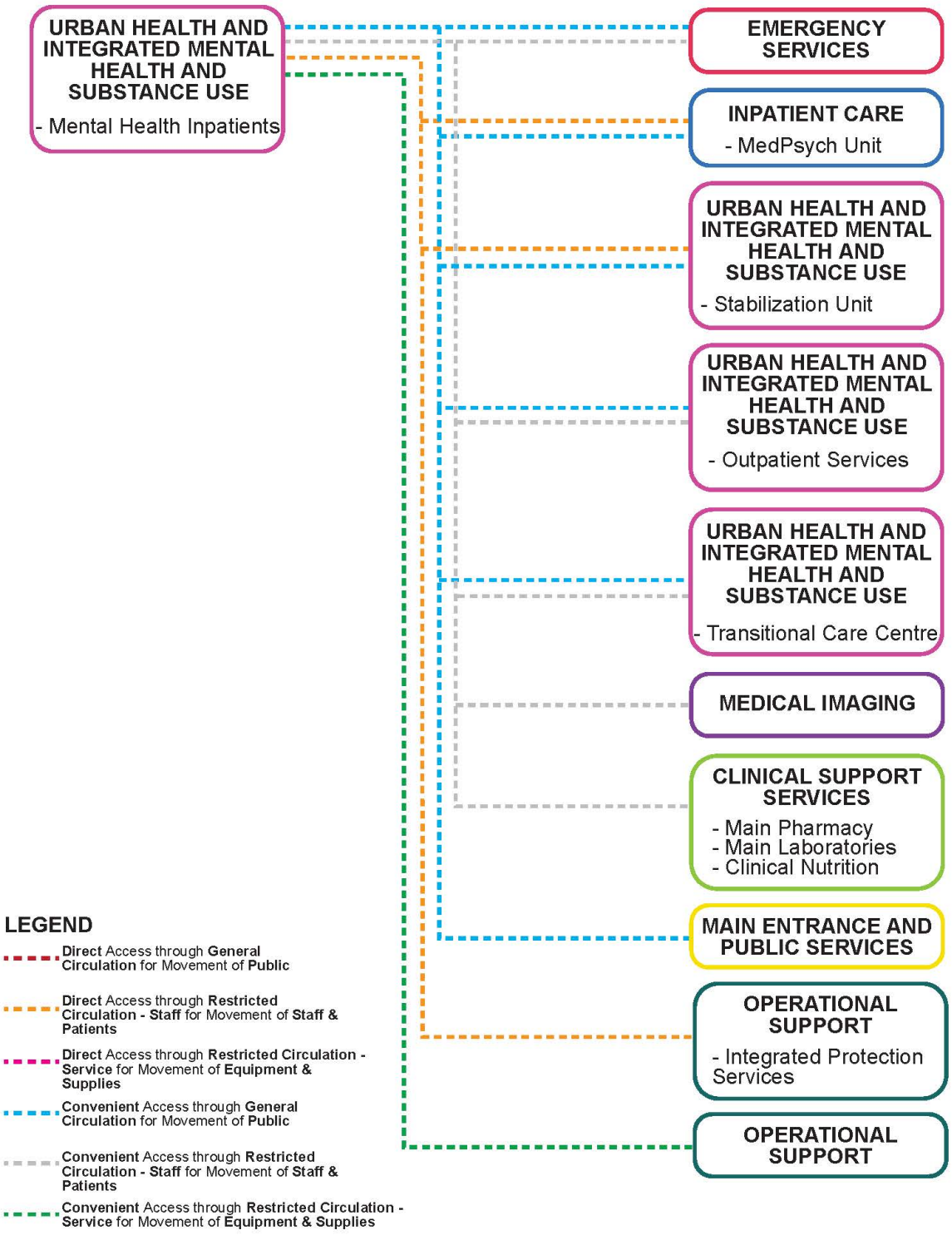
F1. STABILIZATION UNIT EXTERNAL RELATIONSHIPS AND CIRCULATIONS



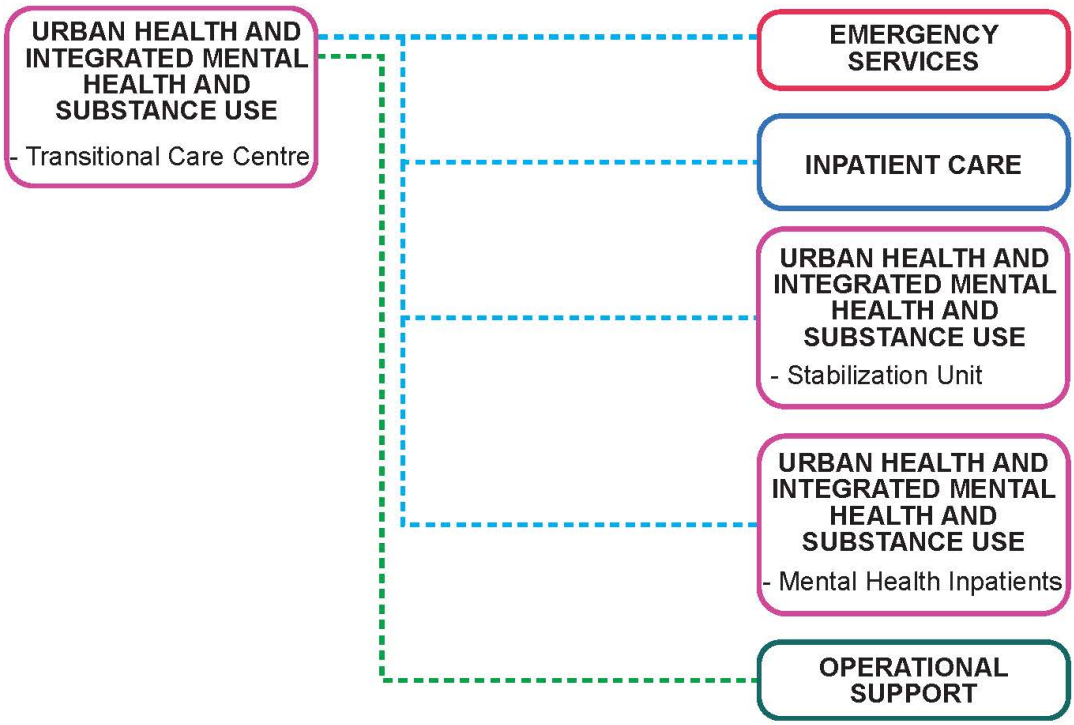
F2. OUTPATIENT SERVICES EXTERNAL RELATIONASHIPS AND CIRCULATIONS



F3. MENTAL HEALTH INPATIENTS EXTERNAL RELATIONSHIPS AND CIRCULATIONS



F4. TRANSITIONAL CARE CENTRE EXTERNAL RELATIONSHIPS AND CIRCULATIONS



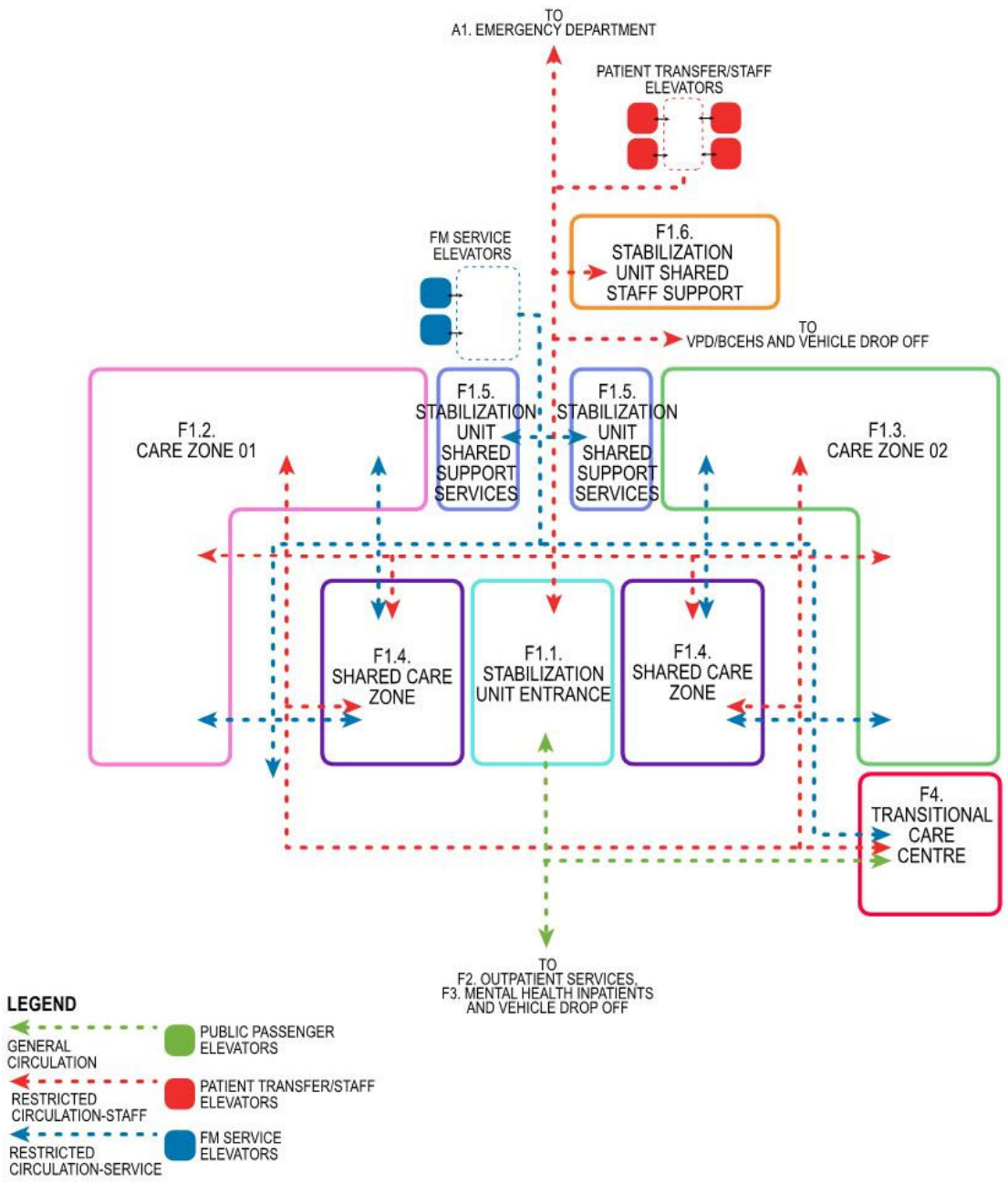
LEGEND

- **Direct** Access through **General Circulation** for Movement of **Public**
- **Direct** Access through **Restricted Circulation - Staff** for Movement of **Staff & Patients**
- **Direct** Access through **Restricted Circulation - Service** for Movement of **Equipment & Supplies**
- **Convenient** Access through **General Circulation** for Movement of **Public**
- **Convenient** Access through **Restricted Circulation - Staff** for Movement of **Staff & Patients**
- **Convenient** Access through **Restricted Circulation - Service** for Movement of **Equipment & Supplies**

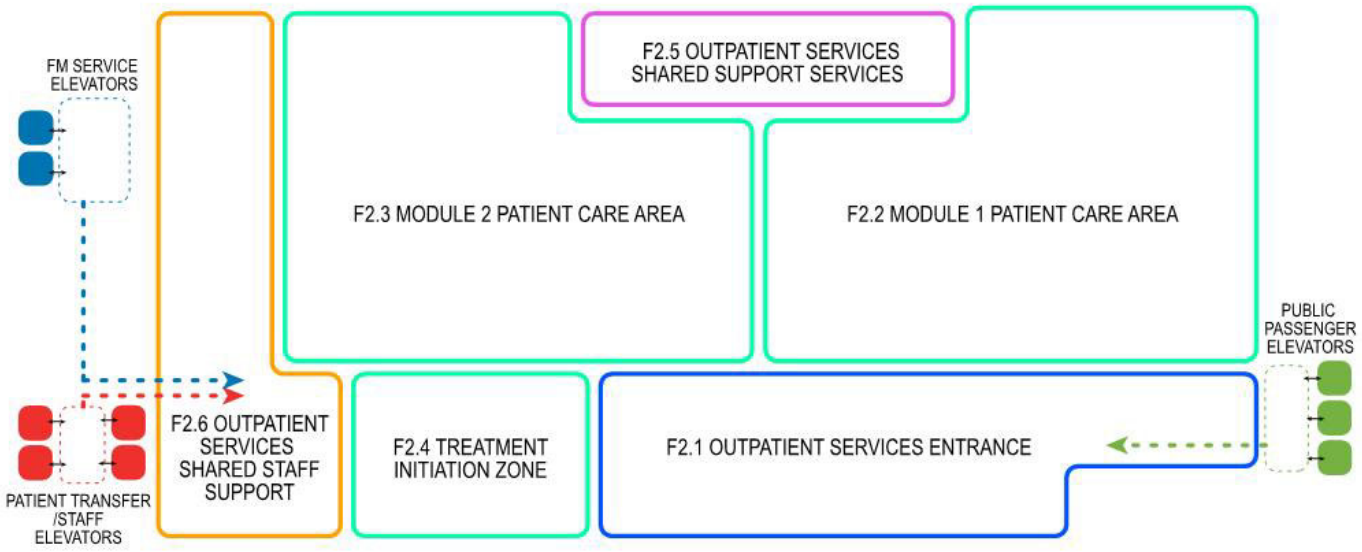
7.6 INTERNAL RELATIONSHIPS

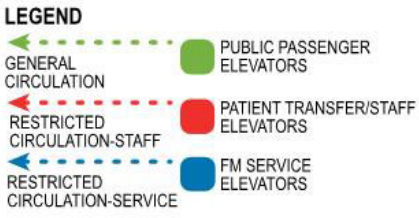
7.6.1 The following diagrams indicate internal functional relationships within this Component.

F1. STABILIZATION UNIT INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES

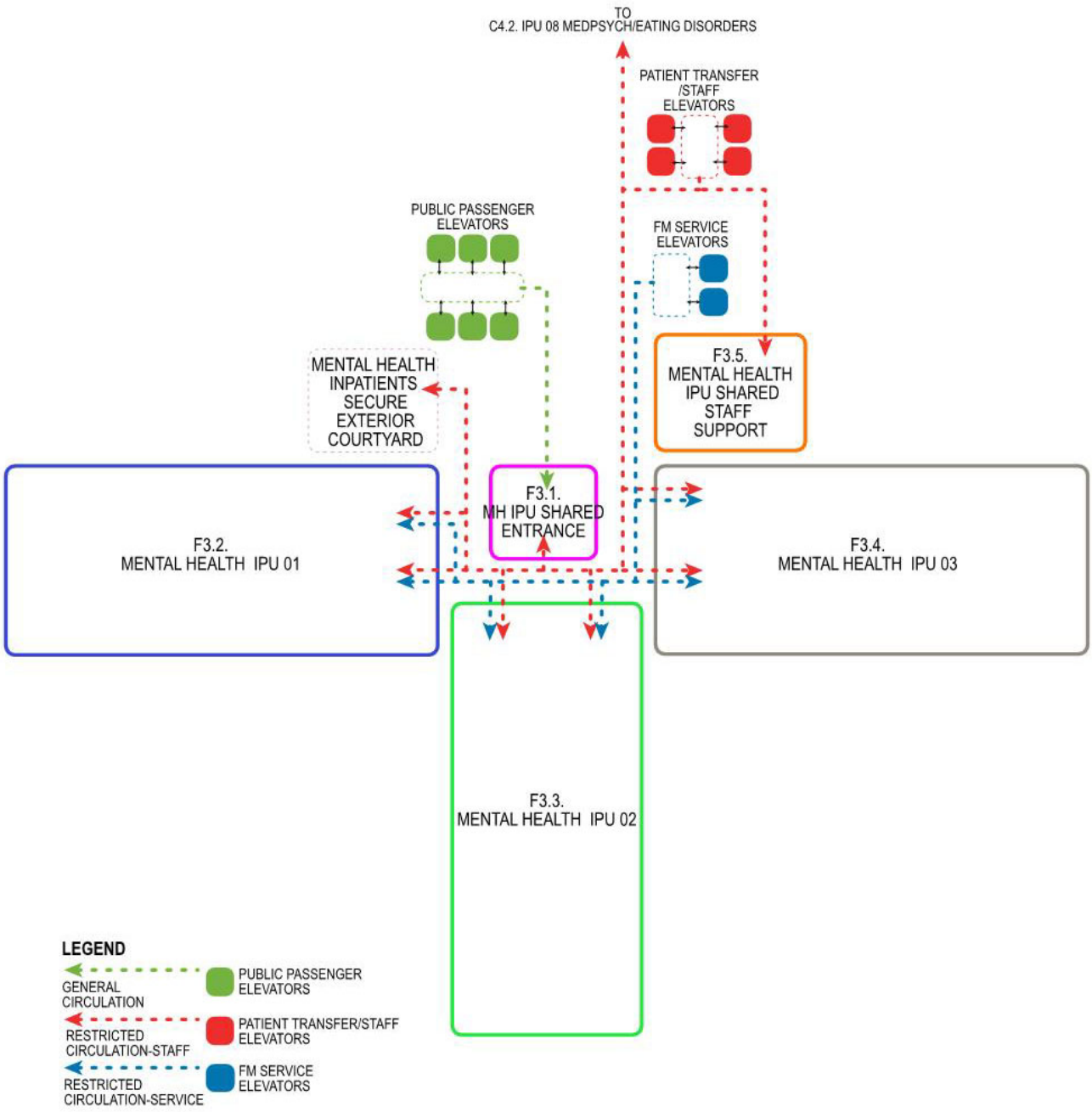


F2. OUTPATIENT SERVICES INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES





F3. MENTAL HEALTH IPU INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



7.7 SCHEDULE OF ACCOMMODATIONS

7.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Urban Health and Integrated Mental Health and Substance Use

F1 - STABILIZATION UNIT	1203.70
F2 - OUTPATIENT SERVICES	1069.50
F3 - MENTAL HEALTH INPATIENTS	2074.50
F4 - TRANSITIONAL CARE CENTRE	156.50
URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE PROGRAMMED SPACE NSM:	**4,504.20**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F1 - STABILIZATION UNIT					
F1.1 - Stabilization Unit Entrance					
F1.1.1	Entrance Vestibule-Walk-in	1	8.50	8.50	Incl. provision for future metal detector in Stabilization Unit Entrance area outside Entrance Vestibule-Walk-in.
F1.1.2	Entrance Vestibule-VPD/BCEHS	1	8.50	8.50	
F1.1.3	Alcove-Wheelchair	1	2.50	2.50	Secured to prevent Patient access.
F1.1.4	Care Team Station	1	12.00	12.00	Incl. 3 workstations, cabinets, charging station, dual egress, fully enclosed with secure interior windows and 2 transaction windows.
F1.1.5	Waiting	1	13.50	13.50	Incl. seating for 8 including 1 in wheelchair, Direct Access to Washroom-Public.
F1.1.6	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Stabilization Unit.
F1.1.7	Alcove-Lockers-Visitor	1	3.00	3.00	Incl. 16 half lockers, located at unit front entrance Vestibule.
F1.1.8	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation, dual egress.
F1.1.9	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
F1.1.10	Control-Security	1	4.00	4.00	Incl. 1 workstation, monitoring equipment, cabinet, counter, fully enclosed with interior windows and 1 transaction window, charging station, located at Stabilization Unit Entrance.
F1.2 - Care Zone 01					
F1.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation, dual egress.
F1.2.2	Secure Room	4	14.00	56.00	
F1.2.3	Anteroom-Secure	2	9.00	18.00	Incl. counter, lockable cabinets, Direct Access and observation window into two Secure Rooms.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F1.2.4	Patient Room-MH Accessible-Airborne Isolation-Hybrid	1	18.00	18.00	Incl. lockable Patient wardrobe, cabinets, accessible for Persons with Disabilities.
F1.2.5	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
F1.2.6	Patient Room-MH	8	14.00	112.00	Incl. lockable Patient wardrobe, cabinets.
F1.2.7	Washroom/Shower-Inpatient Ensuite-Small	6	4.50	27.00	3-piece incl. shower.
F1.2.8	Washroom/Shower-Patient	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
F1.2.9	Alcove-Hand Hygiene Sink	1	1.00	1.00	Centrally located.
F1.2.10	Care Team Station	1	24.00	24.00	Incl. 6 workstations, cabinets, charging station, dual egress, fully enclosed with interior windows and 3 transaction windows.
F1.2.11	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.
F1.2.12	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
F1.2.13	Team Space-Allied Health	1	13.50	13.50	Incl. 3 workstations, adjacent to Care Team Station with dual egress and interior windows.
F1.2.14	Workstation-Touchdown	2	2.50	5.00	Incl. 1 touch down workstation.
F1.3 - Care Zone 02					
F1.3.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation, dual egress.
F1.3.2	Secure Room	4	14.00	56.00	
F1.3.3	Anteroom-Secure	2	9.00	18.00	Incl. counter, lockable cabinets, Direct Access and observation window into two Secure Rooms.
F1.3.4	Patient Room-MH Accessible	1	18.00	18.00	Incl. lockable Patient wardrobe, cabinets, accessible for Persons with Disabilities.
F1.3.5	Washroom/Shower-Inpatient Ensuite	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
F1.3.6	Patient Room-MH	8	14.00	112.00	Incl. lockable Patient wardrobe, cabinets.
F1.3.7	Washroom/Shower-Inpatient Ensuite-Small	6	4.50	27.00	3-piece incl. shower.
F1.3.8	Washroom/Shower-Patient	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
F1.3.9	Alcove-Hand Hygiene Sink	1	1.00	1.00	Centrally located.
F1.3.10	Care Team Station	1	24.00	24.00	Incl. 6 workstations, cabinets, charging station, dual egress, fully enclosed with interior windows and 3 transaction windows.
F1.3.11	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.
F1.3.12	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
F1.3.13	Team Space-Allied Health	1	13.50	13.50	Incl. 3 workstations, adjacent to Care Team Station with dual egress and interior windows.
F1.3.14	Workstation-Touchdown	2	2.50	5.00	Incl. 1 touch down workstation.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F1.4 - Shared Care Zone					
F1.4.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation, dual egress.
F1.4.2	Procedure Room-Small	2	14.00	28.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
F1.4.3	Medication Room-Medium	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, shelving, dual egress and interior windows.
F1.4.4	Lounge/Living Room-Patient	2	22.50	45.00	Incl. seating for up to 9, adjacent to Dining/Activity Area.
F1.4.5	Dining/Activity Area	2	28.00	56.00	Incl. seating for 10, each one located in a Care Zone.
F1.4.6	Multipurpose Room	2	18.00	36.00	Incl. seating for 10, each one located in a Care Zone.
F1.4.7	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets.
F1.4.8	Servery	2	18.50	37.00	Incl. service counter and window with overhead rolling counter shutters, emergency eyewash, adjacent to Dining/Activity Area.
F1.4.9	Utility-Personal Laundry	1	5.50	5.50	Incl. counter, cabinets.
F1.5 - Stabilization Unit Shared Support Services					
F1.5.1	Alcove-Blanket Warmer	2	1.50	3.00	Adjacent to Alcove-Clean Linen.
F1.5.2	Alcove-Local Equipment	4	1.50	6.00	Enclosed with door with locks, distributed in Stabilization Unit.
F1.5.3	Alcove-Clean Linen	2	2.50	5.00	1 for each Care Zone, enclosed with lockable doors.
F1.5.4	Store-Clean Supplies	2	12.00	24.00	
F1.5.5	Alcove-Crash Cart	1	1.50	1.50	Located within Care Team Station.
F1.5.6	Alcove-Exercise Equipment	2	5.00	10.00	Adjacent to Multipurpose Room.
F1.5.7	Alcove-Stretcher	1	2.50	2.50	Secured to prevent Patient access.
F1.5.8	Store-General	1	14.00	14.00	Incl. shelving.
F1.5.9	Store-Patients' Property	1	6.00	6.00	Incl. cabinets, shelving.
F1.5.10	Store-Rehab Therapy	2	6.50	13.00	Incl. shelving.
F1.5.11	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
F1.5.12	Soiled Utility	2	12.00	24.00	Incl. counters, shelving.
F1.5.13	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
F1.6 - Stabilization Unit Shared Staff Support					
F1.6.1	Conference/Meeting Room-Small	1	24.00	24.00	Accommodates 12 Persons.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F1.6.2	Office-Private	2	9.50	19.00	Incl. 1 workstation.
F1.6.3	Office-4 Shared	1	20.00	20.00	Incl. 4 workstations.
F1.6.4	Workstation-Large	8	5.90	47.20	Incl. 1 workstation, combined into one area.
F1.6.5	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
F1.6.6	Lounge-Staff	2	18.00	36.00	Incl. seating for 6, kitchenette, mail slots, 1 touch down workstation.
F1.6.7	Lockers-Staff	1	20.00	20.00	Incl. 36 Z-lockers, 1 shoe rack, split into male and female if required.
F1.6.8	Washroom-Staff	1	3.00	3.00	2-piece.
F1.6.9	Washroom-Staff-Accessible	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
	TOTAL NSM: Stabilization Unit			**1,203.70**	
F2 - OUTPATIENT SERVICES					
F2.1 - Outpatient Services Entrance					
F2.1.1	Waiting-Regular	1	12.00	12.00	Incl. seating for 7 including 1 in wheelchair, Direct Access to UH and IMHSU Public Passenger Elevator and stairs.
F2.1.2	Waiting-Quiet	1	12.00	12.00	Incl. seating for 7 including 1 in wheelchair.
F2.1.3	Waiting-Lounge	1	12.00	12.00	Incl. 4 lounge chairs for Patients to sleep.
F2.1.4	Waiting-Active	1	24.00	24.00	Incl. seating for 14 including 2 in wheelchairs.
F2.1.5	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Outpatient Services.
F2.1.6	Consult/Interview Room-Peer Support-JRC	1	16.00	16.00	Front area incl. one frosted glass sliding door and window for Line of Sight to Waiting-Lounge, seating for 2, kitchenette (with sink, coffee maker, bar fridge), cabinets, counter, shelving. Back area incl. dual egress, seating for 2, table, 1 touch down workstation, dimmable lighting.
F2.1.7	Consult/Interview Room-Peer Support-RAAC	1	16.00	16.00	Front area incl. one frosted glass sliding door and window for Line of Sight to Waiting-Active, seating for 2, kitchenette (with sink, coffee maker, bar fridge), cabinets, counter, shelving. Back area incl. dual egress, seating for 2, table, 1 touch down workstation, dimmable lighting.
F2.1.8	Washroom-Public	3	4.50	13.50	2-piece, accessible for Persons with Disabilities.
F2.2 - Module 1 Patient Care Area					
F2.2.1	Reception-Module 1	1	16.00	16.00	Incl. 3 workstations, cabinets, dual egress with access to a secure area.
F2.2.2	Care Team Station	1	22.00	22.00	Incl. 4 workstations, table for 6, cabinets, charging station, dual egress, fully enclosed with interior windows and 2 transaction windows.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F2.2.3	Alcove-Hand Hygiene Sink	2	1.00	2.00	Located at each Care Team Station entrance.
F2.2.4	Consult/Interview Room	13	10.00	130.00	Incl. seating for 4, 1 touch down workstation, dual egress.
F2.2.5	Exam Room-Large-Airborne Isolation-Hybrid	1	14.00	14.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
F2.2.6	Exam Room	8	12.00	96.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
F2.2.7	Phlebotomy Room	1	14.00	14.00	Incl. counters, cabinets, charging station, 2 phlebotomy chairs. Convenient Access to Washroom-Patient.
F2.2.8	Pneumatic Tube Station	1	1.00	1.00	Incl. counter. Located in Phlebotomy Room.
F2.2.9	Multipurpose Room	1	20.00	20.00	Incl. seating for 10, kitchenette.
F2.2.10	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities. Incl. sample pass through.
F2.3 - Module 2 Patient Care Area					
F2.3.1	Reception-Module 2	1	16.00	16.00	Incl. 3 workstations, cabinets, dual egress with access to a secure area.
F2.3.2	Care Team Station	1	22.00	22.00	Incl. 4 workstations, table for 6, cabinets, charging station, dual egress, fully enclosed with interior windows and 2 transaction windows.
F2.3.3	Alcove-Hand Hygiene Sink	2	1.00	2.00	Located at each Care Team Station entrance.
F2.3.4	Consult/Interview Room	13	10.00	130.00	Incl. seating for 4, 1 touch down workstation, dual egress.
F2.3.5	Exam Room	9	12.00	108.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
F2.3.6	Multipurpose Room	1	20.00	20.00	Incl. seating for 12.
F2.3.7	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities. Incl. sample pass through.
F2.4 - Treatment Initiation Zone (TIZ)					
F2.4.1	Treatment Bay-Recliner	6	7.50	45.00	Incl. walled on 3 sides with privacy curtains,1 half locker.
F2.4.2	Exam Room	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
F2.4.3	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
F2.5 - Outpatient Services Shared Support Services					
F2.5.1	Alcove-Blanket Warmer	2	1.50	3.00	Adjacent to Alcove-Clean Linen. One Alcove to be located with Convenient Access to TIZ.
F2.5.2	Alcove-Clean linen	2	2.50	5.00	Enclosed with lockable doors. One Alcove to be located with Convenient Access to TIZ.
F2.5.3	Alcove-Crash Cart	1	1.50	1.50	Located at Reception-Module 1.
F2.5.4	Alcove-Stretcher	1	2.50	2.50	Secured to prevent Patient access.
F2.5.5	Alcove-Wheelchair	1	2.50	2.50	Secured to prevent Patient access.
F2.3.6	Medication Room-Medium	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, shelving, dual egress. Shared with Convenient Access to Patient Care Areas.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F2.5.7	Store-Clean Supplies	1	12.00	12.00	Shared with Convenient Access to Patient Care Areas.
F2.5.8	Store-General	1	8.50	8.50	Incl. shelving.
F2.5.9	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
F2.5.10	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
F2.5.11	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
F2.6 - Outpatient Services Shared Staff Support					
F2.6.1	Conference/Meeting Room-Small	1	24.00	24.00	Accommodates 12 Persons.
F2.6.2	Office-Private	2	9.50	19.00	Incl. 1 workstation.
F2.6.3	Office-4 Shared	1	20.00	20.00	Incl. 4 workstations.
F2.6.4	Workstation-Touchdown	6	2.50	15.00	Incl. 1 touch down workstation, combined into one area.
F2.6.5	Workstation	10	4.50	45.00	Incl. 1 workstation, combined into one area.
F2.6.6	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
F2.6.7	Lounge-Staff	1	22.00	22.00	Incl. seating for 6 people, kitchenette, mail slots, 2 touch down workstations.
F2.6.8	Lockers-Staff	1	30.00	30.00	Incl. 82 Z-lockers, 1 shoe rack, split into male and female if required, adjacent to Lounge-Staff.
F2.6.9	Washroom-Staff	3	3.00	9.00	2-piece.
F2.6.10	Washroom/Shower-Staff	1	4.50	4.50	3-piece incl. shower.
	TOTAL NSM: Outpatient Services			**1,069.50**	
F3 - MENTAL HEALTH INPATIENTS					
F3.1 - Mental Health IPU Shared Entrance					
F3.1.1	Lounge-Family/Visitor	1	30.00	30.00	Incl. seating for 12.
F3.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Mental Health IPUs.
F3.1.3	Alcove-Lockers-Visitor	1	3.00	3.00	Incl. 16 half lockers, located at unit front entrance Vestibule.
F3.1.4	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
F3.2 - Mental Health IPU 01					
F3.2.1 - Mental Health IPU 01 Unit					
F3.2.1.1	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation, dual egress.
F3.2.1.2	Secure Room	1	14.00	14.00	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F3.2.1.3	Anteroom-Secure	1	9.00	9.00	Incl. counter, lockable cabinets, Direct Access and observation window into Secure Room.
F3.2.1.4	Sensory Modulation Room	1	10.00	10.00	Incl. space for 2-3 people for low stimulation, cabinets.
F3.2.1.5	Patient Room-MH Accessible-Airborne Isolation-Hybrid	1	18.00	18.00	Incl. lockable Patient wardrobe, cabinets, ceiling lift, accessible for Persons with Disabilities.
F3.2.1.6	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
F3.2.1.7	Patient Room-MH	15	14.00	210.00	Incl. lockable Patient wardrobe, cabinets.
F3.2.1.8	Washroom/Shower-Inpatient Ensuite-Small	15	4.50	67.50	3-piece incl. shower.
F3.2.1.9	Alcove-Hand Hygiene Sink	1	1.00	1.00	Centrally located.
F3.2.1.10	Care Team Station	1	16.00	16.00	Incl. 4 workstations, cabinets, charging station, dual egress, fully enclosed with interior windows and 2 transaction windows.
F3.2.1.11	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.
F3.2.1.12	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
F3.2.1.13	Workstation-Touchdown	1	2.50	2.50	Incl. 1 touch down workstation.
F3.2.1.14	Medication Room-Medium	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, shelving, dual egress and interior windows, adjacent to Care Team Station.
F3.2.1.15	Quiet Room-Patient	1	12.00	12.00	Incl. seating for 4.
F3.2.1.16	Lounge/Living Room-Patient	1	37.50	37.50	Incl. seating for 15, adjacent to Dining/Activity Area.
F3.2.1.17	Multipurpose Room	1	18.00	18.00	Incl. seating for 10
F3.2.1.18	Dining/Activity Area	1	33.00	33.00	Incl. seating for 10 and an ADL Kitchen space with adjustable wheelchair accessible counter, cabinets. Provide a side folding polycarbonate grille.
F3.2.1.19	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets.
F3.2.1.20	Servery	1	18.50	18.50	Incl. service counter and window with overhead rolling counter shutters, emergency eyewash, adjacent to Dining/Activity Area.
F3.2.1.21	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
F3.2.2 - Mental Health IPU 01 Support Services					
F3.2.2.1	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
F3.2.2.2	Alcove-Local Equipment	2	1.50	3.00	Enclosed with door with locks, distributed in Mental Health IPU 01.
F3.2.2.3	Alcove-Clean Linen	1	2.50	2.50	Enclosed with lockable doors.
F3.2.2.4	Alcove-Exercise Equipment	1	12.00	12.00	Adjacent to Multipurpose Room.
F3.2.2.5	Alcove-Stretcher	1	2.50	2.50	Secured to prevent Patient access.
F3.2.2.6	Alcove-Wheelchair	1	2.50	2.50	Secured to prevent Patient access.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F3.2.2.7	Store-Clean Supplies	1	12.00	12.00	
F3.2.2.8	Store-General	1	10.00	10.00	Incl. shelving.
F3.2.2.9	Store-Patients' Property	1	6.00	6.00	Incl. cabinets, shelving.
F3.2.2.10	Store-Rehab Therapy	1	6.50	6.50	Incl. shelving.
F3.2.2.11	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
F3.2.2.12	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
F3.2.2.13	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
F3.2.3 - Mental Health IPU 01 Staff Support					
F3.2.3.1	Conference/Meeting Room-Xsmall	1	15.00	15.00	Accommodates 6 Persons.
F3.2.3.2	Office-3 Shared	1	16.00	16.00	Incl. 3 workstations.
F3.2.3.3	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
F3.2.3.4	Lounge-Staff	1	10.00	10.00	Incl. hand hygiene sink at entry, seating and tables for 4 people, Staff kitchenette, mail slots, 1 computer workstation.
F3.2.3.5	Washroom-Staff	1	3.00	3.00	2-piece.
F3.3 - MH IPU 02					
F3.3.1 - Mental Health IPU 02 Unit					
F3.3.1.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation, dual egress.
F3.3.1.2	Secure Room	2	14.00	28.00	
F3.3.1.3	Anteroom-Secure	1	9.00	9.00	Incl. counter, lockable cabinets, Direct Access and observation window into two Secure Rooms.
F3.3.1.4	Sensory Modulation Room	1	10.00	10.00	Incl. space for 2-3 people for low stimulation, cabinets.
F3.3.1.5	Patient Room-MH Accessible	1	18.00	18.00	Incl. lockable Patient wardrobe, cabinets, ceiling lift, accessible for Persons with Disabilities.
F3.3.1.6	Washroom/Shower-Inpatient Ensuite	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
F3.3.1.7	Patient Room-MH	15	14.00	210.00	Incl. lockable Patient wardrobe, cabinets.
F3.3.1.8	Washroom/Shower-Inpatient Ensuite-Small	15	4.50	67.50	3-piece incl. shower.
F3.3.1.9	Alcove-Hand Hygiene Sink	1	1.00	1.00	Centrally located.
F3.3.1.10	Care Team Station	1	16.00	16.00	Incl. 4 workstations, cabinets, charging station, dual egress, fully enclosed with interior windows and 2 transaction windows.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F3.3.1.11	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.
F3.3.1.12	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
F3.3.1.13	Workstation-Touchdown	1	2.50	2.50	Incl. 1 touch down workstation.
F3.3.1.14	Medication Room-Medium	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, shelving, dual egress and interior windows, adjacent to Care Team Station.
F3.3.1.15	Quiet Room-Patient	1	12.00	12.00	Incl. seating for 4.
F3.3.1.16	Lounge/Living Room-Patient	1	37.50	37.50	Incl. seating for 15, adjacent to Dining/Activity Area.
F3.3.1.17	Multipurpose Room	1	18.00	18.00	Incl. seating for 10
F3.3.1.18	Dining/Activity Area	1	28.00	28.00	Incl. seating for 10.
F3.3.1.19	Not Used	0	0.00	0.00	
F3.3.1.20	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets.
F3.3.1.21	Servery	1	18.50	18.50	Incl. service counter and window with overhead rolling counter shutters, emergency eyewash, adjacent to Dining/Activity Area.
F3.3.1.22	Utility-Personal Laundry	1	5.50	5.50	Incl. counter, cabinets, shared with IPU 01 and IPU 03 Units.
F3.3.1.23	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
F3.3.2 - Mental Health IPU 02 Support Services					
F3.3.2.1	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
F3.3.2.2	Alcove-Local Equipment	2	1.50	3.00	Enclosed with door with locks, distributed in Mental Health IPU 02.
F3.3.2.3	Alcove-Clean Linen	1	2.50	2.50	Enclosed with lockable doors.
F3.3.2.4	Alcove-Crash Cart	1	1.50	1.50	Located within Care Team Station, shared with adjacent MH IPUs.
F3.3.2.5	Alcove-Exercise Equipment	1	12.00	12.00	Adjacent to Multipurpose Room.
F3.3.2.6	Alcove-Stretcher	1	2.50	2.50	Secured to prevent Patient access.
F3.3.2.7	Alcove-Wheelchair	1	2.50	2.50	Secured to prevent Patient access.
F3.3.2.8	Store-Clean Supplies	1	12.00	12.00	
F3.3.2.9	Store-General	1	10.00	10.00	Incl. shelving.
F3.3.2.10	Store-Patients' Property	1	6.00	6.00	Incl. cabinets, shelving.
F3.3.2.11	Store-Rehab Therapy	1	6.50	6.50	Incl. shelving.
F3.3.2.12	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
F3.3.2.13	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F3.3.3 - Mental Health IPU 02 Staff Support					
F3.3.3.1	Conference/Meeting Room-Xsmall	1	15.00	15.00	Accommodates 6 Persons.
F3.3.3.2	Office-Private	2	9.50	19.00	Incl. 1 workstation.
F3.3.3.3	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
F3.3.3.4	Lounge-Staff	1	10.00	10.00	Incl. seating for 4, kitchenette, mail slots, 1 touch down workstation.
F3.3.3.5	Washroom-Staff	1	3.00	3.00	2-piece.
F3.4 - MH IPU 03					
F3.4.1 - Mental Health IPU 03 Unit					
F3.4.1.1	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation, dual egress.
F3.4.1.2	Secure Room	1	14.00	14.00	
F3.4.1.3	Anteroom-Secure	1	9.00	9.00	Incl. counter, lockable cabinets, Direct Access and observation window into Secure Room.
F3.4.1.4	Sensory Modulation Room	1	10.00	10.00	Incl. space for 2-3 people for low stimulation, cabinets.
F3.4.1.5	Patient Room-MH Accessible-Airborne Isolation-Hybrid	1	18.00	18.00	Incl. lockable Patient wardrobe, cabinets, ceiling lift, accessible for Persons with Disabilities.
F3.4.1.6	Washroom/Shower-Inpatient Ensuite-Airborne Isolation	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
F3.4.1.7	Patient Room-MH	15	14.00	210.00	Incl. lockable Patient wardrobe, cabinets.
F3.4.1.8	Washroom/Shower-Inpatient Ensuite-Small	15	4.50	67.50	3-piece incl. shower.
F3.4.1.9	Alcove-Hand Hygiene Sink	1	1.00	1.00	Centrally located.
F3.4.1.10	Care Team Station	1	16.00	16.00	Incl. 4 workstations, cabinets, charging station, dual egress, fully enclosed with interior windows and 2 transaction windows.
F3.4.1.11	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.
F3.4.1.12	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
F3.4.1.13	Workstation-Touchdown	1	2.50	2.50	Incl. touch down workstation.
F3.4.1.14	Medication Room-Medium	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, shelving, dual egress and interior windows, adjacent to Care Team Station.
F3.4.1.15	Quiet Room-Patient	1	12.00	12.00	Incl. seating for 4.
F3.4.1.16	Lounge/Living Room-Patient	1	37.50	37.50	Incl. seating for 15, adjacent to Dining/Activity Area.
F3.4.1.17	Multipurpose Room	1	18.00	18.00	Incl. seating for 10
F3.4.1.18	Dining/Activity Area	1	33.00	33.00	Incl. seating for 10 and an ADL Kitchen space with adjustable wheelchair accessible counter, cabinets. Provide a side folding polycarbonate grille.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F3.4.1.19	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets.
F3.4.1.20	Servery	1	18.50	18.50	Incl. service counter and window with overhead rolling counter shutters, emergency eyewash, adjacent to Dining/Activity Area.
F3.4.1.21	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
F3.4.2 - Mental Health IPU 03 Support Services					
F3.4.2.1	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
F3.4.2.2	Alcove-Local Equipment	2	1.50	3.00	Enclosed with door with locks, distributed in Mental Health IPU 03.
F3.4.2.3	Alcove-Clean Linen	1	2.50	2.50	Enclosed with lockable doors.
F3.4.2.4	Alcove-Exercise Equipment	1	12.00	12.00	Adjacent to Multipurpose Room.
F3.4.2.5	Alcove-Stretcher	1	2.50	2.50	Secured to prevent Patient access.
F3.4.2.6	Alcove-Wheelchair	1	2.50	2.50	Secured to prevent Patient access.
F3.4.2.7	Store-Clean Supplies	1	12.00	12.00	
F3.4.2.8	Store-General	1	10.00	10.00	Incl. shelving.
F3.4.2.9	Store-Patients' Property	1	6.00	6.00	Incl. cabinets, shelving.
F3.4.2.10	Store-Rehab Therapy	1	6.50	6.50	Incl. shelving.
F3.4.2.11	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
F3.4.2.12	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
F3.4.2.13	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
F3.4.3 - Mental Health IPU 03 Staff Support					
F3.4.3.1	Conference/Meeting Room-Xsmall	1	15.00	15.00	Accommodates 6 Persons.
F3.4.3.2	Office-3 Shared	1	16.00	16.00	Incl. 3 workstations.
F3.4.3.3	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
F3.4.3.4	Lounge-Staff	1	10.00	10.00	Incl. seating for 4, kitchenette, mail slots, 1 touch down workstation.
F3.4.3.5	Washroom-Staff	1	3.00	3.00	2-piece.
F3.5 - Mental Health IPU Shared Staff Support					
F3.5.1	Lockers-Staff	2	28.00	56.00	Incl. 80 Z lockers, 1 shoe rack, split into male and female if required.
F3.5.2	Washroom-Staff	2	3.00	6.00	2-piece.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
F3.5.3	Washroom-Staff-Accessible	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
F3.5.4	Washroom/Shower-Staff	2	4.50	9.00	3-piece incl. shower.
	TOTAL NSM: Mental Health Inpatients			**2,074.50**	
F4 - TRANSITIONAL CARE CENTRE					
F4.1	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Transitional Care Centre.
F4.2	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation, dual egress.
F4.3	Bedroom-Special Needs	1	12.00	12.00	Accessible for Persons with Disabilities.
F4.4	Bedroom-2 Single Beds	4	18.00	72.00	
F4.5	Washroom/Shower-Patient	2	4.50	9.00	3-piece incl. shower, accessible for Persons with Disabilities.
F4.6	Workstation	1	4.50	4.50	Incl. 1 workstation.
F4.7	Dining/Activity Area	1	28.00	28.00	Incl. seating for 10.
F4.8	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets, adjacent to Dining/Activity Area.
F4.9	Store-General	1	2.00	2.00	Incl. shelving.
F4.10	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
	TOTAL NSM: Transitional Care Centre			**156.50**	
	TOTAL NSM: URBAN HEALTH AND INTEGRATED MENTAL HEALTH AND SUBSTANCE USE			**4,504.20**	

THE NEW ST. PAUL'S PHASE 1A

G. SURGICAL AND INTERVENTIONAL SERVICES

G. SURGICAL AND INTERVENTIONAL SERVICES

8.1 OVERVIEW

8.1.1 The Surgical and Interventional Services Component exists for the purposes of surgical procedures and invasive cardiac and radiological procedures in a controlled environment supporting a sterile field and during which Patients require either general/regional anesthesia and/or sedation. Surgical procedures include open, minimally invasive and in future robotic surgery. Two hybrid rooms will accommodate surgical, endovascular and radiological interventions simultaneously.

8.1.2 Unscheduled and emergency procedures may be referred by the ED, elsewhere in the Facility, other sites within the region and throughout the province based on the tertiary and quaternary services available. The scheduled case mix similarly reflects the unique dichotomy of the urban environment and the provincial demand for highly specialized surgical services. Following each procedure, Patients will be recovered in the Anesthetic Care Unit before being transferred to an inpatient bed or discharged home. Critical Care Complex inpatients will be transferred directly back to Critical Care Complex Unit. Services of the OR Booking Office will be accommodated here.

8.1.3 Services of the Pre-anesthetic clinic will be accommodated in Component H, Outpatient Care Centre.

8.1.4 The purpose of the Surgical and Interventional Services is to create a single platform that groups services, facilitates integration and collaboration of interdisciplinary specialties requiring an aseptic environment and serves as a mechanism to enhance efficient use of resources such as: Interventional Radiology (IR), Interventional cardiology (IC), ORs and Anesthetic Care Unit (ACU). Operations Control Desks will oversee operations for the platform that is able to track Patients from their arrival to discharge on the Surgical and Interventional Services.

8.2 FUNCTIONAL DESCRIPTION

8.2.1 Scope of Services

8.2.1.1 The Surgical and Interventional Services will consist of two (2) zones:

8.2.1.1(1) Surgical and Major Procedures Zone

8.2.1.1(2) Scopes and Minor Procedures Zone

8.2.1.2 Scope of Educational Activity

8.2.1.2(1) Ongoing Staff education and training will take place in this Component. All teaching and supervised functions will be accommodated in the general work areas, allowing for learners and researchers to observe advanced procedures.

8.2.1.2(2) Learners include doctors, perfusionists, medical students, residents, national and international trainees, nurses and allied

health. Cath lab routinely broadcasts to international conferences and requires associated IM/IT equipment and capabilities.

8.2.1.3 Scope of Research Activity

8.2.1.3(1) Research activities will take place in this Component but will not require any additional or dedicated space.

8.2.1.4 Scope Exclusions

8.2.1.4(1) The following list specifies functions supporting surgical services or involving minor invasive procedures, and requiring either local anesthesia or sedation, but are planned to occur in other Functional Components in the Facility:

8.2.1.4(1)(a) Uncomplicated Caesarean-sections. Refer to Component E, Maternity Centre.

8.2.1.4(1)(b) Neurosurgery is an exclusion however, neuro-modulation will occur within the ORs and therefore neuro-modulation will be an inclusion for minor procedures requiring local anesthesia only.

8.2.1.4(1)(c) Major burn, debridement and pediatrics.

8.2.2 Services provided

8.2.2.1 Surgical and Major Procedures Zone

8.2.2.1(1) The Surgical and Major Procedures Zone will have Interventional Suites for radiological and cardiac interventions as well as ORs, including two (2) hybrid ORs.

8.2.2.1(2) The Surgical and Major Procedures Zone will be separated into two (2) distinct flows. One flow will accommodate surgeries in the ORs and a second flow will accommodate Patients going to the Interventional Suites.

8.2.2.1(3) The Facility will provide a state of the art level of services in the following specialties:

8.2.2.1(3)(a) Surgical services: Trauma, general surgery, Vascular and Cardiac surgery, Orthopedics, Urosurgery, Plastics. Space will be provided to ensure that intraoperative imaging is provided such as fluoroscopy or CT. A Lab-Frozen Section will be located adjacent to the ORs.

8.2.2.1(3)(b) IC: the current mandate protocol for Patients that require emergent cardiac catheterization is access goal of 90 minutes from the time of presentation at

the Facility to the start of the procedure. The IC area will be adequately staffed and resourced to meet the requirements of emergent and urgent care as well as handling large volume of Patients. The IC will be adjacent to the cardiac surgery ORs, Critical Care Complex and Inpatient cardiac units. It will also be adjacent to preparation and recovery areas to maintain rapid turnover of the rooms and high flow of Patients through this service.

8.2.2.1(3)(c) IR: The IR will continue to be an inseparable element of care at the surgical platform. The growth of IR services will continue to increase due to an increase in Inpatient activity, increase in Outpatient services and increased demand for specialized diagnostics and interventions with NSPH becoming a leading site for complex cases and referrals.

8.2.2.1(4) Pre- and post-operative ACU spaces will be a shared resource to provide support for both Interventional Suites and the ORs.

8.2.2.2 Scopes and Minor Procedures Zone

8.2.2.2(1) The Scopes and Minor Procedures Zone will accommodate scopes, including: transesophageal echocardiograms (TEE), colonoscopy, GI endoscopy, bronchoscopy, cystoscopy, and arthroscopy; and other low-risk procedures that require anesthesia.

8.2.2.2(2) Pain with Neuromodulation will be carried out in one of the Procedure Rooms with capability to access ACU bays for pre and post Patient care.

8.2.2.2(3) A separate ACU will be used for pre- and post-procedure Patients in this zone.

8.3 OPERATIONAL CONSIDERATIONS

8.3.1 Service Delivery Principles and Methods

8.3.1.1 Patient and Family Management Processes and Flows

8.3.1.1(1) Simple and intuitive Wayfinding principles are required to enable the Patients and visitors accessing the Surgical and Interventional Services Component to find their area of service.

8.3.1.1(2) The design will enable Convenient Access by Patients from Main Entrance and Public Services.

8.3.1.1(3) Person- and Family-Centred Care will be provided by proceduralists (surgeons, interventional radiologists and cardiologists), nursing, medical radiation technologists, anesthesiologists, anesthesia assistants, technologists (perfusion, respiratory and electro-physiologists), porters, and learners.

8.3.1.1(4) The goal is to deliver diagnostic and therapeutic procedures in an environment that is supportive and therapeutic for Patients, families and Staff.

8.3.1.1(5) Referral

8.3.1.1(5)(a) The OR booking process will begin with an electronic booking request from a proceduralist's office to a centralized booking office.

8.3.1.1(6) OR booking

8.3.1.1(6)(a) Patient scheduling will be centralized for all surgical/ procedural and interventional services through the centralized booking system office located in this Component.

8.3.1.1(7) Pre-Operative Assessment

8.3.1.1(7)(a) All Patients will have undergone a pre-screening assessment by a health professional. This pre-screening assessment may be done by telephone or for Patients requiring pre-operative assessment, this will be scheduled and done through the Outpatient Care Centre's Pre-anesthetic Clinic. If required, an Equipment order requisition including any loan items required will be arranged. This data will then be fed back into the booking procedure which will be used to compile the "day before" slate.

8.3.1.1(8) Reception

8.3.1.1(8)(a) Pre- registration can be done prior to the Patient arriving at the OR by coordination between the OR booking office and the referring unit/source. The Reception at the OR will register the Patient.

8.3.1.1(8)(b) All Patients scheduled for procedures at the Surgical and Major Procedures Zone will present at a central Reception. Much of the registration and initial check-in process can be completed prior to arrival at the central Reception. Patients will

then be directed to the appropriate ACU bay of the Component to receive pre-operative care.

8.3.1.1(8)(c) Patients arriving at the Scopes and Minor Procedures Zone will present at a dedicated Reception. From there, they will be directed to an ACU bay where they will receive pre- procedure care.

8.3.1.1(8)(d) Reception/Control Functions will be centralized to facilitate control and monitoring of all Patient movement into, within, and out of, the Component.

8.3.1.1(8)(e) Remote monitoring systems may be utilized to assist in this function and to help maintain security.

8.3.1.1(9) Pre-Operative/Procedural Care (ACU)

8.3.1.1(9)(a) Patients will be taken and greeted at the respective ACU, where they will be directed to a bed within the ACU for pre-operative/procedural preparation, same day admits or Outpatients will change into a gown and receive final instructions, medications and preparation for the procedure. Inpatients, including Critical Care Complex Patients, Emergency Patients (to the extent possible) will be prepped and gowned before arriving to the surgical suites.

8.3.1.1(9)(b) Patient belongings will be stored in a storage room within the ACU until the Patient has arrived back in the ACU. Patients will then change back into their personal clothing when discharge criteria have been met. If admitted to an IPU, Patient belongings will be transported with the Patient to the admitting unit.

8.3.1.1(10) Procedures Suites

8.3.1.1(10)(a) Patients will be transferred to the OR by a porter for the scheduled procedure. Patients will walk in to ORs or enter by stretcher. Communication devices will notify Staff internally and externally (e.g. Critical Care Complex) of the progress of Patient’s procedural phase or supply and instrument requests from MDRD.

8.3.1.1(10)(b) The Facility’s portering Staff will transfer Patients arriving at and leaving the Component. At an

appropriate lead-time prior to the availability of each Patient's scheduled surgical suite, a porter will be dispatched to transfer the Patient. This process will be re-visited once Patients are sufficiently recovered and ready for transfer out of ACU. Transfers to and from this Component will generally originate from one of the following:

8.3.1.1.10.(b).1 Emergency Services
8.3.1.1.10.(b).2 Inpatient Care
8.3.1.1.10.(b).3 Critical Care Complex
8.3.1.1.10.(b).4 Outpatient Care Center

8.3.1.1(11) Post-operative/procedural Care (ACU)

8.3.1.1(11)(a) Post-operative/procedure unconscious Patients will be moved immediately to the ACU for recovery (Phase I recovery). Patients on airborne isolation precautions will be recovered in the OR with doors closed until sufficient air changes have occurred to render 99% removal of airborne pathogens since last aerosol generating procedure (extubation) prior to being moved. Once achieving a state of consciousness and awareness indicating that further close monitoring is not required (Phase II recovery), Patients will be transferred back to the appropriate Inpatient care unit, remain for extended time in ACU and/or be prepped for discharge. Patients requiring critical care post procedure and Critical Care Complex Inpatients will not be moved to ACU but will be transferred directly to the Critical Care Complex.

8.3.1.1(12) 24 hour stay

8.3.1.1(12)(a) Patients identified as requiring a 24 hour stay, meeting the specific requirements (such as Patients with a swollen airway or gland) will be cared for in ACU.

8.3.1.1(13) Infection Prevention and Control Management

8.3.1.1(13)(a) Surgical procedures performed are invasive, meaning penetrating sterile areas of a Patient's body. These procedures require a controlled environment of the OR/Procedure Rooms to ensure a sterile field and aseptic technique can be maintained.

8.3.1.1(13)(b) All Staff (including students), will wear appropriate freshly laundered hospital-issued surgical attire according to PHC Policies to prevent cross-contamination.

8.3.1.1(13)(c) To ensure a high level of asepsis control, surgical ORs and associated spaces are to be grouped into restricted and semi-restricted zones.

8.3.1.1.13.(c).1 Restricted zones require surgical attire, hair covering, shoe coverings (if not designated OR footwear) and masks (when sterile items are open).

8.3.1.1(13)(d) All materials and instruments will be sterilized and stored in restricted zone to maintain sterility.

8.3.1.1(13)(e) Scrub sinks will be provided in any area where operative procedures are performed.

8.3.1.2 Patient Information Management

8.3.1.2(1) All Patient information will be maintained in the EMR system.

8.3.1.2(2) Wireless technology will enable data entry using a combination of fixed terminals located adjacent to each Patient's bedside and at key Staff workstations in addition to mobile devices/tablets.

8.3.1.2(3) Access to the EMR will be controlled electronically with varying levels of security clearance determining a Person's access to different sections and their ability to enter/edit data.

8.3.1.2(4) The ORs and Interventional Suites will be a quiet environment. Noisy equipment, such as servers, will be located outside of the ORs.

8.3.1.2(5) Dictation will occur at Alcove-Touchdown/Charting throughout the Component.

8.3.1.2(6) ORs will be flexible and integrated through Advanced Digital Hospital technology.

8.3.1.2(7) Surgical procedures will be supported by interfaces with diagnostic images (PACS) and laboratory results. Staff in the surgical suite will have access to the Patient's previous procedures, tests and images, while continuously monitoring the Patient's clinical status.

8.3.1.2(8) Ceiling booms will be used to manage mounted monitors and Equipment management systems, surgical lights, equipment for anesthesia, perfusion, and endoscopy to safely manage and enclose cables and keep them off the floor.

8.3.1.2(9) Planning assumes that electronic displays in each OR will have the capability to display these diagnostic tools in addition to real-time Patient vital statistics.

8.3.1.2(10) Technical support and IM/IT support areas will be provided for technicians to troubleshoot issues, set up systems and perform updates without having to enter into the OR during a case.

8.3.1.2(11) Staffing information will be a managed corporate service. Scheduling, including providing for sick and vacation relief will be conducted centrally, and off-site. Notices to individual Staff regarding their schedules will be communicated electronically.

8.3.1.3 Care Provider Work Processes and Flows

8.3.1.3(1) Staff scheduling will ensure that there is distribution of workloads efficiently to enable effective utilization of resources.

8.3.1.3(2) The clinical unit will optimize Infection Prevention and Control and care delivery through a design which emphasizes the blend of workflow, care processes, automation of practice, and interoperability between medical and business technologies in support of the Owner's strategic investment in clinical and business systems, including Cerner (Clinical and Systems Transformation or CST).

8.3.1.3(3) Staff will be enabled to leverage technology and the resultant optimal care environment with respect to communication, access to the EMR, documentation, mobility, monitoring, tracking, and care processes and best practices. The space will accommodate, at minimum, the technology devices and medical equipment required to deliver care in an automated environment including mounting, storage, charging, and space requirements of:

8.3.1.3(3)(a) Integrated Medication Carts;

8.3.1.3(3)(b) Automated Dispensing Cabinets for medication;

8.3.1.3(3)(c) Mobile and fixed computer workstations;

8.3.1.3(3)(d) Mobile and fixed Label Printers;

8.3.1.3(3)(e) Mobile and fixed Barcode Scanners;

8.3.1.3(3)(f) Handheld computer devices;

8.3.1.3(3)(g) Glucometers with Docking Stations;

8.3.1.3(3)(h) Tracking Monitors for Patient, Staff and Resources;

8.3.1.3(3)(i) Clinical Dashboards;

8.3.1.3(3)(j) Smart Beds;

8.3.1.3(3)(k) Smart Pumps;

8.3.1.3(3)(l) Device Integration for real –time clinical assessment and physiological data documentation;

8.3.1.3(3)(m) Digital room signage and Way-finding;

8.3.1.3(3)(n) Interactive Patient Station;

8.3.1.3(3)(o) Location Awareness;

8.3.1.3(3)(p) Device Connectivity;

8.3.1.3(3)(q) Multifunction Communication Devices with integration to systems;

8.3.1.3(3)(r) Telemedicine and Virtual Team Capabilities;

8.3.1.3(3)(s) RTLS; and

8.3.1.3(3)(t) Staff duress systems.

8.3.1.3(4) All Workstations will have access to PACS.

8.3.1.3(5) Electronic Patient status board and Patient monitoring will be available, at minimum, at the Reception, public Waiting area and ACU areas as well as Lounge-Staff, Consult/Interview Rooms and provider/learner work areas.

8.3.1.3(6) Staff will be able to communicate utilizing a hands-free communication system.

8.3.1.3(7) Patient care areas and Care Team Stations will accommodate documentation capabilities for maintaining both paper and electronic charts/records.

8.3.1.3(8) Start/end of shift

8.3.1.3(8)(a) At the start of shift, Staff will pick up a handheld wireless communication device that is linkable and with the ability to view physiologic monitoring of the Patients they are assigned to.

8.3.1.3(8)(b) When the shift is completed, Staff will return the handheld wireless communication device, change

in the locker room and dispose of surgical garb prior to leaving the Facility.

8.3.1.3(9) Staff will have access to an internal convenience stair that will allow Staff to flow between suites, as required, to meet Patient needs. This internal connection is critical for a rapid response to a Code Blue. The internal convenience stair will be a continuous semi-restricted pathway providing access between Surgical and Major Procedures Zone, Surgical and Interventional Services Future Expansion, MDRD, Maternity Centre C-Section and Procedures, and Scopes and Minor Procedures Zone. Staff will require donning of surgical attire to enter these zones.

8.3.1.3(10) The completion of the pre-procedure process will be provided in the ACU Patient Bays to allow privacy for interviews and exams.

8.3.1.3(11) The staffing model for the ACU will flex according to Patient care needs and acuity.

8.3.1.3(12) Medications will be administered in the ACU according to Patient needs.

8.3.1.3(13) Proceduralists who need to speak with family during or after a procedure will do so in the ACU or will speak with families just outside of the ACU in the Conference/Meeting Rooms.

8.3.1.3(14) The Care Team Station will act as the central control point within the ACU areas. These will be strategically located as identified by the team.

8.3.1.3(15) Line of Sight to the ACU Patients will be required and allow for collaboration among Staff. ACU Patient Bays will be connected through a glass sliding door between Bays to facilitate Line of Sight for Staff.

8.3.1.3(16) Care Team Stations will have wall mounted displays.

8.3.1.3(17) Staff in Scopes and Minor Procedures Zone will be able to communicate with Surgical and Major Procedures Zone team using hands-free communication devices for emergency response situations.

8.3.1.3(18) Receiving of Patients in –Surgical and Interventional Services: Patients can come from one of the IPU, Critical Care Complex, Emergency Services, home for same day admits or for day care procedures and then confirming Patients' identity according to the procedure for which they are scheduled and their destination in the Component: Interventional procedure ACU zone or Main OR ACU zone.

8.3.1.3(19) Patients will be received in the Scopes and Minor Procedures Zone and their identity will be confirmed according to the procedure for which they are scheduled and their destination in the Component. The Scopes and Minor Procedures Zone will accommodate a variety of short procedures with a rapid turnaround time for most Patients who will be under light or conscious sedation and in the future, potentially Patients who may require general anesthesia.

8.3.1.3(20) Identification and segregation of infectious Patients.

8.3.1.3(21) Induction of Patients, including general anesthesia, spinal blocks and regional block administration by anesthesiologists.

8.3.1.3(22) Continuous ventilation and monitoring of Patients vital signs by anesthetists during surgical procedures.

8.3.1.3(23) Performing diagnostic imaging procedures during surgical procedures.

8.3.1.3(24) Procuring and transferring tissue/fluid samples during surgical procedures.

8.3.1.3(25) Post procedure recovery to a state where Patients are awake and alert (meet disposition criteria).

8.3.1.3(26) Conducting emergency cardioversions.

8.3.1.3(27) Patient scheduling including coordinating surgical suite availability with surgeons' schedules and coordinating with pre-admission clinics and services.

8.3.1.3(28) Conducting pre-procedural assessments in a consultative clinic setting (ACU).

8.3.1.3(29) Coordinating with the Facility's Patient portering service.

8.3.1.3(30) Coordinating the transfer of clean and soiled equipment, supplies and case carts.

8.3.1.3(31) Managing inventories of consumable supplies.

8.3.1.3(32) Performing routine maintenance on ventilators and anesthetic equipment.

8.3.1.3(33) Performing routine cleaning of ORs between cases and terminal cleaning at the end of each day.

8.3.1.3(34) Flash sterilization of urgently needed surgical instruments. Flash sterilizers will not be used in an OR.

8.3.1.3(35) Staff and provider environment

8.3.1.3(35)(a) Collaborative teams will minimize the handover of Patient care by utilizing workflow process improvements including performing multiple procedures under one anesthetic when possible.

8.3.1.3(35)(b) The ACU utilizes a care team of nurses (e.g. RN, LPN), care aides to provide multi-acuity Patient ratios, physicians (anesthesiologists, proceduralists), professional support (electrophysiology and laboratory technicians, anesthesia assistants, porters, clerk, radiology technologists, physio and RT and volunteers).

8.3.1.3(35)(c) The ORs, Interventional Suites, hybrid ORs, Procedure Room-General, Procedure Room-Bronchoscopy, Procedure Room-ERCP/GI Endoscopy and Procedure Room-GI Endoscopy utilize a care team of anesthesiologists, proceduralists and nurses, care aides per Patient depending on the complexity of the case. Professional support includes electrophysiology, echocardiography and laboratory technicians, anesthesia assistants, porters, clerk, radiology technologists, and equipment specialists.

8.3.1.3(35)(d) The Interventional Suites will utilize a care team of cardiologists, radiologists, nurses, radiology technologists, anesthesiologists, anesthesia assistants, and learners.

8.3.1.3(36) Students

8.3.1.3(36)(a) The Facility will be a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents. Work spaces will be enabled to have private, confidential conversations and be equipped with teaching capability.

8.3.1.4 Clinical and Logistical Support Processes and Flows

8.3.1.4(1) Medical Imaging

8.3.1.4(1)(a) Medical Imaging required during a surgical or interventional procedure will generally be conducted using digital general radiography and/or fluoroscopy.

8.3.1.4(1)(b) Portable imaging Equipment will be kept near the Surgical and Major Procedures Zone and the Scopes and Minor Procedures Zone for convenient use. Storage requirements will be in accordance with CSA Z8000-11 standards.

8.3.1.4(2) Laboratory Services

8.3.1.4(2)(a) Tissue and fluid specimens will be obtained during some surgical procedures. Regardless of the urgency in testing requirements, all specimens will be transported to the Main Laboratories for processing and analysis, unless on site analysis is required. The Main Laboratories will be available to support this Component (See Component J, Clinical Support Services).

8.3.1.4(2)(b) Transfusion Medicine will maintain a blood fridge in the Surgical and Interventional Services Component.

8.3.1.4(2)(c) Specimen transport will be conducted through the pneumatic tube stations, which will accommodate sensitive items such as blood products and glass containers including by means of a receiving area designed to slow down the arriving tubes and protect the specimens and their containers. When a specimen's stability or fragility requires manual transport, laboratory technicians or porters will be responsible for transporting specimens from ORs to the Laboratory; however, these exceptions in no way reduce the obligation to accommodate transport of all sensitive items via pneumatic tube. Specimen collection protocols will enable Laboratory Staff access to specimens without entering a sterile area; Staff working in a sterile area will also not be required to exit into a clean or contaminated area.

8.3.1.4(2)(d) Laboratory test results will be communicated back to the OR electronically, and on video displays.

8.3.1.4(3) Pharmacy Services

8.3.1.4(3)(a) Automation will be used in the inventory management and dispensing of Patient medications. Medication Rooms and ADCs will be dispersed throughout the Surgical and Interventional Services Component. Pharmacy

Staff will be responsible for inventory management of the ADCs. Clinicians and nursing Staff will deliver medications from the ADCs to the Patients.

8.3.1.4(3)(b) Unstable products will be prepared in the Pharmacy Component (refer to Component J, Clinical Support Services), and then delivered to the Surgical and Interventional Services Component either according to a prescribed schedule or upon request.

8.3.1.4(3)(c) Anesthetic workstations will be included in all ORs, Procedure Room-General, Procedure Room-Bronchoscopy, Procedure Room-ERCP/GI Endoscopy and Procedure Room-GI Endoscopy.

8.3.1.4(3)(d) Pharmaceutical agents used to support anesthetic procedures will be maintained on anesthetic carts by anesthetists or anesthesia technologists. All pharmaceuticals will be ordered through EMR and delivered by the Pharmacy. Inventory management will be electronically monitored.

8.3.1.4(3)(e) All narcotics used in surgical procedures will be maintained in secured rooms located in this Component, with Convenient Access to the ORs and the recovery area. Removal of a narcotic from inventory will be recorded electronically.

8.3.1.4(4) Equipment and Instruments

8.3.1.4(4)(a) Equipment storage supported by Store-Central Equipment will be adjacent to each OR.

8.3.1.4(4)(b) Stretcher storage immediately adjacent to each OR is required; ideally this space is to be private enough for any last minute Patient consultations.

8.3.1.4(5) Consumable Supplies

8.3.1.4(5)(a) Consumable supplies will be kept in Store-Clean Supplies close to POC. Items will be maintained with a minimum inventory level, which will trigger a re-ordering process using real time Inventory Management System (IMS).

8.3.1.4(5)(b) Consumable supplies will be maintained centrally in the Surgical and Major Procedures Zone and the Scopes and Minor Procedures Zone and ACU

which will trigger a re-ordering process using real time IMS.

8.3.1.4(5)(c) Planning assumes electronic tracking supporting Radio Frequency Identification (RFID) inventory maintenance system. Under this system of inventory control, materials and items will be replenished just-in-time and will be available and accessible for Staff as soon as needed. Depleted tagged items and/or bins will be placed on an electronic monitoring board. This will then trigger the reordering process. “Fast-track” delivery will be triggered on the electronic monitoring board. All orders will be sent electronically to the Logistics Centre Component (See Component O, Operational Support) for processing.

8.3.1.4(5)(d) To the extent practicable, consumable supplies stored in different areas in this Component will be organized and stored in a common order and configuration, with each item having a standardized storage location. The intent of this standard is to enable efficient locating of each supply item without Staff first having to reorient themselves to a new room configuration and to avoid long travel distances between supplies storage and point of use.

8.3.1.4(5)(e) Material management will rely on automation. Consumption, reordering and resupplying will rely on a latest automated tracking and ordering management system as supplies are withdrawn from inventories.

8.3.1.4(5)(f) Disposable as opposed to reusable items will be the preferred option in this Component. A key result of this choice will be reflected in the nature of clean and soiled holding areas. Disposable items tend to be lighter and smaller than their reusable counterparts, but they also tend to be retained for longer periods after use before removal for disposal. The net effect will be a reduction in clean utility holding areas and an increase in soiled holding areas.

8.3.1.4(6) Laundry and Linen

8.3.1.4(6)(a) Clean linen will be delivered by AGV vehicles to the FM Service Elevator Lobby on the MDRD floor

level. Clean linen will then be picked up manually from the FM Service Elevator lobby and taken to the Store-Non-Sterile Supplies in the MDRD and packed onto case carts, to be sterilized and transported to the Sterile Core-Equipment/Supplies within the Surgical and Major Procedures Zone and ACU.

8.3.1.4(6)(b) Loose items will be similarly processed and delivered directly to the Surgical and Major Procedures Zone and Scopes and Minor Procedures Zone and ACU and will be stored in designated Alcove-Clean Linen. Clean linen will be covered and contained.

8.3.1.4(6)(c) Soiled linen from procedures will be deposited into lined waste containers located in Procedure Room-General, Procedure Room-Bronchoscopy, Procedure Room-ERCP/GI Endoscopy and Procedure Room-GI Endoscopy. Reusable linens will be collected and removed by housekeeping, multi-skilled workers and transported by AGV.

8.3.1.4(7) Waste Management

8.3.1.4(7)(a) Waste products, recycling and bio HAZMAT will be separated at POC and stored in holding areas until pick up by housekeeping Staff.

8.3.1.4(7)(b) Clinical and other waste will be removed from Procedure Rooms to Disposal Holds, therefore Convenient Access between these rooms will be required.

8.3.1.4(7)(c) Waste containers will be monitored, removed and replaced by housekeeping Staff and transported using AGVs.

8.3.1.4(8) Food Services

8.3.1.4(8)(a) Patients experiencing prolonged stays in the ACU will, on occasion, require snacks or light meals. These will be ordered electronically by ACU Staff and delivered to the Component by CFP (See Component O, Operational Support), stored, heated and distributed to the Patients in the ACU when required. Provision will be made for tele tracking or similar system to confirm Patient

location and linkages to pharmacy and food services.

8.3.1.4(8)(b) Beverages and snack items will be maintained in Nourishment Rooms. CFP will be responsible for replenishing snack/beverage items on a daily basis.

8.3.1.4(9) Medical Device Reprocessing Department

8.3.1.4(9)(a) A Scope Reprocessing area including Utility-Bronch Scope Rinse, Scope Decontamination, Scope Disinfection, Store-Clean Scope-Endo and Store-Clean Scope-Bronch will provide reprocessing of scopes used in the Scopes and Minor Procedures Zone.

8.3.1.4(9)(b) Dedicated Clean and Dirty MDRD Elevators will connect the Surgical and Major Procedures Zone, the Scopes and Minor Procedures Zone and the Future Expansion ORs with the MDRD with separate clean and soiled flows (See Component O, Operational Support).

8.3.1.4(9)(c) Case carts will be tracked with RTLS

8.3.1.5 Anticipated Trends in Service Delivery

8.3.1.5(1) The following lists trends expected within the planning horizon of this project, and that are expected to affect the nature and/or extent of functions accommodated within this Component. Effects of these trends will be reflected in the Component's design.

8.3.1.5(1)(a) Advances in technology and procedures will continue increasing the volumes of minimally invasive procedures.

8.3.1.5(1)(b) The shift from inpatient to ambulatory/same day and less invasive procedures will continue. This trend will require enhanced registration and processing procedures, accommodation for new equipment and technology as well as amenities for family members and escorts.

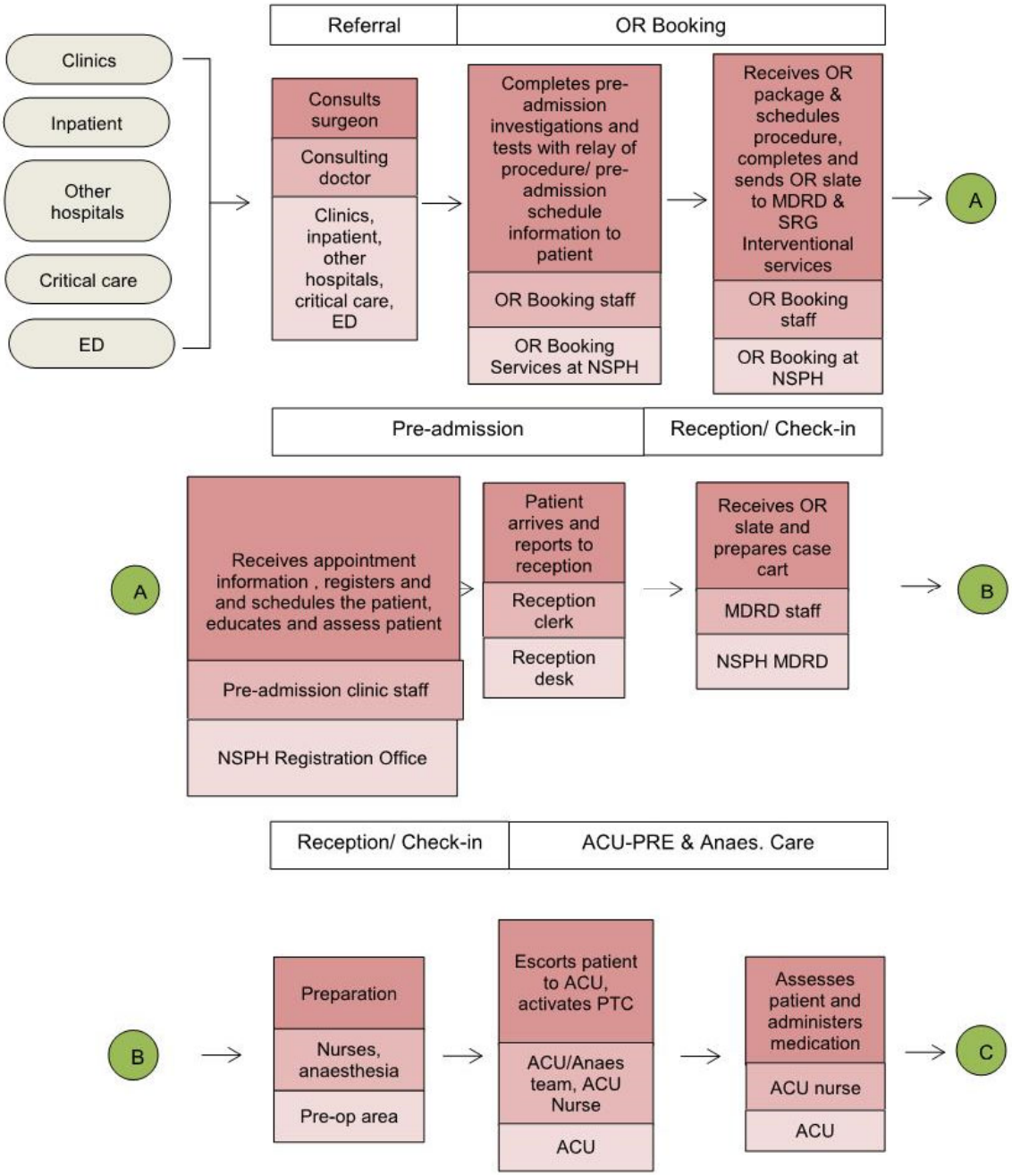
8.3.1.5(1)(c) Minimally invasive, imaged-guided, robotic and telesurgery procedures, along with intraoperative imaging techniques continue to replace traditional surgical procedures.

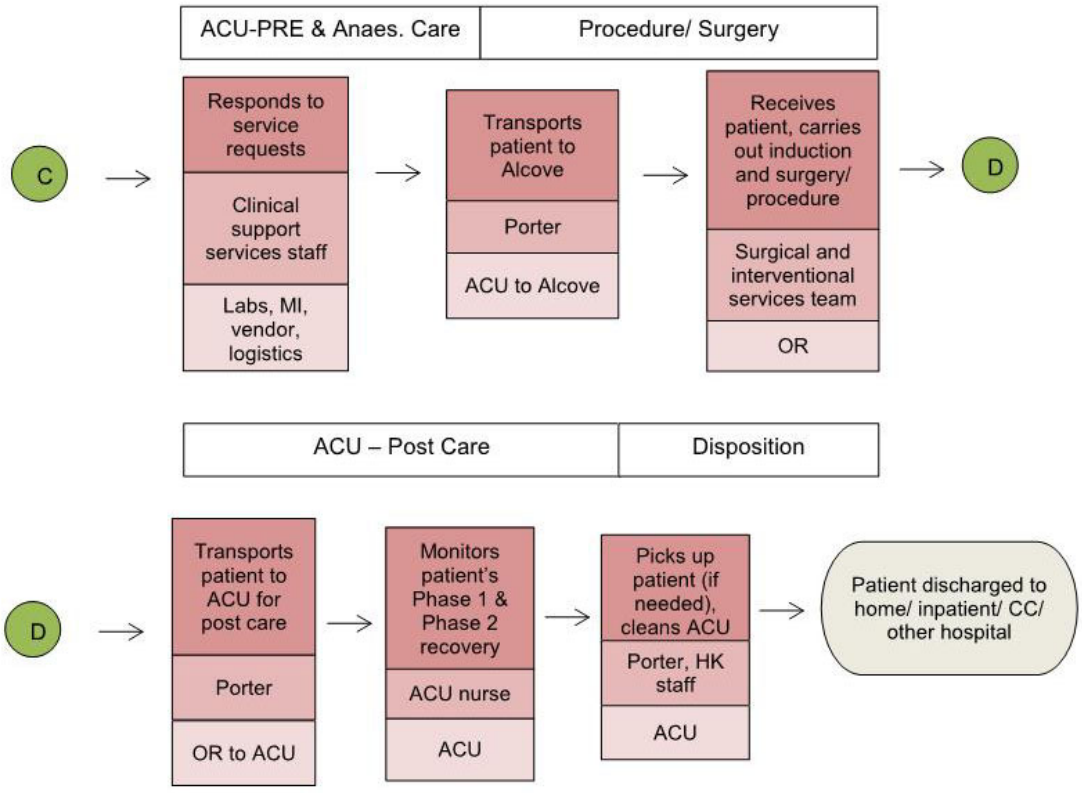
8.3.1.5(1)(d)	Increased focus on improving efficiency by reducing OR turnover times and overall productivity in anticipation pf economic challenges.
8.3.1.5(1)(e)	More efficient use of the ORs will mean that, regional block anesthetics will become more prevalent supporting a separate induction room (block room).
8.3.1.5(1)(f)	Increased numbers of bariatric Patients will be anticipated.
8.3.1.5(1)(g)	The mean age of Staff working in this Component is predicted to increase.
8.3.1.5(1)(h)	Shortages of key Staff positions are predicted to increase, including Staff in the highly trained, specialized professions.
8.3.1.5(1)(i)	Safety to increase with monitoring in the ORs such as the OR black box.
8.3.1.5(1)(j)	Infection Prevention and Control will remain a high priority in all areas of the Facility.
8.3.1.5(1)(k)	Increasing prevalence of antibiotic resistant organisms, particularly in environmentally persistent pathogens.
8.3.1.5(1)(l)	Alternate approaches to cleaning and disinfection including no touch techniques (hydrogen peroxide vapor, UV light etc.).

8.3.2 Workflows

8.3.2.1 The Surgical and Interventional Services workflows are depicted in the following workflow diagram.

G. SURGICAL AND INTERVENTIONAL SERVICES WORKFLOW DIAGRAM




ACU-PRE & Anaes. Care
Procedure/ Surgery
C
Responds to service requests
Clinical support services staff
Labs, MI, vendor, logistics
Transports patient to Alcove
Porter
ACU to Alcove
Receives patient, carries out induction and surgery/ procedure
Surgical and interventional services team
OR
D
ACU – Post Care
Disposition
D
Transports patient to ACU for post care
Porter
OR to ACU
Monitors patient's Phase 1 & Phase 2 recovery
ACU nurse
ACU
Picks up patient (if needed), cleans ACU
Porter, HK staff
ACU
Patient discharged to home/ inpatient/ CC/ other hospital

8.3.3 Hours of Operation

8.3.3.1 The Surgical and Major Procedures Zone will be staffed and operational 24 hours per day, 365 days per year (Note: most procedures will occur during the day; procedures performed after hours will generally be of emergent or urgent nature).

8.3.3.2 The Anesthesia Care Unit will be operational 24 hours a day, 365 days per year. Most Patients will recover and be discharged but some Patients may need to remain for an extended period until they are able to meet discharge criteria.

8.3.3.3 The Scopes and Minor Procedures Zone will operate from 0600 to 2000 hours. Emergency cases may occur after these hours.

8.3.4 Workloads

8.3.4.1 The maximum estimated workload for Surgical and Major Procedures Zone is shown in the following table.

SURGICAL AND MAJOR PROCEDURES ZONE STAFF CATEGORY	PEAK SHIFT
Direct Care Team Staff: Operating Rooms	
Physician	24
Surgical Assistant	16
Anesthesiologist	24
Anesthesia Assistant	16
Nurse Educator	3
Patient Care Manager	1
Clinical Nurse Leader	10
Registered Nurse -4 per OR (4*16)	64
Licenced Practical Nurse	8
Perfusionist	8
Other Technologist (Radiology Tech)	12
Porter Ward Aides – OR	8
Unit Clerk	2
Care Aide	1
Porter Ward Aide	15
Supplies and Logistics	5
Housekeeper	8
Subtotal, Direct care team Staff: Operating Rooms	**225**
Other	

SURGICAL AND MAJOR PROCEDURES ZONE STAFF CATEGORY	PEAK SHIFT
Medical Resident	20
Fellows	10
Student	20
Volunteer	2
Researcher and Other	2
Subtotal, Other	**54**
Shared Staff	
Program Director	1
Medical Director	2
Patient Care Manager	2
Staffing Clerk	4
Booking Clerks	6
Data Clerks	2
Physician Consultants	3
Administration Assistant	2
Subtotal, Shared Staff (not included in daytime peak)	**22**
TOTAL: Operating Rooms	**279**
Direct Care Team Staff: Anesthetic Care Unit for Operating Rooms	
Physicians	3
Patient Care Manager	1
Clinical Nurse Educators	2
Clinical Nurse Specialist	1
Clinical Nurse Leader	2
ACU Registered Nurse	40
Clinical Pharmacist	1
Pharmacy Technician	1
Porter/Ward Aides	8
Social Worker	1
Unit Clerk	3
Program Clerk	1
Housekeeper	5
Subtotal, Direct Care Team Staff: Anesthetic Care Unit for Operating Rooms	**69**

SURGICAL AND MAJOR PROCEDURES ZONE STAFF CATEGORY	PEAK SHIFT
Other	
Resident	2
Fellow	1
Student	10
Volunteer	2
Subtotal, Other	**15**
TOTAL: Anesthetic Care Unit for Operating Rooms	**84**
Direct Care Team Staff: Interventional Suites	
Physician	12
Anesthesiologist	3
Anesthesia Assistant	2
Nurse Practitioner	1
Patient Care Manager	1
Clinical Nurse Educator	1
Clinical Nurse Leader	1
Clinical Nurse Specialist	1
Registered Nurses	20
Interventional Radiology Technologist	8
Perfusionist	6
Anesthesia Assistant	6
Other Technologist	15
Unit Clerk	2
Vendor Assistant	3
Porter/Ward Aide	4
Housekeeper	4
Subtotal, Direct care team Staff: Operating Rooms	**90**
Other	
Resident	10
Fellow	10
Student	30

SURGICAL AND MAJOR PROCEDURES ZONE STAFF CATEGORY	PEAK SHIFT
Volunteer	2
Researcher and Other	2
Subtotal, Other	**54**
Shared Staff	
Program Director	1
Medical Director	2
Patient Care Manager	1
Physician Consultants	3
Staffing Clerk	1
Booking Clerks	4
Data Clerks	2
Administration Assistant	1
Subtotal, Shared Staff (not included in daytime peak)	**15**
TOTAL: Interventional Suites	**144**
Direct Care Team Staff: Anesthetic Care Unit for Interventional Suites	
ACU Registered Nurse	18
Clinical Nurse Specialist CNS	2
Clinical Nurse Leader CNL	1
Clinical Nurse Educator CNE	1
Clinical Pharmacist	1
Pharmacy Technician	1
Social Worker	1
Respiratory Therapists	1
Porter Ward Aide	3
Anesthetists	3
Physicians	4
Rad Technicians	4
Anesthesia Assistants	1
Perfusionists	1
Vendor Assistant	3
Electrophysiology Technicians	2

SURGICAL AND MAJOR PROCEDURES ZONE STAFF CATEGORY	PEAK SHIFT
Housekeeper	4
Subtotal, Direct Care Team Staff: Anesthetic Care Unit for Interventional Suites	**51**
Other	
Resident	2
Fellow	1
Student	7
Volunteer	2
Researcher and Other	2
Clerks	4
Subtotal, Other	**18**
Shared Staff	
Program Director	1
Medical Director	2
Patient Care Manager	1
Staffing Clerk	1
Physician Consultants	3
Administration Assistant	1
Booking Clerks	3
Data Clerks	2
Subtotal, Shared Staff (not included in daytime peak)	**14**
TOTAL: Anesthetic Care Unit for Interventional Suites	**69**
DAYTIME PEAK TOTAL: Surgical and Major Procedures Zone	**576**

8.3.4.2 The maximum estimated workload for Scopes and Minor Procedures Zone is shown in the following table.

SCOPES AND MINOR PROCEDURES ZONE STAFF CATEGORY	PEAK SHIFT
Direct Care Team Staff: Scopes and Minor Procedures Zone	
ACU Registered Nurse	13

SCOPES AND MINOR PROCEDURES ZONE STAFF CATEGORY	PEAK SHIFT
Care Aide	2
Clinical Pharmacist	1
Pharmacy Technician	1
Social Worker	1
Physiotherapist	1
Dietitian	1
Speech Language Pathologist	1
Respiratory Therapists	1
Technologist, X-Ray	4
Porter Ward Aide	3
Housekeeper	4
Subtotal, Direct Care Team Staff: Scopes and Minor Procedures Zone	**33**
Other	
Student	7
Volunteer	2
Subtotal, Other	**9**
TOTAL: Endoscopy and General Procedures Zone	**42**
Shared Staff	
Program Director	1
Medical Director	2
Patient Care Manager	1
Staffing Clerk	1
Booking Clerks	4
Data Clerks	2
Physician Consultants	3
Administration Assistant	1
TOTAL: Shared Staff (not included in daytime peak)	**15**
Direct Care Team Staff: Anesthetic Care Unit	
Physician/Anesthesiologist	10
Medical Resident	10

SCOPES AND MINOR PROCEDURES ZONE STAFF CATEGORY	PEAK SHIFT
Clinical Nurse Leader/Charge Nurse	1
Nurse	13
Respiratory Technologist	2
Other Technologist	2
Unit Clerk	3
Housekeeper	2
Porter Ward Aide	2
Subtotal, Direct Care Team Staff: Anesthetic Care Unit	**45**
Other	
Student	7
Volunteer	2
Researcher and Other	2
Subtotal, Other	**11**
TOTAL: Anesthetic Care Unit	**56**
DAYTIME PEAK TOTAL: Scopes and Minor Procedures Zone	**98**

8.4 DESIGN CRITERIA

8.4.1 General Requirements

8.4.1.1 Zones of activity within the Component include the following:

8.4.1.1(1) Surgical and Major Procedures Zone

8.4.1.1(2) Scopes and Minor Procedures Zone

8.4.1.1(3) Surgical and Interventional Services General Workstations

8.4.1.2 Patient flow through this Component will have a one-way flow where inbound and outbound Patients do not cross paths. This will require two (2) entrances; a Patient access point that could also function as the Staff entrance, and a Patient egress point that is functionally, physically and visually separate from the entrance.

8.4.1.3 Walk-in Patients, or Patients referred from outpatients following same day consultation and referral/unscheduled visits will have Convenient Access to

Public Passenger Elevators that can connect them directly to the Scopes and Minor Procedure Zone floor and Interventional Suites.

8.4.1.4 Separate Clean and Dirty MDRD Elevators between this Component and the MDRD will enable preservation of the Sterile Core-Equipment/Supplies and transportation of contaminated items while providing the highest Infection Prevention and Control protocols.

8.4.1.5 Interventional Suites, ORs, Procedure Room-General, Procedure Room-Bronchoscopy, Procedure Room-ERCP/GI Endoscopy and Procedure Room-GI Endoscopy are to be flexibly designed to easily accommodate future changes in technology and demand over time.

8.4.1.6 Each zone within the Platform will be self-contained in terms of access to supplies, Equipment, Soiled Utility rooms, Patient and Staff washrooms and emergency equipment.

8.4.1.7 Access control will be provided to the procedural areas while allowing public flow to the ACUs.

8.4.1.8 Controlled ambient lighting and temperature control with Task Lighting to perform tasks and chart will be provided to enhance Patient experience.

8.4.1.9 Clear movement patterns and separations of Patients and services within the Surgical and Interventional Services will be created. Access routes to all zones within the Platform will be clearly defined and provide direct routes.

8.4.1.10 Corridor widths will be wide enough to accommodate transport of a bariatric bed, medical equipment and a full care team.

8.4.1.11 At the Platform Entrance, there will be intercoms for visitors to communicate with Staff at various locations within the Interventional Platform. They will have video capability and the ability to allow remote entry (i.e. unlock doors) and be programmable to allow Staff to easily redirect the intercom between areas.

8.4.1.12 IP video surveillance cameras covering public areas such as individual zone entrance, will be connected to designated displays for Staff to view at various locations.

8.4.1.13 Bedside monitors in all ACU Patient Rooms and ACU Patient Bays will be positioned to provide maximum viewing in both sitting and standing positions for Staff.

8.4.1.14 Patient information will be available throughout the unit wirelessly with hand-held devices and through computer terminal positions at POC.

8.4.1.15 Each Care Team Station will be designed to allow charging for a number of handheld-devices (such as personal communication devices, Tablets, etc.).

8.4.1.16 Reading Room-PACS and offices will be fitted out with Virtual Health capability, for physicians to perform remote consultation and post-op monitoring and follow up. The system will have ability to share clinical data for immediate consultation.

8.4.1.17 Reading Room-PACS will have Convenient Access to Interventional Suites. One (1) Reading Room-PACS will be located in an unrestricted zone and one (1) Reading Room-PACS will be located in a semi-restricted area.

8.4.1.18 Consult/Interview Rooms, Exam Rooms, and Conference/Meeting Rooms will be located in an unrestricted zone, central to the ORs and Interventional suites and/or split equally between the two areas.

8.4.1.19 Storage of POC supplies and Equipment will be provided by storage spaces outside and inside Surgical and Major Procedure Zone spaces and Scopes and Minor Procedure Zone spaces. PPE will also be stored outside or adjacent to POC, based on the Design.

8.4.1.20 Medication Rooms, Store-Clean Supplies and Store-Central Equipment will be grouped in the Surgical and Interventional Services. Medication Rooms will have one (1) door from the corridor and another door connecting to the Store-Clean Supplies, so Staff can easily retrieve supplies for the setup of IV medications. Store-Clean Supplies will have another door from the corridor.

8.4.1.21 The primary function of Soiled Utility is to provide a space to dispose of the full spectrum of clinical waste including bedpan disinfectors and assorted bins for cytotoxic and biomedical waste (e.g. used blood bags), perform limited soiled activities such as gross decontamination/rinsing/soaking of surgical type instruments, and temporarily store clinical specimens. In the Surgical and Interventional Services, Soiled Utility will also provide space to sequester and marshal soiled equipment and clean them. The design will allow for one way flow from soiled to clean, separate soiled and clean to prevent cross-contamination and provide a dedicated unobstructed cleaning zone, with Convenient Access from all clinical spaces in the area it is intended to serve. Cleaned equipment will be moved to the Store-Central Equipment in a different and physically separate location away from Soiled Utility.

8.4.1.22 Alcove-Imaging Equipment-C-Arm will be located with Convenient Access to ORs and Procedure Room-General. Medical Imaging Staff will require Convenient Access to workstations to support their workflow.

8.4.1.23 Alcove-Imaging Equipment-Large storing the Digital X-Ray Equipment will be located with Convenient Access to the ORs, Procedure Room-General, and ACU Patient Bays and Rooms. Medical Imaging Staff will require Convenient Access to workstations to support their workflow.

8.4.1.24 Histology functions will be closely aligned with services provided through the Surgical and Interventional Services. The benefit of this option is that frozen sections will be transported and analyzed with less risk to the specimen or the

timeline. Pathologists will also be more immediately available to Surgeons for consultation.

8.4.2 Surgical and Major Procedures Zone

8.4.2.1 Surgical and Major Procedures Zone requires Direct Access to one (1) Critical Care Complex Unit on the same floor through a dedicated internal corridor.

8.4.2.2 Surgical and Major Procedures Zone will have Direct Access to ED, Inpatient Care units and ambulance stalls in the underground parking area through Patient Transfer/Staff Service Elevators. It will also have Direct Access to MDRD through Clean and Dirty MDRD Elevators.

8.4.2.3 Surgical and Major Procedures Zone will have Direct Access to C-Section and Procedures in Maternity Centre through Patient Transfer/Staff Service Elevators and Convenience Stairs.

8.4.2.4 Surgical and Major Procedures Zone and Medical Imaging Component can be located on separate floors, but they will be vertically adjacent through Patient Transfer/Staff Service Elevators and dedicated Convenience Stairs for Staff.

8.4.2.5 Surgical and Major Procedures Zone requires Convenient Access to Main Pharmacy, Main Laboratories and Morgue and Autopsy.

8.4.2.6 Surgical and Major Procedures Zone Interventional Suites and ORs include the following:

8.4.2.6(1) Nine (9) Interventional Suites;

8.4.2.6(2) Fourteen (14) ORs; and

8.4.2.6(3) Two (2) Hybrid ORs.

8.4.2.7 All Interventional Suites and ORs will be designed for flexibility with similar layouts and the inclusion of booms. Standard requirements include:

8.4.2.7(1) Scrub sinks with unimpeded access to the ORs following a scrub process and with visualization into the rooms throughout the scrub process;

8.4.2.7(2) Alcove-Scrub Station will be directly adjacent to each of the ORs;

8.4.2.7(3) Each room will have two (2) doors, one (1) door in the back of the room leading to the Sterile Core-Equipment/Supplies for access to clean supplies and/or sterile instruments, and one (1) double door in the front of the room for Patient access. Alcove-Scrub Station will be located adjacent to the double door in the front of the room.

8.4.2.7(4) The Patient access doors will open 90 degrees against side walls (or wing-walls) and not extend into the Interventional Suite or OR.

8.4.2.7(5) Alcove-Lead Apron, Bed Bay-Discharge and Alcove-Stretcher;

8.4.2.7(6) Privacy blinds on windows and doors;

8.4.2.7(7) Doors of sufficient width to allow easy passage of bariatric beds;

8.4.2.7(8) Square shape with columns not protruding more than 400mm inside the room;

8.4.2.7(9) Three zones: anesthesia, circulating and sterile with traffic minimized to the anesthesia and sterile zones;

8.4.2.7(10) Space to allow circulation of Staff in designated clean or sterile zone without contact;

8.4.2.7(11) Provision of natural light from adjacent corridors; and

8.4.2.7(12) Provision for Patients on stretchers to wait temporarily directly outside the ORs, Interventional Suites and all Procedure Rooms in Scopes and Minor Procedures Zone.

8.4.2.8 Supplies will be taken by multi-skilled workers from the AGV FM Service Elevator lobbies with separation of soiled and clean supplies and equipment.

8.4.2.9 All Interventional Suites and Hybrid ORs will meet the following requirements:

8.4.2.9(1) Control-Imaging rooms for operation of imaging Equipment. Control-Imaging rooms will be designed to optimize Line of Sight between the Staff in Control-Imaging room and the Staff working inside the Interventional Suite or Operating Room-Hybrid, as well as to the Patient. The proceduralist will have Line of Sight, with minimal need to turn or re-position (< 90 degrees), to Control-Imaging room to be able to communicate and collaborate with Staff. These requirements for visualization will be reflected in the orientation of the Control-Imaging rooms, orientation of the procedural bed and in-suite monitors, and the size of the lead-lined window between them.

8.4.2.9(2) Provide a door from Control-Imaging rooms to Interventional Suites and Operating Room-Hybrid. Provide a door from semi-restricted corridor into Control-Imaging rooms. Doors from semi-restricted corridor will be provided for each side of the shared Control-Imaging rooms to prevent walking through one side to get to the other side.

8.4.2.9(3) Shared Control-Imaging rooms will have a glass sliding door between the two sides of the room to create separate workspaces and acoustic separation for Staff working in the Interventional Suites when collaboration is not required.

8.4.2.9(4) Control-Imaging rooms will include four (4) multiscreen workstations at a minimum to support monitoring and imaging Equipment for each Interventional Suite and Operating Room-Hybrid. The workstations will have eight (8) screens at a minimum with direct view into each Interventional Suite and Operating Room-Hybrid. The Staff at workstations will be able to look directly into the Interventional Suite or Operating Room-Hybrid through the Control-Imaging room window and still have direct view of the workstation screens.

8.4.2.9(5) Technical Room-Imaging for the imaging Equipment processors and uninterruptible power supply (UPS) units. Adequate ventilation and temperature control for temperature sensitive Equipment is required.

8.4.2.9(6) Hybrid ORs will be located adjacent to the Interventional Suites and ORs as they share consumables and clean supplies. Surgical process needs will be maintained and uninterrupted Patient care will be ensured if these spaces are adjacent to each other.

8.4.2.9(7) Storage spaces will be provided within the Hybrid OR and Interventional Suites and will be managed with an automated inventory and dispensing system.

8.4.2.9(8) Endovascular grafts will need to be stored near the Interventional Suites and thus cryogenic freezer will be located adjacent to the Interventional Suites.

8.4.2.9(9) Operating Room-Hybrid and Interventional Suites also require Direct Access to Control-Imaging.

8.4.2.9(10) Storage spaces can be both within the ORs and outside to ensure adequate spaces.

8.4.2.9(11) Tech support areas need to be equipped to support the high-tech data and equipment requirements of the Surgical and Major Procedures Zone as well as to provide on-site trouble shooting services.

8.4.2.10 Interventional Suites require ceiling lights with multiple light levels only. ORs require a combination of ceiling lights with multiple light levels and moveable ceiling mounted surgical lights.

8.4.2.11 All the Interventional Suites and ORs will have the ability to accommodate general anesthesia with appropriate gases and electrical hook ups.

8.4.2.12 Rooms requiring regular use of an anesthesiologist will include Anesthesia Workstations.

8.4.2.13 Rooms using laser require laser safe glass or screens, electrical and plumbing considerations, door seals, laser power source interconnected with “Laser in Use” sign at all entry points and restriction of access when laser in use.

8.4.2.14 Surgical and Major Procedures Zone will have a single point of access for Patients. This point of access will bring Patients past the Reception and Operations Control Desks to access the Interventional Suites and ORs. Patients leaving the Interventional Suites and ORs will have a separate route of egress to ACU. Other routes will be required for the movement of Staff, equipment, supplies and waste material, with restricted and controlled access/egress.

8.4.2.15 Visitors will not have access to Surgical and Major Procedures Zone unless escorted by a Staff member, beyond the Waiting area located near the Public Passenger Elevators.

8.4.2.16 Two (2) Change Cubicle-Patient and an adjacent Waiting area will have Convenient Access to Interventional suites. These spaces will be utilized by fast turnover IC and IR Patients who will not be receiving sedation intra-procedure and will not require an ACU Patient Room or ACU Patient Bay pre and post procedure.

8.4.2.17 Circulation routes to Interventional Suites and ORs will be configured to minimize travel distances and corners for Staff in the transport of Patients and supplies and respect the traffic zones for restricted and semi-restricted dress codes and access.

8.4.2.18 Functions will be organized within the Surgical and Major Procedures Zone to minimize travel distance and potential conflicts between Patient, Staff and material travels.

8.4.2.19 Surgical and Major Procedures Zone Entrance

8.4.2.19(1) The Surgical and Major Procedures Zone Entrance will be located between Interventional Suites and ORs.

8.4.2.19(2) Waiting area in Surgical and Major Procedures Zone Entrance will require Line of Sight from Reception to Waiting. A hand hygiene sink and two (2) Washroom-Public are required adjacent to this area.

8.4.2.19(3) Two (2) Consult/Interview Rooms will be located adjacent to Waiting area for consultation and/or consenting for procedure between the physician and family. These rooms will be equipped to allow viewing of radiological images.

8.4.2.19(4) In the Reception and Operations Control Desks, there will be designated displays on the wall to view real-time images from the education cameras installed in all ORs and Interventional Suites. There will also be a Patient Status Board and Patient Real-Time location Board which display information such as Patient wait time,

procedure time, and Patient locations. Staff at the Reception and Operations Control Desks will be able to communicate directly with each OR and Interventional Suite.

8.4.2.20 Operating and Interventional Suites - Interventional Suites

8.4.2.20(1) Interventional Suites will include a racetrack corridor allowing Patient access to the front of each Interventional Suite. A Back of House Sterile Core-Equipment/Supplies will be provided to all Interventional Suites with an unrestricted minimum 3.0 m clear width corridor, uninterrupted by any structure, walls or door swings within the Back of House corridor, for Staff and Service access.

8.4.2.20(2) Each Interventional Suite will have Direct Access from both the racetrack and Sterile Core-Equipment/Supplies.

8.4.2.20(3) The Sterile Core-Equipment/Supplies will include a Pneumatic Tube Station for receiving small items from the MDRD.

8.4.2.20(4) Alcoves for cardiac arrest crash carts and/or airway carts will be distributed across the platform.

8.4.2.20(5) Equipment and Store-Interventional Supplies rooms will be dispersed across the procedural area with additional sterile supply storage capacity in the Store-Interventional Supplies rooms.

8.4.2.20(6) Direct access to MDRD through Clean and Dirty MDRD Elevators for movement of supplies will be provided.

8.4.2.20(7) Each Interventional Suite will have a configuration and type of construction to accommodate Future Expansion and/or changes in imaging technology.

8.4.2.20(8) The Interventional Suites will consist of Cath Labs, Interventional Radiology (IR) Suites and Electrophysiology (EP) Suites. The location of Equipment and Staff in each Interventional Suite in relation to the Control-Imaging room will be critical to providing efficient and safe Patient care.

8.4.2.20(8)(a) In Cath Labs and IR Suites, the proceduralist will work primarily on the right side of the Patient and occasionally may need to work on the left side. There will be no impediments to Patient transport via stretcher in and out of the room. The ceiling lift movement for Patient transfer will not interfere with the imaging Equipment. The table will be perpendicular to the Control-Imaging room and allow the proceduralist to maintain Line of Sight to the Control-Imaging room. The monitor will be able to rotate to provide direct Line of Sight to the

proceduralist from either side of the table. The C-Arm will be able to rotate between the head of the Patient and perpendicular to the Patient and it will not interfere with the monitor position, proceduralist Line of Sight or anesthetist workflow. When anesthesia is required, the anesthetist will be located at the head of the table and radiation exposure will be minimized while still having direct access to the Patient. The anesthetist will have access to a workstation and ADC for medication administration. The resuscitation cart will be located at the head of the table with unimpeded access to the Patient and easily accessed by the anesthetist and circulating nurse. The circulating nurse will be located towards the foot of the table to minimize radiation exposure and will have access to a workstation and ADC for medication administration. The Staff in the Interventional Suite will be able to clearly communicate with the Staff in the Control-Imaging room.

8.4.2.20(8)(b) In EP Suites, the flows and requirements will be the same as the Cath Labs and IR Suites with the following additions. The proceduralist will work primarily on the right side of the Patient for EP procedures, and primarily on the left side of the Patient for cardiac device implants. Space will be required for a minimum of two (2) ceiling mounted equipment booms to support each mapping system. Space will also be provided on the floor at the head of the table for installation of a future robotic navigation system.

8.4.2.21 Operating and Interventional Suites - ORs

8.4.2.21(1) The Operating and Interventional Suites - ORs area will be divided into the following zones with restricted zones being clearly marked and identified:

8.4.2.21(1)(a) An unrestricted zone which includes administrative type rooms, Lounge-Staff and Lockers-Staff.

8.4.2.21(1)(b) A semi-restricted (redline zone) which includes support rooms and corridors leading to the ORs.

8.4.2.21(1)(c) A restricted zone which includes the ORs and Sterile Core-Equipment/Supplies.

8.4.2.21(2) There will be two (2) primary flows of traffic throughout the procedural area. Access for Patients will be through corridors (racetrack) to the front of the ORs. Sufficient radius will be provided to allow rapid, easy transit of full-size Patient beds. Access for sterile supplies will be provided to all ORs via a Sterile Core-Equipment/Supplies.

8.4.2.21(3) A Sterile Core-Equipment/Supplies will extend behind all the ORs. The Sterile Core-Equipment/Supplies will be continuous space. There will be Direct Access into the Sterile Core-Equipment/Supplies from all ORs. Minimum width of the Sterile Core-Equipment/Supplies will be a minimum of 3.0 m clear, without any structure (columns, walls) or door swings within the clear width.

8.4.2.21(4) The Sterile Core-Equipment/Supplies requires adequate space to store all essential consumable supplies along with any emergency case carts.

8.4.2.21(5) The Sterile Core-Equipment/Supplies will include a Pneumatic Tube Station for receiving small items from the MDRD.

8.4.2.21(6) Clean MDRD Elevators will be in the Sterile Core-Equipment/Supplies for delivery of clean case carts and sterile supplies from MDRD.

8.4.2.21(7) Dirty MDRD Elevators will be located adjacent to Soiled Hold-Case Carts area in the OR zone with Convenient Access from ORs via a circulation path that does not travel through public areas and avoids sterile/clean spaces. Dirty MDRD Elevators will be used to return soiled case carts and equipment to the Decontamination Area in MDRD. The elevators will be in an area that can be temporarily isolated for purpose of repairs.

8.4.2.21(8) Soiled Hold-Case Carts area location adjacent to Dirty MDRD Elevators will not block access to the elevators.

8.4.2.21(9) All equipment storage spaces will be enclosed rooms or protected alcoves with power and data at convenient height.

8.4.2.21(10) Equipment storage rooms and alcoves will be located adjacent to each OR and supported by the Logistics Centre and Equipment Depot.

8.4.2.21(11) The Lab-Frozen Section room will be adjacent to OR zone with Direct Access from both the unrestricted and semi-restricted zones. The Lab-Frozen Section room requires audio communication to all ORs. Cryogenic Freezer Room will have Convenient Access to the ORs and Patient Transfer/Staff Service Elevators with sliding doors.

8.4.2.21(12) Workroom-Pump/Storage rooms will be located adjacent to Perfusion Office and Soiled Utility-Perfusion with Convenient Access to Cardiac ORs. This adjacency will be key to Perfusion workflow and ability to prepare and respond to cardiac emergencies. Soiled Utility-Perfusion will be used for cleaning Heater/Cooler machines and other Perfusion equipment prior to moving them into Workroom-Pump/Storage rooms for assembly.

8.4.2.21(13) Alcoves for cardiac arrest crash carts and/or airway carts will be located across this zone.

8.4.2.21(14) Store-Central Equipment and Store-Clean Supplies will be dispersed across the procedural area.

8.4.2.21(15) Medication dispensing systems will be located throughout the Sterile Core-Equipment/Supplies for OR use.

8.4.2.21(16) Each OR will be adjacent to an Alcove-Touchdown/Charting.

8.4.2.21(17) Soiled Hold-Case Carts area will be adjacent to a Soiled Utility and Disposal Hold to facilitate disposing of soiled materials before soiled case carts are sent to MDRD.

8.4.2.21(18) Workroom-Anesthesia will be in an unrestricted zone with Convenient Access to ORs. Workroom-Anesthesia will be used as a central meeting space for Staff to provide education in between cases and will be equipped with workstations and conference capabilities.

8.4.2.21(19) Lounge-Staff will be in an unrestricted zone with Convenient Access to Lockers-Staff. This will reduce travel distance and allow Staff flow between Lockers-Staff and Lounge-Staff without travelling through semi-restricted corridors with food and beverages.

8.4.2.22 Anesthetic Care Unit

8.4.2.22(1) ACU will provide sixty (60) beds including four (4) ACU Patient Room-Airborne Isolation-Hybrid. Distribution of ACU Patient Bays/Rooms across the Surgical and Major Procedures Zone will be thirty two (32) ACU Patient Bays/Rooms allocated for Interventional Suites and twenty eight (28) ACU Patient Bays/Rooms allocated for the ORs.

8.4.2.22(2) The corridor immediately outside any ACU Patient Room-Airborne Isolation-Hybrid will be a low traffic area purposefully sparse with no stored Equipment and with Convenient Access to a corridor hand hygiene sink to allow Staff to don and doff their PPE and follow appropriate Infection Prevention and Control protocols.

8.4.2.22(3) Bays will be designed with flexibility to accommodate both pre-op and post-op Patients.

8.4.2.22(4) ACU beds are to be designed as three-sided bays fronting on the Care Team Stations.

8.4.2.22(5) There will be separate entries for Patients and for Staff and/or supplies (Back of House).

8.4.2.22(6) There will be no direct view into Patient spaces from Public access points.

8.4.2.22(7) Care Team Stations will provide a central space for team communication. Workstations will be provided for unit coordination Staff and other health care team members. Care Team Stations will have Line of Sight to corridors to all Patient care spaces.

8.4.2.22(8) Patient spaces will be universally designed, providing a full range medical gases and vacuum and infrastructure for cardiac monitoring.

8.4.2.22(9) Two (2) Alcove-Touchdown/Charting will be distributed for documentation purposes.

8.4.2.22(10) For ACU Patient Bays, an area will be provided for a minimum of one family member at bedside.

8.4.2.22(11) Access to natural light will be maximized in ACU Patient Bays.

8.4.2.22(12) All ACU Patient Bays to be connected through glass sliding doors to provide Line of Sight for Staff to the Patient head of the adjacent bed(s).

8.4.2.22(13) At each Care Team Station there will be a central station monitor, positioned for the Staff to view from a sitting position, facing their work desks and with no visibility of the monitor for the public.

8.4.2.22(14) Each Care Team Station will have a wall-mounted display which serves as a Patient Status Board, positioned with Line of Sight from Staff inside the Care Team Station and will not be visible to the public. This board serves to communicate Patient’s clinical information for workflow management on unit. They will display information such as clinical notifications, results availability, clinical alerts, care provider assignment, assigned bed occupancy and turnover status.

8.4.2.22(15) The Care Team Station design will allow for collaboration opportunities among team members, acoustically private conversations and area for equipment such as computers, charging stations and phones.

8.4.2.22(16) The zone with thirty two (32) ACU Patient Bays/Rooms allocated for Interventional Suites will include two (2) Medication Room-Medium, two (2) Store-Clean Supplies, two (2) Soiled Utility, two (2) Nourishment Rooms, two (2) Alcove-Clean Linen, two (2) Alcove-Local Equipment and one (1) Housekeeping Closet.

8.4.2.22(17) The zone with twenty eight (28) ACU Patient Bays/Rooms allocated for the ORs will include two (2) Medication Room-Medium, two (2) Store-Clean Supplies, two (2) Soiled Utility, one (1) Nourishment Room, one (1) Alcove-Clean Linen, one (1) Alcove-Local Equipment and one (1) Housekeeping Closet.

8.4.2.23 Surgical and Major Procedures Zone Shared Staff Support

8.4.2.23(1) Lockers-Staff will be adjacent to the Interventional Suites and OR zone. Staff will be able to enter from Back of House corridors directly from the Patient Transfer/Staff Service Elevators and pass through to the procedural space once changed. Shower facilities are included for Staff to decontaminate prior to changing at the end of the work day.

8.4.3 Scopes and Minor Procedures Zone

8.4.3.1 Scopes and Minor Procedures Zone will have Direct Access to ED and Inpatient Care units through Patient Transfer/Staff Service Elevators. It will also have Direct Access to MDRD through Clean and Dirty MDRD Elevators.

8.4.3.2 Scopes and Minor Procedures Zone requires Convenient Access to Main Pharmacy and Main Laboratories.

8.4.3.3 Scopes and Minor Procedures Zone Procedure Rooms include the following:

8.4.3.3(1) Two (2) Procedure Room-General;

8.4.3.3(2) Two (2) Procedure Room-Bronchoscopy;

8.4.3.3(3) One (1) Procedure Room-ERCP (Endoscopic Retrograde Cholangiopancreatography)/GI Endoscopy; and

8.4.3.3(4) Five (5) Procedure Room-GI Endoscopy.

8.4.3.4 All Procedure Rooms will be designed for flexibility with similar layouts and the inclusion of booms. Standard requirements include:

8.4.3.4(1) Scrub sinks with visualization into room;

8.4.3.4(2) An Alcove-Touchdown/Charting adjacent to each Procedure Room;

8.4.3.4(3) Doors of sufficient width to allow easy passage of bariatric beds;

8.4.3.4(4) Square shape with columns not protruding more than 400mm inside the room;

8.4.3.4(5) Space to allow circulation of Staff in designated clean or sterile zone without contact; and

8.4.3.4(6) Provision of borrowed natural light from adjacent corridors, where possible.

8.4.3.5 Rooms requiring regular use of an anesthesiologist will include Anesthesia Workstations.

8.4.3.6 Scopes and Minor Procedures Zone will have a single point of access for Patients. This point of access will bring Patients past the Reception desk to access the Procedure Rooms. Patients leaving the Procedure Rooms will have a separate route of egress to ACU. Other routes will be required for the movement of Staff, Equipment, supplies and waste material, with restricted and controlled access/egress.

8.4.3.7 Visitors will not have access to Scopes and Minor Procedures Zone unless escorted by a Staff member, beyond Waiting facilities located near the Public Passenger Elevators.

8.4.3.8 Circulation routes to Procedure Rooms will be configured to minimize travel distances and corners for Staff in the transport of Patients and supplies.

8.4.3.9 Functions will be organized within the Scopes and Minor Procedures Zone to minimize travel distance and potential conflicts between Patient, Staff and material travels.

8.4.3.10 The Scopes and Minor Procedures Zone will include an area for a Neuro-stimulation Unit that will provide neuro-stimulation (ECT or Electromagnetic Therapy). This area will have the following requirements.

8.4.3.10(1) It will include four (4) Procedure/Recovery Bay-ECT which will be designed as ACU Patient Bays to provide flexibility for their use and will be utilized as ACU Patient Bays when not used for ECT.

8.4.3.10(2) The Procedure/Recovery Bay-ECT will be large enough to accommodate wheelchair and stretcher and family members and will require medical gases.

8.4.3.10(3) The Procedure/Recovery Bay-ECT will be connected though glass sliding doors to provide Line of Sight for Staff to the Patient head of the adjacent bed(s).

8.4.3.11 Scopes and Minor Procedures Zone Entrance

8.4.3.11(1) Waiting area in Scopes and Minor Procedures Zone Entrance will require Line of Sight from Reception desk. A hand hygiene sink and two (2) Washroom-Public are required in the immediate area.

8.4.3.11(2) A Consult/Interview Room will be located adjacent to Waiting area for consultation and/or consenting for procedure between the physician and family. This room will be equipped to allow viewing of radiological images.

8.4.3.11(3) In the Reception area, there will be electronic displays on the wall to view real-time images from the clinical observation cameras installed in all Procedure Rooms. There will also be wall-mounted displays serving as Patient Status Boards and Patient Real-Time location Boards which display information such as Patient wait time, procedure time, and Patient locations. Staff at the Reception desk will be able to communicate directly with each Procedure Room.

8.4.3.12 General Procedure Rooms

8.4.3.12(1) Each of the Procedure Room-General in the Scopes and Minor Procedures Zone will include Equipment booms to accommodate procedural and nursing equipment. Monitors will be ceiling mounted on articulating arms.

8.4.3.12(2) There will be two (2) primary flows of traffic throughout the Procedure Room-General. Access for Patients will be through a semi-restricted corridor to the front of the general Procedure Rooms. Access for sterile supplies will be provided via a Sterile Core-Equipment/Supplies.

8.4.3.12(3) A Sterile Core-Equipment/Supplies will extend behind both Procedure Room-General and it will be continuous space. There will be Direct Access into the Sterile Core-Equipment/Supplies from both Procedure Room-General. Minimum width of the Sterile Core-Equipment/Supplies will be a minimum of 3.0 m clear without any structure (columns, walls) or door swings within the clear width.

8.4.3.12(4) The Sterile Core-Equipment/Supplies requires adequate space to store all essential consumable supplies along with any emergency case carts.

8.4.3.12(5) Clean MDRD Elevators will be in the Sterile Core-Equipment/Supplies for delivery of clean case carts and sterile supplies from MDRD.

8.4.3.12(6) Dirty MDRD Elevators will have Convenient Access to the Procedure Room-General via a circulation path that does not travel through public areas and avoids sterile/clean spaces. Dirty MDRD

Elevators will be used to return soiled case carts and equipment to the Decontamination Area in MDRD. The elevators will be located in an area that can be temporarily isolated for the purpose of repairs. Staging and loading of case carts into Dirty MDRD Elevators will not block circulation or access to the elevators or other areas in the Scopes and Minor Procedures Zone.

8.4.3.12(7) Medication dispensing systems will be in the Sterile Core-Equipment/Supplies for Procedure Room-General use.

8.4.3.13 Bronchoscopy Procedure Suites and Endoscopy Procedure Suites

8.4.3.13(1) Two (2) Procedure Room-Bronchoscopy with Alcove-Scrub Stations and negative pressure are required.

8.4.3.13(2) A Procedure Room-ERCP/GI Endoscopy and five (5) Procedure Room-GI Endoscopy are within Endoscopy Procedure Suites.

8.4.3.13(3) Corridors outside Procedure Room-Bronchoscopy, Procedure Room-ERCP/GI Endoscopy and Procedure Room-GI Endoscopy may be considered an unrestricted or a semi-restricted area, although sterile instruments and supplies will be used in these Procedure Rooms.

8.4.3.13(4) Local anesthesia or minimal or moderate sedation may be administered in a Procedure Room.

8.4.3.14 Scope Reprocessing

8.4.3.14(1) Bronchoscopy and Endoscopy Procedure Suites will have a dedicated Scope Reprocessing area.

8.4.3.14(2) Scope Reprocessing area including Utility-Bronch Scope Rinse, Scope Decontamination, Scope Disinfection and Store-Clean Scope-Endo will be centrally located in relation to the Endoscopy Procedure Suites and Bronchoscopy Procedure Suites. This area will have Convenient Access to Clean and Dirty MDRD Elevators to facilitate transporting scopes to and from the MDRD.

8.4.3.14(3) Scope Reprocessing area will also include Store-Clean Scope-Bronch which will be located adjacent to both Procedure Room-Bronchoscopy with Direct Access to each room and the corridor.

8.4.3.14(4) Bronchoscopy scopes will be manually pre-cleaned immediately after use in Bronchoscopy Procedure Rooms and moved to Utility-Bronch Scope Rinse with height adjustable triple sinks and counter space for rinsing. These scopes will then be moved to the Scope Decontamination room for staging for further reprocessing. GI scopes will be manually pre-cleaned immediately after use and staged and rinsed for further reprocessing in the Scope

Decontamination room with height adjustable triple sinks with counter space, automated detergent dispensing, enzymatic cleaner pumps and water pistols. Scope Decontamination room will also include five (5) scope hangers for channel checking of scopes prior to being moved to Scope Disinfection room.

8.4.3.14(5) All scopes will be moved to the adjacent Scope Disinfection room and loaded into pass through endoscopy reprocessors. Scope Disinfection room will also include a long height adjustable counter.

8.4.3.14(6) Once high level disinfection is complete, scopes will be moved into endoscope drying/storage cabinets in the Store-Clean Scope-Endo or moved into scope cabinets in the Store-Clean Scope-Bronch. Store-Clean Scope-Endo will have Convenient Access from all Endoscopy Procedure Rooms, but Staff will not have to travel through a Procedure Room to access Store-Clean Scope-Endo.

8.4.3.15 Anesthetic Care Unit

8.4.3.15(1) ACU includes thirty-eight (38) ACU Patient Bays including two (2) ACU Patient Room-Airborne Isolation-Hybrid.

8.4.3.15(2) ACU beds will be provided for each grouping of Procedure Rooms, yet with the flexibility to use in conjunction with all Procedure Rooms to accommodate surge situations.

8.4.3.15(3) The ACU Patient Room-Airborne Isolation-Hybrid will have Convenient Access to the Procedure Room-Bronchoscopy to have the ability to effectively isolate high-risk bronchoscopy Patients and minimize infection risk to other Patients in the Anesthetic Care Unit. There will be a separate flow for the high-risk bronchoscopy Patients and endoscopy Patients in and out of the Procedure Rooms. The endoscopy Patients will not have to walk in front of the ACU Patient Room-Airborne Isolation-Hybrid to reach their ACU Patient Bays.

8.4.3.15(4) Bays will be designed with flexibility to accommodate both pre-op and post-op Patients.

8.4.3.15(5) ACU Patient Bays will be designed as three-sided bays fronting on the Care Team Stations.

8.4.3.15(6) All ACU Patient Bays to be connected through glass sliding doors to provide Line of Sight for Staff to the Patient head of the adjacent bed(s).

8.4.3.15(7) ACU beds closest to the General Procedure Suites will be equipped to perform anesthesia blocks prior to surgery and will convert back into ACU beds.

8.4.3.15(8) There will be separate entries for Patients and for Staff and/or supplies (Back of House).

8.4.3.15(9) There will be no Line of Sight into Patient spaces from Public access points.

8.4.3.15(10) Care Team Stations will provide a central space for team communication. Workstations will be provided for unit coordination Staff and other health care team members. Care Team Stations will have Line of Sight to corridors to all Patient care spaces.

8.4.3.15(11) ACU Patient Bays will be universally designed, providing a full range of medical gases, vacuum and infrastructure; refer to Appendix 3K [Medical Gas Matrix].

8.4.3.15(12) Four (4) Alcove-Touchdown/Charting will be distributed for documentation purposes.

8.4.3.15(13) For ACU Patient Bays, an area will be provided for a minimum of one family member at bedside.

8.4.3.15(14) Access to natural light will be maximized in ACU Patient spaces.

8.4.3.15(15) At each Care Team Station there will be a central station monitor, positioned for the Staff to view from a sitting position, facing their work desks and with no visibility of the monitor for the public.

8.4.3.15(16) Each Care Team Station will have a Patient Status Board, positioned with Line of Sight from Staff inside the Care Team Station and will not be visible to the public. This board serves to communicate Patient's clinical information for workflow management on unit. They will display information such as clinical notifications, results availability, clinical alerts, care provider assignment, assigned bed occupancy and turnover status.

8.4.3.16 Scopes and Minor Procedures Zone Shared Support Services

8.4.3.16(1) Store-Central Equipment storage and Store-Clean Supplies will be dispersed across the procedural area.

8.4.3.17 Scopes and Minor Procedures Zone Shared Staff Support

8.4.3.17(1) Staff will be able to enter Lockers-Staff space from Back of House corridors directly from the Patient Transfer/Staff Service Elevators and pass through to the procedural space once changed. Shower facilities are included for Staff to decontaminate prior to changing at the end of the work day.

8.4.3.17(2) Lounge-Staff will be in an unrestricted zone with Convenient Access to Lockers-Staff. This will reduce travel distance and allow

Staff flow between Lockers-Staff and Lounge-Staff without travelling through semi-restricted corridors with food and beverages.

8.4.4 Surgical and Interventional Services General Workstations (Future Expansion)

8.4.4.1 Future need studies of Surgery indicate that an additional six (6) ORs will be required. As the Surgical and Major Procedures Zone is a large floorplate, it would not be possible for an expansion of this magnitude, including all the support spaces required, to be accommodated adjacent to this zone. Therefore, this Future Expansion can take place adjacent to the Scopes and Minor Procedures Zone. This expansion will comprise two (2) main elements:

8.4.4.1(1) Six (6) ORs and related support services; and

8.4.4.1(2) Twenty (20) ACU-Patient Bays as close to the Scopes and Minor Procedures Zone ACU as possible. A key factor in planning the expanded ACU is recognizing the need to provide the level of natural light conducive to Patients recovery.

8.4.4.2 Provide an adjacent open space with 105 General Workstations designed and located to easily and appropriately convert to Future Expansion of the above mentioned future ORs.

8.4.4.3 Biomedical Engineering or another Component that can be relocated to the basement will also be designed and located adjacent to Scopes and Minor Procedures Zone to accommodate part of this Future Expansion.

8.4.4.4 The OR Future Expansion requires Direct Access to the Clean and Dirty MDRD Elevators to achieve the same functionality as the opening day ORs.

8.4.4.5 The Imaging-CT-Future Expansion will be located in an unrestricted zone in the Interventional Suites area, with Convenient Access to the Anesthetic Care Unit for Patient registration, preparation and recovery. Patient traffic to and from the Imaging-CT-Future Expansion will not constrain the movement of Patients between the Anesthetic Care Unit and the Interventional Suites. OR Patients will also have Convenient Access to the Imaging-CT-Future Expansion.

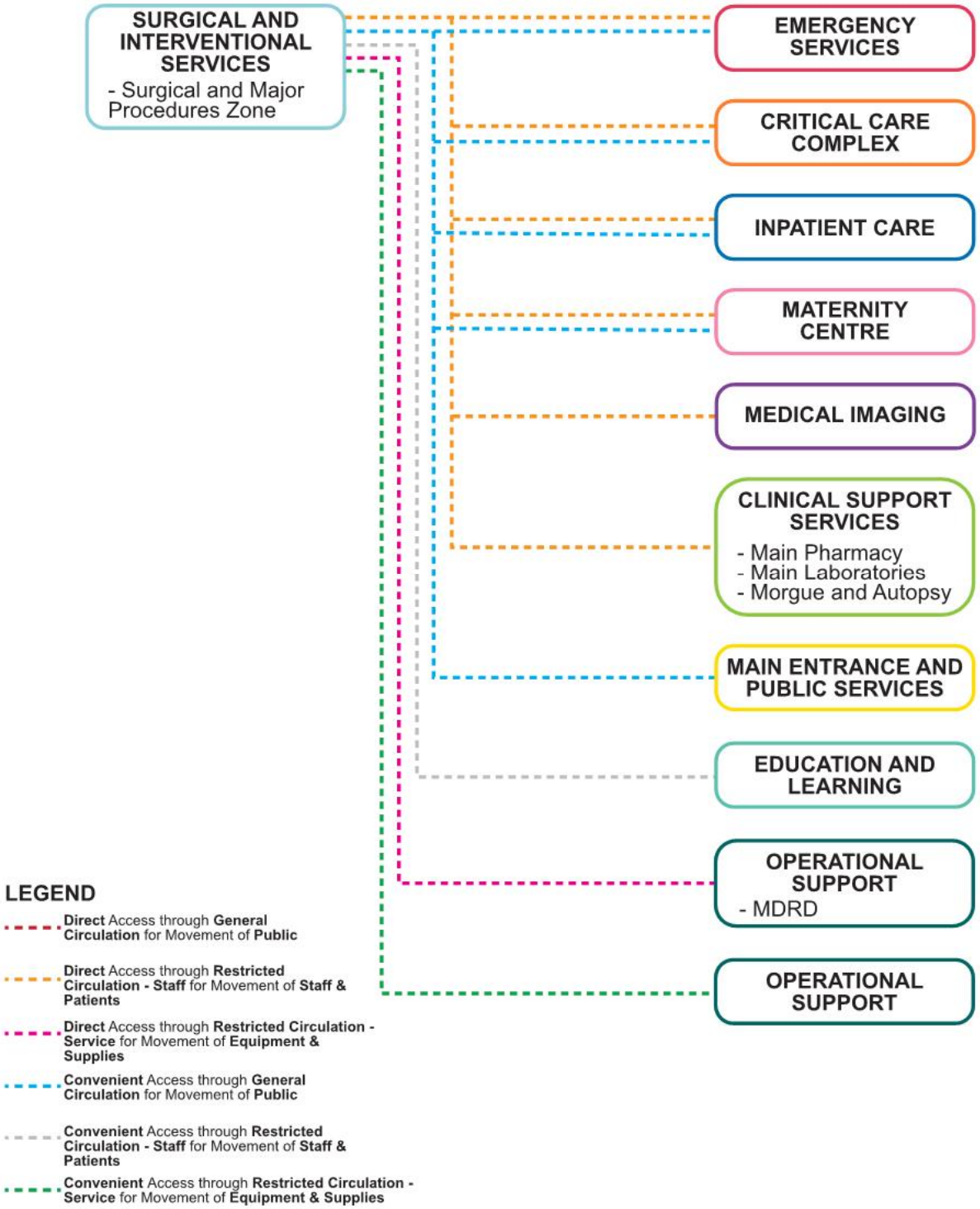
8.4.4.6 The Imaging-CT-Future Expansion will have Convenient Access to the Critical Care Complex through the unrestricted zone adjacent to the Interventional Suites area.

8.4.4.7 In the event that a 3D printer is purchased for Surgical and Interventional Future Expansion area for the purpose of printing implants, the printer will have Direct Access to the Clean MDRD elevators to ensure the safe to handle printed items are reprocessed for surgical use.

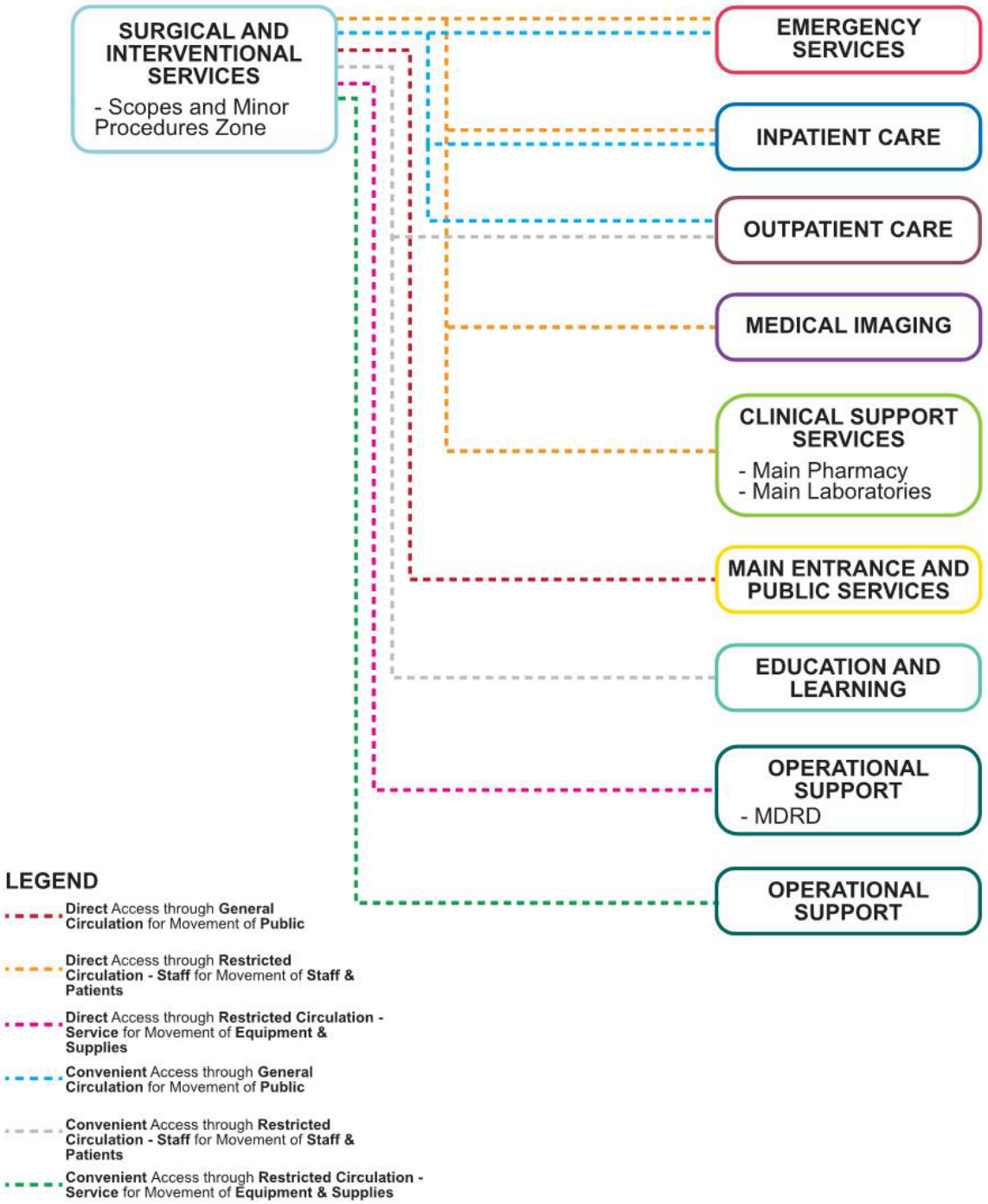
8.5 EXTERNAL RELATIONSHIPS

8.5.1 The following diagrams indicate other Functional Components that have a functional relationship with this Component.

G1. SURGICAL AND MAJOR PROCEDURES ZONE EXTERNAL RELATIONSHIPS AND CIRCULATIONS



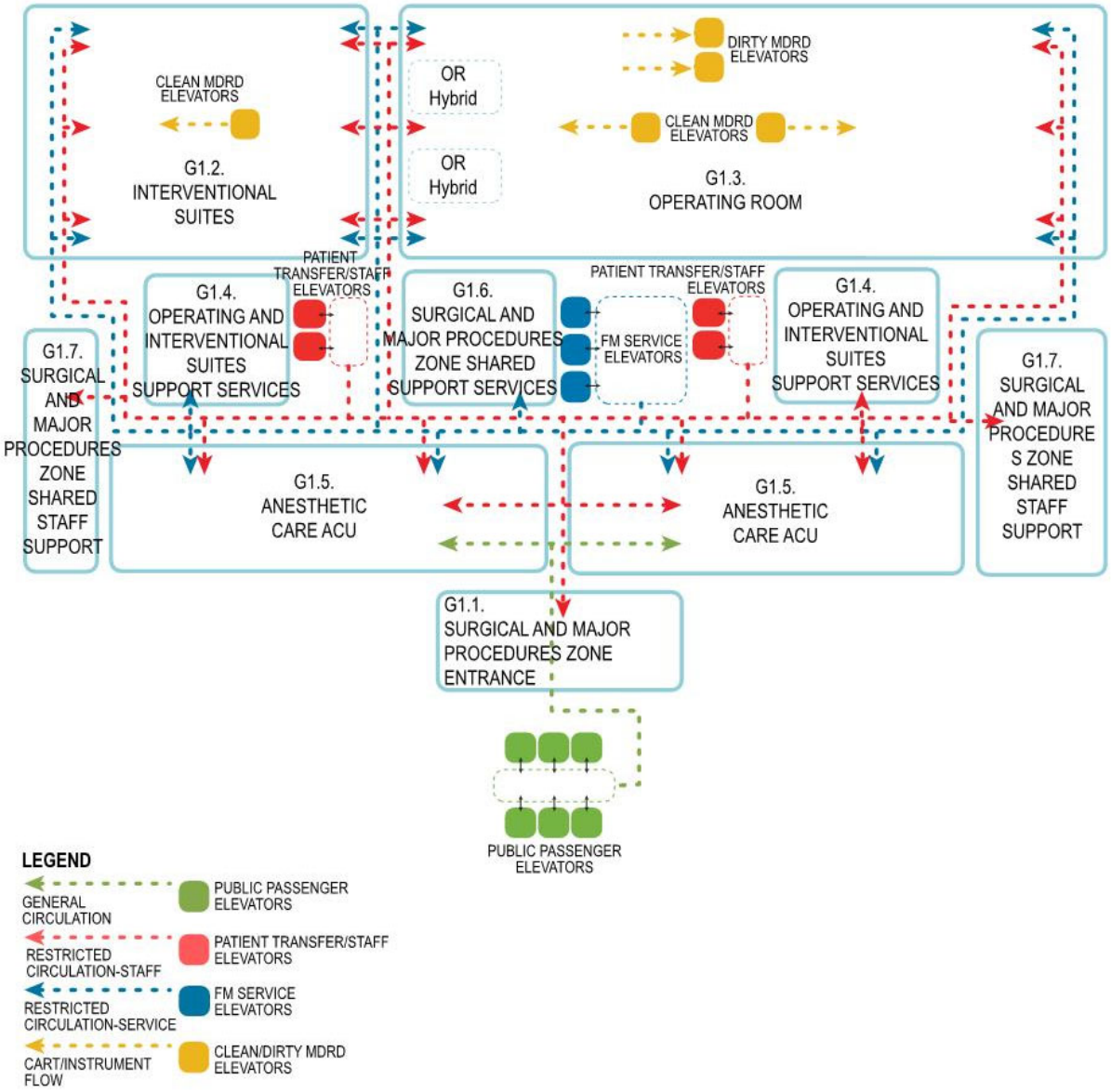
G2. SCOPES AND MINOR PROCEDURES ZONE EXTERNAL RELATIONSHIPS



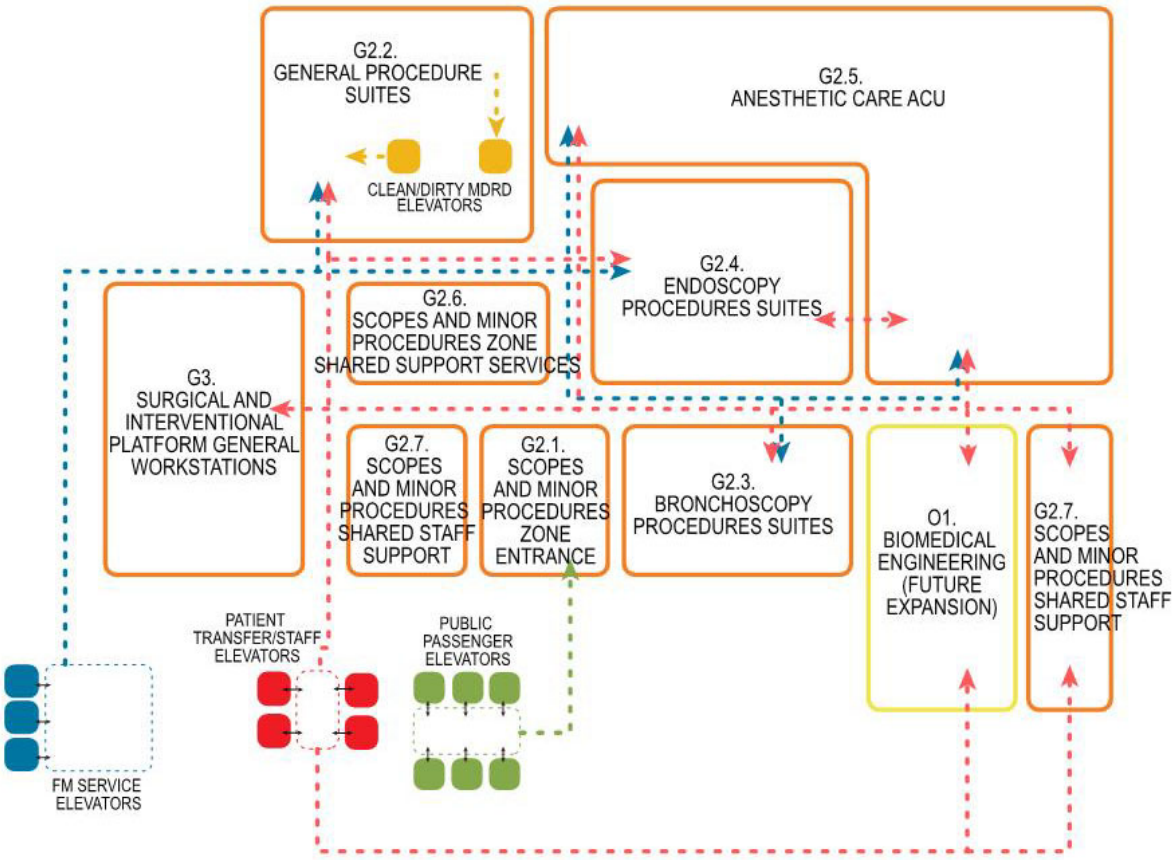
8.6 INTERNAL RELATIONSHIPS

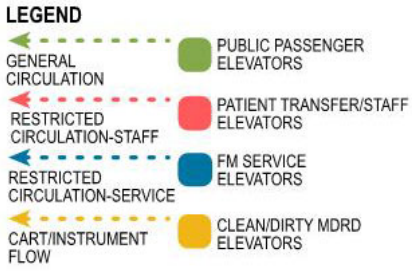
8.6.1 The following diagrams indicate internal functional relationships within this Component.

G1. SURGICAL AND MAJOR PROCEDURES ZONE INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



G2. SCOPE AND MINOR PROCEDURES ZONE INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES





8.7 SCHEDULE OF ACCOMMODATIONS

8.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Surgical and Interventional Services

G1 - SURGICAL AND MAJOR PROCEDURES ZONE	5521.30
G2 - SCOPES AND MINOR PROCEDURES ZONE	1531.80
G3 - SURGICAL AND INTERVENTIONAL PLATFORM GENERAL WORKSTATIONS	567.00
SURGICAL AND INTERVENTIONAL SERVICES PROGRAMMED SPACE NSM:	**7,620.10**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
G1 - SURGICAL AND MAJOR PROCEDURES ZONE					
G1.1 - Surgical and Major Procedures Zone Entrance					
G1.1.1	Reception	1	20.00	20.00	Incl. 4 workstations, cabinets.
G1.1.2	Waiting	1	57.00	57.00	Incl. seating for 34 including 4 in wheelchairs, wall mounted display, Direct Access to Public Passenger Elevators and Washroom-Public.
G1.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Surgical and Major Procedures Zone.
G1.1.4	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation.
G1.1.5	Alcove-Stretcher	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
G1.1.6	Alcove-Wheelchair	2	2.50	5.00	
G1.1.7	Washroom-Public	2	4.50	9.00	2-piece, infant change table in 1 Washroom-Public, accessible for Persons with Disabilities.
G1.2 - Operating and Interventional Suites - Interventional Suites					
G1.2.1	Operations Control Desk	1	16.00	16.00	Incl. 3 workstations, wall mounted displays, platform traffic control, Line of Sight to the corridor.
G1.2.2	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, located in Sterile Core-Equipment/Supplies.
G1.2.3	Interventional Suite	9	70.00	630.00	Incl. 2 touch down workstations, wall mounted displays, ceiling lift with complex ceiling coverage, lead lined.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
G1.2.4	Control-Imaging	4	28.00	112.00	Distributed to support all Interventional Suites with each shared between two Interventional Suites. Incl. 8 multiscreen workstations at a minimum, with 8 screens at a minimum along the window facing each Interventional Suite, lead lined, glass sliding door for separation of Staff, window between Control-Imaging and each Interventional Suite with Line of Sight to proceduralist, Staff and Patient.
G1.2.5	Technical Room-Imaging	1	9.50	9.50	Incl. servers for interventional Suites, lead lined.
G1.2.6	Technical Room-Imaging	4	15.00	60.00	Incl. servers for interventional Suites, lead lined, shared between each two Interventional Suites.
G1.2.7	Alcove-Scrub Station	5	3.00	15.00	Shared between each two Interventional Suites.
G1.2.8	Alcove-Lead Apron	5	2.80	14.00	Distributed across Interventional Suites space, shared between each two Interventional Suites.
G1.2.9	Alcove-Touchdown/Charting	9	2.00	18.00	Incl. 2 touch down workstations.
G1.2.10	Bed Bay-Discharge	9	3.00	27.00	Open bay, located outside of each Interventional Suite.
G1.2.11	Sterile Core-Equipment/Supplies	1	190.00	190.00	Incl. 6 workstations.
G1.2.12	Alcove-Local Equipment	6	1.50	9.00	Distributed in Interventional Suites space.
G1.2.13	Alcove-Crash Cart	4	1.50	6.00	Centrally located for 9 Interventional Suites.
G1.2.14	Store-Interventional Supplies	1	10.00	10.00	Incl. shelving.
G1.2.15	Store-Interventional Supplies	1	44.00	44.00	Incl. shelving.
G1.2.16	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations, adjacent to G1.2.15 Store-Interventional Supplies.
G1.2.17	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
G1.2.18	Control-Imaging	1	14.00	14.00	Incl. 4 multiscreen workstations at a minimum, with 8 screens at a minimum along the window facing the Interventional Suite, lead lined, window between Control-Imaging and Interventional Suite with Line of Sight to proceduralist, Staff and Patient.
G1.3 - Operating and Interventional Suites - Operating Rooms					
G1.3.1	Operations Control Desk	1	16.00	16.00	Incl. 3 workstations, wall mounted displays, platform traffic control, Line of Sight to the corridor.
G1.3.2	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, located in Sterile Core-Equipment/Supplies.
G1.3.3	Operating Room	14	60.00	840.00	Incl. 2 touch down workstations, wall mounted displays, ceiling lift with complex ceiling coverage, lead lined.
G1.3.4	Alcove-Scrub Station	8	3.00	24.00	Shared between each two Operating Rooms.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
G1.3.5	Alcove-Lead Apron	5	2.80	14.00	Distributed across Operating Rooms space, shared between each three Operating Rooms.
G1.3.6	Alcove-Touchdown/Charting	14	2.00	28.00	Incl. 2 touch down workstations, located outside of each Operating Room.
G1.3.7	Alcove-Stretcher	14	2.50	35.00	Located outside of each Operating Room.
G1.3.8	Operating Room-Hybrid	2	70.00	140.00	Incl. 2 touch down workstations, wall mounted displays, ceiling lift with complex ceiling coverage, lead lined.
G1.3.9	Control-Imaging	2	14.00	28.00	Incl. 4 multiscreen workstations, with 8 screens at a minimum along the window facing the Operating Room-Hybrid, lead lined, window between Control-Imaging and Operating Room-Hybrid with Line of Sight to the proceduralist, Staff and Patient.
G1.3.10	Technical Room-Imaging	2	9.50	19.00	Incl. servers for Operating Room-Hybrid, lead lined.
G1.3.11	Alcove-Scrub Station	2	3.00	6.00	Shared between two Operating Room-Hybrid.
G1.3.12	Alcove-Lead Apron	1	2.80	2.80	Shared between two Operating Room-Hybrid.
G1.3.13	Alcove-Touchdown/Charting	2	2.00	4.00	Incl. 2 touch down workstations, located outside of each Operating Room-Hybrid.
G1.3.14	Alcove-Stretcher	2	2.50	5.00	Located outside of each Operating Room-Hybrid.
G1.3.15	Sterile Core-Equipment/Supplies	1	325.00	325.00	Incl. 6 workstations.
G1.3.16	Alcove-Local Equipment	12	1.50	18.00	Distributed in Operating Rooms space.
G1.3.17	Alcove-Crash Cart	2	1.50	3.00	Centrally located for 14 Operating Rooms.
G1.3.18	Housekeeping Closet	2	7.00	14.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
G1.4 - Operating and Interventional Suites Support Services					
G1.4.1	Lab-Frozen Section	1	22.00	22.00	Incl. 2 workstations, pass through window.
G1.4.2	Perfusion Office	1	8.00	8.00	Incl. 1 workstation.
G1.4.3	Specimen Holding	1	5.50	5.50	
G1.4.4	Cryogenic Freezer Room	1	3.00	3.00	Convenient Access to the Operating Rooms and Patient Transfer/Staff Service elevators.
G1.4.5	Utility-Flash Sterilization	1	9.50	9.50	Incl. counters, adjacent to Sterile Core.
G1.4.6	Workroom-Anesthesia	1	28.00	28.00	Incl. 6 workstations, counters, cabinets.
G1.4.7	Workroom-Pump/Storage	1	18.50	18.50	Incl. counters, cabinets.
G1.4.8	Workroom-Pump/Storage	1	28.00	28.00	Incl. counters, cabinets.
G1.4.9	Alcove-Ice Machine	3	2.00	6.00	Incl. counter.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
G1.4.10	Alcove-Local Equipment	22	1.50	33.00	Distributed in Operating and Interventional Suites space.
G1.4.11	Alcove-Imaging Equipment-Large	1	3.00	3.00	
G1.4.12	Alcove-Imaging Equipment-C-Arm.	6	3.00	18.00	
G1.4.13	Store-Anesthesia	1	8.00	8.00	Incl. cabinets, shelving.
G1.4.14	Store-Anesthesia	2	20.00	40.00	Incl. cabinets, shelving.
G1.4.15	Store-Blood Refrigerator	3	4.50	13.50	Located within Sterile Core-Equipment/Supplies.
G1.4.16	Store-Central Equipment	5	6.00	30.00	Incl. shelving, charging station.
G1.4.17	Store-Central Equipment	2	12.00	24.00	Incl. shelving, charging station.
G1.4.18	Store-Clean Supplies	3	12.00	36.00	
G1.4.19	Store-General	1	56.00	56.00	Incl. shelving.
G1.4.20	Store-Imaging Equipment	1	22.50	22.50	
G1.4.21	Store-IT	1	3.50	3.50	Incl. cabinets, shelving.
G1.4.22	Store-Lead Aprons & Badges	1	3.00	3.00	Incl. cabinets, shelving.
G1.4.23	Store-Medical Gas	3	3.50	10.50	
G1.4.24	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
G1.4.25	Soiled Hold-Case Carts	1	18.00	18.00	Incl. holding area for soiled case carts.
G1.4.26	Soiled Utility	1	12.00	12.00	Incl. counters, shelving, casting procedures being performed in this room.
G1.4.27	Soiled Utility-Perfusion	1	14.00	14.00	Incl. counters, shelving, water filters for heater/cooler machines.
G1.5 - Anesthetic Care Unit					
G1.5.1	ACU Patient Room-Airborne Isolation-Hybrid	4	12.00	48.00	Incl. RO Water Supply and Drain Box.
G1.5.2	Washroom-Patient Ensuite-Airborne Isolation	4	4.50	18.00	2-piece, accessible for Persons with Disabilities.
G1.5.3	ACU Patient Bay	56	11.50	644.00	Incl. RO Water Supply and Drain Box in 3 ACU Patient Bays, walled on 3 sides with privacy curtains, connecting glass sliding doors between all ACU Patient Bays.
G1.5.4	Alcove-Hand Hygiene Sink	28	1.00	28.00	Shared between each two ACU Patient Bays.
G1.5.5	Alcove-Touchdown/Charting	2	1.00	2.00	Incl. 1 touch down workstation, distributed in Anesthetic Care Unit.
G1.5.6	Care Team Station	4	12.00	48.00	Incl. 3 workstations, cabinets, charging station, dual egress.
G1.5.7	Alcove-Hand Hygiene Sink	4	1.00	4.00	Located within 6 m of each Care Team Station entrance.
G1.5.8	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
G1.5.9	Medication Room-Medium	4	12.00	48.00	Incl. 1 touch down workstation, counters, cabinets, shelving.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
G1.5.10	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation.
G1.5.11	Exam Room	2	12.00	24.00	Incl. 1 touch down workstation, counters, cabinets.
G1.5.12	Not Used	0	0.00	0.00	
G1.5.13	Office-3 Shared	1	16.00	16.00	Incl. 3 workstations.
G1.5.14	Office-4 Shared	1	20.00	20.00	Incl. 4 workstations.
G1.5.15	Nourishment Room	3	6.00	18.00	Incl. counters, cabinets.
G1.5.16	Alcove-Blanket Warmer	2	1.50	3.00	Adjacent to Alcove-Clean Linen.
G1.5.17	Alcove-Clean Linen	3	2.50	7.50	
G1.5.18	Alcove-Crash Cart	2	1.50	3.00	Centrally located.
G1.5.19	Alcove-Local Equipment	3	1.50	4.50	Distributed in Anesthetic Care Unit space.
G1.5.20	Alcove-Stretcher	1	2.50	2.50	
G1.5.21	Alcove-Wheelchair	1	2.50	2.50	
G1.5.22	Store-Central Equipment	2	16.00	32.00	Incl. shelving, charging station.
G1.5.23	Store-Central Equipment	1	60.00	60.00	Incl. shelving, charging station.
G1.5.24	Store-Clean Supplies	4	12.00	48.00	
G1.5.25	Soiled Utility	4	12.00	48.00	Incl. counters, shelving.
G1.5.26	Lockers-Patient	2	8.00	16.00	Incl. 20 half lockers.
G1.5.27	Washroom-Patient	8	4.50	36.00	2-piece, accessible for Persons with Disabilities.
G1.5.28	Housekeeping Closet	2	7.00	14.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
G1.5.29	Change Cubicle-Patient	2	3.50	7.00	
G1.5.30	Waiting	1	9.50	9.50	Incl. seating for 5 including 1 in wheelchair.
G1.6 - Surgical and Major Procedures Zone Shared Support Services					
G1.6.1	Alcove-Local Equipment	2	1.50	3.00	Distributed in Surgical and Major Procedures Zone.
G1.6.2	Store-General	1	8.00	8.00	Incl. shelving.
G1.6.3	Store-Central Equipment	1	6.00	6.00	Incl. shelving, charging station.
G1.6.4	Disposal Hold	3	12.00	36.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
G1.7 - Surgical and Major Procedures Zone Shared Staff Support					
G1.7.1	Conference/Meeting Room-Small	2	24.00	48.00	Accommodates 12 Persons.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
G1.7.2	Conference/Meeting Room-Medium	1	44.00	44.00	Incl. counters, cabinets, accommodates 25 Persons.
G1.7.3	Reading Room-PACS	1	24.00	24.00	Incl. 4 PACS workstations, adjacent to Interventional Suites.
G1.7.4	Reading Room-PACS	1	36.00	36.00	Incl. 6 PACS workstations, adjacent to Interventional Suites.
G1.7.5	Office-Private	6	9.50	57.00	Incl. 1 workstation.
G1.7.6	Office-4 Shared	6	20.00	120.00	Incl. 4 workstations.
G1.7.7	Workstation	40	4.50	180.00	Incl. 1 workstation.
G1.7.8	On-Call Room	4	7.00	28.00	Incl. 1 touch down workstation, 1 full locker.
G1.7.9	Lounge-Staff	2	60.00	120.00	Incl. seating for 20, kitchenette, mail slots, 2 touch down workstations.
G1.7.10	Lockers-Staff	2	100.00	200.00	Incl. 250 Z lockers, 4 shoe racks.
G1.7.11	Washroom/Shower-Staff	4	4.50	18.00	3-piece incl. shower.
G1.7.12	Washroom-Staff	16	3.00	48.00	2-piece.
	TOTAL NSM: Surgical and Major Procedures Zone			**5,521.30**	
G2 - SCOPES AND MINOR PROCEDURES ZONE					
G2.1 - Scopes and Minor Procedures Zone Entrance					
G2.1.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets.
G2.1.2	Waiting	1	33.00	33.00	Incl. seating for 20 including 2 in wheelchairs, Direct Access to Public Passenger Elevators and Washroom-Public.
G2.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Scopes and Minor Procedures Zone.
G2.1.4	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
G2.1.5	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
G2.1.6	Alcove-Stretcher	2	2.50	5.00	Centrally located adjacent to Patient Elevators.
G2.1.7	Alcove-Wheelchair	1	2.50	2.50	
G2.1.8	Store-General	1	8.00	8.00	Incl. shelving.
G2.1.9	Washroom-Public	2	4.50	9.00	2-piece, infant change table in 1 Washroom-Public, accessible for Persons with Disabilities.
G2.2 - General Procedure Suites					
G2.2.1	Procedure Room-General	2	40.00	80.00	Incl. 2 touch down workstations, wall mounted displays, lead lined.
G2.2.2	Alcove-Scrub Station	1	3.00	3.00	Shared between two Procedure Room-General.
G2.2.3	Alcove-Touchdown/Charting	2	1.00	2.00	Incl. 1 touch down workstation, located outside of each Procedure Room-General.
G2.2.4	Sterile Core-Equipment/Supplies	1	46.00	46.00	Incl. 2 workstations.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
G2.2.5	Store-Sterile	1	28.00	28.00	
G2.2.6	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, adjacent to Procedure Room-General.
G2.2.7	Alcove-Local Equipment	1	1.50	1.50	
G2.2.8	Alcove-Stretcher	1	2.50	2.50	
G2.3 - Bronchoscopy Procedure Suites					
G2.3.1	Procedure Room-Bronchoscopy	2	40.00	80.00	Incl. 2 touch down workstations, wall mounted displays.
G2.3.2	Alcove-Scrub Station	1	3.00	3.00	Shared between two Procedure Room-Bronchoscopy.
G2.3.3	Alcove-Touchdown/Charting	2	1.00	2.00	Incl. 1 touch down workstation, located outside of each Procedure Room-Bronchoscopy.
G2.3.4	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, adjacent to Procedure Room-Bronchoscopy.
G2.3.5	Alcove-Stretcher	1	2.50	2.50	
G2.3.6	Not Used	0	0.00	0.00	
G2.3.7	Not Used	0	0.00	0.00	
G2.4 - Endoscopy Procedure Suites					
G2.4.1	Procedure Room-ERCP/GI Endoscopy	1	40.00	40.00	Incl. 2 touch down workstations, wall mounted displays, lead lined.
G2.4.2	Procedure Room-GI Endoscopy	5	28.00	140.00	Incl. 1 touch down workstation, wall mounted displays.
G2.4.3	Alcove-Scrub Station	3	3.00	9.00	Shared between each two Procedure Room-GI Endoscopy and Procedure Room-ERCP/GI Endoscopy.
G2.4.4	Alcove-Touchdown/Charting	2	1.00	2.00	Incl. 1 touch down workstation, located outside of Procedure Room-ERCP/GI Endoscopy and Procedure Room-GI Endoscopy.
G2.4.5	Alcove-Stretcher	2	2.50	5.00	
G2.4.6	Not Used	0	0.00	0.00	
G2.4.7	Not Used	0	0.00	0.00	
G2.4.8	Not Used	0	0.00	0.00	
G2.5 - Anesthetic Care Unit					
G2.5.1	ACU Patient Room-Airborne Isolation-Hybrid	2	12.00	24.00	Assigned to Bronchoscopy suite.
G2.5.2	ACU-Patient Bay-Small	36	9.80	352.80	Walled on 3 sides with privacy curtains, connecting glass sliding doors between all ACU Space-Small.
G2.5.3	Alcove-Hand Hygiene Sink	18	1.00	18.00	Shared between each two ACU-Patient Bay-Small.
G2.5.4	Alcove-Touchdown/Charting	4	1.00	4.00	Incl. 1 touch down workstation, distributed in Anesthetic Care Unit.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
G2.5.5	Care Team Station	3	12.00	36.00	Incl. 3 workstations, cabinets, charging station, dual egress.
G2.5.6	Not Used	0	0.00	0.00	
G2.5.7	Alcove-Hand Hygiene Sink	3	1.00	3.00	Located within 6 m of each Care Team Station entrance.
G2.5.8	Pneumatic Tube Station	2	1.00	2.00	Incl. counter.
G2.5.9	Medication Room-Small	2	8.00	16.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
G2.5.10	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets.
G2.5.11	Alcove-Blanket Warmer	2	1.50	3.00	Adjacent to Alcove-Clean Linen.
G2.5.12	Alcove-Clean Linen	3	2.50	7.50	
G2.5.13	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
G2.5.14	Alcove-Local Equipment	3	1.50	4.50	Distributed in Anesthetic Care Unit space.
G2.5.15	Alcove-Wheelchair	1	2.50	2.50	
G2.5.16	Store-General	1	8.00	8.00	Incl. shelving.
G2.5.17	Store-Central Equipment	1	24.00	24.00	Incl. shelving, charging station.
G2.5.18	Store-Clean Supplies	3	12.00	36.00	
G2.5.19	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
G2.5.20	Lockers-Patient	1	8.00	8.00	Incl. 20 half lockers.
G2.5.21	Washroom-Patient	3	4.50	13.50	2-piece, accessible for Persons with Disabilities.
G2.5.22	Procedure/Recovery Bay-ECT	4	9.50	38.00	Walled on 3 sides with privacy curtains, connecting glass sliding doors between all Procedure/Recovery Bay-ECT and ACU Space-Small.
G2.5.23	Alcove-Imaging Equipment-Small	1	1.50	1.50	
G2.6 - Scopes and Minor Procedures Zone Shared Support Services					
G2.6.1	Workroom-Anesthesia/Supplies	1	15.00	15.00	Incl. 2 workstations, counter, cabinets.
G2.6.2	Store-General	2	8.00	16.00	Incl. shelving.
G2.6.3	Store-Central Equipment	1	6.00	6.00	Incl. shelving, charging station.
G2.6.4	Store-Lead Shields	1	1.50	1.50	Incl. cabinets.
G2.6.5	Alcove-Imaging Equipment-Large	1	3.00	3.00	
G2.6.6	Alcove-Imaging Equipment-C-Arm	1	3.00	3.00	
G2.6.7	Store-Central Equipment	1	12.00	12.00	Incl. shelving, charging station.
G2.6.8	Store-Clean Supplies	1	12.00	12.00	
G2.6.9	Store-Lead Aprons & Badges	1	3.00	3.00	Incl. shelving.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
G2.6.10	Store-Medical Gas	1	3.50	3.50	
G2.6.11	Soiled Utility	1	12.00	12.00	Incl. counters, shelving, casting procedures being performed in this room.
G2.6.12	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
G2.6.13	Washroom-Patient	4	4.50	18.00	2-piece, accessible for Persons with Disabilities.
G2.6.14	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
G2.7 - Scopes and Minor Procedures Zone Shared Staff Support					
G2.7.1	Conference/Meeting Room-Medium	1	44.00	44.00	Incl. counters, cabinets, accommodates 25 Persons.
G2.7.2	Office-Private	1	9.50	9.50	Incl. 1 workstation.
G2.7.3	Workstation	8	4.50	36.00	Incl. 1 workstation, combined into one area.
G2.7.4	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
G2.7.5	Lockers-Staff	1	40.00	40.00	Incl. 100 Z lockers, 2 shoe racks, split into male and female if required.
G2.7.6	Washroom/Shower-Staff	4	4.50	18.00	3-piece incl. shower.
G2.8 - Scope Reprocessing					
G2.8.1	Utility-Bronch Scope Rinse	1	6.00	6.00	Incl. counters, cabinets. Direct Access to corridor.
G2.8.2	Scope Decontamination	1	20.00	20.00	Direct Access to corridor.
G2.8.3	Scope Disinfection	1	30.00	30.00	Incl. emergency eyewash, Direct Access to corridor, located between Scope Decontamination and Store-Clean Scope-Endo.
G2.8.4	Store-Clean Scope-Endo	1	12.00	12.00	Incl. stainless steel counter, Direct Access to corridor.
G2.8.5	Store-Clean Scope-Bronch	1	8.00	8.00	Direct Access to corridor and to each Procedure Room-Bronchoscopy.
	TOTAL NSM: Scopes and Minor Procedures Zone			**1,531.80**	
G3 - SURGICAL AND INTERVENTIONAL SERVICES GENERAL WORKSTATIONS					
G3.1	Workstation-General	1	567.00	567.00	Incl. 105 Workstations at 4.5 nsm each, combined into one area, adjacent to G2 Scopes and Minor Procedures Zone.
	TOTAL NSM: Surgical and Interventional Services General Workstations			**567.00**	
	TOTAL NSM: SURGICAL AND INTERVENTIONAL SERVICES			**7,620.10**	

8.7.2 The following table lists the number of spaces, Net Areas and space contents for Surgical and Interventional Services Future Expansion.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
G - SURGICAL AND INTERVENTIONAL SERVICES FUTURE EXPANSION					
G1.2 - Operating and Interventional Suites - Interventional Suites					
G1.2.15	Imaging-CT-Future Expansion	1	40.00	40.00	Incl. cabinets, ceiling lift with complex ceiling coverage, lead lined.
G1.2.15.1	Technical Room-Imaging-Future Expansion	1	4.00	4.00	Incl. servers for modality, lead lined.
G1.2.16	Control-Imaging-Future Expansion	1	12.00	12.00	Incl. 2 workstations, lead lined, adjacent to Imaging-CT-Future Expansion, window between Control-Imaging-Future Expansion and Imaging-CT-Future Expansion.
G3 - SURGICAL AND INTERVENTIONAL SERVICES GENERAL WORKSTATIONS					
G3.1.1	Operating Room-Future Expansion	6	60.00	360.00	Incl. 2 touch down workstations, wall mounted displays, ceiling lift with complex ceiling coverage.
G3.1.2	Alcove-Scrub Station-Future Expansion	3	3.00	9.00	Shared between each two Operating Room-Future Expansion.
G3.1.3	Alcove-Lead Apron-Future Expansion	2	2.80	5.60	Distributed across Operating Rooms space, shared between each three Operating Room-Future Expansion.
G3.1.4	Alcove-Touchdown/Charting-Future Expansion	6	2.00	12.00	Incl. 2 touch down workstations, located outside of each Operating Room-Future Expansion.
G3.1.5	Alcove-Stretcher-Future Expansion	6	2.50	15.00	Located outside of each Operating Room-Future Expansion.
G3.1.6	Shared Support Services and Shared Staff Support-Future Expansion	1.00	165.40	165.40	Area break down to be determined. Space for 20 ACU Patient Bays, Sterile Core-Equipment/Supplies and related Shared Support Services and Shared Staff Support to replace adjacent Biomedical Engineering area.
	TOTAL NSM: SURGICAL AND INTERVENTIONAL SERVICES FUTURE EXPANSION			**623.00**	

THE NEW ST. PAUL'S PHASE 1A

H. OUTPATIENT CARE CENTRE

H. OUTPATIENT CARE CENTRE

9.1 OVERVIEW

9.1.1 Outpatient care is defined “as a broad range of services and activities that are delivered to Patients who do not require admission to an inpatient bed. These services include diagnostic services, consultative services, and treatment” (refer to “A Framework for Ambulatory Care in BC 2014”).

9.1.2 Clinical services in the Outpatient Care Centre will provide inter-professional and integrated care to a variety of Patients through the services detailed below. Clinic spaces need to be modular, allowing for flexible use by different physicians and team members to support changing Patient volumes. These clinics will work in an inter-professional manner, allowing Patients to be seen during their visit by multiple specialty providers. It is anticipated that the outpatient centre will adopt standardized processes to optimize delivery of Patient care in ambulatory settings, resulting in maximum and optimal use of resources, Staff and space and to position outpatient care as a central resource to support operational efficiencies for both inpatient areas and EDs (Refer to “Ambulatory Care Design London Health Sciences Centre Document 2018”).

9.1.3 Exam, Procedure and Consult/Interview Rooms are being designed as flexible spaces with standardized layout that can adapt to future requirements.

9.1.4 Access to full circle outpatient care is important to the success of this Component. Convenient Access will be provided to the space for Patient and public with appropriate Wayfinding.

9.1.5 Outpatient clinics will be designed with a major emphasis on creating an efficient flow of Patients through the Exam and Consult/Interview Rooms and adjoining Procedure Rooms. In addition, a productive environment will be created for providers and support Staff, who are increasingly pressured to care for more Patients with fewer resources.

9.1.6 In addition to providing efficient and coordinated team-based care on an outpatient basis, the Outpatient Care Centre will provide a major catalyst for changing care delivery from its current model. The Outpatient Care Centre will assist with providing improved access and waitlist management as well as just in time follow up care. However, the Outpatient Care Centre will also help improve Patient experience and mitigate access blockades by re-directing Patients from the ED as well as those from IPUs whose care can be better managed within the Outpatient Care Centre.

9.1.7 The purpose for the Outpatient Care Centre is to achieve the following:

9.1.7.1 Focus on core business and not duplicate services provided in private practice or by non-health authority providers;

9.1.7.2 Locate services in community wherever feasible;

9.1.7.3 Create capacity or mitigate demand in inpatient care and ED services;

9.1.7.4 Leverage inter-professional approach and link to continuum of care;

9.1.7.5 Support academic mandates;

9.1.7.6 Provide a clear, transparent, and equitable access based on Patient needs;

9.1.7.7 Support (not replace) primary care & Patient self-management;

9.1.7.8 Be cost effective and sustainable;

9.1.7.9 Collect meaningful data to support scheduling, waitlist management, planning, quality improvement and evaluation;

9.1.7.10 Involve Patients and families as partners; and

9.1.7.11 Build in a quality framework in to all the work that we accomplish (Quadruple aim).

9.2 FUNCTIONAL DESCRIPTION

9.2.1 Scope of Services

9.2.1.1 The Outpatient Care Centre Component will address the operational and Facility requirements for the following outpatient clinics functions:

9.2.1.1(1) Clinical assessment

9.2.1.1(2) Diagnostic testing (cardiac, radiography, audiology, neurology)

9.2.1.1(3) Minor procedures (requiring local anesthetic only)

9.2.1.1(4) Medical management (inclusive of the Infusion Centre)

9.2.1.2 Scope of Educational Activity

9.2.1.2(1) Ongoing Staff education and training will take place in this Component. All teaching and supervised functions will be accommodated in the general work areas and will not require separate dedicated space.

9.2.1.2(2) Students from all professions will see Patients in the Outpatient clinics under the supervision of clinicians or independently with the support of a clinician, as appropriate.

9.2.1.2(3) The clinical setting will provide both one-to-one and small group-based training and learning opportunities.

9.2.1.3 Scope of Research Activity

9.2.1.3(1) There will be a strong research component for clinical trials and research studies within this Component, which often requires access to Patients during their visit. Researchers and research assistants will make use of existing workstations within Exam Rooms and Workstation-Touchdown within the clinic space.

9.2.1.4 Scope Exclusions

9.2.1.4(1) The following outpatient clinics and diagnostic services are excluded from this Component:

9.2.1.4(1)(a) Primary Care Triage and Access Centre (located near ED);

9.2.1.4(1)(b) Renal Outpatient Clinics (located within the renal floorplate);

9.2.1.4(1)(c) Urban Health and Integrated Mental Health and Substance Use (UHIMHSU) clinics; and

9.2.1.4(1)(d) Center for Healthy Aging clinics.

9.2.2 Services provided

9.2.2.1 The full spectrum of Medical/Surgical Outpatient Clinics will evolve over time to address demographic and community needs but are anticipated to include the following clinical academic groupings in the Outpatient Care Centre.

9.2.2.1(1) Medicine and Complex Care

9.2.2.1(1)(a) Hypertension (RA);

9.2.2.1(1)(b) Inherited Bleeding & Red Blood Cell Disorders (IBRCD);

9.2.2.1(1)(c) Contact Dermatitis Clinic

9.2.2.1(1)(d) Dermatology;

9.2.2.1(1)(e) Diabetes;

9.2.2.1(1)(f) Family Practice;

9.2.2.1(1)(g) Adult Bleeding Disorder (Haemophilia);

9.2.2.1(1)(h) Red Cell Disorder (Haemoglobinopathy);

9.2.2.1(1)(i) Primary Immunology Clinic;

9.2.2.1(1)(j) Rapid Assessment Clinic (RAC)/General Internal Medicine (GIM);

9.2.2.1(1)(k) Rheumatology/Lupus;

9.2.2.1(1)(l) SCIG Clinic;

9.2.2.1(1)(m) Serious Drug Reaction Clinic;

9.2.2.1(1)(n) Endocrinology;

9.2.2.1(1)(o) Thrombosis Clinic;

9.2.2.1(1)(p) Parenteral Nutrition; and

9.2.2.1(1)(q) Home Enteral Nutrition.

9.2.2.1(2) Digestive Diseases and Surgery

9.2.2.1(2)(a) Colorectal;

9.2.2.1(2)(b) General Surgery;

9.2.2.1(2)(c) Gastroenterology/Gastro-intestinal (GI);

9.2.2.1(2)(d) Gynecology;

9.2.2.1(2)(e) Pre-Admission and Post-Operative Assessment Clinics;

9.2.2.1(2)(f) Ophthalmology;

9.2.2.1(2)(g) Thyroid-Endocrinology; and

9.2.2.1(2)(h) Urology (including Interstitial Cystitis Clinic and Uro-gyne).

9.2.2.1(3) Audiology (Including ENT-General and ENT-Hearing and Balance)

9.2.2.1(3)(a) The audiology testing Components will be grouped to provide expertise in areas relating to ENT-General and ENT-Hearing and Balance. An integration of both medical and surgical services will be provided to offer a wider range of treatment to Patients. Audiology visits (cochlear implants, tinnitus, dizziness testing) will be provided in this clinic module. Exam rooms will be outfitted with the ability to provide multiple testing components to improve efficiency. The following specialty clinics will be included:

9.2.2.1.3.(a).1 Audiology;
9.2.2.1.3.(a).2 Diagnostic Audiology Testing;
9.2.2.1.3.(a).3 Vestibular Testing and Management;
9.2.2.1.3.(a).4 Tinnitus Clinic; and
9.2.2.1.3.(a).5 Cochlear Implant Program Centre for BC and Yukon.

9.2.2.1(4) Heart and Vascular

9.2.2.1(4)(a) Heart and Vascular includes a number of specialty clinics that act as a group to deliver a full range of medical and surgical services to Patients with heart conditions. These services accommodate a large and diverse group of Patients across British Columbia and include specialized care and treatment. The full scope of services offered by the Heart Centre pertains to heart disease prevention and reversal, various diagnostic services, treatment, care and rehabilitation.

- 9.2.2.1.4.(a).1 Vascular Surgery;
- 9.2.2.1.4.(a).2 Congenital Heart;
- 9.2.2.1.4.(a).3 Cardiac Obstetrics;
- 9.2.2.1.4.(a).4 Cardiology – chest pain, STAT clinic;
- 9.2.2.1.4.(a).5 Heart Transplant – pre and post Structural heart disease including Trans-catheter Valve;
- 9.2.2.1.4.(a).6 Heart Function and advanced Heart Failure;
- 9.2.2.1.4.(a).7 Heart Rhythm disorders including atrial fibrillation and inherited arrhythmia;
- 9.2.2.1.4.(a).8 Heart Device (Pacemaker) Clinic;
- 9.2.2.1.4.(a).9 Percutaneous Heart Valve Clinics;
- 9.2.2.1.4.(a).10 Cardiomyopathy Clinics (dilated and hypertrophic);
- 9.2.2.1.4.(a).11 Cardiac Rehab;
- 9.2.2.1.4.(a).12 Cardio-metabolic disorders; and
- 9.2.2.1.4.(a).13 Cardiac Prevention Clinic.

9.2.2.1(4)(b) The following diagnostic services will be provided adjacent to the Heart and Vascular Pod in the Outpatient Cardiac Diagnostics Pod:

- 9.2.2.1.4.(b).1 Cardiac electrodiagnostics including the below:
  - (b).1.1 Electrophysiology;
  - (b).1.2 Holter - ECG;
  - (b).1.3 Echocardiogram;
  - (b).1.4 Cardiac Stress Test;
  - (b).1.5 Advance cardiac imaging – including cardiac echocardiography;
  - (b).1.6 Non-sedation Dobutamine stress echo cardiograph and outpatient TEE (Transoesophageal Testing); and
  - (b).1.7 Vascular labs.

9.2.2.1(5) Lung, Sinus and Allergy

9.2.2.1(5)(a) The Lung, Sinus and Allergy consists of programs that serve Patients with chronic conditions

affecting respiratory function. These include the following services:

9.2.2.1.5.(a).1 COPD Clinic;
9.2.2.1.5.(a).2 Asthma Clinic;
9.2.2.1.5.(a).3 ENT-Sinonasal Clinic;
9.2.2.1.5.(a).4 Scleroderma Clinic;
9.2.2.1.5.(a).5 Pacific Lung Centre (PLC);
9.2.2.1.5.(a).6 Adult Cystic Fibrosis (CF) Clinic;
9.2.2.1.5.(a).7 Interstitial lung disease;
9.2.2.1.5.(a).8 Bronchiectasis;
9.2.2.1.5.(a).9 Interventional Pulmonology;
9.2.2.1.5.(a).10 General Respiratory Clinic; and
9.2.2.1.5.(a).11 HHT –Hereditary Haemorrhagic telangiectasia.

9.2.2.1(6) Musculoskeletal (MSK)

9.2.2.1(6)(a) Neurology;

9.2.2.1(6)(b) Orthopedic;

9.2.2.1(6)(c) Pain Clinic;

9.2.2.1(6)(d) Plastics Dermatology;

9.2.2.1(6)(e) Minor surgical;

9.2.2.1(6)(f) Upper Extremity;

9.2.2.1(6)(g) Clinical diagnostic rooms for neurology (Electroencephalogram (EEG), evoked potential/ auditory brainstem response and EMG rooms) will be adjacent to the MSK Clinic; and

9.2.2.1(6)(h) Surgical clinic diagnostic and support rooms (radiography, splint and cast rooms, etc.) will be grouped and located within/as a part of the MSK Clinic pod.

9.2.2.1(7) Infusion Therapy Clinic

9.2.2.1(7)(a) The Infusion Therapy Clinic will offer care for Patients requiring infusions, transfusions or chemotherapy treatments. Unlike the existing Medical Short Stay Unit (MSSU), the Infusion Therapy Clinic will not perform as a pre-procedure or recovery area for Patients, as this activity will occur in ACU spaces immediately adjacent to the Procedure Rooms. The clinic will perform all infusions, transfusions and similar treatments

together in one easily identifiable, Patient-friendly location. The Infusion Therapy Clinic will provide consistent care and support for its short term and chronic Patients, with whom the Staff have developed strong therapeutic relationships. Of note, chemotherapeutic agents are administered to Patients in this area, meaning that design features will need to support this from a Patient and Staff safety perspective.

9.2.2.1(7)(b) Presently the Infusion Therapy Clinic models Person- and Family-Centred Care by offering services such as wound care that can be performed concurrently with other treatments; this is anticipated to continue. The Infusion Therapy Clinic will offer the following treatments:

- 9.2.2.1.7.(b).1 Pain treatment- neuromodulation therapy;
- 9.2.2.1.7.(b).2 Infusions including training Patients to administer their own at home;
- 9.2.2.1.7.(b).3 Transfusions;
- 9.2.2.1.7.(b).4 Chemotherapy; and
- 9.2.2.1.7.(b).5 Outpatient Antibiotic Therapy (OPAT), this is a 7-day per week clinic and will need after hours and weekend access.

9.3 OPERATIONAL CONSIDERATIONS

9.3.1 Service Delivery Principles and Methods

9.3.1.1 Patient and Family Management Processes and Flows

9.3.1.1(1) Patients

9.3.1.1(1)(a) Outpatient Care Centre will be planned and reviewed to support Person- and Family-Centred Care.

9.3.1.1(1)(b) Outpatient Care Centre will be designed to maximize the value of the physical space ensuring separation of soiled and clean clinician workspace in Patient care spaces, with uncluttered design concepts and including integration with telemedicine options. Patient satisfaction will be improved by simple Wayfinding, expedited Patient throughput, decrease of waiting times and continuity of care. Key principles of Wayfinding involve limiting the potential number of destinations that the Patient may choose at any

given decision point and providing one-stop shopping.

9.3.1.1(1)(c) The following are the benefits of adopting these principles to achieve an enhanced ambulatory care:

9.3.1.1.1.(c).1 Improved utilization of resources and space and improved pre-visit planning to make the ambulatory visit as meaningful and efficient as possible.

9.3.1.1.1.(c).2 Improved on-time starts during the visit; to prevent “behind time” and increase the ability to see more Patients and the time spent with Patients.

9.3.1.1.1.(c).3 Improved quality and standardization of care:

(c).3.1 Ensure Patients get exactly the care they require when they require it, in the most appropriate place. This means focusing on core business and minimizing duplication of services provided in the community or via health care partners;

(c).3.2 The goal is to wrap the services around the Patients to enhance their ambulatory care experience;

(c).3.3 Explore a case management approach to improve the coordination of care; and

(c).3.4 Effectively provide care on an outpatient basis to assure the appropriate level-of-care is provided, to prevent inpatient re-admissions and ensure that the Patients’ medical, environmental and psychosocial needs are met over the continuum of care.

9.3.1.1.1.(c).4 Improved ability to communicate and follow up with the Patient though phone calls, emails, telemedicine and video applications.

9.3.1.1(2) Family

9.3.1.1(2)(a) Exam Rooms, Procedure Rooms and Infusion Treatment rooms will be accessible to family as defined and desired by the Patient. Waiting spaces comfortable for various body types and needs will also exist outside of the care areas and will be available for family members.

9.3.1.1(3) Patient Management Processes

9.3.1.1(3)(a) Planning assumes the Facility operations will include a fully integrated booking/scheduling system in which all Facility-based services participate. The intent of this specification is to allow Patients to move between multiple, same day appointments seamlessly, with few delays and short wait times and without the need to continuously revisit Patient registration.

9.3.1.1(3)(b) Patients will proceed directly to the Component's Reception areas where appointments will be confirmed as will any other diagnostic procedures scheduled for the same visit. All Patient waiting will be accommodated close to Reception areas. Patient location technology will enable Patients to be located and notified that an appointment is about to begin.

9.3.1.1(3)(c) Patients will be able to book appointments via telephone or online. Booking of follow-up appointments will be completed in the Reception area of each clinic module by the designated clerical Staff. Depending on the service, the registration service will vary and could include:

- 9.3.1.1.3.(c).1 An online registration system to allow Patients to register from home;
- 9.3.1.1.3.(c).2 Registration kiosks within the main entrance to allow Patients to self-register;
- 9.3.1.1.3.(c).3 Registration kiosks will be accessible to complement traditional registration processes;
- 9.3.1.1.3.(c).4 In circumstances where Patients are unable to register at home, or at the central registration desk or kiosks, registration and check-in may occur at the clinic Reception area; and
- 9.3.1.1.3.(c).5 Patients will present at the Reception desk of the clinic module for a brief confirmation process upon arrival.

9.3.1.2 Patient Information Management

9.3.1.2(1) A Patient tracking system will be incorporated to provide the ability to track Patients from time of arrival to completion of visit and include the following abilities:

9.3.1.2(1)(a) Where Patients are and how long they have been waiting;

9.3.1.2(1)(b) Patient status (ready to be seen, with provider, in diagnostics, etc.);

9.3.1.2(1)(c) Room status (available, assigned, in need of cleaning);

9.3.1.2(1)(d) Where Patients and caregivers will go next; and

9.3.1.2(1)(e) Where bottlenecks in flows are causing delays.

9.3.1.2(2) Telemedicine will be a critical enabler in delivering care to Patients and will be an important design consideration.

9.3.1.2(3) Telemedicine capabilities are required in Consult/Interview and Exam Rooms and may be required in select workstation areas.

9.3.1.2(4) All diagnostic services will have online capability for viewing and reporting of results.

9.3.1.3 Provider Work Processes and Flows

9.3.1.3(1) Providers

9.3.1.3(1)(a) The Outpatient Care Centre will be an environment where all members of the inter-professional team, whether they are employees, physicians or volunteers, can work collaboratively in promoting health and wellness. Designated space will be required to provide access to immediate coordinated team follow-up within the outpatient clinic and/or Infusion Therapy Clinic, promoting seamless and timely transition to discharge. Team members will require access to space to provide non-clinic-based Patient care, including follow-ups, case management and consultation with other team members.

9.3.1.3(1)(b) Staffing information will be a managed by corporate service. Scheduling, including providing for sick and vacation relief will be conducted centrally, and off-site. Notices to individual Staff regarding their schedules will be communicated electronically.

9.3.1.3(1)(c) At the start of shift, Staff will pick up a handheld wireless communication device that is linkable and

with the ability to view physiologic monitoring of the Patients they are assigned to.

9.3.1.3(1)(d) An integrated, linked Nurse Call System with ability to link and receive physiologic monitoring will be required for the pods.

9.3.1.3(1)(e) Staff will be able to communicate utilizing hands-free communication system.

9.3.1.3(1)(f) Allied Health

9.3.1.3.1.(f).1 Clinical services that will be provided in Exam Rooms, Procedure Rooms or in dedicated therapy and treatment spaces within each pod to include: clinical pharmacy, PT, nutrition, OT, SLP, RT and Social Work.

9.3.1.3(1)(g) Language Services

9.3.1.3.1.(g).1 Interpreters will be available upon request for Patient and families.

9.3.1.3(1)(h) Staff access to supplies and equipment

9.3.1.3.1.(h).1 The placement of equipment and supplies stores will promote the concept of reducing travel distances for Staff to/from a Patient. Minimal volumes of commonly used items are stored either in the Exam Rooms or Procedure Rooms. More rationed items will be stored in Store-Clean Supplies and Store-Local Equipment found in the outpatient clinic shared support spaces. Unique or “one of” items will be generally stored in the Store-Central Equipment that will function closely with the Equipment Depot (See Component O).

9.3.1.3(1)(i) Staff Workspaces

9.3.1.3.1.(i).1 Standardization in design to the maximum extent possible to promote defect-free, standard work. Standardize configurations to reduce variations in work processes and promote long term flexibility.

9.3.1.3.1.(i).2 For shared work spaces such as Medication Rooms, a standardized layout is required for instant familiarity and reducing the potentials for error.

9.3.1.3.1.(i).3 Design for visual cues that will enable Staff to detect abnormalities instantly in their workspace.

9.3.1.3.1.(i).4 Designate parking spaces for frequently used Equipment to reduce time of Staff searching when it is in use.

9.3.1.3.1.(i).5 Make pathways direct with intuitive Wayfinding, making it possible to visualize the destination from the point of entry.

9.3.1.3.1.(i).6 Design the layout for smooth flow, where work proceeds in one direction where the start and end are adjacent.

9.3.1.3.1.(i).7 Integration of clinical research procedures within the clinical space: visits, simple tests, blood draws, spirometry, access to a fridge, phlebotomy stations, fridge to store supplies.

9.3.1.3.1.(i).8 Equipment for pulmonary function, audiology, vestibular testing and management with space for laptops, calibration devices, clinical trials will be provided.

9.3.1.3.1.(i).9 Spirometry to occur in the pulmonary function areas. This will be the area for cardio-pulmonary testing.

9.3.1.3.1.(i).10 Interventional research and cardiac clinical research capacity to be provided on clinic areas.

9.3.1.3.1.(i).11 Clinical research capacity to be also provided for audiology, vestibular testing and management.

9.3.1.3.1.(i).12 Sinus and respiratory teams to ensure ongoing collaboration and integration of clinical and research between Components.

9.3.1.3(2) Students

9.3.1.3(2)(a) The Facility will be a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents. Work spaces will be enabled to have private, confidential conversations and be equipped with teaching capability.

9.3.1.3(2)(b) Medical, nursing and allied health students will receive practical skills training. All teaching and supervision functions will be accommodated in the general work areas and will not require specialized or dedicated facilities in this Component.

9.3.1.4 Clinical and Logistical Support Processes and Flows

9.3.1.4(1) Equipment and Instruments

9.3.1.4(1)(a) Planning assumes Facility-wide reliance on RTLS for most Equipment enabling immediate locating capability.

9.3.1.4(1)(b) Electronic requests for an item will be received in the Equipment Depot (See Component O) where portering services Staff will locate the item, retrieve it or a comparable item, and deliver it to the Component. Satellite Scope Reprocessing unit will be provided for high level disinfection and sterilization of instruments and will have Convenient Access to Audiology, ENT- Sinonasal, ENT-General, and ENT-Hearing and Balance clinics.

9.3.1.4(2) Consumable Supplies

9.3.1.4(2)(a) To the extent practicable, consumable supplies stored in treatment areas will be organized and stored in a common order and configuration. The intent of this standard is to enable efficient locating of each supply item without Staff first having to reorient themselves to a new room configuration and to avoid long travel distances between supplies storage and point of use. All ordering, purchasing, receiving, checking and delivering of supplies will be conducted through the Facility's Materiel Management Component Supplies (Consumable supplies, linen, waste). Consumable supplies will be kept close to the POC. Items will be maintained with a minimum inventory level, which will trigger a re-ordering process.

9.3.1.4(3) Waste Management

9.3.1.4(3)(a) Waste products, recycling and bio-HAZMAT will be separated at POC and stored in holding areas until pick up by housekeeping Staff and transported by AGV's.

9.3.1.4(4) Laundry

9.3.1.4(4)(a) Storage and pathways for clean supplies, equipment and linen will be kept separate from soiled supplies, equipment and linen.

9.3.1.5 Anticipated Trends in Service Delivery

9.3.1.5(1) The following lists trends expected within the planning horizon of this project, and that are expected to affect the nature and/or extent of functions accommodated within this Component. Effects of these trends will be reflected in the Component's design.

9.3.1.5(1)(a) Acuity and complexity of Patients managed in an outpatient setting will continue to increase.

9.3.1.5(1)(b) Facility admission, the most costly form of health care, may be avoided or their length reduced by effective ambulatory care service delivery. Ambulatory care provides a bridge following hospital discharge and helps reduce the potential for readmission for the same problem.

9.3.1.5(1)(c) Growth in ambulatory care services is anticipated in response to a growing and aging population and from an ongoing shift from inpatient service delivery as treatment and technologies evolve and become more appropriate for delivery in the outpatient settings.

9.3.1.5(1)(d) The shift to outpatient service provision is of great benefit to Patients as it is the least disruptive to their personal lives. Significant numbers of Patients will access these ambulatory clinics and it is important that the design promotes safe, quality health care and provides an environment which considers Patient's needs. The design also will address accessibility and movement of Patients between services.

9.3.1.5(1)(e) Care which is responsive to Patients needs is particularly important among vulnerable and disadvantaged populations such as the elderly or those from culturally diverse backgrounds, such as Indigenous people. There will be consideration of their specific needs in the development of this space.

9.3.1.5(1)(f) Chronic disease management programs will continue to become more inter-professional as Patient groups seldom present with a single medical condition.

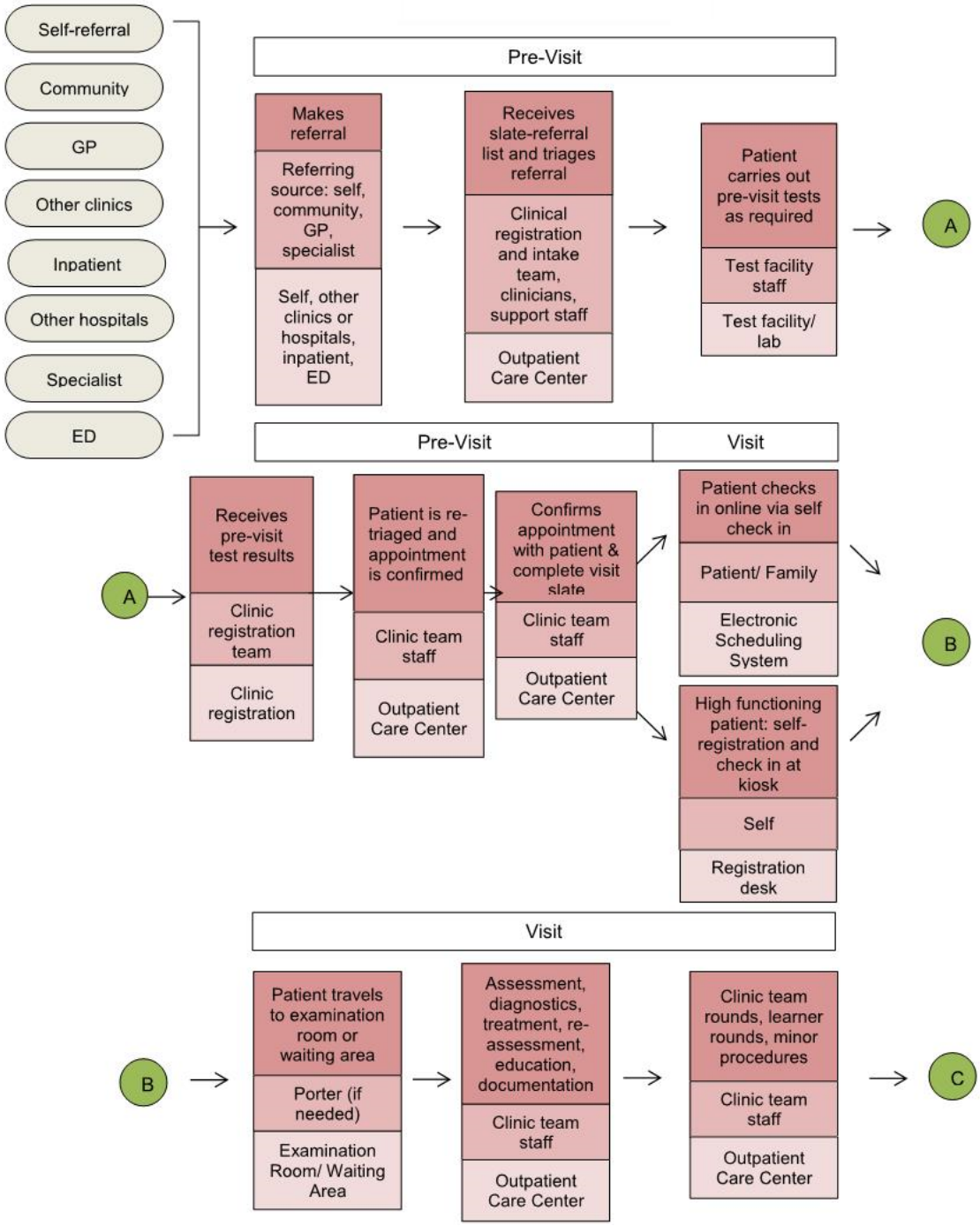
9.3.1.5(1)(g) Telemedicine will continue allowing more outpatient encounters to occur remotely, and without the need for a Patient visiting a clinic or hospital.

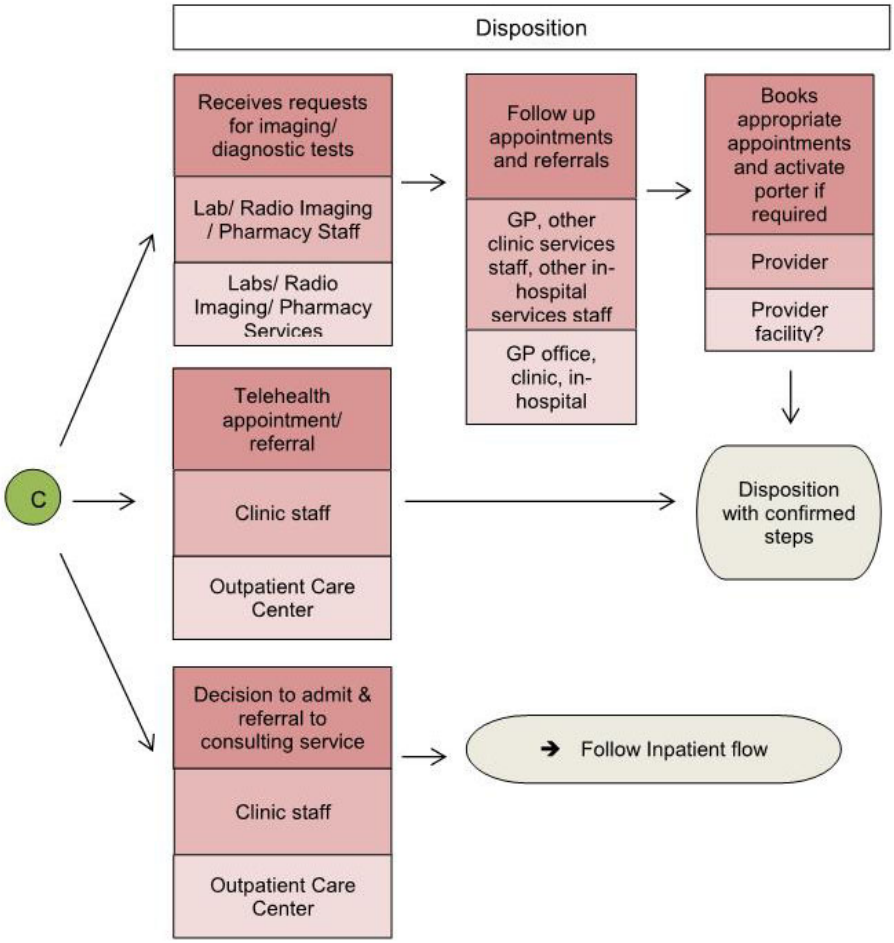
9.3.1.5(1)(h)	Evolution of EMR will enable Patients to move efficiently between programs and services as their health needs will be communicated with the appropriate professionals almost immediately.
9.3.1.5(1)(i)	Staff and students may be engaged in research. The nature and extent of research functions will be accommodated in the general work areas and will not require specialized or dedicated facilities in this Component.
9.3.1.5(1)(j)	Infection Prevention and Control will remain a high priority in all areas of the Facility.

9.3.2 Workflows

9.3.2.1 The Outpatient Clinics workflows are depicted in the following workflow diagram.

H. OUTPATIENT CARE CENTRE WORKFLOW DIAGRAM




Disposition
Receives requests for imaging/ diagnostic tests
Lab/ Radio Imaging / Pharmacy Staff
Labs/ Radio Imaging/ Pharmacy Services
Follow up appointments and referrals
GP, other clinic services staff, other in-hospital services staff
GP office, clinic, in-hospital
Books appropriate appointments and activate porter if required
Provider
Provider facility?
C
Telehealth appointment/ referral
Clinic staff
Outpatient Care Center
Disposition with confirmed steps
Decision to admit & referral to consulting service
Clinic staff
Outpatient Care Center
Follow Inpatient flow

9.3.3 Hours of Operation

9.3.3.1 It is anticipated that clinics will be open during regular business hours, with the ability for schedules to flex and expand as required (i.e. Patient population and volumes).

9.3.4 Workloads

9.3.4.1 The maximum estimated workload for this Component is shown in the following table.

OUTPATIENT CARE CENTRE STAFF CATEGORY	PEAK SHIFT
Direct Care Team Staff: Outpatient Medicine Clinics	
Physician	20
Medical Resident	60
Endocrinologists	2
Hematologists	2
Respirologist	3
Clinical Pharmacist	4
Clinical Nurse Leader	3
Nurse Practitioner	4
Nurse Educator	3
Physiotherapist	1
Occupational Therapist	1
Nurse	30
Technologist	4
Social Worker/Psychologist	1
Spiritual Care	1
Dietician	6
Unit Clerk	14
Clinical Coordinator	1
Housekeeper	3
Porter	3
Subtotal, Direct Care Team Staff: Outpatient Medicine Clinics	**166**
Direct Care Team Staff: Outpatient Surgical Clinics (GI, Ortho, Plastics, Uro/Gyn, Urology, Minor Procedures, Gen Surgery, Podiatry, Neurosurgery, Pain, Rehab, Vascular and PAC)	
Physicians	20

OUTPATIENT CARE CENTRE STAFF CATEGORY	PEAK SHIFT
Residents	20
Nurses	23
Clinical Nurse Leaders - CNL	2
Clinical Nurse Educators	2
Clerks	14
Anesthesiologists	2
Vascular Techs	1
Ortho Techs	1
Patient Ward Aids	2
Physiotherapy	1
Occupational Therapist	1
OR Booking Clerks	8
Subtotal, Direct Care Team Staff: Outpatient Surgical Clinics	**97**
Direct Care Team Staff: Outpatient Eye, ENT, Audiology and Pain (Infusion) Clinics	
Audiology	
Audiologist	10
Audio Tech	1
Unit Clerks	3
ENT	
Nurse	1
Ward Aid	1
Clerks	2
Ophthalmology	
Orthoptists	3
Clerks	3
Pain	
Nurses	4
Psychologists	2
Clerks	3
Occupational therapist	1
Physiotherapist	2
Subtotal, Direct Care Team Staff: Outpatient Eye, ENT, Audiology and Pain (Infusion) Clinics	**36**

OUTPATIENT CARE CENTRE STAFF CATEGORY	PEAK SHIFT
Direct Care Team Staff: Outpatient Cardiac Diagnostics	
Clinical Nurse Educator	8
Nurse	18
Exercise Leaders	2
Leaders	2
Patient Care Manager	1
Echo Techs	7
Admin Assistant	1
Genetic Counselor	2
Program Coordinator	1
Nurse Practitioner	2
Physiotherapy	2
Social Worker	1
Dietician	1
Psychologist	1
Physicians	8
Residents	4
Subtotal, Direct Care Team Staff: Outpatient Cardiac Diagnostics	**61**
Other	
Student	25
Volunteer	4
Researcher and Other	4
Subtotal, Other	**33**
DAYTIME PEAK TOTAL	**393**

9.4 DESIGN CRITERIA

9.4.1 General Requirements

9.4.1.1 Zones of activity within the Component include the following:

9.4.1.1(1) Generic Outpatient Clinics

9.4.1.1(2) Outpatient Diagnostic and Specialized Clinics

9.4.1.1(3) Outpatient Clinic Support

9.4.1.2 Convenient Access from the Facility Main Entrance will be provided.

9.4.1.3 Outpatient Clinic design will facilitate the sharing of spaces and rooms across clinic modules for maximum flexibility. Maximizing the use of all areas in this Component will require that each space be able to accommodate a variety of functions. This will enable services to move among eligible locations depending upon space availability. The process of moving among locations will be facilitated by designing and configuring rooms and/or groups of rooms (e.g., Exam Rooms and associated support space) based on the principles of standardization; refer to Schedule 3 Section 3.6 Standardization. Under this scheme, Staff will not be faced with reorienting themselves with respect to supply inventory location, electrical power outlet location, IM/IT equipment, etc. each time they are booked into a different location.

9.4.1.4 Outpatient Clinics will be designed to support separate “on-stage/off-stage” principles of Patient, Staff and material flow. Convenient Access to off-stage areas will be provided to facilitate efficient workflow for Staff.

9.4.1.5 Medical and technical Staff will be better able to perform their work when free from distractions. Patient contact areas will be considered as on-stage, where Staff will focus on providing service to the Patient. Functions accommodated in technical support and professional office space will be distraction-free and considered off-stage. No Patient contact will occur in these off-stage areas.

9.4.1.6 A central off-stage space that offers collaboration for Staff and clinical support will be provided.

9.4.1.7 The supply rooms and teamwork areas will be located near the Exam Rooms and Infusion Treatment rooms to minimize Staff travel distances.

9.4.1.8 Opportunities for natural light and views will be provided throughout the Component to the maximum extent possible.

9.4.1.9 The design will be elder-friendly, reflect best practice for care of people who are frail and/or elders and comply with Code Plus, Physical Design Components for an Elder-Friendly Hospital, latest edition. Provide acoustic design features to facilitate communication between hearing impaired Patients and caregivers; refer to Appendix 3C [Acoustic and Noise Control Measures].

9.4.1.10 Storage, including clean Equipment and supply rooms and Soiled Utility rooms will be provided.

9.4.1.11 The location of Store-Clean Supplies and Soiled Utility Rooms and holding rooms will be strategically placed to optimize flow and promote best Infection Prevention and Control protocols.

9.4.1.12 Medication Rooms and Store-Clean Supplies will be adjacent. Medication Rooms will have one (1) door from the corridor and another door connecting to the Store-Clean Supplies, so Staff can easily retrieve supplies for the setup of IV medications. Store-Clean Supplies will have another door from the corridor.

9.4.1.13 Store-Local Equipment will be grouped with Medication Room and Store-Clean Supplies.

9.4.1.14 Medication Room-Small will be centrally located in each Generic Pod to have Convenient Access from Exam Rooms and Procedure Rooms. Medication Room-Medium will also be centrally located in the Outpatient Infusion Therapy Clinic.

9.4.1.15 The primary function of Soiled Utility is to provide a space to dispose of the full spectrum of clinical waste including bedpan disinfectors and assorted bins for cytotoxic and biomedical waste (e.g. used blood bags), perform limited soiled activities such as gross decontamination/rinsing/soaking of surgical type instruments, and temporarily store clinical specimens. In the Outpatient Care Centre, Soiled Utility will also provide space to sequester and marshal soiled equipment and clean them. The design will allow for one way flow from soiled to clean, separate soiled and clean to prevent cross-contamination and provide a dedicated unobstructed cleaning zone, with Convenient Access from all clinical spaces in the area it is intended to serve. Cleaned equipment will be moved to the Store-Local Equipment or Store-Central Equipment in a different and physically separate location away from Soiled Utility.

9.4.1.16 Hand hygiene sinks will be strategically located with respect to work flows to facilitate hand hygiene best practice in all clinical areas as per Infection Prevention and Control protocols.

9.4.1.17 Infection Prevention and Control protocols will be followed by ensuring isolation protocols for handling clean and soiled linen, supplies and equipment. Isolation protocols will also be followed for waste removal. There will be a degree of separation if required for immunocompromised and regular Patients.

9.4.1.18 Convenient Access will be provided by simple Wayfinding for Patients arriving as outpatients from the Main Entrance and public services.

9.4.1.19 View to the exterior and natural light will be maximized in Outpatient Care Centre for Patients, Staff and visitors.

9.4.1.20 Procedure Room-Airborne Isolation-Hybrid, Exam Room-Large-Airborne Isolation-Hybrid and Infusion Treatment-Bed-Airborne Isolation-Hybrid will have

Convenient Access to Reception and Waiting areas to allow Staff to quickly isolate Patients with known respiratory infections. These rooms will also have Convenient Access to a corridor hand hygiene sink to allow Staff to don and doff their PPE and follow appropriate Infection Prevention and Control protocols.

9.4.1.21 Reception Areas

9.4.1.21(1) Public Waiting areas are to have maximum natural light and views.

9.4.1.21(2) Reception areas are to be located adjacent to public entrances. The Reception desk will be positioned to permit Staff to observe the Waiting area and to control access to the Exam/Procedure area.

9.4.1.21(3) Line of Sight from Waiting areas to Reception will be provided to maximize support and assistance to those waiting.

9.4.1.21(4) Acoustic privacy for Patient communication activities will be provided as per Appendix 3C [Acoustic and Noise Control Measures].

9.4.1.21(5) All Staff workstations, including clinical documentation stations, with the exception of those in Reception, require a non-public area to accommodate the following functions:

9.4.1.21(5)(a) Private and confidential Patient phone calls;

9.4.1.21(5)(b) Clinical documentation and charting; and

9.4.1.21(5)(c) Collaboration and interaction with peers.

9.4.1.22 Typical Exam Rooms

9.4.1.22(1) Exam rooms will be generic in form for maximum flexibility, and suitable for all outpatient examinations.

9.4.1.22(2) Outpatient Generic Pods 01, 02, 04 and 05 include two (2) Procedure Rooms and twenty (20) Exam Rooms each. Outpatient Generic Pod 03 includes eight (8) Procedure Rooms and fourteen (14) Exam Rooms. One of the Exam Rooms in Outpatient Generic Pods 02, 04 and 05 is an Exam Room-Large-Airborne Isolation-Hybrid. One of the Procedure Rooms in Outpatient Generic Pods 01 and 03 is a Procedure Room-Airborne Isolation-Hybrid.

9.4.1.22(3) The Outpatient clinics will be built on a clinical module concept, with all Patient encounter rooms (Exam Rooms and Consult/Interview Rooms), being designed to a universal room design. Each Exam Room and Consult/Interview Room will be equipped and fit out based upon the anticipated clinical use of the room as determined in consultation with the Owner.

9.4.1.22(4) Flexible examination and treatment space will be designed to adapt to future growth, changes in treatment approaches and changes in workload. Modular concepts of design and layout of the physical space and the use of modular Furniture which can be easily moved and reconfigured will be used to maximize future flexibility. Plan for opportunities for Future Expansion.

9.4.1.22(5) Flexible electrical and mechanical systems are required to support the reconfiguration of this space in the future

9.4.1.22(6) Standard room sizes and configuration will be utilized except when there are specific clinical indications warranting an exception.

9.4.1.22(7) Two (2) entrances into Exam Rooms to separate Patient and Staff flows will be provided. Staff entry will be from an off-stage service corridor.

9.4.1.22(8) Exam Rooms will be designed to provide visual and acoustic privacy for Patients as per Appendix 3C [Acoustic and Noise Control Measures].

9.4.1.22(9) Exam Rooms will be located near teamwork areas.

9.4.1.22(10) A hand hygiene sink will be provided in every Exam Room.

9.4.1.22(11) All Exam Rooms will be capable of supporting telemedicine.

9.4.1.22(12) Pod of twenty (20) Exam Rooms and two (2) Procedure Rooms to be supported by a Reception to house two (2) clerks and a Waiting area with an adjacent Washroom-Public.

9.4.1.23 Typical Procedure Rooms

9.4.1.23(1) Typical Procedure Rooms will be required for procedures such as minor surgical (i.e. hemorrhoid banding) biopsies, injections, aspirations, paracentesis, changing of urostomy catheters, tattooing (plastics-breast-nipples).

9.4.1.23(2) Any procedure that requires sedation will be done in Scopes and Minor Procedures Zone Component.

9.4.1.24 Collaboration Areas

9.4.1.24(1) Public on-stage access to Inter-Professional Team Rooms will be provided. Inter-Professional Team Rooms will be used to accommodate large families (or care teams) for Patient and family consultations.

9.4.1.24(2) Staff offices will be located close to the Staff support areas and to the Conference/Meeting Rooms.

9.4.1.24(3) Staff support services will be grouped with Store-Clean Supplies and Medication Rooms.

9.4.1.24(4) Most Staff will complete indirect Patient care functions (i.e., documentation, administrative functions) at workstations located within an open concept area.

9.4.1.24(5) These workstations will have Convenient Access to and from the Exam Rooms and Procedure Rooms where associated Patient care is provided.

9.4.1.24(6) The workstations will be designed and organized to allow for variable levels of visibility, interaction, privacy, collaboration and sound attenuation for confidentiality and concentration as per Appendix 3C [Acoustic and Noise Control Measures].

9.4.1.25 Clinical Academic Groupings & Module Adjacencies

9.4.1.25(1) Five (5) Generic Outpatient Clinics will include the following:

9.4.1.25(1)(a) H1.1 - Outpatient Clinic Pod 01 - Medicine and Complex Care;

9.4.1.25(1)(b) H1.2 - Outpatient Clinic Pod 02 - Digestive Diseases and Surgery;

9.4.1.25(1)(c) H1.3 - Outpatient Clinic Pod 03 - Lung, Sinus and Allergy;

9.4.1.25(1)(d) H1.4 - Outpatient Clinic Pod 04 - Heart and Vascular; and

9.4.1.25(1)(e) H1.5 - Outpatient Clinic Pod 05 – Musculoskeletal.

9.4.1.25(2) The Heart and Vascular (H1.4 – Pod 04), the Lung, Sinus and Allergy (H1.3 – Pod 03) and the Outpatient Cardiac Diagnostics (H2.1) will be grouped together and adjacent to each other on the same floor. The Outpatient Cardiac Diagnostics (H2.1) will be located between the Heart and Vascular (H1.4 – Pod 04) and the Lung, Sinus and Allergy (H1.3 – Pod 03).

9.4.1.25(3) Cardio pulmonary stress testing will be shared between the pulmonary function in the Lung, Sinus and Allergy (H1.3 – Pod 03) and the Outpatient Cardiac Diagnostics (H2.1).

9.4.1.25(4) Convenient Access from the Heart and Vascular clinic spaces (H1.4 – Pod 04) to Rehabilitation Centre Component is required to enable efficient Patient transfers between clinics, diagnostics and the Rehab Healthy Heart and Prevention programs.

9.4.1.25(5) The MSK Clinic (H1.5 - Pod 05) will have Convenient Access to the Rehabilitation Centre Component.

9.4.1.25(6) The Lung, Sinus and Allergy including ENT-Sinonasal Clinic (H1.3 – Pod 03) will be adjacent to the Outpatient Audiology Clinic which includes ENT-General and ENT-Hearing and Balance Clinics (H2.2) either on the same floor or vertically on consecutive floors.

9.4.1.25(7) Convenient Access from Heart and Vascular (H1.4 – Pod 04) to the Medical Imaging Component, where Cardiac CT scans and Nuclear Stress Testing occur, is required.

9.4.2 Outpatient Cardiac Diagnostics (H2.1)

9.4.2.1 Outpatient Cardiac Diagnostics (H2.1), Heart and Vascular (H1.4 – Pod 04) and the Lung, Sinus and Allergy (H1.3 – Pod 03) will all have Direct Access to an IPU 64-Bed Group in the Inpatient Care Component on the same floor, creating a heart centre care zone.

9.4.2.2 Echo, ECG and Stress Testing will have Direct Access to Heart and Vascular (H1.4 – Pod 04).

9.4.3 Outpatient Audiology Clinic (H2.2)

9.4.3.1 This area will accommodate soundproof audiometry booths as per Appendix 3C [Acoustic and Noise Control Measures]. Each booth will require two (2) adjacent doors for separate access to the Patient and Control sides of the booth. The Patient side of the booth will be square shaped and accessible to a Patient in a wheelchair without the need to use a ramp.

9.4.3.2 It will also include other specialized audiology related Exam Rooms for Auditory Brainstem Response (ABR), Continuous Interleaved Sampling (CIS), Video Head Impulse Test (VHIT), and Videonystagmography (VNG).

9.4.3.3 Workstation-Audiology will be located in an area with minimal traffic and disruption in order to allow Staff to quietly and confidentially document their clinical work.

9.4.3.4 Exam Room-VNG and Exam Room-ABR will be away from windows and/or natural light.

9.4.3.5 Exam Room-VHIT, Exam Room-VNG and Exam Room-ABR will be grouped together to ensure efficient workflow.

9.4.4 Lung, Sinus and Allergy (H1.3 – Pod 03)

9.4.4.1 The six (6) Procedure Room-Respiratory Diagnostics will have negative air pressure capability to allow for sputum induction testing. These Procedure Rooms will have Convenient Access from the Waiting area to allow Patients to walk frequently and easily between these spaces during appointments.

9.4.4.2 Convenient Access to Imaging-Digital Radiography will be provided as the Patient population of adult cystic fibrosis and chronic obstructive pulmonary disease often require these diagnostic tests.

9.4.4.3 The Store-Local Equipment in these areas will have Convenient Access to the Exam and Procedure Rooms as the Staff will store oxygen tanks in these rooms.

9.4.4.4 The Lung, Sinus and Allergy will have centrally located Support Services.

9.4.4.5 The Satellite Scope Reprocessing-Soiled and Satellite Scope Reprocessing-Clean will be located in an area with minimal traffic to minimize the risk of damage to sensitive and valuable instruments and infection/contamination of other Patients and Staff during transfer.

9.4.5 Outpatient Infusion Therapy (H2.3)

9.4.5.1 A combination of bays and rooms will be included to best meet the varied needs of this unique Patient population.

9.4.5.2 Bays will be sized to accommodate family members or loved ones who often accompany Patients on their visits.

9.4.5.3 Infusion Treatment Bay-Stretcher will be used by diverse population groups. Therefore, the requirements for Direct Natural Light and views to the exterior vary based on Patient population needs:

9.4.5.3(1) One (1) group of Patients is complex and unpredictable. These Patients only come in for a short time. Direct Natural Light and views to the exterior will not be required in Infusion Treatment Bays used by this population group.

9.4.5.3(2) One (1) group of Patients comes in for regular appointments and stays for longer treatments. Direct Natural Light and views to the exterior will be required in Infusion Treatment Bays used by this population group, as Patients will remain there for hours while receiving infusions.

9.4.5.3(3) The last group of Patients comes in for pain treatments. The procedure induces photosensitivity in these Patients and, hence, they will need to be away from Direct Natural Light.

9.4.5.3(4) The grouping of the Infusion Treatment Bays and room will not be based on these distinct Patient population groups and therefore will provide flexibility for Staff to book Patients into these bays and room with the appropriate level of Direct Natural Light suitable for their Patient population needs.

9.4.5.4 Infusion Treatment-Bed-Airborne Isolation-Hybrid will not require Direct Natural Light or views to the exterior.

9.4.5.5 To encourage hand hygiene and Infection Prevention and Control protocols, one (1) hand hygiene sink will be located and shared between two (2) Infusion Treatment Bay-Stretcher. The hand hygiene sink will be located outside the bays.

9.4.6 Outpatient Diagnostics (H2.4)

9.4.6.1 Outpatient Diagnostics will be grouped with MSK (H1.5 – Pod 05).

9.4.6.2 Outpatient Diagnostics will be a self-contained unit with dedicated changing and sub-waiting facilities to be included to safeguard Patient privacy and dignity and maximize clinical throughput. In addition, MSK (H1.5 – Pod 05) and Outpatient Diagnostics (H2.4) will be horizontally adjacent to Outpatient Clinic Pod 01 (H1.1) and Outpatient Clinic Pod 02 (H1.2).

9.4.6.3 Imaging-Digital Radiography, Radiology Tech Work/Supplies and Workstation-Diagnostics in this area will be located adjacent to the Waiting area as these spaces will receive a high number of Patients with mobility issues throughout the day.

9.4.6.4 Change Cubicle-Patient in this area will be centrally located and shared between Imaging-Digital Radiography, Exam Room-EEG, Exam Room-EMG and Exam Room-Evoked Potentials.

9.4.6.5 In addition, Imaging-Digital Radiography and its associated rooms will be grouped with Procedure Room-Cast and Procedure Room-Splint in MSK (H1.5 – Pod 05).

9.4.6.6 EEG, EMG and Evoked Potential Exam Rooms will be located in an area with minimal traffic away from elevators to safeguard Patient privacy and mitigate extraneous sound and vibrations as per Appendix 3C [Acoustic and Noise Control Measures].

9.4.6.7 Exam Room-EEG and Exam Room-Evoked Potentials will be grouped together to support Staff workflow. These two types of Outpatient Diagnostics exam rooms are highly sensitive to noise, with Exam Room-Evoked Potentials being the most sensitive.

9.4.6.8 Exam Room-Evoked Potentials will be located the farthest away from elevators, General Circulation and high traffic areas.

9.4.7 Outpatient Clinic Support

9.4.7.1 Patients requiring testing may go to the Outpatient Lab. POCT may also be provided in the clinics by nursing or phlebotomy Staff.

9.4.7.2 Staff support facilities will be available on the same floor as the outpatient clinics and will be scaled to the number of clinic modules on each floor.

9.4.7.3 Amenities will include coat and boot storage, lockers for day use, Nourishment Rooms and seating areas.

9.4.7.4 Materials management will deliver supplies to the Store-Clean Supplies.

9.4.7.5 Staff will distribute supplies from the Store-Clean Supplies to individual rooms in the area.

9.4.7.6 Back up supplies and those not used regularly will be kept in the Store-Clean Supplies.

9.4.7.7 Conference/Meeting Rooms will be designed for team members to complete administrative functions and consult with each other. These rooms will be located in off-stage areas.

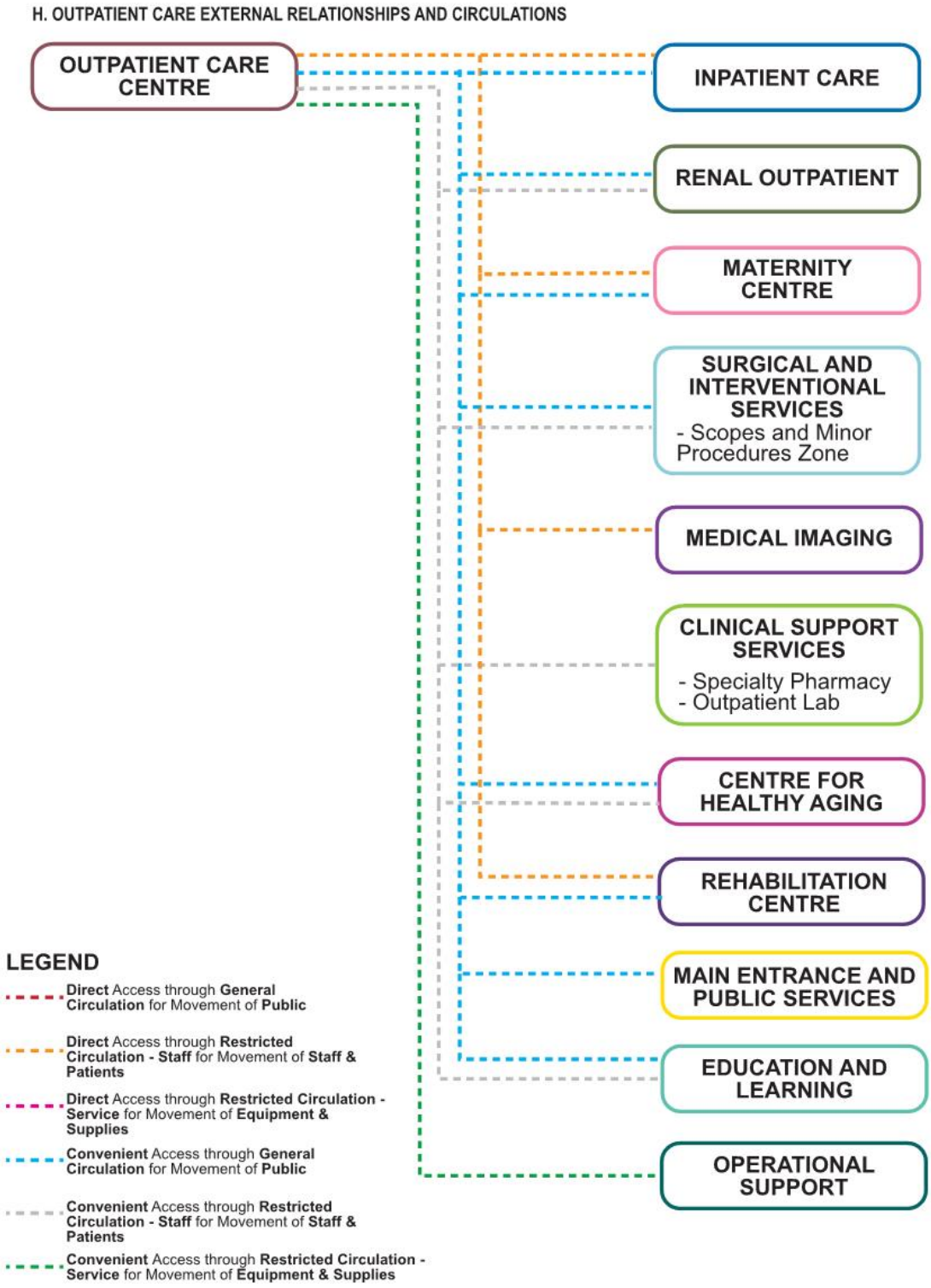
9.4.7.8 Conference/Meeting Rooms will be provided for private consultation between clinic Staff, residents and students regarding Patient findings, approaches to care, etc.

9.4.7.9 Open space with unassigned, shared workstations adjacent to Exam Rooms and Procedure Rooms (accommodating both standing and sitting) will be designed for Staff to complete various brief tasks.

9.4.7.10 Shared Staff Support areas will be accessible at all hours to allow Staff to continue Patient care management outside of clinic hours.

9.5 EXTERNAL RELATIONSHIPS

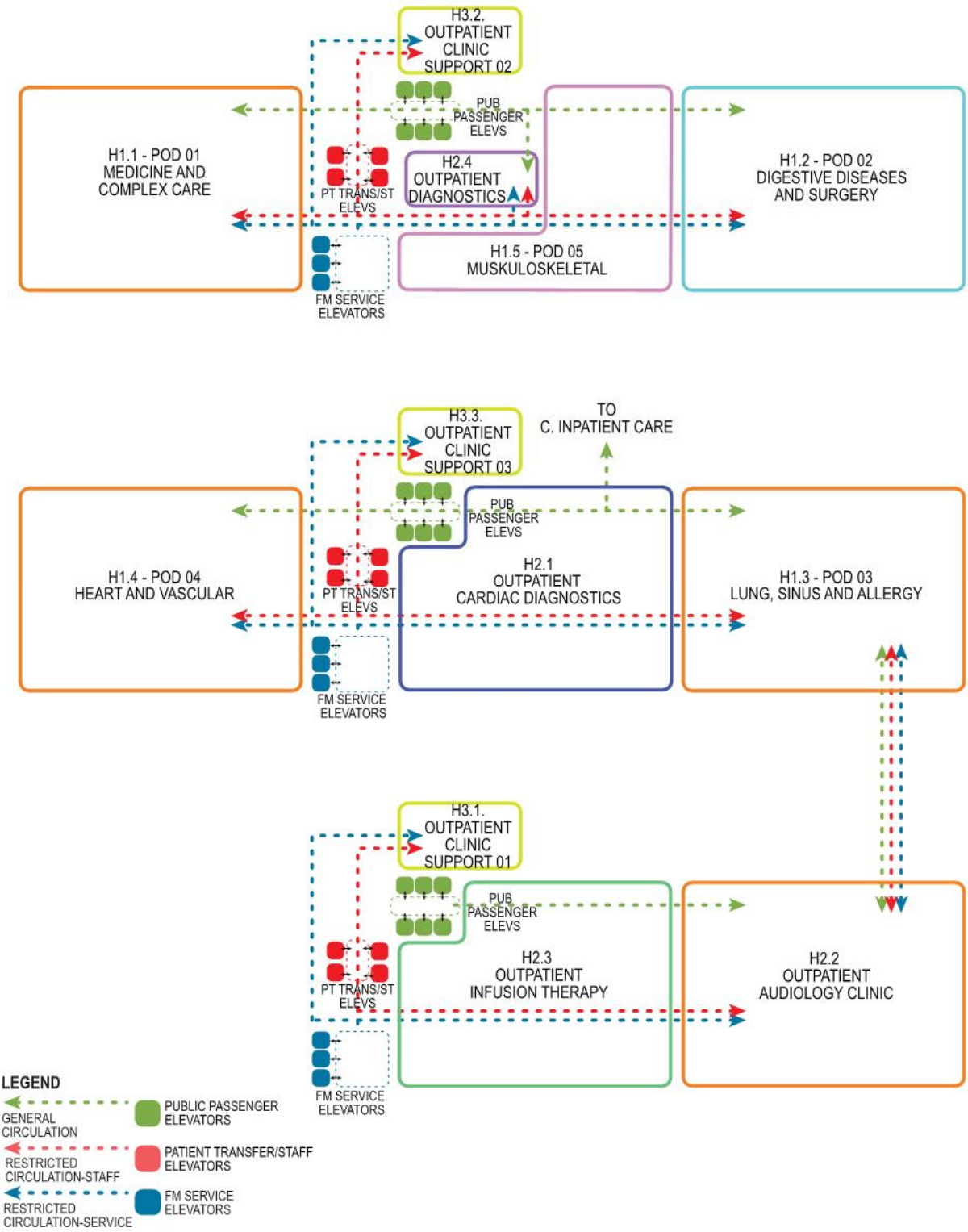
9.5.1 The following diagram indicates other Functional Components that have a functional relationship with this Component.



9.6 INTERNAL RELATIONSHIPS

9.6.1 The following diagrams indicate internal functional relationships within this Component.

H. OUTPATIENT CARE CENTRE INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



9.7 SCHEDULE OF ACCOMMODATIONS

9.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Outpatient Care Centre

H1 - GENERIC OUTPATIENT CLINICS	3199.00
H2 - OUTPATIENT DIAGNOSTIC AND SPECIALIZED CLINICS	1805.00
H3 - OUTPATIENT CLINIC SUPPORT	342.00
OUTPATIENT CARE CENTRE PROGRAMMED SPACE NSM:	**5,346.00**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
H1 - GENERIC OUTPATIENT CLINICS					
H1.1 - Outpatient Clinic Pod 01 - Medicine and Complex Care					
H1.1.1 - Outpatient Clinic Pod 01 Entrance					
H1.1.1.1	Reception	1	6.00	6.00	Incl. 1 workstation, cabinets.
H1.1.1.2	Waiting	1	48.00	48.00	Incl. seating for 32 including 2 in wheelchairs, Direct Access to Public Passenger Elevators and Washroom-Public.
H1.1.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Outpatient Clinic Pod 01.
H1.1.1.4	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
H1.1.2 - Outpatient Clinic Pod 01					
H1.1.2.1	Procedure Room-Airborne Isolation-Hybrid	1	16.50	16.50	Incl. 1 touch down workstation, counters, cabinets.
H1.1.2.2	Washroom-Patient Ensuite-Airborne Isolation	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
H1.1.2.3	Procedure Room	1	16.50	16.50	Incl. 1 touch down workstation, counters, cabinets.
H1.1.2.4	Exam Room-Large	20	14.00	280.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
H1.1.2.5	Workstation	6	4.50	27.00	Incl. 1 workstation, combined into one area.
H1.1.2.6	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, located in off-stage area in Generic Pod, either adjacent to Reception or Workstations.
H1.1.2.7	Medication Room-Small	1	8.00	8.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
H1.1.2.8	Inter-Professional Team Room	2	24.00	48.00	Incl. 8 touch down workstations.
H1.1.2.9	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities.
H1.1.3 - Outpatient Clinic Pod 01 Support Services					

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
H1.1.3.1	Alcove-Wheelchair	1	2.50	2.50	
H1.1.3.2	Store-Clean Supplies	1	16.00	16.00	
H1.1.3.3	Store-Local Equipment	1	16.00	16.00	Incl. shelving, charging station.
H1.1.3.4	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
H1.1.4 - Outpatient Clinic Pod 01 Staff Support					
H1.1.4.1	Conference/Meeting Room-Small	2	24.00	48.00	Accommodates 12 Persons.
H1.1.4.2	Office-Private	2	9.50	19.00	Incl. 1 workstation.
H1.1.4.3	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
H1.1.4.4	Workstation	6	4.50	27.00	Incl. 1 workstation, combined into one area.
H1.1.4.5	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
H1.1.4.6	Washroom-Staff	2	3.00	6.00	2-piece.
H1.2 - Outpatient Clinic Pod 02 - Digestive Diseases and Surgery					
H1.2.1 - Outpatient Clinic Pod 02 Entrance					
H1.2.1.1	Reception	1	6.00	6.00	Incl. 1 workstation, cabinets.
H1.2.1.2	Waiting	1	48.00	48.00	Incl. seating for 32 including 2 in wheelchairs, Direct Access to Public Passenger Elevators and Washroom-Public.
H1.2.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Outpatient Clinic Pod 02.
H1.2.1.4	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
H1.2.2 - Outpatient Clinic Pod 02					
H1.2.2.1	Procedure Room	2	16.50	33.00	Incl. 1 touch down workstation, counters, cabinets.
H1.2.2.2	Exam Room-Large	19	14.00	266.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
H1.2.2.3	Workstation	6	4.50	27.00	Incl. 1 workstation, combined into one area.
H1.2.2.4	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, located in off-stage area in Generic Pod, either adjacent to Reception or Workstations.
H1.2.2.5	Medication Room-Small	1	8.00	8.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
H1.2.2.6	Inter-Professional Team Room	2	24.00	48.00	Incl. 8 touch down workstations.
H1.2.2.7	Washroom-Patient	3	4.50	13.50	2-piece, accessible for Persons with Disabilities.
H1.2.2.8	Exam Room-Large-Airborne Isolation-Hybrid	1	14.00	14.00	Incl. 1 touch down workstation, counters, cabinets.
H1.2.3 - Outpatient Clinic Pod 02 Support Services					
H1.2.3.1	Alcove-Wheelchair	1	2.50	2.50	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
H1.2.3.2	Store-Clean Supplies	1	16.00	16.00	
H1.2.3.3	Store-Local Equipment	1	16.00	16.00	Incl. shelving, charging station.
H1.2.3.4	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
H1.2.4 - Outpatient Clinic Pod 02 Staff Support					
H1.2.4.1	Conference/Meeting Room-Small	2	24.00	48.00	Accommodates 12 Persons.
H1.2.4.2	Office-Private	2	9.50	19.00	Incl. 1 workstation.
H1.2.4.3	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
H1.2.4.4	Workstation	6	4.50	27.00	Incl. 1 workstation, combined into one area.
H1.2.4.5	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
H1.2.4.6	Washroom-Staff	2	3.00	6.00	2-piece.
H1.3 - Outpatient Clinic Pod 03 - Lung, Sinus and Allergy					
H1.3.1 - Outpatient Clinic Pod 03 Entrance					
H1.3.1.1	Reception	1	6.00	6.00	Incl. 1 workstation, cabinets.
H1.3.1.2	Waiting	1	48.00	48.00	Incl. seating for 32 including 2 in wheelchairs, Direct Access to Public Passenger Elevators and Washroom-Public.
H1.3.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Outpatient Clinic Pod 03.
H1.3.1.4	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
H1.3.2 - Outpatient Clinic Pod 03					
H1.3.2.1	Procedure Room-Airborne Isolation-Hybrid	1	16.50	16.50	Incl. 1 touch down workstation, counters, cabinets.
H1.3.2.2	Washroom-Patient Ensuite-Airborne Isolation	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
H1.3.2.3	Procedure Room	1	16.50	16.50	Incl. 1 touch down workstation, counters, cabinets.
H1.3.2.4	Procedure Room-Respiratory Diagnostics	6	14.00	84.00	Incl. 1 touch down workstation, counters, cabinets.
H1.3.2.5	Exam Room-Large	14	14.00	196.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
H1.3.2.6	Workstation	6	4.50	27.00	Incl. 1 workstation, combined into one area.
H1.3.2.7	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, located in off-stage area in Generic Pod, either adjacent to Reception or Workstations.
H1.3.2.8	Medication Room-Small	1	8.00	8.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
H1.3.2.9	Inter-Professional Team Room	2	24.00	48.00	Incl. 8 touch down workstations.
H1.3.2.10	Satellite Scope Reprocessing-Soiled	1	20.00	20.00	Incl. pass through chamber to Satellite Scope Reprocessing-Clean, Direct Access to corridor, adjacent to Satellite Scope

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
					Reprocessing-Clean.
H1.3.2.11	Satellite Scope Reprocessing-Clean	1	20.00	20.00	Direct Access to corridor, adjacent to Satellite Scope Reprocessing-Soiled.
H1.3.2.12	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities.
H1.3.3 - Outpatient Clinic Pod 03 Support Services					
H1.3.3.1	Alcove-Wheelchair	1	2.50	2.50	
H1.3.3.2	Store-Clean Supplies	1	16.00	16.00	
H1.3.3.3	Store-Local Equipment	1	16.00	16.00	Incl. shelving, charging station.
H1.3.3.4	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
H1.3.4 - Outpatient Clinic Pod 03 Staff Support					
H1.3.4.1	Conference/Meeting Room-Small	2	24.00	48.00	Accommodates 12 Persons.
H1.3.4.2	Office-Private	2	9.50	19.00	Incl. 1 workstation.
H1.3.4.3	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
H1.3.4.4	Workstation	6	4.50	27.00	Incl. 1 workstation, combined into one area.
H1.3.4.5	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
H1.3.4.6	Washroom-Staff	2	3.00	6.00	2-piece.
H1.4 - Outpatient Clinic Pod 04 - Heart and Vascular					
H1.4.1 - Outpatient Clinic Pod 04 Entrance					
H1.4.1.1	Reception	1	6.00	6.00	Incl. 1 workstation, cabinets.
H1.4.1.2	Waiting	1	48.00	48.00	Incl. seating for 32 including 2 in wheelchairs, Direct Access to Public Passenger Elevators and Washroom-Public.
H1.4.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Outpatient Clinic Pod 04.
H1.4.1.4	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
H1.4.2 - Outpatient Clinic Pod 04					
H1.4.2.1	Procedure Room	2	16.50	33.00	Incl. 1 touch down workstation, counters, cabinets.
H1.4.2.2	Exam Room-Large	19	14.00	266.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
H1.4.2.3	Workstation	6	4.50	27.00	Incl. 1 workstation, combined into one area.
H1.4.2.4	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, located in off-stage area in Generic Pod, either adjacent to Reception or Workstations.
H1.4.2.5	Medication Room-Small	1	8.00	8.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
H1.4.2.6	Inter-Professional Team Room	2	24.00	48.00	Incl. 8 touch down workstations.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
H1.4.2.7	Washroom-Patient	3	4.50	13.50	2-piece, accessible for Persons with Disabilities.
H1.4.2.8	Exam Room-Large-Airborne Isolation-Hybrid	1	14.00	14.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
H1.4.3 - Outpatient Clinic Pod 04 Support Services					
H1.4.3.1	Alcove-Wheelchair	1	2.50	2.50	
H1.4.3.2	Store-Clean Supplies	1	16.00	16.00	
H1.4.3.3	Store-Local Equipment	1	16.00	16.00	Incl. shelving, charging station.
H1.4.3.4	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
H1.4.4 - Outpatient Clinic Pod 04 Staff Support					
H1.4.4.1	Conference/Meeting Room-Small	2	24.00	48.00	Accommodates 12 Persons.
H1.4.4.2	Office-Private	2	9.50	19.00	Incl. 1 workstation.
H1.4.4.3	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
H1.4.4.4	Workstation	6	4.50	27.00	Incl. 1 workstation, combined into one area.
H1.4.4.5	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
H1.4.4.6	Washroom-Staff	2	3.00	6.00	2-piece.
H1.5 - Outpatient Clinic Pod 05 - Musculoskeletal					
H1.5.1 - Outpatient Clinic Pod 05 Entrance					
H1.5.1.1	Reception	1	6.00	6.00	Incl. 1 workstation, cabinets.
H1.5.1.2	Waiting	1	48.00	48.00	Incl. seating for 32 including 2 in wheelchairs, Direct Access to Public Passenger Elevators and Washroom-Public.
H1.5.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Outpatient Clinic Pod 05.
H1.5.1.4	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
H1.5.2 - Outpatient Clinic Pod 05					
H1.5.2.1	Procedure Room	2	16.50	33.00	Incl. 1 touch down workstation, counters, cabinets.
H1.5.2.2	Procedure Room-Cast	1	18.00	18.00	Incl. 1 touch down workstation, counters, cabinets, casting procedures being performed in this room, 2 open bays with privacy curtains.
H1.5.2.3	Procedure Room-Splint	1	16.50	16.50	Incl. 1 touch down workstation, counters, cabinets, casting/splinting procedures being performed in this room.
H1.5.2.4	Exam Room-Large	18	14.00	252.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
H1.5.2.5	Exam Room-Dermatology	1	9.50	9.50	Incl. 1 touch down workstation, counters, cabinets.
H1.5.2.6	Workstation	6	4.50	27.00	Incl. 1 workstation, combined into one area.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
H1.5.2.7	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, located in off-stage area in Generic Pod, either adjacent to Reception or Workstations.
H1.5.2.8	Medication Room-Small	1	8.00	8.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
H1.5.2.9	Inter-Professional Team Room	2	24.00	48.00	Incl. 8 touch down workstations.
H1.5.2.10	Washroom-Patient	3	4.50	13.50	2-piece, accessible for Persons with Disabilities. 1 Washroom-Patient to be grouped with Procedure Room-Cast and Procedure Room-Splint.
H1.5.2.11	Exam Room-Large-Airborne Isolation-Hybrid	1	14.00	14.00	Incl. 1 touch down workstation, counters, cabinets.
H1.5.3 - Outpatient Clinic Pod 05 Support Services					
H1.5.3.1	Alcove-Wheelchair	1	2.50	2.50	
H1.5.3.2	Store-Clean Supplies	1	16.00	16.00	
H1.5.3.3	Store-Local Equipment	1	16.00	16.00	Incl. shelving, charging station.
H1.5.3.4	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
H1.5.4 - Outpatient Clinic Pod 05 Staff Support					
H1.5.4.1	Conference/Meeting Room-Small	1	24.00	24.00	Accommodates 12 Persons.
H1.5.4.2	Office-Private	1	9.50	9.50	Incl. 1 workstation.
H1.5.4.3	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
H1.5.4.4	Workstation	6	4.50	27.00	Incl. 1 workstation, combined into one area.
H1.5.4.5	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
H1.5.4.6	Washroom-Staff	2	3.00	6.00	2-piece.
	TOTAL NSM: Generic Clinics			**3,199.00**	
H2 - OUTPATIENT DIAGNOSTIC AND SPECIALIZED CLINICS					
H2.1 - Outpatient Cardiac Diagnostics					
H2.1.1 - Outpatient Cardiac Diagnostics Entrance					
H2.1.1.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets.
H2.1.1.2	Waiting	1	48.00	48.00	Incl. seating for 32 including 2 in wheelchairs, Direct Access to Public Passenger Elevators.
H2.1.1.3	Waiting	2	6.00	12.00	Incl. seating for 3 including 1 in wheelchair.
H2.1.1.4	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Outpatient Cardiac Diagnostics (H2.1).
H2.1.2 - Outpatient Cardiac Diagnostics Clinic					
H2.1.2.1	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
H2.1.2.2	Stretcher Prep Bay	3	9.50	28.50	Open bay with privacy curtains.
H2.1.2.3	Stress Test-Set-up	3	5.50	16.50	Open bay with privacy curtains.
H2.1.2.4	Exam Room-ECG	7	10.00	70.00	Incl. 1 touch down workstation, counters, cabinets.
H2.1.2.5	Exam Room-Echo	8	12.00	96.00	Incl. 1 touch down workstation, counters, cabinets.
H2.1.2.6	Exam Room-Vascular	2	14.00	28.00	Incl. 1 touch down workstation, counters, cabinets.
H2.1.2.7	Exam Room-Stress Test-Non-Nuclear	1	68.00	68.00	Incl. 6 open bays, 6 touch down workstations, counters, cabinets.
H2.1.2.8	Holter Monitor Bay	1	30.00	30.00	Incl. 2 workstations, 4 open bays with privacy curtains.
H2.1.2.9	Holter Monitor Analysis Area	1	9.00	9.00	Incl. 2 workstations, counters, cabinets, shelving, charging station.
H2.1.2.10	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, adjacent to Workstation-ECHO.
H2.1.2.11	Change Cubicle-Patient	2	3.50	7.00	
H2.1.2.12	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities.
H2.1.2.13	Washroom/Shower-Patient	1	4.50	4.50	3-piece incl. shower.
H2.1.3 - Outpatient Cardiac Diagnostics Clinic Support Services					
H2.1.3.1	Alcove-Crash Cart	1	1.50	1.50	Adjacent to Exam Room-Stress Test-Non-Nuclear, shared with adjacent Outpatient pods.
H2.1.3.2	Alcove-ECG	1	3.00	3.00	
H2.1.3.3	Alcove-Wheelchair	1	2.50	2.50	
H2.1.3.4	Store-Clean Supplies	1	16.00	16.00	
H2.1.3.5	Store-Local Equipment	1	12.00	12.00	Incl. shelving, charging station.
H2.1.3.6	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
H2.1.3.7	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
H2.1.4 - Outpatient Cardiac Diagnostics Clinic Staff Support					
H2.1.4.1	Workstation-ECHO	10	4.50	45.00	Incl. 1 workstation, combined into one area.
H2.1.4.2	Workstation-ECG	3	4.50	13.50	Incl. 1 workstation, combined into one area.
H2.1.4.3	Workstation-Card Team	2	4.50	9.00	Incl. 1 workstation, combined into one area, adjacent to Exam Room-Stress Test-Non-Nuclear.
H2.1.4.4	Reading Room-PACS	1	24.00	24.00	Incl. 4 PACS workstations.
H2.1.4.5	Office-Private	2	9.50	19.00	Incl. 1 workstation.
H2.1.4.6	Office-4 Shared	1	20.00	20.00	Incl. 4 workstations.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
H2.1.4.7	Workstation	4	4.50	18.00	Incl. 1 workstation, combined into one area.
H2.1.4.8	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
H2.1.4.9	Washroom-Staff	1	3.00	3.00	2-piece.
H2.2 - Outpatient Audiology Clinic					
H2.2.1 - Outpatient Audiology Clinic Entrance					
H2.2.1.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets.
H2.2.1.2	Waiting	1	48.00	48.00	Incl. seating for 32 including 2 in wheelchairs, Direct Access to Public Passenger Elevators.
H2.2.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Outpatient Audiology Clinic.
H2.2.2 - Outpatient Audiology Clinic					
H2.2.2.1	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation.
H2.2.2.2	Group Therapy Room-Tinnitus	1	24.00	24.00	Incl. seating for 12.
H2.2.2.3	Procedure Room	1	16.50	16.50	Incl. 1 touch down workstation, counters, cabinets.
H2.2.2.4	Exam Room-Large	4	14.00	56.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
H2.2.2.5	Exam Room-ABR	3	10.00	30.00	Incl. 1 touch down workstation, counters, cabinets.
H2.2.2.6	Exam Room-Audiometry Booth	4	10.00	40.00	All Exam Room-Audiometry Booths and Exam Room-Audiometry Booths-CIS can be combined into one room with 7 double-walled booths.
H2.2.2.7	Exam Room-Audiometry Booth-CIS	3	12.00	36.00	All Exam Room-Audiometry Booths and Exam Room-Audiometry Booths-CIS can be combined into one room with 7 double-walled booths.
H2.2.2.8	Exam Room-CIS	10	10.00	100.00	Incl. 1 touch down workstation, counters, cabinets.
H2.2.2.9	Exam Room-VHIT	2	10.00	20.00	Incl. 1 touch down workstation, counters, cabinets.
H2.2.2.10	Exam Room-VNG	2	16.00	32.00	Incl. 1 touch down workstation, counters, cabinets.
H2.2.2.11	Alcove-Touchdown/Charting	6	1.00	6.00	Incl. 1 touch down workstation.
H2.2.2.12	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, adjacent to Workstation-Audiology.
H2.2.2.13	Inter-Professional Team Room	1	24.00	24.00	Incl. 8 touch down workstations.
H2.2.2.14	Washroom-Patient	3	4.50	13.50	2-piece, accessible for Persons with Disabilities.
H2.2.3 - Outpatient Audiology Clinic Support Services					
H2.2.3.1	Alcove-Crash Cart	1	1.50	1.50	Centrally located, shared with adjacent Outpatient pods.
H2.2.3.2	Alcove-Imaging Equipment-C-Arm	1	3.00	3.00	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
H2.2.3.3	Alcove-Wheelchair	1	2.50	2.50	
H2.2.3.4	Store-Clean Supplies	1	16.00	16.00	
H2.2.3.5	Store-Local Equipment	1	12.00	12.00	Incl. shelving, charging station.
H2.2.3.6	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
H2.2.3.7	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
H2.2.4 - Outpatient Audiology Clinic Staff Support					
H2.2.4.1	Workstation-Audiology	6	4.50	27.00	Incl. 1 workstation, combined into one area.
H2.2.4.2	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
H2.2.4.3	Washroom-Staff	1	3.00	3.00	2-piece.
H2.3 - Outpatient Infusion Therapy					
H2.3.1 - Outpatient Infusion Therapy Entrance					
H2.3.1.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets.
H2.3.1.2	Waiting	1	25.50	25.50	Incl. seating for 16 including 1 in wheelchairs, Direct Access to Public Passenger Elevators.
H2.3.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Outpatient Infusion Therapy.
H2.3.2 - Outpatient Infusion Therapy Clinic					
H2.3.2.1	Exam Room	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, dual egress.
H2.3.2.2	Infusion Treatment-Bed-Airborne Isolation-Hybrid	1	12.00	12.00	Incl. counters, cabinets, ceiling lift.
H2.3.2.3	Washroom-Patient Ensuite-Airborne Isolation	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
H2.3.2.4	Not Used	0	0.00	0.00	
H2.3.2.5	Infusion Treatment Bay-Stretcher	20	10.00	200.00	Incl. counters, cabinets, walled on 3 sides with privacy curtains, ceiling lift.
H2.3.2.6	Care Team Station	1	8.00	8.00	Incl. 2 workstations, cabinets, charging station, dual egress.
H2.3.2.7	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.
H2.3.2.8	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
H2.3.2.9	Medication Room-Medium	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
H2.3.2.10	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets.
H2.3.2.11	Washroom-Patient	3	4.50	13.50	2-piece, accessible for Persons with Disabilities.
H2.3.3 - Outpatient Infusion Therapy Clinic Support Services					

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
H2.3.3.1	Alcove-Crash Cart	1	1.50	1.50	Centrally located, shared with adjacent Outpatient pods.
H2.3.3.2	Not Used	0	0.00	0.00	
H2.3.3.3	Alcove-Local Equipment	1	1.50	1.50	
H2.3.3.4	Alcove-Wheelchair	1	2.50	2.50	
H2.3.3.5	Store-Clean Supplies	1	10.00	10.00	
H2.3.3.6	Store-Local Equipment	1	12.00	12.00	Incl. shelving, charging station.
H2.3.3.7	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
H2.3.3.8	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
H2.3.4 - Outpatient Infusion Therapy Clinic Staff Support					
H2.3.4.1	Workstation	6	4.50	27.00	Incl. 1 workstation, combined into one area.
H2.3.4.2	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
H2.3.4.3	Washroom-Staff	1	3.00	3.00	2-piece.
H2.4 - Outpatient Diagnostics					
H2.4.1 - Outpatient Diagnostics Entrance					
H2.4.1.1	Waiting	1	6.00	6.00	Incl. seating for 3 including 1 in wheelchair, Direct Access to Public Passenger Elevators.
H2.4.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Outpatient Diagnostics.
H2.4.2 - Outpatient Diagnostics					
H2.4.2.1	Exam Room-EEG	2	16.00	32.00	Incl. 1 touch down workstation, counters, cabinets.
H2.4.2.2	Exam Room-EMG	2	16.00	32.00	Incl. 1 touch down workstation, counters, cabinets.
H2.4.2.3	Exam Room-Evoked Potentials	1	16.00	16.00	Incl. 1 touch down workstation, counters, cabinets.
H2.4.2.4	Imaging-Digital Radiography	2	30.00	60.00	Incl. cabinets, shelving, ceiling lift with complex ceiling coverage, lead lined, Control-Imaging with 1 workstation, window between Control-Imaging and Imaging-Digital Radiography with Line of Sight to the whole room.
H2.4.2.5	Radiology Tech Work/Supplies	2	3.00	6.00	Incl. 1 touch down workstation, cabinets, combined into one area.
H2.4.2.6	Workstation-Diagnostics	3	4.50	13.50	Incl. 1 workstation, combined into one area.
H2.4.2.7	Change Cubicle-Patient	2	3.50	7.00	
H2.4.2.8	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
	TOTAL NSM: OP Diagnostic and Specialized Clinics			**1,805.00**	
H3 - OUTPATIENT CLINIC SUPPORT					
H3.1 - Outpatient Clinic Support 01					
H3.1.1 - Outpatient Clinic Support 01 Shared Support Services					
H3.1.1.1	Alcove-Blanket Warmer	2	1.50	3.00	Adjacent to Alcove-Clean Linen.
H3.1.1.2	Alcove-Clean Linen	2	2.50	5.00	
H3.1.1.3	Store-Central Equipment	1	18.50	18.50	Incl. shelving, charging station.
H3.1.1.4	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
H3.1.2 - Outpatient Clinic Support 01 Shared Staff Support					
H3.1.2.1	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
H3.1.2.2	Lockers-Staff	1	30.00	30.00	Incl. 84 Z-lockers, 1 shoe rack, split into male and female if required, adjacent to Lounge-Staff.
H3.1.2.3	Washroom-Staff-Accessible	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
H3.1.2.4	Washroom-Staff	3	3.00	9.00	2-piece.
H3.2 - Outpatient Clinic Support 02					
H3.2.1 - Outpatient Clinic Support 02 Shared Support Services					
H3.2.1.1	Alcove-Blanket Warmer	2	1.50	3.00	Adjacent to Alcove-Clean Linen.
H3.2.1.2	Alcove-Clean Linen	2	2.50	5.00	
H3.2.1.3	Store-Central Equipment	1	18.50	18.50	Incl. shelving, charging station.
H3.2.1.4	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
H3.2.2 - Outpatient Clinic Support 02 Shared Staff Support					
H3.2.2.1	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
H3.2.2.2	Lockers-Staff	1	30.00	30.00	Incl. 84 Z-lockers, 1 shoe rack, split into male and female if required, adjacent to Lounge-Staff.
H3.2.2.3	Washroom-Staff-Accessible	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
H3.2.2.4	Washroom-Staff	3	3.00	9.00	2-piece.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
H3.3 - Outpatient Clinic Support 03					
H3.3.1 - Outpatient Clinic Support 03 Shared Support Services					
H3.3.1.1	Alcove-Blanket Warmer	2	1.50	3.00	Adjacent to Alcove-Clean Linen.
H3.3.1.2	Alcove-Clean Linen	2	2.50	5.00	
H3.3.1.3	Store-Central Equipment	1	18.50	18.50	Incl. shelving, charging station.
H3.3.1.4	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
H3.3.2 - Outpatient Clinic Support 03 Shared Staff Support					
H3.3.2.1	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
H3.3.2.2	Lockers-Staff	1	30.00	30.00	Incl. 84 Z-lockers, 1 shoe rack, split into male and female if required, adjacent to Lounge-Staff.
H3.3.2.3	Washroom-Staff-Accessible	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
H3.3.2.4	Washroom-Staff	3	3.00	9.00	2-piece.
	TOTAL NSM: OP Clinic Support			**342.00**	
	TOTAL NSM: OUTPATIENT CARE CENTRE			**5,346.00**	

THE NEW ST. PAUL'S PHASE 1A

I. MEDICAL IMAGING

APPENDIX 3A - CLINICAL SPECIFICATIONS AND FUNCTIONAL SPACE REQUIREMENTS

I. MEDICAL IMAGING

10.1 OVERVIEW

10.1.1 Medical Imaging services will provide the special skill set and resources required by all IPUs as well as the Critical Care Complex, ED and Outpatient Care Centre. Medical Imaging will be available for Radiography, Ultrasound, CT, MRI, NM, Bone Densitometry and selective sub specialty imaging. Mobile radiographic and Imaging-Ultrasound will occur as required.

10.1.2 All medical images will be digitally produced and as such will be accessible wherever a high-resolution computer terminal exists and the user has the authority to access. There will be several high-resolution PACS viewing stations, including at Care Team Stations and in Physicians Workrooms. All charting computers will also be used for viewing digital medical images.

10.2 FUNCTIONAL DESCRIPTION

10.2.1 Scope of Services

10.2.1.1 The Medical Imaging Component provides a comprehensive range of diagnostic and therapeutic medical imaging services. Medical Imaging is a key Component within the NSPH and for many conditions is central to ensuring the best possible clinical outcomes. The capacity of imaging to support the processes of diagnosis and treatment is constantly expanding as medical science advances. In addition, ongoing technological advances in the modalities themselves only compound this process of change. These factors combine to place increasing pressure on this Component and the need to incorporate strategies for Future Expansion of modalities is essential in any investment strategy.

10.2.1.2 Scope of Educational Activity

10.2.1.2(1) Medical Imaging is an approved partner site to BCIT and UBC through the Canadian Medical Association. The Medical Imaging is involved in training radiography students, NM students, ultrasound students, MRI students, residents and fellows in addition to our role as a Medical Imaging Component for the province of BC. Medical Imaging actively pursues research projects and will provide educational seminars and preceptorships for imaging professionals on an international basis.

10.2.1.2(2) Training for radiologists, fellows, residents, technologists and other Staff will occur within Medical Imaging modalities, administrative, Conference/Meeting Rooms and other support areas.

10.2.1.2(3) All teaching and supervisor functions will be accommodated in the general work area and in the Supervisor offices and will not require specialized or dedicated facilities in this Component. Utilization of spaces such as Conference/Meeting Rooms, in the MI Component will be carried out as they will be used for teaching purposes.

Supervisor functions will be accommodated in their dedicated work areas in private offices along with 2 clinical educators' offices.

10.2.1.3 Scope of Research Activity

10.2.1.3(1) Clinical research activities will be conducted within the Component. The nature and extent of research functions will be accommodated in the general work areas and will not require specialized or dedicated facilities in this Component.

10.2.2 Services provided

10.2.2.1 The following identifies they key modalities that will be provided in Medical Imaging:

10.2.2.1(1) Radiography (Digital Radiography and Fluoroscopy);

10.2.2.1(2) Ultrasound;

10.2.2.1(3) CT;

10.2.2.1(4) MRI;

10.2.2.1(5) Nuclear Medicine (NM) and PET/CT (future); and

10.2.2.1(6) Bone Densitometry.

10.2.2.2 Interventional Radiology (IR) is a part of MI and will be provided on the Surgical and Interventional Services (see Component G).

10.2.2.3 Most Medical Imaging will be conducted in the NSPH Medical Imaging Component. Imaging for Patients on IPUs who cannot be transported to the Medical Imaging Component, will be accommodated using portable equipment that will be transported to the POC.

10.2.2.4 In addition to the main Medical Imaging Component, imaging services will be provided in the ED, Surgical and Major Procedures Zone, Scopes and Minor Procedures Zone and Anaesthetic Care Units using mobile and fixed imaging equipment stored in these areas. The Outpatient Care Centre will be equipped with the appropriate Medical Imaging services. Imaging will be digital and accessible through PACS.

10.3 OPERATIONAL CONSIDERATIONS

10.3.1 Service Delivery Principles and Methods

10.3.1.1 Patient and Family Management Processes and Flows

10.3.1.1(1) The Medical Imaging Component will provide imaging services for outpatients and inpatients, referrals from other facilities and emergency Patients. Patients may be ambulatory or may arrive to

the Component via stretcher, wheelchair or hospital bed. It will also be the main operational hub for all imaging services, team spaces and inter-professional interaction.

10.3.1.1(2) Ambulatory Patients that arrive for medical imaging will proceed directly to the main Reception area in the MI Component to complete any documentation that is required and confirm pre-procedure preparations or instructions have been followed. Patients will then be directed or escorted to the appropriate modality inside the MI Component where a Patient may be required to change or receive additional preparation. Unscheduled arrivals will be registered assuming the Patient has the necessary information/test required. Post procedure, ambulatory Patients will get their personal belongings and be discharged for the Component.

10.3.1.1(3) All scheduled and unscheduled Patients will be received at the main reception desk.

10.3.1.1(4) Integrated electronic scheduling strategies will promote streaming Patients to their POC with minimal wait times.

10.3.1.1(5) Most Patients will be pre-booked and given instructions to prepare for their appointment by their referring physician. Patients may register on-line, or at one of the registration kiosks upon arrival to their appointment. Once the Patient arrives for their appointment, the specific modality technologist will be notified. When the room is ready, Patients will be directed to the appropriate destination.

10.3.1.1(6) Waiting and preparation areas will be located in each modality pod. Patients may need to change, be prepped prior to their exam and will use the Change Cubicle-Patient adjacent to each modality pod. Washrooms will be available for each pod. Once the Patient is ready, a technologist will escort them to the Procedure Room.

10.3.1.1(7) Once their examination is complete, Patients will be directed back to the Change Cubicle-Patient and if necessary, asked to wait to see if further imaging is required.

10.3.1.2 Patient Information Management

10.3.1.2(1) IT such as wireless networking throughout the Component, telemedicine connections for consultations with the NSPH throughout the province, and EMR will be employed.

10.3.1.3 Clinical and Logistical Support Processes and Flows

10.3.1.3(1) Pharmacy Services

10.3.1.3(1)(a) All medication required in this Component will be stored and accessed in the ADC. Medication in the ADC will be stocked and monitored by the Main Pharmacy Component.

10.3.1.3(2) Biomedical Engineering/Informatics Space (PACS/RIS)

10.3.1.3(2)(a) A Workroom-Biomedical Engineering will be provided in this Component for the repair and testing of imaging Equipment. The room will have radiation shielding and cabinets for storage of parts. The room will also have an Equipment lift and ceiling hoist. Large pieces of Equipment will be tested and repaired in the Procedure Rooms, whereas smaller pieces of Equipment or parts will be transported to the Workroom.

10.3.1.3(2)(b) The Workroom-Biomedical Engineering will be located in an area with minimal traffic and away from Patient care areas.

10.3.1.3(2)(c) Workroom-Technologist for Medical Imaging informatics will include space for eight (8) workstations. Space will be required for hot swap Reading Room-PACS workstations for repairs and other IT repair space.

10.3.1.3(3) Equipment and Instruments

10.3.1.3(3)(a) Sterile supplies used in Medical Imaging procedures will be brought to the unit from the Sterile Storage and Distribution area in MDRD, with soiled equipment returning to the Decontamination Area in MDRD for reprocessing via Patient Transfer/Staff Service Elevators.

10.3.1.3(3)(b) Other supplies and disposables will be brought to the unit from dedicated central storage. Sufficient supplies will be stored at Component level for normal operation with automatic monitoring of inventory and re-supply using Smart technology.

10.3.1.3(3)(c) The Equipment Depot (See Component O) will store all excess Equipment that can be quickly brought to any Patient space by multi-skilled workers with the support of AGVs.

10.3.1.3(3)(d) Necessary equipment will be kept on the unit in alcoves for ease of access.

10.3.1.3(3)(e) RTLS tagging of Equipment will allow for tracking and monitoring.

10.3.1.3(4) Laundry and Linen

10.3.1.3(4)(a) All clean linen used for Patient care will be stored close to the point of use and away from public access to minimize the potential of cross contamination. All inventories will be replaced based on pre-decided levels.

10.3.1.3(4)(b) Soiled linen will be placed in hampers and moved to Disposal Hold area for pick up via housekeeping Staff or AGVs via FM Service Elevators.

10.3.1.3(4)(c) Clean and soiled linen will be transported to the loading dock and from the Component using an exchange cart system.

10.3.1.3(5) Waste Management

10.3.1.3(5)(a) Waste will be picked up and transported to the loading dock area from Disposal Hold.

10.3.1.4 Anticipated Trends in Service Delivery

10.3.1.4(1) The following trends can be anticipated and can affect the nature and/or extent of functions accommodated within this Component:

10.3.1.4(1)(a) Telemedicine technology will continue expanding to provide more services to remotely located Patients and will expand to include more of the imaging modalities.

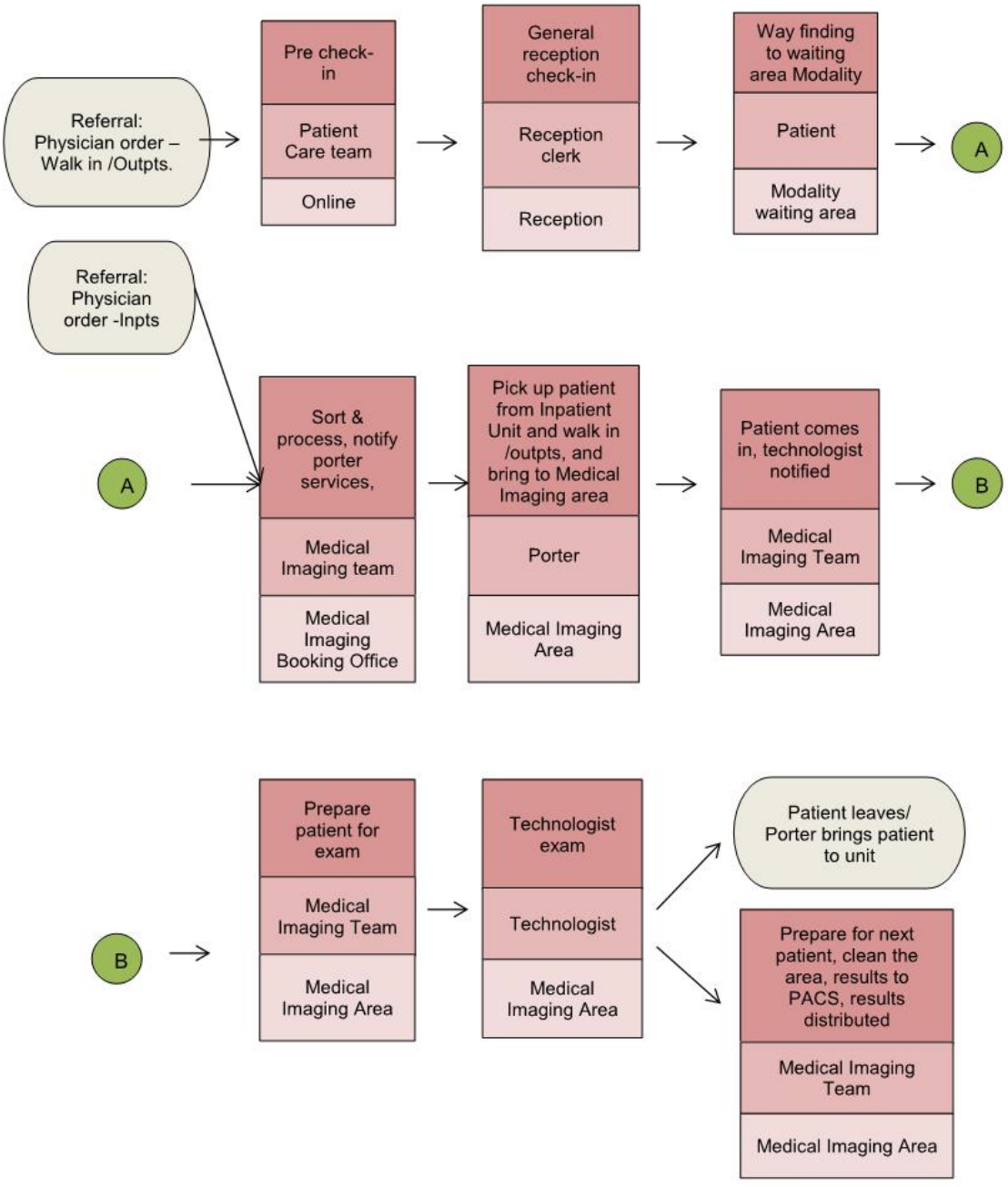
10.3.1.4(1)(b) The mix of purely diagnostic and interventional imaging procedures will continue and will increase the average procedure time per Patient.

10.3.1.4(1)(c) The Medical Imaging layout anticipates Future Expansion and rebalancing of modalities as the capacity of imaging to support the processes of diagnosis and treatment is constantly expanding along with advances in the modalities. Expansion capability will be built in to accommodate additional one (1) CT, one (1) MRI and one (1) Positron Emission Tomography (PET) enabled Gamma Camera, along with Support Spaces arranged to accommodate additional Imaging-Ultrasound and Imaging-Digital Radiography rooms if necessary.

10.3.2 Workflows

10.3.2.1 The Medical Imaging Component workflows are depicted in the following workflow diagram.

I. MEDICAL IMAGING WORKFLOW DIAGRAM



10.3.3 Hours of Operation

10.3.3.1 Inpatient and emergency MI hours are 24/7 with the exception of Nuclear Medicine.

10.3.3.2 Outpatient MI hours are as follows:

10.3.3.2(1) Radiography: 0800 – 1600 hours, Monday to Friday

10.3.3.2(2) Ultrasound: 0730 – 2130 hours, 7 days per week

10.3.3.2(3) CT: 0730 – 2130 hours, 7 days per week

10.3.3.2(4) MRI: 24/7- and 363-day service for Outpatients. 0700 – 2200 hours, Monday to Sunday for Inpatients

10.3.3.2(5) NM: 0630 – 1800 hours, Monday to Friday, 0700 – 1530 hours, Saturday

10.3.4 Workloads

10.3.4.1 The maximum estimated workload for this Component is shown in the following table.

MEDICAL IMAGING STAFF CATEGORY	PEAK SHIFT
Direct Care Team: Radiography	
Radiologist	3
Radiology Resident	1
Fellows	2
Nurse	1
Technologists	8
Radiology Aide	1
Clerk (Booking includes IR)	3
Housekeeper	1
Subtotal, Direct Care Team Staff	**20**
Other	
Student	4
Researcher and Other	2
Subtotal, Other	**6**
DAYTIME PEAK TOTAL, Radiography	**26**

MEDICAL IMAGING STAFF CATEGORY	PEAK SHIFT
Direct Care Team: Ultrasound	
Radiologist	5
Radiology Resident	2
Fellows	2
Technologist	15
Radiology Aide	1
Clerk (Booking)	4
Housekeeper	1
Subtotal, Direct Care Team Staff	**30**
Other	
Student	3
Researcher and Other	1
Subtotal, Other	**4**
DAYTIME PEAK TOTAL, Ultrasound	**34**
Direct Care Team: CT	
Radiologist	4
Radiology Resident	2
Fellow	2
Technologist	9
Radiology Aide	2
Clerk (Booking)	2
Nurse	3
Housekeeper	1
Subtotal, Direct Care Team Staff	**25**
Other	
Student	3
Researcher and Other	1
Subtotal, Other	**4**
DAYTIME PEAK TOTAL, CT	**29**

MEDICAL IMAGING STAFF CATEGORY	PEAK SHIFT
Direct Care Team: MRI	
Radiologist	4
Radiology Resident	2
Fellows	1
Technologist	9
Clerk (Booking)	4
Nurse	1
Housekeeper	1
Subtotal, Direct Care Team Staff	**22**
Other	
Student	2
Researcher and Other	2
Subtotal, Other	**4**
DAYTIME PEAK TOTAL, MRI	**26**
Direct Care Team: Nuclear Medicine	
Radiologist	2
Radiology Resident	2
Fellows	1
Nuclear Medicine Technologist	8
Clerk (Reception/Booking/Filing)	3
Housekeeper	1
Subtotal, Direct Care Team Staff	**17**
Other	
Student	3
Researcher and Other	1
Subtotal, Other	**4**
DAYTIME PEAK TOTAL, Nuclear Medicine	**21**
Shared Staff	

MEDICAL IMAGING STAFF CATEGORY	PEAK SHIFT
Program Director	1
Clerical Supervisor	1
Medical Director	1
Site Coordinator	1
Administration Assistant	1
Clinical Nurse Leader/Educator	1
Bio-Medical	6
PACS/RIS	8
Porter Ward Aide	10
Clinical Educator (technologist)	1
Area Supervisors	6
Clerk (Reception Area and Film Desk)	7
Subtotal, Shared Staff	**44**
Direct Care Team: Surgical and Major Procedures Zone	
X-ray Techs for OR and Portables	7
Radiologists	4
Interventional Radiology - Technologist	9
Radiology Resident/Fellows	3
Nurse	6
TOTAL: Surgical and Major Procedures Zone	**29**
Direct Care Team: Scopes and Minor Procedures Zone	
X-ray Tech	4
TOTAL: Scopes and Minor Procedures Zone	**4**
Direct Care Team: Emergency Department	
X-Ray, CT Technologist and Sonographer will cover portables and Resuscitation Room	7
Radiologist/Fellow/Resident in ED area	2
TOTAL: Emergency Department	**9**

MEDICAL IMAGING STAFF CATEGORY	PEAK SHIFT
Direct Care Team: Outpatient Care Centre	
Technologists	4
Student	1
TOTAL: Outpatient Care Centre	**5**
DAYTIME PEAK TOTAL: Medical Imaging, Surgical and Interventional Services, Emergency Department, Outpatient Care Centre	**227**

10.4 DESIGN CRITERIA

10.4.1 General Requirements

10.4.1.1 Zones of activity within the Component include the following:

10.4.1.1(1) Medical Imaging Entrance

10.4.1.1(2) Imaging Modalities

10.4.1.1(2)(a) Radiography

10.4.1.1(2)(b) Ultrasound

10.4.1.1(2)(c) CT

10.4.1.1(2)(d) MRI

10.4.1.1(2)(e) NM

10.4.1.1(2)(f) Bone Densitometry

10.4.1.1(3) Medical Imaging Shared Support Services

10.4.1.1(4) Medical Imaging Shared Staff Support

10.4.1.1(5) Medical Imaging General Workstations

10.4.1.2 The Medical Imaging Component will provide imaging services for outpatients, inpatients and emergency Patients. These Patients may be ambulatory, on a stretcher or in a wheelchair. It will also be the main operational hub for all imaging services, team spaces and inter-professional interaction.

10.4.1.3 Ideally the Medical Imaging Component will be located adjacent to Surgical and Interventional Services. These two (2) Components may be located on separate floors one above the other with connecting stairs for ease of Staff transit.

10.4.1.4 Medical Imaging Component will also have Direct Access to a Critical Care Complex Unit.

10.4.1.5 The main Reception area will have Line of Sight to the entrance of the Component. The layout will provide intuitive Wayfinding for Patients to easily navigate the Component.

10.4.1.6 All Component entrances will be clearly arranged along a wide internal “street” which will house the main Waiting areas.

10.4.1.7 Views through and out of the Component will be maximized from both main and sub-waiting areas.

10.4.1.8 Sub-waiting will be separated from main waiting to provide Patient privacy and dignity. Private sub-waiting for gowned, wheelchair, restricted mobility and stretcher Patients will be provided away from General Circulation.

10.4.1.9 Provide a separation of Patients and the public from Staff work areas.

10.4.1.10 Patients that require pre-procedure preparation will be managed in the modality area.

10.4.1.11 Washroom-Patient and Change Cubicle-Patient will be provided for each imaging modality.

10.4.1.12 Provide knock-out panels in the exterior wall for replacement of MRI equipment. Access route for initial install and future replacement of large imaging Equipment will be demonstrated.

10.4.1.13 Workstation-Touchdown spaces for Staff will facilitate the integration of clinical, educational and teaching activities.

10.4.1.14 Reading Room-PACS (I4.3, I4.4 and I4.6) will be grouped and positioned centrally within Medical Imaging so they have Convenient Access from all modality clusters and from the major access points into the Component to facilitate access for consultation with clinical Staff.

10.4.1.15 All Reading Room-PACS will be noise dampened and provided with blackout blinds to allow for reading of images and to minimize illuminance (ambient light) between reading workstations, as per Diagnostic Accreditation Program (DAP).

10.4.1.16 Shared Staff support area will be positioned to accommodate Convenient Access by Medical Imaging Staff, without impacting Patient access.

10.4.1.17 Radiation protection will be provided; refer to Schedule 3 Section 6.13.1 Radiation Shielding System.

10.4.1.18 The physical environment will facilitate team collaboration.

10.4.1.19 Staff areas will be Back of House, separated from visitor and Patient areas.

10.4.1.20 The presence of mobility aids including canes, crutches, walkers, wheelchairs, stretchers and motorized chairs/scooters will be anticipated in all Patient accessible areas throughout the Component.

10.4.1.21 Staff Washrooms will have Convenient Access to Staff work areas.

10.4.1.22 A Lounge-Staff will be provided within the Component. Staff will not be required to leave the Component to access the Lounge-Staff, including Lockers-Staff and Washroom-Staff. Washrooms will not open to main public work areas or directly into the Lounge-Staff.

10.4.1.23 Washroom-Patient need to be placed with Convenient Access to Imaging rooms.

10.4.1.24 Hand hygiene sinks will be directly accessible and distributed appropriately in all clinical areas as per Infection Prevention and Control protocols.

10.4.1.25 Support services and storage including Soiled Utility, Disposal Hold, Store-General, Equipment storage and Store-Clean Supplies will be centrally distributed within corresponding zones of activity to enable un-interrupted operations.

10.4.1.26 Alcove-Medication will be located in areas with minimal traffic to ensure Staff can safely dispense medications with minimal distraction.

10.4.1.27 Alcove-Medication and Store-Clean Supplies will be grouped in the Medical Imaging so Staff can easily retrieve supplies for the setup of IV medications.

10.4.1.28 Store-Local Equipment will be grouped with Alcove-Medication and Store-Clean Supplies in Bone Densitometry modality.

10.4.1.29 The primary function of Soiled Utility is to provide a space to dispose of the full spectrum of clinical waste including bedpan disinfectors and assorted bins for cytotoxic and biomedical waste (e.g. used blood bags), perform limited soiled activities such as gross decontamination/rinsing/soaking of surgical type instruments, and temporarily store clinical specimens. In the Medical Imaging, Soiled Utility will also provide space to sequester and marshal soiled equipment and clean them. The design will allow for one way flow from soiled to clean, separate soiled and clean to prevent cross-contamination and provide a dedicated unobstructed cleaning zone, with Convenient Access from all clinical spaces in the area it is intended to serve. Cleaned equipment will be moved to the Store-Local Equipment in a different and physically separate location away from Soiled Utility.

10.4.1.30 Each zone of activity will have Convenient Access to Imaging rooms to optimize flow and promote best Infection Prevention and Control protocols.

10.4.1.31 A Patient will not be able to access Control-Imaging room to maintain Patient’s confidentiality.

10.4.1.32 Staff will be able to access each I2.4.7 Technical Room-Imaging directly from the corridor without going through another space. All other Technical Room-Imaging can be accessed via the associated Control-Imaging room or a corridor. In the planning of I2.4.10 Conference/Meeting Room, design the space such that Staff will be able to access I2.4.10.3 Technical Room-Imaging-Future Expansion directly from the corridor without going through another space.

10.4.1.33 Workroom-Biomedical Engineering will be located in the Back of House area and have Convenient Access to all Imaging modalities.

10.4.1.34 The main Reception in Medical Imaging Entrance will have Line of Sight to Prep/Holding Bays in this area for Staff to be able to assist Patients waiting, if needed.

10.4.2 Imaging modalities

10.4.2.1 Radiography

10.4.2.1(1) Medical Imaging will include one (1) Imaging-Fluoroscopy Multi-Purpose Room (MPR) and three (3) Imaging-Digital Radiography.

10.4.2.1(2) Control-Imaging rooms will have a standing-height counter, sufficient space to accommodate equipment and infrastructure, a hand hygiene sink at the entrance, a lead glass window between the Control-Imaging and the Imaging-Digital Radiography to provide a clear view of Patient and cabinet for storage for PPE. Fluoroscopy room to have ventilation requirements consistent with Procedure Room standards.

10.4.2.1(3) Provide Direct Access from the Control-Imaging room into the Imaging-Fluoroscopy Multi-Purpose Room (MPR) room and a separate corridor access into the Control-Imaging room.

10.4.2.1(4) Workroom-Technologist room will be adjacent to Imaging-Digital Radiography rooms.

10.4.2.1(5) Radiology supervisor and clinical instructor technologist offices will be adjacent to the modality.

10.4.2.1(6) Two (2) Control-Imaging rooms will be combined and shared between two (2) Imaging-Digital Radiography rooms to increase efficiency.

10.4.2.1(7) Washroom-Patient will be located centrally within the modality and have Convenient Access to Imaging-Fluoroscopy Multi-Purpose Room (MPR).

10.4.2.2 Ultrasound

10.4.2.2(1) Medical Imaging will include ten (10) Imaging-Ultrasound rooms and two (2) Procedure Room-Imaging-Ultrasound.

10.4.2.2(2) Procedure Room-Imaging-Ultrasound will meet Procedure Room HVAC standards, as procedures will be in an aseptic field where the protective surface of the Patient's body is penetrated.

10.4.2.2(3) Imaging-Ultrasound rooms Patient will have Convenient Access to a Washroom-Patient.

10.4.2.2(4) Workroom-Technologist room to be adjacent to Imaging-Ultrasound rooms.

10.4.2.2(5) Ultrasound supervisor office will be adjacent to the modality.

10.4.2.2(6) Ultrasound Probe Cleaning space for five (5) probes high level disinfecting and seven (7) probes per unit to be adjacent to Imaging-Ultrasound rooms.

10.4.2.2(7) Ultrasound Probe Cleaning will be adjacent and contiguous to Soiled Utility to facilitate reprocessing of instruments.

10.4.2.2(8) Ultrasound Probe Cleaning will have Convenient Access from Imaging-Ultrasound rooms to facilitate flow of supplies and instruments.

10.4.2.2(9) Ultrasound Probe Cleaning will be located in an area with minimal traffic to minimize the risk of damage to sensitive and valuable instruments and infection/contamination of Patients and Staff during transfer.

10.4.2.3 CT

10.4.2.3(1) Medical Imaging will include three (3) Imaging-CT rooms (1 with Fluoro) and Future Expansion capability for one (1) CT. One (1) Imaging-CT room will have ventilation requirements which comply with Procedure Room HVAC standards.

10.4.2.3(2) CT technologists seated in the Control-Imaging room will have Line of Sight through lead glass window to entire Imaging-CT room.

10.4.2.3(3) Provide Direct Access from the Control-Imaging rooms into the Imaging-CT rooms and a separate corridor access into the Control-Imaging rooms.

10.4.2.3(4) The Patient prep and sub-waiting areas will be adjacent to the CT.

10.4.2.3(5) CT supervisor and nurse educator/CNL (1 Person) offices will be adjacent to the modality.

10.4.2.3(6) Two (2) Control-Imaging rooms will be combined and shared between two (2) Imaging-CT rooms to increase efficiency.

10.4.2.3(7) One (1) Exam/Treatment Room-Cardiac Rate Control will be provided to safely care for Patients undergoing Cardiac CT, as this procedure requires Patients to be given medications that slow their heart rates.

10.4.2.3(8) The Exam/Treatment Room-Cardiac Rate Control will be adjacent to Imaging-CT rooms and Alcove-Medication.

10.4.2.3(9) The Exam/Treatment Room-Cardiac Rate Control will include two (2) hand hygiene sinks, one (1) touch down workstation, five (5) recliners separated by privacy curtains and one (1) ceiling lift with coverage over all recliners. Each recliner will have a headwall with medical gases.

10.4.2.3(10) The Exam/Treatment Room-Cardiac Rate Control will have two (2) access points:

10.4.2.3(10)(a) One (1) access point will be from Front of House corridor adjacent to Imaging-CT rooms for Patients and Staff and used to bring Patients through for monitoring after Cardiac CT.

10.4.2.3(10)(b) The other access point will be a door to Back of House spaces for Staff use. This is to ensure a separate entrance for Staff is provided in case of an emergency situation, such as Code Blue.

10.4.2.4 MRI

10.4.2.4(1) Medical Imaging will include three (3) MRIs and Future Expansion capability for one (1) MRI.

10.4.2.4(2) Access to the MRI Suite will be restricted by establishing four (4) zones around the MRI scanner; refer to Schedule 3 for Radio Frequency Shielding requirements.

10.4.2.4(2)(a) Zone 1 - This Zone will include all areas that are accessible to the general public. Zone 1 will be outside the MRI environment, and Patients and Staff will access the MRI environment through this Zone.

10.4.2.4(2)(b) Zone 2 - MRI screening, confidential medical history, and appropriate Patient gowning/preparation will take place in Zone 2. Zone 2 will include Waiting, Change Cubicle-Patient, Consult/Interview Rooms, one (1)

Prep/Holding Bay and Lockers-Patient. Soiled Utility and Store-Clean Supplies will also be located in Zone 2. Zone 2 spaces will support the flow of both inpatients and outpatients. For Patient safety considerations, access to Zone 3 from Zone 2 will be restricted and controlled by MRI Staff. Once changed and screened, some Patients will be brought to Prep/Holding Bays in Zone 3 for IV starts, but others will continue to wait in the Waiting area in Zone 2.

10.4.2.4(2)(c) Zone 3 - All Patients will be screened by MRI Staff prior to entering Zone 3. Access by non-MRI Staff to this Zone and supervision over Zone 3 (and Zone 4) will be controlled by and entirely under the supervision of Level 2 MRI Staff at all times. Zone 3 will have the following requirements:

10.4.2.4.2.(c).1 Zone 3 will include three (3) Prep/Holding Bays with Convenient Access to Imaging-MRI.

10.4.2.4.2.(c).2 For outpatients, once they enter Zone 3, they will wait in Prep/Holding Bays until they are ready to be received into Imaging-MRI. MRI Staff will supervise Patients in Zone 3.

10.4.2.4.2.(c).3 Prep/Holding Bays will also be used for inpatients in Zone 3 once they have been screened to improve efficiency. Transfer from the inpatient stretcher to the MRI bed will be done in these spaces.

10.4.2.4.2.(c).4 All Control-Imaging will be located in Zone 3. Line of Sight will be provided from Control-Imaging to the adjacent Imaging-MRI, so that MRI Staff will be able to directly observe and control access to Zone 4 from their normal positions when stationed at their desks in Control-Imaging. There will be minimal distance between the doors of Imaging-MRI and Control-Imaging from the corridor, so that Staff can enter Imaging-MRI quickly in case of an emergency situation.

10.4.2.4.2.(c).5 Alcove-Medication will be located in Zone 3.

10.4.2.4(2)(d) Zone 4 - Zone 4 will contain Imaging-MRI rooms. Imaging-MRI room doors will swing out into the corridor for safety purposes. Only screened Patients, technologists and Biomedical Engineering Staff (when scheduled to repair/maintain Equipment) will enter Zone 4.

10.4.2.4(3) Offices, workstations and other collaboration areas will not be located in Zones 3 and 4.

10.4.2.4(4) MRI supervisor office will be adjacent to the modality.

10.4.2.4(5) Two (2) Control-Imaging rooms will be combined and shared between two (2) Imaging-MRI rooms to increase efficiency.

10.4.2.4(6) Provide Direct Access from the corridor into the Control-Imaging rooms.

10.4.2.4(7) MRI technologists will have Convenient Access to a Store-Clean Supplies and an Alcove-Clean Linen.

10.4.2.5 Nuclear Medicine

10.4.2.5(1) Medical Imaging will include three (3) Imaging-Nuclear Medicine and one (1) Imaging-Nuclear Medicine-Large.

10.4.2.5(2) NM radioisotopes/radiopharmaceuticals from off-site providers will be delivered to the Reception at Medical Imaging Entrance via courier.

10.4.2.5(3) Imaging-Nuclear Medicine will be adjacent to Exam Room-Stress Test-Nuclear for nuclear cardiology studies.

10.4.2.5(4) Separate Waiting-Cold and Waiting-Hot areas, Change Cubicle-Patient-Hot, Washroom-Patient-Cold, Washroom-Patient-Hot and Washroom-Staff will be provided for NM.

10.4.2.5(5) The Hot Lab will be adjacent to the Imaging room but separated from the Waiting-Hot area.

10.4.2.5(6) NM supervisor office will be adjacent to the modality.

10.4.2.5(7) Design will comply with Canadian Nuclear Safety Commission (CNSC), United States Pharmacopeia (USP) and other regulatory body requirements for Nuclear Medicine and PET safety and design standards.

10.4.2.5(8) Two (2) Control-Imaging rooms will be combined and shared between two (2) Imaging-Nuclear Medicine rooms to increase efficiency.

10.4.2.5(9) One (1) Control-Imaging will be lead lined for PET/CT radioisotopes and located adjacent to Imaging-Nuclear Medicine-Large (I2.5.37).

10.4.2.5(10) Provide Direct Access from the Control-Imaging rooms into the Imaging-Nuclear Medicine rooms and Imaging-Nuclear Medicine-

Large room and a separate corridor access into the Control-Imaging rooms.

10.4.2.5(11) The modality will support nuclear stress testing and meet the following requirements:

10.4.2.5(11)(a) Exam Room-Stress Test-Nuclear will be grouped with Stress Test-Set-up, Alcove-Crash Cart and Alcove-ECG. Exam Room-Stress Test-Nuclear will contain two (2) treadmill stations.

10.4.2.5(11)(b) Stress Test-Set-up will be located adjacent to Exam Room-Stress Test-Nuclear and used to prepare and hold Patients before they enter Exam Room-Stress Test-Nuclear.

10.4.2.6 Bone Densitometry

10.4.2.6(1) Medical Imaging will include one (1) Imaging-Bone Densitometry room.

10.4.3 Medical Imaging General Workstations (Future Expansion)

10.4.3.1 The layout anticipates Future Expansion and rebalancing of modalities, as the capacity of imaging to support the processes of diagnosis and treatment is constantly expanding along with advances in the modalities. Future Expansion capability will accommodate one (1) additional Imaging-CT and one (1) additional Imaging-MRI, along with support spaces arranged to accommodate additional Imaging-Ultrasound and Imaging-Digital Radiography rooms if necessary. In addition, the Imaging-Nuclear Medicine-Large (I2.5.37) will house PET/CT in the future as part of the Future Expansion. Wireless networking throughout the Component will be required, including capability for telemedicine connections for consultations with the Facility throughout the province, and EMR access.

10.4.3.2 The space for Future Expansion Digital Radiography, Ultrasound, CT and MRI Imaging Rooms will be initially planned as Conference/Meeting Rooms and offices. The space is required to be designed and located to be appropriately converted to these future Imaging rooms with minimal disruption to the operations of the Component and adjacent areas.

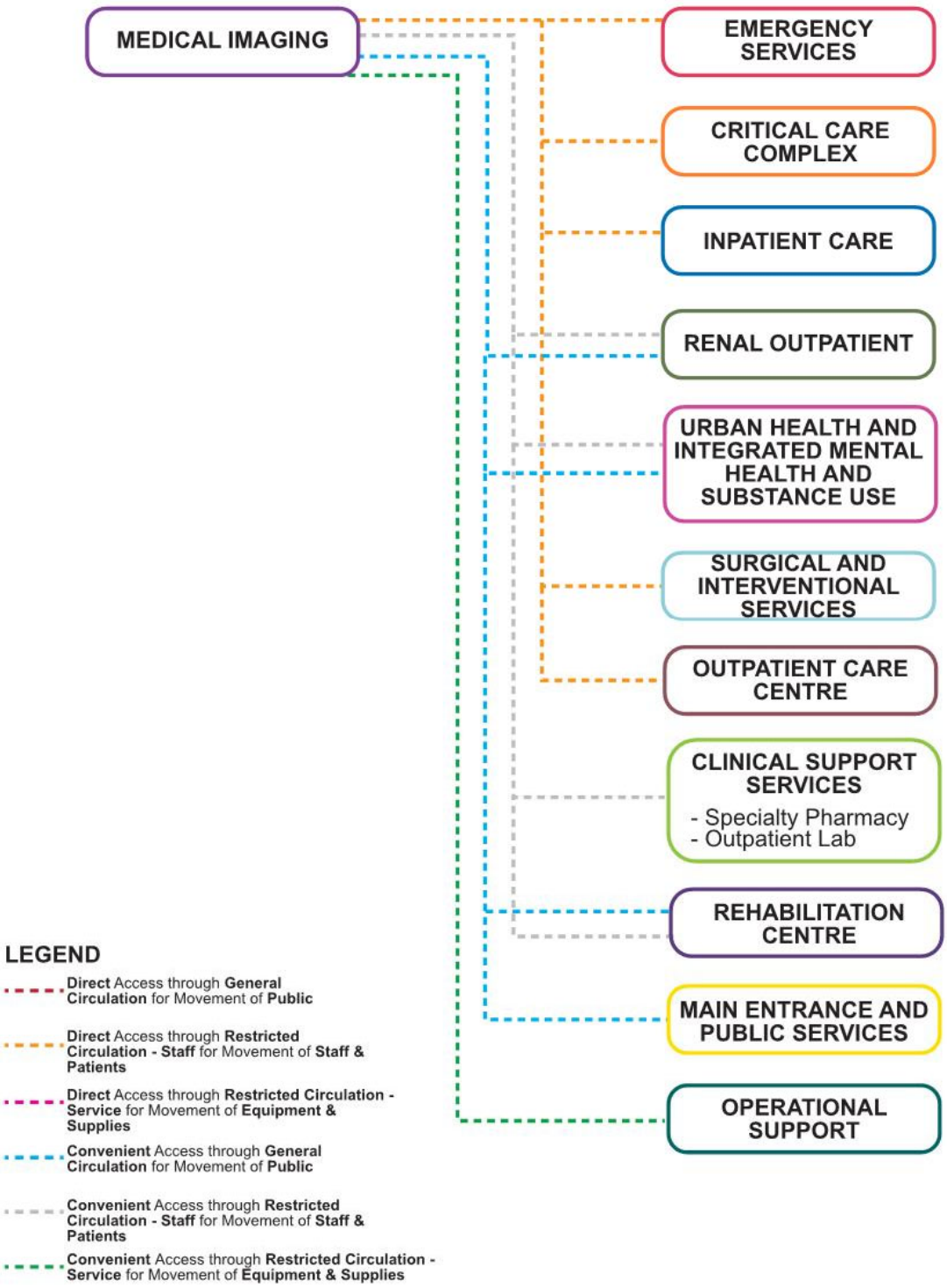
10.4.3.3 Future Expansion Imaging Rooms will be designed to be grouped with and located adjacent to other Imaging Rooms in the same modality. Each Future Expansion Control-Imaging room will be combined with another Control-Imaging room in the same modality and shared between two (2) Imaging rooms to increase efficiency.

10.4.3.4 An adjacent open space with twenty-two (22) General Workstations will be provided for future allocation of the above-mentioned Conference/Meeting Rooms and offices.

10.5 EXTERNAL RELATIONSHIPS

10.5.1 The following diagram indicates other Functional Components that have a functional relationship with this Component.

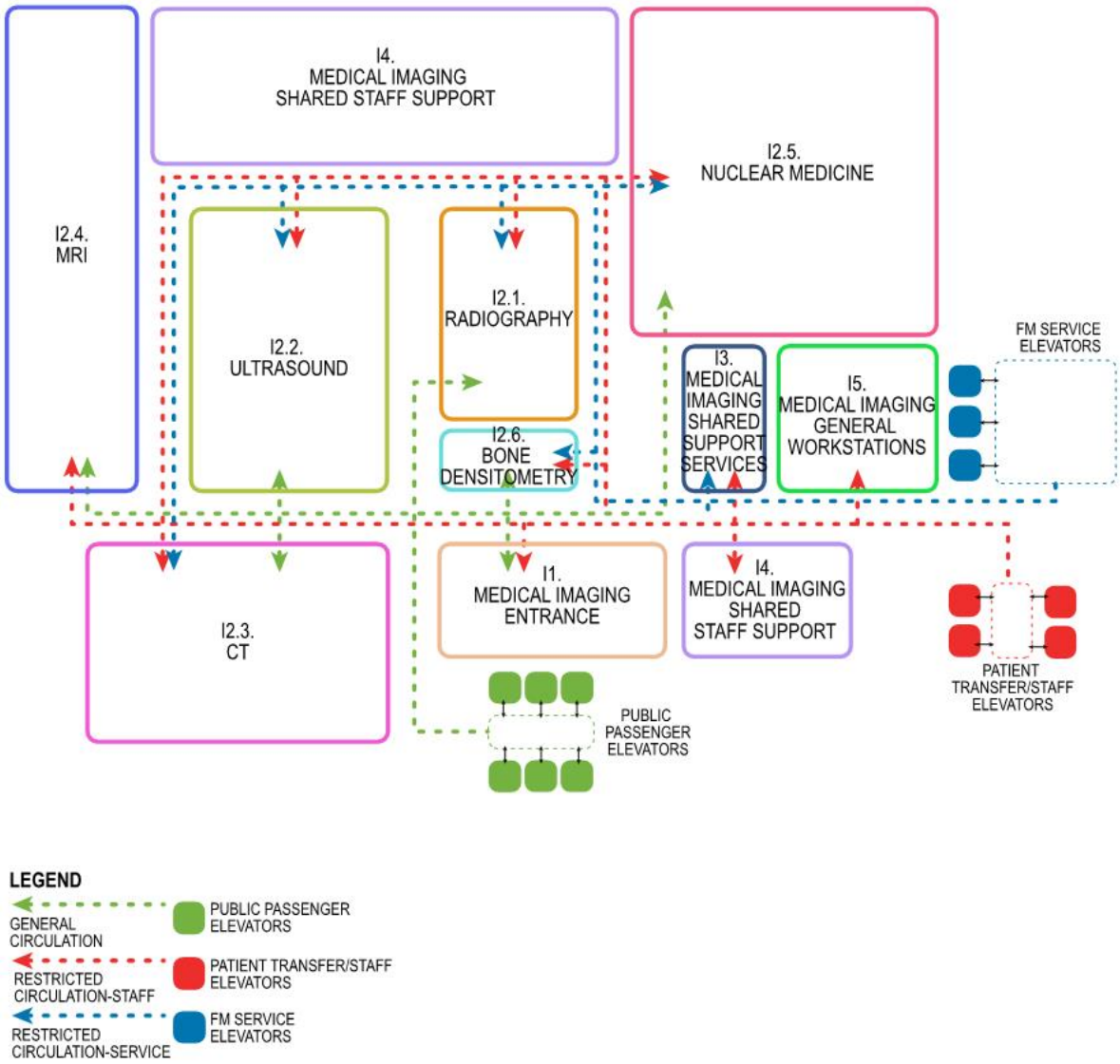
I. MEDICAL IMAGING EXTERNAL RELATIONSHIPS AND CIRCULATIONS



10.6 INTERNAL RELATIONSHIPS

10.6.1 The following diagram indicates internal functional relationships within this Component.

I. MEDICAL IMAGING INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



10.7 SCHEDULE OF ACCOMMODATIONS

10.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Medical Imaging

I1 - MEDICAL IMAGING ENTRANCE	220.50
I2 - IMAGING MODALITIES	2063.90
I3 - MEDICAL IMAGING SHARED SUPPORT SERVICES	203.00
I4 - MEDICAL IMAGING SHARED STAFF SUPPORT	736.50
I5 - MEDICAL IMAGING GENERAL WORKSTATIONS	120.00
MEDICAL IMAGING PROGRAMMED SPACE NSM:	**3,343.90**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
I1 - MEDICAL IMAGING ENTRANCE					
I1.1	Reception	1	32.00	32.00	Incl. 7 workstations, cabinets.
I1.2	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
I1.3	Waiting	1	81.50	81.50	Incl. seating for 50 including 5 in wheelchairs, Direct Access to Public Passenger Elevators and Washroom-Public.
I1.4	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Medical Imaging.
I1.5	Prep/Holding Bay	2	9.50	19.00	Open bay with privacy curtains.
I1.6	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
I1.7	Conference/Meeting Room-Large-Dividable	1	60.00	60.00	Incl. counters, cabinets, accommodates 35 Persons, dividable into two separate rooms by an operable partition.
I1.8	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
I1.9	Washroom-Public	2	4.50	9.00	2-piece, infant change table in 1 Washroom-Public, accessible for Persons with Disabilities.
	TOTAL NSM: Medical Imaging Entrance			**220.50**	
I2 - IMAGING MODALITIES					
I2.1 - Radiography					
I2.1.1	Waiting	1	15.00	15.00	Incl. seating for 8 including 2 in wheelchairs.
I2.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Radiography.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
I2.1.3	Change Cubicle-Patient	4	3.50	14.00	
I2.1.4	Imaging-Fluoroscopy Multi-Purpose Room (MPR)	1	30.00	30.00	Incl. cabinets, shelving, ceiling lift with complex ceiling coverage, lead lined, procedures being performed in this room.
I2.1.5	Control-Imaging	1	7.50	7.50	Incl. 2 workstations, lead lined, adjacent to Imaging-Fluoroscopy Multi-Purpose Room (MPR), window between Control-Imaging and Imaging-Fluoroscopy Multi-Purpose Room (MPR) with Line of Sight to the whole room.
I2.1.6	Alcove-Hand Hygiene Sink	1	1.00	1.00	Adjacent to Control-Imaging.
I2.1.7	Imaging-Digital Radiography	3	30.00	90.00	Incl. cabinets, ceiling lift with complex ceiling coverage, lead lined, Control-Imaging with 1 workstation, window between Control-Imaging and Imaging-Digital Radiography with Line of Sight to the whole room. 2 Control-Imaging will be combined and shared between 2 Imaging-Digital Radiography.
I2.1.8	Alcove-Hand Hygiene Sink	2	1.00	2.00	Each shared between 2 Control-Imaging.
I2.1.9	Office-6 Shared	1	30.00	30.00	Incl. 6 workstations.
I2.1.10	Alcove-Medication	1	4.50	4.50	Incl. counters, cabinets, shelving.
I2.1.11	Workroom-Technologist	1	20.00	20.00	Incl. 8 touch down workstations for MI Workflow Coordinator/ Porter Ward Aide, adjacent to Imaging-Digital Radiography.
I2.1.12	Prep/Holding Bay	3	9.50	28.50	Incl. ceiling lift, open bay with privacy curtains.
I2.1.13	Store-Lead Shields	1	2.00	2.00	
I2.1.14	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
I2.1.15	Lockers-Patient	1	2.00	2.00	Incl. 12 Z-lockers, adjacent to Change Cubicle-Patient.
I2.2 - Ultrasound					
I2.2.1	Waiting	1	21.00	21.00	Incl. seating for 12 including 2 in wheelchairs.
I2.2.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Ultrasound.
I2.2.3	Prep/Holding Bay	3	9.50	28.50	Open bay with privacy curtains.
I2.2.4	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
I2.2.5	Change Cubicle-Patient	8	3.50	28.00	
I2.2.6	Imaging-Ultrasound	10	14.00	140.00	Incl. 1 touch down workstation, cabinets, ceiling lift in 2 Imaging-Ultrasound rooms.
I2.2.7	Procedure Room-Imaging-Ultrasound	2	17.00	34.00	Incl. 1 touch down workstation, cabinets, ceiling lift, located side by side.
I2.2.8	Office-3 Shared	1	16.00	16.00	Incl. 3 workstations, adjacent to Imaging-Ultrasound.
I2.2.9	Alcove-Medication	1	4.50	4.50	Incl. counters, cabinets, shelving.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
I2.2.10	Workroom-Technologist	1	20.00	20.00	Incl. 8 touch down workstations, adjacent to Imaging-Ultrasound.
I2.2.11	Ultrasound Probe Cleaning	1	18.50	18.50	Incl. counters, cabinets.
I2.2.12	Store-Gown	3	1.50	4.50	1 Store-Gown to accommodate a blanket warmer.
I2.2.13	Washroom-Patient	6	4.50	27.00	2-piece, accessible for Persons with Disabilities.
I2.2.14	Lockers-Patient	1	2.00	2.00	Incl. 12 Z-lockers, adjacent to Change Cubicle-Patient.
I2.3 - CT					
I2.3.1	Waiting	1	16.50	16.50	Incl. seating for 10 including 1 in wheelchair.
I2.3.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to CT.
I2.3.3	Change Cubicle-Patient	3	3.50	10.50	
I2.3.4	Prep/Holding Bay	3	9.50	28.50	Open bay with privacy curtains.
I2.3.5	Imaging-CT	3	40.00	120.00	Incl. counters, cabinets, shelving, ceiling lift with complex ceiling coverage, lead lined.
I2.3.6	Control-Imaging	3	11.00	33.00	Incl. 2 workstations, cabinets, lead lined, adjacent to Imaging-CT, window between Control-Imaging and Imaging-CT. 2 Control-Imaging will be combined and shared between 2 Imaging-CT.
I2.3.7	Technical Room-Imaging	1	9.50	9.50	Incl. servers for modality, lead lined, shared between two Imaging-CT.
I2.3.8	Technical Room-Imaging	1	4.50	4.50	Incl. servers for modality, lead lined.
I2.3.9	Alcove-Hand Hygiene Sink	2	1.00	2.00	Each shared between 2 Control-Imaging.
I2.3.10	Conference/Meeting Room	1	62.00	62.00	Incl. counters, cabinets, accommodates 34 Person.
I2.3.11	Reading Room-PACS	1	12.00	12.00	Incl. 2 PACS workstations.
I2.3.12	Alcove-Medication	1	5.50	5.50	Incl. counters, cabinets, shelving.
I2.3.13	Alcove-Clean Linen	1	2.50	2.50	
I2.3.14	Alcove-Stretcher	2	2.50	5.00	
I2.3.15	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
I2.3.16	Exam/Treatment Room-Cardiac Rate Control	1	47.50	47.50	Incl. 1 touch down workstation, 5 recliners separated by privacy curtains, one ceiling lift with coverage over all recliners.
I2.3.17	Lockers-Patient	1	2.00	2.00	Incl. 12 Z-lockers, adjacent to Change Cubicle-Patient.
I2.4 - MRI					
I2.4.1	Not Used	0	0.00	0.00	
I2.4.2	Waiting	1	15.50	15.50	Incl. seating for 9 including 1 in wheelchair.
I2.4.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to MRI.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
I2.4.4	Prep/Holding Bay	4	9.50	38.00	Incl. ceiling lift, open bay with privacy curtains.
I2.4.5	Imaging-MRI	3	50.00	150.00	Incl. cabinets, RF Shielding required, adjacent to outside wall for removal.
I2.4.6	Control-Imaging	3	14.00	42.00	Incl. 2 workstations, cabinets, RF Shielding required, adjacent to Imaging-MRI, window between Control-Imaging and Imaging-MRI with Line of Sight to the Patient. 2 Control-Imaging will be combined and shared between 2 Imaging-MRI.
I2.4.7	Technical Room-Imaging	3	18.00	54.00	Incl. servers for modality, RF Shielding required.
I2.4.8	Alcove-Hand Hygiene Sink	2	1.00	2.00	Each shared between 2 Control-Imaging.
I2.4.9	Xenon Hyperpolarizer Room	1	13.40	13.40	
I2.4.10	Conference/Meeting Room	1	82.00	82.00	Incl. counters, cabinets, accommodates 46 Person.
I2.4.11	Alcove-Medication	1	4.50	4.50	Incl. counters, cabinets, shelving.
I2.4.12	Workstation	1	4.50	4.50	Incl. 1 workstation.
I2.4.13	Lockers-Patient	1	2.00	2.00	Incl. 12 Z-lockers, adjacent to Change Cubicle-Patient.
I2.4.14	Change Cubicle-Patient	3	3.50	10.50	
I2.4.15	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
I2.4.16	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation.
I2.5 - Nuclear Medicine					
I2.5.1	Waiting-Cold	1	24.00	24.00	Incl. seating for 14 including 2 in wheelchairs.
I2.5.2	Waiting-Hot	1	12.00	12.00	Incl. seating for 7 including 1 in wheelchair, lead lined.
I2.5.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Nuclear Medicine.
I2.5.4	Change Cubicle-Patient-Hot	4	3.50	14.00	Lead lined.
I2.5.5	Exam Room	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets.
I2.5.6	Prep/Recovery/Injection Room	2	9.50	19.00	Lead lined for PET/CT radioisotopes.
I2.5.7	Alcove-Hand Hygiene Sink	1	1.00	1.00	Shared between Stress Test-Set-up bays.
I2.5.8	Patient Uptake/Injection Room	3	13.00	39.00	Lead lined for PET/CT radioisotopes.
I2.5.9	Imaging-Nuclear Medicine	3	40.00	120.00	Incl. cabinets, shelving, ceiling lift with complex ceiling coverage, lead lined.
I2.5.10	Control-Imaging	4	11.00	44.00	Incl. 2 workstations, lead lined, window between Control-Imaging and Imaging-Nuclear Medicine with Line of Sight to the Patient. 2 Control-Imaging will be combined and shared between 2 Imaging-Nuclear Medicine. Control-Imaging adjacent to Imaging-Nuclear Medicine-Large to be lead lined for PET/CT radioisotopes.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
I2.5.11	Technical Room-Imaging	2	4.50	9.00	Incl. servers for modality, lead lined, each shared between 2 Imaging-Nuclear Medicine.
I2.5.12	Alcove-Hand Hygiene Sink	2	1.00	2.00	Each shared between 2 Control-Imaging.
I2.5.13	Stress Test-Set-up	3	5.50	16.50	Open bay with privacy curtains.
I2.5.14	Exam Room-Stress Test-Nuclear	1	37.00	37.00	Incl. counters, cabinets, open bays, lead lined.
I2.5.15	Alcove-Crash Cart	1	1.50	1.50	
I2.5.16	Workstation-Touchdown	2	2.50	5.00	Incl. 1 touch down workstation, adjacent to Exam Room-Stress Test-Nuclear, window between Workstation-Touchdown and Exam Room-Stress Test-Nuclear.
I2.5.17	Alcove-Medication	1	4.50	4.50	Incl. counters, cabinets, shelving.
I2.5.18	Reading Room-PACS	1	30.00	30.00	Incl. 3 PACS workstations, 2 workstations.
I2.5.19	Inter-Professional Team Room-Small	1	12.00	12.00	Incl. 4 touch down workstations.
I2.5.20	Workstation-Tech Post Processing	1	4.50	4.50	Incl. 1 workstation, adjacent to Imaging-Nuclear Medicine.
I2.5.21	Hot Lab	1	30.00	30.00	Incl. 1 workstation, counters, leaded cabinets, shelving, lead lined, entrance from Anteroom.
I2.5.22	Cell labelling lab	1	10.00	10.00	Lead lined, located inside Hot Lab with a separate door.
I2.5.23	Radiopharmaceutical Compounding Lab	1	10.00	10.00	Lead lined, located inside Hot Lab with a separate door.
I2.5.24	Low Level Lab	1	10.00	10.00	Incl. 1 workstation, counters, cabinets, shelving, lead lined, adjacent to Hot Lab, entrance from Anteroom.
I2.5.25	Anteroom	1	20.00	20.00	Incl. cabinets, shelving, lead lined, for access to Hot Lab and Low Level Lab.
I2.5.26	Mo/TC Generator	1	13.00	13.00	Lead lined.
I2.5.27	Alcove-ECG	2	3.00	6.00	
I2.5.28	Alcove-Local Equipment	2	1.50	3.00	Distributed in Nuclear Medicine.
I2.5.29	Alcove-Stretcher	1	2.50	2.50	
I2.5.30	Store-General	1	12.00	12.00	Incl. shelving.
I2.5.31	Store-NM	1	14.00	14.00	Incl. cabinets, shelving.
I2.5.32	Store-NM Hot	1	9.50	9.50	Incl. leaded cabinets, shelving, lead lined.
I2.5.33	Washroom-Patient-Cold	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
I2.5.34	Washroom-Patient-Hot	2	4.50	9.00	2-piece, accessible for Persons with Disabilities, lead lined for PET/CT radioisotopes.
I2.5.35	Emergency Shower/Eyewash	1	1.50	1.50	Incl. emergency shower/eyewash, floor drain.
I2.5.36	Washroom-Staff	2	3.00	6.00	2-piece.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
I2.5.37	Imaging-Nuclear Medicine-Large	1	45.50	45.50	Incl. cabinets, shelving, ceiling lift with complex ceiling coverage, lead lined for PET/CT radioisotopes.
I2.6 - Bone Densitometry					
I2.6.1	Not Used	0	0.00	0.00	
I2.6.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Bone Densitometry.
I2.6.3	Imaging-Bone Densitometry	1	14.00	14.00	Incl. ceiling lift with complex ceiling coverage, lead lined.
I2.6.4	Alcove-Wheelchair	3	2.50	7.50	
I2.6.5	Store-Local Equipment	1	9.50	9.50	Incl. shelving, charging station.
	TOTAL NSM: Imaging modalities			**2,063.90**	
I3 - MEDICAL IMAGING SHARED SUPPORT SERVICES					
I3.1	Alcove-Clean Linen	5	2.50	12.50	Distributed in Medical Imaging.
I3.2	Alcove-Local Equipment	3	1.50	4.50	Distributed in Medical Imaging.
I3.3	Alcove-Imaging Equipment-Large	2	3.00	6.00	
I3.4	Not Used	0	0.00	0.00	
I3.5	Store-Clean Supplies	5	12.00	60.00	Distributed in Medical Imaging.
I3.6	Store-Gown	3	1.50	4.50	
I3.7	Store-Lead Shields	2	2.00	4.00	
I3.8	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
I3.9	Soiled Utility	5	12.00	60.00	Incl. counters, shelving, lead lined.
I3.10	Workroom-Biomedical Engineering	1	18.50	18.50	Incl. 1 workstation, workbenches for 3, cabinets, shelving, ceiling mounted chain hoist, lead lined.
I3.11	Housekeeping Closet	3	7.00	21.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
	TOTAL NSM: Medical Imaging Shared Support Services			**203.00**	
I4 - MEDICAL IMAGING SHARED STAFF SUPPORT					
I4.1	Conference/Meeting Room-Small	1	24.00	24.00	Accommodates 12 Persons.
I4.2	Office-RIS/PACS Team	1	65.00	65.00	Incl. 10 workstations, counters, cabinets, shelving, workspace for hot swaps.
I4.3	Reading Room-PACS	1	18.00	18.00	Incl. 3 PACS workstations.
I4.4	Reading Room-PACS	1	30.00	30.00	Incl. 5 PACS workstations.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
I4.5	Reading Room-PACS	1	36.00	36.00	Incl. 6 PACS workstations. Located in I2.2 - Ultrasound, adjacent to I2.2.10 Workroom-Technologist.
I4.6	Reading Room-PACS	2	36.00	72.00	Incl. 12 PACS workstations.
I4.7	Office-Private/PACS	11	9.50	104.50	Incl. 1 PACS workstation, 2 Office-Private/PACS located in I2.5 - Nuclear Medicine.
I4.8	Office-Private	3	9.50	28.50	Incl. 1 workstation.
I4.9	Office-4 Shared	5	20.00	100.00	Incl. 4 workstations, distributed in all Imagining Modalities.
I4.10	Office-5 Shared-US/IR	1	25.00	25.00	Incl. 4 workstations.
I4.11	Workstation	14	4.50	63.00	Incl. 1 workstation, distributed in all Imagining Modalities.
I4.12	Store-Office Support	3	4.00	12.00	Incl. counters, cabinets, multi-function printer, distributed in Medical Imaging adjacent to Offices and Workstations.
I4.13	Lounge-Staff	2	32.00	64.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
I4.14	Lockers-Staff	2	36.00	72.00	Incl. 100 Z-lockers, 2 shoe racks, split into male and female if required, adjacent to Lounge-Staff.
I4.15	Washroom-Staff	6	3.00	18.00	2-piece.
I4.16	Washroom/Shower-Staff	1	4.50	4.50	3-piece incl. shower.
	TOTAL NSM: Medical Imaging Shared Staff Support			**736.50**	
I5 - MEDICAL IMAGING GENERAL WORKSTATIONS					
I5.1	Workstation-General	1	120.00	120.00	Incl. 22 Workstations at 4.5 nsm each, combined into one area.
	TOTAL NSM: Medical Imaging General Workstations			**120.00**	
	TOTAL NSM: MEDICAL IMAGING			**3,343.90**	

10.7.2 The following table lists the number of spaces, Net Areas and space contents for Medical Imaging Future Expansion.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
I - MEDICAL IMAGING FUTURE EXPANSION					
I2.1 - Radiography					
I2.1.9	Imaging-Digital Radiography-Future Expansion	1	30.00	30.00	Incl. cabinets, ceiling lift with complex ceiling coverage, Control-Imaging with 1 workstation, lead lined, window between Control-Imaging and Imaging-Digital Radiography-Future Expansion with Line of Sight to the whole room.
I2.2 - Ultrasound					
I2.2.8	Imaging-Ultrasound-Future Expansion	1	16.00	16.00	Incl. 1 touch down workstation, cabinets, ceiling lift, lead lined.
I2.3 - CT					
I2.3.10.1	Imaging-CT-Future Expansion	1	41.50	41.50	Incl. cabinets, ceiling lift with complex ceiling coverage, lead lined.
I2.3.10.2	Control-Imaging-Future Expansion	1	11.00	11.00	Incl. 2 workstations, lead lined, adjacent to Imaging-CT-Future Expansion, window between Control-Imaging-Future Expansion and Imaging-CT-Future Expansion.
I2.3.10.3	Technical Room-Imaging-Future Expansion	1	9.50	9.50	Incl. servers for modality, lead lined.
I2.4 - MRI					
I2.4.10.1	Imaging-MRI-Future Expansion	1	50.00	50.00	Incl. ceiling lift with complex bed coverage, lead lined, adjacent to outside wall for removal.
I2.4.10.2	Control-Imaging-Future Expansion	1	14.00	14.00	Incl. 2 workstations, lead lined, adjacent to Imaging-MRI-Future Expansion, window between Control-Imaging-Future Expansion and Imaging-MRI-Future Expansion with Line of Sight to the Patient.
I2.4.10.3	Technical Room-Imaging-Future Expansion	1	18.00	18.00	Incl. servers for modality, lead lined.
I2.5 - Nuclear Medicine					
I2.5.37	Imaging-PET/CT-Future Expansion	1	45.50	45.50	Incl. cabinets, shelving, ceiling lift with complex ceiling coverage, lead lined for PET/CT radioisotopes.
I5 - MEDICAL IMAGING GENERAL WORKSTATIONS					
I5.1	Conference/Meeting Room-Large-Dividable-Future Expansion	2	60.00	120.00	Incl. counters, cabinets, accommodates 35 Persons, dividable into two separate rooms by an operable partition.
	TOTAL NSM: MEDICAL IMAGING FUTURE EXPANSION			**355.50**	

THE NEW ST. PAUL'S PHASE 1A

J. CLINICAL SUPPORT SERVICES

J. CLINICAL SUPPORT SERVICES

11.1 OVERVIEW

11.1.1 Pharmacy (Main Pharmacy and Specialty Pharmacy)

11.1.1.1 The pharmacy at the NSPH will be the central location for many services including clinical pharmacy, dispensing services, aseptic medication preparation and management of pharmaceutical information. The clinical pharmacy will maintain standards of care and ensure that all Patients receive appropriate, safe and cost-effective medication. Clinical pharmacy services will operate across all care areas of the Facility and outpatient departments. The pharmacy Staff will work closely with health care teams, contributing their knowledge of optimal drug therapy and the potential for adverse drug reactions. Clinical pharmacists will also assist in the coordination of Patient therapy as they transition from the Facility to the community. The pharmacy will continue to provide medication, distribution and clinical services to all inpatients at Mount St. Joseph's Hospital. Outpatient services will also be provided through the new facilities (both as part of clinics and in the community) to support hemodialysis, KCCs, Atrial Fibrillation Clinic, Healthy Heart Program, Home IV program, Adult CF, Outpatient chemotherapy, Addictions and HIV population services. The pharmacy will provide outpatient medications to the HIV population across the province and Solid Organ Transplant Patients.

11.1.2 Clinical Nutrition

11.1.2.1 Clinical Nutrition services will consist of registered dietitians at the NSPH. Dietitian services will provide nutritional care and consultation for all Patient care delivery.

11.1.3 Laboratory Services (Main Laboratories and Outpatient Lab)

11.1.3.1 Pathology and Laboratory Medicine provides a comprehensive range of diagnostic services, therapeutic support and consultative clinical care including surgical pathology, cytopathology, autopsy pathology, clinical chemistry, hematopathology, microbiology, virology and transfusion medicine. The St. Paul's Hospital laboratory is a sole provincial source for many specialized testing programs.

11.1.3.2 The program is supported by significant infrastructure and is affiliated closely with the Component of Pathology and Laboratory Medicine at UBC. Services provided to the Yukon are conducted through affiliation with the Yukon Hospital Corporation. When offsite testing is required, specimens will be prepared for transportation and transferred via courier.

11.1.4 Morgue and Autopsy

11.1.4.1 This service will provide for receiving and holding bodies of deceased Patients, viewing of the deceased by family members and the performance of autopsies.

11.2 FUNCTIONAL DESCRIPTION

11.2.1 Scope of Services

11.2.1.1 This section gives key information on the following services:

11.2.1.1(1) Pharmacy

11.2.1.1(1)(a) Main Pharmacy

11.2.1.1(1)(b) Specialty Pharmacy

11.2.1.1(2) Clinical Nutrition

11.2.1.1(3) Laboratory Services

11.2.1.1(3)(a) Main Laboratories

11.2.1.1(3)(b) Outpatient Lab

11.2.1.1(4) Morgue and Autopsy

11.2.1.2 Scope of Educational Activities

11.2.1.2(1) Learners for each of the Clinical Support Services will be accommodated within the Components. Generally, learners will not require specialized spaces but will utilize the clinical areas; however, there will be some dedicated teaching spaces and workstations for learners in some areas as required.

11.2.1.2(2) The Pharmacy Component is involved in training of pharmacy undergraduates, residents and postgraduate students as well as technicians. Component members are also actively involved in teaching at the university and on-site and are involved in clinical research.

11.2.1.2(3) The Pharmacy Component will accommodate the following types of residents and students:

11.2.1.2(3)(a) Pharmacy residents (Year 1 and Year 2) (in-house);

11.2.1.2(3)(b) UBC pharmacy students (OEE) (in-house);

11.2.1.2(3)(c) Pharmacy technician students (in-house);

11.2.1.2(3)(d) Other post-graduate pharmacy learners such as Master’s Degree students and Fellows; and

11.2.1.2(3)(e) Medical residents or students (transient).

11.2.1.2(4) Space is required for increased pharmacy student teaching as the UBC Faculty of Pharmaceutical Sciences has converted from a Bachelor to a Pharmacy Doctorate degree and expands the number of hospital rotations and students. On-site teaching weeks have increased 2.5 fold since 2015 and there are at least 6 pharmacy learners on site at all times. With the implementation of Year 2 residency programs and fellowship programs this number will grow further. We expect there to be 10-12 pharmacy learners on site during an average month in the coming years. These learners will need to meet together for joint presentations and teaching and learners will work in both the Main Pharmacy Component and on the Patient care units. On the Patient care units there will be Convenient Access to private meeting areas for Patient case review and for delivery of confidential feedback to the learners.

11.2.1.2(5) The Laboratory Services program supports clinically-integrated teaching for medical laboratory technologists, medical laboratory assistants, undergraduate students, pathology residents and residents/fellows from other medical specialties (e.g. hematopathology, nephrology).

11.2.1.2(6) The use of simulation in SIM LAB for learning is a future trend that has not been included within the Pharmacy space but maybe required in the future. It will not be included in Laboratory Services space.

11.2.1.3 Scope of Research Activities

11.2.1.3(1) Research activities will be accommodated in the Clinical Support Services Components but will not generally require dedicated space unless indicated. Touch down spaces will be required throughout all clinical areas. Space will be available that allows for quiet uninterrupted work with the ability to handle and secure sensitive/private research data.

11.2.1.3(2) The Main Laboratories include a designated Centralized Research and Development Area which is used as translational and validation space. This space will be adjacent to the Microbiology and Core Laboratory areas.

11.2.2 Services provided

11.2.2.1 Main Pharmacy

11.2.2.1(1) The Main Pharmacy will be staffed by a skilled team working together to provide a high-quality dispensing Facility for Patients that are being treated in the Facility and in many outpatient clinics.

11.2.2.1(2) Centralized pharmacy facilities for the Facility's pharmaceutical services will be contained within this area. Clinical pharmacists provide direct Patient care through Patient assessment and collaboration with the multi-disciplinary team. Clinical pharmacists identify and resolve drug related problems, educate Patients and their caregivers on medication use, support medication reconciliation and serve as a resource to the multidisciplinary team.

11.2.2.1(3) The Pharmacy will be designed to incorporate the latest technology to ensure rapid, efficient and space efficient solutions to the preparation, storage and issue of pharmaceutical products. Wardstock medications will be maintained in the ADC, while Patient specific medications will be stored as close to the Patient as possible, within preparation areas that meet Infection Prevention and Control standards.

11.2.2.1(4) Functions for this service are to include:

11.2.2.1(4)(a) Receiving and stocking of pharmaceutical drugs and related supplies;

11.2.2.1(4)(b) Production of medications (IV admixture/sterile preparations, parenteral nutrition, hazardous/chemotherapeutic medications);

11.2.2.1(4)(c) Dispensing and delivery of STAT and first dose medications;

11.2.2.1(4)(d) Stocking of ADCs in clinical areas and anesthesia workstations in OR;

11.2.2.1(4)(e) Preparing medication trays; including code blue crash cart trays;

11.2.2.1(4)(f) Barcoding and re-packaging of unit dose items;

11.2.2.1(4)(g) Order entry and checking of medical orders, including audit functions;

11.2.2.1(4)(h) Identification and preparation of medications that Patients bring from home;

11.2.2.1(4)(i) Support for Patients who participate in the self-administration of medication process; and

11.2.2.1(4)(j) Providing direct Patient care in collaboration with the multi-disciplinary team; educating Patients, family and clinical Staff on the use, dosage and administration of medications; supporting

medication reconciliation on admission and discharge.

11.2.2.1(5) The Main Pharmacy will receive medications directly from vendors unit doses from the Centralized Unit Dose Production facility, and medications from the IPUs that Patients bring with them from home for identification and consumption while admitted. The pharmacy currently prepares sterile IV admixture and chemotherapy IV medications for St. Paul's Hospital and Mount St. Joseph's Hospital as well as batched IV products for other sites. In the future, it is assumed that this practice will continue.

11.2.2.1(6) Clinical pharmacists work directly with the multidisciplinary team to provide clinical care to Patients on the Patient care units. Pharmacy learners will assist in this work (2-3 per ward at any given time). Clinical pharmacists will also support computerized prescriber order entry by verifying STAT and first doses of medications from the Patient care unit. A workstation in a private area will be available for quiet non-interrupted work while verifying medications.

11.2.2.2 Specialty Pharmacy

11.2.2.2(1) The Specialty Pharmacy will provide services to select outpatients and will not be a retail pharmacy.

11.2.2.2(2) Pharmacists will provide direct Patient care in collaboration with the multi-disciplinary team; educate Patients family and clinical Staff on the use, dosage and administration of medications.

11.2.2.2(3) The Specialty Pharmacy will be receiving and stocking pharmaceutical drugs and related supplies.

11.2.2.2(4) The Specialty Pharmacy requires Convenient Access and discreet Wayfinding on the main level. It is not required to have Specialty Pharmacy adjacent to the Main Pharmacy. The two largest Patient groups to which service will be provided are those who require antiretroviral therapy across B.C. and solid organ transplant recipients. In the future to support the Outpatient Care Centre, additional Patients may require the Specialty Pharmacy to dispense outpatient medications. The specially trained pharmacy Staff will provide counselling to outpatients and their families who will collect medication from the Pharmacy.

11.2.2.3 Clinical Nutrition

11.2.2.3(1) Registered dietitians will be distributed throughout the NSPH. Given that team members will be dispersed throughout the Facility, touchdown workstations in all clinical areas will be allocated for this

work to take place adjacent to where Patients and families are located. A central location for dietitians to receive daily reports and educational updates will be required; in addition, this space will store educational materials.

11.2.2.4 Main Laboratories and Outpatient Lab

11.2.2.4(1) Pre and Post Analytical (Accessioning)

11.2.2.4(1)(a) Pre and Post Analytical functions will include inpatient, outpatient and provincial referral lab testing; specimen receiving province-wide; specimen send-outs; data entry and distribution of specimens across all disciplines. Information on specimens that are delivered to the lab will be entered into the laboratory information system (LIS) and specimens prepared for analysis. Many of the specimens will require special handling due to the complexity of the testing. Pre and Post Analytical also provides phlebotomy services for inpatients and outpatients, and for long term care beds within PHC and the Dr. Peter's Centre. In the future, there may be a need to expand this service. Access to courier services is required.

11.2.2.4(2) Core Laboratory

11.2.2.4(2)(a) The Core Laboratory is a high volume/high automation area adjacent to the Accessioning Area, which includes chemistry-hematology analyzers that may be linked to the front-end modular automation in accessioning. The Core Laboratory therefore requires an open concept layout and will consist of chemistry, hematology and urinalysis testing. The less automated STAT and urgent testing such as blood gases and fetal fibronectins will be located adjacent to the Accessioning Area to ensure quick turnaround time for results. During off-shift hours the Core Laboratory and the urgent testing area will have reduced staffing therefore analyzers will be grouped to reduce in-flight times for technologists working the off-shifts. As test volumes increase, modular automation will play a larger role in the Laboratory's ability to process specimens with limited human resources. By linking the high volume analyzers with modular front-end and back-end automation, it will allow higher volumes of testing to be processed efficiently.

11.2.2.4(3) Clinical Chemistry

11.2.2.4(3)(a) Clinical Chemistry will provide clinical information, test results and medical diagnostic expertise to all clinical services. The Clinical Chemistry lab at the NSPH will be also a provincial resource for highly specialized analysis including protein analysis, endocrine, lipid and immunologic testing.

11.2.2.4(4) Hematopathology

11.2.2.4(4)(a) Hematopathology laboratory will provide diagnostic testing on blood, bone marrow and body fluids ranging from routine CBC to blood film reviews to complex flow cytometry including CD4 counts. Bone marrow biopsies will be both performed and analyzed. The coagulation laboratory will perform routine clotting tests to monitor coagulation therapies as well as complex testing to diagnose bleeding or clotting disorders. The laboratory will continue to be the only centre in Western Canada providing certain highly specialized coagulation tests.

11.2.2.4(5) Transfusion Medicine

11.2.2.4(5)(a) Transfusion Medicine will provide pre-transfusion testing for the provision of serologically compatible blood products for Patients based on best practice and serological testing guidelines. The service will be organized into several Components: limited prenatal testing (the majority will be performed by Canadian Blood Services) and pre-transfusion compatibility testing including work-up of routine and emergency requests for blood products and the performance of immune-hematological tests, determination of blood type, screening for atypical antibodies, determination of in-vivo antibody or complement binding to RBCs, cross matching and identification of clinically significant antibodies.

11.2.2.4(5)(b) Transfusion Medicine will provide storage, preparation and release of blood and blood Components for transfusion including short-date fraction Components; and provide coordination of the red cell redistribution program. There will be a Patient window and door for Patient pick-up of specialized blood products. Transfusion Medicine will continue to support the provincial programs for

adult inherited bleeding disorders, hemoglobinopathies and hemosiderosis.

11.2.2.4(6) Medical Microbiology and Virology

11.2.2.4(6)(a) Medical Microbiology and Virology will provide a comprehensive range of diagnostic services including: routine and specialized bacteriology, mycology, mycobacteriology (tuberculosis) and molecular diagnostics (including next generation sequencing).

11.2.2.4(6)(b) Microbiology will also support Infection Prevention and Control and Antimicrobial Stewardship Program services. The St. Paul's Microbiology laboratory is unique in supporting a provincial adult CF program and providing specialized Polymerase Chain Reaction (PCR) testing for Pneymocystis jiroveci Pneumonia (PJP). These tests will be made available to all health authorities.

11.2.2.4(6)(c) Virology will include serological testing for HIV, CMV, Hepatitis A, B and C. Molecular diagnostic testing used for detection of viral infections such as herpes simplex, varicella zoster, enterovirus and adenovirus will also be provided. Rapid testing for respiratory Influenza and GI Norovirus will be required for management of outbreak at St. Paul's Hospital, Mount St. Joseph's Hospital and long-term care facilities. Rapid molecular testing will be performed for blood infections. Testing of viral loads excluding Hepatitis C (HIV, CMV, EBV, Hepatitis B, polyomavirus) for therapeutic monitoring and management of immunocompromised and transplant Patients in B.C. will be done at St. Paul's Hospital Virology laboratory.

11.2.2.4(7) Anatomic Pathology

11.2.2.4(7)(a) Anatomic Pathology will continue to provide the following services: medical autopsy, surgical frozen section (intraoperative surgical pathology consultation), cytology and surgical pathology.

11.2.2.4(7)(b) Cytology and surgical pathology will utilize light microscopy to interpret Patient tissue samples providing information essential to Patient care. Tissue samples analyzed by cytology and surgical

pathology include biopsies/surgical resections of any body site, with the exception of brain/spinal cord. Breast biopsy/resection specimens are currently received from ORs at MSJ Hospital. Sometimes small biopsies of these organs are analyzed; sometimes the entire organ.

11.2.2.4(7)(c) Cytology and surgical pathology will provide information that can identify the disease process (e.g. inflammatory, infectious or neoplastic), tumour identity (in the case of neoplasia) and information critical to appropriate staging and treatment of cancer.

11.2.2.4(7)(d) Cytology and surgical pathology interpretation require that many complex and detailed procedures be in place to allow for routine light microscopy. These procedures include but are not limited to: liquid based cytology slide preparation; tissue biopsy/organ fixation and processing; paraffin-wax embedding; microtomy, preparation of thin tissue sections mounted onto glass slides stained with routine stains and special stains (ImmunoHistoChemistry) for specific proteins; special stains for microorganisms; enzyme histochemistry for muscle tissue).

11.2.2.4(7)(e) Additional special procedures will also be required for analysis of heart, kidney, and skin biopsies that utilize, in addition to light microscopy, fluorescence microscopy and electron microscopy for analysis. Cytology tissue interpretation will utilize specialized technologists to screen slides in preparation for interpretation by a pathologist.

11.2.2.4(8) POC Testing

11.2.2.4(8)(a) The laboratory will manage POCT, and Staff at the Patients' POC will perform the testing. Management will include quality control recording, proficiency testing, testing of new devices and overseeing of required maintenance and repairs, including consultation on new POCT protocols and procedures.

11.2.2.4(9) Laboratory Administrative Support

11.2.2.4(9)(a) Administrative support will provide administrative assistance, clerical and resource services. The

scope of services is anticipated to continue with the addition of new diagnostics in the future.

11.2.2.4(10) Exclusions

11.2.2.4(10)(a) The laboratory functions within a complex governance structure as part of PHC, consolidated Lower Mainland Laboratories, and within the emerging influence of the provincial Agency for Pathology and Laboratory Medicine (APLM)), under the oversight of PHSA. There is significant program integration and also overlap with laboratory services at VCH and PHSA laboratories (BC Children's and Women's, BC Cancer, BC Centre for Disease Control).

11.2.2.5 Outpatient Lab

11.2.2.5(1) The Outpatient Lab collects blood and urine samples from outpatients (arriving from in-hospital clinics and from outside physician offices/clinics). Both Patient registration and sample collection occur in this area (eight collection stations/cubicles). Two (2) Washroom-Patient (necessary for urine collection) and a Store-General for supply storage are required. Waiting area for Patients is required. There will be a transaction window for Patient pick-up of specialized blood products.

11.2.2.6 Morgue and Autopsy

11.2.2.6(1) The following services are included in Morgue and Autopsy:

11.2.2.6(1)(a) Receiving and temporary cold storage of the deceased. In some circumstances the deceased may be held for up to a month;

11.2.2.6(1)(b) Viewing of the deceased by family and friends. Grieving families will also be able to attend to the deceased on the IPU, but this may not be possible in all circumstances;

11.2.2.6(1)(c) Performing an autopsy on the body to discover the cause of death, extent of disease, or other factors relevant to the treating clinicians or family members;

11.2.2.6(1)(d) Specimen handling and storage, mobile radiography and photography;

11.2.2.6(1)(e) Demonstration of autopsy findings in cases of clinical interest, for teaching or quality of care purposes; and

11.2.2.6(1)(f) Transfer of the deceased to funeral homes.

11.3 OPERATIONAL CONSIDERATIONS

11.3.1 Service Delivery Principles and Methods

11.3.1.1 Care Provider Work Processes and Flows

11.3.1.1(1) Main Pharmacy

11.3.1.1(1)(a) The Main Pharmacy will be secure and generally accessible to pharmacy Staff, apart from a transaction window where Home IV therapy medications will be picked up. The pharmacy will consist of Receiving/Stores Area for storage of bulk supplies. A secure off-stage delivery pathway to take medication and deliveries from the loading dock to the Pharmacy will be crucial. This area will have Convenient Access from the FM Service Elevators for the delivery of drugs and other supplies to clinical floors. The drug distribution area is where unit doses are to be picked and packed for delivery to IPUs. AGVs will be available for the scheduled distribution of these.

11.3.1.1(1)(b) The Sterile Preparation Area will include one Clean Room-Hazardous Drugs with an Anteroom-Hazardous Drugs and one Clean Room-Non-Hazardous with an Anteroom-Non-Hazardous Drugs.

11.3.1.1(1)(c) Automation technology (e.g., box or pill pickers) may be implemented in the future within the Main Pharmacy. The new technology will be integrated within the programmed area and used to automate current manual processes with the goal being that of a closed loop medication system. It will also be critical that a RTLS tracking system is established for container/ cart with specific medications.

11.3.1.1(1)(d) The Order Entry Area is required to be a quiet area where the pharmacy technicians and pharmacists verify and process medication orders. Order verification will occur centrally in the Main

Pharmacy and de-centrally by clinical pharmacists on the Patient care units.

11.3.1.1(1)(e) The Reception/Administration Area will include the offices and Reception area to the pharmacy.

11.3.1.1(2) Specialty Pharmacy

11.3.1.1(2)(a) The Specialty Pharmacy will be located off the public area in the main lobby. Although this pharmacy serves outpatients, it will have Convenient Access from Main Entrance lobby with no direct Line of Sight to avoid the public confusing it with a retail pharmacy.

11.3.1.1(2)(b) Patients who are coming to pick up medications will have a Waiting area with three (3) transaction windows. Two (2) Consult/Interview Rooms will be provided for Patients requiring a more in-depth discussion regarding their medications. A separation between the public side and the Staff only side of the pharmacy is required. Waiting area and transaction windows will be discreet and located within the Component.

11.3.1.1(2)(c) In the back of Specialty Pharmacy area, a Hazardous (H) Sterile Room with an Anteroom-Hazardous will be located. There will be Staff workstations, Dispensary Area, Outreach Drug Distribution Area, as well as Bulk Storage/Decasing Area. The Order Entry Area is required to be a quiet area where the pharmacy technicians and pharmacists verify and enter medication orders.

11.3.1.1(2)(d) The Specialty Pharmacy will consist of receiving/stores area for storage of bulk supplies. This area will have Convenient Access from the FM Service Elevators for the delivery of drugs and other supplies. A secure off-stage delivery pathway to take medications and deliveries from the loading dock to Specialty Pharmacy will be crucial.

11.3.1.1(3) Clinical Nutrition

11.3.1.1(3)(a) Clinical Nutrition will be secure and generally accessible to dietitian Staff.

11.3.1.1(4) Laboratory Services (Main Laboratories and Outpatient Lab)

11.3.1.1(4)(a) Specimen Transport

11.3.1.1.4.(a).1 While Laboratory Staff will continue to collect specimens throughout the Facility, it is anticipated some travel requirements will be reduced by use of a PTS. This system will be designed to accommodate rapid delivery of specimens and hard copy documents to/ from stations located with Pre- and Post-Analytical (Accessioning) and Core Laboratory functions. It will be capable of safely transporting all potential lab samples and blood samples without damage to the samples.

11.3.1.1(4)(b) Consumable Supplies Management

11.3.1.1.4.(b).1 The majority of laboratory consumable supplies will be ordered and delivered directly to the Component. Dry and refrigerated storage will be located as close as possible to the areas serviced. Many consumables are time sensitive so rotational storage capacity will be required to allow for Convenient Access and to ensure maximum utilization of supplies. Frequent direct deliveries to the Laboratory will require temporary holding facilities pending Staff's availability to sort items into storage areas. The Outpatients area physically separate from the main Laboratory will require its own supply space.

11.3.1.1(4)(c) Blood product distribution

11.3.1.1.4.(c).1 Conveyance system like PTS specific for the delivery of blood products to various areas of the Facility will be required.

11.3.1.1.4.(c).2 Courier and public access for blood product transportation will occur in the Main Laboratories. Public access for Patients to pick up blood products will occur in the Outpatient Lab.

11.3.1.1(5) Morgue and Autopsy

11.3.1.1(5)(a) The deceased will arrive at this Component from anywhere within the Facility. Cases arriving Dead On Arrival (DOA) will be transferred from the ED. The deceased will leave the morgue via an

adjacent dedicated and discreet Sally-Port accessed from the parking level by intercom. Transportation of the deceased through the Facility will not cross public corridors and will be conducted using discrete transport gurneys along non-General Circulation routes. Access by funeral home personnel will be limited to the Store-Cadaver. Funeral home transport will utilize the adjacent dedicated Sally-Port for discrete transfer of cadavers.

11.3.1.2 Patient Information Management

11.3.1.2(1) Pharmacy (Main Pharmacy and Specialty Pharmacy)

11.3.1.2(1)(a) Decision support tools including physician order entry Clinical Decision Support System (CDSS), Cerner and BDM are often combined with computerized physician (or provider) order entry systems (CPOE), through which medications, tests and procedures are ordered.

11.3.1.2(2) Clinical Nutrition

11.3.1.2(2)(a) Cerner and Food Service Management systems (Computrition).

11.3.1.2(3) Laboratory Services (Main Laboratories and Outpatient Lab)

11.3.1.2(3)(a) Sunquest Laboratory Information System /CST Cerner;

11.3.1.2(3)(b) Sunquest Clinical Collect, Cerner Bridge and other positive Patient identification (PPID) systems, mobile label printers; and

11.3.1.2(3)(c) Requisition scanning (billing function – integrated).

11.3.1.2(4) Morgue and Autopsy

11.3.1.2(4)(a) Sunquest LIS/Cerner

11.3.1.3 Clinical and Logistical Support Processes and Flows

11.3.1.3(1) Pharmacy (Main Pharmacy and Specialty Pharmacy)

11.3.1.3(1)(a) Equipment and Instruments

11.3.1.3.1.(a).1 AGVs will support the movement of medications to and from the Components in secure, back-of-house spaces.

11.3.1.3(1)(b) Consumable Supplies

11.3.1.3.1.(b).1 Consumable supplies stored in the pharmacy area will be organized and stored in a common order and configuration. The intent of standardization is to enable efficient locating of each supply item without Staff having to reorient to a new room configuration and to avoid long travel distances between supplies storage and POC.

11.3.1.3.1.(b).2 The material management and pharmacy Components will establish a receiving and delivery system for incoming and outgoing pharmaceutical products to ensure that all such activities are timely, reduce the need to carry out unnecessary handoffs, provide required chain of control including cold chain processes, and the pharmaceutical products are stored as per manufacturers recommendation and are kept safe.

11.3.1.3.1.(b).3 Pharmaceuticals will be delivered directly to the pharmacy through a non-public corridor.

11.3.1.3.1.(b).4 A secure off-stage delivery pathway to take medications and deliveries from the loading dock to pharmacy will be crucial.

11.3.1.3.1.(b).5 Pharmaceuticals will be delivered directly to the Pharmacies by vendors. These deliveries will still access the loading dock for offloading and staging before products are moved to designated locations in the Main Pharmacy or Specialty Pharmacy.

11.3.1.3(2) Clinical Nutrition

11.3.1.3(2)(a) Dietitians working on IPUs will perform nutrition assessments and establish nutrition care plans for Patients. Patients requiring dietitian services are identified through multiple nutrition screening approaches. Nutrition assessments are done at bedside and using Cerner. Nutrition care plans may include diet modifications, enteral and parenteral feeding, nutrition education and counselling, discharge planning and referrals to other care providers or services. Dietitians will be responsible client monitoring and evaluation of outcome measurements for clients. Dietitians working on IPUs will spend the majority of their time on the unit they are assigned to. Inpatient

dietitians' services include, but are not limited to, the following clinical areas/services: renal, cardiac, medicine, surgery, critical care, palliative care, mental health, urban health.

11.3.1.3(2)(b) Dietitians working in outpatient care will perform nutrition assessments and establish nutrition care plans for Patients. Patients requiring dietitian services are determined by area specific standards. Nutrition assessments may be done in a clinic setting, over the phone, or through one-on-one appointments. Nutrition care plans may include enteral and parenteral feeding, nutrition education and counselling and referrals to other care providers or services. Dietitians may also lead group education sessions. Dietitians will be responsible client monitoring and evaluation of outcome measurements for clients. Dietitians working in outpatient care will spend their time in clinics and at their workstations. Electronic or phone consultations and follow up are frequent. Outpatient dietitian services include, but are not limited to, the following clinical areas/services: renal, Heart Centre, Cystic Fibrosis (CF), Home Parenteral Nutrition, Elder Care, diabetes, and general outpatients.

11.3.1.3(2)(c) Some dietitians work in both inpatient and outpatient roles to maintain continuity of care. These dietitians may spend part of their time on an IPU or service, as well as in clinics or at their workstation.

11.3.1.3(3) Laboratory Services (Main Laboratories and Outpatient Lab)

11.3.1.3(3)(a) Equipment and Instruments

11.3.1.3.3.(a).1 Laboratory functions will rely on an increasing prevalence of automated instrumentation, mechanical and electrical equipment. This equipment will require routine maintenance as well as periodic repair. To the extent practicable, routine maintenance will be performed without moving the item from its normal place of operation. Some bench space will be available in shared support space that could accommodate minor technical work. External service engineers or laboratory Staff will

perform virtually all repairs and maintenance on the laboratory equipment on site within the Laboratory. Biomedical Engineering will be involved in small general equipment only. Refrigerators for blood products require secondary monitoring to ensure that temperature standards are maintained. Some other equipment requires monitoring and alarm systems.

11.3.1.3(3)(b) Consumable Supplies

11.3.1.3.3.(b).1 Inventories of common consumable supplies will be maintained close to point of use throughout the Laboratory. Items will be maintained with minimum inventory levels triggering a re-ordering process.

11.3.1.3.3.(b).2 Most Laboratory supplies will be speciality items ordered directly from the vendor by laboratory Staff. These items will be received by material management and delivered to the laboratory on an agreed upon regular schedule. Inventories on top-up carts will be generally maintained according to prescribed delivery schedules.

11.3.1.3(3)(c) Laundry and Linen

11.3.1.3.3.(c).1 Clean linen exchange carts will be delivered to the loading dock before being delivered to the laboratory where it will be centrally stored.

11.3.1.3.3.(c).2 Soiled linen will be consolidated at a central Disposal Hold location in the Component, and temporarily held in foot controlled laundry hampers.

11.3.1.3(3)(d) Processed Specimen Retention

11.3.1.3.3.(d).1 Processed specimens including specimen tubes, urines, fluids, swabs, stools, blocks, slides and wet specimens, will be stored centrally in the laboratory for up to one year in both frozen and dry storage. Long term storage of processed tissue samples (20 years) (e.g. glass slides and paraffin blocks) will be accommodated offsite.

11.3.1.3.3.(d).2 Tissue bank

(d).2.1 A formal research tissue bank will not be part of the clinical Laboratory, but ultra-low temperature freezers will be

required to temporarily store clinical trial research samples, and conventional freezer space is required for frozen tissue retention (renal, cardiac, skin) for diagnostic purposes.

11.3.1.3(3)(e) Waste Management

11.3.1.3.3.(e).1 Waste products will be managed according to a system of segregation at point of origin and sequential consolidation. Operation of this system relies on appropriate containment facilities for each type of waste product beginning at where the waste is generated followed by similar, but progressively larger, containment facilities at key collection locations.

11.3.1.3.3.(e).2 Throughout the Laboratory Component, waste management is understood to begin at the individual workstations with centralized collection and temporary holding stations being located in a general support area. Each administrative area will also accommodate segregation of the types of waste products typically generated in these types of spaces.

11.3.1.3.3.(e).3 Segregation of wastes will accommodate the following categories of products:

(e).3.1 General garbage;
(e).3.2 Confidential paper;
(e).3.3 Sharps (including potentially biohazardous items);
(e).3.4 Infectious or contaminated wastes (excluding sharps);
(e).3.5 Flammables;
(e).3.6 Chemicals (including residues);
(e).3.7 Clean recyclable paper and cardboard;
(e).3.8 Clean metal (tin and aluminum); and
(e).3.9 Clean recyclable plastics.

11.3.1.3(4) Morgue and Autopsy

11.3.1.3(4)(a) Cadavers will arrive from anywhere in the Facility at this Component. Those that are DOA will arrive directly from the ED.

11.3.1.3(4)(b) Operation of the waste management system relies on appropriate containment facilities for each type of waste.

11.3.1.3(4)(c) Consumable supplies will be maintained in the space close to the point of use to allow for storage of minimum 3 days of supply for each item.

11.3.1.3(4)(d) Equipment used in this Component will consist primarily of stretchers, fixed autopsy tables and small equipment items used for autopsies. Transportation of cadavers will be done in an enclosed and discreet manner with stretchers.

11.3.1.4 Anticipated Trends in Service Delivery

11.3.1.4(1) Pharmacy (Main Pharmacy and Specialty Pharmacy)

11.3.1.4(1)(a) The following trends will influence the future functioning of this Component, and will be taken into account in the Component's design.

11.3.1.4.1.(a).1 Patients requiring inpatient care will be increasingly more acute putting increased demands on the medication distribution as the number of prescriptions increases each year.

11.3.1.4.1.(a).2 The delivery of evidence-based, cost effective care will continue.

11.3.1.4.1.(a).3 The numbers of admissions per bed will continue to increase until lengths of stay reach absolute minimums.

11.3.1.4.1.(a).4 Computers will increasingly perform a vital role in Patient-related data assembly/analysis; almost any data will be available at any terminal device with the proper passwords.

11.3.1.4.1.(a).5 Pagers will become obsolete and mobile devices/electronic messaging will be the dominant form of non-face to face communication between health care professionals.

11.3.1.4.1.(a).6 The increasing use of automation and technology in the ordering and dispensing of medications will continue.

11.3.1.4.1.(a).7 Telemedicine will increasingly provide outreach opportunities to and from health care facilities province-wide.

11.3.1.4.1.(a).8 The trend toward working in interdisciplinary teams will continue.

11.3.1.4.1.(a).9 There will be a continued shortage of residency-trained pharmacists and pharmacy techs, requiring available workers to assume broader responsibilities.

11.3.1.4.1.(a).10 The trend to adopt evidence-based clinical pathways will continue, with standards becoming available in many more types of cases.

11.3.1.4.1.(a).11 Pharmacy will experience increased demands in its clinical services, particularly in Outpatient Care Centre Clinics and in support of medication reconciliation on admission and discharge.

11.3.1.4.1.(a).12 Pharmacists will be increasingly mobile, working remotely from collaborative care spaces distributed throughout the Patient spaces.

11.3.1.4.1.(a).13 The trend towards Person- and Family-Centred Care will continue.

11.3.1.4(2) Clinical Nutrition

11.3.1.4(2)(a) Dietary needs are becoming increasingly more complex due to cultural diversity, chronic diseases, and increasing age. Managing these distinct needs within one food service model will become increasingly challenging.

11.3.1.4(2)(b) There will be an expected shortage of trained dietitians and food services workers/managers, requiring available workers to assume broader responsibilities.

11.3.1.4(2)(c) Clinical nutrition will experience increased demands on dietitian services particularly in inpatient areas to support the prevention and treatment of malnutrition.

11.3.1.4(2)(d) The trend towards Patient and family centred care will continue. Food service models will be transformed to support greater Patient choice in menu items and timing of meals.

11.3.1.4(2)(e) Computers will increasingly perform a vital role in Patient-related data assembly/analysis; almost any data will be available at any terminal device with the proper passwords.

11.3.1.4(2)(f) Pagers will become obsolete and mobile devices/electronic messaging will be the dominant form of non-face to face communication between health care professionals.

11.3.1.4(2)(g) The trend toward working in interdisciplinary teams will continue.

11.3.1.4(3) Laboratory Services (Main Laboratories and Outpatient Lab)

11.3.1.4(3)(a) The following lists trends expected within the planning horizon of this project, and that are expected to affect the nature and/or extent of functions accommodated within this Component. Effects of these trends will be reflected in the Component's design.

11.3.1.4.3.(a).1 Telemedicine and POC (POC) technology will continue expanding to provide more laboratory services to remotely located Patients. POC testing provided in remote facilities will be monitored and this site will continue to have oversight responsibility for this type of remote testing.

11.3.1.4.3.(a).2 Technology, technical capacity and POC testing will continue increasing space needs in the Laboratory Component.

11.3.1.4.3.(a).3 Outpatient (billable) Lab services represent a source of revenue for the Authority. Attention will continue focusing on streaming Patients making it both convenient and efficient to access these on-site services for outpatients.

11.3.1.4.3.(a).4 Attracting qualified medical and technical Staff to laboratory medicine will be an ongoing challenge. An optimized, safe, well-ventilated, natural light work environment is essential.

11.3.1.4.3.(a).5 Further Automation, including robotics will enable "walk-way" technology giving technical Staff the option of attending to other functions while specimen analyzing and reporting is being conducted.

11.3.1.4.3.(a).6 The creation of centers of excellence or consolidation of services within the BC lab space will continue and may change the scope of services provided on site overtime.

11.3.1.4.3.(a).7 Voice recognition technology will potentially alter the requirements for on-site clerical and medical transcription Staff.

11.3.1.4.3.(a).8 Digital pathology – a fully digital workstream for anatomic pathology will impact design of technical space (to accommodate high-volume whole slide imaging systems) and pathologist workspaces (high-resolution monitors replacing microscopes)

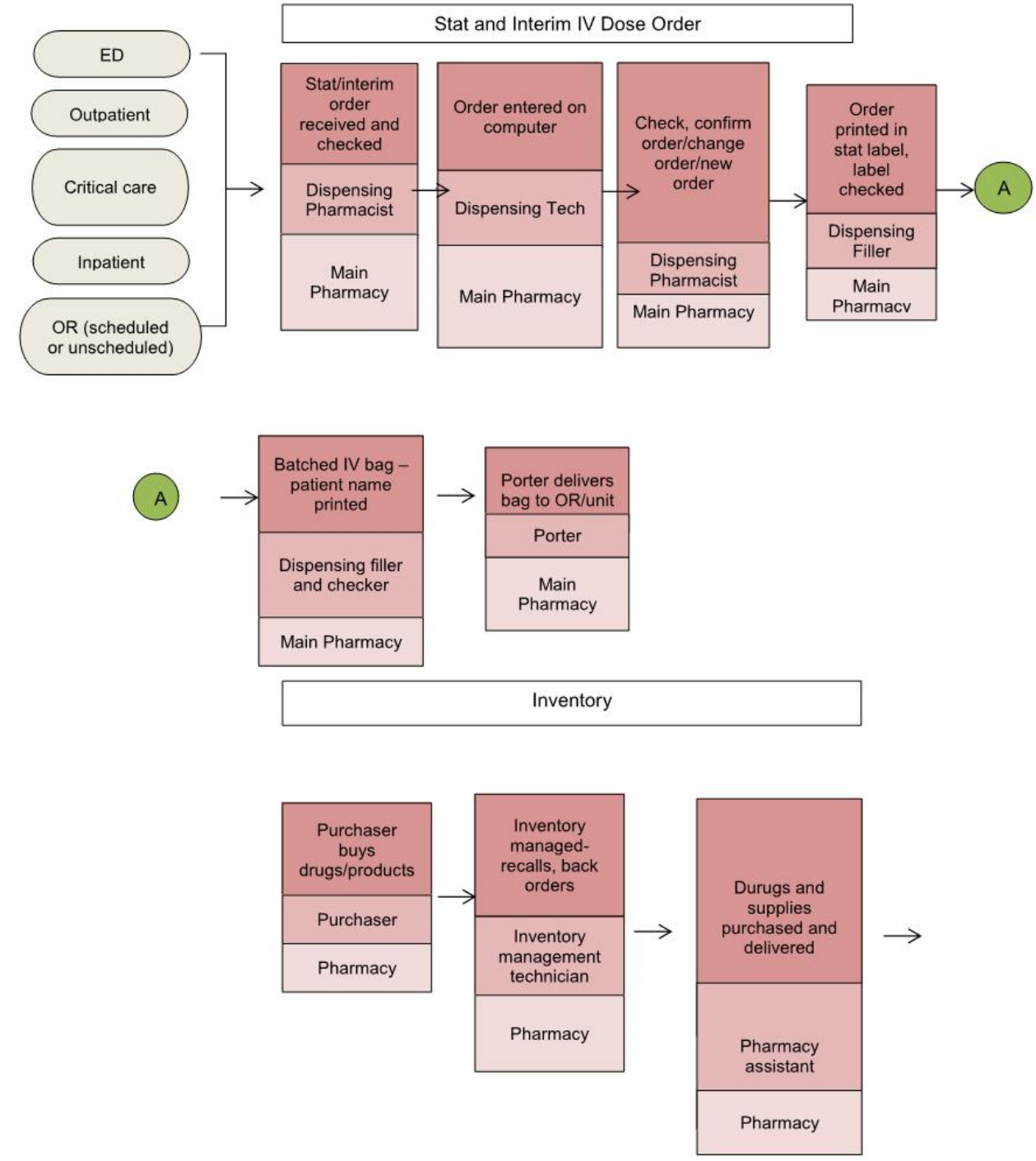
11.3.1.4(4) Morgue and Autopsy

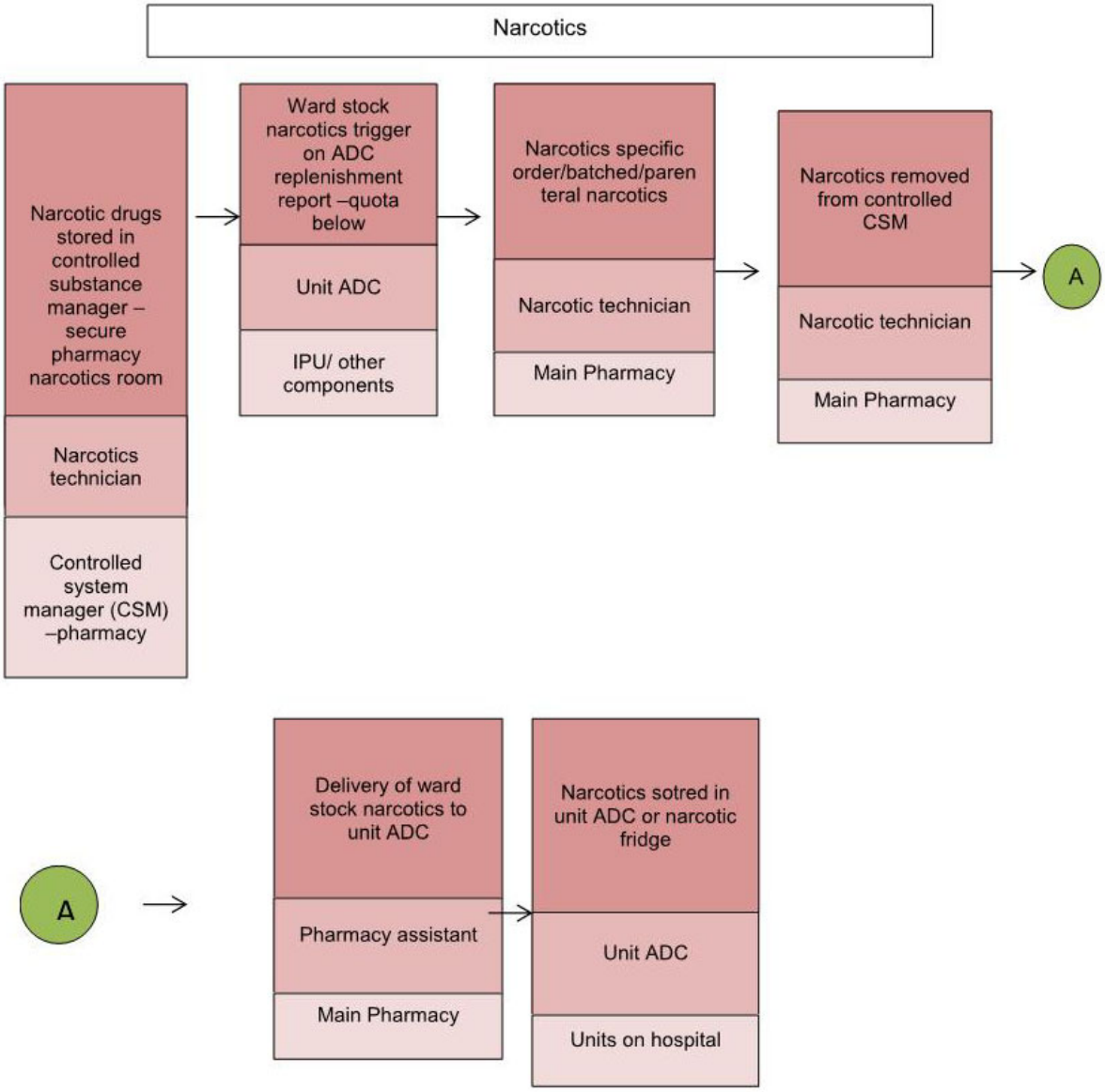
11.3.1.4(4)(a) A high-capacity, consolidated autopsy service within Vancouver would change the requirement for an autopsy suite at the Facility.

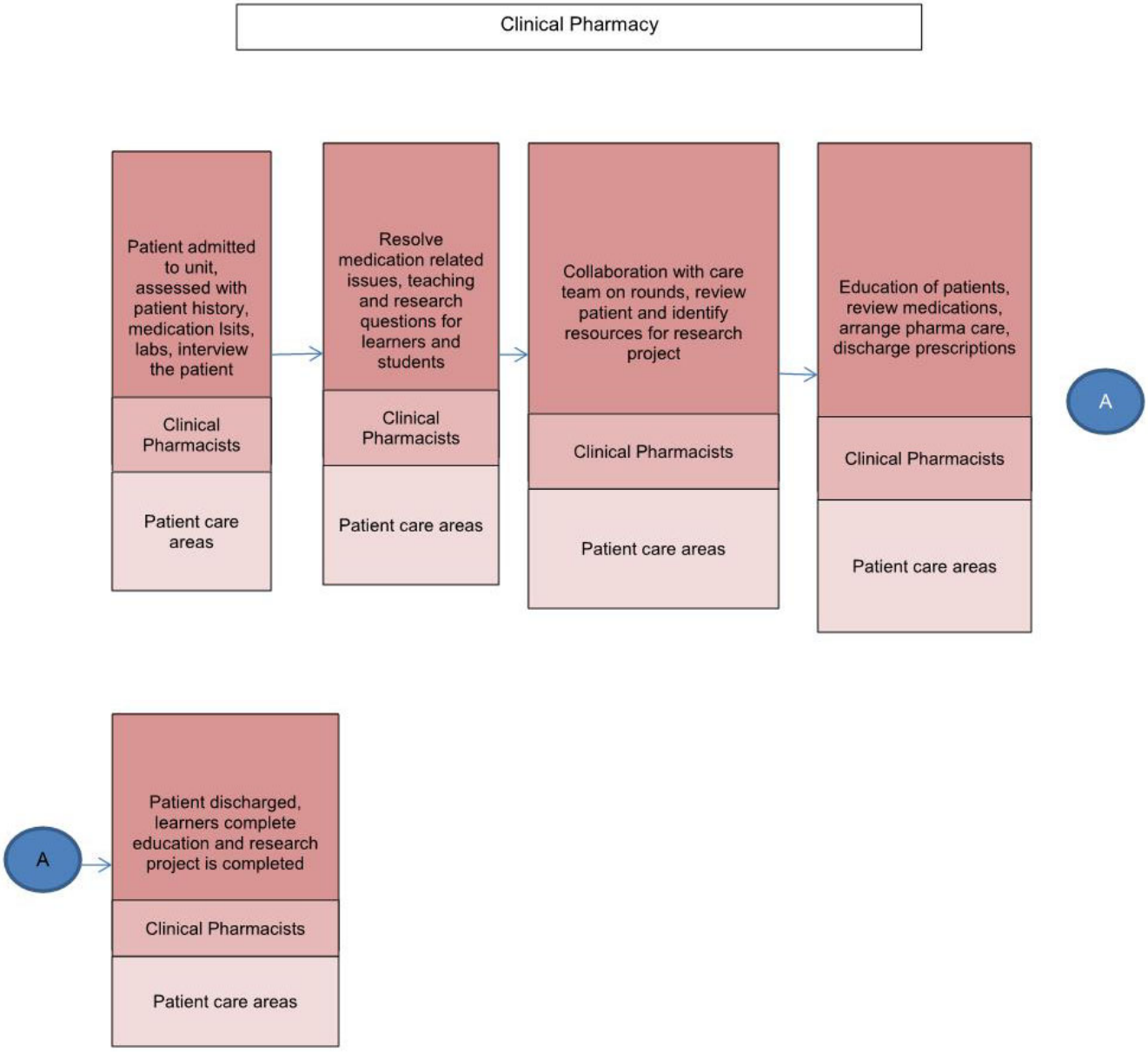
11.3.2 Workflows

11.3.2.1 The Main Pharmacy workflows are depicted in the following workflow diagram.

J1 - MAIN PHARMACY WORKFLOW DIAGRAM

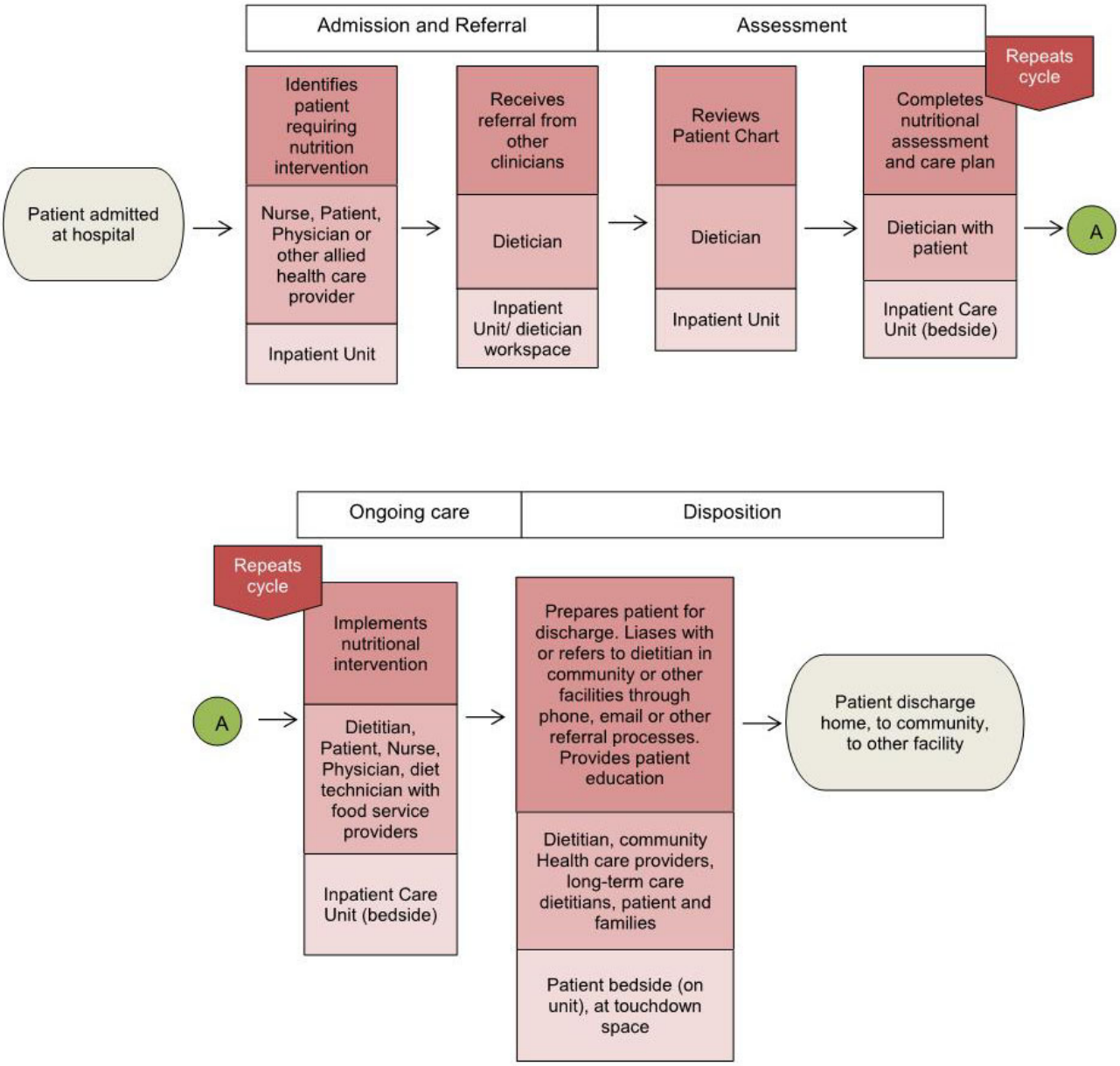



Narcotics
Narcotic drugs stored in controlled substance manager – secure pharmacy narcotics room
Narcotics technician
Controlled system manager (CSM) –pharmacy
Ward stock narcotics trigger on ADC replenishment report –quota below
Unit ADC
IPU/ other components
Narcotics specific order/batched/parenteral narcotics
Narcotic technician
Main Pharmacy
Narcotics removed from controlled CSM
Narcotic technician
Main Pharmacy
A
A
Delivery of ward stock narcotics to unit ADC
Pharmacy assistant
Main Pharmacy
Narcotics sotred in unit ADC or narcotic fridge
Unit ADC
Units on hospital

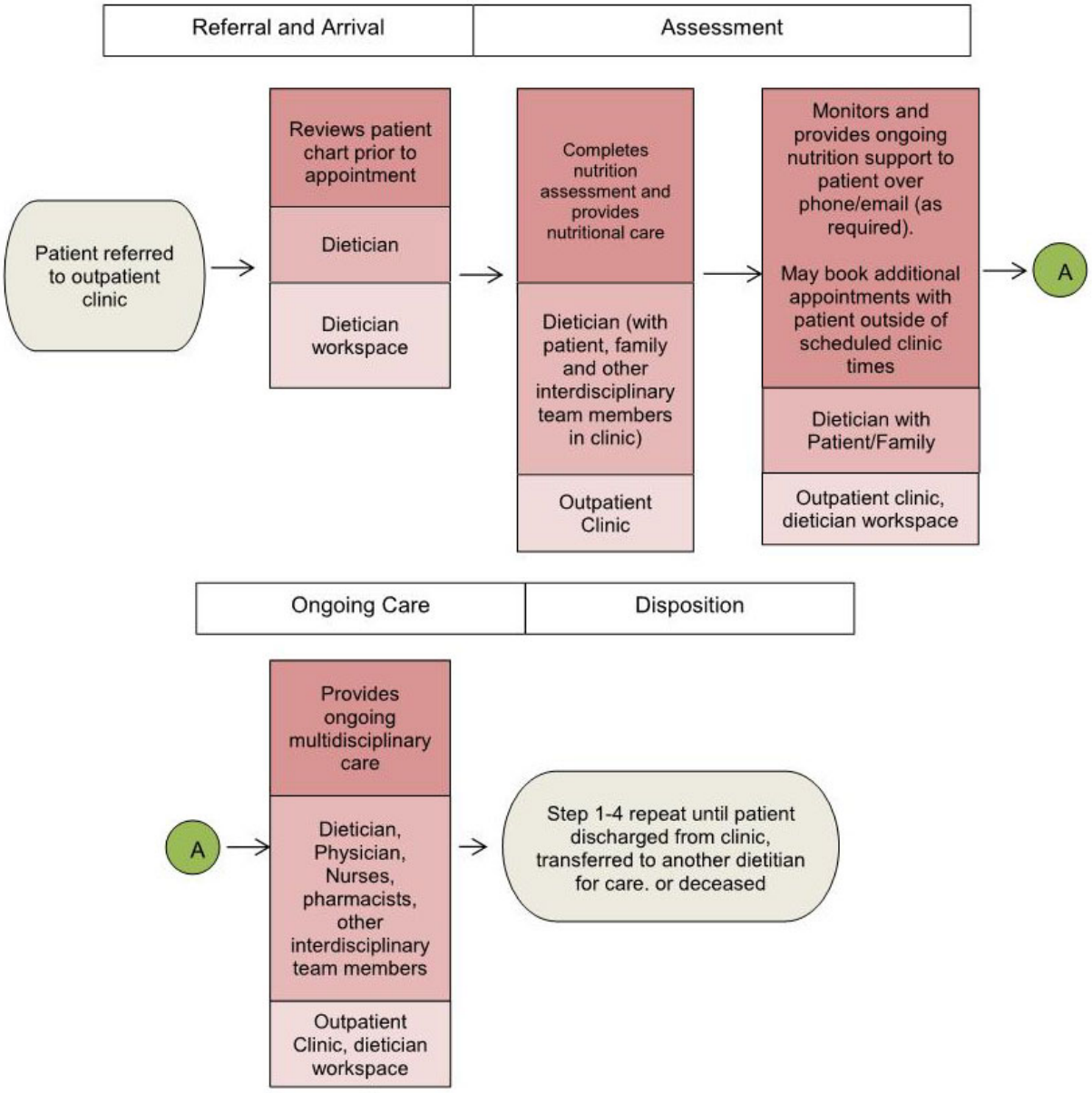

Clinical Pharmacy
Patient admitted to unit, assessed with patient history, medication lsits, labs, interview the patient
Clinical Pharmacists
Patient care areas
Resolve medication related issues, teaching and research questions for learners and students
Clinical Pharmacists
Patient care areas
Collaboration with care team on rounds, review patient and identify resources for research project
Clinical Pharmacists
Patient care areas
Education of patients, review medications, arrange pharma care, discharge prescriptions
Clinical Pharmacists
Patient care areas
A
A
Patient discharged, learners complete education and research project is completed
Clinical Pharmacists
Patient care areas

11.3.2.2 The Clinical Nutrition workflows are depicted in the following workflow diagram.

J3 - CLINICAL NUTRITION INPATIENT WORKFLOW DIAGRAM



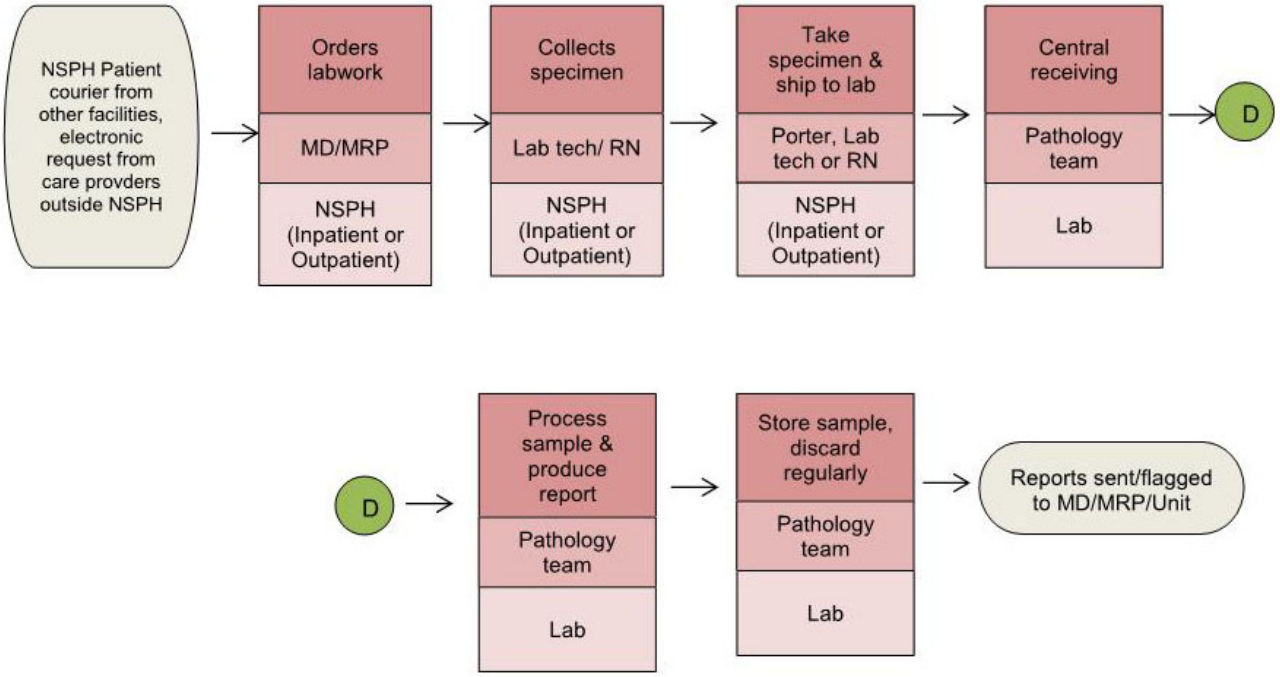
J3 - CLINICAL NUTRITION OUTPATIENT WORKFLOW DIAGRAM



11.3.2.3 The Laboratory Services workflows are depicted in the following workflow diagram.

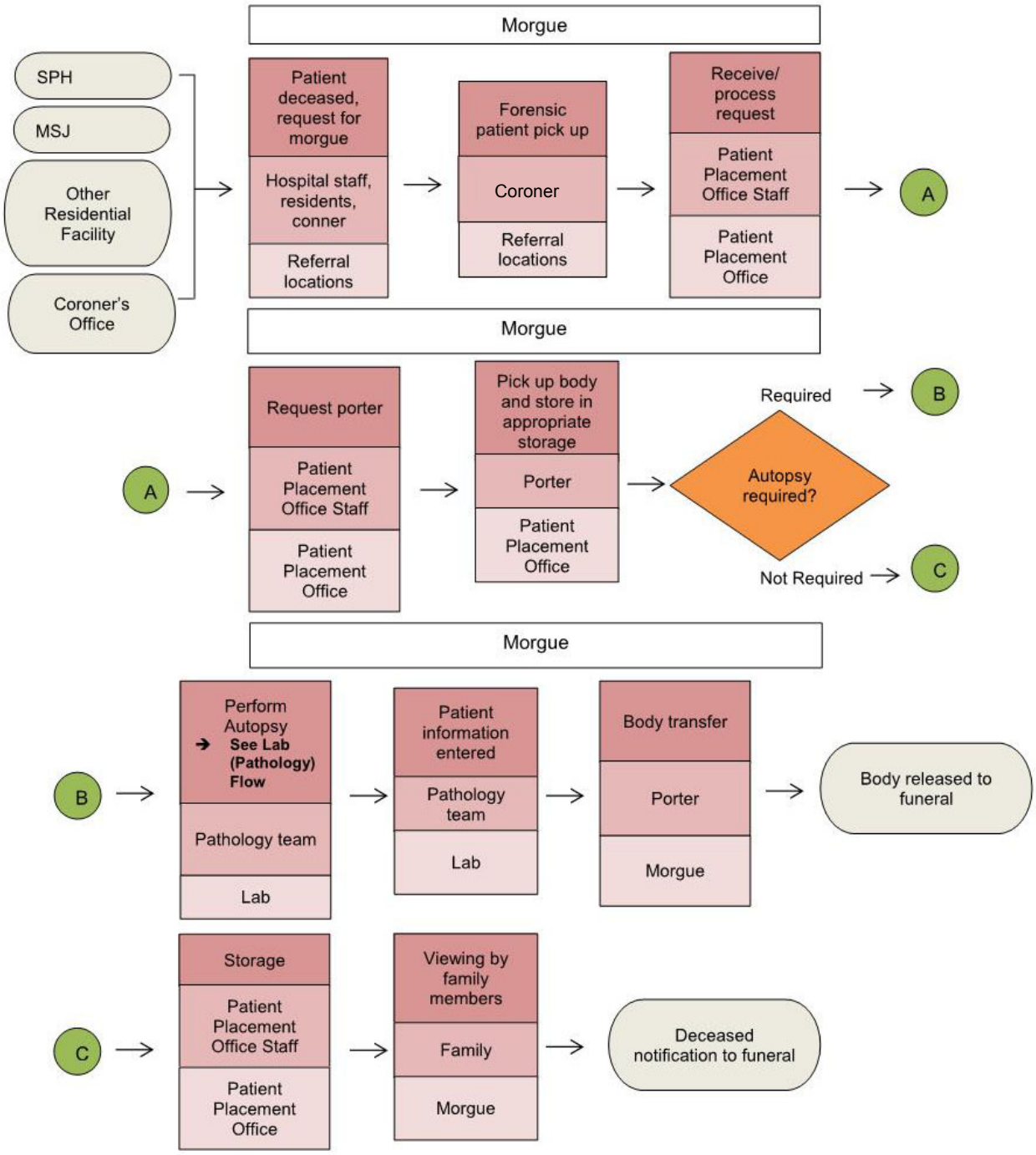
J4 - MAIN LABORATORIES WORKFLOW DIAGRAM

Cultures from Blood/Urine/Tissue/Other Areas:



11.3.2.4 The Morgue and Autopsy workflows are depicted in the following workflow diagram.

J6 - MORGUE AND AUTOPSY WORKFLOW DIAGRAM



11.3.3 Hours of Operation

11.3.3.1 Main Pharmacy: 0000 – 2400 hours, 7 days per week

11.3.3.2 Specialty Pharmacy: 0830 – 1800 hours, Monday to Friday

11.3.3.3 Clinical Nutrition: 0730 – 1700 hours, Monday to Friday

11.3.3.4 Laboratory Services (Main Laboratories and Outpatient Lab)

11.3.3.4(1) Pre and Post Analytical: 0000 – 2400 hours, 7 days per week

11.3.3.4(2) Core Laboratory (Incl. Clinical Chemistry, Hematopathology, Transfusion Medicine): 0000 – 2400 hours, 7 days per week

11.3.3.4(3) Anatomic Pathology: 0600 – 1900 hours, Monday to Friday/On-Call Technologist, Weekends and Stat Holidays Outpatient specimen collection: 0700-1800 hours, Monday to Friday, 1000-1500 hours weekends, closed statutory holidays

11.3.3.4(4) Cytology: 0700 – 1700 hours, Monday to Friday/On-Call Technologist, Stat Holidays

11.3.3.4(5) Renal Lab: 0700 – 1700 hours, Monday to Friday

11.3.3.4(6) Microbiology: 0700-2300 hours, Monday to Friday; 0800-1600 hours, weekends and statutory holidays

11.3.3.4(7) Virology: 0800 – 1700 hours, Monday to Friday/0800 – 1600 hours, Weekends and Stat Holidays/On-Call Technologist 24/7

11.3.3.4(8) Outpatient Lab: 07:00 – 18:00 hours, Monday to Friday; 10:00 – 15:00 weekends and statutory holidays

11.3.3.5 Morgue and Autopsy: The Morgue and Autopsy will not be staffed regularly but will be accessible to authorized Staff and escorted families 24 hours per day, 7 days per week. Autopsies will typically be performed during regular business hours.

11.3.4 Workloads

11.3.4.1 For Pharmacy, prescriptions filled per day are expected to increase 5% per year and the CIVA mixtures are expected to increase 1% per year (this growth rate could change depending on significant program changes at St. Paul's Hospital in the future). In the future, total workload may increase if St. Paul's Hospital takes on order verifications from other sites through the CST project.

11.3.4.2 The laboratory currently provides 5.4 million test results annually with overall workload increasing at a steady 3% per year.

11.3.4.3 The maximum estimated workload for this Component is shown in the following table.

CLINICAL SUPPORT SERVICES STAFF CATEGORY	PEAK SHIFT
Main Pharmacy	
Regional Director and Managers	3
Pharmacy Coordinator and Ops Support Coordinator	3
Pharmacist Supervisor	4
Staffing Clerk	3
Technician Supervisor 2	1
Technician Supervisor 1	1
Med safety Pharmacist	1
Med Use Management Pharmacist	1
Antimicrobial Stewardship Pharmacist	1
TPN/Chemo Pharmacist	1
Home IV/Med/Rec Pharmacist	1
EEF Pharmacist	1
Study Pharmacist	1
Pharm Admin	3
IS Coordinator	1
IS Technician	1
Project Manager Pharmacist	1
Dispensary/IV Pharmacist	12
Clinical Pharmacist	36
Clinical Technician	4
Pharmacy Student	4
Pharmacy Resident	6
Inventory Pharmacy Technician	2
VCC Student	4
Purchaser	1
ADM Tech	3
Dispensary/IV Tech	14
Ward stock Tech	20
Distribution Resident	2

CLINICAL SUPPORT SERVICES STAFF CATEGORY	PEAK SHIFT
TOTAL: Main Pharmacy	**136**
Specialty Pharmacy	
Pharmacy coordinator	1
Clinical pharmacist	13
Dispensary Pharmacist	3
Pharmacy Technician	2
Pharmacy Assistant	6
TOTAL: Specialty Pharmacy	**25**
Clinical Nutrition	
Dietitians	8
Students	2
TOTAL: Clinical Nutrition	**10**
Laboratory	
Pre and Post Analytical	
Technical Lead	1
Technical Coordinator/Senior MLA	3
Medical Laboratory Assistants	80
Medical Laboratory Technologists	5
Medical Laboratory Assistant Students	2
Subtotal, Pre and Post Analytical	**91**
Clinical Chemistry	
Medical Laboratory Assistants	1
Medical Technologists	44
Biochemists	4
Clinical Chemist	1
Technical Lead	1
Technical Coordinator	3
Medical Residents	3

CLINICAL SUPPORT SERVICES STAFF CATEGORY	PEAK SHIFT
Lab Tech students	3
Subtotal, Clinical Chemistry	**60**
Hematopathology	
Medical Laboratory Technologists	22
Hematopathologist	4
Medical Residents	2
Technical Lead	1
Technical Coordinator	3
Lab Tech Students	3
Subtotal, Hematopathology	**35**
Transfusion Medicine	
Medical Laboratory Technologists	20
Lab Tech Students	3
Technical Lead	1
Technical Coordinator	2
Residents	3
Subtotal, Transfusion Medicine	**29**
Microbiology	
Medical Laboratory Technologist	34
Pathologists/Microbiologists	3
Residents	4
Clinical Scientist (Molecular)	2
Molecular Bioinformatics Analyst	2
Technical Coordinator	2
Lab Tech Students	3
Antibiotic Stewardship & IPAC	1
Subtotal, Microbiology	**51**
Virology	
Medical Laboratory Technologists (Virology)	19
Pathologists/Microbiologists	2
Technical Coordinator	3

CLINICAL SUPPORT SERVICES STAFF CATEGORY	PEAK SHIFT
Subtotal, Virology	**24**
Anatomic Pathology	
Transcriptionist	7
Lab Assistant	1
Data Entry	2
Cytology Technologists	5
AP Technologists	23
Technical Lead	1
Residents	4
Pathologists	19
Researcher	1
Technical Coordinator	2
Lab Tech Students	3
Subtotal, Anatomic Pathology	**68**
Laboratory Administration	
Department Head	1
Administration Assistant	2
Laboratory Operations Manager	1
Laboratory Site Supervisor	1
Data Quality and Billing	1
Research Admin. Coordinator	1
Research Coordinator	2
POCT & QI Technologist	3
LIS Technical Support	1
Subtotal, Laboratory Administration	**13**
Outpatient Laboratory	
Technical Coordinator/Senior MLA	1
Medical Laboratory Assistants	12
Subtotal, Outpatient Laboratory	**13**
TOTAL: Laboratory	**384**

CLINICAL SUPPORT SERVICES STAFF CATEGORY	PEAK SHIFT
DAYTIME PEAK TOTAL	**555**

11.4 DESIGN CRITERIA

11.4.1 General Requirements

11.4.1.1 Zones of activity within the Component include the following:

11.4.1.1(1) Main Pharmacy

11.4.1.1(2) Specialty Pharmacy

11.4.1.1(3) Clinical Nutrition

11.4.1.1(4) Main Laboratories

11.4.1.1(5) Outpatient Lab

11.4.1.1(6) Morgue and Autopsy

11.4.2 Main Pharmacy

11.4.2.1 Main Pharmacy does not need to be located adjacent to the Specialty Pharmacy and both pharmacies will have Direct Access to the loading dock through Patient Transfer/Staff Service and FM Service Elevators and corridors.

11.4.2.2 Access to this Component will be controlled at all times. This area will be accessible to authorized personnel 24 hours a day, 7 days a week. Staff panic duress system will communicate directly with IPS.

11.4.2.3 Entry & Security

11.4.2.3(1) Receiving/Break Down Area will be secured and separate from the Staff only areas of Pharmacy.

11.4.2.3(2) Main Pharmacy will have a Reception and an adjacent, enclosed Waiting area with an entry door from General Circulation, a secure door into the Pharmacy area, one (1) transaction window and seating for four (4) including one (1) in wheelchair. Line of Sight from the Reception to the Waiting area will be provided.

11.4.2.4 General Internal Layout

11.4.2.4(1) The Component will be organized into five (5) major areas as follows:

11.4.2.4(1)(a) Administration work area including offices and Conference/Meeting Rooms for teaching and training.

11.4.2.4(1)(b) Technical work areas including product receiving/reprocessing and technical workstations for barcoding and ADC unit stock management.

11.4.2.4(1)(c) The Sterile Preparation Area for sterile preparation/laminar with flow hoods in Clean Room-Non-Hazardous and chemotherapy biological safety cabinet in Clean Room-Hazardous Drugs.

11.4.2.4(1)(d) The pharmacy dispensary consisting of segregated Order Entry Area adjacent to the medication filling and checking area.

11.4.2.4(1)(e) Inventory Storage will consist of shelving units to stock bulk drug and non-drug inventory (i.e. supplies).

11.4.2.4(2) Provide an open floor plan design concept for the Component. Work areas will incorporate a modular design, thus enabling easy movement and reconfiguration as the pharmacy program changes.

11.4.2.4(3) The Store-Narcotics Vault will be adjacent to the Drug Distribution Area.

11.4.2.4(4) The Sterile Preparation Area will have Convenient Access to the Order Entry Area.

11.4.2.4(5) The Store-Medication Supplies will be adjacent to the Receiving/Break Down Area.

11.4.2.4(6) Access to administrative offices and workstations will not cross technical areas in which medications are stored (such as Receiving / Stores Area, Order Entry Area, Drug Distribution Area and Sterile Preparation Area).

11.4.2.4(7) Pharmacy design will conform to the regulations of the professional and Governmental Authority and will respect Canadian Society of Hospital Pharmacists and Health and Welfare Guidelines.

11.4.2.4(8) Hand hygiene sinks will be located at workstations where medications are prepared. The location of all hand hygiene sinks will prevent against accidental spills and splashes from contacting nearby medications.

11.4.2.4(9) Two (2) plumbed emergency shower/eyewash (tempered with thermostatic mixing values to prevent eye scalding) will be installed in the pharmacy.

11.4.2.4(10) The emergency shower/eyewash will be provided such that a Person can access it from anywhere in the Component within 10 seconds, meaning not having to travel more than 10 metres. Refer to National Guidelines for Handling Hazardous Substances by the Canadian Centre for Occupational Health & Safety (CCOHS) and National Association of Pharmacy Regulatory Authorities (NAPRA) standards.

11.4.2.4(11) Some supplies and drugs will be received from the loading dock and distributed to other Components via scheduled AGV deliveries.

11.4.2.5 Sterile Preparation Area

11.4.2.5(1) The Sterile Preparation Area will be organized into two (2) separate zones:

11.4.2.5(1)(a) one for preparation of hazardous drugs products; and

11.4.2.5(1)(b) one for non-hazardous drug products.

11.4.2.5(2) Both zones will be independent of each other including their respective anterooms.

11.4.2.5(3) Anteroom countertops will be stainless steel to promote ease of cleaning. Each zone will also require a dedicated production Clean Room to prepare all ingredients for production in the room and to validate production work before submitting finished product into distribution to meet UPS 797 and 800 standards.

11.4.2.5(4) The Clean Room-Hazardous Drugs and Clean Room-Non-Hazardous will each have an anteroom where a scrub sink is located for “gloving”. The compounding hazardous and non-hazardous sterile products will meet the NAPRA standards. The hoods will meet International Organization for Standardization (ISO) 5 requirements. The Anteroom-Non-Hazardous Drugs will meet ISO 8 requirements and the Anteroom-Hazardous Drugs will meet ISO 7 requirements. A pass through will connect each respective anteroom with its corresponding checking space in the production/storage area.

11.4.2.5(5) Preparation of sterile IV products will be conducted in biological safety and laminar flow cabinets. As the operation of these cabinet units will be influenced by internal air circulation into and within the room, there will be no drafts near the cabinets other than those created by the cabinets themselves. Also, to minimize risk of cross contamination, processes associated with hazardous drugs preparation will be separated from processes associated with non-

hazardous drugs preparation, requiring separate clean rooms, anterooms and refrigerators.

11.4.2.5(6) The Sterile Preparation Area will be physically separated from the rest of the Pharmacy and its storage areas via anterooms located at the entry. The chemotherapy hood (Class IIB Biological Safety Cabinet) will be vented to the outside and located in a separate Clean Room-Hazardous Drugs. Provide a video intercommunication system for urgent 2-way, real time communication between Dispensing Area, Sterile Preparation Area and IV checking areas.

11.4.2.5(7) The Clean Room-Hazardous Drugs and Clean Room-Non-Hazardous will be adjacent to their dedicated anterooms. Each Anteroom will have two (2) doors, one (1) to the uncontrolled space and one (1) to the Clean Room.

11.4.2.5(8) A hand hygiene sink will be provided adjacent to the Change Room-Staff and both Anteroom-Hazardous Drugs and Anteroom-Non-Hazardous Drugs.

11.4.2.5(9) The Change Room-Staff will have Convenient Access to both Anteroom-Hazardous Drugs and Anteroom-Non-Hazardous Drugs. This space is intended to provide a place for Staff to change their footwear and into hospital scrubs in preparation for working in sterile compounding areas. The Change Room-Staff will contain a hand hygiene sink and will be located adjacent to Lockers-Staff for Staff to store personal belongings.

11.4.2.5(10) The Anteroom-Hazardous Drugs and Anteroom-Non-Hazardous Drugs will be used by Staff to don and doff PPE, and for product organization/prepping and tray set up prior to being moved into dedicated clean rooms via a pass through window for compounding in the hoods, then back through the pass through window for labeling and checking the final compounded sterile product.

11.4.2.5(11) Provide one (1) pass through for Clean Room-Hazardous Drugs and one (1) pass through for Clean Room-Non-Hazardous that adjoin each dedicated anteroom where organizing/preparing product for compounding will occur.

11.4.2.5(12) All Sterile Preparation Areas will have sufficient air circulation to address sterility and heat exchange requirements. Room temperature fluctuations are to be avoided. The air pressure gradient for Clean Room-Non-Hazardous will be positive relative to the Anteroom-Non-Hazardous Drugs, which in turn will be positive relative to the air pressure gradient in the general air pressure requirement providing a one-way air flow. Similarly, air pressure

gradient for the Clean Room-Hazardous Drugs will be negative relative to general air pressure as per biohazard guidelines.

11.4.2.5(13) Clean rooms, anterooms and hazardous storage need to meet NAPRA standards.

11.4.2.5(14) Store-Completed IV Products and Store-IV Supply may be combined in an open area.

11.4.2.6 Store-Narcotics Vault

11.4.2.6(1) Requirements for storage of narcotics and controlled drugs will meet provincial and federal requirements. Narcotics and controlled drugs will be stored in ADC within a designated narcotics room. Basic requirements include:

11.4.2.6(1)(a) Secure floor to ceiling non-penetrable walls;

11.4.2.6(1)(b) Secure, non-accessible ceiling;

11.4.2.6(1)(c) Secure, lockable door;

11.4.2.6(1)(d) Access control;

11.4.2.6(1)(e) Integrated alarm system;

11.4.2.6(1)(f) Back-up mechanical locking under power failure; and

11.4.2.6(1)(g) IP video surveillance.

11.4.2.6(2) The Design will comply with the College of Pharmacists of British Columbia Guidelines for the storage of narcotics.

11.4.2.7 Lounge-Staff

11.4.2.7(1) A Lounge-Staff will be provided within the pharmacy. Staff will not be required to leave the secure area of the pharmacy to access the Lounge-Staff, including Lockers-Staff. Washroom-Staff and Washroom-Staff-Accessible will be provided without Staff having to exit the secure areas of the pharmacy. Washrooms will not open to main public work areas or directly into the Lounge-Staff.

11.4.2.8 Lighting Requirements

11.4.2.8(1) There will be a variety of lighting options in pharmacy, each suited to the functions accommodated in a specific space.

11.4.2.8(2) Artificial lighting in the administrative and technical work areas will be variable to accommodate different levels of ambient lighting

commensurate with the functions ongoing at any one time in that space.

11.4.2.8(3) Exposure to natural light will not compromise the Component's security by providing direct views from the outside into key work and storage areas.

11.4.3 Specialty Pharmacy

11.4.3.1 Specialty Pharmacy will be located on Level 1 for ease of access for the public.

11.4.3.2 It will be located in a low to medium traffic area where Patients are not easily seen by the general public entering/exiting the Speciality Pharmacy holding their medication bags. The location will be easily accessible as there will be Patients with mobility aids such as scooters, wheelchairs and walkers accessing the Speciality Pharmacy.

11.4.3.3 The Specialty Pharmacy will be accessible through Back of House corridors from the Patient Transfer/Staff Service elevators.

11.4.3.4 The entry and access point requirements to the Specialty Pharmacy will need to be met so that Patients can access the transaction windows, while the courier drop-off and supplies will come through the Secure Vestibule from the Back of House corridor.

11.4.3.5 The Specialty Pharmacy entrance will have a Waiting room and three (3) transaction windows within the Patient Waiting room. The Dispensary Area inside the Specialty Pharmacy will have Line of Sight to Patients in the Waiting room through the transaction windows.

11.4.3.6 There will be two (2) Consult/Interview Rooms adjacent to the Waiting room, each with two (2) doors; one (1) from inside the secure Specialty Pharmacy and one (1) from the Waiting room.

11.4.3.7 The Dispensary Area will be adjacent to the Outreach Drug Distribution Area as well as the three (3) transaction windows.

11.4.3.8 The Specialty Pharmacy will have open plan central workstations.

11.4.3.9 One (1) Emergency Shower/Eyewash will be located in Anteroom-Hazardous.

11.4.4 Clinical Nutrition

11.4.4.1 Clinical Nutrition services will be located adjacent to Rehabilitation Centre (SLP, OT and PT) to facilitate interdisciplinary care and collaboration. Clinical dietitians also work closely with Food Services managers and diet technicians.

11.4.4.2 The area will consist of two (2) Office-Private, one (1) Office-2 Shared, a six-person Conference/Meeting Room-Xsmall and a shared Workroom including six (6) workstations and three (3) touchdown workstations combined into one area.

11.4.4.3 This area will act as the 'home base' for dietitians' leaders, research, education and administration support. Casual dietitians, dietetic students and dietitians not assigned to specific unit will also use this space.

11.4.4.4 Clinical Nutrition services will require access control and key locks on offices and Conference/Meeting Room-Xsmall.

11.4.4.5 Artificial lighting in the administrative and technical work areas will be variable to accommodate different levels of ambient lighting commensurate with the functions ongoing at any one time in that space.

11.4.5 Main Laboratories

11.4.5.1 The Main Laboratories is not required to be located at a public location but Convenient Access to different Components in the Facility will be considered during design.

11.4.5.2 The layout of the Main Laboratories will be configured to facilitate a "Core Lab" concept. The Main Laboratories will be organized into the following functional zones:

11.4.5.2(1) Central Receiving;

11.4.5.2(2) Pre and Post Analytical;

11.4.5.2(3) Core Laboratory;

11.4.5.2(4) Clinical Chemistry;

11.4.5.2(5) Hematopathology;

11.4.5.2(6) Transfusion Medicine;

11.4.5.2(7) Microbiology;

11.4.5.2(8) Virology;

11.4.5.2(9) Molecular Diagnostic Lab;

11.4.5.2(10) Anatomic Pathology;

11.4.5.2(11) Cytopathology;

11.4.5.2(12) Electron Microscopy; and

11.4.5.2(13) Support Services/Staff Support.

11.4.5.3 The Main Laboratories will, at minimum, be organized to incorporate the following concepts:

11.4.5.3(1) Maximize use of flexible open space with modular movable bench work and equipment; use fixed enclosures only where necessary;

11.4.5.3(2) Separate highly flexible ‘soft’ lab space (to be provided to allow for shifting boundaries between lab disciplines) from less flexible ‘hard’ lab spaces provided for specific, dedicated functions;

11.4.5.3(3) Biosafety cabinets and fume hoods will be strategically placed to optimize workflow;

11.4.5.3(4) Corridors and doorways will be wide enough to accommodate the movement of large pieces of equipment;

11.4.5.3(5) Equipment and supplies will be located such to provide Convenient Access by laboratory users as required;

11.4.5.3(6) Consumables will be delivered to the Main Laboratories and distributed to the appropriate supply storage areas;

11.4.5.3(7) Power/data/RO water/gases will be located as required based on layout of equipment and benching;

11.4.5.3(8) Biosafety cabinets will require minimum clearance around the cabinets to reduce risk of disruption of laminar airflow when in use. Placing BSCs near doorways and high traffic areas will be avoided. A minimum of 1016 mm is required between two (2) BSCs along the same wall;

11.4.5.3(9) A Containment Level (CL) 2+ suite is required for handling infectious disease samples. For this purpose, the Mycobacteriology Room-High Risk will have an Anteroom-Clean Change, an Anteroom-Dirty Change, a Shower-Walkthrough and an Anteroom-Equipment. A pass through autoclave between the Mycobacteriology Room-High Risk and the Autoclave & Media Preparation Room is required;

11.4.5.3(10) All microscopes require vibration isolation; and

11.4.5.3(11) All equipment for generation of lab gases, RO water, UPS/Emergency power and similar items will be in mechanical rooms.

11.4.5.4 Entry and Security

11.4.5.4(1) The laboratory will always be secured through a secure entrance with access control. Any Back of House elevators accessing the Main Laboratory will be secured with access control. There will be a panic duress button that allows laboratory Staff to summon assistance when required.

11.4.5.4(2) Non-public Issuing Wicket in Transfusion Medicine will have a transaction window to General Circulation for Patient pick-up of specialized blood products.

11.4.5.4(3) Microbiology, Virology & Molecular Diagnostics sub-components will be fully enclosed and secured with card access from the rest of the Main Laboratory to restrict access only to Laboratory Staff who are CL2/CL2+ certified.

11.4.5.5 Lounge-Staff/Lockers-Staff/Washrooms

11.4.5.5(1) A Lounge-Staff will be provided with in the Main Laboratories. Staff will not be required to leave the secure area of the Laboratory to access the Lounge-Staff, including Lockers-Staff. Washroom-Staff, Washroom-Staff-Accessible and Change Room-Staff will be provided without Staff having to exit the secure areas of the laboratory. Washrooms will not open to main public work areas or directly into the Lounge-Staff.

11.4.5.6 The areas with 24-hour activity will be grouped and include the following:

11.4.5.6(1) Pre and Post Analytical (PPA)

11.4.5.6(1)(a) Specimen Receive/Sort/Verification

11.4.5.6(1)(b) Manual Processing Area

11.4.5.6(2) Central Receiving

11.4.5.6(2)(a) Courier Pick-up & Drop-off Vestibule

11.4.5.6(2)(b) Roller Conveyor

11.4.5.6(3) Transfusion Medicine

11.4.5.6(4) Clinical Chemistry-High Volume

11.4.5.6(4)(a) Automated High-Volume Analyzer Area

11.4.5.6(4)(b) Blood Gas/Whole Blood Analysis Area

11.4.5.6(4)(c) Lab-Urinalysis

11.4.5.6(4)(d) Manual Workbench

11.4.5.6(4)(e) Pneumatic Tube station

11.4.5.6(5) Hematopathology-High Volume

11.4.5.6(5)(a) Receiving/Preparation Area

11.4.5.6(5)(b) Automated High-Volume Analyzer Area-Small

11.4.5.6(5)(c) Manual Hematology & Fluids

11.4.5.6(5)(d) Lab-Microscopy

11.4.5.7 Zoning According to Flexibility

11.4.5.7(1) In addition to the functional zones described above, the Main Laboratories will be organized into three (3) zones ranging from highly flexible to least flexible space. The resulting spatial organization will include:

11.4.5.7(1)(a) Highly flexible zone including Central Receiving and those disciplines that are heavily reliant on automation (Hematopathology, Clinical Chemistry and Transfusion Medicine). This zone will accommodate high workload volumes and will be the most susceptible to workflow and equipment changes;

11.4.5.7(1)(b) Semi-flexible zone for more specialized and/or manual testing (Core Support and Microbiology, and Anatomic Pathology); and

11.4.5.7(1)(c) Least flexible zone for offices and Staff support services.

11.4.5.7(2) The arrangement of these three (3) zones will allow for the Component's boundaries to expand and contract in response to service demands and technology-driven space requirements. Consideration will be given to locating the high volume, 24/7 services in the centre of the Main Laboratories, with the least flexible office spaces located on the periphery.

11.4.5.8 Segregation of Accessioning Functions

11.4.5.8(1) Functions occurring in the Central Receiving and Pre and Post Analytical areas will require separation between "clean" activities (clerical, data entry and administrative) and "dirty" activities (specimen handling). Centrifuge machines supporting the latter will be equipped with biohazard containment.

11.4.5.8(2) Accessioning for Anatomic Pathology will be performed in the space allocated to this discipline.

11.4.5.9 Line of Sight

11.4.5.9(1) Staff working in each of the Main Laboratories sub-components will be conducting different tests at different workstations simultaneously and require Line of Sight between the workstations for distant monitoring within each sub-component as well as visibility through interior windows between neighbouring sub-components.

11.4.5.10 Air Quality Control

11.4.5.10(1) Generation of fumes, noxious odours and heat from equipment and light fixtures will require enhanced ventilation compared with that throughout the rest of the Facility. Clinical & Laboratory Standards Institute (CLSI) Design Standards will be incorporated into the design of this Component. Different ventilation features (e.g. bench level, High Efficiency Particulate Air (HEPA) filter, biohazardous and laminar flow hoods) will be incorporated to address the needs of each workstation. Passive ventilation will be required for some supplies, such as acids.

11.4.5.10(2) Biosafety cabinets will be required in any area where open specimens will be present.

11.4.5.11 Noise Insulation

11.4.5.11(1) Some large equipment items will produce noise while operating. Noise attenuating technologies will be incorporated into rooms built to accommodate these types of items or into surrounding enclosures if they are built-in.

11.4.5.12 Lighting Requirements

11.4.5.12(1) Staff working at the technical workstations will benefit from exposure to natural lighting. Views to the outside as well as Task Lighting will be provided to adapt to functions occurring at workstations, which will vary from moment-to-moment.

11.4.5.12(2) Task Lighting for Microbiology will require integrated magnifying lenses.

11.4.5.13 Slide/Block Storage

11.4.5.13(1) Anatomic Pathology block and slide storage is required. Floor loading requirements for this storage area requires special consideration. This includes wet specimen storage (within AP laboratory/Morgue and Autopsy), and slides/paraffin block storage (adjacent to AP laboratory). Minimum on-site storage requirement is 1-year, but space for 2-5 years onsite storage would be ideal to facilitate clinical care (e.g. transplant pathology previous biopsy review), research, and teaching

11.4.5.14 Staff Environment

11.4.5.14(1) Prevalence of heat generating equipment and chemicals will create risks for Staff working in this Component. Fire suppression systems, Emergency Shower/Eyewash, plumbed emergency eyewash stations and first aid stations will be strategically located throughout the technical work areas. Flooring used in the technical work areas will be smooth, non-porous, skid resistant and resistant

to electrostatic build-up. Floor areas around Emergency Shower/Eyewash will be supplied with floor drains.

11.4.5.14(2) PPE stations will be strategically located throughout the Component.

11.4.5.14(3) Spill kits will be strategically located throughout the Component in key areas where transportation of dangerous goods will be a common occurrence.

11.4.5.14(4) Provide a sufficient number of hand hygiene sinks and emergency eyewash stations, in the appropriate locations. Final location and quantities of hand hygiene sinks will be determined in consultation with the Owner to suit functional requirements.

11.4.5.14(5) As determined in consultation with the Owner, confirm the need and location(s) for Emergency Shower/Eyewash. Do not locate electrical outlet or sensitive laboratory Equipment within the Emergency Shower/Eyewash splash zone.

11.4.5.14(6) Provide a secure drainage system required to prevent contamination of water streams.

11.4.5.15 Component Security and Confidentiality

11.4.5.15(1) Couriers will routinely access Central Receiving to drop off and pick up packages for delivery. The Owner will rely on a variety of companies, ranging from professional couriers (e.g., UPS) to taxi companies for this function. An area for the temporary holding of packages, envelopes and insulated containers will be conveniently located adjacent to one of the Component's service entrances. Couriers will be able to access this temporary holding area without entering any of the laboratory workspaces.

11.4.6 Outpatient Lab

11.4.6.1 Outpatient Lab will be located on Level 1 with Convenient Access to a Front of House corridor adjacent to the Main Entrance for simple Wayfinding and exposure.

11.4.6.2 There will be a Reception area where Patients will initially present and it will include cabinets and counter space for two (2) Staff to package specimens. The Outpatient Lab will have phlebotomy stations consisting of four (4) chairs, two (2) stretcher bays and two (2) bays that will accommodate Patients in scooters or wheelchairs.

11.4.6.3 The Outpatient Lab area will have two (2) Washroom-Patient required for urine specimen collection. Pass through into a secure Back of House laboratory space is required for urine sample containers.

11.4.6.4 A Waiting area will be located adjacent to the Outpatient Lab for Patients who are required to wait for testing. Line of Sight will be provided from Outpatient Lab Reception to the Waiting area.

11.4.6.5 The Outpatient Lab area will have a public transaction window for Patient pick-up of specialized blood products (prepared/distributed by Transfusion Medicine).

11.4.6.6 The Outpatient Lab will have Direct Access to Back of House corridors and Patient Transfer/Staff Service elevators for the movement of Staff and specimens to the Main Laboratories for testing.

11.4.6.7 ECG testing and Holter Monitor application will also occur in the Outpatient Lab in the two (2) ECG Bays.

11.4.7 Morgue and Autopsy

11.4.7.1 Morgue and Autopsy will be in the underground parking level to provide private and dignified transfer through an enclosed Sally-Port.

11.4.7.2 Simple Wayfinding for family members from the Facility Main Entrance using Parking Passenger Elevators to grieving/viewing rooms will be provided.

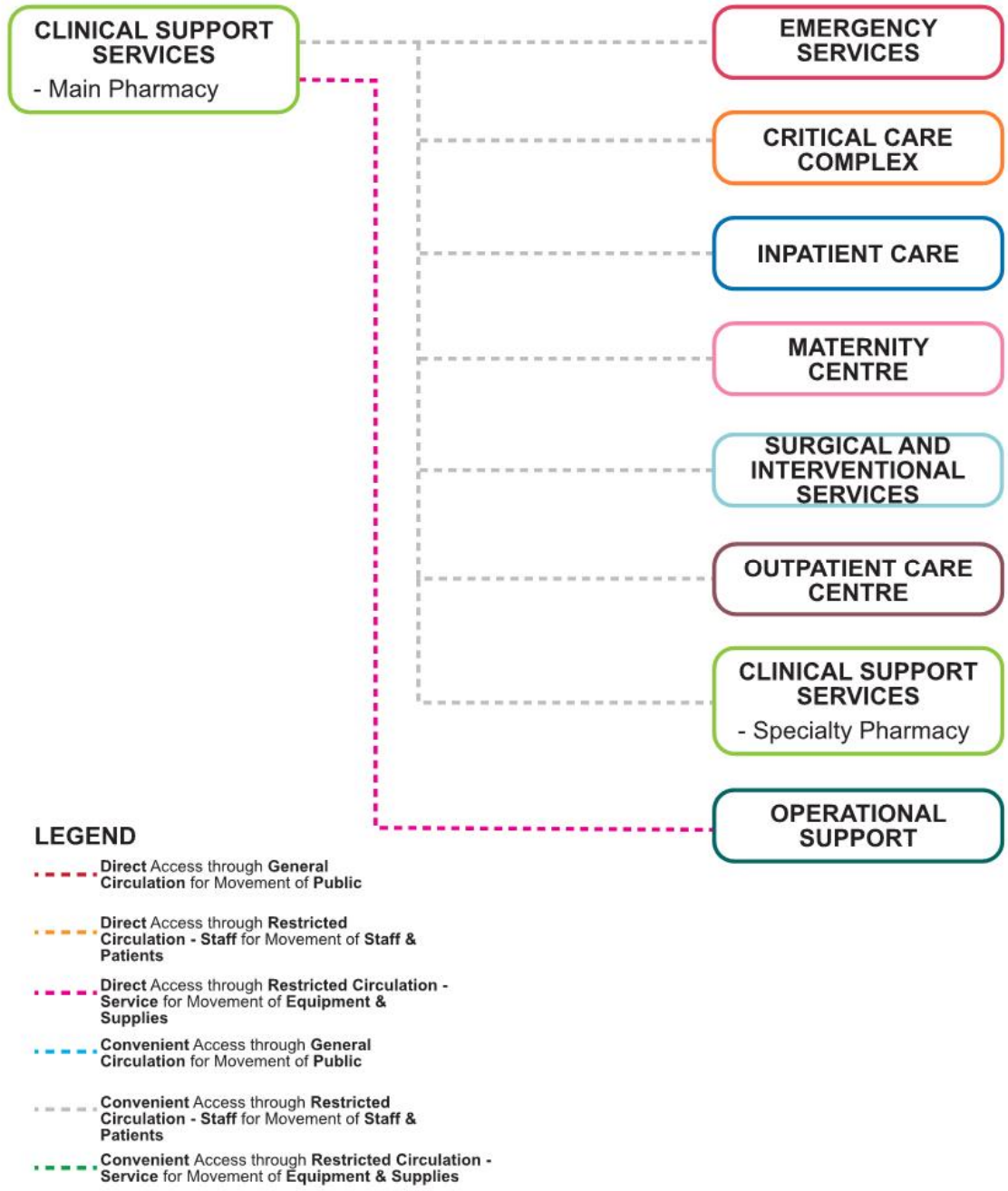
11.4.7.3 Discrete access will be provided for cadaver transfer via Back of House routes.

11.4.7.4 Internal layout will allow cadaver lift circulation within and from Store-Cadaver to Autopsy Room, Cadaver Preparation/Viewing Room and the hearse Sally-Port.

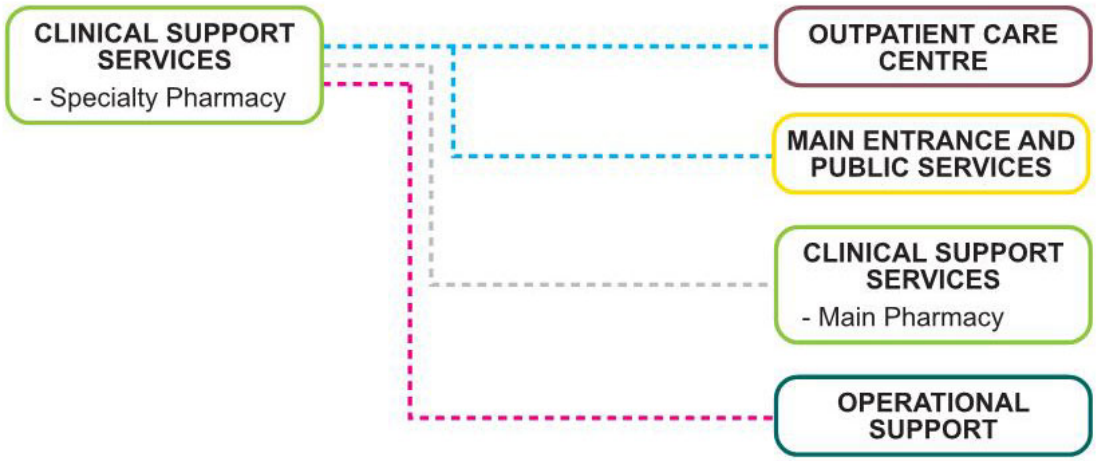
11.5 EXTERNAL RELATIONSHIPS

11.5.1 The following diagrams indicate other Functional Components that have a functional relationship with this Component.

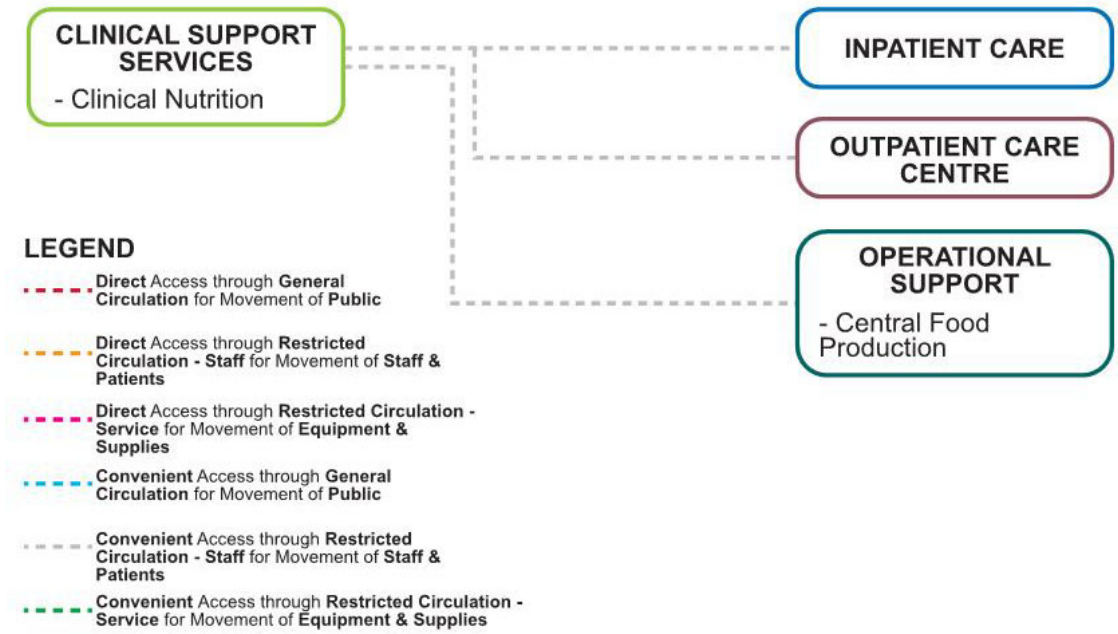
J1. MAIN PHARMACY EXTERNAL RELATIONSHIPS AND CIRCULATIONS



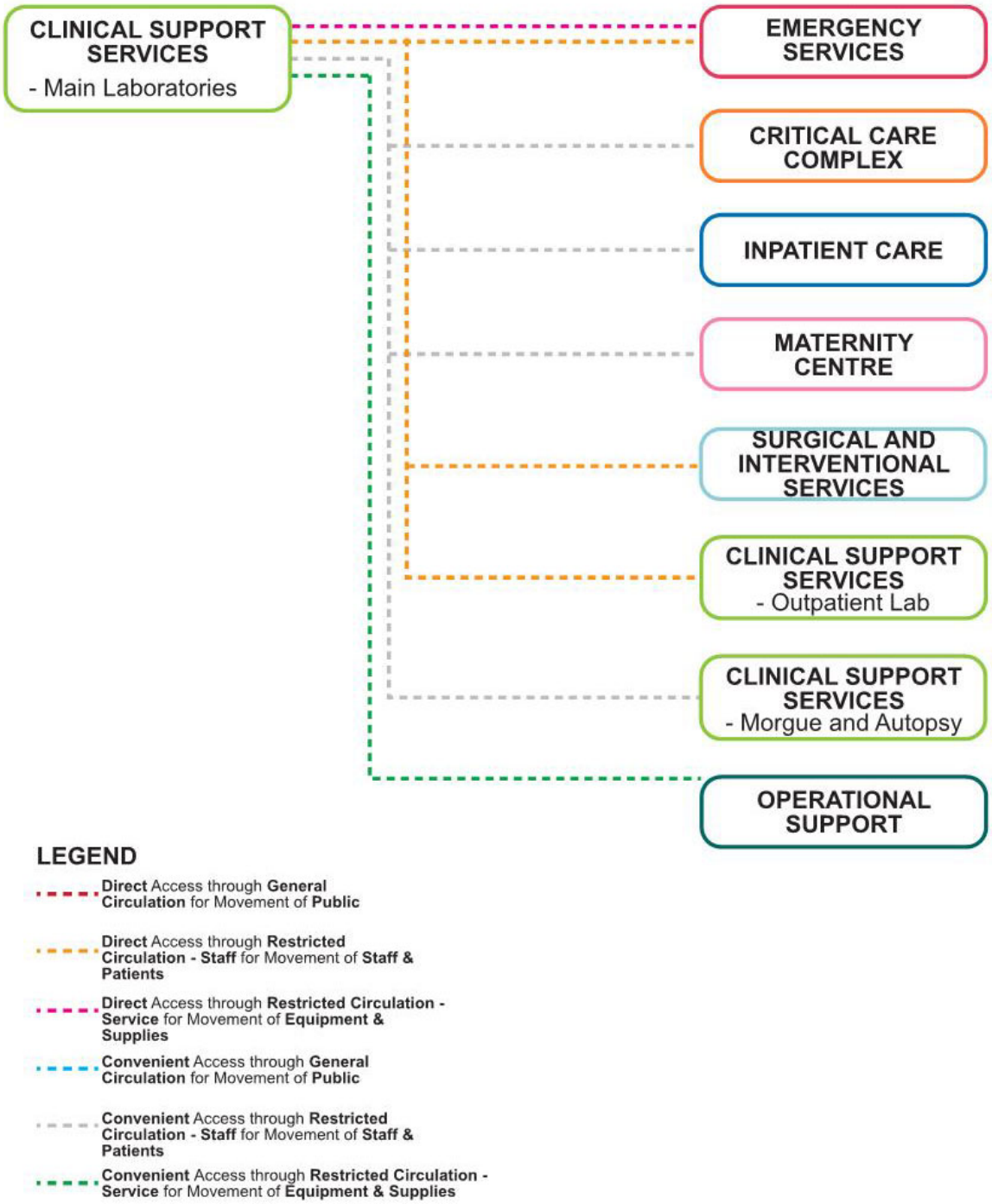
J2. SPECIALTY PHARMACY EXTERNAL RELATIONSHIPS AND CIRCULATIONS



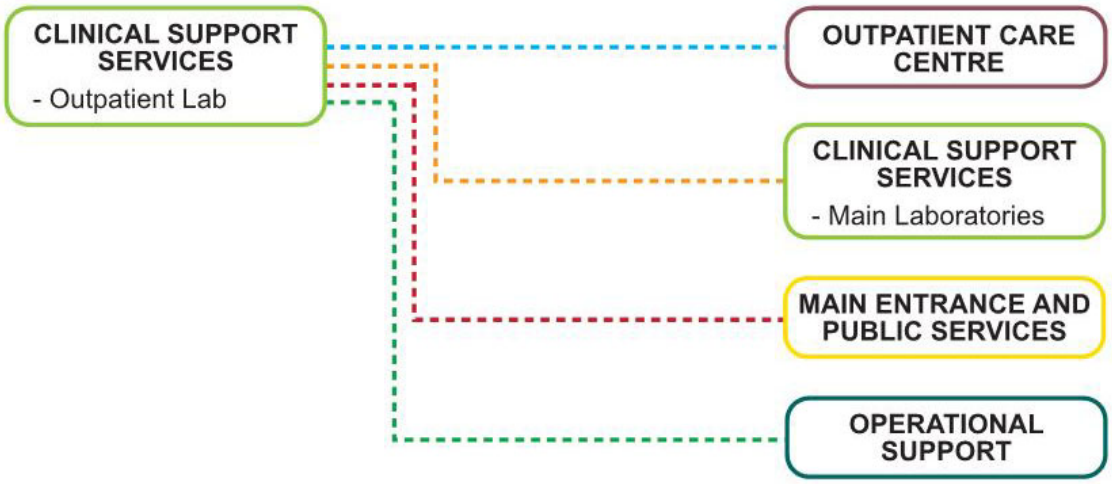
J3. CLINICAL NUTRITION EXTERNAL RELATIONSHIPS AND CIRCULATIONS



J4. MAIN LABORATORIES EXTERNAL RELATIONSHIPS AND CIRCULATIONS



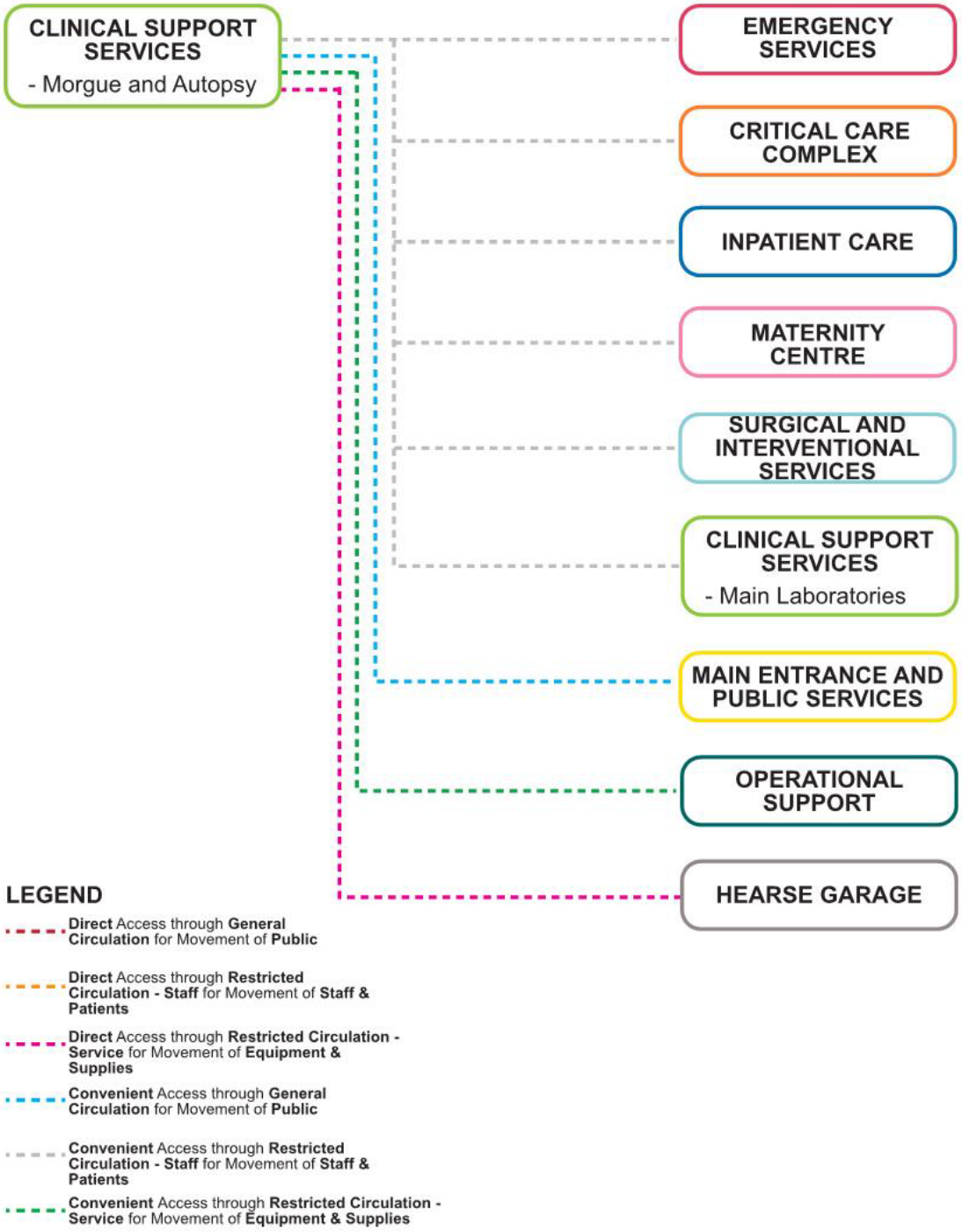
J5. OUTPATIENT LAB EXTERNAL RELATIONSHIPS AND CIRCULATIONS



LEGEND

- **Direct** Access through **General Circulation** for Movement of **Public**
- **Direct** Access through **Restricted Circulation - Staff** for Movement of **Staff & Patients**
- **Direct** Access through **Restricted Circulation - Service** for Movement of **Equipment & Supplies**
- **Convenient** Access through **General Circulation** for Movement of **Public**
- **Convenient** Access through **Restricted Circulation - Staff** for Movement of **Staff & Patients**
- **Convenient** Access through **Restricted Circulation - Service** for Movement of **Equipment & Supplies**

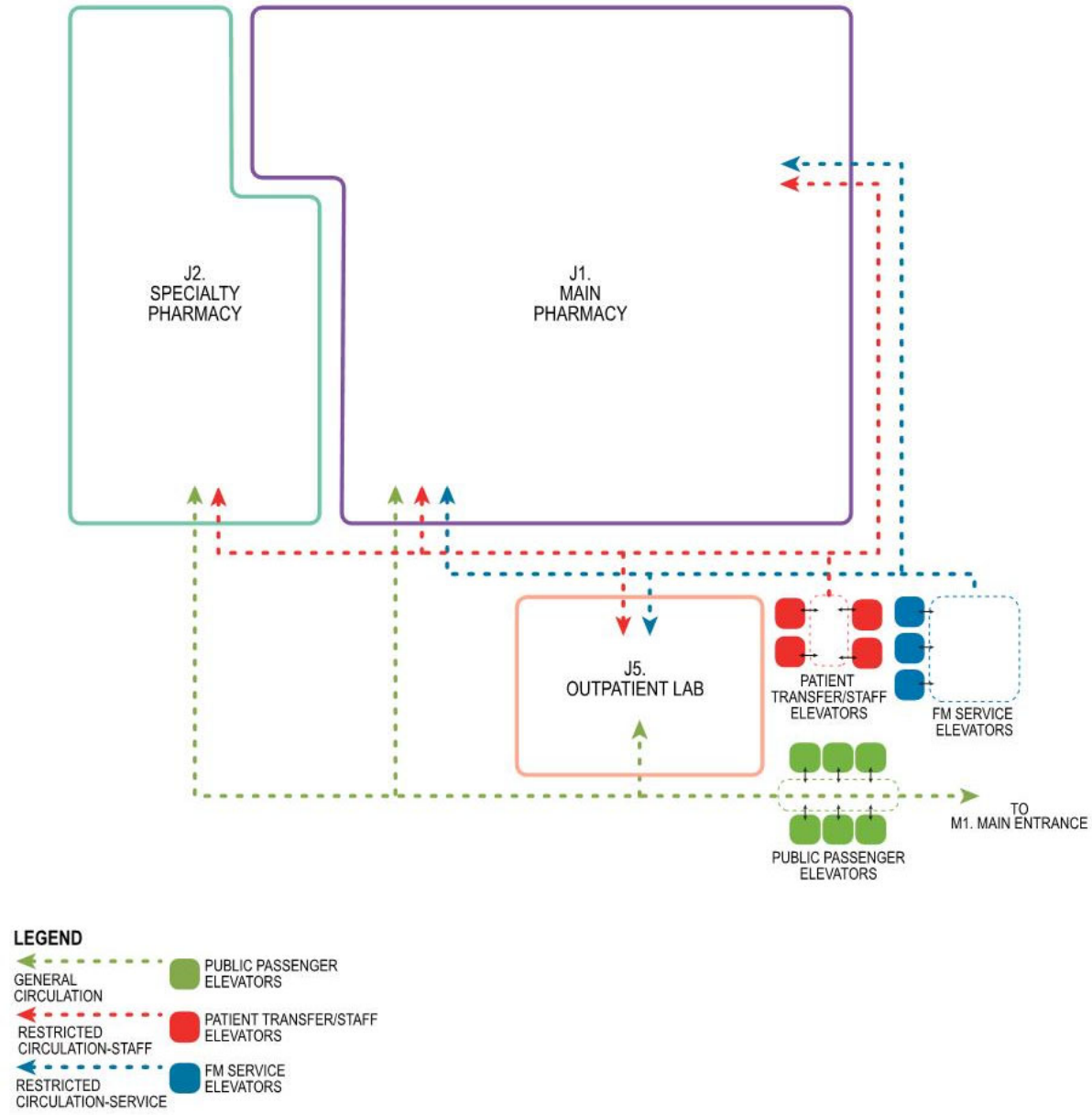
J6. MORGUE AND AUTOPSY EXTERNAL RELATIONSHIPS AND CIRCULATIONS



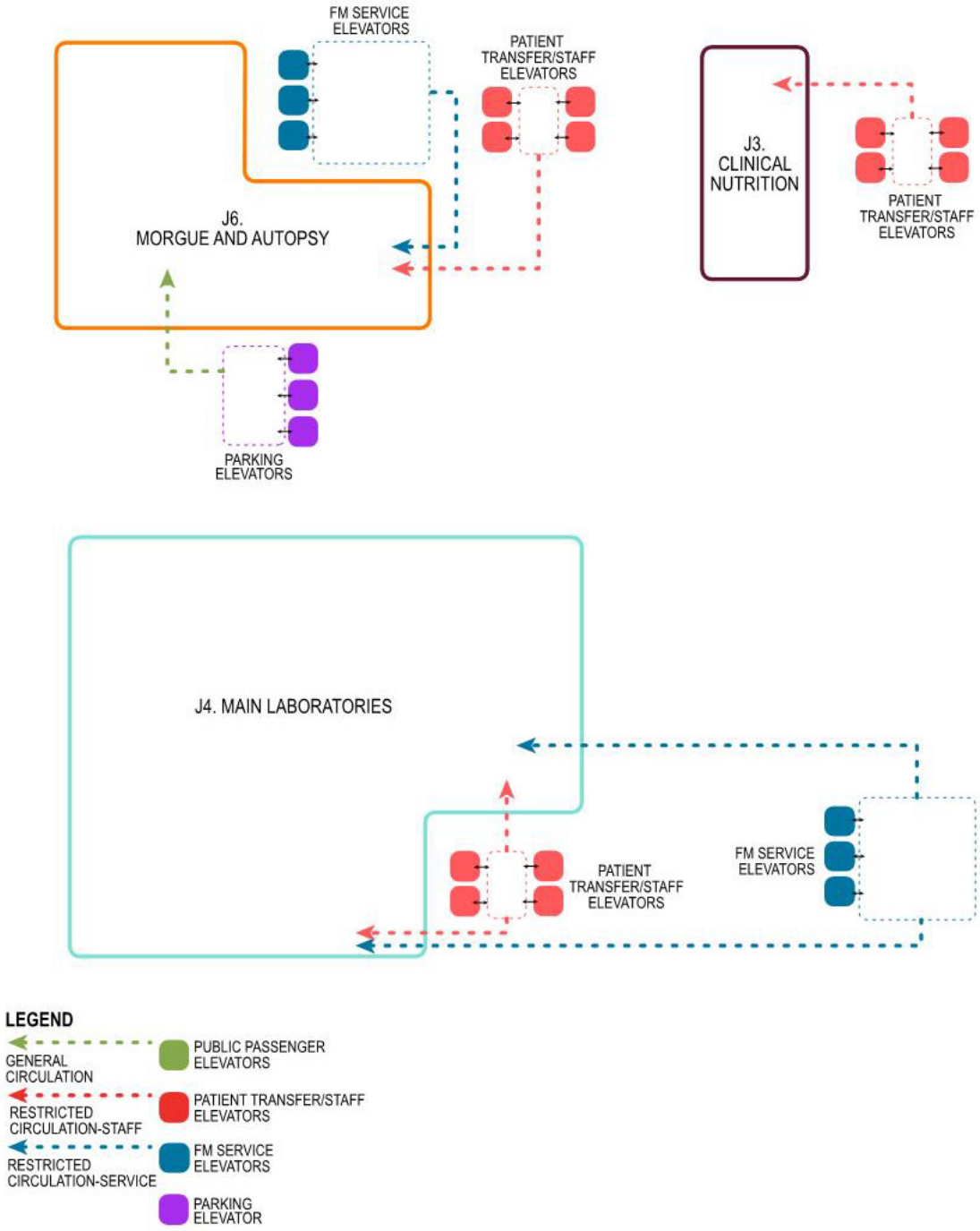
11.6 INTERNAL RELATIONSHIPS

11.6.1 The following diagrams indicate internal functional relationships within this Component.

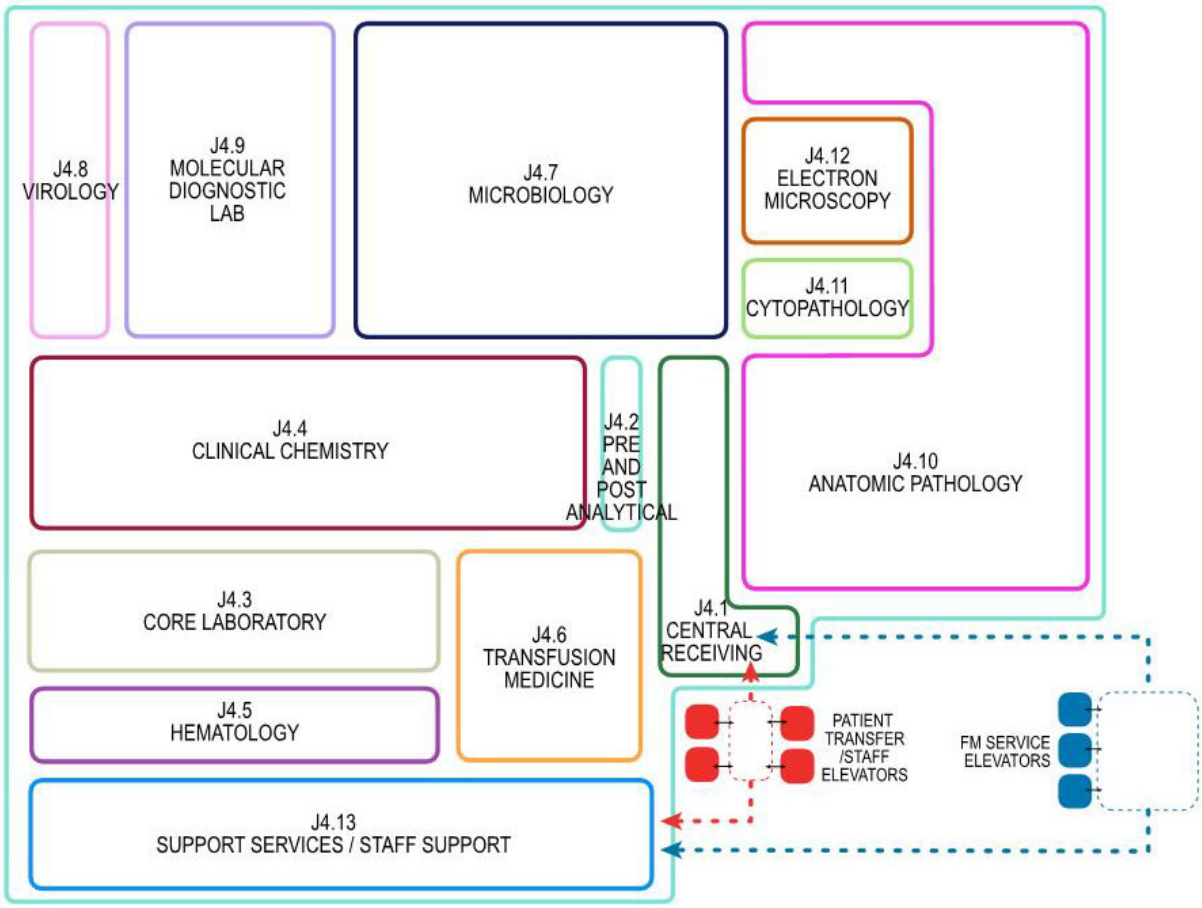
J. CLINICAL SUPPORT SERVICES INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES

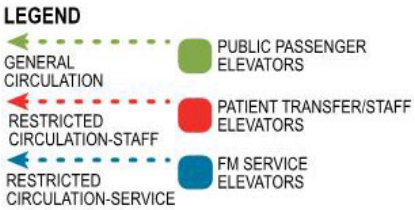


J. CLINICAL SUPPORT INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



J4 - MAIN LABORATORIES INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES





11.7 SCHEDULE OF ACCOMMODATIONS

11.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements. The updates shown below by means of highlighted cells indicate the redistribution of spaces between sub-components to meet clinical requirements. Room numbers have not yet been updated to reflect the reordering; this will be done in the design phase.

Summary of Clinical Support Services

J1 - MAIN PHARMACY	991.00
J2 - SPECIALTY PHARMACY	237.50
J3 - CLINICAL NUTRITION	81.20
J4 - MAIN LABORATORIES	2720.50
J5 - OUTPATIENT LAB	136.50
J6 - MORGUE AND AUTOPSY	211.50
CLINICAL SUPPORT SERVICES PROGRAMMED SPACE NSM:	**4,378.20**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J1 - MAIN PHARMACY					
J1.1 - Reception/Administration Area					
J1.1.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets.
J1.1.2	Waiting	1	14.50	14.50	Incl. 1 transaction window with one-way glass, enclosed waiting room with entry door from General Circulation, seating for 4 including 1 in wheelchair.
J1.1.3	Office-Private	5	9.50	47.50	Incl. 1 workstation.
J1.1.4	Office-2 Shared	3	12.00	36.00	Incl. 2 workstations.
J1.1.5	Office-4 Shared	2	20.00	40.00	Incl. 4 workstations.
J1.1.6	Office-8 Shared	1	40.00	40.00	Incl. 8 workstations.
J1.1.7	Workroom-Clinical Pharmacists	1	18.00	18.00	Incl. 6 touch down workstations.
J1.1.8	Conference/Meeting Room-Xsmall	1	15.00	15.00	Accommodates 6 Persons.
J1.1.9	Conference/Meeting Room-Medium	1	44.00	44.00	Incl. counters, cabinets, accommodates 25 Persons.
J1.1.10	Store-Inactive Records	1	6.00	6.00	Incl. shelving.
J1.1.11	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
J1.2 - Receiving/Stores Area					
J1.2.1	Secure Vestibule	1	12.50	12.50	Incl. two sets of double doors.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J1.2.2	Receiving/Break Down Area	1	20.00	20.00	Incl. 3 workstations.
J1.2.3	Not Used	0	0.00	0.00	
J1.2.4	Store-Medication Supplies	1	88.00	88.00	Incl. 5 workstations, shelving, emergency shower/eyewash, floor drain, walk-in refrigerator at 5.00 nsm.
J1.2.5	Crash Cart/Anesthesia Tray Prep Area	1	20.00	20.00	Incl. counters.
J1.2.6	Store-ADC Parts	1	12.00	12.00	Incl. cabinets, shelving.
J1.2.7	AUD/Barcoding/Picking Area	1	20.00	20.00	Incl. 5 workstations.
J1.3 - IV Admin Work Area					
J1.3.1	Not Used	0	0.00	0.00	
J1.3.2	Store-Central Equipment	1	6.00	6.00	Incl. shelving, charging station.
J1.3.3	Workstation Room	1	18.00	18.00	Incl. 4 workstations.
J1.4 - Order Entry Area					
J1.4.1	Order Entry Area #1	1	40.00	40.00	Incl. 10 workstations.
J1.4.2	Order Entry Area #2	1	36.00	36.00	Incl. 8 workstations.
J1.4.3	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
J1.4.4	Dispensing/Secure Vestibule	1	4.50	4.50	Incl. 2 sets of doors, 1 transaction window with one-way glass for medication pick up inside vestibule.
J1.5 - Drug Distribution Area					
J1.5.1	Office-Private	2	9.50	19.00	Incl. 1 workstation.
J1.5.2	Dispensing Area Unit Doses	1	48.00	48.00	Incl. unit dose picking shelving, 1 workstation.
J1.5.3	Pneumatic Tube Station	2	1.00	2.00	Incl. counter, adjacent to Dispensing Area Unit Doses.
J1.5.4	Store-Narcotics Vault	1	28.00	28.00	Incl. 2 workstations, counters, cabinets, shelving.
J1.6 - Sterile Preparation Area					
J1.6.1	Clean Room-Hazardous Drugs	1	16.50	16.50	
J1.6.2	Anteroom-Hazardous Drugs	1	20.00	20.00	Incl. 3 workstations, counters, shelving, emergency shower/eyewash, floor drain, 3 workstations, pass through chamber.
J1.6.3	Store-Hazardous Drugs	1	25.00	25.00	Incl. 1 workstation, counters, cabinets, shelving, securable.
J1.6.4	Clean Room-Non-Hazardous	1	45.00	45.00	
J1.6.5	Anteroom-Non-Hazardous Drugs	1	60.00	60.00	Incl. 5 workstations, counters, shelving, emergency eyewash, pass through chamber.
J1.6.6	Store-Completed IV Products	1	17.50	17.50	Incl. counters, cabinets, shelving.
J1.6.7	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, located adjacent to Store, Completed IV Products.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J1.6.8	Store-IV Supply	1	40.00	40.00	Incl. cabinets, shelving.
J1.6.9	Lockers-Staff	2	6.00	12.00	Incl. 12 Z-lockers, 1 shoe rack.
J1.6.10	Change Room-Staff	1	3.50	3.50	Shared between Main Pharmacy and Specialty Pharmacy, adjacent to Lockers-Staff in Sterile Preparation Area.
J1.7 - Support Services Area					
J1.7.1	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
J1.7.2	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
J1.8 - Staff Support Area					
J1.8.1	Lounge-Staff	1	32.00	32.00	Incl. seating for 10 people, kitchenette, mail slots, 2 touch down workstations.
J1.8.2	Lockers-Staff	1	28.00	28.00	Incl. 76 Z-lockers, 1 shoe rack, split into male and female if required, adjacent to Lounge-Staff.
J1.8.3	Washroom-Staff	4	3.00	12.00	2-piece.
J1.8.4	Washroom-Staff-Accessible	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
	TOTAL NSM: Main Pharmacy			**991.00**	
J2 - SPECIALTY PHARMACY					
J2.1	Waiting	1	30.00	30.00	Incl. 3 transaction windows with one-way glass, enclosed waiting room with entry door from public space, seating for 12 including 1 in wheelchair.
J2.2	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation, dual egress, one from Waiting and one from inside Specialty Pharmacy with a one-way observation window between each Consult/Interview Room and inside Specialty Pharmacy.
J2.3	Conference/Meeting Room-Xsmall	1	20.00	20.00	Accommodates 10 Persons.
J2.4	Dispensary Area	1	30.00	30.00	Incl. unit dose picking shelving, 7 workstations, counters.
J2.5	Bulk Storage/Decasing Area	1	20.00	20.00	
J2.6	Outreach Drug Distribution Area	1	27.50	27.50	Incl. 6 workstations, counters, shelving.
J2.7	Not Used	0	0.00	0.00	
J2.8	Hazardous (H) Sterile Room	1	15.00	15.00	
J2.9	Anteroom-Hazardous	1	10.00	10.00	Incl. counters, shelving, pass through chamber.
J2.10	Office-3 Shared	2	13.50	27.00	Incl. 3 workstations.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J2.11	Office-Private	1	9.50	9.50	Incl. 1 workstation.
J2.12	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
J2.13	Emergency Shower/Eyewash	1	1.50	1.50	Incl. emergency shower/eyewash, floor drain.
J2.14	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
J2.15	Lockers-Staff	1	9.00	9.00	Incl. 22 Z-lockers, 1 shoe rack, split into male and female if required.
J2.16	Washroom-Staff	1	3.00	3.00	2-piece.
J2.17	Secure Vestibule	1	7.00	7.00	Incl. two sets of double doors.
	TOTAL NSM: Specialty Pharmacy			**237.50**	
J3 - CLINICAL NUTRITION					
J3.1	Office-Private	2	9.50	19.00	Incl. 1 workstation.
J3.2	Workroom	1	35.20	35.20	Incl. 6 workstations at 4.5 nsm and 3 touchdown workstations at 2.5 nsm, combined into one area.
J3.3	Conference/Meeting Room-Xsmall	1	15.00	15.00	Incl. sink, counters, cabinets, accommodates 6 Persons.
J3.4	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
	TOTAL NSM: Clinical Nutrition			**81.20**	
J4 - MAIN LABORATORIES					
J4.1 - Central Receiving					
J4.2 - Pre and Post Analytical					
J4.1.1	Courier Pick-up & Drop-off Vestibule	1	15.00	15.00	Incl. two sets of double doors
J4.1.3	Roller Conveyor	1	3.50	3.50	Incl. Modular Casework with 1 workbench/workstation, issue counter with 1 transaction window opening to General Circulation, integrated into Courier Pick-up & Drop-off Vestibule.
J4.2.1	Specimen Receive/Sort/Verification	1	48.00	48.00	Incl. Modular Casework with 5 workbenches/ workstations, counters, shelving.
J4.2.2	Manual Processing Area	1	24.00	24.00	Incl. Modular Casework with 3 workbenches/ workstations, counters.
J4.1.5	Workstation	3	4.50	13.50	Incl. 1 workstation, combined into one area, for Data Entry.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J4.1.2	Clinical Trials Area	1	10.00	10.00	Incl. Modular Casework with 2 workbenches/ workstations, shelving.
J4.3.10	Workstation-POC	6	4.50	27.00	Incl. lab Modular Casework, 1 workstation, combined into one area to support POC device testing.
J4.2.5	Workstation	2	4.50	9.00	Incl. 1 workstation, combined into one area, for POCT & QI Technologists, MSP Billing.
J4.2.6	Workstation-Touchdown	2	2.50	5.00	Incl. 1 workstation, combined into one area.
J4.2.7	Office-Main Lab	1	9.00	9.00	Incl. 1 workstation.
J4.2.4	Store-Venipuncture Supplies	1	18.00	18.00	Incl. cabinets, shelving.
J4.3 - Core Laboratory					
J4.1.4	Pneumatic Tube Station	1	6.00	6.00	Incl. counter, located in Clinical Chemistry, adjacent to Blood Gas/Whole Blood Analysis Area, to be either 2 tube stations to ensure redundancy, or a high volume station with built in redundancy.
J4.5.1	Receiving/Preparation Area	1	24.00	24.00	Incl. Modular Casework including 2 workstations, height adjustable vibration free bench for a microscope and workstation, shelving.
J4.4.2	Blood Gas/Whole Blood Analysis Area	1	10.00	10.00	Incl. Modular Casework with 1 workbench/ workstation.
J4.4.3	Lab-Urinalysis	1	15.00	15.00	Incl. Modular Casework including height adjustable vibration free workbench for 2 microscopes and 4 workbenches/ workstations, adjacent to and combined into one room with J4.4.4 Manual Workbench.
J4.4.4	Manual Workbench	1	10.00	10.00	Incl. Modular Casework including 2 workstations, adjacent to and combined into one room with J4.4.3 Lab-Urinalysis.
J4.4.1	Automated High-Volume Analyzer Area	1	120.00	120.00	Incl. Modular Casework with 4 workbenches/ workstations.
J4.9.6	Serology/IVD Molecular Area	1	60.00	60.00	Incl. Modular Casework with 4 workbenches/ workstations, bleach resistant countertop, RO Water Supply and Drain Box, located in J4.4 - Clinical Chemistry.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J4.5.2	Automated High-Volume Analyzer Area-Small	1	28.00	28.00	Incl. Modular Casework including 4 workstations.
J4.5.3	Manual Hematology & Fluids	1	15.00	15.00	Incl. Modular Casework including 2 workstations, height adjustable vibration free bench for 2 microscopes and 2 workstations, adjacent to and combined into one room with J4.5.7 Lab-Microscopy.
J4.5.7	Lab-Microscopy	1	15.00	15.00	Incl. Modular Casework including height adjustable and vibration free bench for 3 microscopes and 4 workstations, adjacent to and combined into one room with J4.5.3 Manual Hematology & Fluids.
J4.4.7	Centralized Research & Development Area	1	24.00	24.00	Incl. Modular Casework including 4 workstations, flexible to support instrument validation from a variety of areas.
J4.13.6	Emergency Shower/Eyewash	1	1.50	1.50	Incl. emergency shower/eyewash, floor drain, located in J4.3 - Core Laboratory for dirty zone.
J4.3.7	Workstation	9	4.50	40.50	Incl. 1 workstation, combined into one area.
J4.3.8	Workstation-Touchdown	1	2.50	2.50	Incl. 1 touch down workstation, combined into one area.
J4.3.9	Office-Microscope	1	16.00	16.00	Incl. 3 workstations.
Core Laboratory Support Services					
J4.3.5	Store-Walk-in Refrigerator	1	15.00	15.00	Incl. walk-in refrigerator, door on side for entry with trolley and glass sliding (or dairy style) doors on front for access, smart shelving.
J4.3.2	Store-Central Equipment & Lab Consumables	1	44.00	44.00	Incl. charging station.
J4.13.7	Store-Bulk & Waste Chemical Hold	1	6.00	6.00	Located in J4.3 - Core Laboratory for dirty zone.
J4.3.4	Store-Supplies/Samples	1	9.50	9.50	
J4.3.3	Store-Freezers	1	10.00	10.00	
J4.3.6	Balance Room	1	9.00	9.00	Incl. Modular Casework, stone table, counters, shelving.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J4.13.5	Wash-up Area	1	10.00	10.00	Incl. Modular Casework with 1 workbench/ workstation, RO Water Supply and Drain Box, located in J4.3 - Core Laboratory for dirty zone.
J4.1.6	Disposal Hold	1	8.00	8.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to Service Elevators.
J4.4 - Clinical Chemistry					
J4.4.5	Lab-Special Chemistry	1	32.00	32.00	Incl. Modular Casework including 4 workstations.
J4.4.6	Mass Spectrophotometry Room	1	56.00	56.00	Incl. Modular Casework including 4 workstations, height adjustable vibration free bench for a microscope and workstation.
J4.3.1	Alcove-Cleaning Station	1	1.50	1.50	Incl. emergency eyewash.
J4.4.8	Workstations	3	4.50	13.50	Incl. 1 workstation, combined into one area.
J4.4.9	Office-Main Lab	6	9.00	54.00	Incl. 1 workstation.
J4.5 - Hematopathology					
J4.5.4	Special Coagulation Area	1	15.00	15.00	Incl. Modular Casework including 3 workstations.
J4.5.5	Flow Cytometry Area	1	17.00	17.00	Incl. Modular Casework including 4 workstations, height adjustable vibration free bench for a microscope and computer.
J4.5.6	Lab-Bone Marrow	1	15.00	15.00	Incl. Modular Casework including benchtop downdraft ventilation for at least 5m of the working bench, 3 workstations, height adjustable vibration free bench for 1 microscope and workstation.
J4.13.4	Alcove-Cleaning Station	2	1.50	3.00	Incl. emergency eyewash.
J4.5.8	Workstation	2	4.50	9.00	Incl. 1 workstation, combined into one area.
J4.5.9	Office-Microscope	3	9.00	27.00	Incl. 1 workstation.
J4.6 - Transfusion Medicine					
J4.6.7	Non-public Issuing Wicket	1	3.50	3.50	Incl. issue counter with 1 transaction window and one doorway opening to General Circulation, 1 workstation, shelving.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J4.6.6	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, located in Specimen Receiving & Verification Area.
J4.6.1	Specimen Receiving & Verification Area	1	10.00	10.00	Incl. Modular Casework with 2 workbenches/ workstations, counters, shelving.
J4.6.2	Store-Blood Products	1	20.00	20.00	Incl. Modular Casework with 2 workbenches/ workstations, walk-in refrigerator at 10.00 nsm with glass sliding doors in front, separate walk-in door on side, shelving.
J4.6.3	Electronic Cross Match Area	1	40.00	40.00	Incl. Modular Casework with 10 workbenches/ workstations.
J4.6.5	Manual Cross Match/Antibody Identification	1	15.00	15.00	Incl. Modular Casework with 2 workbenches/ workstations, located in a quiet area.
J4.6.4	Blood Product Preparation Area	1	24.00	24.00	Incl. Modular Casework, RO Water Supply and Drain Box.
J4.6.9	Store-Freezers	1	2.00	2.00	
J4.6.8	Store/Support Area	1	18.00	18.00	Incl. cabinets, shelving.
J4.6.10	Workstation	2	4.50	9.00	Incl. 1 workstation, combined into one area.
J4.6.11	Office-Main Lab	1	9.00	9.00	Incl. 1 workstation.
J4.7 - Microbiology					
J4.7.1	Receiving Area	1	12.00	12.00	Incl. Modular Casework with 3 workbenches/ workstations, counters, shelving, multi-function printer.
J4.7.7	Blood Culture Area	1	24.00	24.00	
J4.7.8	Blood Culture Bench	2	4.50	9.00	
J4.7.2	Plating Area-Automated & Manual	1	40.00	40.00	Incl. Modular Casework with 2 workbenches/ workstations.
J4.7.3	Incubator/Fridge/Freezer Area	1	30.00	30.00	
J4.7.4	Store-Walk-in Refrigerator	1	20.00	20.00	Incl. walk-in refrigerator, glass sliding doors in front and separate walk-in door on side.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J4.7.5	Culture Bench	12	4.50	54.00	Incl. Modular Casework with 1 workbench/ workstation, seamless black countertops.
J4.7.6	Microscope Bench	1	5.00	5.00	Incl. Modular Casework with 1 workbench/ workstation, vibration free height adjustable bench for 1 microscope.
J4.7.9	ID & Susceptibility	2	14.00	28.00	Incl. Modular Casework with 1 workbench/ workstation, set-up bench.
J4.7.10	Mycology Room	1	12.00	12.00	Incl. Modular Casework with 1 workbench/ workstation, vibration free height adjustable bench for 1 microscope, negative pressure.
J4.10.5	Fluorescent Microscopy Workstation	1	3.00	3.00	Incl. Modular Casework with 1 workbench/ workstation, vibration free height adjustable bench for 1 microscope.
J4.7.13	Anteroom-Clean Change	1	5.00	5.00	Incl. shelving.
J4.7.14	Anteroom-Dirty Change	1	5.00	5.00	Incl. shelving.
J4.7.15	Shower-Walkthrough	1	3.00	3.00	Located between Anteroom-Entry-Clean Vestibule and Anteroom-Entry-Dirty Vestibule to meet CL2+ requirements.
J4.7.16	Anteroom-Equipment	1	5.50	5.50	Incl. cabinet, shelving, wide door to accommodate moving equipment in and out of J4.7.12 Mycobacteriology Room-High Risk.
J4.7.12	Mycobacteriology Room-High Risk	1	22.00	22.00	Incl. Modular Casework with 1 workbench/workstation, vibration free height adjustable bench for 1 microscope, pass through chamber for specimen, CL2+ (Containment Level 2+). Interior windows for Line of Sight from adjacent surrounding spaces to ensure occupant safety.
J4.7.17	Autoclave & Media Preparation Room	1	15.00	15.00	Incl. Modular Casework with 1 workbench/ workstation, pass through autoclave to Mycobacteriology Room-High Risk, CL2 (Containment Level 2).
J4.2.3	Wash-up Area	1	10.00	10.00	Incl. Modular Casework with 1 workbench/ workstation, RO Water Supply and Drain Box, floor drain.
J4.7.18	Store	1	16.00	16.00	Incl. cabinets, shelving.
J4.7.19	Alcove-Cleaning Station	1	1.50	1.50	Incl. emergency eyewash.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J4.7.20	Workstation	8	4.50	36.00	Incl. 1 workstation, combined into one area.
J4.7.21	Office-Main Lab	1	9.00	9.00	Incl. 1 workstation.
J4.7.22	Store/Workstation-Slide Filing	1	4.00	4.00	Incl. Modular Casework with 1 workbench/ workstation, shelving.
J4.7.23	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to Service Elevators.
J4.8 - Virology					
J4.9 - Molecular Diagnostic Lab					
J4.9.5	Closed System Molecular Area	1	24.00	24.00	Incl. Modular Casework with 3 workbenches/ workstations, bleach resistant countertop.
J4.9.1	Clean Master Mix Room	3	4.50	13.50	Incl. small storage credenza, sliding door, positive pressure.
J4.9.2	Extraction Room	3	15.00	45.00	Incl. Modular Casework with 1 workbench/ workstation, bleach resistant countertop, negative pressure.
J4.9.3	PCR Room	5	10.00	50.00	Incl. Modular Casework with 1 workbench/ workstation, bleach resistant countertop, most negative pressure.
J4.9.4	Post-PCR Room	2	10.00	20.00	Incl. Modular Casework with 1 workbench/ workstation, bleach resistant countertop, negative pressure.
J4.8.1	Pre-Sequencing Room	1	10.00	10.00	Incl. Modular Casework with 1 workbench/ workstation, bleach resistance countertops, negative pressure.
J4.8.2	Sequencing Room	3	10.00	30.00	Incl. Modular Casework with antivibration workbench, 1 workstation, bleach resistant countertops, most negative pressure.
J4.8.3	Post-Sequencing-Bioinformatics	1	12.00	12.00	Incl. Modular Casework with 3 workbenches/ workstations.
J4.13.8	Centralized Molecular R&D	1	20.00	20.00	Incl. Modular Casework with 1 workbench/ workstation with bleach resistant countertop, cabinets, shelving, located in J4.9 - Molecular Diagnostic Lab.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J4.8.4	Store-Freezers	1	6.50	6.50	
J4.9.7	Alcove-Cleaning Station	1	1.50	1.50	Incl. emergency eyewash.
J4.9.8	Office-Main Lab	6	9.00	54.00	Incl. 1 workstation.
J4.9.9	Office-3 Shared	1	16.00	16.00	Incl. 3 workstations.
J4.10 - Anatomic Pathology					
J4.10.1	Accessioning Area	1	24.00	24.00	Incl. Modular Casework with 3 workbenches/ workstations.
J4.10.7	Wet Specimen Processing	1	15.00	15.00	Incl. Modular Casework with 2 workbenches/ workstations.
J4.10.2	Grossing & Tissue Processing Room	1	71.00	71.00	Incl. Modular Casework with 5 workbenches/ workstations, 3 grossing workstations, emergency eyewash, located adjacent to Wet Specimen Processing.
J4.10.15	Store-Wet Specimens	1	10.00	10.00	
J4.10.6	Lab-Embedding/Cutting	1	58.00	58.00	Incl. Modular Casework with 12 workbenches/ workstations, vibration free height adjustable for microtomy, should withstand wax cleaning and heavy Equipment.
J4.10.3	Staining Area	1	20.00	20.00	Incl. slide sign out Modular Casework with 1 workbench/ workstation, metal workbench.
J4.10.4	IHC & Special Stains Area	1	66.00	66.00	Incl. Modular Casework with 2 workbenches/ workstations, manual staining bench.
J4.10.8	Support Space	1	32.00	32.00	Incl. Modular Casework with 1 workbench/ workstation, one side to be open to J4.10.4 IHC & Special Stains Area.
J4.10.9	Emergency Shower/Eyewash	2	1.50	3.00	Incl. emergency shower/eyewash, floor drain.
J4.10.10	Store-Flammable	1	6.00	6.00	
J4.10.11	Store-Blocks & Slides	1	20.00	20.00	Incl. counters, cabinets.
J4.10.12	Store-Blocks & Slides-Long-Term	1	10.00	10.00	Incl. counters, cabinets.
J4.10.13	Store-Spill Clean Supplies	1	3.00	3.00	Incl. shelving.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J4.10.14	Store-Supplies	2	10.00	20.00	
J4.10.17	Workstation-Touchdown	2	2.50	5.00	Incl. 1 touch down workstation, combined into one area.
J4.10.16	Conference/Meeting Room-Small	1	24.00	24.00	Accommodates 12 Persons.
J4.10.18	Office-Microscope	15	9.00	135.00	Incl. 1 workstation.
J4.10.19	Office-Microscope	2	12.00	24.00	Incl. 2 workstations.
J4.10.20	Office-Microscope	1	20.00	20.00	Incl. 4 workstations.
J4.11 - Cytopathology					
J4.11.1	Cytology Assessment & Processing Area	1	20.00	20.00	Incl. Modular Casework with 1 workbench/ workstation.
J4.11.2	Cytology Screening Room	1	15.00	15.00	Incl. Incl. Modular Casework with 4 workbenches/ workstations with antivibration workbenches, Convenient Access to pathologists' offices.
J4.12 - Electron Microscopy					
J4.12.1	Renal Lab Support	1	15.00	15.00	Incl. Modular Casework with 1 workbench/ workstation.
J4.12.4	Workstation	5	4.50	22.50	Incl. 1 workstation, combined into one area.
J4.7.11	Fluorescent Microscopy Workstation	1	3.00	3.00	Incl. Modular Casework with 1 workbench/ workstation, vibration free height adjustable bench for 1 microscope.
J4.12.2	Electron Microscope Room	1	15.00	15.00	Incl. Modular Casework with 1 workbench/ workstation.
J4.12.3	EM equipment Room	1	10.00	10.00	
J4.12.5	Workstation-Touchdown	2	2.50	5.00	Incl. 1 touch down workstation, combined into one area.
J4.13 - Support Services / Staff Support - Administration					
J4.13.1	Reception	1	6.00	6.00	Incl. 1 workstation, cabinets.
J4.13.11	Office-Main Lab	2	9.00	18.00	Incl. 1 workstation.
J4.13.12	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J4.13.13	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer, 1 touch down workstation.
J4.13.2	Consult/Interview Room-Large	1	14.00	14.00	Incl. seating for 6, 1 touch down workstation.
J4.13.3	Conference/Meeting Room-Medium	1	44.00	44.00	Incl. counters, cabinets, accommodates 25 Persons.
J4.13.9	Workroom-Flexible	1	15.00	15.00	Incl. Modular Casework with 1 workbench/ workstation, shelving.
J4.13.10	Workstation	3	4.50	13.50	Incl. 1 workstation, combined into one area.
J4.13.15	Lockers-Staff	1	50.00	50.00	Incl. 144 Z-lockers, 2 shoe racks, split into male and female if required, adjacent to Lounge-Staff.
J4.13.16	Change Room-Staff	4	3.50	14.00	
J4.13.17	Washroom-Staff	1	3.00	3.00	2-piece.
J4.13.18	Washroom-Staff-Accessible	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
J4.13.19	Washroom-Staff	6	3.00	18.00	2-piece, distributed.
J4.13.14	Lounge-Staff	1	60.00	60.00	Incl. seating for 20, kitchenette, mail slots, 2 touch down workstations.
J4.13.20	Housekeeping Closet	2	7.00	14.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
	TOTAL NSM: Main Laboratories			**2,720.50**	
J5 - OUTPATIENT LAB					
J5.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets, counter, 1 transaction window.
J5.2	Waiting	1	13.50	13.50	Incl. seating for 8 including 1 in wheelchair, Direct Access to Main Entrance and Public Passenger Elevators.
J5.3	Phlebotomy Bay-Chair	4	6.00	24.00	Incl. cabinets, walled on 3 sides with privacy curtains.
J5.4	Phlebotomy Bay-Scooter	2	7.50	15.00	Incl. cabinets, walled on 3 sides with privacy curtains.
J5.5	Phlebotomy Bay-Stretcher	2	9.50	19.00	Incl. cabinets, walled on 3 sides with privacy curtains.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
J5.6	ECG Bay	2	8.50	17.00	Walled on 3 sides with privacy curtains.
J5.7	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, adjacent to Reception.
J5.8	Office-3 Shared	1	16.00	16.00	Incl. 3 workstations for phlebotomists, PTS, sample pass through from Washroom-Patient to this room.
J5.9	Store-General	1	10.00	10.00	Incl. shelving.
J5.10	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities. Incl. sample pass through.
	TOTAL NSM: Outpatient Lab			**136.50**	
J6 - MORGUE AND AUTOPSY					
J6.1	Vestibule	2	10.00	20.00	Incl. two sets of double doors.
J6.2	Family Grieving Room	1	12.00	12.00	Incl. seating for 4.
J6.3	Cadaver Preparation/Viewing Room	1	12.00	12.00	Incl. window for controlled access to Family Grieving Room.
J6.4	Autopsy Room	1	24.00	24.00	Incl. Modular Casework with 1 workbench/ workstation, high pressure hose, counters, cabinets, ceiling lift, emergency shower/eyewash.
J6.5	Specimen Processing Room	1	14.00	14.00	Incl. Modular Casework with 1 workbench/ workstation, shelving, ceiling lift, emergency eyewash, can be combined with Autopsy Room.
J6.6	Store-Cadaver	1	60.00	60.00	Incl. cadaver storage racking for a total of 30 cadavers including 24 regular cadavers and 6 bariatric cadavers. Cold room with access from Autopsy Room and corridor to loading docks.
J6.7	Store-PPE/Other Supplies	1	7.50	7.50	
J6.8	Store-Wet Specimens	1	30.00	30.00	
J6.9	Alcove-Cadaver Lift	1	5.00	5.00	Incl. space for cadaver lift parking.
J6.10	Alcove-Tray Cleaning Bay	1	5.00	5.00	Incl. space to wipe down body trays.
J6.11	Office-Private	1	9.50	9.50	Incl. 1 workstation.
J6.12	Washroom/Shower-Staff	1	4.50	4.50	3-piece incl. shower.
J6.13	Lockers-Staff	1	1.00	1.00	Incl. 2 Z-lockers in an alcove.
J6.14	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
	TOTAL NSM: Morgue and Autopsy			**211.50**	
	TOTAL NSM: CLINICAL SUPPORT SERVICES			**4,378.20**	

THE NEW ST. PAUL'S PHASE 1A

K. CENTRE FOR HEALTHY AGING

APPENDIX 3A - CLINICAL SPECIFICATIONS AND FUNCTIONAL SPACE REQUIREMENTS

K. CENTRE FOR HEALTHY AGING

12.1 OVERVIEW

12.1.1 The Centre for Healthy Aging will group and synergistically leverage two services. The first is the existing interdisciplinary ambulatory geriatric assessment clinics (currently known as the Geriatric Outpatient Clinics). This service will continue to provide non-urgent, scheduled, specialized multidisciplinary geriatric assessments. In addition, the Centre for Healthy Aging will house an innovative rapid access specialized short stay planning and assessment (SSPA) outpatient clinic for frail and vulnerable older adults that is an alternative to a visit to the ED or an acute inpatient admission. The SSPA Unit will provide rapid multidisciplinary assessments, specialized treatment and care plans that will then be activated by primary and community care providers. The Centre will be open 12-14 hours per day with capacity for both scheduled and urgent referrals from primary and community care, BCEHS, and the ED. Urgent assessment may also take place in the NSPH ED. Emergent and urgent in-home assessments, including using telemedicine and new technologies in partnership with community services, are also being explored. The services in the Centre for Healthy Aging will support primary care providers and the elders' circle of care in on-going care management of older adults in community, delay/reduce ED visits, admission to the Facility, and admission to long term care.

12.1.2 The purpose for the Centre for Healthy Aging is to achieve the following:

12.1.2.1 Prevention and support for elders with deteriorations in cognition, mobility, and especially function in their instrumental and basic ADL.

12.1.2.2 The 21st century model will look at the interconnected issues of physical, mental health and cognitive and functional frailty utilizing technology to address the living environment of elders and their caregivers and to proactively prevent or slow further decline.

12.1.2.3 The care plans will respect the Patient and families' goals of care and psycho-social complexities including vulnerabilities and marginalization.

12.1.2.4 The community care providers remain integral parts of the team to help elders' transition to different parts of their care pathway, and the Centre will use cutting edge technology to enable communication between PHC, family medicine/ primary care and VCH community providers.

12.1.3 The philosophy of the Centre is to deliver anticipatory care to proactively prevent deterioration through connection to a team of specialist clinicians with access to a range of diagnostics and multidisciplinary skills and working in meaningful collaboration with primary and community care.

12.2 FUNCTIONAL DESCRIPTION

12.2.1 Scope of Services

12.2.1.1 The Centre for Healthy Aging will provide the following services:

12.2.1.1(1) Urgent multi-disciplinary assessment, treatment and care planning;

12.2.1.1(2) Non-urgent, scheduled specialized multi-disciplinary geriatric assessment and treatment;

12.2.1.1(3) Short term crisis intervention;

12.2.1.1(4) Short term rehabilitation and re-activation for stabilization;

12.2.1.1(5) Symptom control (including but not limited to palliative Patients);

12.2.1.1(6) Patient/family support, education and skills development; and

12.2.1.1(7) Referral, linkage and advocacy.

12.2.1.2 Scope of Educational Activity

12.2.1.2(1) The Facility will be a UBC Faculty of Medicine (FoM) accredited site that is expected to provide a learning environment for UBC students and residents.

12.2.1.2(2) A wide range of individual and small group clinical teaching activities will be accommodated directly in the clinical care areas. These include:

12.2.1.2(2)(a) Individualized Patient/family education;

12.2.1.2(2)(b) Precepting and mentoring learners as per agreements with educational facilities; and

12.2.1.2(2)(c) Orientation of new Staff.

12.2.1.2(3) In-service and inter-professional teaching and education will be conducted on a regular basis in the Staff Conference/Meeting Room.

12.2.1.2(4) Patient/family/caregiver education and teaching programs including province-wide outreach, consultation, education and teaching, will be conducted on a regular basis in the Multipurpose Room-Large.

12.2.1.3 Scope of Research Activity

12.2.1.3(1) Clinical research activities will be integrated into the work conducted within the Centre for Healthy Aging. This means that researchers and research associates will see Patients in all of the Patient care spaces including the Waiting areas. Researchers and research associates may need to gain consent, draw blood or take other samples and conduct tests and assessments. No additional space is required to support research activities; however, researchers and research associates will require use of Workstation-Touchdown.

12.2.1.4 Scope Exclusions

12.2.1.4(1) Adults with multiple co-morbidities and early frailty related to a severe mental health or substance use disorder.

12.2.1.4(2) Patients who, for medical or functional reasons, would be more appropriately managed in an inpatient setting.

12.2.2 Patient Population Served

12.2.2.1 The Centre for Healthy Aging will focus on adults, frail older adults and older adults with multiple, complex chronic conditions, including:

12.2.2.1(1) Significant poverty and isolation, and considered vulnerable with complex psychosocial needs;

12.2.2.1(2) Lack of English language and literacy skills;

12.2.2.1(3) Mild to moderate cognitive impairment;

12.2.2.1(4) Other mild to moderate mental health concerns and/or substance use concerns;

12.2.2.1(5) Mild to moderate behavioural disturbance or Behavioural and Psychological Symptoms of Dementia (BPSD);

12.2.2.1(6) Those with a score of 7-9 on the Clinical Frailty Scale (CFS);

12.2.2.1(7) Those at risk of (further) fall and with impaired mobility;

12.2.2.1(8) Older adults with multiple co-morbidities such as diabetes, cardiac and lung disease, or severe muscular skeletal diseases who are vulnerable to adverse events leading to hospitalization;

12.2.2.1(9) Adults with complex chronic conditions, resulting in increasing morbidity, early frailty and risk of rapid deterioration;

12.2.2.1(10) Those identified above who are nearing end of life and require specialized outpatient palliative assessment and care; and

12.2.2.1(11) Patient’s family in crisis or distress, creating risk of Patient’s hospitalization or admission to a long-term care facility.

12.2.3 Services provided

12.2.3.1 Specialized multidisciplinary outpatient assessment, treatment and care planning in collaboration with primary and community care by an interdisciplinary care team including dietitian services, geriatric-certified nurse, geriatricians, geriatric psychiatry, neuropsychiatry, physiatry, palliative care, pharmacy, nurse practitioner, continence nurse, RT, OT, PT, SLP, geriatric and Adult Guardianship Act social worker.

12.2.3.2 Patient/family support, education and skills development through individualized Patient/family teaching, group social/learning activities, caregiver resilience groups provided by members of the multidisciplinary team and through community partnerships with community organizations such as the Alzheimer's Society, in order to build capacity within caregivers for home first.

12.2.3.3 Referral, linkage and advocacy through social workers working closely with Transition Service Teams in the community to ensure a seamless continuity of care for Patients at discharge into the community, while maintaining necessary supports and services.

12.2.3.4 Specialized multidisciplinary outpatient assessment, specialized treatment, and care planning in collaboration with primary and community care.

12.3 OPERATIONAL CONSIDERATIONS

12.3.1 Service Delivery Principles and Methods

12.3.1.1 Service Delivery Principles

12.3.1.1(1) The following principles guide how Patients and families are cared for in the Centre for Healthy Aging:

12.3.1.1(1)(a) Person- and Family-Centred Care - Believing that Patient's values, need and autonomy are to be respected and participation and collaboration from partners and families are integral to acceptable care. The Centre for Healthy Aging strives to maximize Patient's ability to continue to live in an environment which reflects their goals and values.

12.3.1.1(1)(b) Palliative approach to care - Being diagnosed as "close to death" can no longer be the trigger for initiating palliative care because too many people with life threatening illnesses who die "unexpectedly" will not receive the care that could enhance both their living and dying. Instead, a palliative approach could and will be integrated into care for people with chronic, life-limiting conditions and people who are frail and vulnerable to infections or falls that could hasten death.

12.3.1.1(1)(c) Culturally competent care - Cultural competence is the ability to interact effectively with people of different cultures. Cultural competence means to be respectful and responsive to the health beliefs and practices and cultural and linguistic needs of diverse population groups.

12.3.1.1(1)(d) Culturally safe care - By treating Patients and families with dignity and respect and honouring the Truth and Reconciliation agreement for Indigenous populations. The Centre for Healthy Aging is committed to providing culturally safe, trauma-informed and resiliency focused care, creating a sanctuary for Patients and their families.

12.3.1.1(1)(e) Undertaking innovative clinical research, discovery, knowledge translation and continuously integrating evidence-based improvements into our processes and practices.

12.3.1.1(1)(f) Excellence in teaching - As an academic teaching and research centre, we strive for excellence in teaching and mentoring students, trainees and post-doctoral fellows.

12.3.1.1(1)(g) Continuity of care - This is the process by which the Patient and his/her care team are cooperatively involved in ongoing health care management toward the shared goal of high-quality care that allows the Patient to live at home as long as desirable.

12.3.1.2 Patient and Family Management Processes and Flows

12.3.1.2(1) Patient

12.3.1.2(1)(a) Planning assumes the Facility operations will include a fully integrated booking/scheduling system in which all Facility-based services participate. The intent of this specification is to facilitate multiple, same day appointments seamlessly, with few delays and short wait times and without the need to continuously revisit Patient registration.

12.3.1.2(1)(b) Referral and Triage

12.3.1.2.1.(b).1 The Centre will accept non-urgent, scheduled referrals from inpatient and community providers.

12.3.1.2.1.(b).2 Referrals will be accepted via electronic clinical information system or via telephone.

12.3.1.2.1.(b).3 The Centre will triage urgent, unscheduled referrals from primary care providers, ED and BCEHS.

12.3.1.2.1.(b).4 Mobility or ADL assessments for Patients managed by Rehabilitation Centre services

will also occur in the Centre for Healthy Aging; these will be scheduled by Rehabilitation Centre (see Component L).

12.3.1.2.1.(b).5 Referrals will be triaged and scheduled by a physician or a clinical nurse specialist.

12.3.1.2(1)(c) Registration and Admission

12.3.1.2.1.(c).1 Pre-registration will occur at the Reception desk or registration kiosk. Capability for self-registration remotely is included.

12.3.1.2.1.(c).2 Patients and families will wait in a Waiting area.

12.3.1.2(1)(d) Assessment and Treatment

12.3.1.2.1.(d).1 To the extent possible, assessment and treatment will come to the Patient.

12.3.1.2.1.(d).2 Depending on the type of visit, Patient will go to either Outpatient Clinics Exam Room or Consult/Interview Room; or to a Patient Room in the Assessment and Team Bases Area.

12.3.1.2.1.(d).3 Patient may be sent for labs, diagnostics if required.

12.3.1.2(1)(e) Care Planning

12.3.1.2.1.(e).1 For visits that require a care plan, care planning may include any or all of the following: Patient/family, the multidisciplinary team members, primary care provider and community care.

12.3.1.2.1.(e).2 For at-risk Patients who require it, wrap around care planning will be conducted. Wrap around care planning may include any or all of the following: multidisciplinary team members, primary care provider and community care. Care providers and Patients/families will be invited to view the care plans through a palliative lens.

12.3.1.2.1.(e).3 Care planning will occur at the conclusion of the Patient visit, either via teleconference, videoconference or face to face and will be documented in a collaborative care plan that is shared with Patient/family and all care providers.

12.3.1.2(1)(f) Booking Follow Up Appointment and Discharge

12.3.1.2.1.(f).1 Follow up appointments are determined by care providers and scheduled with Patients/families.

12.3.1.2.1.(f).2 Patient is automatically discharged one calendar year from date of last appointment.

12.3.1.2(2) Family

12.3.1.2(2)(a) It is an expectation that many Patients will be accompanied by family members or other support Persons. Patient rooms will be accessible to family or support Persons as defined and desired by the Patient. Waiting areas and clinical rooms will be large enough to accommodate family members and support Persons and will be designed to be comfortable for various body types and needs.

12.3.1.3 Patient Information Management

12.3.1.3(1) All Patient related information will be maintained on the EMR system. Wireless technology will enable data entry using a combination of fixed workstation/ WOWs, located close to each Patient's bedside and at key Staff workstations, and mobile devices/tablets. Access to the EMR will be controlled electronically with varying levels of security clearance determining a Care Provider's access to different sections and their ability to enter/ edit data.

12.3.1.3(2) A Patient tracking system will be incorporated to provide the ability to track Patients from time of arrival to completion of their visit and include the following abilities:

12.3.1.3(2)(a) Where Patients are and how long they have been waiting;

12.3.1.3(2)(b) Patient status (ready to be seen, with provider, in diagnostics, etc.);

12.3.1.3(2)(c) Room status (available, assigned, in need of cleaning);

12.3.1.3(2)(d) Where Patients and caregivers will go next; and

12.3.1.3(2)(e) Where bottlenecks are causing delay.

12.3.1.4 Care Provider Work Processes and Flows

12.3.1.4(1) Staffing information will be a managed corporate service. Scheduling, including providing for sick and vacation relief will be

conducted centrally, and off-site. Notices to individual Staff regarding their schedules will be communicated electronically.

12.3.1.4(2) At the start of shift, Staff will pick up a handheld wireless communication device that is linkable and with the ability to view physiologic monitoring of the Patients they are assigned to.

12.3.1.4(3) An integrated, linked nurse call system with ability to link and receive physiologic monitoring will be required for the Unit.

12.3.1.4(4) Staff will be able to communicate utilizing hands-free communication system.

12.3.1.4(5) Multidisciplinary team members will come to the Patient as much as possible.

12.3.1.4(6) POCT is being explored, in order to reduce wait times and improve assessment for treatment and care planning.

12.3.1.4(7) Telemedicine will be enabled to the maximum extent possible to ensure timeliness of assessment, treatment and care planning, and optimal inclusion of the circle of care.

12.3.1.4(8) All members of the multidisciplinary team chart in the same Patient record within an integrated plan of care.

12.3.1.5 Clinical and Logistical Support Processes and Flows

12.3.1.5(1) Medical Imaging

12.3.1.5(1)(a) When necessary, Patients will be transported to the Medical Imaging (see Component I) for Medical Imaging services.

12.3.1.5(1)(b) ECG will be brought to the Patient’s bedside when clinically indicated.

12.3.1.5(2) Laboratory Services

12.3.1.5(2)(a) The Main Laboratories (see Component J) will be available to support the Centre for Healthy Aging.

12.3.1.5(2)(b) Phlebotomists will go to the Patient bedside/ Exam Rooms wherever feasible; otherwise Patient will attend the Outpatient Lab (see Component J) located adjacent to the Main Entrance.

12.3.1.5(2)(c) Specimens will be transported by PTS for testing.

12.3.1.5(3) Pharmacy services

12.3.1.5(3)(a) ADCs will be located in the Medication Rooms. Pharmacy Staff will replenish stock in the cabinets.

12.3.1.5(4) Respiratory Therapy Services

12.3.1.5(4)(a) RT will provide care as part of the inter-professional team.

12.3.1.5(5) Allied Health

12.3.1.5(5)(a) Clinical services that will be provided at the Patient bedside or in dedicated Assessment/Treatment Rooms within the unit include: clinical pharmacy, nutrition, PT, OT, SLP, RT and social work.

12.3.1.5(6) Rehabilitation Services

12.3.1.5(6)(a) PTs, OTs, SLP and rehab assistants will attend Patients for assessments, treatment and education.

12.3.1.5(7) Social Work

12.3.1.5(7)(a) Adult Guardianship Act social workers are an integral part of the Patient care for this Component and will provide counselling services to Patients and families, including mental health needs, organizing community services for Patients, helping with housing issues, and conducting capability assessments and, if required, referral to the Office of the Public Guardian and Trustee.

12.3.1.5(7)(b) The geriatric social workers provide comprehensive clinical services to Patients and families, as well as consultative support to Staff and medical residents. This includes providing therapeutic counselling to Patients and their care partners. A special lens is being applied to building resilience for dementia caregivers through individual counselling or unique therapy groups. The geriatric social workers also play a supportive role to geriatricians by gathering non-medical information for basis of geriatric consult, including administering tools such as Montreal Cognitive Assessment (MoCA), Mini-Mental State Examination (MMSE), Geriatric Depression Scale (GDS), etc. In this process, needs such as caregiver stress, social isolation, etc. are identified for further follow up. The social workers also co-

lead groups for Patients diagnosed with Mild Cognitive Impairment.

12.3.1.5(8) Volunteer Resources

12.3.1.5(8)(a) Volunteers will provide support to Patients and their families within their scope of service.

12.3.1.5(9) Language services

12.3.1.5(9)(a) Interpreters will be available upon request for Patient and families.

12.3.1.5(10) Equipment and Instruments

12.3.1.5(10)(a) The Equipment Depot (See Component O) will store all excess Equipment that can be quickly brought to any area.

12.3.1.5(10)(b) Necessary equipment will be kept in the Centre for ease of use and storage. This will be monitored and stocked by central supply.

12.3.1.5(10)(c) RTLS tagging of Equipment will allow for tracking and monitoring.

12.3.1.5(11) Consumable Supplies

12.3.1.5(11)(a) Consumable supplies will be kept close to the POC. Items will be maintained with a minimum inventory level, which will trigger a re-ordering process. RTLS tagging of supplies will allow for tracking and replenishment. Store-Clean Supplies will also store supplies. AGVs will support the transport of materials and supplies to FM Service Elevator lobbies from the Logistics level.

12.3.1.5(12) Laundry and Linen Services

12.3.1.5(12)(a) All clean linen for use in Patient spaces will be stored close to the POC in exchange carts in Alcove-Clean Linen. Soiled linen will be placed in hampers and then moved to Disposal Hold area for pick up and transportation to loading dock.

12.3.1.5(13) Waste Management

12.3.1.5(13)(a) Waste products, recycling and bio HAZMAT will be separated at POC and stored in holding areas until pick up by housekeeping Staff.

12.3.1.5(14) Food Services

12.3.1.5(14)(a) Food will be brought from the CFP, stored, heated and distributed to the Patients either in their rooms or in dining spaces by food services Staff.

12.3.1.5(14)(b) Used food trays will be retrieved by food services Staff and returned to the Servery for washing.

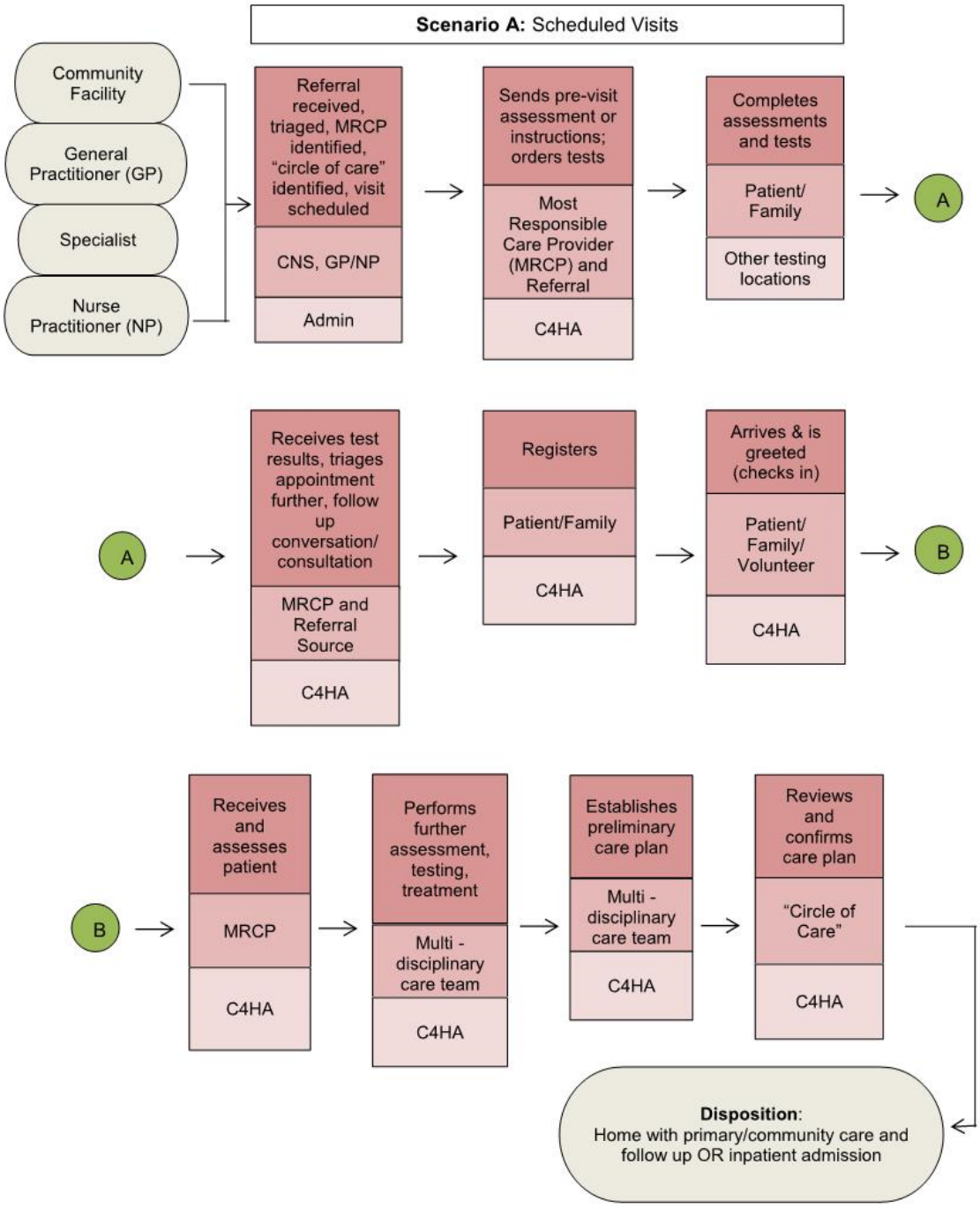
12.3.1.6 Anticipated Trends in Service Delivery

12.3.1.6(1) It is anticipated that the size of the population served by the Centre for Healthy Aging will double by 2030. It is also anticipated that innovations in technology and digital health will allow for more home monitoring, assessment and diagnostics to support ‘aging in place’. Technology and digitization will allow for virtual communication and collaboration between care providers, improving continuity and timeliness of care.

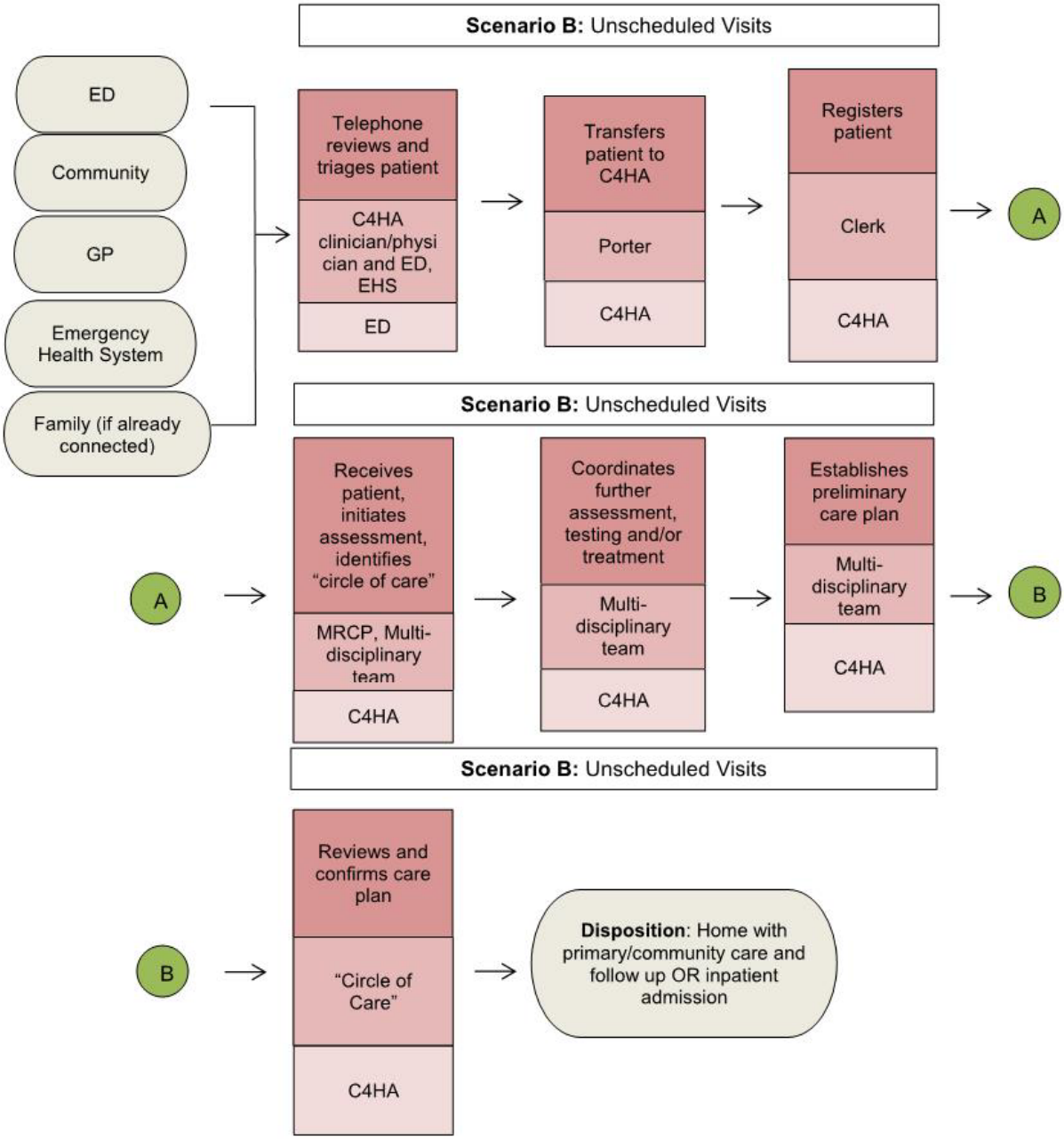
12.3.2 Workflows

12.3.2.1 The Centre for Healthy Aging workflows are depicted in the following workflow diagrams.

K. CENTER FOR HEALTHY AGING (C4HA) WORKFLOW DIAGRAM - SCENARIO A: SCHEDULED VISITS



K. CENTER FOR HEALTHY AGING (C4HA) WORKFLOW DIAGRAM - SCENARIO B: UNSCHEDULED VISITS



12.3.3 Hours of Operation

12.3.3.1 The Centre for Healthy Aging will operate approximately 14 hours a day, 7 days a week. Patients will not be admitted to the Centre for overnight stays, but rather will be assessed, treated and monitored in day-stay Patient Rooms and in outpatient and ambulatory care areas. Physicians will remain on-call 24 hours a day for assessments to the ED.

12.3.4 Workloads

12.3.4.1 The maximum estimated workload for this Component is shown in the following table.

CENTRE FOR HEALTHY AGING STAFF CATEGORY	PEAK SHIFT
Direct Care Team	
Physicians	6
Unit Manager	1
Patient Care Manager	1
Clinical Nurse Educator	1
Nurse Practitioner	1
Clinical Nurse Leader	1
Registered Nurse (Continence Nurse and 3 RNs)	4
Care Aide	1
Clinical Pharmacist	1
Social Worker	3
Physiotherapist	3
Occupational Therapist	3
Rehabilitation Assistant	2
Speech Language Pathologist	1
Respiratory Therapist	0
Dietician	2
Clerical Support	3
Porter/Ward Aides	2
Housekeeper	1
Subtotal, Direct Care Team	**37**
Other	
Residents	2
Students	4
Other - Community Partners	5

CENTRE FOR HEALTHY AGING STAFF CATEGORY	PEAK SHIFT
Subtotal, Other	**11**
DAYTIME PEAK TOTAL	**48**

12.4 DESIGN CRITERIA

12.4.1 General Requirements

12.4.1.1 Zones of activity within the Component will include the following:

12.4.1.1(1) C4HA Outpatient Clinics

12.4.1.1(2) C4HA Assessment and Team Bases

12.4.1.1(3) C4HA Shared Support Services

12.4.1.1(4) C4HA Shared Staff Support

12.4.1.2 The design of this Component will comply with Code Plus, Physical Design Components for an Elder-Friendly Hospital, latest edition, recognizing and responding to the physiological, cognitive and functional changes associated with ageing in order to create a supportive environment that reduces stress, promotes functional ability, encourages healing and recovery, and enhances safety.

12.4.1.3 The design of this Component will be dementia-friendly. To achieve a safe and healing environment for those with dementia or BPSD, the design will:

12.4.1.3(1) Distract attention away from objects or areas that are unsafe in the environment;

12.4.1.3(2) Direct attention toward environmental cues;

12.4.1.3(3) Camouflage or highlight distinct features in the environment; and

12.4.1.3(4) Reduce anxiety to produce a calm behavioural response.

12.4.1.4 The Outpatient Clinics and C4HA Assessment and Team Bases may be located on two (2) consecutive floors. Direct Access between these two (2) main areas via convenient stairs and a dedicated Patient elevator will be required.

12.4.1.5 The Centre for Healthy Aging will have Direct Access to the Health Care Boulevard and the Main Entrance Lobby.

12.4.1.6 C4HA Outpatient Clinics will have Direct Access to a “storefront” location on Level 1 with an accessible dedicated entrance for mobility and cognitively impaired Patients, who may be dropped off and who may require the use of walker, scooter or wheelchair.

12.4.1.7 The dedicated entrance will have a vestibule with double doors from the exterior, an overhang and covered walkway to protect Patients and families from rain and inclement weather conditions and to avoid glare from natural light, in order to reduce the risk of falls. Line of Sight is required from the Reception to the entrance vestibule and pick-up and drop-off area.

12.4.1.8 The Centre for Healthy Aging entrance will be located adjacent to dedicated lay-by stalls for Patient pick-up and drop-off.

12.4.1.9 The entrance will have Line of Sight to/from hospital transfer vehicles for Patient pick-up and drop-off.

12.4.1.10 Simple and intuitive Wayfinding is important for Patients and public coming to the Centre for Healthy Aging.

12.4.1.11 Clear distinction between the ED and the Centre for Healthy Aging entrance will be provided via Wayfinding and signage.

12.4.1.12 Provide appropriate lighting to minimize glare and ensure there is a gradual change in lighting as older adults enter the Facility.

12.4.1.13 The Centre for Healthy Aging will have Convenient Access to Rehabilitation Centre via Patient Transfer/Staff Service Elevators to provide a swift transition between Components for Patients and Staff.

12.4.1.14 Convenient Access to IPUs via Patient Transfer/Staff Service Elevators will be provided in case a Patient will be admitted.

12.4.1.15 Hand hygiene sinks will be directly accessible and distributed appropriately in this Component.

12.4.1.16 The presence of mobility aids including canes, crutches, walkers, wheelchairs, stretchers and motorized chairs/scooters will be anticipated in all Patient accessible areas throughout the Component.

12.4.1.17 Views and access to natural light will be maximized for Patients, Staff and visitors.

12.4.1.18 Support services and storage including Soiled Utility, Disposal Hold, Store-Central Equipment, Store-Clean Supplies and Housekeeping Closet will be located centrally with Convenient Access to Patient spaces to optimize flow and promote best Infection Prevention and Control protocols.

12.4.1.19 Medication Rooms and Store-Clean Supplies will be adjacent. Medication Rooms will have one (1) door from the corridor and another door connecting to the Store-Clean Supplies, so Staff can easily retrieve supplies for the setup of IV medications. Store-Clean Supplies will have another door from the corridor.

12.4.1.20 Store-Central Equipment will be grouped with Medication Room and Store-Clean Supplies.

12.4.1.21 The primary function of Soiled Utility is to provide a space to dispose of the full spectrum of clinical waste including bedpan disinfectors and assorted bins for cytotoxic and biomedical waste (e.g. used blood bags), perform limited soiled activities such as gross decontamination/rinsing/soaking of surgical type instruments, and temporarily store clinical specimens. In the Centre for Healthy Aging, Soiled Utility will also provide space to sequester and marshal soiled equipment and clean them. The design will allow for one way flow from soiled to clean, separate soiled and clean to prevent cross-contamination and provide a dedicated unobstructed cleaning zone, with Convenient Access from all clinical spaces in the area it is intended to serve. Cleaned equipment will be moved to the Store-Central Equipment in a different and physically separate location away from Soiled Utility.

12.4.1.22 The Facility will be a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents. Work spaces will be enabled to have private, confidential conversations and be equipped with teaching capability.

12.4.1.23 Conference/Meeting Room-Xsmall will require visual and audio recording and teaching capability.

12.4.1.24 Telemedicine capacity will be enabled in all care delivery spaces.

12.4.1.25 Staff areas will be Back of House, separated from visitor and Patient areas.

12.4.1.26 The physical environment will facilitate team collaboration.

12.4.1.27 Lockers-Staff will be located adjacent to the Lounge-Staff.

12.4.1.28 Lockers-Staff will be divided into Male and Female Locker Rooms. A Washroom-Staff-Accessible will be accessed from within the Lockers-Staff.

12.4.1.29 Washroom-Staff will have Convenient Access to Staff work areas.

12.4.2 C4HA Outpatient Clinics

12.4.2.1 C4HA Outpatient Clinics Entrance

12.4.2.1(1) C4HA Outpatient Clinics will have Direct Access to the Centre for Healthy Aging main entrance on Level 1.

12.4.2.1(2) Waiting will comprise two (2) separate areas. One Waiting area will be located inside Outpatient Clinics adjacent to entrance and Reception and the other Waiting-Drop Off/Pick Up area will be located at main entrance to the Centre for Healthy Aging.

12.4.2.1(3) Waiting areas will house a variety of information on Patient health and opportunities for third party displays to promote healthy aging products.

12.4.2.1(4) Waiting areas will require wall mounted displays.

12.4.2.1(5) The Waiting area will have two (2) Alcove-Wheelchair to park walkers, scooters and wheelchairs.

12.4.2.1(6) The Reception area will have Line of Sight to both Waiting areas.

12.4.2.1(7) Reception will comprise two (2) areas: an open front desk with two (2) workstations and an acoustically separated inner room with one (1) workstation and upper glazing panels for a clerk making phone calls; refer to Appendix 3C [Acoustic and Noise Control Measures].

12.4.2.1(8) There will be an accessible Washroom-Public in the Waiting area with the ability to accommodate 2 Person assistance, if required.

12.4.2.2 C4HA Outpatient Clinics Area

12.4.2.2(1) The C4HA Outpatient Clinics Area will have three (3) Consult/Interview Rooms, one (1) Procedure Room and ten (10) Exam Rooms.

12.4.2.2(2) The layout and operation of the C4HA Outpatient Clinics Area will provide a flexible platform for joint working between clinicians and, facilitate optimal asset utilization of both clinical and physical resources.

12.4.2.2(3) The C4HA Outpatient Clinics Area will be designed to engage older adults with limited mobility, cognition and function, and to support the inclusion of Patients' family/support Persons in their assessment, treatment and care planning. This will assure optimal Patient experience and support better health care decision-making and care planning.

12.4.2.2(4) Exam Rooms will provide the ability to be used for diverse specialty services.

12.4.2.2(5) A Mobility Gym will be situated at C4HA Outpatient Clinics Area and shared with the Rehabilitation Centre.

12.4.2.2(6) Two (2) Multipurpose Room-Large in C4HA Outpatient Clinics Area will be located adjacent to each other. These rooms will be separated by an operable partition to provide the ability to create a large space.

12.4.2.2(7) Consult/Interview Rooms, Procedure Room, Exam Rooms, Multipurpose Room-Large and Mobility Gym entrances will have doors which are sized to accommodate bariatric stretcher, scooter or wheelchair; refer to Appendix 3M [Door Requirements Matrix].

12.4.2.2(8) Two (2) accessible Washroom-Patient will have Convenient Access to Patient spaces with the ability to accommodate two-person assistance if required.

12.4.3 C4HA Assessment and Team Bases

12.4.3.1 C4HA Assessment and Team Bases will include the following zones:

12.4.3.1(1) Entrance zone;

12.4.3.1(2) A treatment/therapy zone with Consult/Interview Rooms, Assessment/Treatment Rooms and a Procedure Room;

12.4.3.1(3) An ADL assessment zone so that Patients can be assessed in circumstances as close to normal living as possible. The ADL zone is for joint use with OT; and

12.4.3.1(4) A day stay assessment zone, with Patient Room-C4HA.

12.4.3.1 The Entrance zone will include a Waiting area and an adjacent Nourishment Room for use by Patients, families and visitors.

12.4.3.2 The Assessment and Team Bases will have two (2) Consult/Interview Rooms, one (1) Procedure Room and two (2) Assessment/Treatment Rooms for treatment/therapy.

12.4.3.3 The ADL assessment zone includes an ADL-Bath, an ADL-Bed and an ADL-Kitchen.

12.4.3.4 The Rehabilitation Centre will be integral to the assessment and treatment of Patients in the Centre for Healthy Aging. Rehabilitation Staff will utilize resources located in the Centre for Healthy Aging Component, for Healthy Aging and other Patient groups. Resources such as a teaching kitchen as well as an ADL assessment area can be efficiently utilized by multiple programs and both Components with centralized scheduling. Therefore, Convenient Access between Rehabilitation centre and the Centre for Healthy Aging is required to provide a smooth transition between Components for Patients and Staff. The Assessment and Team Bases will have a Care Team Station with three (3) workstations and a Medication Room-Small.

12.4.3.5 Care Team Station will have Line of Sight to the Patient Room entry doors and Waiting area.

12.4.3.6 Care Team Station design will allow for collaboration among Staff and will require wall mounted displays.

12.4.3.7 Care Team Station will be provided with a PTS.

12.4.3.8 Care Team Station will be acoustically private and include an area for technologies such as computers, charging stations and phones.

12.4.3.9 Medication Room-Small will be a distraction free area and will be located adjacent to the Care Team Station and Store-Clean Supplies.

12.4.3.10 Access to Medication Room-Small will be controlled with Line of Sight from the Care Team Station. It will include glazing in the door for visibility, ADC with attached fridge, utility sink, hand hygiene sink, adequate counter space for medication preparation, storage for consumables, waste and recyclable receptacles.

12.4.3.11 The Assessment and Team Bases will have six (6) short stay single Patient Room-C4HA with midboard Washroom/Shower-Inpatient Ensuite-Small, medical gases, suction and ceiling lifts.

12.4.3.12 The Assessment and Team Bases will have two (2) short stay single Patient Room-C4HA Accessible with Washroom/Shower-Inpatient Ensuite, medical gases, suction and ceiling lifts.

12.4.3.13 Two (2) Patient Room-C4HA Accessible will be larger and designated to accommodate Patients with more challenging accessibility issues such as large scooters.

12.4.3.14 Entry door to a Patient Room-C4HA Accessible will accommodate the movement of a bariatric bed into the room.

12.4.3.15 Patient Rooms will require lockable Patient wardrobe for Patient belongings.

12.4.3.16 Patient specific medications will be stored in a lockable drawer in Patient Rooms.

12.4.3.17 Patient Rooms will have Patient controlled ambient lighting and temperature control. Task Lighting will be provided for Staff to perform tasks and chart while Patients enjoy a darkened environment.

12.4.3.18 Provide a magnetic whiteboard in the Patient Rooms for Staff, family and Patient use that communicates the goals of care, nurse in charge, doctor in charge and other pertinent information, as required.

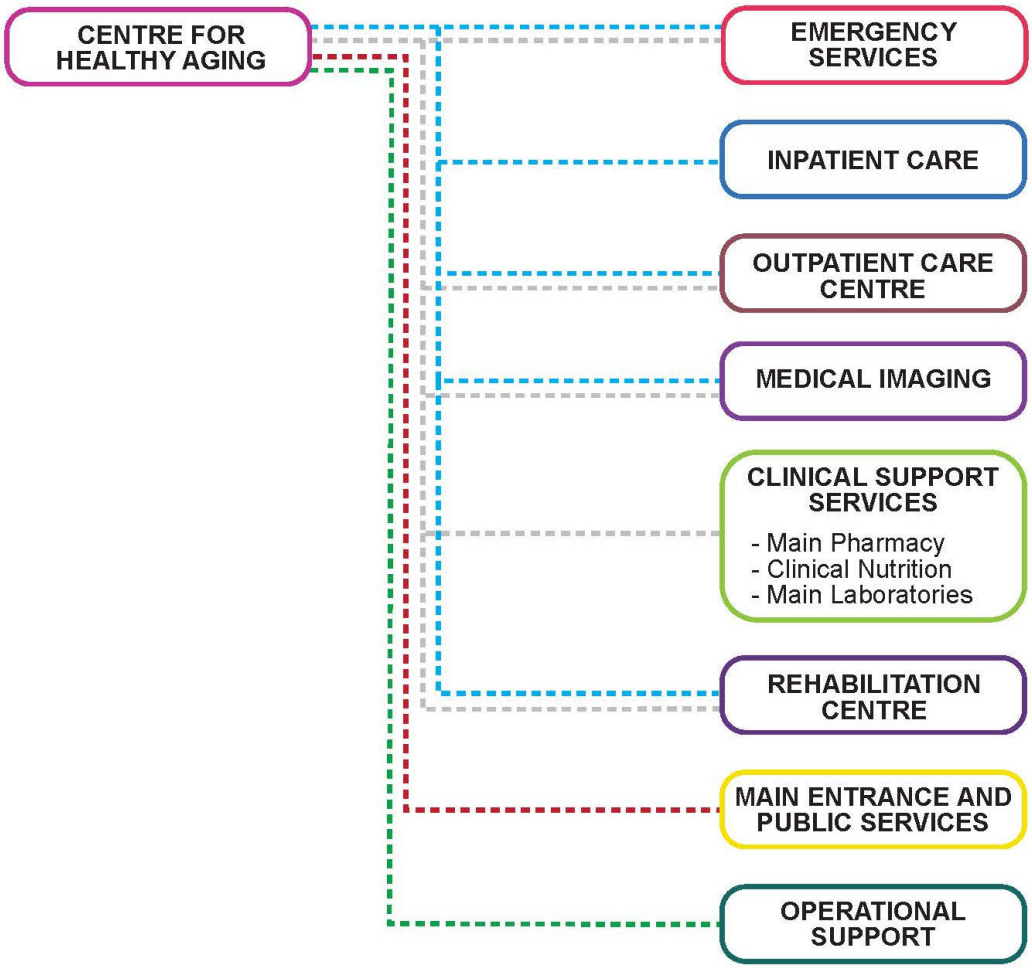
12.4.3.19 Multipurpose Room-Large will be located adjacent to ADL-Kitchen. These rooms will be separated by an operable partition to provide the ability to connect the two spaces to create a large teaching area. Multipurpose Room-Large will also have Direct Access to the Servery for Patient Dining.

12.4.3.20 A Store-Patients' Property will be provided to store Patient belongings that will not be stored inside Patient Rooms.

12.5 EXTERNAL RELATIONSHIPS

12.5.1 The following diagram indicates other Functional Components that have a functional relationship with this Component.

K. CENTRE FOR HEALTHY AGING EXTERNAL RELATIONSHIPS AND CIRCULATIONS

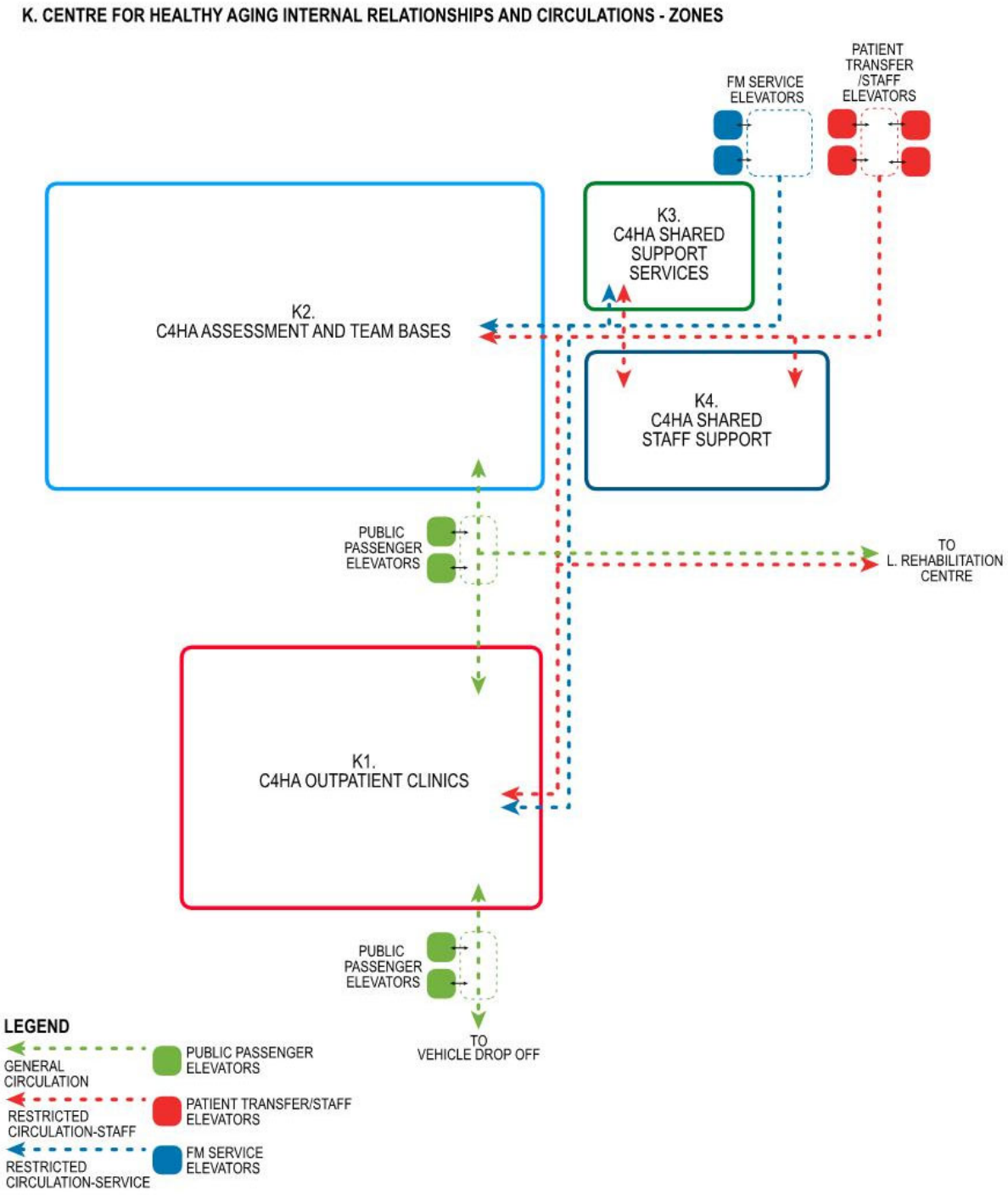


LEGEND

- **Direct** Access through **General Circulation** for Movement of **Public**
- **Direct** Access through **Restricted Circulation - Staff** for Movement of **Staff & Patients**
- **Direct** Access through **Restricted Circulation - Service** for Movement of **Equipment & Supplies**
- **Convenient** Access through **General Circulation** for Movement of **Public**
- **Convenient** Access through **Restricted Circulation - Staff** for Movement of **Staff & Patients**
- **Convenient** Access through **Restricted Circulation - Service** for Movement of **Equipment & Supplies**

12.6 INTERNAL RELATIONSHIPS

12.6.1 The following diagram indicates internal functional relationships within this Component.



12.7 SCHEDULE OF ACCOMMODATIONS

12.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of C4HA

K1 - C4HA OUTPATIENT CLINICS	430.00
K2 - C4HA ASSESSMENT AND TEAM BASES	418.00
K3 - C4HA SHARED SUPPORT SERVICES	38.00
K4 - C4HA SHARED STAFF SUPPORT	155.50
C4HA PROGRAMMED SPACE NSM:	**1,041.50**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
K1 - C4HA OUTPATIENT CLINICS					
K1.1 - C4HA Outpatient Clinics Entrance					
K1.1.1	Reception	1	18.00	18.00	Incl. 3 workstations, cabinets.
K1.1.2	Waiting	1	36.00	36.00	Incl. seating for 14 including 10 in wheelchairs, Direct Access to Vehicle Drop Off and Pick Up area, C4HA Public Passenger Elevator and Washroom-Public.
K1.1.3	Waiting-Drop Off/Pick Up	1	10.50	10.50	Incl. seating for 5 including 2 in wheelchairs, Line of Sight and Direct Access to Vehicle Drop Off and Pick Up area.
K1.1.4	Not Used	1	0.00	0.00	
K1.1.5	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to C4HA Outpatient Clinics.
K1.1.6	Alcove-Wheelchair	2	2.50	5.00	
K1.1.7	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
K1.2 - C4HA Outpatient Clinics Area					
K1.2.1	Consult/Interview Room	3	10.00	30.00	Incl. seating for 4, 1 touch down workstation.
K1.2.2	Procedure Room	1	16.50	16.50	Incl. 1 touch down workstation, counters, cabinets.
K1.2.3	Exam Room	10	12.00	120.00	Incl. 1 touch down workstation, counters, cabinets.
K1.2.4	Mobility Gym	1	85.00	85.00	Incl. 4 workstations, cabinets.
K1.2.5	Multipurpose Room-Large	2	24.00	48.00	Incl. seating for 16. Two Multipurpose Room-Large will be adjacent to each other with an operable partition in between.
K1.2.6	Medication Room-Small	1	8.00	8.00	Incl. 1 touch down workstation, counters, cabinets, shelving.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
K1.2.7	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities.
K1.3 - C4HA Outpatient Clinics Support Services					
K1.3.1	Alcove-Clean Linen	1	2.50	2.50	
K1.3.2	Alcove-Stretcher	1	2.50	2.50	
K1.3.3	Alcove-Wheelchair	1	2.50	2.50	
K1.3.4	Store-Clean Supplies	1	12.00	12.00	
K1.3.5	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
K1.3.6	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
	TOTAL NSM: C4HA Outpatient Clinics			**430.00**	
K2 - C4HA ASSESSMENT AND TEAM BASES					
K2.1 - C4HA Assessment and Team Bases Entrance					
K2.1.1	Waiting	1	7.50	7.50	Incl. seating for 4 including 1 in wheelchair, Direct Access to C4HA Public Passenger Elevators.
K2.1.2	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to C4HA Assessment and Team Bases.
K2.1.3	Not Used	0	0.00	0.00	
K2.1.4	Nourishment Room	1	6.00	6.00	Incl. counters, cabinets, adjacent to Waiting.
K2.2 - C4HA Assessment and Team Bases Area					
K2.2.1	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation.
K2.2.2	Procedure Room	1	16.50	16.50	Incl. 1 touch down workstation, counters, cabinets.
K2.2.3	Assessment/Treatment Room	2	11.00	22.00	Incl. 1 touch down workstation, counters, cabinets.
K2.2.4	ADL-Bath	1	10.00	10.00	Incl. fully functioning tub/shower, toilet, sink, accessible for Persons with Disabilities.
K2.2.5	ADL-Bed	1	10.00	10.00	
K2.2.6	ADL-Kitchen	1	10.00	10.00	Incl. adjustable wheelchair accessible counter, cabinets, adjacent to Multipurpose Room-Large.
K2.2.7	Patient Room-C4HA Accessible	2	18.00	36.00	Incl. lockable Patient wardrobe, cabinets, ceiling lift, accessible for Persons with Disabilities.
K2.2.8	Washroom/Shower-Inpatient Ensuite	2	5.50	11.00	3-piece incl. shower, accessible for Persons with Disabilities.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
K2.2.9	Patient Room-C4HA	6	14.00	84.00	Incl. lockable Patient wardrobe, cabinets, ceiling lift.
K2.2.10	Washroom/Shower-Inpatient Ensuite-Small	6	4.50	27.00	3-piece incl. shower.
K2.2.11	Alcove-Hand Hygiene Sink	1	1.00	1.00	Centrally located.
K2.2.12	Alcove-Touchdown/Charting	3	1.00	3.00	Incl. touch down 1 workstation, distributed in Assessment and Team Bases Area.
K2.2.13	Care Team Station	1	12.00	12.00	Incl. 3 workstations, cabinets, charging station, dual egress.
K2.2.14	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located within 6 m of each Care Team Station entrance.
K2.2.15	Pneumatic Tube Station	1	1.00	1.00	Incl. counter.
K2.2.16	Medication Room-Small	1	8.00	8.00	Incl. 1 touch down workstation, counters, cabinets, shelving.
K2.2.17	Inter-Professional Team Room	1	24.00	24.00	Incl. 8 touch down workstations.
K2.2.18	Multipurpose Room-Large	1	24.00	24.00	Incl. seating for 16, located adjacent to ADL-Kitchen with an operable partition in between.
K2.2.19	Utility-Personal Laundry	1	5.50	5.50	Incl. counter, cabinets.
K2.3 - C4HA Assessment and Team Bases Support Services					
K2.3.1	Servery	1	18.50	18.50	Incl. service counter and window with overhead rolling counter shutters, emergency eyewash, adjacent to Multipurpose Room-Large.
K2.3.2	Alcove-Blanket Warmer	1	1.50	1.50	Adjacent to Alcove-Clean Linen.
K2.3.3	Alcove-Clean Linen	1	2.50	2.50	
K2.3.4	Alcove-Local Equipment	2	1.50	3.00	Distributed in CHA Assessment and Team Bases.
K2.3.5	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
K2.3.6	Alcove-Stretcher	1	2.50	2.50	
K2.3.7	Alcove-Wheelchair	1	2.50	2.50	
K2.3.8	Store-Clean Supplies	1	12.00	12.00	
K2.3.9	Store-Patients' Property	1	6.00	6.00	Incl. cabinets, shelving.
K2.3.10	Store-Rehab Therapy	1	8.50	8.50	Incl. shelving.
K2.3.11	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
K2.3.12	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
	TOTAL NSM: C4HA Assessment and Team Bases			**418.00**	

APPENDIX 3A - CLINICAL SPECIFICATIONS AND FUNCTIONAL SPACE REQUIREMENTS

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
K3 - C4HA SHARED SUPPORT SERVICES					
K3.1	Store-Central Equipment	1	12.00	12.00	Incl. shelving, charging station.
K3.2	Store-General	1	14.00	14.00	Incl. shelving.
K3.3	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
	TOTAL NSM: C4HA Shared Support Services			**38.00**	
K4 - C4HA SHARED STAFF SUPPORT					
K4.1	Conference/Meeting Room-Xsmall	1	15.00	15.00	Accommodates 6 Persons.
K4.2	Inter-Professional Team Room-Small	3	12.00	36.00	Incl. 4 touch down workstations.
K4.3	Office-Private	2	9.50	19.00	Incl. 1 workstation.
K4.4	Office-3 Shared	2	16.00	32.00	Incl. 3 workstations.
K4.5	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
K4.6	Lounge-Staff	1	22.00	22.00	Incl. seating for 6, kitchenette, mail slots, 1 touch down workstation.
K4.7	Lockers-Staff	1	20.00	20.00	Incl. 40 Z-lockers, 1 shoe rack, split into male and female if required, adjacent to Lounge-Staff.
K4.8	Washroom-Staff-Accessible	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
K4.9	Washroom-Staff	1	3.00	3.00	2-piece.
	TOTAL NSM: C4HA Shared Staff Support			**155.50**	
	TOTAL NSM: CENTRE FOR HEALTHY AGING			**1,041.50**	

THE NEW ST. PAUL'S PHASE 1A

L. REHABILITATION CENTRE

L. REHABILITATION CENTRE

13.1 OVERVIEW

13.1.1 The Rehabilitation Centre will accommodate non-invasive and invasive (SLP scopes) assessment and treatment of conditions that affect Patients' abilities to function at their maximum physical and mental potential. Goals of therapy will be to either restore function or to slow down further deterioration of function.

13.1.2 The Rehabilitation Centre will group all of the rehabilitation and therapy service areas together into one easily identifiable, Patient-friendly location. By putting like activities together, the Rehabilitation Centre will allow for sharing of resources designed to increase utilization while reducing duplication of equipment as well as Staff effort. One central location for all rehabilitation services will also enhance intuitive Wayfinding for Patients. Individual program functions will remain separate and distinct, but Convenient Access between services will serve to enhance opportunities for collaboration between providers and their programs.

13.2 FUNCTIONAL DESCRIPTION

13.2.1 Scope of Services

13.2.1.1 The Rehabilitation Centre will consist of the following rehabilitation and therapy departments that currently fall under the Rehabilitation Centre and Healthy Heart Groups at SPH. This grouping will serve as a comprehensive Rehabilitation Centre with the goal of advancing Patient care and maximizing efficiency through a Person- and Family-Centred Care and inter-professional approach. Many of the rehabilitation programs work closely with other clinical areas across the Facility to best serve the diverse and specialized needs of their Patient population. The Rehabilitation Centre will consist of:

13.2.1.1(1) Physiotherapy (PT);

13.2.1.1(2) OT;

13.2.1.1(3) Speech Language Therapy (SLP); and

13.2.1.1(4) Healthy Heart Cardiac Rehabilitation.

13.2.1.2 The following list specifies the minimum set of functions that will be accommodated within the Functional Component's spaces:

13.2.1.2(1) Reception and registration of ambulatory outpatient's assessment of each Patient's needs and capabilities and then development of a holistic care treatment plan around these parameters.

13.2.1.2(2) Rehabilitation services for inpatients as needed and for outpatients will be provided to treat mobility and functionally impaired Patients and other Patient groups with specialized diagnosis such as Chronic Obstructive Pulmonary Disease (COPD). Examples of

conditions that impair function and mobility include but are not limited to:

13.2.1.2(2)(a) Orthopedic and Plastics: Fractures, Joint Replacements, Musculoskeletal Injuries;

13.2.1.2(2)(b) Neurological: Stroke, Brain Injury, Multiple Sclerosis, Parkinson's Disease, ALS, Guillain-Barre;

13.2.1.2(2)(c) Amputation; and

13.2.1.2(2)(d) Systemic Conditions: cardiovascular conditions (Heart Attack, Heart Surgery), respiratory conditions (COPD, Pulmonary Fibrosis), Diabetes, Renal Failure.

13.2.1.2(3) Care is organized by therapy discipline and often delivered in an inter-professional approach with involvement in specialized or focused programs.

13.2.1.3 Scope of Educational Activity

13.2.1.3(1) Teaching and training of rehabilitation learners will occur in this Component, both Patient and Staff education occur in this centralized space.

13.2.1.4 Scope of Research Activity

13.2.1.4(1) Some research will occur in this Component; however, much of the research activity will take place in the Rehabilitation Clinical Research Program, which will include the Cardiopulmonary Exercise Physiology Lab. This program will be located in the future Research Building. The research lab will be adjacent to the Rehabilitation Centre in the future for simple Wayfinding for Patients as well as efficient Staff exchange between the two (2) areas.

13.2.1.5 Scope Exclusions

13.2.1.5(1) The following list specifies functions that are understood to occur in other Functional Components in the Facility or outside of the Facility:

13.2.1.5(1)(a) Most inpatient encounters will be accommodated in activation (therapy) space located within each Inpatient Care Unit. However, there may be instances in which an inpatient will receive therapy services within this Component.

13.2.1.5(1)(b) Outpatient rehabilitation services for frail elders will be conducted in the Centre for Healthy Aging (see Component K), which would include but not limited to gait and balance training, and classes for the elderly.

13.2.1.5(1)(c) Audiology services will occur in the Outpatient Care Centre (See Component H).

13.2.1.5(1)(d) The outpatient flow portion of the Heart and Vascular (examples include Cardiac and the Prevention/Lipid Clinics) are located in the Outpatient Care Centre (See Component H).

13.2.1.5(1)(e) Patients requiring rehabilitation services within an inter-professional and integrated approach will be provided in the Outpatient Care Centre (See Component H).

13.2.1.5(1)(f) Patients who are suitable for community-based rehabilitation and/or support in transitioning to the community will receive rehabilitation services outside the Facility. Community rehabilitation services would be provided by a licensed physical therapist or OT to clients who require acute, chronic, palliative or rehabilitative support. The main goals of community rehabilitation therapy are to help improve or maintain physical and functional abilities and to provide assessment and treatment to ensure a client's home is suitably arranged for their needs and safety. Generally, community rehabilitation services will be provided on a short-term basis and community rehabilitation therapists assist clients and their families to be confident in taking over care at home.

13.2.2 Services provided

13.2.2.1 Physiotherapy

13.2.2.1(1) PT will be responsible for maintaining and/or improving Patients' physical function and capacities through individualized assessments and 1:1 and group interventions. They work in an inter-professional collaborative approach with other allied health professionals. Examples of specialized services include but are not limited to:

13.2.2.1(1)(a)	Pre and post-surgical consultations and treatment (e.g. Pre-operative education for elective joint replacements);
13.2.2.1(1)(b)	Post trauma, fractures, dislocations and joint arthroplasties; orthopaedics and plastic surgeries;
13.2.2.1(1)(c)	Frailty-mobility issues, strengthening, tolerance;
13.2.2.1(1)(d)	Therapy post reconstructive surgery-tendon transfers and bone grafts;
13.2.2.1(1)(e)	Lymphedema;
13.2.2.1(1)(f)	Return to work (Work safe and ICBC contracts): return to work planning and return to work monitoring;
13.2.2.1(1)(g)	Acute and rehab respiratory including CF;
13.2.2.1(1)(h)	Acute and rehab renal;
13.2.2.1(1)(i)	Women’s health including post breast surgery;
13.2.2.1(1)(j)	Continence;
13.2.2.1(1)(k)	Facial palsy;
13.2.2.1(1)(l)	Hemophilia;
13.2.2.1(1)(m)	Complex pain;
13.2.2.1(1)(n)	Vestibular;
13.2.2.1(1)(o)	Cardiac;
13.2.2.1(1)(p)	CF;
13.2.2.1(1)(q)	Amputee and wound care collaborative with nursing Staff;
13.2.2.1(1)(r)	Hand Program: note that this is a combined PT and OT program and will be located together. Services provided in this program include splint fabrication and modification; including custom splinting. This area requires a work space that can accommodate both treatment and splint fabrication and the required storage of materials for this program;

13.2.2.1(1)(s) PTs who are designated as certified hand therapists provide outpatient services to clients (including WorkSafe BC contract); and

13.2.2.1(1)(t) PTs also work in interdisciplinary collaboration with OT, Speech Language Pathology (SLP), registered dieticians and Social Work. Professional Practice Leaders and Site Leaders across allied collaborate regularly.

13.2.2.2 Occupational Therapy

13.2.2.2(1) OT will be responsible for maintaining and/or improving Patients' functional capacity. They provide assessments and interventions to assist in rehabilitation and discharge planning goals. Most often, OT is requested to provide a clinical opinion on a Patient's safety for discharge. Assessments that are conducted directly in the Patient's room will require access to appropriate chair/table space and good lighting.

13.2.2.2(2) To provide best practices, OTs require Convenient Access to an ADL suite. This suite is most appropriately designed as a small, downtown apartment with a standard bath tub, toilet, sink, bedroom and kitchen. The function of this suite is primarily to provide a functional assessment to determine if the Patient is safe to be discharged back to their home in the community and helps to identify any functional challenges. An estimate of 40% of inpatients require this OT assessment therefore this suite will be within Convenient Access of Patient Transfer/Staff Service elevators. This assessment is necessary in order to help identify if there are barriers to discharge. There will be continued emphasis on discharging the Patient back home with any necessary community services. Therefore, providing this assessment in a timely manner is critical to ensure there is organizational Patient flow acute to community.

13.2.2.2(3) OT also works in inter-disciplinary collaboration with PT, SLP, and Social Work (SW). Professional practice leaders across allied, but particularly OT, PT, SLP & SW work very closely together. Site Leaders across these disciplines also collaborate regularly.

13.2.2.2(4) Examples of specialized OT services include but are not limited to:

13.2.2.2(4)(a) Ambulatory programs

13.2.2.2.4.(a).1 Hand Therapy.

13.2.2.2.4.(a).2 OTs who are designated as certified hand therapists provide outpatient services to clients (including WSBC contract).

13.2.2.2.4.(a).3 Examples of other type of services include but are not limited to OT assessment and treatment services for complex pain Patients, and Geriatric outpatients. Convenient Access to quiet Assessment/Treatment Rooms and an ADL suite is required for these Patients.

13.2.2.2(4)(b) Therapeutic wheelchairs and seating

13.2.2.2.4.(b).1 OTs provide wheelchairs and seating/positioning equipment on a prescription basis following a clinical assessment. This is different from transport wheelchairs, which are basic wheelchairs (or staxis) with the sole purpose of moving Patients from point A to point B within the Facility.

13.2.2.2(4)(c) ADL Equipment/supplies

13.2.2.2.4.(c).1 OTs provide adaptive ADL equipment to Patients for in-hospital use, as well as sell equipment to Patients at cost.

13.2.2.2.4.(c).2 Storage areas are required for this equipment, with Convenient Access for all OTs (inpatient and ambulatory). It requires shelving and storage units.

13.2.2.2(4)(d) Pressure relief – ROHO mattress sectionals

13.2.2.2.4.(d).1 OTs are consulted when Patients identified as at risk for pressure injuries require therapeutic surfaces. Pressure relief mattresses (e.g. ROHO mattress sectionals) will be maintained/ cleaned/ stored in the centralized Equipment Depot (See Component O).

13.2.2.3 Speech Language Pathology

13.2.2.3(1) SLP will be responsible for assessing and treating conditions affecting Patients' language, voice, speech and swallowing by supporting the following:

13.2.2.3(1)(a) Swallowing clinic;

13.2.2.3(1)(b) Parkinson's disease Patients – Voice therapy, speech language, neurological Patients including stroke and Parkinson's and swallowing therapy;

13.2.2.3(1)(c) Speech, language, and cognitive communication assessment and treatment; and

13.2.2.3(1)(d) Head and neck post-surgical treatment (e.g. cancer and tracheotomy).

13.2.2.4 Healthy Heart Cardiac Rehabilitation

13.2.2.4(1) The Cardiac Rehab Clinic Patients are referred for risk factor modification to prevent or reduce risk of subsequent cardiac events. Examples of conditions include but are not limited to: post myocardial infarction, coronary heart disease, valve replacement, coronary bypass, pacemaker, heart transplant (pre & post), arrhythmia, heart failure, hyperlipidemia and lipid disorders.

13.2.2.4(2) The rehabilitation flow of the Cardiac Rehab Clinic consists of the rehabilitation gym area that is located in this Component. The program promotes cardiac health through education, counseling and exercise. Cardiac exercise classes are conducted during the week. During these classes there is an integration of dieticians, nurses, and exercise physiologists where the education series is wrapped around the Patient. This is a key requirement of the program. Physician support is available when required.

13.3 OPERATIONAL CONSIDERATIONS

13.3.1 Service Delivery Principles and Methods

13.3.1.1 Patient and Family Management Processes and Flows

13.3.1.1(1) Patients

13.3.1.1(1)(a) Scheduled outpatient visits will be accessible to this Component via Public Passenger Elevators that will exit onto a Reception and Waiting area. Patients will be received and directed or escorted to their therapy gym or treatment space. Patient change, and washroom areas will be located next to the gym spaces for Patients to change and shower. Treatment will consist of individual sessions or group sessions depending on the prescribed therapy. Unscheduled emergency ambulatory arrivals may be seen within the Component assuming the Patient has the necessary requisition and if operationally feasible.

13.3.1.1(1)(b) Inpatients may be transported to the Component or will be escorted by rehabilitation Staff for their assessment and treatment if they require the specialized services offered in the Rehabilitation Centre. Inpatients will access the Component via the Patient Transfer/Staff Service Elevators and

will not need to go through the Reception and Waiting areas.

13.3.1.1(1)(c) Patients arriving at the Facility for rehabilitation services will either proceed directly to the Rehabilitation Centre or will stop at the main Registration Services in the main entrance area prior to arriving at Rehabilitation Centre. The intent is to minimize the travel distances for Patients accessing this Component wherever possible. Wayfinding systems in place will also be utilized to minimize travel distances within the Facility.

13.3.1.1(2) Family

13.3.1.1(2)(a) Patient spaces will be accessible to families as defined and desired by the Patient. Waiting spaces comfortable for various body types and needs will also exist outside of the care areas and will be available for family members.

13.3.1.2 Patient Information Management

13.3.1.2(1) All Patient related information will be maintained on the EMR system. Wireless technology will enable data entry using a combination of fixed terminals, and at key Staff workstations, and mobile pads. Access to the EMR will be controlled electronically with varying levels of security clearance determining a Person's access to different sections and their ability to enter/edit data.

13.3.1.2(2) The clinical units and Patient care spaces will optimize care delivery through the design and build of facilities and work spaces which emphasize the blend of workflow, care processes, automation of practice, and interoperability between medical and business technologies in support of the Authority's strategic investment in CST and other clinical and business systems.

13.3.1.2(3) The intent is to enable clinicians and Staff to take advantage of the technologies and resultant optimal care environment with respect to communication, access to the EMR, documentation, mobility, monitoring, tracking, and care processes and best practices supported by technology. The space will accommodate the technology devices and medical equipment required to deliver care in an automated environment including mounting, storage, charging, and space requirements of:

13.3.1.2(3)(a) Mobile and Fixed Computer Devices – Desktop, Wall mount and WOWs;

13.3.1.2(3)(b) Mobile and Fixed Label Printers;

13.3.1.2(3)(c) Mobile and Fixed Barcode Scanners;

13.3.1.2(3)(d) Handheld Computer Devices;

13.3.1.2(3)(e) Clinical dashboards;

13.3.1.2(3)(f) Device Integration for real-time clinical assessment and physiological data documentation;

13.3.1.2(3)(g) Digital room signage and Wayfinding;

13.3.1.2(3)(h) Interactive Patient Station;

13.3.1.2(3)(i) Device Connectivity;

13.3.1.2(3)(j) Multifunction Communication Devices with integration to systems;

13.3.1.2(3)(k) Telemedicine and Virtual Team Capabilities;

13.3.1.2(3)(l) RTLS; and

13.3.1.2(3)(m) Staff Safety and Duress.

13.3.1.2(4) Staffing information will be a managed corporate service. Scheduling, including providing for sick and vacation relief will be conducted by Leaders based in this Component as well as supported by a corporate service

13.3.1.3 Care Provider Work Processes and Flows

13.3.1.3(1) The clinical team will meet the Patient upon arrival, conduct an assessment, and provide treatment and document in the Patient record. When required the clinician may request investigation results. Once results are received, further care plans are made, and treatment given. Therapy can be provided in groups or individually. Clinicians may have multiple individual therapies occurring at once where by the clinician is required to observe multiple Patients at one time. Therefore, Line of Sight is important for operational and Patient safety purposes. Communications among clinicians will include verbal, electronic and written. Handheld wireless devices with the ability to link documents and Patient records will be available to clinicians. Electronic Patient information boards with specific Patient information will be available. Electronic communication will link with housekeeping.

13.3.1.3(2) Students

13.3.1.3(2)(a) Allied health students will be integrated into all aspects of the Patient, family and provider space in the rehab Component.

13.3.1.3(2)(b) The Facility will be a UBC Faculty of Medicine (FoM) accredited site that will provide a learning environment for UBC students and residents. Work spaces will be enabled to have private, confidential conversations and be equipped with teaching capability.

13.3.1.4 Clinical and Logistical Support Processes and Flows

13.3.1.4(1) Equipment and Instruments

13.3.1.4(1)(a) The Equipment Depot (See Component O) will store all excess Equipment that can be expediently delivered to an area upon request.

13.3.1.4(1)(b) Example would include the ability for an OT to request wheelchairs for delivery to the Assessment/Treatment Room post-assessment.

13.3.1.4(1)(c) Regularly used equipment will be kept in the Rehabilitation Centre for ease of access and; will be monitored and stocked by central supply.

13.3.1.4(1)(d) RTLS tagging of Equipment will allow for tracking and monitoring.

13.3.1.4(1)(e) Instruments used in Rehabilitation Centre will be cleaned at POC with the exception of scopes.

13.3.1.4(1)(f) Scopes used by SLP will be sterilized and re-processed daily. There will be a secure method of transport and Convenient Access to the Satellite Scope Reprocessing area in Outpatient Clinic Pod 03 (Lung, Sinus and Allergy) in Outpatient Care Centre Component via Patient Transfer/Staff Service Elevators.

13.3.1.4(2) Consumable Supplies

13.3.1.4(2)(a) Consumable supplies will be kept close to the POC. Items will be maintained with a minimum inventory level, which will trigger a re-ordering process. RTLS tagging of supplies will allow for tracking and replenishment. Store-Clean Supplies will also store supplies.

13.3.1.4(2)(b) MDRD Staff will maintain sterile trays.

13.3.1.4(3) Laundry and Linen

13.3.1.4(3)(a) Clean linen for use in Patient spaces will be stored close to the POC in exchange carts.

13.3.1.4(3)(b) Soiled linen will be placed in hampers and then moved to Disposal Hold for pick up and transportation to loading dock.

13.3.1.4(3)(c) Storage and pathways for clean supplies, equipment and linen will be kept separate from soiled supplies, equipment and linen.

13.3.1.4(4) Waste Management

13.3.1.4(4)(a) Waste products, recycling and bio HAZMAT will be separated at POC and stored in holding areas until pick up by housekeeping Staff and transported by AGV's.

13.3.1.4(5) Food Services

13.3.1.4(5)(a) The Food Services Component will not be involved with the production and delivery of meals to Therapy Services.

13.3.1.4(5)(b) SLP does require Convenient Access to food supply for swallowing assessment purposes. This is primarily in the form of shelf – stable (e.g. canned) foods but will require ready access to fresh food (examples include sandwiches, thickened fluids).

13.3.1.5 Anticipated Trends in Service Delivery

13.3.1.5(1) The following lists trends expected within the planning horizon of this project, and that are expected to affect the nature and/or extent of functions accommodated within this Component. Effects of these trends will be reflected in the Component's design.

13.3.1.5(1)(a) Therapy services are one of the key strategies used to minimize inpatient stays or avoid inpatient admission altogether. They also target those at risk for institutionalization by allowing them to live as independently as feasible for as long as possible. Demands for these services are expected to grow, especially in response to an

aging population that often presents with multiple health and functioning issues.

13.3.1.5(1)(b) As the demand for rehabilitation services in the home and outpatient setting is increasing, the therapist's role will continue shifting towards proportionately more outpatient care as opposed to inpatient care, although many outpatient care plans will originate with the latter.

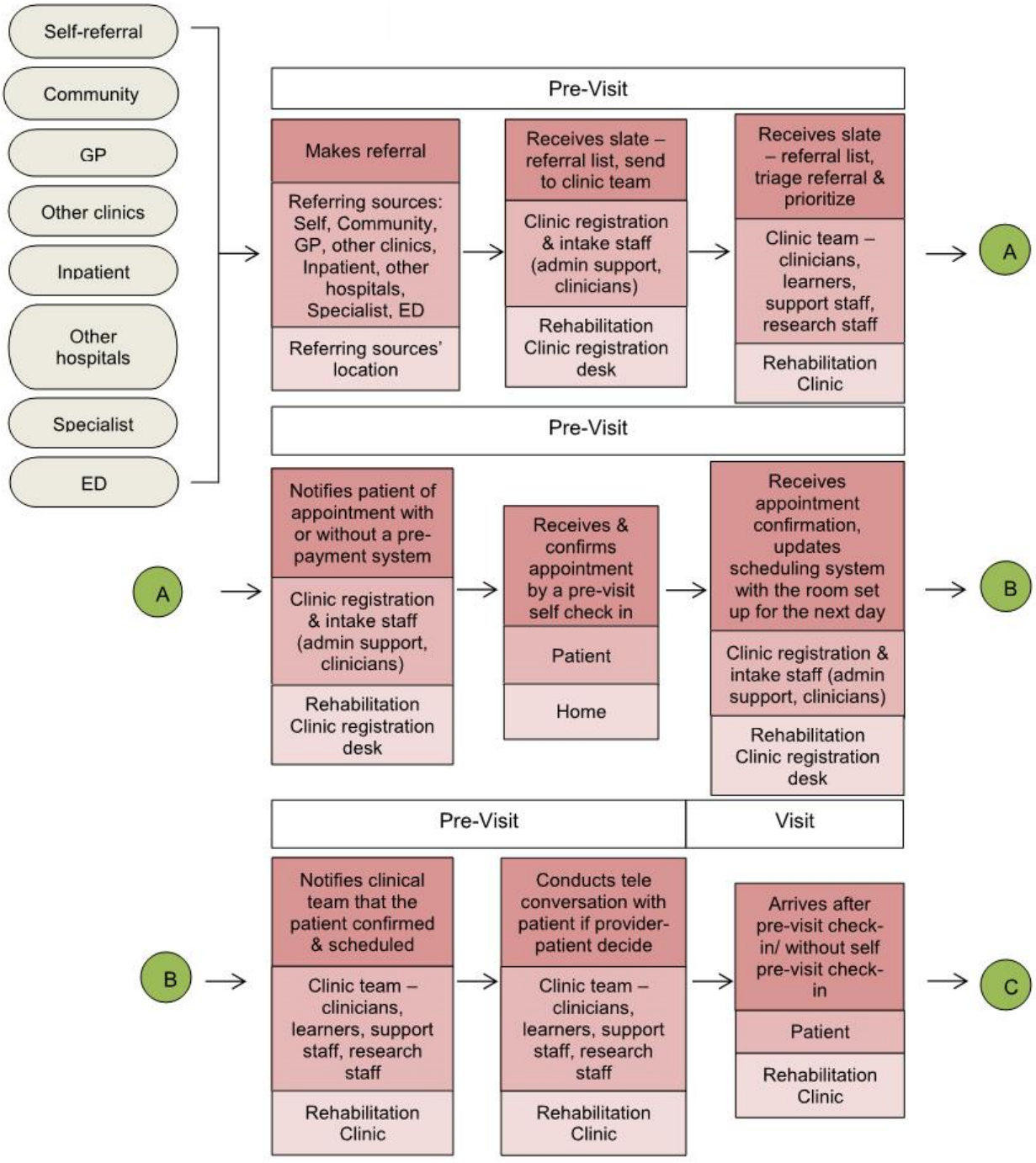
13.3.1.5(1)(c) Demands for therapy services will promote introduction of extended hours and weekend operations as opposed to larger facilities as a means of increasing capacity.

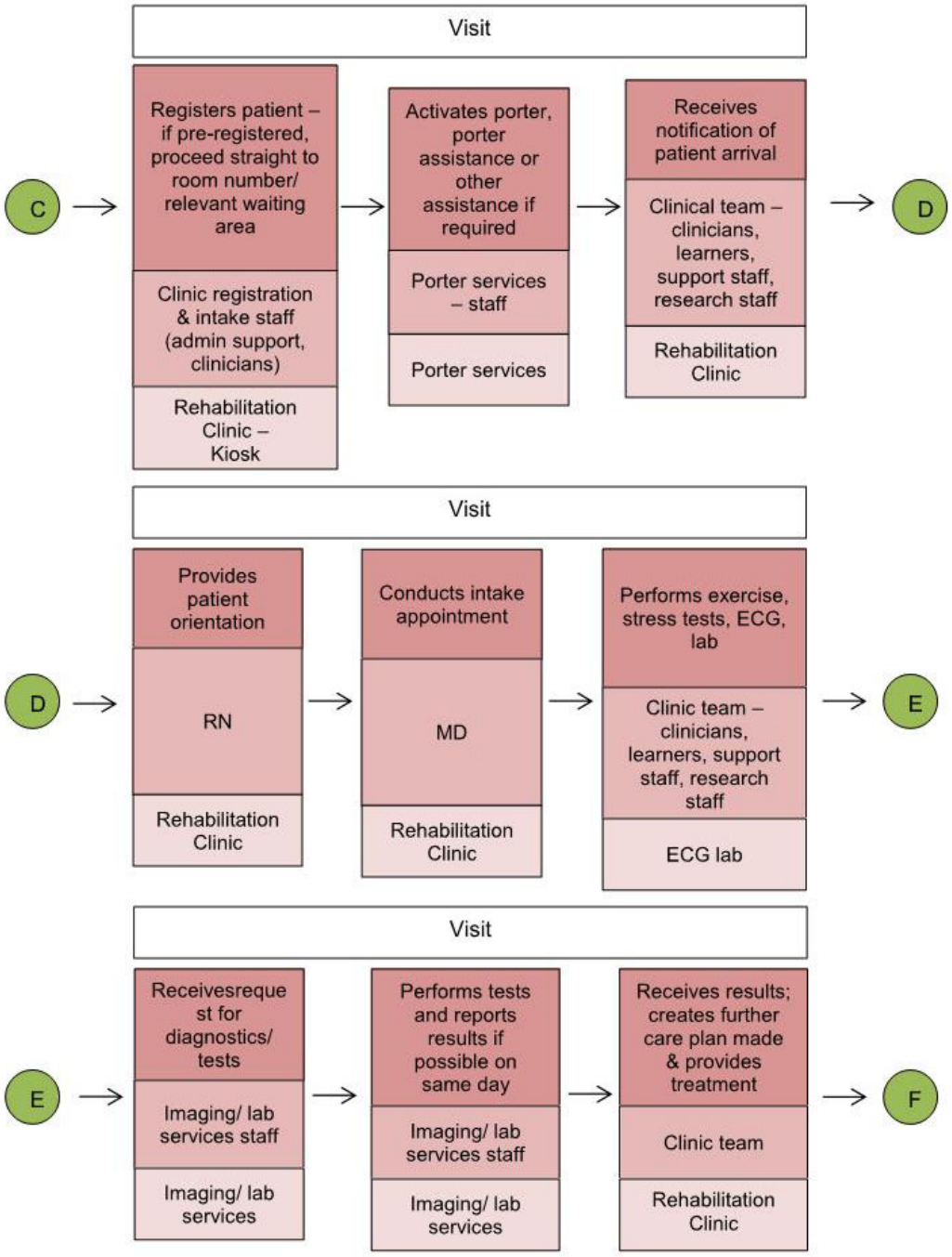
13.3.1.5(1)(d) As appropriate, emphasis will continue being placed on group encounter therapy sessions as opposed to one-on-one.

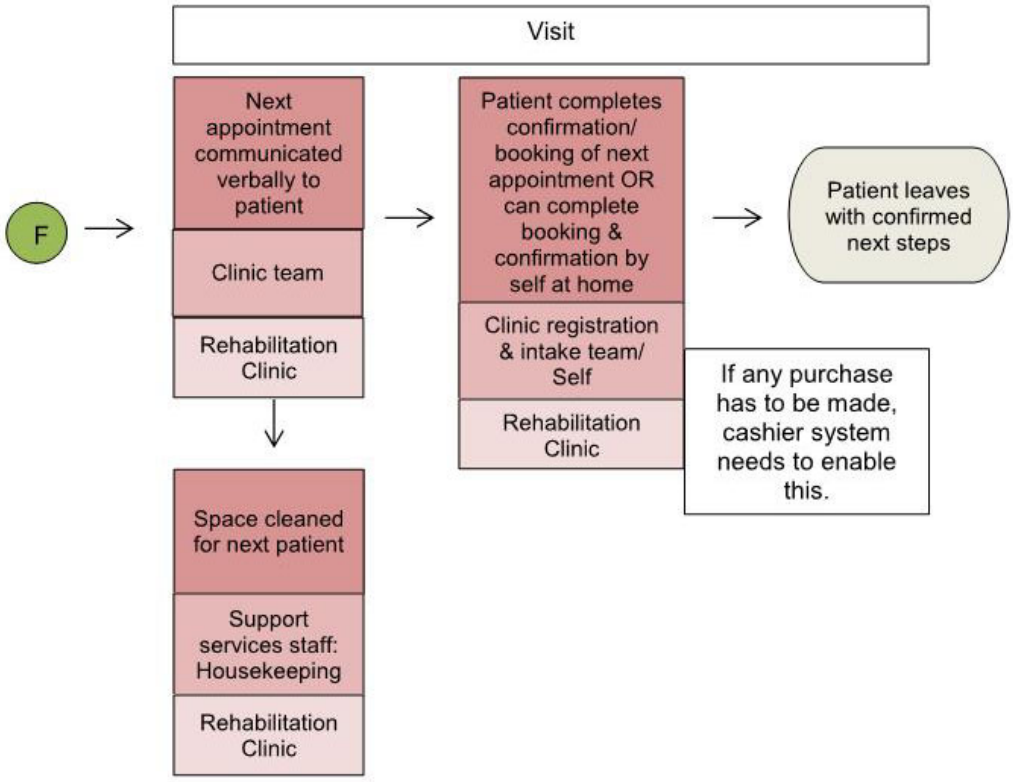
13.3.2 Workflows

13.3.2.1 The Rehabilitation Centre workflows are depicted in the following workflow diagram.

L. REHABILITATION CENTRE WORKFLOW DIAGRAM




Visit
C
Registers patient – if pre-registered, proceed straight to room number/ relevant waiting area
Clinic registration & intake staff (admin support, clinicians)
Rehabilitation Clinic – Kiosk
Activates porter, porter assistance or other assistance if required
Porter services – staff
Porter services
Receives notification of patient arrival
Clinical team – clinicians, learners, support staff, research staff
Rehabilitation Clinic
D
Visit
D
Provides patient orientation
RN
Rehabilitation Clinic
Conducts intake appointment
MD
Rehabilitation Clinic
Performs exercise, stress tests, ECG, lab
Clinic team – clinicians, learners, support staff, research staff
ECG lab
E
Visit
E
Receivesreque st for diagnostics/ tests
Imaging/ lab services staff
Imaging/ lab services
Performs tests and reports results if possible on same day
Imaging/ lab services staff
Imaging/ lab services
Receives results; creates further care plan made & provides treatment
Clinic team
Rehabilitation Clinic
F


Visit
F
Next appointment communicated verbally to patient
Clinic team
Rehabilitation Clinic
Space cleaned for next patient
Support services staff: Housekeeping
Rehabilitation Clinic
Patient completes confirmation/ booking of next appointment OR can complete booking & confirmation by self at home
Clinic registration & intake team/ Self
Rehabilitation Clinic
If any purchase has to be made, cashier system needs to enable this.
Patient leaves with confirmed next steps

13.3.3 Hours of Operation

13.3.3.1 The Rehabilitation Centre minimum hours of operation are from 0630 – 1830 hours, Monday to Friday.

13.3.3.2 Outpatient programs may occur in after hours or on weekends in the future.

13.3.4 Workloads

13.3.4.1 The maximum estimated workload for this Component is shown in the following table.

REHABILITATION CENTRE STAFF CATEGORY	PEAK SHIFT
Direct Care Team Staff	
Professional Practice Leaders	3
Site leaders	3
Program Assistants	3
Physician	2
Physiotherapist	25
Occupational Therapist	10
Speech Language Pathologists	6
Rehab Assistant	12
Exercise physiologists	3
Dietician	3
Pharmacist	1
RN's	2
Exercise leaders	2
Housekeeper	2
Subtotal, Direct Care Team Staff	**77**
Other	
Student	25
Volunteer	4
Researcher and Other	4
Subtotal, Other	**33**
DAYTIME PEAK TOTAL	**110**

13.4 DESIGN CRITERIA

13.4.1 General Requirements

13.4.1.1 Zones of activity within the Component include the following:

13.4.1.1(1) PT and Cardiac Rehab

13.4.1.1(2) OT

13.4.1.1(3) SLP

13.4.1.2 The Rehabilitation Centre will have Convenient Access by Public Passenger Elevators from Main Entrance and Public Services for Patients arriving as outpatients.

13.4.1.3 The Rehabilitation Centre will be integral to the assessment and treatment of Patients in the Centre for Healthy Aging. Rehabilitation Staff will utilize resources located in the Centre for Healthy Aging Component, for Healthy Aging and other Patient groups. Resources such as a teaching kitchen as well as an ADL assessment area can be efficiently utilized by multiple programs with centralized scheduling. Therefore, Convenient Access to the Centre for Healthy Aging is required to provide a smooth transition between Components for Patients and Staff. Clinical nutrition will be adjacent to Rehabilitation Centre as registered dieticians will work with Staff and Patients in this Component.

13.4.1.4 The Rehabilitation Centre will have Convenient Access to the MSK Clinic (Outpatient Clinic Pod 05, H1.5) to enable efficient Patient transfers between clinics, diagnostics and Rehab Healthy Heart and Prevention programs.

13.4.1.5 The Rehabilitation Centre requires Convenient Access to Main Pharmacy and Main Laboratories.

13.4.1.6 All rehabilitation services will be grouped in one area. If not feasible, PT and OT will be grouped as the clinical work is more aligned (in comparison with the other therapy disciplines).

13.4.1.7 OT’s and PT’s who are designated as certified hand therapists provide outpatient services to clients through the hand clinic. During the clinic, the Patient will require space free of visual and auditory distractions to facilitate focus on the therapy. Simultaneously hand therapists may be monitoring other Patients in the PT gym and will require Line of Sight and ability to communicate with Patients in both locations.

13.4.1.8 Views and access to natural light will be maximized in the Rehabilitation Centre for Patients, Staff and visitors.

13.4.1.9 At the main entrance to the Component, there will be a centrally located Reception and Waiting area. The Waiting area for Patients, families and visitors

will be equipped with a Patient entertainment/education system and a hand hygiene sink.

13.4.1.10 The Reception area design will provide a private section for confidential conversations.

13.4.1.11 All Waiting areas require Direct Natural Light; refer to Schedule 3 Section 5.6.1.6 Access to Daylight and Views.

13.4.1.12 All Rehabilitation Centre Staff (e.g., Clerk, Receptionist, etc.) will have Line of Sight to Patient Waiting areas.

13.4.1.13 Specialized rooms will be organized by service, for example all rooms related to OT or SLP will be located together.

13.4.1.14 Assessment/Treatment Rooms will be as standardized as possible in order to maximize flexibility of use and reduce risk by promoting Staff familiarity with the placement of supplies and equipment.

13.4.1.15 Patient spaces will be considered as on-stage and where Staff will focus on providing services to the Patient. Functions accommodated in Rehab Support Services will be distraction-free and designed as off-stage spaces.

13.4.1.16 Support Services and Storage including Disposal Hold, Store-Central Equipment, Store-Local Equipment and Store-Clean Supplies will be located centrally with Convenient Access to Assessment/Treatment Rooms to optimize flow and promote best Infection Prevention and Control protocols.

13.4.1.17 The primary function of Soiled Utility is to provide a space to dispose of the full spectrum of clinical waste including bedpan disinfectors and assorted bins for cytotoxic and biomedical waste (e.g. used blood bags), perform limited soiled activities such as gross decontamination/rinsing/soaking of surgical type instruments, and temporarily store clinical specimens. In the Rehabilitation Centre, Soiled Utility will also provide space to sequester and marshal soiled equipment and clean them. The design will allow for one way flow from soiled to clean, separate soiled and clean to prevent cross-contamination and provide a dedicated unobstructed cleaning zone, with Convenient Access from all clinical spaces in the area it is intended to serve. Cleaned equipment will be moved to the Store-Local Equipment and Store-Central Equipment in a different and physically separate location away from Soiled Utility.

13.4.1.18 Hand hygiene sinks will be directly accessible and distributed uniformly in all clinical areas as per Infection Prevention and Control protocols.

13.4.1.19 All Washroom-Patient will be placed with Convenient Access to Assessment/Treatment Rooms.

13.4.1.20 All Washroom-Staff will be placed with Convenient Access to Staff work areas.

13.4.1.21 The presence of mobility aids including canes, crutches, walkers, wheelchairs, stretchers and motorized chairs/scooters will be anticipated in all Patient accessible areas throughout the Component.

13.4.1.22 Alcove-Stretcher and Alcove-Wheelchair will be located adjacent to the Component's point of entrance/exit.

13.4.1.23 Doors will be wide enough to accommodate bariatric Patients.

13.4.1.24 The physical environment will facilitate team collaboration.

13.4.1.25 Telemedicine capacity will be enabled in all care delivery spaces.

13.4.2 Physiotherapy and Cardiac Rehab

13.4.2.1 There is significant interdisciplinary collaboration between PT and OT, therefore they will be grouped with Direct Access.

13.4.2.2 PT and OT entrance will have Direct Access to Public Passenger Elevators.

13.4.2.3 A Reception and Waiting area shared with OT will have Line of Sight from the main Public Access to PT area. This area will be separated from Patient spaces for Patient privacy and to decrease noise transmission from the Gyms. The Waiting area will be equipped with a Patient entertainment/education system.

13.4.2.4 The Rehabilitation Centre Component will include four (4) Gyms with glazing for visibility between adjacent Gyms as well as between the Gyms and the corridor.

13.4.2.5 PT will also include one (1) Assessment/Treatment Room-Large, ten (10) Assessment/Treatment Bays and two (2) Extremity Whirlpool Rooms.

13.4.2.6 Extremity Whirlpool Rooms will be located adjacent to Rehab Gym-Physiotherapy.

13.4.2.7 PT Assessment/Treatment Bays will be configured around PT Rehab Gyms according to an open plan with privacy curtains and minimal partitioning. An open plan will assist in monitoring several Patients at one time and will allow for equipment to be moved as reorganizations become necessary. Assessment/Treatment Bays will have Line of Sight to Rehab Gym-Physiotherapy.

13.4.2.8 Access to three sides of the treatment table in Assessment/Treatment room and bays will be incorporated for therapist and Patient including wheelchair and scooters.

13.4.2.9 The Rehab Gym therapy spaces will be adjacent but separated based on activities.

13.4.2.10 The Rehab Gym area will be located on an exterior wall with large windows to maximize views and natural light.

13.4.2.11 The Rehab Gym-Cardiovascular will require cardio exercise equipment. This Gym will require acoustical separation from the other therapy areas, as therapy sessions such as the Healthy Heart Group are generally noisier than other sessions that may be going on simultaneously, as per Appendix 3C [Acoustic and Noise Control Measures]. The Rehab Gym-Cardiovascular will be adjacent to the Rehab Gym-Strength Training.

13.4.2.12 The Rehab Gym-Group Exercise will be used for group exercise sessions and will require acoustical separation from the other therapy areas as per Appendix 3C [Acoustic and Noise Control Measures].

13.4.2.13 The Rehab Gym-Physiotherapy will be equipped with treadmills, exercise bikes and other equipment, along with plinths for one-on-one therapy sessions. Assessment/Treatment Bays will be incorporated into the Gym for individual therapies or assessments including tables for hand therapy. The Rehab Gym-Physiotherapy will be adjacent to the Rehab Gym-Group Exercise.

13.4.2.14 The Rehab Gym-Strength Training will be equipped with free weights and universal gym equipment. Soft flooring is required in case weights are dropped. The Rehab Gym-Strength Training will be adjacent to the Rehab Gym-Group Exercise.

13.4.2.15 All Gyms will be interconnected with double doors with glazing. Storage for equipment will be accommodated within the Gym area as well as extra equipment will be located adjacent to the Gyms for ease of access.

13.4.2.16 All PT areas with administrative functions, therapist work areas and documentation areas will be directly contiguous to the Assessment/Treatment spaces and Gym area of the Component. Therapists require the ability to visually and audibly observe the Gym and Assessment/Treatment spaces from the administrative zones of the Component.

13.4.2.17 Lockers-Patient areas with change and shower facilities will be located next to the Gyms and will be equipped with lockers for secure storage of Patient personal belongings.

13.4.2.18 There will be a monolithic ceiling to accommodate adjustable poles and overhead grids.

13.4.2.19 Provision will be made for wall backing/reinforcing for pulleys, etc.

13.4.2.20 The ceiling structure will accommodate the weight of therapy grids.

13.4.2.21 There will be Direct Access from the PT area to a Therapy Roof Garden and walking loop. The Therapy Roof Garden will also have Convenient Access for Patients within the Component through controlled access from the Reception area as well as for Patients arriving from other Components. This Convenient Access will not interfere with Rehab Patient treatment or privacy.

13.4.3 Occupational Therapy

13.4.3.1 The OT area will be directly adjacent to PT area but will be separated from PT open plan area.

13.4.3.2 OT will require Direct Access to the Reception and Waiting area shared with PT.

13.4.3.3 OT will include four (4) Assessment/Treatment Rooms.

13.4.3.4 All Assessment/Treatment Room doors will have vision panels.

13.4.3.5 Staff in OT will require Convenient Access to a central Office for collaborative work and quiet report writing.

13.4.4 Speech Language Pathology

13.4.4.1 Patients accessing SLP area will not pass through the PT and OT areas.

13.4.4.2 SLP will require Convenient Access to Medical Imaging to access fluoroscopy equipment.

13.4.4.3 SLP will also require Convenient Access to Satellite Scope Reprocessing area in Outpatient Clinic Pod 03 (Lung, Sinus and Allergy) in Outpatient Care Centre Component via Patient Transfer/Staff Service Elevators for scope processing.

13.4.4.4 SLP entrance will have Convenient Access to Public Passenger Elevators.

13.4.4.5 A Reception and Waiting area will have Line of Sight from the main public access door into the SLP area. This area will be separated from SLP Clinic for Patient privacy and to decrease noise transmission. The Waiting area will be equipped with a Patient entertainment/education system.

13.4.4.6 SLP will include five (5) Assessment/Treatment Rooms, one (1) Procedure Room-Fiberoptic Endoscopy and one (1) Consult/Interview Room.

13.4.4.7 Dedicated Assessment/Treatment Rooms will be provided for SLP. The SLP Assessment/Treatment Rooms will be sound attenuated as per Appendix 3C [Acoustic and Noise Control Measures]. Utility / process sinks are required in each Assessment/Treatment Room due to frequent oral secretions and the need to access and dispose of fluids used in swallowing assessments.

13.4.4.8 A Procedure Room-Fiberoptic Endoscopy will be provided in the SLP area which will accommodate an endoscope, dimmable lighting, medical gases and suction. SLP will require an ice machine.

13.4.4.9 Staff in SLP require access to a central Office for collaborative work and quiet report writing.

13.4.4.10 The SLP area will require acoustic isolation from the rest of the Component to accommodate testing and assessment procedures as per Appendix 3C [Acoustic and Noise Control Measures].

13.4.5 Rehab Shared Support Services and Shared Staff Support

13.4.5.1 The Rehabilitation Centre Shared Support Services and Shared Staff Support will be located centrally with Convenient Access for Staff from the Patient treatment areas.

13.4.5.2 Staff in the Rehabilitation Centre require Convenient Access to offices and a Conference/Meeting Room-Medium with AV capabilities.

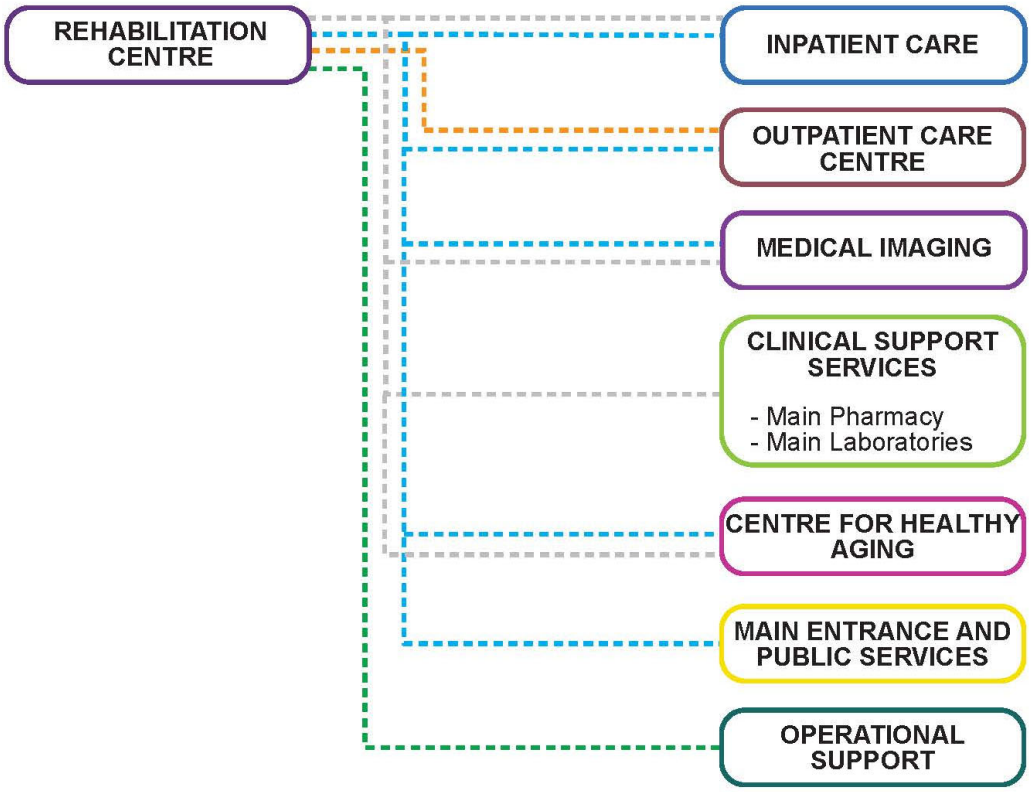
13.4.5.3 Staff areas will be Back of House, separated from visitor and Patient areas and will include secure workspaces for Staff and their belongings. Lounge-Staff, Lockers-Staff and Washroom-Staff require adjacencies.

13.4.5.4 Leader adjacencies to respective teams are required for Staff workflow and processes.

13.5 EXTERNAL RELATIONSHIPS

13.5.1 The following diagram indicates other Functional Components that have a functional relationship with this Component.

L. REHABILITATION CENTRE EXTERNAL RELATIONSHIPS AND CIRCULATIONS



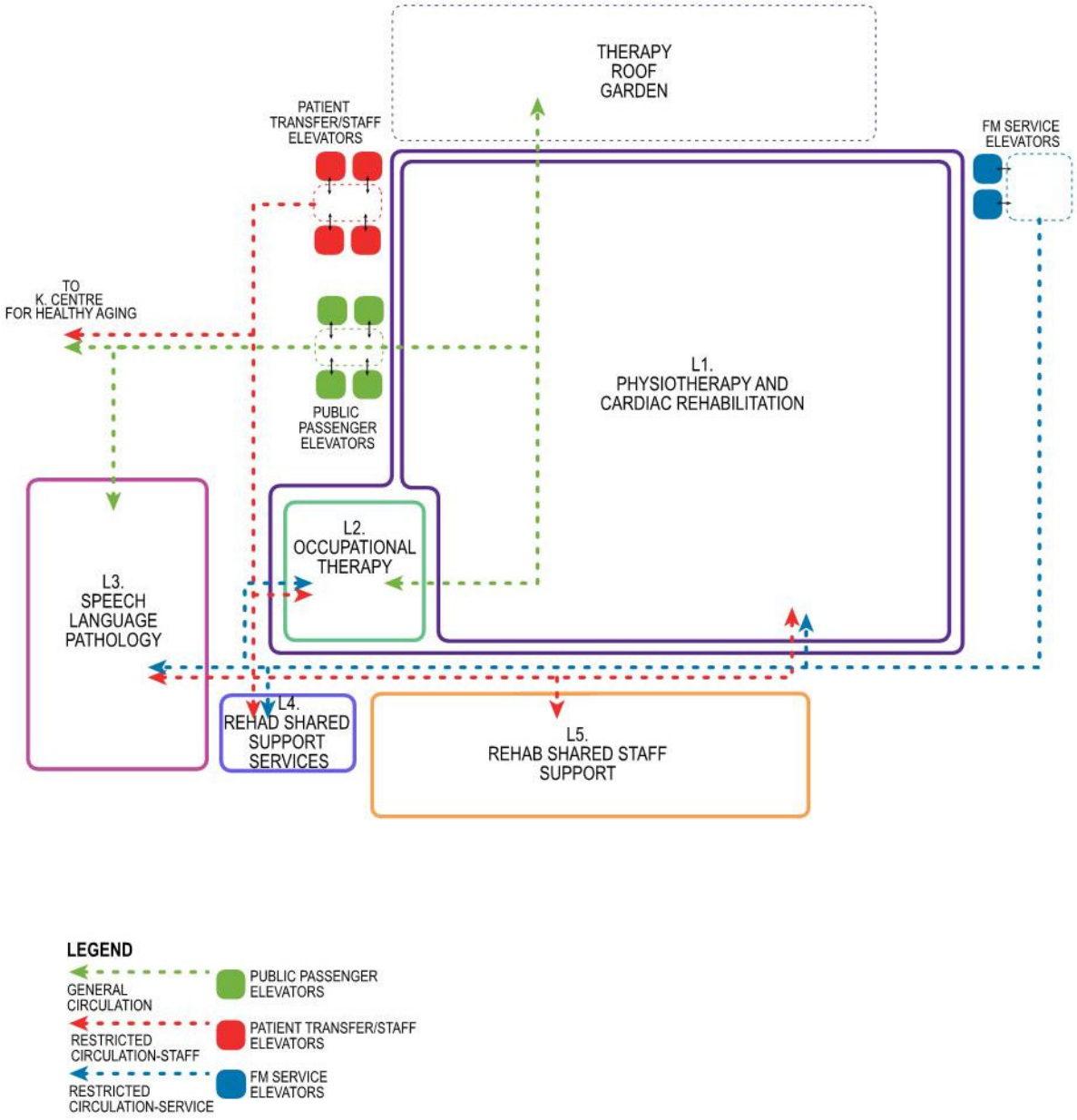
LEGEND

- **Direct** Access through **Public** Circulation for Movement of **Public**
- **Direct** Access through **Staff** Circulation for Movement of **Staff & Patients**
- **Direct** Access through **Service** Circulation for Movement of **Equipment & Supplies**
- **Convenient** Access through **Public** Circulation for Movement of **Public**
- **Convenient** Access through **Staff** Circulation for Movement of **Staff & Patients**
- **Convenient** Access through **Service** Circulation for Movement of **Equipment & Supplies**

13.6 INTERNAL RELATIONSHIPS

13.6.1 The following diagram indicates internal functional relationships within this Component.

L. REHABILITATION INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



13.7 SCHEDULE OF ACCOMMODATIONS

13.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Rehabilitation Centre

L1 - PHYSIOTHERAPY AND CARDIAC REHAB	803.00
L2 - OCCUPATIONAL THERAPY	59.00
L3 - SPEECH LANGUAGE PATHOLOGY	128.50
L4 - REHAB SHARED SUPPORT SERVICES	43.00
L5 - REHAB SHARED STAFF SUPPORT	196.00
REHABILITATION CENTRE PROGRAMMED SPACE NSM:	**1,229.50**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
L1 - PHYSIOTHERAPY AND CARDIAC REHAB					
L1.1 - Physiotherapy and Cardiac Rehab Entrance					
L1.1.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets.
L1.1.2	Waiting	1	33.00	33.00	Incl. seating for 20 including 2 in wheelchairs, Direct Access to Public Passenger Elevators and Washroom-Public.
L1.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Physiotherapy and Cardiac Rehab.
L1.1.4	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
L1.2 - Physiotherapy and Cardiac Rehab Clinic					
L1.2.1	Consult/Interview Room	2	10.00	20.00	Incl. seating for 4, 1 touch down workstation.
L1.2.2	Assessment/Treatment Room-Large	1	14.00	14.00	Incl. 1 touch down workstation, counters, cabinets, ceiling lift.
L1.2.3	Assessment/Treatment Bay	10	8.50	85.00	Incl. 1 touch down workstation, open bay with privacy curtains, Line of Sight to Rehab Gym-Physiotherapy.
L1.2.4	Rehab Gym-Cardiovascular	1	200.00	200.00	Incl. 2 workstations, cabinets.
L1.2.5	Rehab Gym-Group Exercise	1	80.00	80.00	Incl. 2 workstations, cabinets.
L1.2.6	Rehab Gym-Physiotherapy	1	200.00	200.00	Incl. 2 workstations, cabinets, ceiling lift with multi-bed coverage.
L1.2.7	Rehab Gym-Strength Training	1	48.00	48.00	Incl. 2 workstations, cabinets.
L1.2.8	Extremity Whirlpool Room	2	10.00	20.00	Incl. cabinets, whirlpool bath for extremities.
L1.2.9	Lockers-Patient-Female	1	8.00	8.00	Incl. 20 half lockers.
L1.2.10	Washroom/Shower-Patient	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
L1.2.11	Lockers-Patient-Male	1	8.00	8.00	Incl. 20 half lockers.
L1.2.12	Washroom/Shower-Patient	1	5.50	5.50	3-piece incl. shower, accessible for Persons with Disabilities.
L1.2.13	Washroom-Patient	2	4.50	9.00	2-piece, accessible for Persons with Disabilities.
L1.3 - Physiotherapy and Cardiac Rehab Support Services					
L1.3.1	Alcove-Crash Cart	1	1.50	1.50	Adjacent to Rehab Gym-Cardiovascular, shared with adjacent Outpatient pods.
L1.3.2	Alcove-Freezer	1	2.00	2.00	
L1.3.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Centrally located.
L1.3.4	Alcove-Ice Machine	1	2.00	2.00	Incl. counter.
L1.3.5	Alcove-Splint Cleaning	1	1.00	1.00	Incl. counters, cabinets, casting/splinting procedures being performed in this alcove.
L1.3.6	Alcove-Stretcher	2	2.50	5.00	
L1.3.7	Alcove-Wheelchair	1	2.50	2.50	
L1.3.8	Store-Central Equipment	1	12.00	12.00	Incl. shelving, charging station.
L1.3.9	Store-Local Equipment	1	8.00	8.00	Incl. shelving, charging station.
L1.4 - Physiotherapy and Cardiac Rehab Staff Support					
L1.4.1	Workstation	2	4.50	9.00	Incl. 1 workstation, combined into one area.
L1.4.2	Workstation-Touchdown	1	2.50	2.50	Incl. 1 touch down workstation.
L1.4.3	Washroom-Staff	1	3.00	3.00	2-piece.
	TOTAL NSM: Physiotherapy			**803.00**	
L2 - OCCUPATIONAL THERAPY					
L2.1	Waiting	1	7.50	7.50	Incl. seating for 6 including 1 in wheelchair, combined with Physiotherapy and Cardiac Rehab Waiting.
L2.2	Assessment/Treatment Room	4	11.00	33.00	Incl. 1 touch down workstation, counters, cabinets.
L2.3	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
L2.4	Washroom-Staff	1	3.00	3.00	2-piece.
	TOTAL NSM: Occupational Therapy			**59.00**	
L3 - SPEECH LANGUAGE PATHOLOGY					
L3.1 - Speech Language Pathology Entrance					
L3.1.1	Reception	1	6.00	6.00	Incl. 1 workstation, cabinets.
L3.1.2	Waiting	1	20.00	20.00	Incl. seating for 12 including 2 in wheelchairs, Direct Access to Public Passenger Elevators and Washroom-Public.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
L3.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	Located at entrance to Speech Language Therapy.
L3.1.4	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
L3.2 - Speech Language Pathology Clinic					
L3.2.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
L3.2.2	Procedure Room-Fiberoptic Endoscopy	1	16.50	16.50	Incl. 1 touch down workstation, counters, cabinets.
L3.2.3	Assessment/Treatment Room	5	11.00	55.00	Incl. 1 touch down workstation, counters, cabinets.
L3.2.4	Washroom-Patient	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
L3.3 - Speech Language Pathology Support Services					
L3.3.1	Store-Local Equipment	1	8.00	8.00	Incl. shelving, charging station.
L3.3.2	Washroom-Staff	1	3.00	3.00	2-piece.
	TOTAL NSM: Speech Language Pathology			**128.50**	
L4 - REHAB SHARED SUPPORT SERVICES					
L4.1	Store-Clean Supplies	1	12.00	12.00	
L4.2	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
L4.3	Soiled Utility	1	12.00	12.00	Incl. counters, shelving.
L4.4	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
	TOTAL NSM: Rehab Shared Support Services			**43.00**	
L5 - REHAB SHARED STAFF SUPPORT					
L5.1	Conference/Meeting Room-Medium	1	44.00	44.00	Incl. counters, cabinets, accommodates 25 Persons.
L5.2	Office-Private	3	9.50	28.50	Incl. 1 workstation.
L5.3	Office-3 Shared	3	16.00	48.00	Incl. 3 workstations.
L5.4	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
L5.5	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
L5.6	Lockers-Staff	1	32.00	32.00	Incl. 90 Z-lockers, 2 shoe racks, split into male and female if required, adjacent to Lounge-Staff.
L5.7	Washroom-Staff	1	3.00	3.00	2-piece.
L5.8	Washroom-Staff-Accessible	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
	TOTAL NSM: Rehab Shared Staff Support			**196.00**	
	TOTAL NSM: REHABILITATION CENTRE			**1,229.50**	

THE NEW ST. PAUL'S PHASE 1A

M. MAIN ENTRANCE AND PUBLIC SERVICES

M. MAIN ENTRANCE AND PUBLIC SERVICES

14.1 OVERVIEW

14.1.1 The Main Entrance and Public Services Component exists for the purposes of accommodating the non-clinical needs of all Facility Users including Patients, visitors and Staff. It is intended to function as the Facility's front door and where first impressions will be created. Services located here will respond to people's need for orienting, dining, relaxing and will support spiritual and cultural practices. They will also create opportunities for revenue generating functions in support of Facility operations.

14.2 FUNCTIONAL DESCRIPTION

14.2.1 Scope of Services

14.2.1.1 The following programs will comprise the Main Entrance and Public Services:

14.2.1.1(1) Main Entrance;

14.2.1.1(2) Food Court/Retail;

14.2.1.1(3) Public Services;

14.2.1.1(4) Volunteer Resources;

14.2.1.1(5) Clinical Operations Centre;

14.2.1.1(6) Roman Catholic Chapel;

14.2.1.1(7) All Nations Sacred Space; and

14.2.1.1(8) Meditation Space.

14.2.1.2 Scope of Educational Activity

14.2.1.2(1) Educational functions accommodated in this Component will support:

14.2.1.2(1)(a) Clinical Pastoral Education Student access to the Roman Catholic Chapel;

14.2.1.2(1)(b) Educational and informational sessions for Staff, Patients, visitors and volunteers; and

14.2.1.2(1)(c) Orientation sessions for volunteers.

14.2.1.3 Scope Exclusions

14.2.1.3(1) The following list specifies administrative, instructional and educational functions conducted in other Components in the Facility or outside of the Facility:

14.2.1.3(1)(a) Additional inventory storage supporting the above Components.

14.2.2 Services provided

14.2.2.1 Main Entrance

14.2.2.1(1) The Main Entrance lobby will be the primary arrival point for most visitors and Patients and will be designed to mitigate the potentially intimidating nature of the Facility setting, to ensure it is as non-institutional and welcoming as possible and provide an area that is visible and accessible to highlight various displays.

14.2.2.1(2) Patients and visitors entering the Facility may be disoriented or anxious, and many will be Patients who are elders and may have diminished cognitive and physical abilities. Patients, visitors and Staff will perceive the environment as open, warm and of appropriate scale, rather than regimented and intimidating.

14.2.2.1(3) The Main Entrance lobby will have Direct Access from a vehicle pick-up and drop-off area with Convenient Access to public underground parking via Parking Passenger Elevators and convenience stairs.

14.2.2.1(4) An area adjacent to Main Entrance doors will be available for Patients who have been discharged from the Facility or those that have completed outpatient therapies and are waiting for transportation. This area will be conveniently located for maximum visibility.

14.2.2.1(5) Greeting and orientation functions will be prominently located enabling immediate access upon entering the Facility. Volunteer greeters will utilize workspaces within the Information/Volunteer Kiosk in the Lobby area.

14.2.2.1(6) Adequate space for a wide variety of functions will be provided along with sufficient and adjacent set-up and storage spaces.

14.2.2.1(7) Public accessibility will be enhanced through the provision of such elements as a Gift Shop, Display/Retail space, Food Court and Coffee Shop/Cafe and by the design of a main “front door” focal point.

14.2.2.1(8) Registration

14.2.2.1(8)(a) Registration is a decentralised model and will be provided at the various clinical programs for all scheduled visits and admissions as well as some unscheduled visits as appropriate. In the main lobby a decentralized check in model in the form of

registration kiosks will be utilized. Patients will also be able to register online.

14.2.2.1(9) Security Services

14.2.2.1(9)(a) Security personnel will be stationed in a Control-Security kiosk at the Main Entrance in a visible location to monitor the Main Entrance. Electronic monitors will be available at this kiosk for monitoring all areas of the Facility.

14.2.2.1(10) Cashier/Billing Office

14.2.2.1(10)(a) A cashier office with two (2) Wickets will be available for Patients who need to pay for services and/or equipment. Adjacent to this will be a billing office.

14.2.2.1(11) SPH Foundation

14.2.2.1(11)(a) St. Paul's Foundation raises funds for enhanced Patient care, capital projects, equipment needs, research, teaching and innovation to improve the care for Patients at St. Paul's hospital. In addition to other areas of the Facility, the Foundation may have display areas for art, artifacts and archives.

14.2.2.1(12) Patient Care Quality

14.2.2.1(12)(a) The PHC Patient Care Quality office will serve as a single-entry point for feedback. The Patient Care Quality office has a mandate to address complaints promptly and fairly by assisting with communication between Components and services, providing an explanation of policies, procedures and investigating concerns.

14.2.2.1(13) Release of Information (ROI)

14.2.2.1(13)(a) An ROI office with a Wicket will be available for Patients to request and receive their health records.

14.2.2.2 Food Court/Retail

14.2.2.2(1) Coffee Shop/Café

14.2.2.2(1)(a) Space has been allocated for two (2) third-party Coffee Shop/Café space in the Main Entrance. The space includes a Coffee Shop/Café/Seating

and will be open 24 hours per day, 7 days per week.

14.2.2.2(2) Food Court

14.2.2.2(2)(a) Space will be provided for an open plan Food Court with four (4) food vendors. The various food vendors will have an off-stage area where supplies can be brought in and removed. An off-stage elevator that is linked to a basement holding area will ensure just-in-time supply to the retail outlets.

14.2.2.2(3) Gift Shop

14.2.2.2(3)(a) The Retail Area will include a Gift Shop which will be overseen by St. Paul's volunteers and will be located in the Main Entrance.

14.2.2.2(4) Display/Retail Area

14.2.2.2(4)(a) The Display/Retail Area will also include third-party retail kiosks for venders.

14.2.2.3 Public Services

14.2.2.3(1) The majority of Washrooms provided will be gender inclusive. Washrooms will be located with Convenient Access to Facility entrances and strategically placed close to Public Passenger Elevators on the floor levels of the Facility that contain Main Entrance, Learning Commons and Conference Centre spaces.

14.2.2.3(2) Four (4) Washroom-Public will include an infant change table and one (1) Washroom-Public-Large will include an adult change table.

14.2.2.4 Volunteer Resources

14.2.2.4(1) Volunteer Resources (VR) recruits, screens and manages volunteers. Volunteers at the Facility will help Patients and visitors with Wayfinding and navigation, assist in the Gift Shop and Store-Clothing Depot, take coffee and library carts to Patients and visit with Patients. Volunteers will continue to be easily identified by their red vests.

14.2.2.4(2) The Volunteer Resources centre in the Main Entrance will require a highly visible image and appropriate signage. This will have line of Sight and Convention Access for Patients and visitors from General Circulation in the Main Entrance.

14.2.2.5 Clinical Operations Centre

14.2.2.5(1) The Clinical Operations Centre will have the Emergency Operations Centre (EOC) function as a part of the Command Centre/EOC provided to allow the Command Centre/EOC to function when the EOC is activated (situational, not permanent).

14.2.2.5(2) The Clinical Operations Centre will have adequate space, communication and technology infrastructure, videoconferencing capabilities, a radio system base station, and supportive features needed to operate 24/7.

14.2.2.5(3) Command Centre/EOC will also have Direct Access to three (3) of the five (5) total Conference/Meeting Room-Xsmall. The remaining two (2) Conference/Meeting Room-Xsmall and one (1) Lounge-Medical Staff will not be accessed directly from the Command Centre/EOC.

14.2.2.5(4) The Clinical Operations Centre will be used as a centralized area for leaders to meet daily for the operational and bed flow meeting. A centralized meeting area to monitor hospital flow will improve Patient disposition and provide for a more rapid and seamless movement of Patients and resources.

14.2.2.5(5) The Clinical Operations Centre will function as a Command Center and will be the focal point of daily clinical operations in order to monitor and manage hospital flow. This will display operational dashboards of various Components.

14.2.2.5(6) In addition, the Clinical Operations Centre will be utilized as EOC for leaders and others to convene and implement surge and or disaster plans in the event of an emergency situation such as an internal mechanical or power failure, a mass casualty event, a natural disaster or a pandemic outbreak.

14.2.2.5(7) The Clinical Operations Centre is not required to be located in the Main Entrance lobby.

14.2.2.6 Roman Catholic Chapel

14.2.2.6(1) The Roman Catholic Chapel is a Catholic sacred space for the celebration of Mass. It will be open and welcoming to all and will be a space for prayer, liturgy, sacramental ministry and counselling. The Chapel will have presence within the Main Entrance Lobby as a visible symbolic and architectural anchor. The Chapel will have direct access to natural light and the entrance foyer will open fully to the Main Entrance lobby for special occasions.

14.2.2.7 All Nations Sacred Space

14.2.2.7(1) The All Nations Sacred Space will be adjacent to an exterior Traditional Medicine Garden and will be used for cultural and ceremonial activities such as drumming, singing, smudging, preparation of food and traditional healing practices. It will be a culturally appropriate space that reflects the organization's commitment in its Declaration of Cultural Safety and Humility. Access to this space will be visible from the Main Entrance lobby. In addition to the main public access to the All Nations Sacred Space, a second Back of House entry will be provided to discretely bring in deceased Patients.

14.2.2.7(2) The All Nations Sacred Space is currently used for:

14.2.2.7(2)(a) Daily smudging ceremony;

14.2.2.7(2)(b) Talking Circle (average of 20-25 people currently attend every week);

14.2.2.7(2)(c) Pipe Ceremony;

14.2.2.7(2)(d) Baby Naming Ceremonies;

14.2.2.7(2)(e) Feasts and special circles;

14.2.2.7(2)(f) Providing a safe space for Patients and their families during acute care admission; and

14.2.2.7(2)(g) Meetings with Elders.

14.2.2.8 Meditation Space

14.2.2.8(1) A Meditation Room with a foot wash facility will be provided. This does not need to be located in the Main Entrance lobby.

14.3 OPERATIONAL CONSIDERATIONS

14.3.1 Service Delivery Principles and Methods

14.3.1.1 Patient and visitors Management Processes and Flows

14.3.1.1(1) While the Main Entrance, commercial, public areas and Public Passenger Elevators areas will be open to promote access while limiting points of access to the rest of the Facility. This will simplify controlling public access in crisis situations (i.e., pandemic, natural disaster, etc.) and will facilitate after hours and security management.

14.3.1.1(2) Some elective Patients who have been pre-admitted will know how to access the appropriate clinical areas of the Facility; however, a number of Patients will need assistance from the volunteers.

14.3.1.1(3) A large number of Patients and visitors will flow from the underground parking.

14.3.1.1(4) Patient drop-off areas will be adjacent to Main Entrance lobby doors and suitable for all wheeled traffic (strollers, wheelchairs, etc.).

14.3.1.2 Logistical Support Processes and Flows

14.3.1.2(1) Integrated Protection Services

14.3.1.2(1)(a) Regular patrols by IPS Staff will ensure that all office/administrative spaces and retail spaces are secured after hours.

14.3.1.2(2) Environmental Services

14.3.1.2(2)(a) Environmental Services (EVS) will collect all waste and recycling materials form all areas of this Component.

14.3.1.2(2)(b) A Housekeeping Closet adjacent to the Main Entrance doors will be provided.

14.3.1.2(2)(c) Seasonal floor mats will be stored elsewhere in the Facility and brought to the lobby, as required.

14.3.1.2(2)(d) Recycle and waste bins will be strategically located in the entrance area and emptied by EVS Staff on a regular basis.

14.3.1.3 Anticipated Trends in Service Delivery

14.3.1.3(1) The following lists trends expected within the planning horizon of this project, and that are expected to affect the nature and/or extent of functions accommodated within this Component. Effects of these trends will be reflected in the Component's design.

14.3.1.3(1)(a) The Facility will continue playing a major role in the overall health of the community. It will be seen as a resource used by those requiring support for an existing health problem, but it will also assume a growing role in promoting healthy lifestyles before health issues arise.

14.3.1.3(1)(b) Opportunities for expanded service capacity will need to be addressed partly through extended hours of operation, and not simply by adding space.

14.3.1.3(1)(c) Hospitals of the future will run under extended hours of operation which will put added pressures on the Facility's "front door" and associated public amenities.

14.3.2 Hours of Operation

14.3.2.1 The Main Entrance of the NSPH will be open 24 hours-a-day, 7 days a week with access to Public Passenger Elevators.

14.3.2.2 Provision will be made whereby these areas will be made available to users without compromising safety and security elsewhere in the Component.

14.3.2.3 The various functions in the Main Entrance are expected to be open/active as indicated below:

14.3.2.3(1) Main Entrance Doors and Lobby: 0000 – 2400 hours, 7 days a week

14.3.2.3(2) Security Services: 0000 – 2400 hours, 7 days a week

14.3.2.3(3) Coffee Shop/Café/Seating: 0000 – 2400 hours, 7 days a week

14.3.2.3(4) Food Court and Coffee Shop/Café: 0700 – 2400 hours, Monday to Friday/0800 – 2200, weekends

14.3.2.3(5) Gift Shop and Display/Retail Area: 0800 – 1800 hours, 7 days a week

14.3.2.3(6) Cashier/Billing Office, SPH Foundation, Patient Care Quality and ROI: 0830 – 1515 hours, Monday to Friday

14.3.2.3(7) Volunteer Resources: Info desk run by volunteers 0800 – 1600 hours, 7 days a week, other volunteer services would vary

14.3.2.3(8) Clinical Operations Centre: 000 – 2400 hours, 7 days a week

14.3.2.3(9) Roman Catholic Chapel: 0000 – 2400 hours, 7 days a week

14.3.2.3(10) All Nations Sacred Space and Indigenous Health: 0000 – 2400 hours, 7 days a week

14.3.2.3(11) Meditation Space: 0000 – 2400 hours, 7 days a week

14.3.3 Workloads

14.3.3.1 The maximum estimated occupancy for this Component will be approximately 300 people.

14.4 DESIGN CRITERIA

14.4.1 General Requirements

14.4.1.1 Zones of activity within the Component include the following:

14.4.1.1(1) Main Entrance

14.4.1.1(2) Food Court/Retail

14.4.1.1(3) Public Services

14.4.1.1(4) Volunteer Resources

14.4.1.1(5) Clinical Operations Centre

14.4.1.1(6) Roman Catholic Chapel

14.4.1.1(7) All Nations Sacred Space

14.4.1.1(8) Meditation Space

14.4.1.2 The Facility entry and approach paths will be clearly identified.

14.4.1.3 Direct Access and General Circulation to major Front of House and Back of House circulation (both horizontal and vertical) for transition to any part of the Facility will be provided.

14.4.1.4 All Main Entrance and Public Services areas except for Clinical Operations Centre and some Washroom-Public will be adjacent to each other and located on Level 1.

14.4.1.5 Main Entrance and Public Services areas on Level 1 with have Direct Access to outdoor areas.

14.4.1.6 Clinical Operations Centre and some Washroom-Public may be grouped with Conference Centre on Level 2. Line of Sight will be provided from the Clinical Operations Centre to the Main Entrance vestibule.

14.4.1.7 An open, high ceiling space will be provided to serve as the Main Lobby and connect Level 1 and 2 areas. This space will provide natural light and reflect the Owner's Identity; refer to Schedule 3 Section 3.1 The Owner's Identity and Section 5.6.1.3 Enclosed Atrium.

14.4.1.8 Feature stairs to be provided in a prominent and visible location for Convenient Access to Level 2 from Level 1.

14.4.1.9 A central Enclosed Atrium to be provided at the main lobby as the social heart of the Facility and its public realm. Essential supporting functions (Coffee Shop/Café, Food Court, Display/Retail Area, Registration, Cashier/Billing Office, etc.) and the prominent features of the Roman Catholic Chapel and the All Nations Sacred Space will be arranged around this open, welcoming space for Patient and visitor Convenient Access.

14.4.1.10 Direct Access to a vehicle passenger drop-off area, including hospital transfer vehicles, will allow efficient access to Main Entrance Lobby and Public Services for Patients, their escorts and visitors. This space will also be able to accommodate access to future forms of transportation such as Uber/ Lyft or autonomous vehicles.

14.4.1.11 Public Passenger Elevators, Parking Passenger Elevators, stairways to Level 2 and washrooms are to be intuitively located without the need for detailed Wayfinding information.

14.4.1.12 Parking Passenger elevators from the underground parking will have Convenient Access to Wayfinding features in the Main Entrance Lobby. After hours access from underground parking areas will be convenient and secure.

14.4.1.13 The Main Entrance and Public Services will have Convenient Access to Critical Care Complex, Inpatient Care, Renal Outpatient, Maternity Centre, Mental Health and Integrated Substance Use, Surgical and Interventional Services, Outpatient Care Centre, Medical Imaging, Rehabilitation Centre and Education and Learning via Public Passenger Elevators.

14.4.1.14 The Main Entrance and Public Services will have Direct Access to Emergency Services, Centre for Healthy Aging, Learning Commons, Stabilization Unit, Specialty Pharmacy and Outpatient Lab on the same floor.

14.4.1.15 This area will accommodate a range of ‘front door’ services and activities of the Facility.

14.4.2 Main Entrance

14.4.2.1 The design of the Main Entrance will, at minimum, include the following:

14.4.2.1(1) Small seating groups with potential for wheelchair users to sit adjacent in Waiting areas;

14.4.2.1(2) Facilities for children and parents including Child Play Area and Breastfeeding Room;

14.4.2.1(3) Information point for leaflets and multi-media;

14.4.2.1(4) Hand hygiene station(s);

14.4.2.1(5) Phones (regular, taxi, Staff/house, hearing impaired);

14.4.2.1(6) Automated Teller Machines (ATM);

14.4.2.1(7) Parking pay machines;

14.4.2.1(8) Alcove-Wheelchair and Alcove-Stretcher;

14.4.2.1(9) Washroom-Public;

14.4.2.1(10) Alcove-Vending Machine;

14.4.2.1(11) Natural light and views to landscaped outdoor areas;

14.4.2.1(12) Donor recognition wall;

14.4.2.1(13) Public art; and

14.4.2.1(14) Historical artifacts.

14.4.2.2 The spatial layout of the Main Entrance will maximize flexibility for use.

14.4.2.3 Adjacencies will be carefully considered to thoughtfully include group Components and reduce travel distances.

14.4.2.4 Functional spaces adjacent to external entrances will be draft-free, by means of appropriate lobby vestibule design; refer to Schedule 3 Section 5.6.3.1 Facility Entrances.

14.4.2.5 The overall design will provide a pleasant environment through the use of colour, attractive finishes and furnishings, lighting, effective ventilation and signage.

14.4.2.6 The overall environment is to be inviting and de-institutionalized, promoting a restorative and inviting community space.

14.4.2.7 Finishes will reflect a West Coast palette and will be selected to promote healthy materials and comply with Infection Prevention and Control protocols.

14.4.2.8 Natural light and exterior views will be maximized throughout, creating a light and airy feeling in public and Patient areas.

14.4.2.9 Physical design attributes will make accommodation and sufficient space for Persons with Disabilities including those using mobility aids such as canes, crutches, walkers, wheelchairs, stretchers and motorized chairs/scooters.

14.4.2.10 The Main Entrance and Public Services will reflect a commitment to Person- and Family-Centred Care and a focus on Patient calming and well-being.

14.4.2.11 The configuration of this area will smoothly integrate the Facility and planned Future Expansion circulation pathways for the Health Campus. The intention is to facilitate the flow of people through the Main entrance and onward into other areas of the Facility and Health Campus without difficulty.

14.4.2.12 This Component will experience high Patient volumes daily. There will be peak traffic periods, but constant activity throughout a workday will be anticipated.

14.4.2.13 The Owner’s Identity will be easily recognizable to all upon entry.

14.4.2.14 Donors play a crucial role in enabling St. Paul’s Hospital to deliver world-leading care, research and medical testing that benefits people throughout British Columbia and around the world. It is critical that space and appropriate design

consideration for a St. Paul's Hospital Foundation donor wall and Information/Volunteer Kiosk be provided in the Main Entrance.

14.4.2.15 Architecture and location will represent a Catholic faith-based health care institution committed to reconciliation and improved wellness for Indigenous people.

14.4.2.16 Main Entrance will also incorporate displays of St. Paul's Hospital's history featuring the legacy of the founding Sisters.

14.4.2.17 Main Entrance will include design and services required for large group gatherings and events.

14.4.2.18 The design of the Main Entrance will have appropriately configured and aesthetically integrated hand hygiene sinks strategically positioned to encourage use as one walks into the Facility.

14.4.2.19 Materials and goods movement through Main Entrance public areas will be avoided. There will be Back of House Convenient Access to the various functions and services in the Main Entrance Lobby area for movement of supplies, mail, waste and recycling, as well as Staff. If there are security concerns or a potential threat in the Main Entrance Lobby, Staff and volunteers will be able to exit their respective areas through Back of House circulation, to the greatest extent possible and as determined in consultation with the Owner.

14.4.2.20 Main Entrance Lobby

14.4.2.20(1) The Main Entrance Lobby area will function as an orientation space where people will receive directions to their destinations, either by means of signage, digital Wayfinding kiosks or information personnel. Wayfinding to various services in the lobby will be clear and easily understood.

14.4.2.20(1) The Control-Security kiosk requires Line of Sight to Main Entrance doors, Parking Passenger Elevators and Public Passenger Elevators for after hours access.

14.4.2.20(2) The Main Entrance area will facilitate the following primary functions:

14.4.2.20(2)(a) Access to the All Nations Sacred Space;

14.4.2.20(2)(b) Arrival and departure;

14.4.2.20(2)(c) Dropping off, meeting, and collection;

14.4.2.20(2)(d) Security, information, and internal communication;

14.4.2.20(2)(e) Wayfinding;

14.4.2.20(2)(f) Waiting; and

14.4.2.20(2)(g) After hours access.

14.4.2.20(3) A vestibule will be required at the Facility Main Entrance with two (2) sets of automatic sliding doors.

14.4.2.20(4) Upon entry, Patients, Staff and visitors will have immediate access to a hand hygiene station with hand cleanser, face masks and Infection Prevention and Control signage.

14.4.2.20(5) An Alcove-Wheelchair will be located adjacent to the Main Entrance and Discharge Lounge available for users requiring mobility assistance.

14.4.2.21 Waiting

14.4.2.21(1) Within the Waiting area(s) special provisions will be made for:

14.4.2.21(1)(a) Persons with Disabilities;

14.4.2.21(1)(b) Young children; and

14.4.2.21(1)(c) Breastfeeding mothers.

14.4.2.21(2) The Waiting area requires natural light.

14.4.2.21(3) Space between those seated in the Waiting area will be appropriate for mitigating the transmission of airborne infections.

14.4.2.21(4) The Waiting area will be flexible to be used as event space and post-disaster marshalling area.

14.4.2.22 Reception

14.4.2.22(1) Main Entrance Reception will be an open space with movable Furniture.

14.4.2.23 Information/Volunteer Kiosk

14.4.2.23(1) In the Main Entrance there will be a navigation station for the volunteers to stand or sit and greet and assist Patients and visitors as they enter the Facility. This kiosk/ desk will be a combination of stand up height Millwork and wheelchair accessible height counter with two (2) workstations and lockable drawers. Feature lighting and signage will be provided over the Information/Volunteer kiosk.

14.4.2.24 Control-Security

14.4.2.24(1) A fully enclosed Control-Security kiosk with interior windows and one (1) transaction window will be located near the Information/Volunteer Kiosk and will have Line of Sight from the Main Entrance and be clearly marked. Security personnel may be

stationed in Control-Security kiosk to monitor the Main Entrance. Monitors will be available at this kiosk for monitoring areas of the Facility. The Control-Security kiosk will be obvious to Persons who may pose a threat, but otherwise will be understated and re-assuring to the general public. Visual connection between the Staff members in the Control-Security kiosk and the Main Entrance and Waiting areas is required.

14.4.2.25 Info/Registration Kiosk

14.4.2.25(1) A decentralized Patient registration model will be utilized in the Facility. This will be in the form of registration kiosks. Patients will also be able to register online.

14.4.2.25(2) The Info/registration kiosks will be clearly visible from the Main Entrance.

14.4.2.25(3) The Information/Volunteer Kiosk will have Line of Sight to Info/Self-Registration Kiosks so that volunteers can see if a Patient is having difficulty with registration or information.

14.4.2.26 Discharge Lounge

14.4.2.26(1) The Patient Discharge Lounge will be located adjacent to the Main Entrance doors for maximum visibility and will have Line of Sight to the drop-off area and hospital transfer vehicle layby areas.

14.4.2.26(2) Discharge Lounge will have Direct Access to vehicle drop off and pick up area, Public Passenger Elevators and Washroom-Public.

14.4.2.26(3) This area will be strategically located for visibility between the vehicle and Person waiting.

14.4.2.26(4) It will have the capacity to seat twelve (12) Patients and space for four (4) Patients in wheelchairs.

14.4.2.26(5) There will be a designated zone for Persons with Disabilities going to or coming from vehicular transport.

14.4.2.26(6) An Alcove-Wheelchair will be located adjacent to the Discharge Lounge for wheelchair storage.

14.4.2.26(7) The Discharge Lounge will include a wall-mounted display, access to magazines and books and receptacles for scooter charging.

14.4.2.26(8) IP video surveillance monitoring is required.

14.4.2.27 Child Play Area and Breastfeeding Room

14.4.2.27(1) A Child Play Area will be accommodated in the Waiting area. The area will be culturally inclusive and meet Infection Prevention and Control protocols.

14.4.2.27(2) A Breastfeeding Room adjacent to Washroom-Public and with Convenient Access to the Child Play Area will be provided. This room will include a baby change table, hand hygiene sink, comfortable seating and storage cabinets.

14.4.2.28 Cashier/Billing Office

14.4.2.28(1)(a) A shared cashier office with two (2) workstations will be available for Patients to pay for services and/or Equipment.

14.4.2.28(1)(b) The cashier office will be visible but not located in a prime location.

14.4.2.28(1)(c) This area also includes a billing office with two (2) workstations adjacent to the cashier/billing office.

14.4.2.28(1)(d) Clear signage will indicate where the two (2) offices are located. Privacy will be provided for Patients communicating with the cashier.

14.4.2.28(1)(e) Security is important in the design and location of the offices as cash is kept on-site.

14.4.2.28(1)(f) The cashier office also requires a safe box for the storage of valuables that cannot be viewed through the Wicket.

14.4.2.28(1)(g) The work surface will be ergonomically designed with a computer and phone, along with a Point of Sale (POS) terminal.

14.4.2.28(1)(h) The Millwork will include two (2) locked cash drawers to fill the bill/coin tray insert.

14.4.2.28(1)(i) A secure Staff entrance door with a fish-eye viewer is required.

14.4.2.28(1)(j) The customer service counter will have a lockable transaction window above for Staff interactions with the public.

14.4.2.28(1)(k) A drop slot/lock box will be readily visible for customer payments.

14.4.2.28(1)(l) Window coverings will be provided on all windows, including the customer service transaction window for privacy.

14.4.2.28(1)(m) The Cashier/Billing Office will also be provided with phone, fax, panic duress button, and direct line for debit card and credit card use.

14.4.2.29 SPH Foundation

14.4.2.29(1) The SPH Foundation Office will be a separate area with a prominent entrance off the Main Entrance Lobby. Donor displays will be accommodated in the Main Entrance Lobby.

14.4.2.29(2) The 'Lights of Hope' fundraising campaign that adorns the existing St. Paul's Hospital in the wintertime will be considered in the design of the Facility.

14.4.2.29(3) The Enclosed Atrium will accommodate the annual St. Paul's Foundation public fundraising campaign, and include space for a public display for approximately 200 donors of various levels.

14.4.2.29(4) The Foundation requires space that is visible to and provides access for the public. Access to the Foundation Office will be welcoming and open with floor to ceiling glazing.

14.4.2.29(5) The space will include high profile displays of fundraising campaigns/donation opportunities and, in the case of volunteers, joining opportunities.

14.4.2.29(6) The Foundation requires the ability to secure the area after hours.

14.4.2.29(7) Office/administrative functions of the Foundation will require acoustic isolation from activities occurring in the Main Entrance Lobby and Food Court areas.

14.4.2.30 Patient Care Quality

14.4.2.30(1) The PHC Patient Care Quality shared office will serve as a single-entry point for feedback. This Office will be grouped with Cashier/Billing Office.

14.4.2.31 Release of Information (ROI)

14.4.2.31(1) ROI is a service where Patients can request and receive their health records.

14.4.2.31(2) ROI requires a shared office with two (2) workstations and a photocopier.

14.4.2.31(3) ROI requires a Wicket complete with a transaction window.

14.4.3 Food Court/Retail

14.4.3.1 Food Court/Retail area including the Food Court, Coffee Shop/Café/Seating, Coffee Shop/Café, Gift Shop and vendor kiosks will be located to promote pedestrian activity and a natural gathering place for the public, Patients and Staff.

14.4.3.2 The various retail outlets will have an off-stage area where supplies can be brought in and removed. Direct Access to Patient Transfer/Staff Service Elevators is required for access to the loading dock for just-in-time supply to the retail outlets.

14.4.3.3 Coffee Shop/Café/Seating and Coffee Shop/Café

14.4.3.3(1) Space has been allocated for a third-party Coffee Shop/Café in the Main Entrance with Convenient Access to the ED.

14.4.3.3(2) This Coffee Shop/Café/Seating will have limited number of seating and will be open 24/7.

14.4.3.3(3) Space has also been allocated for a third-party Coffee Shop/Café in the Food Court area or distributed in public amenity space.

14.4.3.3(4) Separate Staff access to the storage/preparation area of the Coffee Shop/Café/Seating and Coffee Shop/Café for the delivery of food carts and other supplies and removal of waste will be provided.

14.4.3.4 Food Court

14.4.3.4(1) The Food Court will include four (4) food vendors with dedicated storage and Disposal Hold for each.

14.4.3.4(2) The Food Court will require an open seating area that is inviting to users and providing comfortable seating and views to natural settings outside of the Facility.

14.4.3.4(3) Additional seating will be provided in an outdoor seating area, allowing users the option of eating outside.

14.4.3.4(4) Access for Patients in wheelchairs will be possible.

14.4.3.4(5) Acoustic separation will be provided in the wall assemblies separating food vendor spaces.

14.4.3.4(6) The Food Court area will be closed off and secured when vendors are closed, after hours.

14.4.3.5 Retail

14.4.3.5(1) A Display/Retail Area will have Line of Sight from the Main Entrance and the Parking Passenger Elevators.

14.4.3.5(2) Display/Retail Area will be welcoming and intuitively draw customers in.

14.4.3.5(3) Display/Retail Area will provide opportunities to display items including refrigerated storage for flowers.

14.4.3.5(4) Some inventory storage space will be associated with Display/Retail Area with additional storage accommodated in the Operational Support Component.

14.4.3.5(5) These areas will have Line of Sight from the Information/Volunteer Kiosk and Control-Security kiosk and include a Gift Shop.

14.4.3.5(6) Gift Shop

14.4.3.5(6)(a) The Gift Shop will be operated by volunteers and will be located in the Main Entrance. Placement of the Gift Shop will not deter visitors from approaching the Information/Volunteer Kiosk with Wayfinding queries or the visibility from the Security Desk.

14.4.3.5(6)(b) The Gift shop will have full glazing and an open concept for visibility into the shop. Sun shading will be provided if in direct natural light to protect freezer/coolers.

14.4.3.5(6)(c) There will be, at minimum, a cash register, computer and phones on Millwork counters. The counter will allow space for a chair and a worktable behind the counter.

14.4.3.5(6)(d) The Gift Shop will be securable and lockable.

14.4.3.5(6)(e) The Gift Shop will be provided with a panic duress button and IP video surveillance.

14.4.3.5(6)(f) The Gift Shop will have a direct line for debit card and credit card use and will also have a safe box.

14.4.3.5(6)(g) The Gift Shop will have Direct Access to Store-General and will be adjacent to the Cashier/Billing Office.

14.4.3.5(6)(h) A storage space is required for the Gift Shop.

14.4.4 Public Services

14.4.4.1 Public Services Washrooms will have Convenient Access to Facility entrances and Public Passenger Elevators.

14.4.4.2 Public Services Washrooms will serve Main Entrance spaces as well as the Conference Centre.

14.4.4.3 Two (2) Washroom-Public-Female with three (3) toilet stalls and two (2) Washroom-Public-Male with one (1) toilet stall and two (2) urinals will be provided.

14.4.4.4 The remainder of Washroom-Public will be gender neutral.

14.4.4.5 One (1) gender neutral Washroom will include an adult change table. Four (4) gender neutral Washrooms will include infant change tables.

14.4.4.6 The Control-Security kiosk will have Line of Sight to Main Entrance and Public Services Washrooms.

14.4.5 Volunteer Resources

14.4.5.1 There will be approximately 400 volunteers who will support in the Facility.

14.4.5.2 The Volunteer Resources in the Main Entrance area will require a highly visible image and appropriate signage and be easily accessible to Patients and visitors from General Circulation in the Main Entrance.

14.4.5.3 The Volunteer Resources information desk will provide help for the Public and will include two (2) phones for use by visitors and public when volunteers are not on duty.

14.4.5.4 A Consult/Interview Room is required for volunteer interviews and private conversations.

14.4.5.5 The Lounge-Volunteer will be adjacent to the Main Entrance and will be for volunteers use only. Volunteers will be allowed to sign in on computers and use a phone. The space will also include a storage area and a supply area for equipment. Lockers-Volunteer will be adjacent to the Lounge-Volunteer space. The Lounge-Volunteer will also be used as a training zone.

14.4.5.6 Within this area will be an Office-4 Shared with four (4) workstations dedicated to the Volunteer Resources team.

14.4.5.7 A Store-Clothing Depot will be centrally located and only accessible to Staff and volunteers.

14.4.5.8 A Store-Patient Library Materials will be centrally located, but does not have to be close to Main Entrance, and accessible only to volunteers.

14.4.5.9 The Store-Clothing Depot and Store-Patient Library Materials will be adjacent and located in the basement.

14.4.6 Clinical Operations Centre

14.4.6.1 The Clinical Operations Centre is incorporated into a combined Command Centre and EOC that will normally be used as a centralized area for Staff leaders on a day to day basis to monitor operations, Staff levels and bed usage. In times of a disaster situation, this space will be quickly converted into the EOC provided that the Command Centre functions can continue when the EOC is activated (situational not permanent) and will form the heart of any management procedure.

14.4.6.2 The Clinical Operations Centre will include the technology to support the Command Centre function during normal operations; with the capability to convert when the EOC is activated.

14.4.6.3 The Clinical Operations Centre will accommodate up to forty (40) people doing a variety of tasks.

14.4.6.4 Five (5) Conference/Meeting Room-Xsmall and one (1) Lounge-Medical Staff will be provided to allow for smaller group activities.

14.4.6.5 All Conference/Meeting Room-Xsmall will be used for EOC when it is activated.

14.4.6.6 One Conference/Meeting Room-Xsmall will be used as a radio room in a disaster situation.

14.4.6.7 The Lounge-Medical Staff and two (2) Conference/Meeting Room-Xsmall will be located adjacent to the Command Centre/EOC but access to them will not be directly from the Command Centre/EOC.

14.4.6.8 Three (3) Conference/Meeting Rooms-Xsmall will be located in the Command Centre/EOC with Direct Access. These Conference/Meeting Rooms-Xsmall will have glass walls and Line of Sight to the video wall inside the Command Centre/EOC.

14.4.6.9 The Clinical Operations Centre has the following requirements:

14.4.6.9(1) Ability to see outside for current weather conditions;

14.4.6.9(2) Line of Sight to Main Entrance lobby, which will be used as an impromptu hall during a disaster situation to convey or distribute information;

14.4.6.9(3) Linear lockable Millwork in the Command Centre that can store EOC equipment as well as operations/procedure manuals etc.;

14.4.6.9(4) Flexibility to accommodate a large number of people working in the Command Centre/EOC at the same time doing a variety of tasks;

14.4.6.9(5) Wall space to post notices, maps and magnetic whiteboards to allow for quick notes to be posted;

14.4.6.9(6) A video wall that is sized so that it can be used in its entirety during normal operations but can also concurrently display EOC information when the EOC is activated;

14.4.6.9(7) Two (2) workstations for the operator(s): one will be staffed for normal operations and the second workstation would be a backup. The second workstation will have the same technology and can be staffed by an EOC operator when the EOC is activated;

14.4.6.9(8) Ten (10) desktop workstations with computers/dual-monitors and additional 10 desks for laptop users;

14.4.6.9(9) Ten (10) foldup/spare cots and linens, towels for usage in a pro-longed emergency;

14.4.6.9(10) The incident commander will reside in one of the Conference/Meeting Room-Xsmall and/or the open Command Centre/EOC;

14.4.6.9(11) Dedicated Washroom-Staff-Accessible and an Alcove-Nourishment located within Command Centre/EOC;

14.4.6.9(12) Speech intelligibility acoustic measures as per Appendix 3C [Acoustic and Noise Control Measures] to be able to make out conversations when several people are talking simultaneously, or radio/TV are all going at the same time; and

14.4.6.9(13) Each Conference/Meeting Room-Xsmall will have a display/screen that is integrated with the video wall system to electronically display information into each Conference/Meeting Room-Xsmall as directed by the shift Commander and/or the Incident Commander.

14.4.7 Roman Catholic Chapel

14.4.7.1 The Roman Catholic Chapel will comprise a 25-seat chapel including altar, chancel and a sacristy.

14.4.7.2 The Chapel will have prominence in the Main Entrance and have Direct Natural Light.

14.4.7.3 Several artifacts, currently in the existing St. Paul’s Chapel will be moved into the new Chapel; refer to Schedule 3 Section 5.12.6.6 Owner’s Artifacts and Archives. These include the altar from the current chapel, Our Lady of Sorrows statue (to be located in an alcove of the new Chapel) and wooden Good Samaritan carving.

14.4.7.4 The Chapel environment will be quiet, non-disruptive and comfortable. The vestibule at the entry to the Chapel will provide acoustical privacy; refer to Appendix 3C [Acoustic and Noise Control Measures] for acoustic requirements.

14.4.7.5 Convenient Access between the Chapel and Patient Transfer/Staff Service Elevators will be provided.

14.4.8 All Nations Sacred Space

14.4.8.1 The All Nations Sacred Space will be located near the Main Entrance in a quiet, non-disruptive and comfortable environment to allow for meditation and privacy.

14.4.8.2 Cultural and spiritual needs of the Facility's users will need to be addressed at any time. Convenient Access to the Main Entrance Lobby and to the All Nations Sacred Space will be provided from anywhere within the Facility and from the ED Entrance.

14.4.8.3 The All Nations Sacred Space will be a welcoming space for all.

14.4.8.4 The interior design of the Ceremony Room will be culturally sensitive and include circular features, such as in the layout of the ceiling and floor.

14.4.8.5 The Ceremony Room will have capacity to seat thirty five (35) people seated in one (1) circle.

14.4.8.6 The Ceremony Room requires Direct Access to the outdoor Traditional Medicine Garden. Access doors to the Traditional Medicine Garden will provide the ability to bring in fresh air into the Ceremony Room.

14.4.8.7 The ventilation system for the Ceremony Room will accommodate smudging. The design, configuration and orientation of this space will be planned in consultation with Indigenous advisors.

14.4.8.8 Two (2) entrances will be provided to access the Ceremony Room, one (1) for the public through Front of House circulation, and one (1) for Patients/Staff, including the deceased, through Back of House circulation.

14.4.8.9 The Patient/Staff entry will be sized to accommodate a hospital bed.

14.4.8.10 Access to Ceremony Room will be provided at all hours, day or night, and the access route will not compromise safety or security in other areas of Main Entrance and Public Services Component.

14.4.8.11 Direct Natural Light and a large exterior view of the Traditional Medicine Garden will be provided in the All Nations Sacred Space while maintaining privacy. Windows into the room will balance requirements for natural light and privacy. High level clerestory windows will be considered.

14.4.8.12 A quiet environment will be provided for by means of sound dampening to allow an Elder's voice to be heard. Additionally, as ceremonies in the All Nations Sacred Space will include drumming and generate noise; acoustic separation will be provided; refer to Appendix 3C [Acoustic and Noise Control Measures].

14.4.8.13 Access doors into the Ceremony Room will be wide enough to accommodate a hospital bed.

14.4.8.14 The following will be included in the Ceremony Room design:

14.4.8.14(1) Making the interior design features circular to recognize the sacredness of the circle in Indigenous cultures;

14.4.8.14(2) A kitchen area for feast preparation and cooking food;

14.4.8.14(3) Ability to bring Patient beds into the space (door width, turning circles) to enable providing ceremony to bed-dependent Patients and an end of life ceremony;

14.4.8.14(4) Access to outdoor space and ability to bring in fresh air;

14.4.8.14(5) Space for the preparation and storage of traditional medicines, warrior blankets and sacred items; and

14.4.8.14(6) Privacy structures around the Traditional Medicine Garden for security and privacy of Persons using the space and to retain sacredness of space.

14.4.9 Meditation Space

14.4.9.1 The Meditation Room does not require Direct Access to Main Entrance.

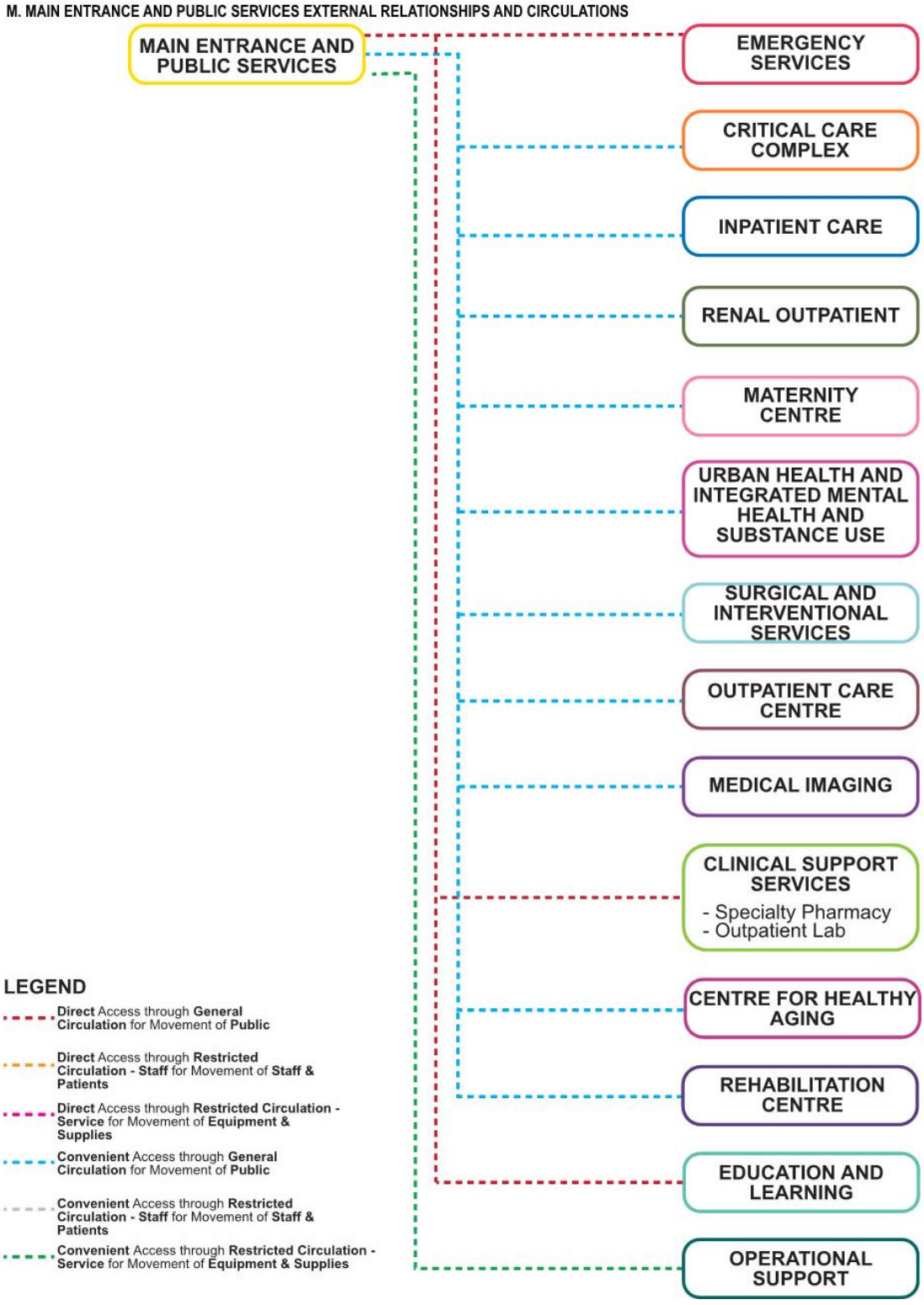
14.4.9.2 The Meditation Space will have a separate entrance, a private changing area, a footbath for Muslim Patients/Staff and a Qibla pointing to Mecca.

14.4.9.3 The Meditation Room will have capacity for ten (10) people.

14.4.9.4 Storage space to be provided for prayer mats.

14.5 EXTERNAL RELATIONSHIPS

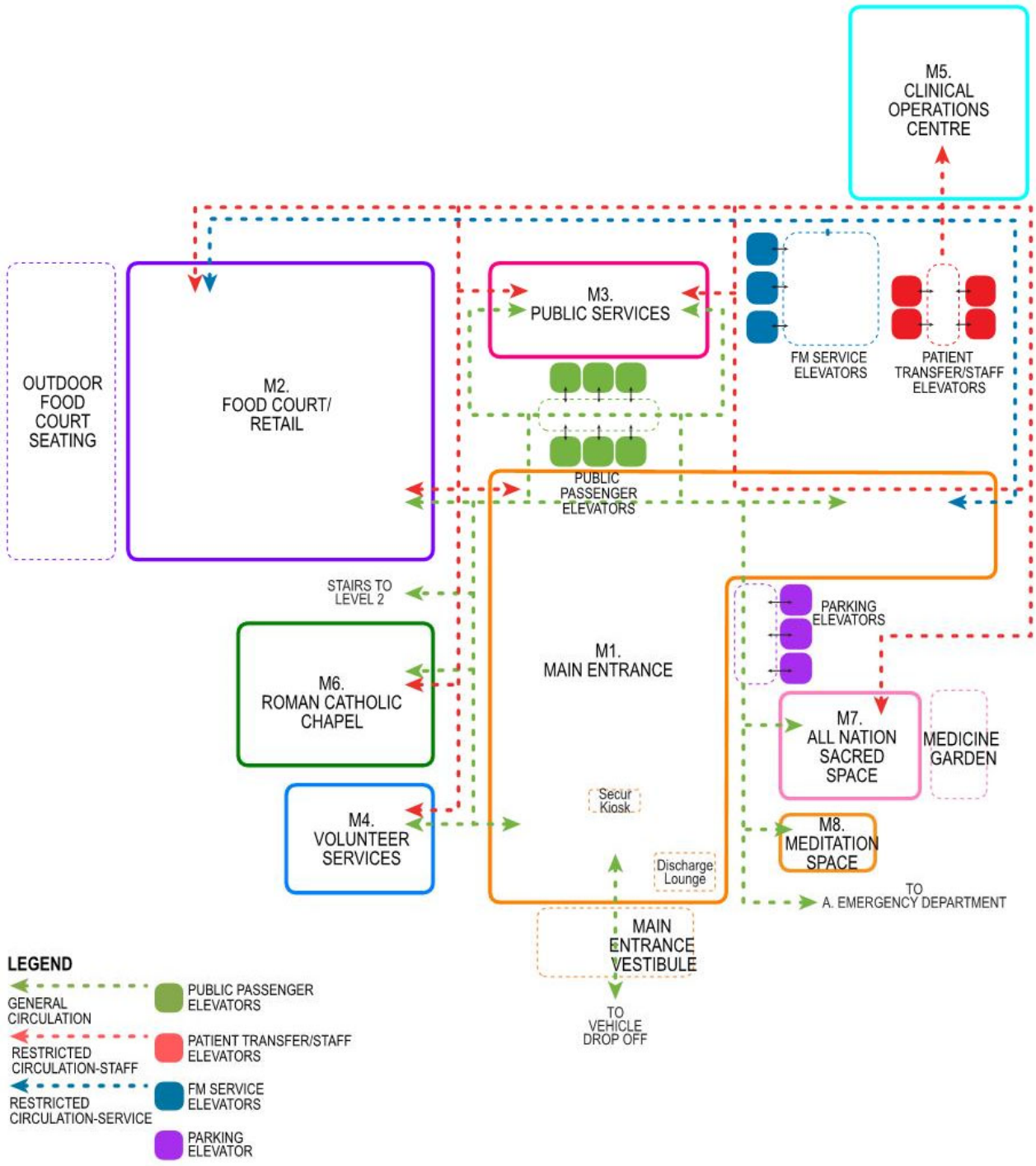
14.5.1 The following diagram indicates other Functional Components that have a functional relationship with this Component.



14.6 INTERNAL RELATIONSHIPS

14.6.1 The following diagram indicates internal functional relationships within this Component.

M. MAIN ENTRANCE AND PUBLIC SERVICES INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



14.7 SCHEDULE OF ACCOMMODATIONS

14.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Main Entrance and Public Services

M1 - MAIN ENTRANCE	407.50
M2 - FOOD COURT/RETAIL	870.00
M3 - PUBLIC SERVICES	173.00
M4 - VOLUNTEER RESOURCES	123.50
M5 - CLINICAL OPERATIONS CENTRE	259.50
M6 - ROMAN CATHOLIC CHAPEL	170.70
M7 - ALL NATIONS SACRED SPACE	84.00
M8 - MEDITATION ROOM	21.00
MAIN ENTRANCE AND PUBLIC SERVICES PROGRAMMED SPACE NSM:	**2,109.20**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
M1 - MAIN ENTRANCE					
M1.1 - Main Entrance Lobby					
M1.1.1	Reception	1	16.00	16.00	Incl. 3 workstations, cabinets.
M1.1.2	Waiting	1	180.00	180.00	Incl. seating for 45 including 5 in wheelchairs, Direct Access to Public Passenger Elevators, Parking Passenger Elevators and Washroom-Public.
M1.1.3	Discharge Lounge	1	30.00	30.00	Incl. seating for 16 including 4 in wheelchairs, scooter charging, Direct Access to Vehicle Drop Off and Pick Up area, Public Passenger Elevators and Washroom-Public.
M1.1.4	Information/Volunteer Kiosk	1	9.00	9.00	Incl. 2 workstations.
M1.1.5	Control-Security	1	9.00	9.00	Incl. 2 workstations, monitoring Equipment, cabinets, counter, fully enclosed with interior windows and 1 transaction window, charging station, lockable, Line of Sight to Main Entrance and Parking Passenger Elevators.
M1.1.6	Info/Self-Registration Kiosk	4	1.00	4.00	
M1.1.7	Child Play Area	1	15.00	15.00	Incl. wall mounted displays.
M1.1.8	Breastfeeding Room	1	7.50	7.50	Incl. seating for 2, infant change table, counters, cabinets.
M1.1.9	Alcove-Stretcher	1	2.50	2.50	Adjacent to Main Entrance doors.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
M1.1.10	Alcove-Wheelchair	1	20.00	20.00	Adjacent to Discharge Lounge.
M1.1.11	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., Convenient Access to FM Service Elevators.
M1.1.12	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
M1.2 - Cashier/Billing Office					
M1.2.1	Wicket	2	4.50	9.00	Incl. counter and 1 transaction window.
M1.2.2	Office-2 Shared-Cashier	1	12.00	12.00	Incl. 2 workstations.
M1.2.3	Office-2 Shared-Billing	1	12.00	12.00	Incl. 2 workstations.
M1.3 - SPH Foundation					
M1.3.1	Workstation-Large	5	5.90	29.50	Incl. 1 workstation, combined into one area.
M1.3.2	Workstation	1	4.50	4.50	Incl. 1 workstation.
M1.4 - Patient Care Quality					
M1.4.1	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
M1.5 - Release of Information					
M1.5.1	Office-2 Shared-Release of Information	1	12.00	12.00	Incl. 2 workstations.
M1.5.2	Wicket	1	4.50	4.50	Incl. counter and 1 transaction window.
	TOTAL NSM: Main Entrance			**407.50**	
M2 - FOOD COURT/RETAIL					
M2.1 - Food Court					
M2.1.1	Coffee Shop/Café/Seating	1	107.00	107.00	Shelled Space, to be fit out by vendor.
M2.1.2	Coffee Shop/Café	1	47.00	47.00	Shelled Space, to be fit out by vendor.
M2.1.3	Food Court	4	45.00	180.00	Shelled Space, to be fit out by vendor.
M2.1.4	Store-Food Court	4	12.00	48.00	Shelled Space, to be fit out by vendor.
M2.1.5	Disposal Hold-Food Court	4	5.00	20.00	Shelled Space, to be fit out by vendor.
M2.1.6	Food Court Seating	1	350.00	350.00	Shelled Space, to be fit out by vendor. Incl. seating for a minimum of 250.
M2.2 - Retail					
M2.2.1	Gift Shop	1	50.00	50.00	Incl. display, shelving, Direct Access to Store-General.
M2.2.2	Cashier	1	3.50	3.50	Incl. counter.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
M2.2.3	Display/Retail Area	1	44.50	44.50	Incl. potential kiosks for venders.
M2.2.4	Store-General	1	20.00	20.00	Incl. cabinets, shelving.
	TOTAL NSM: Food Court/Retail			**870.00**	
M3 - PUBLIC SERVICES					
M3.1	Washroom-Public	14	4.50	63.00	2-piece, infant change table in 4 Washroom-Public, accessible for Persons with Disabilities.
M3.2	Washroom-Public-Large	1	10.00	10.00	2-piece, adult change table, ceiling lift, accessible for Persons with Disabilities.
M3.3	Washroom-Public-Female	2	25.00	50.00	Incl. 3 toilet stalls and 2 sinks, accessible for Persons with Disabilities.
M3.4	Washroom-Public-Male	2	25.00	50.00	Incl. 1 toilet stall, 2 urinals and 2 sinks, accessible for Persons with Disabilities.
	TOTAL NSM: Public Services			**173.00**	
M4 - VOLUNTEER RESOURCES					
M4.1	Consult/Interview Room	1	10.00	10.00	Incl. seating for 4, 1 touch down workstation.
M4.2	Office-4 Shared	1	20.00	20.00	Incl. 4 workstations.
M4.3	Store-General	1	18.00	18.00	Incl. cabinets, shelving.
M4.4	Store-Clothing Depot	1	20.00	20.00	Includes counters, cabinets, shelving.
M4.5	Store-Patient Library Materials	1	14.00	14.00	Incl. cabinets, shelving.
M4.6	Lounge-Volunteer	1	20.00	20.00	Incl. seating for 6 people, kitchenette.
M4.7	Lockers-Volunteer	1	10.00	10.00	Incl. 25 Z-lockers, 1 shoe rack.
M4.8	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
M4.9	Washroom-Public	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
	TOTAL NSM: Volunteer Resources			**123.50**	
M5 - CLINICAL OPERATIONS CENTRE					
M5.1	Command Centre/EOC	1	145.00	145.00	Incl. 2 operator stations, 20 workstations, counters, cabinets, video wall.
M5.2	Conference/Meeting Room-Xsmall	5	15.00	75.00	Accommodates 6 Persons, glass walls.
M5.3	Alcove-Nourishment	1	5.00	5.00	Incl. counters, cabinets.
M5.4	Washroom-Staff-Accessible	1	4.50	4.50	2-piece, accessible for Persons with Disabilities.
M5.5	Lounge-Medical Staff	1	30.00	30.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
	TOTAL NSM: Clinical Operations Centre			**259.50**	

APPENDIX 3A - CLINICAL SPECIFICATIONS AND FUNCTIONAL SPACE REQUIREMENTS

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
M6 - ROMAN CATHOLIC CHAPEL					
M6.1	Entrance Lobby	1	11.70	11.70	
M6.2	Chapel	1	132.50	132.50	
M6.3	Chapel Altar	1	9.50	9.50	
M6.4	Sacristy	1	17.00	17.00	Incl. cabinets.
	TOTAL NSM: Spiritual Health			**170.70**	
M7 - ALL NATIONS SACRED SPACE					
M7.1	Ceremony Room	1	70.00	70.00	Incl. seating for 35.
M7.2	Kitchen-Staff	1	10.00	10.00	Incl. counters, cabinets, shelving.
M7.3	Store-General	1	4.00	4.00	Incl. cabinets, shelving.
	TOTAL NSM: All Nations Sacred Space			**84.00**	
M8 - MEDITATION SPACE					
M8.1	Meditation Room	1	16.00	16.00	Incl. shelving.
M8.2	Change/Foot Wash	1	5.00	5.00	Incl. 1 shoe rack, foot wash basin.
	TOTAL NSM: All Meditation Space			**21.00**	
	TOTAL NSM: MAIN ENTRANCE AND PUBLIC SERVICES			**2,109.20**	

THE NEW ST. PAUL'S PHASE 1A

N. EDUCATION AND LEARNING

N. EDUCATION AND LEARNING

15.1 OVERVIEW

15.1.1 The philosophy of the Education and Learning Component promotes a future where everyone is learning together. This Component will serve to create shared spaces of integrated education and learning for all professionals, Patients, their families and the community at large.

15.1.2 The Education and Learning Component accommodates group activities that vary in size for a variety of administrative, instructional and educational functions. Provision of academic space for teaching UBC medical undergraduate students and post-graduate resident trainees has been legislated in Section 45 of the Hospitals Act, wherein hospitals grant space for this purpose and is set out in the Academic Space Protocol, an agreement to which the UBC FoM, all Health Authorities, and the Ministry are Signatories.

15.1.3 The clinical placement model is a fundamental Component of the UBC FoM education programming and academic teaching facilities are required to support the Vancouver Fraser Medical Program and Royal College Components of the UBC Medical School, and related family practice and other post-graduate trainee programs.

15.1.4 This Component will be centrally managed as a Facility resource and it will be open to all the users from inside and outside of the Facility (with the exception of the On-Call Support, accessible to medical undergraduate students and post-graduate resident trainees only, and the Clinical Skills, accessible for Patients with escort). Education spaces used for MD Year 1 and 2 medical curriculum can be shared with other programs, but will demonstrate priority in scheduling decisions for medical school accreditation purposes.

15.1.5 To meet medical school accreditation requirements, the UBC FoM requires ubiquitous wireless (Wi-Fi) internet access at all sites of instruction including clinical education and training sites. This wireless internet access requires full hospital coverage and will have sufficient bandwidth and coverage density for the entire clinical site and accommodate all potential education users at a given site, all types of legitimate online resources including rich media, all commonly used devices and multiple devices per user. The wireless service will allow access to commonly-used educational content and will have industry standard uptime, be appropriately supported, and meet privacy and security requirements for medical education. The current solution for meeting these needs is known as ‘eduroam’. See http://medit.med.ubc.ca/initiatives/eduroam/ for details.

15.1.6 Medical Education Program administrators, faculty/ physicians and students need to be able to connect from SPH to UBC servers, shared drives and applications through wired network connection.

15.2 FUNCTIONAL DESCRIPTION

15.2.1 Scope of Services

15.2.1.1 The following programs will comprise the Education and Learning Component:

15.2.1.1(1) Learning Commons;

15.2.1.1(2) Conference Centre;

15.2.1.1(3) Clinical Skills;

15.2.1.1(4) Media Services; and

15.2.1.1(5) On-call Support.

15.2.1.2 Scope of Educational Activity

15.2.1.2(1) This Component is dedicated to the education and teaching of Staff, medical undergraduate students and postgraduate resident trainees (learners), nursing students, other health professions programs, Patients and the public. Functions accommodated in this Component will support:

15.2.1.2(1)(a) Continuing education for professionals;

15.2.1.2(1)(b) In-service education for hospital Staff;

15.2.1.2(1)(c) Orientation sessions for new Staff;

15.2.1.2(1)(d) Demonstrations on the use of new technology and equipment; and

15.2.1.2(1)(e) Teaching and learning will include centralized, decentralized and telemedicine learning activities in order to support the required undergraduate students and postgraduate resident trainees' elements of the medical education program along with nursing and other health professions programs.

15.2.1.3 Scope of Research Activity

15.2.1.3(1) This Component is to be used for research activities, such as, lectures and report research. Functions accommodated in this Component will support research activities of investigators employed at the Facility and of visiting professionals. This support will be in the form of:

15.2.1.3(1)(a) Hosting presentations of research projects;

15.2.1.3(1)(b) Accommodating small group meetings of research Staff engaged in literature or data review; and

15.2.1.3(1)(c) Additional space for Patient-driven research is required in IPUs. It is expected that there will be additional requirements for facilities at the NSPH. A separate process and analysis will be required to describe these needs, outside the scope of this document.

15.2.1.4 Scope Exclusions

15.2.1.4(1) The following list specifies administrative, instructional and educational functions conducted in other Components in the Facility or outside of the Facility:

15.2.1.4(1)(a) Instructional, educational and assessment functions requiring dedicated and/ or purpose built facilities (e.g., ADL kitchen located in Component K, Centre for Healthy Aging).

15.2.2 Services provided

15.2.2.1 The philosophy of the Education and Learning Component promotes a future where everyone is learning together. This Component will serve to create shared spaces of integrated education and learning for all professionals, Patients, their families and the community at large.

15.2.2.2 Learning Commons

15.2.2.2(1) The Learning Commons will be used for accessing information resources and services that support knowledge integration and exchange, continuous learning, discovery and creativity for a wide variety of audiences, including Patients and families, clinicians, allied health professionals, researchers, learners of all levels and the public. General standards of accreditation for medical programs require establishing and maintaining a basic medical reference Facility accessible twenty-four (24) hours a day offering adequate reading and workspace, and such Facility will include a selection of current major medical texts and current journals and access to information resources (computers and internet access). Library services are supervised by a professional Staff member that is familiar with regional and national information resources and data systems and is responsive to the needs of the medical students, faculty members, and other health profession programs associated with the medical school.

15.2.2.2(2) The Learning Commons area will be located in close proximity to the Main Entrance and will be an accessible, dynamic, multi-purpose physical space, hosting a wide variety of events and programs for all. This coupled with an online presence that facilitates access to resources and services will help users connect

with appropriate information. Technology will enable participants in the Learning Commons to gain access to other health and general university libraries, public libraries, other research and data centres, Patients, families and the community. Adequate, thoughtfully designed space is required for Staff collaboration, learning and recruitment.

15.2.2.2(3) An estimated total of forty (40) formal and informal study stations will be required to support the combined medical school undergraduate students and post-graduate resident trainees, and when not used by learners, others who will use the Learning Commons. Learners are expected to be the major users of these stations. A Conference/Meeting Room-Large-Dividable (both sections will be Videoconference (VC) enabled) is also required for 35 learners.

15.2.2.2(4) Single sided shelving bays for Medical Education Program related collection materials and librarian touch down workstation will be provided.

15.2.2.3 Conference Centre

15.2.2.3(1) For accreditation purposes the medical school requires appropriately designed and adequate space for lecture halls, large group classrooms facilities as well as small group teaching spaces and videoconferencing.

15.2.2.3(2) The Conference Center will have a minimum set of functions that will be accommodated within the Centre's spaces:

15.2.2.3(2)(a) The Conference Centre will consist of two (2) Conference-VC Lecture Theatres capable of accommodating audiences of 120 and 70. One Conference/Meeting Room-XXLarge-Dividable (both sections will be VC enabled) will accommodate thirty-five (35) for VC and fifty (50) seats for local events, two (2) Conference/Meeting Room-XLarge-Dividable (both sections will be VC enabled) will accommodate thirty (30) for VC and fifty (50) seats for local events, three (3) Conference/Meeting Room-Medium will accommodate sixteen (16) for VC and thirty-five (35) seats for local events and one (1) Conference/Meeting Room-Small will accommodate eight (8) for VC and fourteen (14) seats for local events. The Centre will be used for lectures for the UBC FoM program as well as PHC lectures, meetings and events and will have the ability to conduct meetings, instructional sessions,

lectures, presentations to remote sites, demonstrations, rounds, Academic Half Days and Full Days, case studies and workshops involving audiences of varying sizes and locations.

15.2.2.3(2)(b) Informal seminars, discussion and team meetings in a flexible, multipurpose environment.

15.2.2.3(2)(c) Presenting the list of functions cited above using live presenters and through the use of teleconference, VC and telemedicine technology that allows real time, face to face discussion and Q&A from any participant at any site.

15.2.2.3(2)(d) VC capability will be available in all of the Conference/Meeting Rooms and those that are dividable, to each section of the divided room.

15.2.2.3(2)(e) A Coat Closet will be provided in the Component. The Coat Closet will accommodate a minimum of fifty (50) coats.

15.2.2.4 Clinical Skills

15.2.2.4(1) For accreditation purposes the medical school requires appropriately designed and adequate space for Clinical skills teaching and simulation facilities. The Clinical Skills suite will provide undergraduate students Year 1 and Year 2 work with standardized Patients in on-site Clinical Skills Rooms (CSR) (i.e. history taking and physical exams) and simulation training and assessments for other health care clinicians, in a realistic clinical setting. The Clinical Skills suite will be set up with a set of six (6) CSRs capable of housing up to eight (8) students, instructor and a Patient with a family member. Each set of two (2) CSRs will share a one way mirror and two way communications. The Clinical Skills suite also includes a Clinical Skills Room-Enhanced room with a full mannequin, and multidisciplinary medical team and observation by instructors in an adjacent Control-Observation room with a one way mirror and two way communications. Debriefing after practice and evaluation session is critical to the learning experience and will occur in Observation/Seminar Room that can accommodate fourteen (14) participants in a VC session and twenty-two (22) participants in local event in the suite. As Objective Structured Clinical Exams (OSCEs) will occur periodically, the six (6) CSRs, Enhanced CSR and the Observation/ Seminar Room require to be designed as a cluster. Reception, Change Cubicle-Patient, Lockers-Patient, offices and storage will also make up the suite. Activities in the Clinical Skills suite include:

15.2.2.4(1)(a) Instructor and undergraduate students driven clinical skills exercises, with typically two (2) to eight (8) students (2 for history taking, up to 8 for other activities), one (1) instructor/clinician and one (1) simulated or volunteer Patient in an Exam or Consult/Interview Room type environment;

15.2.2.4(1)(b) De-briefing, oral presentation and unobtrusive video recording of selected sessions (e.g., interview/communications skills training, diagnostics, group interaction) w/playback to review and analyze results;

15.2.2.4(1)(c) Clinical Skills drop-in and scheduled practice activities in specific areas such as breast or pelvic examinations (e.g., viewing of videos, DVD/CD-ROM package, practical hand skills, use of models, discussion, internet access); and

15.2.2.4(1)(d) Storage (e.g., IM/IT equipment, references, consumables).

15.2.2.5 Media Services

15.2.2.5(1) The Media Services department will contain centralized facilities used in the production of educational, research and promotional materials. Full studio facilities will support video production and still photography and will accommodate subjects ranging from small biological samples to live actors. Media processing facilities will accommodate editing and film processing and free hand or computer-assisted illustration and graphics. An IM/IT equipment loan service will be operated out of the Media Services department. This will involve the control of equipment moving to and from users and repair and maintenance of projectors, televisions and recorders. Media Services will also serve as a centralized Conference/Meeting Room booking facility.

15.2.2.6 On-Call Support

15.2.2.6(1) For accreditation purposes, medical education program undergraduate students and post-graduate resident trainees require support space for lockers (e.g., street clothes, books and stethoscopes), relaxation and networking, and on-call activities.

15.2.2.6(2) On-Call Support rooms will be organized into a suite, including Lounge-Learner and Lockers-Learner, and will be used by undergraduate students and post-graduate resident trainees. The twenty-nine (29) On-Call Rooms within the suite will not necessarily be dedicated to a department or service but will have flexible

assignment to those individuals required to be on-call at any point in time.

15.2.2.6(3) On-Call Support requires secure, 24/7 access via access control for on-call postgraduate resident trainees and undergraduate students. The location of the on-call suite will be carefully considered so that the route between this area and IPUs and the ED is safe, particularly after hours, and within a 5-minute walking time.

15.2.2.6(4) At least one (1) On-Call Room will be wheelchair accessible.

15.2.2.6(5) Anesthesia, OB/Gyn, Pediatrics and ICU residents require their respective On-Call Rooms to be within Patient areas and the ORs.

15.2.2.6(6) A Lockers-Learner area is required for medical school undergraduate students and post graduate resident trainees. Clustering these functions is essential for the interaction and learning experience and to minimize duplication of resources. A central, common Facility will optimize flexibility in locker assignments. Each student will be assigned a locker with a mechanical combination cam lock. Change areas with single Washroom/Shower-Staff are also required.

15.2.2.6(7) As part of the On-Call Support, access to a central relaxation and networking Lounge-Learner, located within the On-Call Support area, will be required for undergraduate students and post-graduate resident trainees for informal socializing, relaxing, TV watching, coffee and meals/snacks preparation.

15.3 OPERATIONAL CONSIDERATIONS

15.3.1 Service Delivery Principles and Methods

15.3.1.1 Clinical and Logistical Support Processes and Flows

15.3.1.1(1) Waste Management

15.3.1.1(1)(a) In this Component, waste management will focus on disposal of discarded paper, used food containers and disposable plates and utensils. All collected waste will be returned to designated holding areas located in EVS (see Component O).

15.3.1.1(2) Food Services

15.3.1.1(2)(a) Catering for events conducted in this Component will be accommodated, and will involve areas for setting up prepared foods, snacks and beverages for self-service. Electrical services will be required

for small appliances like coffee machines and hot plates.

15.3.1.1(2)(b) Alcove-Nourishment will be provided for cleaning of spills and initial cleaning of plates, utensils and serving dishes. All final cleaning of these items will be conducted elsewhere (e.g. CFP or off-site if catering is supplied by private vendors).

15.3.1.1(2)(c) Food production will not be accommodated in this Component.

15.3.1.2 Anticipated Trends in Service Delivery

15.3.1.2(1) The following lists trends expected within the planning horizon of this Project, and that are expected to affect the nature and/or extent of functions accommodated within this Component. Effects of these trends will be reflected in the Component's design.

15.3.1.2(1)(a) Providing medical, nursing and allied health support to remote communities will continue relying on telemedicine.

15.3.1.2(1)(b) Demands for quality meeting spaces will continue to exceed availability of suitable rooms, especially during peak utilization hours. The need for this Component to operate under extended hours, including evenings and on weekends is anticipated.

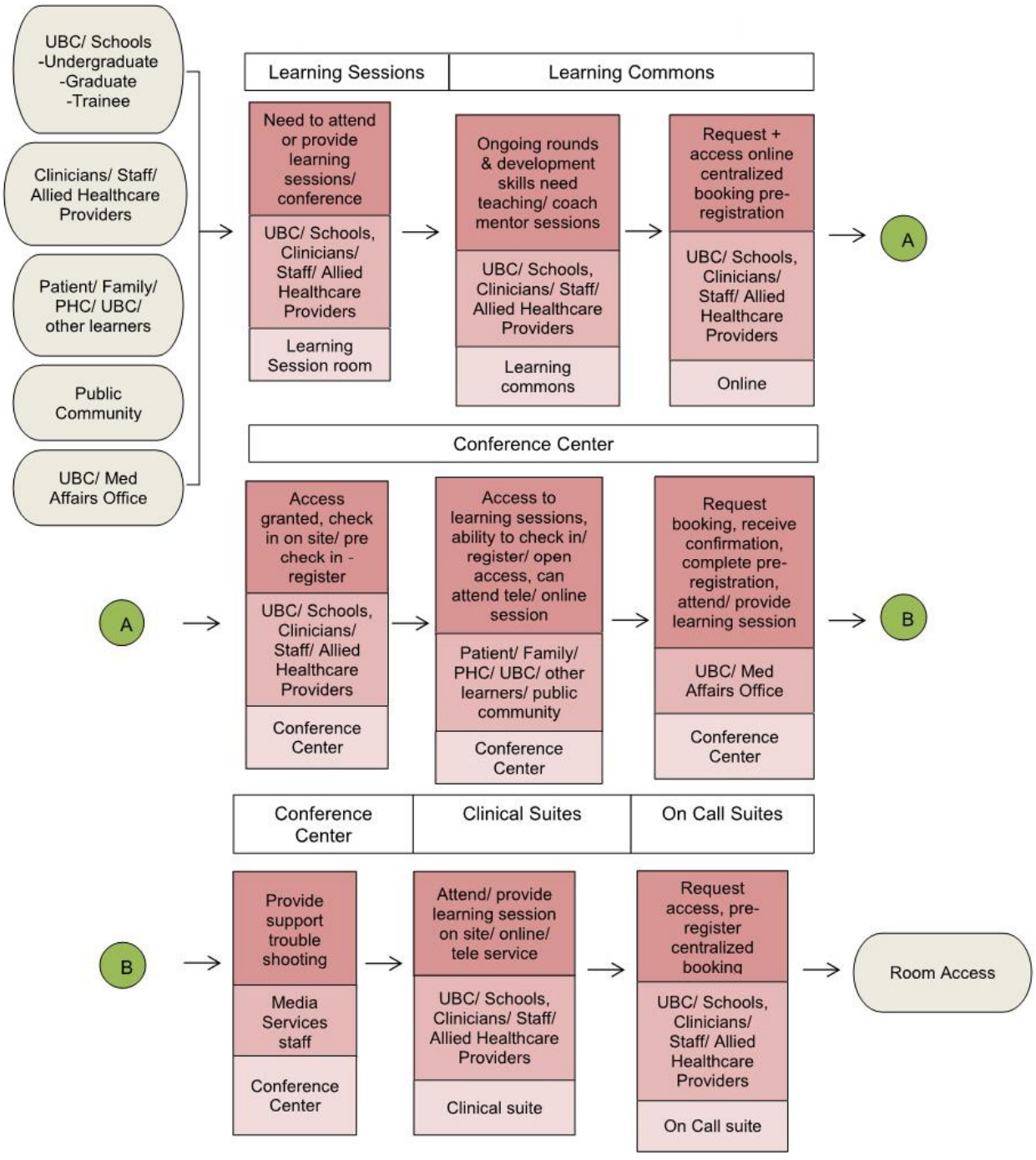
15.3.1.2(1)(c) With pressure to improve space utilization, many institutions are scheduling Conference/Meeting Rooms and classrooms centrally, regardless of whether the rooms are centrally located or decentralized throughout the campus.

15.3.1.2(1)(d) With advances in technology and increasing dependence on computerization in all aspects of health care delivery, there are demands for sophisticated, specialty designed teaching and teleconferencing facilities.

15.3.2 Workflows

15.3.2.1 The Education and Learning Component workflows are depicted in the following workflow diagram.

N. EDUCATION AND LEARNING WORKFLOW DIAGRAM



15.3.3 Hours of Operation

15.3.3.1 Minimum hours of operation are listed below:

15.3.3.1(1) Learning Commons: 0000 – 2400 hours, 7 days per week

15.3.3.1(2) Conference Centre: 0700 – 1800 hours, Monday to Friday; after hours access required

15.3.3.1(3) Clinical Skills: 0000 – 2400 hours, 7 days per week

15.3.3.1(4) Media Services: 0800 – 1800 hours, Monday to Friday

15.3.3.1(5) On-Call Support: 0000 – 2400 hours, 7 days per week

15.3.4 Workloads

15.3.4.1 The maximum estimated occupancy for this Component will be approximately 350 people.

15.4 DESIGN CRITERIA

15.4.1 General Requirements

15.4.1.1 Zones of activity within the Component will include the following:

15.4.1.1(1) Learning Commons

15.4.1.1(2) Conference Centre

15.4.1.1(3) Clinical Skills

15.4.1.1(4) Media Services

15.4.1.1(5) On-call Support

15.4.1.2 Utilization of this Component will be promoted through Convenient Access for users arriving from off-site. Secure access outside of the Facility's routine hours of operation, and at times when staffing is likely to be lower or absent in other Components is also required.

15.4.1.3 Satisfying these criteria will require Convenient Access from exterior vehicle drop-off and parking facilities. An interior, unsecured point of access will available during regular hours of operation. The Component will be secured with access restricted to authorized users after hours. Safety and security in other areas of the Facility will not be compromised by this Component's operations during evenings and weekends.

15.4.2 Learning Commons

15.4.2.1 Learning Commons will be located on Level 1 with Direct Access to the Main Entrance.

15.4.2.2 Criteria specific to the Learning Commons include:

15.4.2.2(1) Convenient Access for the general public during regular hours of operation. Staff and Learners will have access 24 hours per day, 7 days per week.

15.4.2.2(2) Flexible space that is suitable for multiple users, including the public.

15.4.2.2(3) Forty (40) formal and informal study stations will be required to support medical undergraduate students and post graduate resident trainees, and when not used by Learners, others who will use the Learning Commons.

15.4.2.2(4) The study areas will consist of study carrels, some with computers, table and chairs and comfortable soft seating. Each station will require power and data access.

15.4.2.2(5) Each enclosed Study Room-Group will accommodate fourteen (14) people, and will be acoustically separated from the more open work areas as per Appendix 3C [Acoustic and Noise Control Measures].

15.4.2.2(6) A Conference/Meeting Room-Large-Dividable with an operable partition that will enable VC sessions in each section of the room with appropriately and correctly designed, sized and positioned displays, VC equipment, lighting, acoustical treatment as per Appendix 3C [Acoustic and Noise Control Measures] and locally controlled HVAC will also be required for up to thirty-five (35) learners.

15.4.2.2(7) Single-sided shelving bays for Medical Education Program related collection materials and one (1) librarian Workstation-Touchdown.

15.4.2.2(8) A variety of types of workstations will be provided.

15.4.3 Conference Centre

15.4.3.1 The Conference Centre will be located with Direct Access to Main entrance Enclosed Atrium, however this space may be located on Level 2 and accessed directly from Main Entrance through Public Passenger Elevators and Feature Stairs to provide Convenient Access for Staff and visitors to the Facility whilst providing an interest and focal point in the Facility.

15.4.3.2 The Conference Centre will be provided with a Reception desk and Coat Check area and storage space.

15.4.3.3 It will also include Alcove-Nourishment and Alcove-Catering Cart for events.

15.4.3.4 Conference-VC Lecture Theatres

15.4.3.4(1) Criteria common to the Conference-VC Lecture Theatres include:

15.4.3.4(1)(a) Appropriately and correctly designed, sized and positioned displays, VC equipment, lighting, acoustical treatment as per Appendix 3C [Acoustic and Noise Control Measures] and locally controlled HVAC control for each room.

15.4.3.4(1)(b) Tiered floor with appropriate Ceiling Height and Line of Sight.

15.4.3.4(1)(c) Power at every seat.

15.4.3.4(1)(d) Equipment including phone at the entrance, lectern and computers and a digital wall clock.

15.4.3.4(1)(e) Magnetic whiteboards.

15.4.3.4(1)(f) Wheelchair accessible Control Booth for each of these two (2) rooms for observation, monitoring, and control with two (2) workstations and IM/IT rack space separated from operator workstations.

15.4.3.4(1)(g) Space in each Control Booth for a minimum of two (2) full height IM/IT racks, multiple wall mounted video displays corresponding to each VC Lecture Theatre.

15.4.3.4(1)(h) Enable wheelchair accessible seats.

15.4.3.4(1)(i) Entrance vestibule(s) for each of these two (2) rooms.

15.4.3.4(1)(j) Storage in each of these two (2) rooms.

15.4.3.4(1)(k) Large front of room area to support a fixed lectern that will house IM/IT equipment and presentation computer as well as, confidence monitors placed with Line of Sight from the lectern and Millwork mounting shrouds/housing w/ a clock between the monitors, tables and chairs for interactive panels, and catering. Design will be accessible for Persons with Disabilities and Bariatric.

15.4.3.4(1)(l) Additional up and cross aisle circulation capacity in each of these rooms to support instructor and audience interaction and movement in the room.

15.4.3.4(1)(m) A shared Store-Central AV Equipment room.

15.4.3.4(1)(n) The 120 seats Conference-VC Lecture Theatre will have fixed chairs with fold down tables and the 70 seats will have fixed tables and loose chairs.

15.4.3.5 Conference/Meeting Rooms

15.4.3.5(1) Conference/Meeting Rooms meet the following criteria:

15.4.3.5(1)(a) The Conference/Meeting Room-XXLarge-Dividable will be used for the Yuwipi Ceremony. The Conference/Meeting Room-XXLarge-Dividable will be located directly adjacent to another large room for the feast after the ceremony and will also be adjacent to a kitchen area for food preparation.

15.4.3.5(1)(b) Appropriately and correctly designed, sized and positioned displays, VC equipment, lighting, acoustical treatment as per Appendix 3C [Acoustic and Noise Control Measures] and locally controlled HVAC control for each room.

15.4.3.5(1)(c) For Conference/Meeting Rooms that are dividable, the acoustical divider will enable VC sessions in each section. Each section will include VC equipment and will be appropriately and correctly designed with sized and positioned displays, VC equipment, lighting, acoustical treatment as per Appendix 3C [Acoustic and Noise Control Measures] and locally controlled HVAC.

15.4.3.5(1)(d) Flat floor.

15.4.3.5(1)(e) Power receptacle for each participant.

15.4.3.5(1)(f) Equipment including a phone at the entrance, teleconferencing phone in the centre of the room and a digital wall clock.

15.4.3.5(1)(g) Magnetic whiteboards, large monitors, appropriately sized and positioned displays, VC equipment.

15.4.4 Clinical Skills

15.4.4.1 Criteria for the Clinical Skills suite include:

15.4.4.1(1) An integral suite designed with a single point of entry, complete with Reception, Waiting area, simulated Patients support, storage, standard and Enhanced CSR and debrief/education capacity. The

suite will be designed to facilitate the efficient flow of students and volunteer simulated Patients, with Line of Sight from Reception to the CSRs and efficient and correct learning environment within the CSRs room and the Enhanced CSR together with the Control-Observation room and Observation/Seminar Room including sizing, room ratio, lighting, temperature and acoustical separation as per Appendix 3C [Acoustic and Noise Control Measures].

15.4.4.1(2) This area will have Direct Access to Public Passenger and Patient Transfer/Staff Service Elevators.

15.4.4.1(3) Patient support areas will be standardized and include Change Cubicle-Patient, Lockers-Patient and Waiting.

15.4.4.1(4) Seven (7) CSRs including one (1) Clinical Skills Room-Enhanced plus one (1) Observation/Seminar Room will be required as, at any one time, groups of eight (8) health care professionals may be utilizing these rooms, sometimes distributed with eight (8) learners plus Simulation Lead and Patient in each room.

15.4.4.1(5) A Control-Observation will be required between Observation/Seminar Room and Clinical Skills Room-Enhanced. This room will have a table at least 2.4 m long running the length of the observation one-way window and 2-way communications.

15.4.4.1(6) Additional criteria for each CSR include:

15.4.4.1(6)(a) Upper and lower lockable cabinets for consumable supplies, eight (8) stackable chairs for eight (8) participants, exam stool on wheels, simulation lead and Patient, in a close circle.

15.4.4.1(6)(b) Wall-mounted/fixed equipment including ophthalmoscope/ otoscope, blood pressure cuff, wall-mounted thermometer, digital wall clock, phone, hand hygiene sink, magnetic whiteboard, large monitor, Privacy curtain around exam bed.

15.4.4.1(6)(c) Capacity for a discrete, built-in video camera for recording activities (i.e., mock interviews/communications skills, Patient diagnostics, case studies, etc.) as required and for playback to review and analyze results.

15.4.4.1(6)(d) Locally controlled HVAC control for each room in this suite.

15.4.4.1(6)(e) One of the CSRs will be designed as an Enhanced CSR. This room will have an aspect ratio of approximately 1:1.45.

15.4.4.1(6)(f) A one-way mirror with blinds on both sides and 2-way communications will be provided between each pair of CSRs and between the Enhanced CSR and the Observation/Seminar Room and the Observation Control room.

15.4.4.1(6)(g) Observation/Seminar Room will be appropriately and correctly designed with sized and positioned displays, VC equipment, lighting, acoustical treatment as per Appendix 3C [Acoustic and Noise Control Measures] and locally controlled HVAC for fourteen (14) participants in a VC session and twenty (20) in a local session.

15.4.5 Media Services

15.4.5.1 Media Services will be located adjacent to the Clinical Skills suite with a Back of House internal circulation between the two (2) areas.

15.4.5.2 Media Services will have Direct Access to the Public Passenger Elevators.

15.4.5.3 This area will have a Studio-Photo and a Studio-Video for video production and still photography as well as the main Control-AV room for all VC rooms on site. This studio will be VC capable, linked to the main Control-AV room, and also linked by fibre optics to designated ORs. This allows for the capability to video record and broadcast live cases from the ORs to other locations internationally.

15.4.5.4 It will also include six (6) Video Editing Rooms.

15.4.5.5 The Control-AV will be located adjacent to and between Studio-Photo and a Studio-Video with Line of Sight into both studios. Acoustic separation between Control-AV and adjacent spaces including Studio-Photo and a Studio-Video will be provided.

15.4.6 On-Call Support

15.4.6.1 The location of the On-Call Support will be carefully considered so that the route between this area and IPUs and the ED is secure, particularly after hours, and within a 5 minute walking time.

15.4.6.2 On-Call Rooms will be organized into a suite, including Lounge-Learner and Lockers-Learner described below.

15.4.6.3 Design will consider the following criteria:

15.4.6.3(1) Compliance with current Collective Agreement(s), Facility standards and any other regulatory frameworks that may be applicable.

15.4.6.3(2) On-Call Rooms

15.4.6.3(2)(a) Acoustic separation as per Appendix 3C [Acoustic and Noise Control Measures] between the On-Call Rooms and adjacent spaces is important.

15.4.6.3(2)(b) On-Call Rooms will be private bedrooms with lockable doors to optimize opportunities for rest and study and will be provided with the following:

- 15.4.6.3.2.(b).1 At least one On-Call Room will be wheelchair accessible;
- 15.4.6.3.2.(b).2 Clean sheets and towels changed on a 24-hour basis;
- 15.4.6.3.2.(b).3 A light over the bed or a bedside lamp. Lighting will be controlled from the bed;
- 15.4.6.3.2.(b).4 Full height locker for personal belongings;
- 15.4.6.3.2.(b).5 Telephone in room, voice and data capabilities; connected to hospital dictation system; alarm clock backed up by battery;
- 15.4.6.3.2.(b).6 Small study table with lamp, 2 data ports and power above desk height and lamp;
- 15.4.6.3.2.(b).7 Locally controlled HVAC control for each room;
- 15.4.6.3.2.(b).8 Dead bolt on inside with "available/occupied" indicator from the outside that is connected to the deadbolt; and

15.4.6.3(3) Learners Washroom/Showers

15.4.6.3(3)(a) Learners Washroom/Shower-Staff facilities will be shared by on-call post-graduate resident trainees and undergraduate students.

15.4.6.3(3)(b) Learners Washroom/Shower-Staff will be wheelchair accessible and have a dry area for dressing. There is a need for one single Washroom/Shower-Staff for a non-binary individual.

15.4.6.3(3)(c) Washroom/Shower-Staff will be located inside Lockers-Learner area.

15.4.6.3(4) Lockers-Learner

15.4.6.3(4)(a) A central, secure common Lockers-Learner area will be required for undergraduate students and post-graduate resident trainees in order to secure coats, books and personal items. Each undergraduate student and all post-graduate resident trainees will be assigned Z-lockers with a combination cam lock.

15.4.6.3(4)(b) Male and female Change areas will also be required in the Locker area. The Locker area will be adjacent to Washroom/Shower-Staff which will be used for changing.

15.4.6.3(5) Lounge-Learner

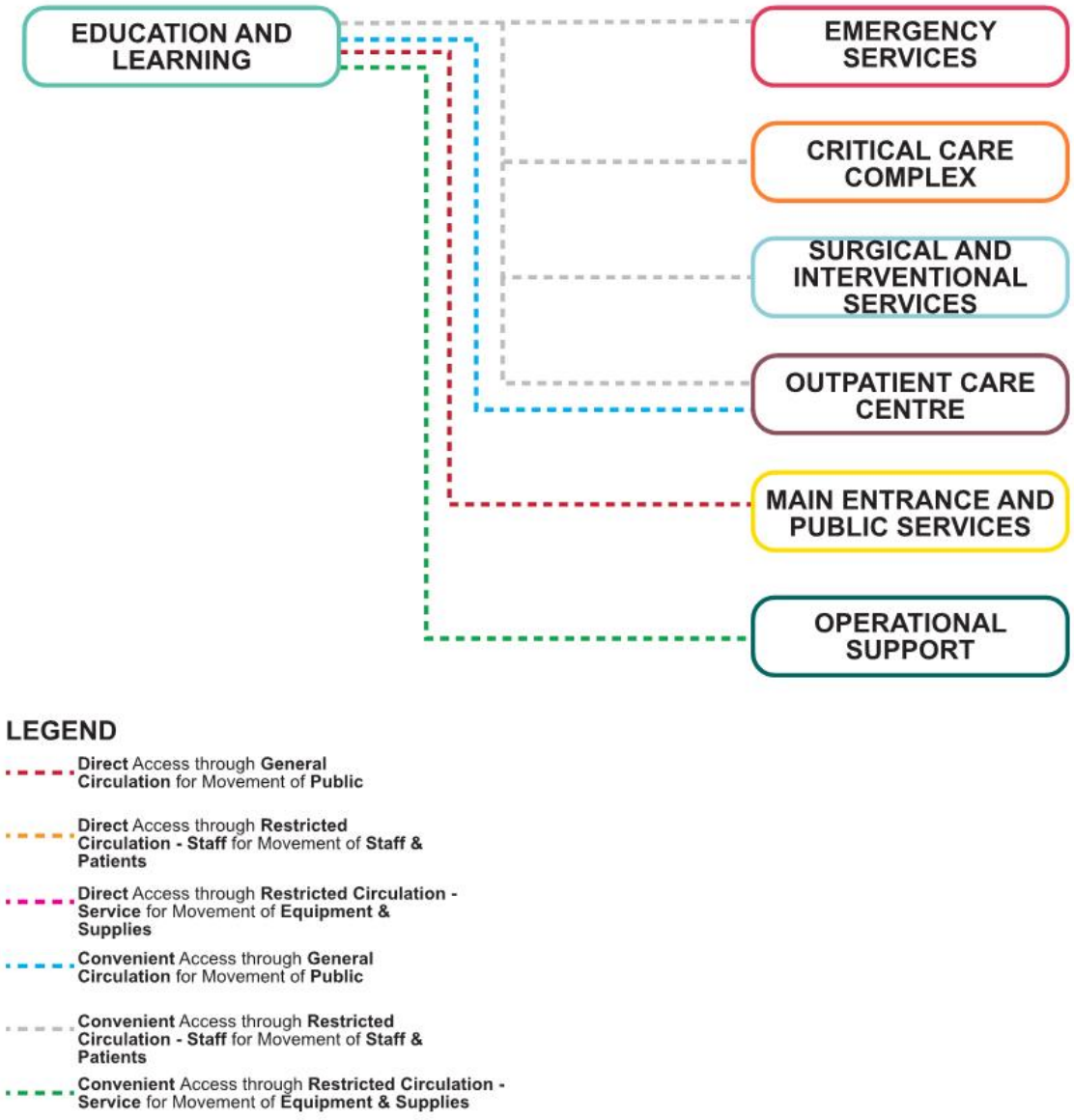
15.4.6.3(5)(a) As part of On-Call Support, Convenient Access to a central relaxation/ networking Lounge-Learner, located within the On-Call Support area will be required for undergraduate students and post-graduate resident trainees. Requirements for the Lounge-Learner include:

- 15.4.6.3.5.(a).1 Mix of informal, comfortable seating with power for conversation and TV watching, quiet study space, and work table with computers (w/ access to Patient information) and printer;
- 15.4.6.3.5.(a).2 Kitchenette for snack preparation with fridge, microwave, coffee maker, sink, dishwasher, durable and easily cleaned surface cabinets and countertop;
- 15.4.6.3.5.(a).3 Capacity for vending machines; and
- 15.4.6.3.5.(a).4 Natural light and windows.

15.5 EXTERNAL RELATIONSHIPS

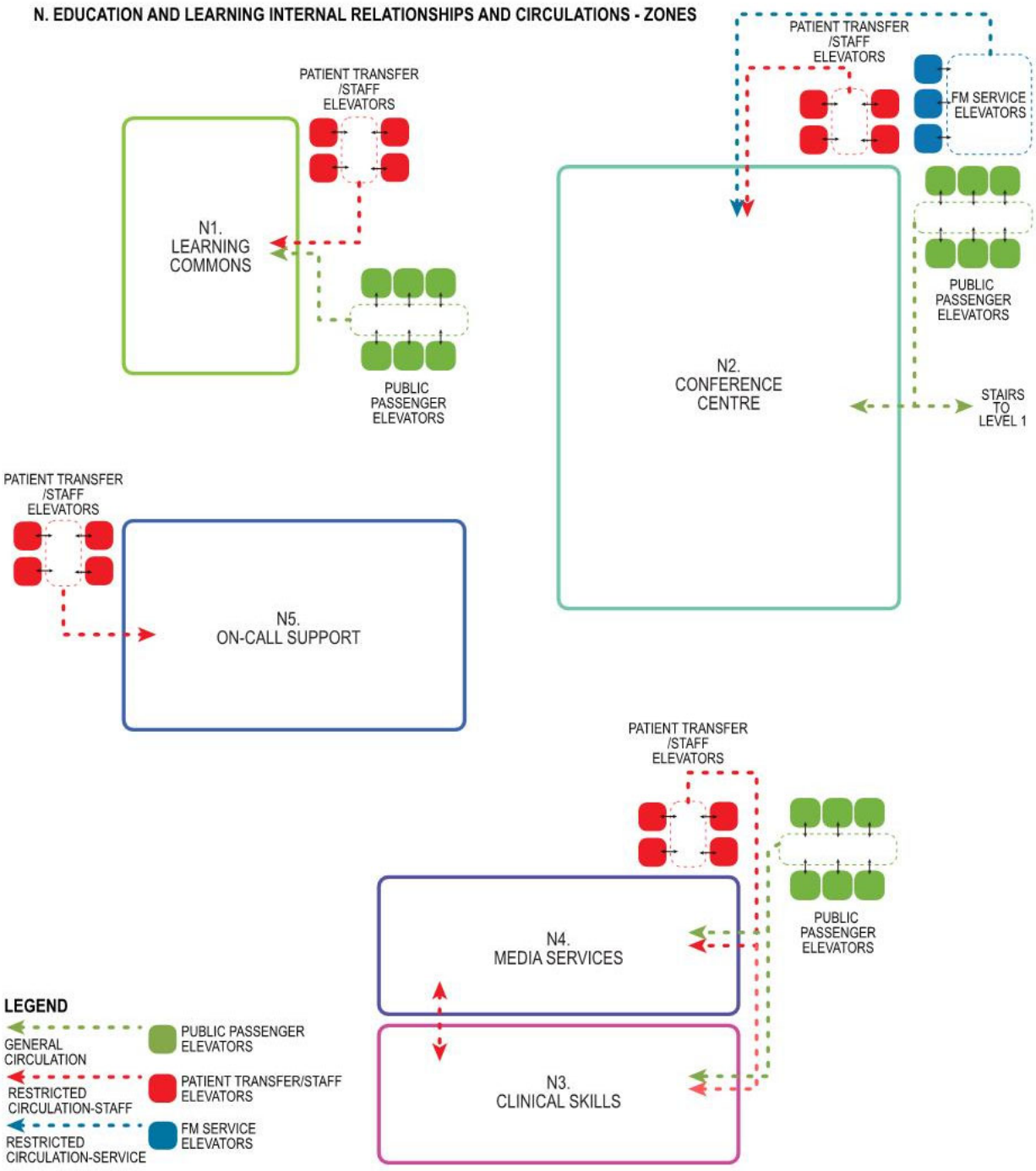
15.5.1 The following diagram indicates other Functional Components that have a functional relationship with this Component.

N. EDUCATION AND LEARNING EXTERNAL RELATIONSHIPS AND CIRCULATIONS



15.6 INTERNAL RELATIONSHIPS

15.6.1 The following diagrams indicate internal functional relationships within this Component.



15.7 SCHEDULE OF ACCOMMODATIONS

15.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Education and Learning

N1 - LEARNING COMMONS	246.00
N2 - CONFERENCE CENTRE	990.50
N3 - CLINICAL SKILLS	314.50
N4 - MEDIAL SERVICES	278.50
N5 - ON-CALL SUPPORT	422.00
EDUCATION AND LEARNING PROGRAMMED SPACE NSM:	**2251.50**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
N1 - LEARNING COMMONS					
N1.1	Conference/Meeting Room-Large-Dividable	1	60.00	60.00	Incl. counters, cabinets, accommodates 35 Persons, dividable into two separate rooms by an operable partition, glass walls.
N1.2	Study Room-Group	2	24.00	48.00	Incl. seating for 14.
N1.3	Study Room-Workstations	2	64.00	128.00	Incl. 20 study workstations.
N1.4	Workstation-Touchdown	2	2.50	5.00	Incl. 1 touch down workstation.
N1.5	Medical Education Program Collection	1	5.00	5.00	
	TOTAL NSM: Learning Commons			**246.00**	
N2 - CONFERENCE CENTRE					
N2.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets, service counter.
N2.2	Seating	1	9.00	9.00	Incl. seating for 6.
N2.3	Coat Check	1	3.00	3.00	Incl. service counter.
N2.4	Coat Closet	1	3.00	3.00	Incl. coat racks.
N2.5	Conference-VC Lecture Theatre-Large	1	240.00	240.00	Incl. tiered seating for 120, counters, cabinets, lectern.
N2.6	Vestibule	2	5.00	10.00	
N2.7	Control Booth	1	19.00	19.00	Incl. 2 workstations.
N2.8	Store	1	3.00	3.00	
N2.9	Conference-VC Lecture Theatre-Small	1	165.00	165.00	Incl. tiered seating for 70, counters, cabinets, lectern.
N2.10	Vestibule	2	5.00	10.00	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
N2.11	Control Booth	1	19.00	19.00	Incl. 2 workstations.
N2.12	Store	1	3.00	3.00	
N2.13	Conference/Meeting Room-XXLarge-Dividable	1	100.00	100.00	Incl. counters, cabinets, accommodates 50 Persons, smudging capability, dividable into two separate rooms by an operable partition.
N2.14	Conference/Meeting Room-XLarge-Dividable	2	88.00	176.00	Incl. counters, cabinets, accommodates 50 Persons, dividable into two separate rooms by an operable partition.
N2.15	Conference/Meeting Room-Medium	3	44.00	132.00	Incl. counters, cabinets, accommodates 35 Persons.
N2.16	Conference/Meeting Room-Small	1	24.00	24.00	Accommodates 14 Persons.
N2.17	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
N2.18	Alcove-Nourishment	2	5.00	10.00	Incl. counter, cabinets.
N2.19	Alcove-Catering Cart	3	1.50	4.50	Distributed in Conference Centre, adjacent to Alcove-Nourishment.
N2.20	Store-General	2	3.00	6.00	Incl. shelving.
N2.21	Store-Central AV Equipment	1	9.00	9.00	Incl. shelving.
N2.22	Store-Equipment & Furniture	1	14.00	14.00	Incl. shelving.
N2.23	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
	TOTAL NSM: Conference Centre			**990.50**	
N3 - CLINICAL SKILLS					
N3.1	Reception	1	16.00	16.00	Incl. 3 workstations, cabinets.
N3.2	Waiting	1	24.00	24.00	Incl. seating for 14 including 2 in wheelchairs, Direct Access to Public Passenger Elevators and Washroom-Public.
N3.3	Change Cubicle-Patient	2	3.50	7.00	
N3.4	Lockers-Patient	1	2.00	2.00	Incl. 12 half lockers in an alcove.
N3.5	Clinical Skills Room	6	18.50	111.00	Incl. counters, cabinets, 3 pairs of CSRs w/observation windows between.
N3.6	Clinical Skills Room-Enhanced	1	28.00	28.00	Incl. ceiling lift.
N3.7	Observation/Seminar Room	1	40.00	40.00	Incl. seating for 14, counters, cabinets, wardrobe.
N3.8	Control-Observation	1	12.00	12.00	Located between Observation/Seminar Room and Clinical Skills Room-Enhanced.
N3.9	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
N3.10	Alcove-Clean Linen	1	2.50	2.50	
N3.11	Alcove-Crash Cart	1	1.50	1.50	Centrally located.
N3.12	Store-Bed	1	20.00	20.00	
N3.13	Store-Loan Equipment	1	15.00	15.00	Incl. cabinets, shelving.
N3.14	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
N3.15	Lockers-Staff	2	6.00	12.00	Incl. 12 Z-lockers.
N3.16	Washroom-Public	1	4.50	4.50	2-piece, infant change table, accessible for Persons with Disabilities.
	TOTAL NSM: Clinical Skills			**314.50**	
N4 - MEDIA SERVICES					
N4.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets.
N4.2	Waiting	1	12.00	12.00	Incl. seating for 8 including 1 in wheelchair, Direct Access to Public Passenger Elevators and Washroom-Public.
N4.3	Studio-Photo	1	30.00	30.00	Incl. cabinets.
N4.4	Studio-Video	1	48.00	48.00	Incl. cabinets.
N4.5	Video Editing Rooms	6	11.00	66.00	Incl. 1 workstation, cabinets.
N4.6	Control-AV	1	28.00	28.00	Incl. counters, cabinets, shelving, located between Studio-Photo and Studio-Video with Line of Sight into both studios.
N4.7	Conference Room-Xsmall	1	15.00	15.00	Accommodates 6 Persons.
N4.8	Office-Private	1	9.50	9.50	Incl. 1 workstation.
N4.9	Store-Equipment & Furniture	1	14.00	14.00	Incl. shelving.
N4.10	Store-Production Equipment	1	25.00	25.00	Incl. shelving.
N4.11	Store-Video Rack	1	10.00	10.00	Incl. shelving.
N4.12	Washroom-Public	2	4.50	9.00	2-piece, infant change table in 1 Washroom-Public, accessible for Persons with Disabilities.
	TOTAL NSM: Media Services			**278.50**	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
N5 - ON-CALL SUPPORT					
N5.1	On-Call Room	29	7.00	203.00	Incl. 1 touch down workstation, 1 full locker, Convenient Access to Lockers-Learner.
N5.2	Study Room-Group	1	24.00	24.00	Incl. seating for 8.
N5.3	Alcove-Clean Linen	5	2.50	12.50	Distributed within the unit.
N5.4	Lounge-Learner	1	56.00	56.00	Incl. seating for 20, kitchenette, 2 touch down workstations.
N5.5	Lockers-Learner	1	70.00	70.00	Incl. 200 Z-lockers, 3 shoe racks, split into male and female if required.
N5.6	Washroom/Shower-Staff	11	4.50	49.50	3-piece incl. shower.
N5.7	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
	TOTAL NSM: On-call Support			**422.00**	
	TOTAL NSM: EDUCATION AND LEARNING			**2,251.50**	

THE NEW ST. PAUL'S PHASE 1A

O. OPERATIONAL SUPPORT

O. OPERATIONAL SUPPORT

16.1 OVERVIEW

16.1.1 Biomedical Engineering

16.1.1.1 Biomedical Engineering involves the use of technology, including hardware and software, to keep vital clinical equipment and medical devices fully operational to support the work of clinicians. Functions occurring in this Component are responsible for the safe design, testing, calibration, repair, maintenance and application of medical devices that are applied to Patients.

16.1.2 MDRD

16.1.2.1 The MDRD will provide services to decontaminate, reprocess, semi-critical and critical instruments and also, inspect, assemble, distribute and manage life-cycle costing processes for medical devices and sterile supplies to Surgical and Major Procedures Zone, Scopes and Minor Procedures Zone, C-Section and Procedures, and satellite Procedure Rooms in all the Facility Components. The MDRD will follow the Ministry required practices, manufacturer's instructions and CSA standards for reference when processing medical devices with the objective to:

16.1.2.1(1) Minimize the risk of exposure and prevent transmission of microorganisms to Patients, Staff, the public and the environment;

16.1.2.1(2) Minimize time between front-line point-of-use and terminal reprocessing through leveraging adjacencies, design and improvements in technology;

16.1.2.1(3) Contain, protect and manage inventory of sterile supplies required for surgery either from in house stock or external loan;

16.1.2.1(4) Minimize the risk of damage to medical devices from inappropriate handling or exposure to incompatible chemicals or decontamination/disinfection/sterilization;

16.1.2.1(5) Minimize/Manage the lifecycle costing efforts of inventory with direct involvement in procurement for Surgical and Interventional Services; and

16.1.2.1(6) Provision of education and support services regarding assessment of critical and semi-critical instrumentation.

16.1.3 Central Food Production

16.1.3.1 CFP provides a decentralized, Patient centric meal service enabling POC meal selection just ahead of service to engage client senses during meal time and ensure good quality, appetizing food.

16.1.4 Facilities Maintenance and Operations

16.1.4.1 Facilities Maintenance and Operations (FMO) Staff are responsible for the maintenance and operation of the Facility and site infrastructure including all mechanical, electrical and Building Systems.

16.1.5 Logistics Centre

16.1.5.1 The Logistics Centre will encompass a wide variety of support activities, and manage all incoming and outgoing supplies, equipment, mail and other deliveries.

16.1.6 Integrated Protection Services

16.1.6.1 Lower Mainland Consolidated (LMC) IPS operates using a hybrid model that combines in-house Staff with contracted personnel for protection and parking services.

16.1.7 Equipment Depot

16.1.7.1 Equipment Depot will consist of storage and management of equipment in the centralized Hold-Central Equipment area as well as decentralized storage spaces for per levels of equipment in the clinical areas.

16.1.8 Environmental Services

16.1.8.1 EVS will encompass housekeeping, waste management and related services (moves and set-ups, and pest control) within the Health Campus.

16.1.9 Cycling Centre

16.1.9.1 Cycling Centre provides services for Staff who arrive on site by bicycles.

16.1.10 Waste Management

16.1.10.1 EVS will manage the Waste Management process and will ensure standards are maintained throughout the new Facility.

16.1.10.2 EVS will be responsible for the safe management and transportation of waste (including general, recyclable, and biomedical) throughout the Health Campus, up to and including, at point of generation to our designated waste holding areas (adjacent to or in loading dock). EVS will ensure waste segregation best practices are in place. All EVS waste handlers will follow all relevant regulatory standards (TDG), and Infection Prevention and Control waste handling guidelines. The major portions of the waste stream including soiled linen, general waste, biomedical waste, and mixed recyclables will be transported in carts and totes.

16.1.11 Laundry and Linen Services

16.1.11.1 Laundry and Linen Services provide clean linen to the Facility and remove/process all soiled linen generated by the Facility.

16.1.12 Central Mail Services

16.1.12.1 Central Mail Services facilitate the process and movement of internal (throughout the Authority), federal (Postage) and small parcels for inbound and outbound items.

16.2 FUNCTIONAL DESCRIPTION

16.2.1 Scope of Services

16.2.1.1 This section gives key information on the following services:

16.2.1.1(1) Biomedical Engineering

16.2.1.1(2) MDRD

16.2.1.1(3) CFP

16.2.1.1(4) FMO

16.2.1.1(5) Logistics Centre

16.2.1.1(6) IPS

16.2.1.1(7) Equipment Depot

16.2.1.1(8) EVS

16.2.1.1(9) Cycling Centre

16.2.1.1(10) Waste Management

16.2.1.1(11) Laundry and Linen Services

16.2.1.1(12) Central Mail Services

16.2.2 Services provided

16.2.2.1 Biomedical Engineering

16.2.2.1(1) The following list specifies the minimum set of functions that will be accommodated within the Component's spaces:

16.2.2.1(1)(a) Receiving, recording and temporary holding of all biomedical devices delivered to the Component, including new devices requiring assembly, set-up, calibration and/or testing and existing devices requiring maintenance or repair;

16.2.2.1(1)(b) Receiving, recording and organized storing of all equipment and supplies used in the assembly, set-up, calibration and testing of biomedical devices;

16.2.2.1(1)(c) Disassembling, assembling, setting-up, calibrating and testing new and existing biomedical devices;

16.2.2.1(1)(d) Cleaning (not sterilizing) biomedical devices and components as required; all sterilizing functions will be accommodated in the Component;

16.2.2.1(1)(e) Maintaining a library of reference manuals, warranties and service records of all biomedical devices used in the Facility; storage of both electronic and hard copy media will be accommodated in this Component;

16.2.2.1(1)(f) Receiving and preparing biomedical devices for off-site servicing, and receiving and preparing devices for return to use following off-site servicing;

16.2.2.1(1)(g) Providing “first line” diagnoses and trouble-shooting services for equipment located in other Components, especially in technology- intensive Components like Medical Imaging, Main Laboratories and Surgical and Interventional Services; and

16.2.2.1(1)(h) Coordinating on-site work of private service contractors.

16.2.2.1(2) Scope of Educational Activity

16.2.2.1(2)(a) Biomedical Engineering students from technical colleges and universities will receive practical skills training through internships and co-op programs. All teaching and supervision functions will be accommodated in the general work areas and will not require specialized or dedicated facilities in this Component.

16.2.2.1(3) Scope of Research Activity

16.2.2.1(3)(a) Biomedical Engineering Staff and students will, from time-to-time, be engaged in research. The nature and extent of research functions will be accommodated in the general work areas and will not require specialized or dedicated facilities in this Component.

16.2.2.1(4) Scope Exclusions

16.2.2.1(4)(a) The following list specifies functions conducted by Biomedical Engineering Staff that are understood to occur in other Components in the Facility or outside of the Facility:

16.2.2.1.4.(a).1 Direct contact with inpatients and outpatients; and

16.2.2.1.4.(a).2 Servicing of equipment covered under a vendor's warranty.

16.2.2.2 MDRD

16.2.2.2(1) Sterilization and re-processing in MDRD occur in compliance with the Ministry, CSA Standards and Accreditation Canada Standards.

16.2.2.2(2) Refer to Schedule 3 [Design and Construction Specifications] for HVAC requirements for monitored and alarmed temperature and humidity for all MDRD spaces.

16.2.2.2(3) A Scope Reprocessing area including Utility-Bronch Scope Rinse, Scope Decontamination, Scope Disinfection, Store-Clean Scope-Endo and Store-Clean Scope-Bronch will be located in Scopes and Minor Procedures Zone to provide scope reprocessing services for Endoscopy and Bronchoscopy Procedure Rooms.

16.2.2.2(4) A Satellite Scope Reprocessing including Satellite Scope Reprocessing-Soiled and Satellite Scope Reprocessing-Clean will be located in Outpatient Care Centre to provide critical and semi-critical services for Outpatient Clinic Pod 03 (Lung, Sinus and Allergy).

16.2.2.2(5) The range of MDRD services include:

16.2.2.2(5)(a) Direct Access from MDRD Sterile Storage and Distribution to Sterile Core-Equipment/Supplies in Surgical and Major Procedures Zone, Scopes and Minor Procedures Zone and C-Section and Procedures for delivery of clean case carts via Clean MDRD Elevators;

16.2.2.2(5)(b) Direct Access from Soiled Hold-Case Carts in Surgical and Major Procedures Zone, from General Procedure Suites in Scopes and Minor Procedures Zone and from C-Section and Procedures area in Maternity Centre to MDRD Decontamination Area for return of soiled case carts via Dirty MDRD Elevators;

16.2.2.2(5)(c)	Reprocessing of TEE probes will be done through MDRD using automated TEE washing/disinfection systems;
16.2.2.2(5)(d)	Sorting of materials on soiled carts, disassembly and rinsing of instruments;
16.2.2.2(5)(e)	Washing/disinfection via an automated system;
16.2.2.2(5)(f)	Washing/disinfection via hand-wash;
16.2.2.2(5)(g)	Cleaning and sterilizing of heat sensitive instruments including robotics;
16.2.2.2(5)(h)	Inspection of instrumentation for function;
16.2.2.2(5)(i)	Assembly of cleaned instruments into surgical packs and trays;
16.2.2.2(5)(j)	Steam sterilizing;
16.2.2.2(5)(k)	Plasma (hydrogen peroxide) sterilization;
16.2.2.2(5)(l)	ETO equivalent sterilization;
16.2.2.2(5)(m)	High Level Disinfectant (HLD) or sterilization of large surgical flexible instruments;
16.2.2.2(5)(n)	Storage of instruments, packs and trays for use;
16.2.2.2(5)(o)	Sterile storage for storage of sterile instruments and supplies needed to stock case carts for cases that are streamlined to maximise efficiency, ergonomically correct and leveraging technology such as RTLS tagging with temperature and humidity control;
16.2.2.2(5)(p)	Staging area for assembly of case specific surgical packs and supplies into case carts for dispatch to Surgical and Interventional Services and Maternity Centre for front-line use;
16.2.2.2(5)(q)	Perioperative instrument acquisition/repair management for Surgical Program;
16.2.2.2(5)(r)	Instrument/set loaner and consignment management for the Perioperative function of the Surgical Program;
16.2.2.2(5)(s)	Perioperative Capital equipment and Supply Management for Surgical Program;

16.2.2.2(5)(t) Real-time communication (through communication solution) to the OR to facilitate sterile supply transactions to/from the OR on an emergent need basis;

16.2.2.2(5)(u) Provision of front-line MDRD support to the OR, through a MDRD workstation in Sterile Core-Equipment/Supplies, adjacent to the Clean MDRD Elevators and in proximity to the Charge OR RN, to be able to interact with the picking resource in MDRD and View inventory; and

16.2.2.2(5)(v) Provision of an instrument inspection station complete with the most modern tools and equipment available to assess perioperative instruments going out for repair or returning from repair.

16.2.2.2(6) The Clean Cart/Wire Shelving Hold area in MDRD Sterile Storage and Distribution will have Direct Access to dedicated Clean MDRD Elevators;

16.2.2.2(7) Continued use of the VCHA/PHC regional instrument tracking information system and use of regional EMR will improve quota management, delivery accuracy and provide data to track outpatient and inpatient procedures and workflow.

16.2.2.2(8) Scope of Educational Activity

16.2.2.2(8)(a) MDRD will generally provide clinical resources in support of teaching programs for the following types and anticipated maximum number of students at any given time: Minimum of eight (8) MDRD students and two (2) Perioperative RNs. New Staff recruited to work in this Component will require orientation and on-the-job training. Unless CSA certification and recertification becomes mandatory, all teaching and supervision functions will be accommodated in the general work areas and will not require specialized or dedicated facilities in this Component.

16.2.2.2(8)(b) In-service teaching for any Staff will be conducted on a regular basis throughout MDRD’s spaces. Allied programs will be provided the opportunity to tour MDRD as part of their orientation to Facility operations.

16.2.2.2(9) Scope of Research Activity

16.2.2.2(9)(a) Research conducted in this Component will support service quality initiatives including studies into Infection Prevention and Control protocols and outcomes. This type of research will be accommodated in the general work areas, and will not require specialized or dedicated facilities in this Component.

16.2.2.2(10) Scope Exclusions

16.2.2.2(10)(a) Scopes and Minor Procedures Zone will include a Scope Reprocessing area for reprocessing.

16.2.2.2(10)(b) Outpatient Care Centre will include a Satellite Scope Reprocessing space for reprocessing.

16.2.2.3 Central Food Production

16.2.2.3(1) Freshly prepared onsite food production using an advanced 5 day cook chill system that also supports the Vancouver General Hospital (VGH) campus means a wide variety of menu items and improved efficiency.

16.2.2.3(2) Food services will include the CFP that will provide the storage, preparation, cooking, chilling, assembly and refrigerated holding as well as pot washing needs for Patients within the Facility and the VGH campus.

16.2.2.3(3) Food services will also include the Nutrition Centres, Dining/Activity Areas, Serveries, Complete Nourishment centres and Nourishment Rooms within each campus to facilitate plating and service for clients.

16.2.2.3(4) Foods for the two health care facilities will be assembled in bulk in the CFP and transported internally to the decentralized foodservice Nutrition Centres and Serveries at NSPH and overland by refrigerated truck to food depots at Banfield and the Jim Pattison Tower at the VGH campus.

16.2.2.3(5) Meals are assembled and served on Locally Assembled Trays (LATs) in the Nutrition Centres on the inpatient units or via table service in Dining/Activity Areas immediately adjacent to the Serveries in Mental Health units and Centre for Healthy Aging depending upon Patient requirements. Access to Nutrition Centres is limited to Food Services Staff. Meals will be available on trays for Patients in IPUs and Maternity Centre.

16.2.2.3(6) Patients in Critical Care Complex Component will be served small meals and nourishments throughout the day from Complete Nourishment centres.

16.2.2.3(7) Patients in day surgery or ED may be served small meals pre-packaged as meal kits.

16.2.2.3(8) The meal service areas – Nutrition Centres, Dining/Activity Areas, Serveries, Complete Nourishment centres and Nourishment Rooms will be consistent in terms of design and equipment across all programs and will be designed so that they can be secured at off meal periods and will include commercial grade appliances, Millwork and finishes. The location of these rooms within a Component will provide separation of clean and soiled flows in relation to other functions.

16.2.2.3(9) Clinical Dietitians will provide consultation, nutrition assessments, counseling and dietary notations (restrictions, allergies, texture modification etc.). Clinical Dietitians will be responsible for nutritional assessment and care plan development, client monitoring and outcome measurements for Patients.

16.2.2.3(10) Functional areas within the CFP will be located to ensure flow of product from receiving, storage, preparation, cooking supported by tumble chill technology, blast chilling and freezing, through to prepared food holding and bulk food cart assembly and distribution internally to the Patient units at St. Paul's and to the food depots at the VGH campus. A forward flow circulation system will be used for all food items to eliminate cross contamination between raw ingredients and prepared food items.

16.2.2.3(11) Menus

16.2.2.3(11)(a) The menu will be based on a regional master menu guide. The menu offering will vary by case mix, age and ethnicity to ensure Patient satisfaction and nutritional health.

16.2.2.3(11)(b) The Patient meal service at the Facility will be predicated on a spoken menu and/or dining on call concept as determined by the clinical Staff. Food Services Staff will facilitate meal selection by Patients at the bedside or in the Dining/Activity Area just prior to meal service.

16.2.2.3(11)(c) Food Services Staff will solicit menu selections at least twice per day, an hour or two in advance of lunch and dinner with next day breakfast selection made either at the time of service or with dinner selection in mid-afternoon depending on Patient and clinical unit preferences.

16.2.2.3(11)(d) Meal selections are entered into an electronic tablet or hand-held device which automatically transmits and tallies meal selections within the nutritional care dietary software. FA then prepare and assembly the meal selections in the Nutrition Centres or Serveries located within the Patient units.

16.2.2.4 FMO

16.2.2.4(1) FMO Services are provided through work completed in FMO workshops and by FMO Staff attending the location in the Facility that requires maintenance and/or repair. FMO Staff also operate the building heating and cooling from the FM Maintenance Operations and the Energy Centre Control Room.

16.2.2.4(2) The FMO Staff require the ability to communicate with each other and security across the Facility.

16.2.2.5 Logistics Centre

16.2.2.5(1) Both medical and non-medical supplies will be received in bulk daily from a central warehouse or directly from vendors.

16.2.2.5(2) Distribution from the Logistics Centre to other areas of the Facility will be supported by AGVs for the delivery and movement of goods, clinical supplies and other materials for improved operational efficiencies.

16.2.2.5(3) AGVs will efficiently execute delivery and transportation of goods currently performed by Staff. They will be programmed to travel and navigate specific routes within the Facility, independently operate dedicated FM Service Elevators and have the capacity to deliver a range of goods and materials, varying in size and type.

16.2.2.5(4) Benefits of Automation include the following:

16.2.2.5(4)(a) Staff will spend more time providing or supporting Patient care, contributing to better health outcomes, rather than on logistical tasks like transporting supplies or goods vertically throughout the Facility.

16.2.2.5(4)(b) Integrated Staff and improved communication.

16.2.2.5(4)(c) The automation of the delivery of goods and services includes creating a new “multi-skilled worker” (MSW) position. The MSW will work closely with program and unit-level Staff, resulting in a more efficient and Patient-centric approach by

having a familiar face that is readily available and familiar with the needs and requirements of the Patients, Staff and their Component.

16.2.2.5(4)(d) AGVs provide efficient, accurate and safe transportation of goods and materials. AGVs have the capacity to deliver and transport a variety of goods and materials, ranging in size and weight. This will result in a reduction in the risk of injuries related to transporting materials.

16.2.2.6 Integrated Protection Services

16.2.2.6(1) Hybrid parking service delivery model

16.2.2.6(1)(a) In-House, bargaining unit and excluded Staff provide services including, but not limited to:

16.2.2.6.1.(a).1 Parking services

(a).1.1 Management of all parking contracts

(a).1.2 Providing a safe and secure parking environment for all groups

(a).1.3 Provision and distribution of the distribution of all employee, physician, contractor, student and volunteer parkers

(a).1.4 Management of parking area maintenance

16.2.2.6.1.(a).2 Access control support and Photo ID

(a).2.1 Design and production of badge/ID for all groups

(a).2.2 Distribution of Photo ID to Staff and others as necessary

16.2.2.6.1.(a).3 Transportation Demand Management

(a).3.1 Cycle to Work

(a).3.2 Carpool/Rideshare to Work

(a).3.3 Transit to Work

(a).3.4 Charge Your Electric Vehicle (EV) at Work

16.2.2.6(1)(b) Contracted Parking Services

16.2.2.6.1.(b).1 Manage and supervise the proper and efficient parking of all vehicles;

16.2.2.6.1.(b).2 Active patrol, enforcement, and violation collection;

16.2.2.6.1.(b).3 Maintenance of all surface lots and parkades

16.2.2.6.1.(b).4 Supply, install, maintain, repair; and replacement of all parking control equipment.

16.2.2.6(2) Hybrid protection service delivery model

16.2.2.6(2)(a) In-house, bargaining unit excluded, management Staff provide services including, but not limited to:

- 16.2.2.6.2.(a).1 People and asset protection for all areas within the Health Campus.
- 16.2.2.6.2.(a).2 Oversight and direction of Security operations.
- 16.2.2.6.2.(a).3 Corporate security, development and oversight of protection policies and strategic planning, management of security contracts, metrics, analytics and performance measures, and protection program planning.
- 16.2.2.6.2.(a).4 Conducting and supporting confidential investigations.
- 16.2.2.6.2.(a).5 Leadership of the corporate Threat Assessment & Management program relating management to the evaluation and mitigation of situations involving potential violence (including targeted and domestic violence) to ensure the overall safety of victims and individuals involved.
- 16.2.2.6.2.(a).6 Physical security risk assessments of property, including providing recommendation and requirements on physical design or technical input for new construction or major renovations.
- 16.2.2.6.2.(a).7 Management of security systems with respect to video Surveillance; Panic/Duress Alarms; Intrusion Alarms; access control.
- 16.2.2.6.2.(a).8 Expertise and support in the design of physical security systems including: video Surveillance; Panic/Duress Alarms; Intrusion Alarms; access control.
- 16.2.2.6.2.(a).9 On-going liaison/communications with local Criminal Justice organizations.
- 16.2.2.6.2.(a).10 Protection communications, including security alerts to the organization for high risk individuals or significant incidents.
- 16.2.2.6.2.(a).11 Security education and training for Health Campus Staff.

16.2.2.6(2)(b) Contracted Security Services

- 16.2.2.6.2.(b).1 The contract security provider is responsible for the daily delivery of site security “guard” related services.
- 16.2.2.6.2.(b).2 Site Security performs a variety of functions in regard to security related events, loss prevention, emergency event support, investigation, post orders and procedures;

aids in the safeguarding of a safe environment for Patients, visitors and Staff for the assigned location.

16.2.2.6.2.(b).3 These services include, but are not limited to:

(b).3.1 Security patrol;
(b).3.2 Emergency response;
(b).3.3 Routine assistance;
(b).3.4 Support clinical Staff in management of aggressive Patients/clients;
(b).3.5 Documentation of activities and incidents;
(b).3.6 Monitoring of site security systems;
(b).3.7 Staff escorts;
(b).3.8 Participate in local committees, as required;
(b).3.9 Fire safety drills and inspections;
(b).3.10 Audit of security/ safety related processes;
(b).3.11 Locking and unlocking the Facility, as required; and
(b).3.12 Support to health organizations in the application of corporate policies.

16.2.2.7 Equipment Depot

16.2.2.7(1) The Facility will include an Equipment Depot (EQD) and Mobile Equipment Cleaning & Disinfection (MECD) Team.

16.2.2.7(2) The MECD Team in the Facility complimented by the EQD ensures clean mobile equipment is available in the right place, at the right time and in the appropriate quantity. The following are MECD program goals and objectives:

16.2.2.7(2)(a) Eliminate equipment being stored in distributed areas throughout the Facility (public corridors, offices, empty AIRs, etc.);

16.2.2.7(2)(b) Ensure equipment is being cleaned and disinfected properly between Patient uses;

16.2.2.7(2)(c) Decrease infectious outbreaks;

16.2.2.7(2)(d) Eliminate hoarding of equipment; and

16.2.2.7(2)(e) Encourage sharing of equipment between units and services.

16.2.2.8 Environmental Services

16.2.2.8(1) EVS will be responsible for cleaning services within the Health Campus including the following:

16.2.2.8(1)(a) Physical building surfaces (floors, walls, windows, ceilings, etc.

16.2.2.8(1)(b) Furnishings

16.2.2.8(1)(c) Selected equipment

16.2.2.8(2) In addition, EVS is responsible for the exterior window cleaning, pressure washing of walkways and patios, and routine cleaning of perimeter and walkways.

16.2.2.8(3) EVS will maintain their fleet of equipment (floor washers, scrubbers, vacuums, etc.).

16.2.2.8(4) EVS also supplies/replenishes garbage bags (all waste streams) paper products (toilet paper and paper towels), hand sanitizer, soap, and manages associated dispensers.

16.2.2.8(5) This program Component will accommodate the spaces required to support EVS central administrative, clerical, communications and storage functions. Decentralized Housekeeping Closets will also be provided throughout the Facility.

16.2.2.8(6) EVS will manage the Waste Management process. Waste Management will begin at the point-of-use, therefore holding rooms for regular garbage, mixed recyclables, biomedical waste containers including sharps will be provided at strategic points throughout the Facility. EVS will have no access to confidential waste as to preserve our secure chain of custody.

16.2.2.8(7) Additional EVS services include:

16.2.2.8(7)(a) Moves and set-ups within the Health Campus.

16.2.2.8(7)(b) Pest control services encompassing the entire Health Campus.

16.2.2.8(7)(c) Reporting Facility conditions that affect the cleaning operation or present as a safety hazard.

16.2.2.8(7)(d) Collect and deliver lost and found articles to IPS.

16.2.2.9 Cycling Centre

16.2.2.9(1) Cycling Centre provides lockers, washrooms and showers for Staff who arrive on site by bicycle.

16.2.2.10 Waste Management

16.2.2.10(1) Waste products generated will be compliantly segregated as per their waste type at point of origin. Compliant containers will be used for each of the different waste types generated. Operation of this system relies on appropriate containment facilities for each type of waste product beginning at where the waste is generated followed by similar, but progressively larger, containment facilities at key collection locations.

16.2.2.10(2) On each IPU, Waste Management is understood to begin in the individual Patient Rooms with collection and temporary holding in the Soiled Utility room located on each 16-bed pod. Each administrative area will also accommodate segregation of the types of waste products typically generated in these types of spaces.

16.2.2.10(3) Segregation of wastes will accommodate the following categories of products:

16.2.2.10(3)(a) General garbage;

16.2.2.10(3)(b) Sharps, non-anatomical, anatomical, cytotoxic (including potentially biohazardous items);

16.2.2.10(3)(c) Confidential Paper and mixed media;

16.2.2.10(3)(d) Infectious or contaminated wastes (excluding sharps);

16.2.2.10(3)(e) Clean paper and cardboard;

16.2.2.10(3)(f) Clean metal (tin and aluminum);

16.2.2.10(3)(g) Clean recyclable plastics, batteries, Styrofoam, electronics, single use pallets;

16.2.2.10(3)(h) Compostable materials; and

16.2.2.10(3)(i) Pharmaceutical Waste.

16.2.2.11 Laundry and Linen Services

16.2.2.11(1) Laundry and Linen Services will provide clean linen to all Components within the Facility and will remove and process all soiled linen from units\Components.

16.2.2.11(2) EVS maintains/manages their own laundry supplies (i.e. microfiber cloths, mops) through their third party vendor.

16.2.2.11(3) Laundry and Linen Services have a centralized Store-Clean Linen Hold for storage of clean linen, and distributed Alcove-Clean Linen and storage for soiled linen and laundry in the clinical areas.

16.2.2.12 Central Mail Services

16.2.2.12(1) Central Mail Services facilitate the process and movement of internal (throughout the Authority), federal (Postage) and small parcels for inbound and outbound items.

16.3 OPERATIONAL CONSIDERATIONS

16.3.1 Service Delivery Principles and Methods

16.3.1.1 Work Processes and Flows

16.3.1.1(1) Biomedical Engineering

16.3.1.1(1)(a) The following are the main operational considerations for Biomedical Engineering:

16.3.1.1.1.(a).1 Efficiency in Circulation

(a).1.1 Biomedical Engineering Staff will frequently travel to other Components to troubleshoot and/or repair equipment. Urgent requests and needs for STAT services will require that this Component be located strategically within the Facility to efficiently respond to requests.

16.3.1.1.1.(a).2 People Management Systems

(a).2.1 Biomedical Engineering Staff will have unrestricted, but controlled access to this Component at all times. Unauthorized personnel will not have access to this Component's interior space.

(a).2.2 The Component will serve as a "home base" for Staff and students at which informal meetings, training sessions and assignment briefings will be conducted.

16.3.1.1.1.(a).3 Information Management Systems

(a).3.1 Most "active" information used in this Component will be stored and managed electronically. Service records, purchase/receipt orders, equipment dispatch records and Staff work records will be entered at local terminals by Component Staff.

(a).3.2 Component Staff will maintain a library of hard copy equipment manuals, but this function will diminish as manuals and technical

information become accessible through company web sites and electronic libraries.

16.3.1.1.1.(a).4 Materiel Management Systems

(a).4.1 Equipment Management

(a).4.1.1 All orders for new equipment will be submitted and processed electronically. Orders for new equipment originating in other Components will be sent initially to the Biomedical Engineering for verification of compliance with current standards. Approved orders will be forwarded to the Facility's Logistics Centre for processing.

(a).4.1.2 Equipment and supplies arriving at the Facility and destined for the Biomedical Engineering Component will be received and checked against purchase/shipping orders in the Logistics Centre. Boxes containing more than 1 item will generally not be broken down in the Logistics Centre but will be delivered intact to the Biomedical Engineering where they will be unpacked, confirmed and taken into inventory.

(a).4.2 Waste Management

(a).4.2.1 To the maximum extent possible, waste products will be managed according to a system of segregation at point of origin and sequential consolidation. Operation of this system relies on appropriate containment facilities for each type of waste product beginning at where the waste is generated followed by similar, but progressively larger, containment facilities at key

collection locations. In the Biomedical Engineering, waste management is understood to begin at the technical workstations. An administrative area will also accommodate segregation of the types of waste products typically generated in these types of spaces.

(a).4.2.2 Segregation of wastes will accommodate general garbage and Sharps (including potentially biohazardous items). The description of Biomedical Waste is an Umbrella term that captures several types of waste each of which has different regulatory requirements and different containers, colours, packaging and end disposal requirements. Each Biomedical waste type generated will require different containers, such as: Non-anatomical, Sharps, Anatomical, Cytotoxic, Cytotoxic or Sharps.

16.3.1.1(2) MDRD

16.3.1.1(2)(a) Patient Information Management and Flows

16.3.1.1.2.(a).1 MDRD will be connected to the regional EMR with read-only access to the slate booking system to facilitate communication between MDRD and perioperative areas for case planning, instrumentation dispatch and return for instrumentation and supplies.

16.3.1.1.2.(a).2 For all MDRD stations, there will be active workflow terminals to allow for MDRD Staff to search, review, add inputs, and add outputs in to the regional instrument tracking station. There will also be ceiling mounted displays for Patient tracking boards to indicate Patient flow through links to the EMR. Inventory will be managed through use of these two

regional systems in addition to the e-procurement system.

16.3.1.1.2.(a).3 All major reprocessing equipment, such as sterilizers and washers, will be directly interfaced to the regionally accepted instrument tracking system to facilitate electronic storage of cycles for quality assurance and quality control purposes.

16.3.1.1.2.(a).4 All MDRD stations and/or MDRD Staff will have a voice communication solution to access the most appropriate resource to assist in workflow or customer service (e.g. perioperative suites).

16.3.1.1.2.(a).5 The layout of Component will be flexible to accommodate tools to suit changes in the regional instrument tracking system

16.3.1.1.2.(a).6 MDRD will accommodate documentation capabilities for maintaining both paper and electronic records.

16.3.1.1(2)(b) Instruments Processes and Flows

16.3.1.1.2.(b).1 MDRD uses one-way workflow, which includes the following steps:

(b).1.1 Decontamination - Medical devices will be transported in closed case carts and arrive in the Decontamination Area, immediately after use, via dedicated Dirty MDRD Elevators from Surgical and Interventional Services and Maternity Centre. Items for reprocessing from departments without Direct Access to dedicated Clean and Dirty MDRD Elevators will be delivered via Back of House circulation routes to a door to the Decontamination Area of the Component. At entry to Decontamination Area, there will be a Vestibule-Gown/De-Gown to accommodate a dedicated hand hygiene sink, a donning and doffing area, a Scrubs Dispenser for clean garments and supplies and an adjacent Washroom-Staff. Upon arrival in Decontamination Area, all carts will be scanned and received into the instrument tracking system and then dispatched to appropriate

work/sink stations for emptying and sorting to facilitate for instrument scanning, soaking and staging for cleaning/disinfection as per manufacturer specific reprocessing instructions. At this stage, any hard containers are routed for washing and disinfection through the cart washer system along with case carts. Instrumentation requiring hand-wash will be directed to a specific station for incoming scanning, testing, cleaning and disinfection prior to passing through instrument washer/disinfectors from Decontamination Area to Clean/Assembly Area. For items to be washed and thermally disinfected in instrument washer/disinfectors, the instruments will be placed in wire racks, on waiting manifolds that are validated for the make/model of pass through system and brought to the instrument washer/disinfectors to have the wire rack loaded onto a conveyor system to feed to the next available chamber for a specifically programmed cycle. Carts, instrument pans, bins or other large devices from the ORs (such as TEE probe transport systems) will be cleaned in the cart washers, exit into the Cart Drying Room and then moved to the Sterile Storage and Distribution area. In the event of loss of automated services, there will be an area for manual wash-down of carts to accommodate downtime procedures. The Dirty Cart Hold area will act as a manual wash-down area during cart washer downtime. The Dirty Cart Hold area will include floor drains, spray wands and anti-slip flooring. All other specialty instruments, such as TEE probes and instruments with small lumens, will be loaded into the small lumen ultrasonic cleaner and TEE probe reprocessor after being hand-

washed, to facilitate automated cavitation, cleaning and chemical and/or thermal disinfection. These instruments will then be transferred to drying cabinets in this area prior to being moved to the Clean/Assembly Area through a pass through chamber. Other than TEE probes, flexible endoscopes delivered to the main MDRD that require High Level Disinfection (HLD) will be routed via dedicated MDRD Dirty Elevators to the Scope Reprocessing area for reprocessing. All sinks will be height adjustable with all tools required for flushing and drying with handheld devices on coiled/flexible lines with DISS connections. The work area will be an open area to maximize staging, work space, with appropriate temperature, humidity and air changes per Schedule 3 [Design and Construction Specifications]. Floor drains are required to manage intermittent flooding of automated machines. Hand hygiene sinks will be located at all major points of entry/exit to Decontamination Area. In addition, an Emergency Shower/Eyewash will be centrally located in Decontamination Area with Convenient Access to Workroom-Decontamination to maximize access.

(b).1.2 Clean / Assembly - Instrument washer/disinfectors will use a conveyor system to automatically discharge cleaned instruments into Clean / Assembly Area. All other specialty instruments, such as TEE probes and instruments with small lumens, will be forwarded from Decontamination Area to Clean/Assembly Area through a pass through chamber or an automated sliding glass door (for larger items) that is adjacent to instrument washer/disinfectors and will then be moved to Sterile Storage and

Distribution area. Wire racks of disinfected instrument containers from cart washers, will be fed to assembly workstations for use in packing instrument sets. These items will be sorted and dispatched to a range of assembly workstations based on the type of service that owns instrumentation (e.g. orthopaedic surgery) and how instrumentation will be packaged as a final product based on sterilizer specific wrapping or sterilizer specific peel pouches. Dryers will be located throughout the area to ensure items that need additional drying time are fully dry prior to inspection and sterilization. MDRD Staff at each assembly workstation will be operating from height adjustable tables and use the instrument tracking system to scan instruments/sets to start the processes of inspection through use of specific tools, counting, assembling and packing activities. All unsterile implants will be stocked and stored in Store-Implants adjacent to the assembly workstation for specific service. In the event that an instrument fails inspection, or a set fails the count procedure, the respective items will be identified, placed aside or labeled and sent to a designated area for follow-up or sent back to Decontamination Area via the Instrument Return pass through chamber. In the event that a spare instrument is required, there will be a storage area where all common instruments will have a back-up supply and be easily located and displayed for replenishment. For items that pass and are appropriately packed, they will be dispatched to the appropriate assembly workstations to finalize packing using sterilizer specific and validated materials. All items will have an instrument tracking

system label to summarize contents and quality control information. After packing, items will be appropriately packaged and labelled and will then be staged on carriages for specific sterilization modalities. When ready to be loaded into the sterilizers, the product will be scanned into the instrument tracking system as a sterilizer batch prior to loading. As required, a Biological Indicator (BI) will be assigned to the load. There will be hand hygiene sinks at all major point of entry/exit within this area. At entry to Clean / Assembly Area from the corridor, there will be a Vestibule-Gown/De-Gown to accommodate a dedicated hand hygiene sink, a donning and doffing area, a Scrubs Dispenser for clean garments and supplies and an adjacent Washroom-Staff. There will also be an automated sliding glass door between the Clean / Assembly Area and Sterile Storage and Distribution. There will be a central RN Workstation adjacent to Workstation-MDRD area, sterilizers and door to Sterile Storage and Distribution area to allow for central viewing and support. This central Workstation will require similar tools used at an assembly workstation in addition to administration tools to plan, communicate and provide space for incoming inspection of loaner equipment and sets for sterilization.

(b).1.3 Sterilization - It is expected that over 60% of Facility products will continue to be steam sterilized through a bank of industrial pre-vac cycle sterilizers. Adequate pre and post staging spaces is required for all carriages. Multiple Low Temperature Vapour or Low Temperature Plasma sterilizers will be required to sterilize instruments not validated as compatible for steam sterilization which will also include adjacent pre

and post process staging space through use of worktables as these systems do not accommodate carriages. While all sterilization cycles will require the use of BI, a recessed area, adjacent to the sterilizers but out of general circulation, is required to allow for incubation and tracking of all used BIs. Post steam sterilization used carriages of instrumentation will be moved to an enclosed Cool Down area prior to final inspection of load. The Cool Down area will not have any active fans, at risk of contributing to condensate, and will be able to accommodate a minimum of six (6) product carriages for a period of 1-2 hours. All low temperature product and “safe to handle” steam product will be checked and, pending no issues with the BI or problems with inspection, scanned as “accepted” sterile product and transferred into the Sterile Storage and Distribution area to be either sent to the OR (if fast-tracked), moved to the Clean Cart/Wire Shelving Hold area to be stocked on shelves, or directly routed to staged case carts due to visual announcements that picking is searching for “missing” instrumentation. To mitigate steam quality issues, maintenance area is required.

(b).1.4 Sterile Storage and Picking - Sterile supplies and instruments will be stored on moveable, wire shelving or high density storage racks in Clean Cart/Wire Shelving Hold area. Sterile Storage and Distribution area will be adjacent to the Cool Down area but fully separated by a wall. This area will be designed to physically protect sterile stock from environmental contamination. Any entry into Sterile Storage and Distribution area from Clean / Assembly Area will be through an automated sliding glass door. A

storage solution will maximize vertical space and minimize risk of using ladders or biomechanical motions that increase risk of shoulder and back injury. The solution will effectively manage instrument trays that weigh 10 kg each. The shelves will be designed for maximum efficiency by Staff and ergonomically to support Staff in the picking process. Storage of expensive sterile implants of small and large sizes will also be accommodated in Clean Cart/Wire Shelving Hold area. Thermally disinfected case carts will be stored in Clean Cart Holding area with direct adjacency to Clean Cart/Wire Shelving Hold area to allow for access to picking during evening hours. When ready to be scanned and distributed, case carts will be sent to a holding area in Clean Cart/Wire Shelving Hold until ready to be moved to Clean Elevator Loading Area and dispatched through the dedicated Clean MDRD Elevators to Surgical and Interventional Services and Maternity Centre where they will be distributed to the appropriate Procedure Rooms and ORs. MDRD will hold staged case carts throughout the business day or accept unused case carts from cancelled procedures in Clean Cart/Wire Shelving Hold area. Where each procedure may require an average of three (3) large case carts, there will be enough staging space in the OR for storage overnight and in the MDRD for soiled staging, clean staging and clean storage activities. There will be sufficient space for MDRD to accommodate 99% of the large, clean case carts in Sterile Storage and Distribution over the weekend without impacting workflow of weekend Staff. For the picking function within this area, a height-adjustable Workstation

will be located adjacent to the Clean MDRD Elevators and Clean Cart/Wire Shelving Hold area. This Workstation will include an instrument tracking system terminal (dual display), dedicated work area for EMR, a ceiling mounted display for real-time flow in perioperative areas, direct communication with the ORs and all required printers and labels for workflow. Sterile supplies and instruments for departments without Direct Access to the Clean and Dirty MDRD Elevators will be transferred to Dispatch Room and delivered to these departments via Restricted Circulation routes.

(b).1.5 Planning assumes RFID will support inventory management. Under this system of inventory control, materials and items will be replenished just-in-time and will be available and accessible for Staff as soon as needed. Depleted tagged items and/or bins will be placed on an electronic monitoring board. All orders will be sent electronically to the Logistics Centre for processing.

16.3.1.1(2)(c) Provider Work Processes and Flows

16.3.1.1.2.(c).1 Devices Workflows

(c).1.1 Unless otherwise specified, MDRD work will only take place in dedicated reprocessing areas that comply with the design, construction, and environmental requirements described in the CSA standards.

(c).1.2 Clean and soiled rooms used for reprocessing of devices will comply with CSA standards to ensure safe mechanical provisions with increased air changes, relative pressurization and room level monitoring.

(c).1.3 Multiple workstations throughout the Component will require use of Instrument Air with dedicated calibrated regulators for instrument drying. All gas connections will be

Diameter Index Safety System (DISS) connector type.

(c).1.4 All workstations will have tools to support all activities relating to tracking, disassembly, washing, inspecting, assembly, packaging and tagging. All workstations will allow ergonomic positioning to mitigate muscular strain and minimize steps to access key tools for efficiency.

(c).1.5 Contaminated devices will be completely separated from clean devices. Contaminated devices will flow one-way from the soiled to the clean areas. Materials will not move in the opposite direction at any point unless flagged for further reprocessing due to contamination or to a problem found during secondary inspection in the Clean / Assembly Area.

(c).1.6 There will be dedicated Clean and Dirty MDRD Elevators with Direct Access to the respective areas of Decontamination and Sterile Storage. The Clean MDRD Elevators will access the Sterile Core-Equipment/Supplies of the Interventional Suites, ORs, C-section ORs and General Procedure Rooms. The Dirty MDRD Elevators will leave from the contaminated area of the Interventional Suites , ORs, C-section ORs and General Procedure Rooms, and access the MDRD Workroom-Decontamination.

(c).1.7 No Patient equipment or non-critical devices will be routed through MDRD. All Patient contact surfaces and Components will be processed at direct POC or through an Equipment Depot solution. Unit-based or non-surgical supplies will be stocked at point of use by material management resources. Semi-critical flexible scopes, that are not validated or compatible for sterilization, will be decontaminated and high-level

disinfected in the Scope Reprocessing area in the Scopes and Minor Procedures Zone, Satellite Scope Reprocessing area in Outpatient Care Centre or at point of use.

(c).1.8 All soiled carts used to transfer soiled devices, pans used to hold sterile instrumentation and bins for used instrumentation, will be collected following unloading and sorting process to be routed through an automated Cart Washer Enclosure to the Cart Wash/Hold area. There will be three (3) cart washers to maximize flow of inventory at peak times.

(c).1.9 Sorted items will be transferred using the appropriate wheeled solution to the appropriate Workroom-Decontamination area and/or Instrument Wash equipment where they will be processed manually or automatically. Small lumen cleaners and or cavitation systems will be used for critical devices that have joints, crevices, lumens, or other areas that are difficult to clean. An automated TEE probe reprocessor will be located in Workroom-Decontamination area to allow for reprocessing these specific semi-critical devices. Drying cabinets will be located adjacent to the automated TEE probe reprocessor for storage of TEE probes and for other items that have gone through a thermal disinfection cycle as a terminal step prior to Patient use.

(c).1.10 Following the cleaning process, problem devices will be routed for second stage inspection and dispatch for repair either through MDRD or Biomedical Engineering. MDRD will require a device investigation station adjacent to the RN Workstation to assist in managing risk, monitor flow and respond to requests from the perioperative areas.

(c).1.11 Soiled linen and MDRD trash will be collected in appropriate containers in Disposal Hold and later transferred to respective collection destinations. All consumable waste from case carts will be disposed at point-of-use.

(c).1.12 Following the decontamination and cleaning operations, all “safe to handle” items will pass through to a Clean / Assembly Area. Clean racks, manifolds and other transfer systems used in decontamination as part of general workflow will be returned to the Decontamination Area for re-use following the removal of the clean materials. Case carts will be washed in the cart washers and placed in the Cart Wash/Hold area after drying in Cart Drying Room.

(c).1.13 Items will be sorted and transferred to the appropriate height adjustable assembly workstation. The primary function of the Workstation-MDRD area will be to prepare various instruments sets, utensils and supplies into trays and packages for front-line use and sterilization. Packaging and assembly Staff will select items needed, inspect for quality, inspect for count, restock what is missing/used and assemble them into standard and special order trays or packages with inclusion of the appropriate indicators and instrument tracking label for identification.

(c).1.14 Unless procured as sterile, linens (wrappers, towels, etc.) will have a daily quota delivered to the Store-Non-Sterile Supplies in Clean / Assembly Area by MDRD Staff to prevent contamination of the sterilized area. Linen packs/bundles will be sterilized within the MDRD by being loaded onto sterilizer carts and moved to Sterile Storage and Distribution after sterilization, with any items not requiring sterilization being

transferred directly out of Store-Non-Sterile Supplies.

(c).1.15 Medical devices will be heat and/or air dried before being reprocessed by any low temperature sterilizer units.

(c).1.16 Steam sterilizer carriages will be staged in a holding area near the sterilizers before being put into the sterilizers. Prior to loading into sterilizers, items will be batched and provided with appropriate indicators. When steam-sterilizer cycles are complete, goods are removed and held in a Cool Down area, while gas-sterilized goods are unloaded following aeration. Appropriate indicators are incubated to confirm appropriate kill rates in loads. After goods have been cooled or aerated, the loads will be accepted and the product will be re-stocked to the Sterile Storage and Distribution area.

(c).1.17 Items which have been sterilized for off-site dispatch will be placed in clean transport carts and transferred to Dispatch Room.

16.3.1.1.2.(c).2 Case Cart Assembly

(c).2.1 Batched case carts, including accessories such as bins, will be assembled in Clean Cart/Wire Shelving Hold area and Clean Elevator Loading Area (when picking for emergency cases) as part of a case cart holding and staging area. Supplies and instrumentation will be organized such that instrumentation is closest to the Clean Cart Holding area and the adjacent Workstation. Unit stock or less critical supplies will be furthest away. After case carts are assembled, they will be staged for priority dispatch in Clean Elevator Loading Area to the Surgical and Interventional Services and C-Section and Procedures ORs.

(c).2.2 Depleted supply items will be replenished to predetermined levels

on a top-up system every evening by Staff.

(c).2.3 Specialty carts will also be managed and stocked in Sterile Storage and Distribution area.

16.3.1.1(2)(d) Clinical and Logistical Support Processes and Flows

16.3.1.1.2.(d).1 The following are critical to the effective operations of this Component:

(d).1.1 Instrument IMS

(d).1.1.1 Continued use of the VCH/PHC Instrument IMS allows users to track the location of all devices in the system. It links those devices to specific Patients as an important element in Patient safety and quality assurance requirements.

(d).1.1.2 IMS provides access to standard operating procedures to reprocessing Staff and provides a permanent record that verifies critical reprocessing parameters were achieved. Managers using the data and reports from the IMS will make better informed decisions.

(d).1.1.3 IMS will track the consumption of single-use/disposable items and generate replacement orders as required.

(d).1.1.4 Combined with use of the EMR and e-procurement system, this system can be used to estimate case costing.

(d).1.2 Information Systems and Technology

(d).1.2.1 Communication methods will involve mobile phones, wireless technology, intercoms and annunciator-type video screens. Required space and infrastructure will depend on the technology selected.

(d).1.2.2 Cameras will be mounted at identified transportation

corridors and other areas, for example in Sterile Core-Equipment/Supplies and Soiled Hold-Case Carts areas in Surgical and Major Procedures Zone to alert MDRD Staff for delivery without direct voice communication from the user area.

(d).1.3 Supply Chain Services

(d).1.3.1 Linen will either be supplied through purchase of disposable options to be replenished on a quota system, through use of a contract service for sterile linen supply or through shared services for a non-sterile option. Linen will be delivered to MDRD using a cart exchange.

16.3.1.1(3) Central Food Production

16.3.1.1(3)(a) Food services includes the CFP kitchen that will provide the storage, preparation, cooking, chilling, assembly and refrigerated holding as well as pot washing needs for Patients within the Facility and the VGH campus.

16.3.1.1(3)(b) CFP will receive, store, prepare, assemble and distribute food and beverages for inpatients for NSPH and VGH. It will have the capacity to produce approximately 4500 meals per day or 6500 peak production meals adjusting the daily requirement for 5 days per week production and excepting statutory holiday weeks.

16.3.1.1(3)(c) A large percentage of Patients will be able to make meal selections at POC just ahead of service. Meals will be prepped locally, within the Component Nutrition Centres, Serveries, Complete Nourishment centres and Nourishment Rooms just prior to service.

16.3.1.1(3)(d) Receiving

16.3.1.1.3.(d).1 The loading dock will have Convenient Access to the CFP. A designated food

service loading dock is a short distance away from the CFP for receipt of incoming products. In addition, the main receiving dock platform is located at the same level as the floor in the CFP, so that incoming goods can be off loaded from the delivery trucks and moved easily to the CFP without having to go through any vertical height changes.

16.3.1.1.3.(d).2 All incoming goods will be removed from transport vehicles and placed into the receiving area. Foodservice Staff will receive and verify the shipment orders.

16.3.1.1.3.(d).3 Incoming supplies will have a dedicated entry with no cross traffic with soiled tray or food cart return and general waste routes. A non-crossing flow route for foodservice waste from the CFP to the main waste handling Facility will be provided.

16.3.1.1.3.(d).4 Perishable food supplies for NSPH will be received on-site and immediately decanted for distribution to the unit galleys. Some bakery and dairy items used as ingredients will be required for the CFP. Perishable food supplies will be received directly at the VGH campus food depots for its use.

16.3.1.1.3.(d).5 Food items received fully prepared will be immediately placed in the prepared food holding refrigerator (Food Bank) on racks designated by menu day alongside the items that have been produced on-site to complete the hot food menu requirements.

16.3.1.1.3.(d).6 Emergency food supplies for up to 72 hours for NSPH only will be stored in the CFP and rotated appropriately to ensure usability if needed.

16.3.1.1(3)(e) Decasing and Storage

16.3.1.1.3.(e).1 Perishable food products will be moved directly to the CFP area for decasing, weighing and auditing for quantity/quality and placed in the designated refrigerated and frozen walk-in units located adjacent to receiving and decasing. Non- perishable products will be moved to day and dry storage rooms.

16.3.1.1.3.(e).2 All open dry food products (grains, baking goods, etc.) to be stored in sealed airtight containers.

16.3.1.1.3.(e).3	All food items will be kept off the ground on carts/racks.
16.3.1.1.3.(e).4	Frozen or chilled procured food items that require more immediate use will be moved to the refrigerated holding room, effectively speeding up the thawing cycle. On a 5 day per week basis, general food items will be removed from refrigerators and freezers. Chilled items will be moved from refrigerated holding walk-ins and transferred to the meat and vegetable preparation areas.
16.3.1.1.3.(e).5	All temperature- controlled rooms are constructed of pre-fabricated, walk- in type insulated Underwriters' Laboratories of Canada (ULC) listed wall and ceiling panels made of 'Rockwool "at minimum 125 mm or 'foamed -in-place insulation at minimum 100 mm, sandwiched in place between exterior and interior metal skins as per the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
16.3.1.1.3.(e).6	The refrigerator and freezer walk-ins and refrigeration systems will be equipped with a sophisticated alarm system. The alarm system will monitor internal temperatures and compressor pressures to ensure that all systems are maintained within the specified temperature and pressure ranges. In the event that either a temperature or pressure goes outside the specified range the alarm system will go into an audio and visual alarm state. The alarm system is capable of sending an electronic signal to an office within the kitchen, a security station or to a remote refrigeration company/mechanic.
16.3.1.1.3.(e).7	Cooling for all walk-ins will be part of a "Rack Refrigeration system". This is a self-contained system which allows for redundancy and continuous cooling in the event of a malfunction in any one of the compressors. Computer controls also allow temperature monitoring and messages to a central computer in the dietary offices and an internal security or building automation system station. The system has a smaller footprint and is much cooler than a normal rack system. Cooling of compressors/

condensers will utilize the building's chilled water system.

16.3.1.1.3.(e).8 Floor depressions will be provided to accommodate in-slab insulation below cold storage rooms, walk-in refrigerators and freezers and ensure a level access both into and out of the units.

16.3.1.1(3)(f) Preparation

16.3.1.1.3.(f).1 Raw food ingredients for cold pre-prepared or in-house assembled items will be removed from the appropriate storage refrigerators and moved to the preparation areas or the ingredient control area. These functional spaces will be adjacent to the refrigerators and freezers for ease of removal and efficient preparation. Equipment in this area will comprise work tables, preparation sinks, assembly tables, mixers, scales, slicer, food processor and utility carts and racks.

16.3.1.1.3.(f).2 Food products requiring in-house production will be removed from their designated walk-in refrigerators and moved to the production area. Raw ingredients will be cooked, blast chilled as required and held in a chilled state on appropriate open angle holding carts in the Food Bank refrigerator. The food will then be wheeled to the central meal Clean/Assembly Areas for use in the bulk meal assembly process.

16.3.1.1(3)(g) Production/Cooking

16.3.1.1.3.(g).1 A 5-day advanced food production system is used with most hot menu items being produced and rapidly chilled using tumble chill and blast chill technology. For efficiency some items will be prepared and rapidly frozen using blast freezers. About 20% of items may be frozen and held for up to 30 days.

16.3.1.1.3.(g).2 Prepared menu items will be produced at least two (2) days in advance of requirements based on the forecasted tallies.

16.3.1.1.3.(g).3 All prepared menu items will be held in a chilled refrigerator on racks designated by menu day.

16.3.1.1.3.(g).4 Most fresh vegetables will be procured pre-prepared; that is cleaned and prepped for

use as ingredients in menu items. There will not be any large-scale processing of fruits and vegetables on site. Rather they will be received in bulk ready for portioning or use as ingredients.

16.3.1.1.3.(g).5 Meal kits for NSPH will be prepared in the nourishment and packaging area.

16.3.1.1.3.(g).6 Some specialized nourishments for NSPH and VGH will be prepared, packaged and labelled in the CFP nourishment area.

16.3.1.1.3.(g).7 The main cooking bank will be a full cook/chill operation complete with stainless steel service walls accommodating services to large kettles, smaller kettles, tilting fry pan, convection ovens, roll-in combination oven and double steamer.

16.3.1.1.3.(g).8 The full cook/chill system will also be equipped with two (2) cook/chill mixer kettles, combination tumble cook/chill tank, one vacuum filling station, one vacuum clipper complete with remote refrigeration, cook/chill air compressor and necessary mechanical support equipment.

16.3.1.1.3.(g).9 Large floor troughs are provided in-front of items that require drainage. Cook's tables, mobile racks and 80 and 40-quart mixers are adjacent to the production line.

16.3.1.1.3.(g).10 An island style "demand control" type exhaust hood complete with make up air to National Fire Protection Association (NFPA) #96 standards will be located above the cooking equipment complete with an automatic fire suppression system for equipment and exhaust hood protection.

16.3.1.1.3.(g).11 The kitchen exhaust and make up air systems will be provided to allow for year-round tempered air. Slight negative pressure will also be provided for odour control in the kitchen areas.

16.3.1.1.3.(g).12 The design of the exhaust system will provide for grease laden vapors to be filtered through an engineered system.

16.3.1.1(3)(h) Meal Assembly, Distribution and Service

16.3.1.1.3.(h).1 A central chilled 14 degree C meal Clean/Assembly Area is provided for assembly of distributed meals.

16.3.1.1.3.(h).2	Bulk meals with both chilled entrees and cold menu items will be assembled for each receiving facility, placed into transport carts and wheeled to the Distribution or Cart Marshalling holding refrigerator ready for distribution two (2) times a day to the individual hospitals.
16.3.1.1.3.(h).3	Insulated stainless steel food carts will be used to assemble food in bulk twice per day for distribution to the Banfield and JP food depots at VGH. The food will be assembled by meal usually lunch with nourishments and other prepared supplies for one early morning delivery and dinner and breakfast items for the second delivery.
16.3.1.1.3.(h).4	The bulk food for NSPH will be further broken down in the Bulk Assembly area on to racks by Nutrition Centre by meal.
16.3.1.1.3.(h).5	In the Cart Marshalling/Distribution area meals will be assembled into pre-chilled insulated Cambro style carts for distribution to the NSPH Nutrition Centres, Serveries and Dining/Activity Areas. Food carts will be taken twice per day to the Nutrition Centres, Serveries and Dining/Activity Areas.
16.3.1.1.3.(h).6	The food carts will be assembled based upon a refined tally of the initially forecasted requirement.
16.3.1.1.3.(h).7	Bulk food on the mobile food racks will be brought to the Cart Marshalling/Distribution area for transport overland in refrigerated trucks to the VGH campus.
16.3.1.1.3.(h).8	Meals for the VGH campus will be assembled for the VGH and Banfield Food Depots. Food will be assembled in bulk by pavilion for VGH. Depending upon the menu item the food will either be weighted or counted.
16.3.1.1.3.(h).9	Meals will be assembled by Nutrition Centre or Servery by meal for NSPH using Cambro insulated carts.
16.3.1.1.3.(h).10	Meals will be assembled first for VGH using stainless steel insulated carts for overland transportation.
16.3.1.1.3.(h).11	The Bulk Assembly area will have the capability to serve as the Food Depot for meal assembly and cart and pan washing for

NSPH. Counters for portioning by meals will be needed.

16.3.1.1(3)(i) Pot Washing, Cart Washing and Sanitation

16.3.1.1.3.(i).1 Soiled food transport carts from VGH will be returned to the CFP for sanitizing prior to reuse. Soiled bulk pans will be scraped and rinsed at the VGH food depots and returned in the soiled carts to the CFP for sanitizing prior to reuse.

16.3.1.1.3.(i).2 Similarly, Cambro carts will be returned from the Nutrition Centres and Serveries at NSPH and sanitized prior to reuse in the Cart Wash area of the CFP. Soiled food pans will be scraped and rinsed in the Nutrition Centres and Serveries at NSPH and returned to the Pot Washing Area in the CFP for sanitizing prior to reuse.

16.3.1.1.3.(i).3 Soiled carts will be washed in the designated Cart Wash area. A fully automated cart wash unit will wash and sanitize each cart. In addition, a fully equipped wash/detergent system is provided. Once sanitized, carts will be wheeled to the chilled Clean Cart Hold space for retrieval to the meal assembly area.

16.3.1.1.3.(i).4 A separate Pot Washing Area has been allocated complete with a three (3) compartment sink with a power soak option and a mechanical/automatic pot washer on one side to allow for effective washing of both internal soiled pots and pans and returning bulk pans. This area will be adjacent to the Clean Cart Hold space to allow for efficient clean storage/holding.

16.3.1.1(3)(j) Offices

16.3.1.1.3.(j).1 The Food Services management offices for the CFP will have Direct Access from the service corridors. The supervisors' offices are well situated for supervision and general viewing of the assembly procedure.

16.3.1.1.3.(j).2 Offices for production Staff and a Training Room/Staff Lounge will be available within the CFP. The offices will require access to both the Facility and VGH networks.

16.3.1.1(3)(k) Waste Management

16.3.1.1.3.(k).1 The waste pulping equipment utilizes a combination of a waste disposal unit and a water press with re-circulating water and is being provided at the pot washing area to reduce the volume of organic waste by up to 80%. The system is a coupled set up that has the pulper at the soiled scraping area connected by stainless steel piping to the water press located under the tabling.

16.3.1.1.3.(k).2 A biodigester for solid food waste will be located within the CFP to turn waste food into drain-safe grey water. The unit churns waste food with infusion of hot and cold water, oxygen and porous plastic “Powerchips” media that distribute microorganisms and enzymes that accelerate the decomposition of solid food waste into nutrient rich grey water that is routed harmlessly down the drain.

16.3.1.1.3.(k).3 The flow of waste does not cross the flow of food supplies being delivered to the kitchen.

16.3.1.1(3)(l) Hazard Analysis and Critical Control Point (HACCP)

16.3.1.1.3.(l).1 The CFP is designed to support a HACCP program. Hazard analysis is the process of identifying and assessing where hazards may enter the food processing flow and effect quality and food safety. Critical control points are operational procedures or functions where identified hazards will be controlled and continuously monitored.

16.3.1.1.3.(l).2 The functional areas within the CFP facilities are arranged to accommodate a forward workflow of products from receiving and storage, through to preparation, production and assembly. A separate, non-crossing flow of waste and soiled carts and service wares are required and the two workflows will not cross to avoid cross contamination. Multiple points of access and egress are required to accommodate the separation of clean and soiled waste flows.

16.3.1.1.3.(l).3 Central to the HACCP program is the control of time temperature relationships through the food processing flow. To support this effort, equipment such as walk-in refrigerators and freezers within the kitchen Facility are

provided with digital temperature recording and alarms and with internal temperature sensors. A central computerized monitoring system, which connects to the time-temperature recorders or sensors installed in the various pieces of equipment, are essential to the HACCP program.

16.3.1.1.3.(l).4 As part of the HACCP program, hand hygiene sinks with soap dispensers and/or automatic hand disinfectant stations will be provided in all work areas in the CFP, Nutrition Centres, Complete Nourishment centres, Dining/Activity Areas and Serveries.

16.3.1.1(3)(m) Patient Food services

16.3.1.1.3.(m).1 Food for meal assembly in the Nutrition Centres and Serveries at NSPH will be delivered chilled in food carts from the CFP twice per day usually dinner and breakfast foods in the pm and lunch and bulk supplies in the am.

16.3.1.1.3.(m).2 Cold food once received in the Nutrition Centres/Serveries will be held chilled until time of service in the insulated food carts except for breakfast which will be transferred to the refrigerator for overnight storage.

16.3.1.1.3.(m).3 Sandwiches and salads will be assembled in the Nutrition Centre and Servery from ingredients and salad mixtures and sandwich fillings provided from the CFP. There will be a cold food assembly counter with sink in the Nutrition Centre and Servery.

16.3.1.1.3.(m).4 Desserts will also be portioned and plated ahead of the meal service in the Nutrition Centres/Serveries. Hot desserts may be heated in advance of the meal service.

16.3.1.1.3.(m).5 Hot menu items will be heated in bulk using retherm equipment that gently heats the prepared foods to serving temperature.

16.3.1.1.3.(m).6 The methods of retherm may include bulk food retherm ovens, convection ovens and microwaves that include combi convection capabilities. Sufficient ventilation is required in the Nutrition Centres/Serveries to remove the hot air. No cooking will occur in the Nutrition Centres.

16.3.1.1.3.(m).7 A variety of meal assembly systems are available for the tray assembly in the

	Nutrition Centres from the B-lean POD style to single Person assembly.
16.3.1.1.3.(m).8	Hot and cold menu items can be assembled on trays that include covered entrée plates but require minimal insulation as the trays will be quickly delivered and served to Patients. In this manner Patient friendly china service including regular beverage mugs and plexi-glass tumblers can be used rather than portioned beverages and insulated mugs.
16.3.1.1.3.(m).9	Coffee and tea will be freshly prepared in the Nutrition Centres/Serveries. A hot water tower for tea and coffee brewing equipment will be included in a hot beverage counter that includes a sink. Hot beverage service may follow the main meal service if so decided.
16.3.1.1.3.(m).10	Tray cart racks will be used to distribute Patient trays and for pickup of soiled trays. They will be stored in the Nutrition Centres or Serveries while awaiting a wipe down after each meal. As each unit will require up to 64 trays there will be up to 6 tray carts to be stored in the ware washing area. Tray carts will periodically be rotated to the cart wash area in the CFP for a more thorough washing and sanitizing.
16.3.1.1.3.(m).11	Some soiled tray return carts will be maintained on the unit to allow for collection of soiled trays and service wares throughout the day (including in-between meal periods). Cart spaces will be provided so that carts do not remain in the corridors and are kept in Nutrition Centres instead.
16.3.1.1.3.(m).12	In the Dining/Activity Areas, Food Services Staff portion and plate the meals but usually clinical Staff assist in Patient meal selection, communicate that to the Food Services Staff, deliver the plates to Patients and assist Patients to eat if needed.
16.3.1.1.3.(m).13	Food service Staff wash and sanitize the dishes, cutlery and trays in the ware washing areas located in the Nutrition Centres or Serveries. Clean dishes are stored in the galley for immediate re-use. Dishwashing machines are planned to be ventless. Grease traps are also required to accumulate food waste grease from the sanitizing process.

16.3.1.1.3.(m).14 The dish machine will be a single tank upright machine with a scraping table and at least 3 feet of drying tabling. Dishes will be stored on mobile dish racks or cabinets for reuse in the meal service.

16.3.1.1.3.(m).15 Between meal nourishments, snacks and supplements are also assembled in the Nutrition Centres and Dining/Activity Areas and provided based upon Patient needs and the clinical program. Depending upon requirements they can be assembled and served by Food Services Staff or prepared centrally if they are specialized or require packaging and labelling.

16.3.1.1.3.(m).16 The digital information system is maintained and supported centrally by the Facility. A printer is available in the Nutrition Centre for the meal assembly tickets and nourishment labels. Most communication including text messages use the tablet or hand-held device dedicated to the Nutrition Centre or Servery.

16.3.1.1.3.(m).17 Each unit will also contain a Nourishment Room for stock of nourishments and snacks. It will contain an ice dispenser, refrigerator, domestic toaster, microwave, coffee maker, tea kettle and space for late tray cart.

16.3.1.1(3)(n) Food Services Information Management System

16.3.1.1.3.(n).1 SPH currently utilizes a computerized food service management information system. This system will be maintained to support the operation of foodservices. The specific device requirements and selection to support the service delivery have not been determined.

16.3.1.1(3)(o) Staff Facilities

16.3.1.1.3.(o).1 Food Service Staff will be provided Convenient Access to Lockers-Staff in the CFP.

16.3.1.1.3.(o).2 A male and female Washroom/Shower-Staff will be provided in the CFP. The washrooms will not open directly into any food processing area.

16.3.1.1.3.(o).3 Washroom/Shower-Staff and Lockers-Staff will be located adjacent to the Staff entry.

16.3.1.1(4) FMO

16.3.1.1(4)(a) FMO respond to requests for service which are made in one of two ways:

16.3.1.1.4.(a).1 Non- Emergency Requests

(a).1.1 All Components in the Facility would complete an online request for service. The requests are triaged to the appropriate specialty within FMO and are responded to on a priority basis.

(a).1.2 If the request is not regular maintenance but a request for additional services these requests are made through management of the requesting department and are likely to have a fee associated with the service and the materials. Once funding has been approved FMO would complete the work or have contract services complete it.

16.3.1.1.4.(a).2 Urgent Requests

(a).2.1 If the request is of an urgent nature (e.g. flood, elevator breakdown, systems failure etc.), all Component Staff would call the emergency contact number that is available both during business hours and after hours.

16.3.1.1(5) Logistics Centre

16.3.1.1(5)(a) All deliveries either from the warehouse or directly from vendors will be received at Central Receiving & Breakdown in the Logistics Centre. From there, the items will be delivered to the appropriate holding/staging area or department either by hand-delivery or AGV.

16.3.1.1(5)(b) The Logistics Centre will also oversee the EQD and the MECD.

16.3.1.1(5)(c) The MECD team is focused on cleaning and disinfecting IV equipment, stretchers, wheelchairs and other mobile equipment. The program strengthens best practices by ensuring quality, safety and availability of mobile Patient care equipment; it is signified by the “Green Means Clean” process for tagging clean equipment and

includes an improved method for reprocessing, storing and tracking.

16.3.1.1(5)(d) Clean linen will be delivered by an outside supplier daily as described in Laundry and Linen section.

16.3.1.1(5)(e) Food products will be delivered directly by vendors to the CFP while pharmaceuticals will be delivered directly to the Main Pharmacy or Specialty Pharmacy by vendors. These deliveries will still access the loading docks for offloading and staging before products are moved by vendors to designated locations in the CFP, Main Pharmacy or Specialty Pharmacy.

16.3.1.1(6) Integrated Protection Services

16.3.1.1(6)(a) Staff will contact security services via a 4-digit local, or contact switchboard to:

- 16.3.1.1.6.(a).1 Implement emergency code and urgent security responses;
- 16.3.1.1.6.(a).2 Implement security/safety risk mitigation procedures (e.g. access control protocols);
- 16.3.1.1.6.(a).3 Request additional security patrol;
- 16.3.1.1.6.(a).4 Document high volume or time sensitive work flows, activities and incidents;
- 16.3.1.1.6.(a).5 Monitor site security systems; and
- 16.3.1.1.6.(a).6 Lock and unlock the Facility, as required.

16.3.1.1(7) Equipment Depot

16.3.1.1(7)(a) The MECD team members check the Soiled Equipment Hold for equipment and have it transported to a designated cleaning area. The first step is a thorough, visual inspection to confirm there is no damage to the equipment. Then the team will proceed to perform a detailed, comprehensive cleaning and disinfection. Finally, the item is tagged with a green “I am Clean” sticker, letting clinical Staff know the equipment is ready for the next Patient, and is stored in the Store-Local Equipment or Store-Central Equipment on the unit according to quotas. Excess equipment is moved off the unit to maintain quotas on other units or stored in the EQD.

16.3.1.1(7)(b) In the NSPH, Equipment will be tracked using RTLS that will enable efficient and effective

management of the equipment fleet, by guiding the cleaning and replenishment needs of the Facility.

16.3.1.1(7)(c) Each clinical unit has pre-established quotas of equipment that the MECD team members are responsible to fulfill and balance, and any extra equipment is taken to the Equipment Depot. The MECD team responds to spikes in the need for equipment. Instead of having clinical Staff looking for extra equipment they can simply contact the Equipment Depot and make a request and a MECD team member will deliver it within minutes.

16.3.1.1(8) Environmental Services

16.3.1.1(8)(a) CQI and innovation initiatives will be supported within EVS.

16.3.1.1(8)(b) Staff will be assigned to specific areas of the Facility to provide cleaning services.

16.3.1.1(8)(c) Staff will sign-in/log-in centrally. The storage, maintenance and charging of large pieces of cleaning equipment (e.g. auto scrubbers, burnishers, floor finishing/ stripping machine, etc.) will be accommodated centrally, as will the storage of bulk cleaning supplies.

16.3.1.1(8)(d) Housekeeping Closets will be used as satellite storage for selected floor care equipment, such as wet-vacs and floor fans, and will be located strategically in areas such as ED Entrance and Triage/Reception and Main Entrance Lobby.

16.3.1.1(8)(e) Traditional Housekeeping Closets and Utility-Personal Laundry rooms will be developed to efficiently service the needs of Patient care and treatment areas of the Facility. The Housekeeping Closets will accommodate a floor sink, a closed system for chemical dispensing, burnisher, vacuum, housekeeping cart, cleaning and paper supplies.

16.3.1.1(9) Cycling Centre

16.3.1.1(9)(a) Cycling Centre provides users with safe and secure bike lockup/storage while at work.

16.3.1.1(9)(b) Cycling Centre provides lockers, washrooms and showers for Staff who arrive on site by bicycle.

16.3.1.1(10) Waste Management

16.3.1.1(10)(a) The various forms of soiled material handling/waste management will be addressed as follows:

16.3.1.1.10.(a).1 General garbage will be collected on the Patient care units from individual Patient Rooms, treatment areas, Soiled Utility, and Disposal Hold rooms. EVS Staff will transport trash carts located throughout the Facility directly to central waste holding area adjacent to the soiled docks and/or directly into trash compactor. The waste holding area will be required to hold waste transport equipment, waste containers for washing and drip drying purposes. The space will be adjacent to the loading dock and waste compactor.

16.3.1.1.10.(a).2 Recyclables will be collected manually from bins located on the units in designated soiled collection rooms. They are then segregated and stored in a central recycling area adjacent to the soiled loading docks until the items are picked up by a recycling company(s). All recyclables will be stored in bins off of the loading dock.

16.3.1.1.10.(a).3 EVS does not handle confidential paper/mixed media waste. Third party vendors collect at point of service. Consoles are locked and the reusable bags bar coded to the generating unit.

16.3.1.1.10.(a).4 Biomedical waste, including anatomical, non-anatomical, pharmaceutical, cytotoxic, and sharps will be collected at the source and taken to the Soiled Utility and Disposal Hold rooms to be later transported by EVS Staff to a designated secure holding room adjacent to the soiled loading dock. The infectious waste will be properly stored in refrigerated environment before being picked up by a licensed contractor. Sharps containers will also be stored in a secure area to await vendor pick-up.

16.3.1.1.10.(a).5 Hazardous Waste: small amounts will be stored in user areas, before the EVS Staff picks-up and transports the waste to a secure storage facility adjacent to the soiled loading dock. A licensed carrier will pick-up

and transport the accumulated hazardous waste on a monthly basis. This may also include small amounts of radioactive waste. All hazardous waste containers will be checked for secured seal and damage before taken off the unit.

16.3.1.1.10.(a).6 EVS does not currently transport flammable waste. It is discarded by the generating unit. (Chemical Waste = Lab, oily rags = FMO)

16.3.1.1.10.(a).7 Food Waste will be held within the CFP. CFP will also use waste pulping equipment and a biodigester to process food waste. EVS will not be directly involved with handling food waste within the CFP but will empty and remove all containers within the CFP and transport them to a holding room adjacent to the loading dock.

16.3.1.1(11) Laundry & Linen

16.3.1.1(11)(a) Clean and soiled linen will be transported to and from the Components using an exchange cart system.

16.3.1.1(11)(b) Clean linen will be delivered by an outside supplier daily in a large tractor-trailer truck. Once the clean linen is offloaded, the trailer is moved into position at a dedicated soiled dock where soiled linen will be loaded back on to the trailer. It will be held until the trailer is full, picked up and driven away. This process will occur daily.

16.3.1.1(11)(c) Clean linen will be stored at the point of use throughout the Facility in exchange carts. Exchange carts will be delivered to designated handling areas by AGVs. A Multi-Skilled Support Service worker will deliver the exchange cart to point of use from the designated handling area.

16.3.1.1(11)(d) Soiled linen will be placed in covered hampers throughout the Facility and moved to a central holding area for pick up and transportation to the loading dock by way of FM Service Elevators and AGVs.

16.3.1.1(12) Central Mail Services

16.3.1.1(12)(a) Central Mail Services facilitates the process and movement of internal (throughout the Authority),

federal (Postage) and small parcels for inbound and outbound items.

16.3.1.1(12)(b) Mail stations within the Facility will be in secured locations with access control for authorized Persons only.

16.3.1.1(12)(c) Central Mail Services will be located adjacent to the Receiving Area.

16.3.1.1(12)(d) There will be corridor access to the mailroom.

16.3.1.2 Anticipated Trends in Service Delivery

16.3.1.2(1) The following lists trends expected within the planning horizon of this project, and that are expected to affect the nature and/or extent of functions accommodated within this Component. Effects of these trends will be reflected in the Component's design.

16.3.1.2(1)(a) Biomedical Engineering

16.3.1.2.1.(a).1 More calibrating and troubleshooting of biomedical devices at point-of-use, and using hardwired or wireless connections with technical Staff located in the Biomedical Engineering Component or off-site;

16.3.1.2.1.(a).2 Increasing involvement of Biomedical Engineering Staff in selecting/purchasing, moving, repairing and maintaining equipment, and decreasing involvement of private service contractors;

16.3.1.2.1.(a).3 Increasing use of technology in maintaining health and combatting diseases;

16.3.1.2.1.(a).4 Increasing Smart technology incorporated into devices; and

16.3.1.2.1.(a).5 Increasing interfaces between the Patient, monitoring devices and the EMR.

16.3.1.2(1)(b) MDRD

16.3.1.2.1.(b).1 Infection Prevention and Control will remain an ongoing challenge in all areas of the Facility;

16.3.1.2.1.(b).2 Complexity of processing is increasing in response to introduction of new technologies;

16.3.1.2.1.(b).3 Ongoing introduction of enhanced approach and standards for Infection Prevention and Control;

16.3.1.2.1.(b).4 MDRD demand will increase; due to evolving complex technology for MIS procedures and other innovations. In future, it is anticipated

that minor Procedure Rooms will be used for procedures that were previously conducted in the OR;

16.3.1.2.1.(b).5 Demand for MDRD services will increase through increased complexity of clinical cases;

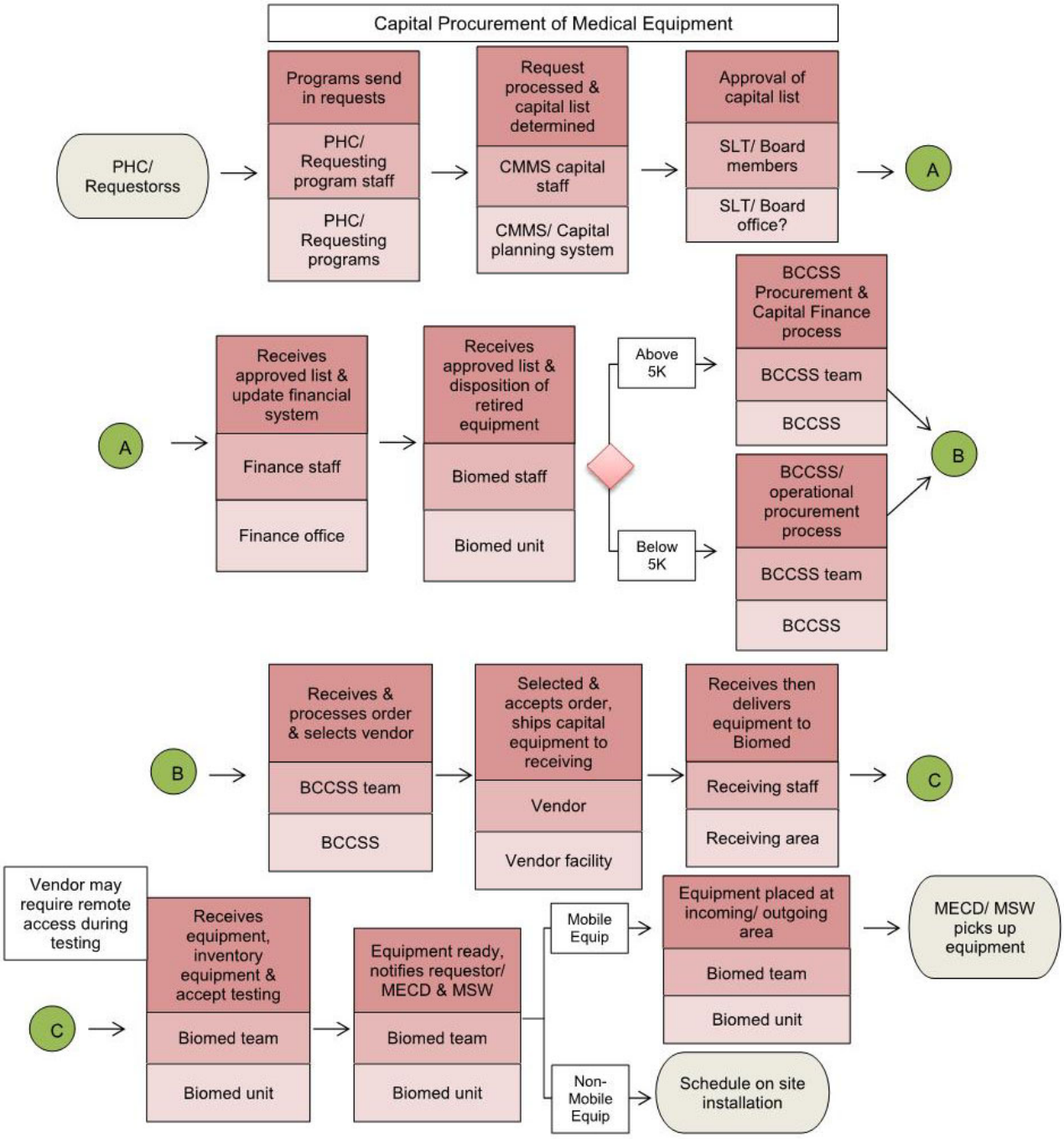
16.3.1.2.1.(b).6 Evolving trends by Equipment manufacturers with regards to higher disinfection and higher evolved levels of sterilization; and

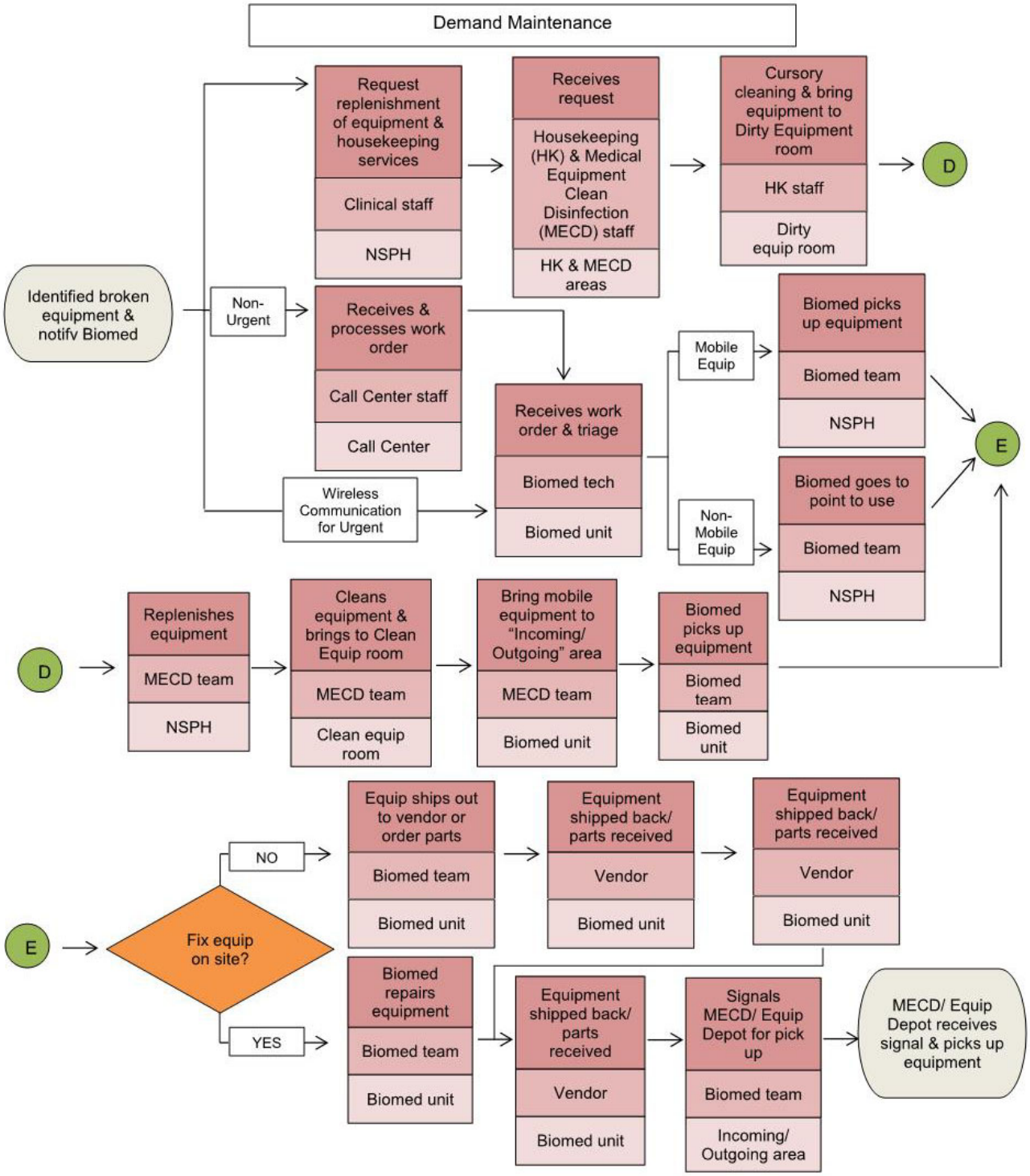
16.3.1.2.1.(b).7 Increased use of disposable items will impact storage, through increased quota of existing instruments or addition of new ancillary proprietary instrumentation required for use with the new disposables.

16.3.2 Workflows

16.3.2.1 The Biomedical Engineering workflows are depicted in the following workflow diagram.

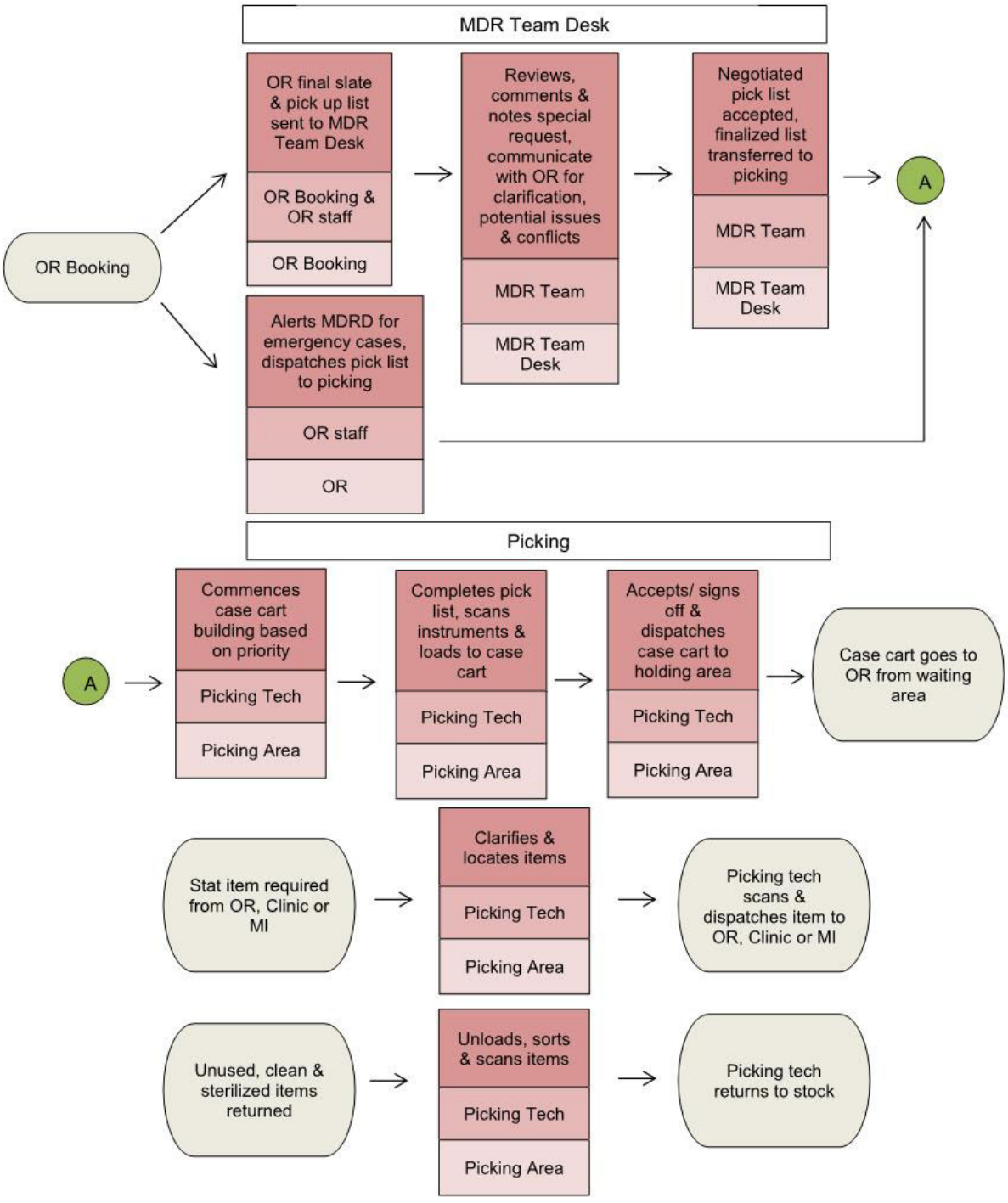
O1. BIOMEDICAL ENGINEERING WORKFLOW DIAGRAM

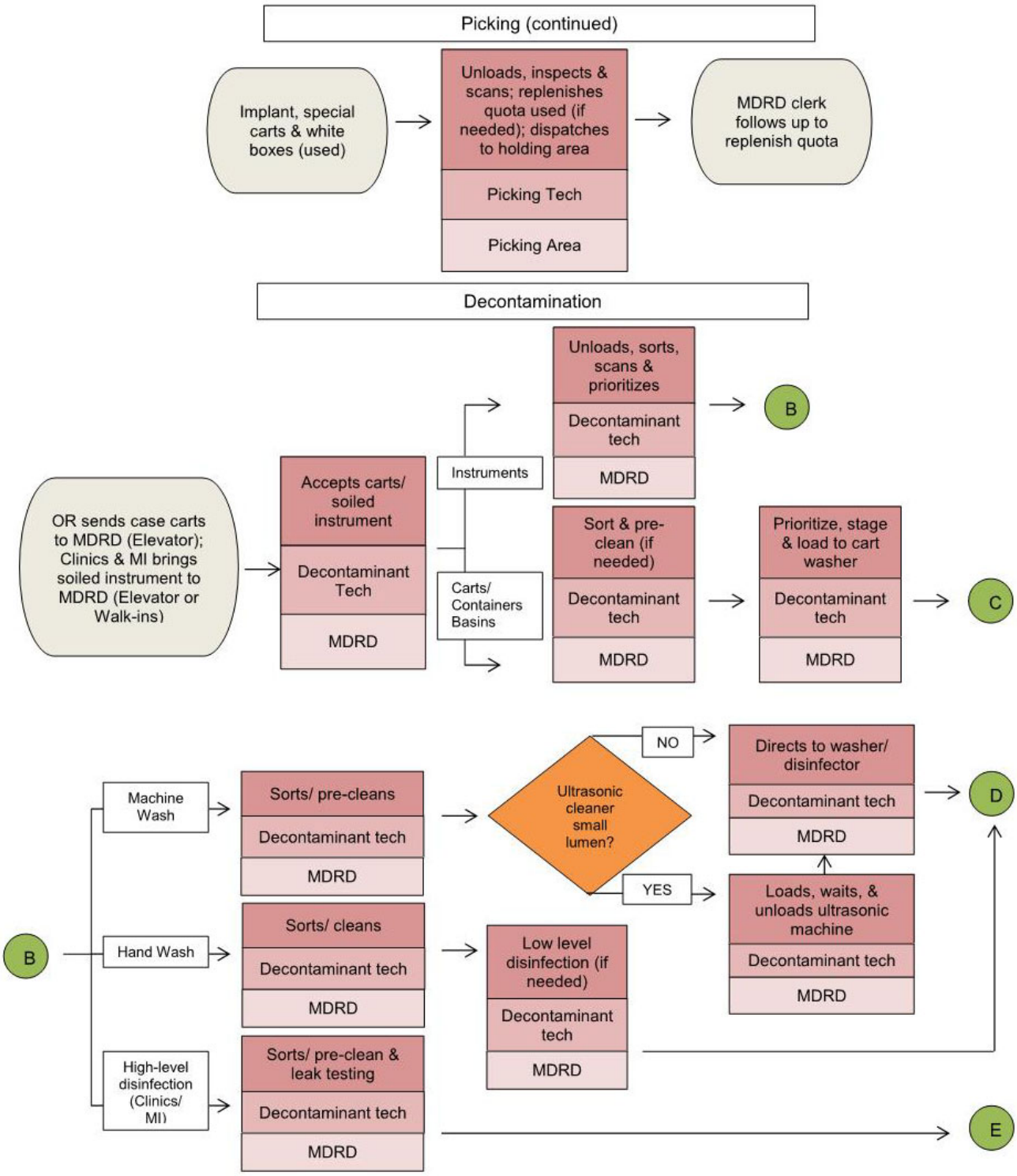


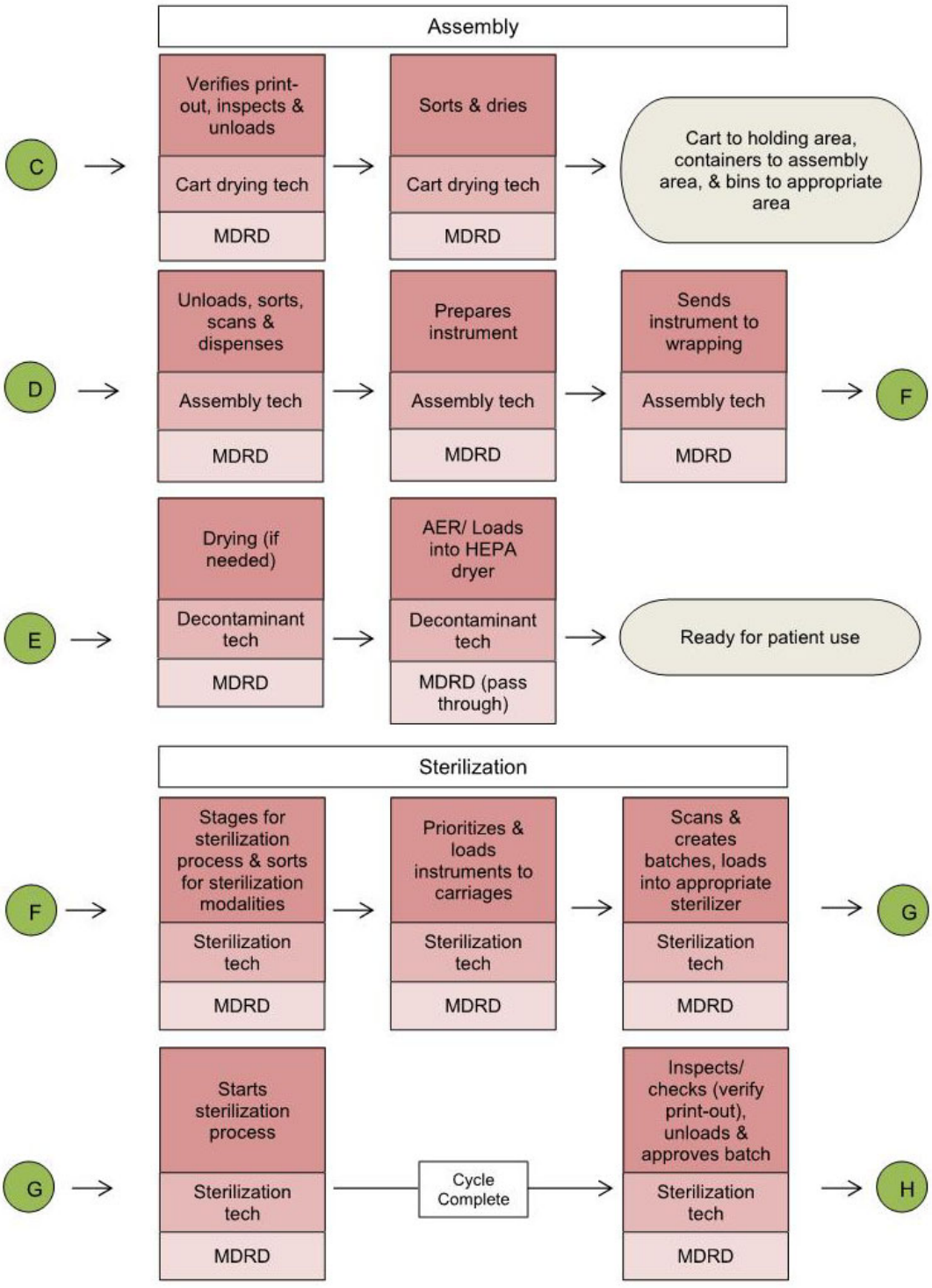

Demand Maintenance
Identified broken equipment & notifv Biomed
Non-Urgent
Request replenishment of equipment & housekeeping services
Clinical staff
NSPH
Receives request
Housekeeping (HK) & Medical Equipment Clean Disinfection (MECD) staff
HK & MECD areas
Cursory cleaning & bring equipment to Dirty Equipment room
HK staff
Dirty equip room
D
Receives & processes work order
Call Center staff
Call Center
Wireless Communication for Urgent
Receives work order & triage
Biomed tech
Biomed unit
Mobile Equip
Non-Mobile Equip
Biomed picks up equipment
Biomed team
NSPH
Biomed goes to point to use
Biomed team
NSPH
E
D
Replenishes equipment
MECD team
NSPH
Cleans equipment & brings to Clean Equip room
MECD team
Clean equip room
Bring mobile equipment to "Incoming/ Outgoing" area
MECD team
Biomed unit
Biomed picks up equipment
Biomed team
Biomed unit
E
Fix equip on site?
NO
YES
Equip ships out to vendor or order parts
Biomed team
Biomed unit
Equipment shipped back/ parts received
Vendor
Biomed unit
Equipment shipped back/ parts received
Vendor
Biomed unit
Biomed repairs equipment
Biomed team
Biomed unit
Equipment shipped back/ parts received
Vendor
Biomed unit
Signals MECD/ Equip Depot for pick up
Biomed team
Incoming/ Outgoing area
MECD/ Equip Depot receives signal & picks up equipment

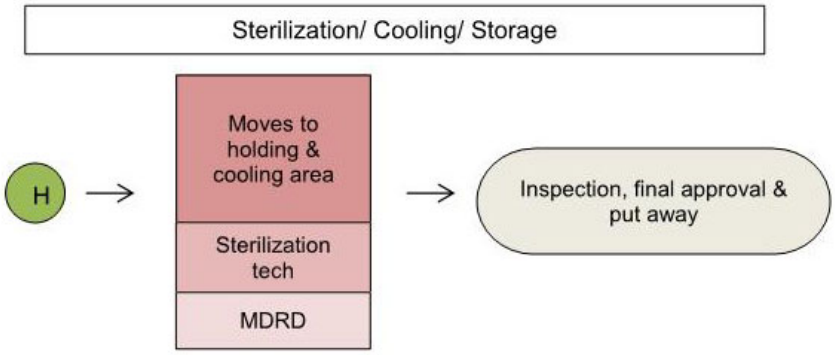
16.3.2.2 The MDRD workflows are depicted in the following workflow diagram.

O2. MDRD WORKFLOW DIAGRAM



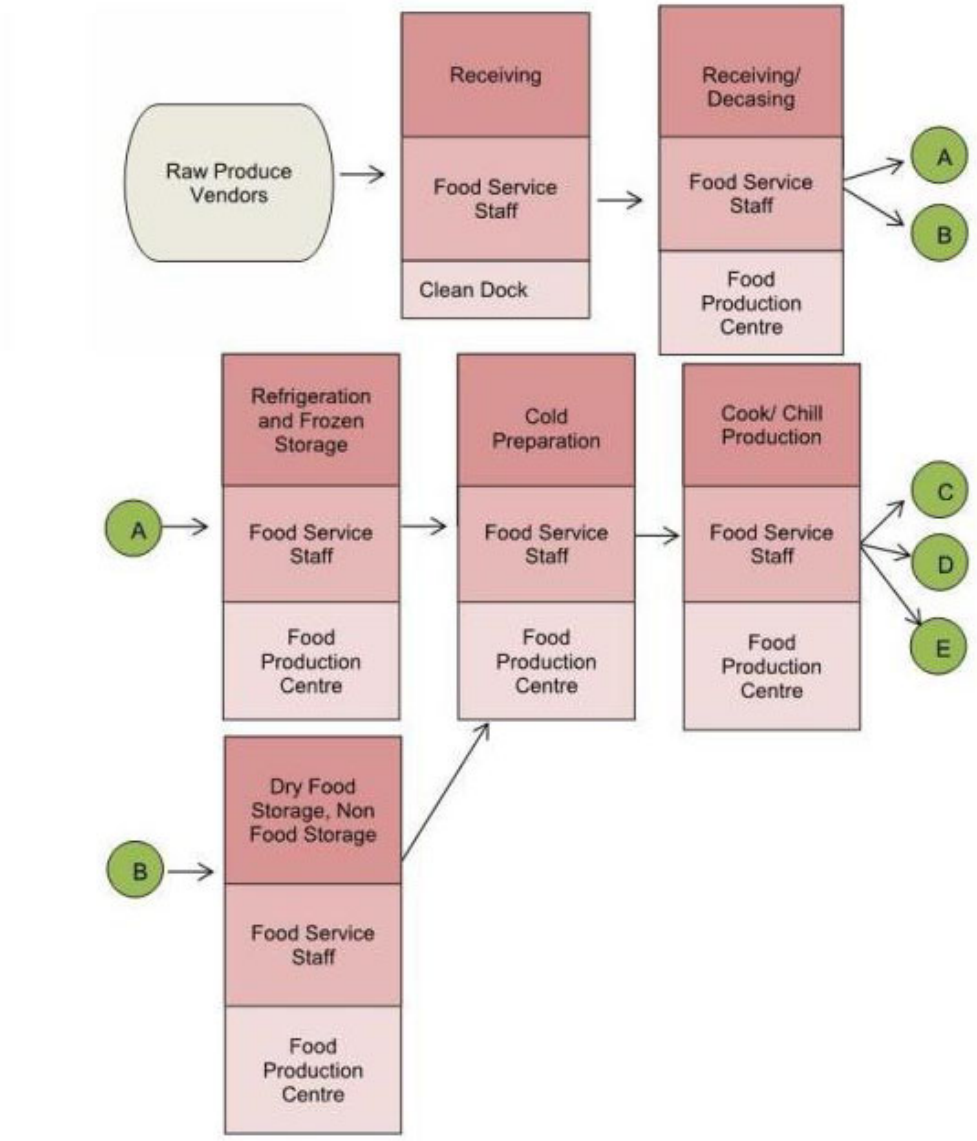

Picking (continued)
Implant, special carts & white boxes (used)
Unloads, inspects & scans; replenishes quota used (if needed); dispatches to holding area
Picking Tech
Picking Area
MDRD clerk follows up to replenish quota
Decontamination
OR sends case carts to MDRD (Elevator); Clinics & MI brings soiled instrument to MDRD (Elevator or Walk-ins)
Accepts carts/ soiled instrument
Decontaminant Tech
MDRD
Instruments
Carts/ Containers Basins
Unloads, sorts, scans & prioritizes
Decontaminant tech
MDRD
B
Sort & pre-clean (if needed)
Decontaminant tech
MDRD
Prioritize, stage & load to cart washer
Decontaminant tech
MDRD
C
B
Machine Wash
Hand Wash
High-level disinfection (Clinics/ MI)
Sorts/ pre-cleans
Decontaminant tech
MDRD
Sorts/ cleans
Decontaminant tech
MDRD
Sorts/ pre-clean & leak testing
Decontaminant tech
MDRD
Ultrasonic cleaner small lumen?
NO
YES
Directs to washer/ disinfector
Decontaminant tech
MDRD
D
Loads, waits, & unloads ultrasonic machine
Decontaminant tech
MDRD
Low level disinfection (if needed)
Decontaminant tech
MDRD
E

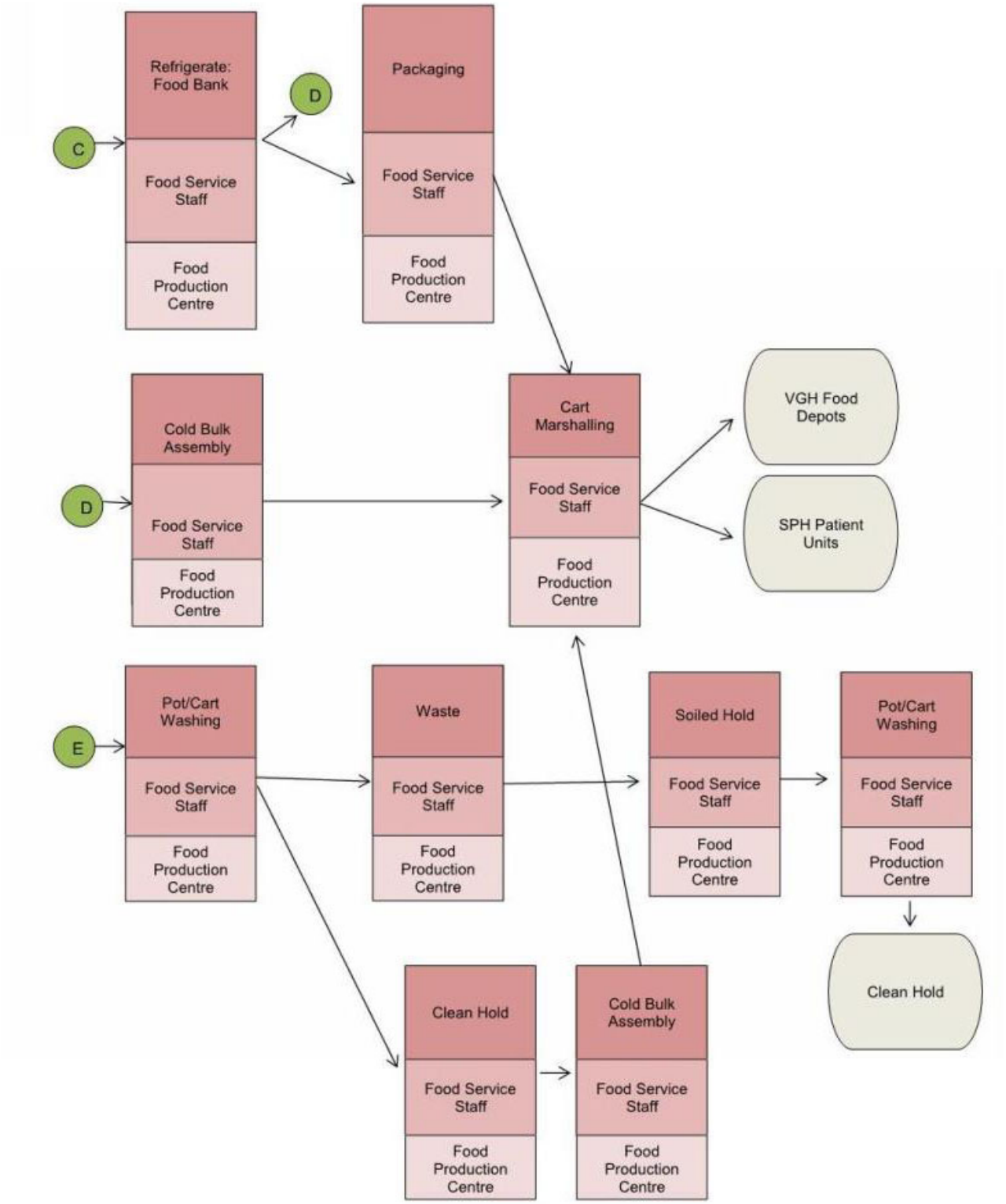

Assembly
C
Verifies print-out, inspects & unloads
Cart drying tech
MDRD
Sorts & dries
Cart drying tech
MDRD
Cart to holding area, containers to assembly area, & bins to appropriate area
D
Unloads, sorts, scans & dispenses
Assembly tech
MDRD
Prepares instrument
Assembly tech
MDRD
Sends instrument to wrapping
Assembly tech
MDRD
F
E
Drying (if needed)
Decontaminant tech
MDRD
AER/ Loads into HEPA dryer
Decontaminant tech
MDRD (pass through)
Ready for patient use
Sterilization
F
Stages for sterilization process & sorts for sterilization modalities
Sterilization tech
MDRD
Prioritizes & loads instruments to carriages
Sterilization tech
MDRD
Scans & creates batches, loads into appropriate sterilizer
Sterilization tech
MDRD
G
G
Starts sterilization process
Sterilization tech
MDRD
Cycle Complete
Inspects/ checks (verify print-out), unloads & approves batch
Sterilization tech
MDRD
H



16.3.2.3 The CFP workflows are depicted in the following workflow diagram.

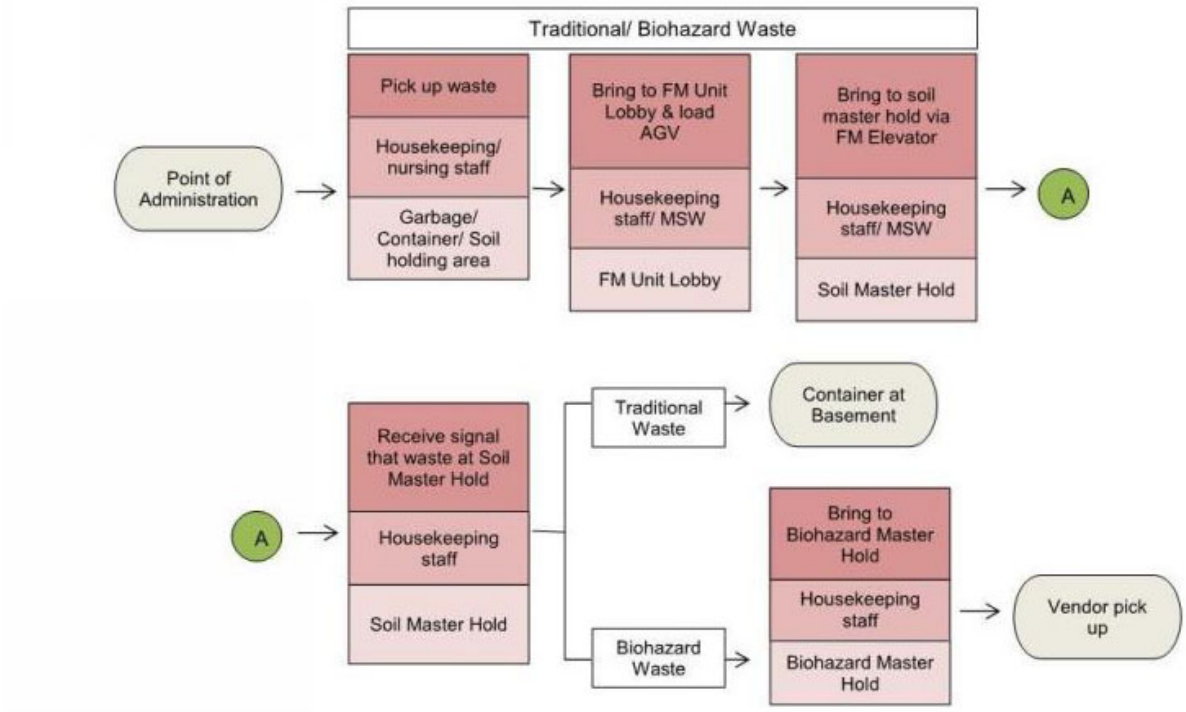
O3. CENTRAL FOOD PRODUCTION WORKFLOW DIAGRAM



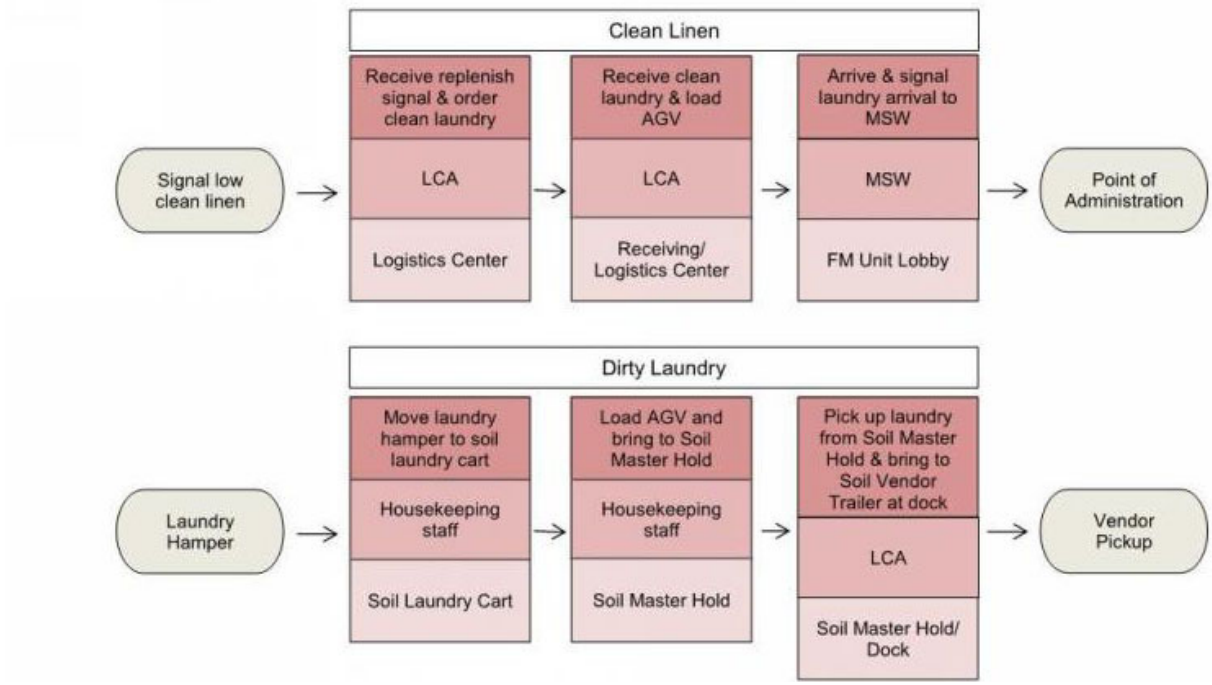

Refrigerate: Food Bank
Food Service Staff
Food Production Centre
C
D
Packaging
Food Service Staff
Food Production Centre
Cold Bulk Assembly
Food Service Staff
Food Production Centre
D
Cart Marshalling
Food Service Staff
Food Production Centre
VGH Food Depots
SPH Patient Units
Pot/Cart Washing
Food Service Staff
Food Production Centre
E
Waste
Food Service Staff
Food Production Centre
Soiled Hold
Food Service Staff
Food Production Centre
Pot/Cart Washing
Food Service Staff
Food Production Centre
Clean Hold
Clean Hold
Food Service Staff
Food Production Centre
Cold Bulk Assembly
Food Service Staff
Food Production Centre

16.3.2.4 The Waste Management and Laundry and Linen Services workflows are depicted in the following workflow diagrams.

O10. WASTE MANAGEMENT WORKFLOW DIAGRAM

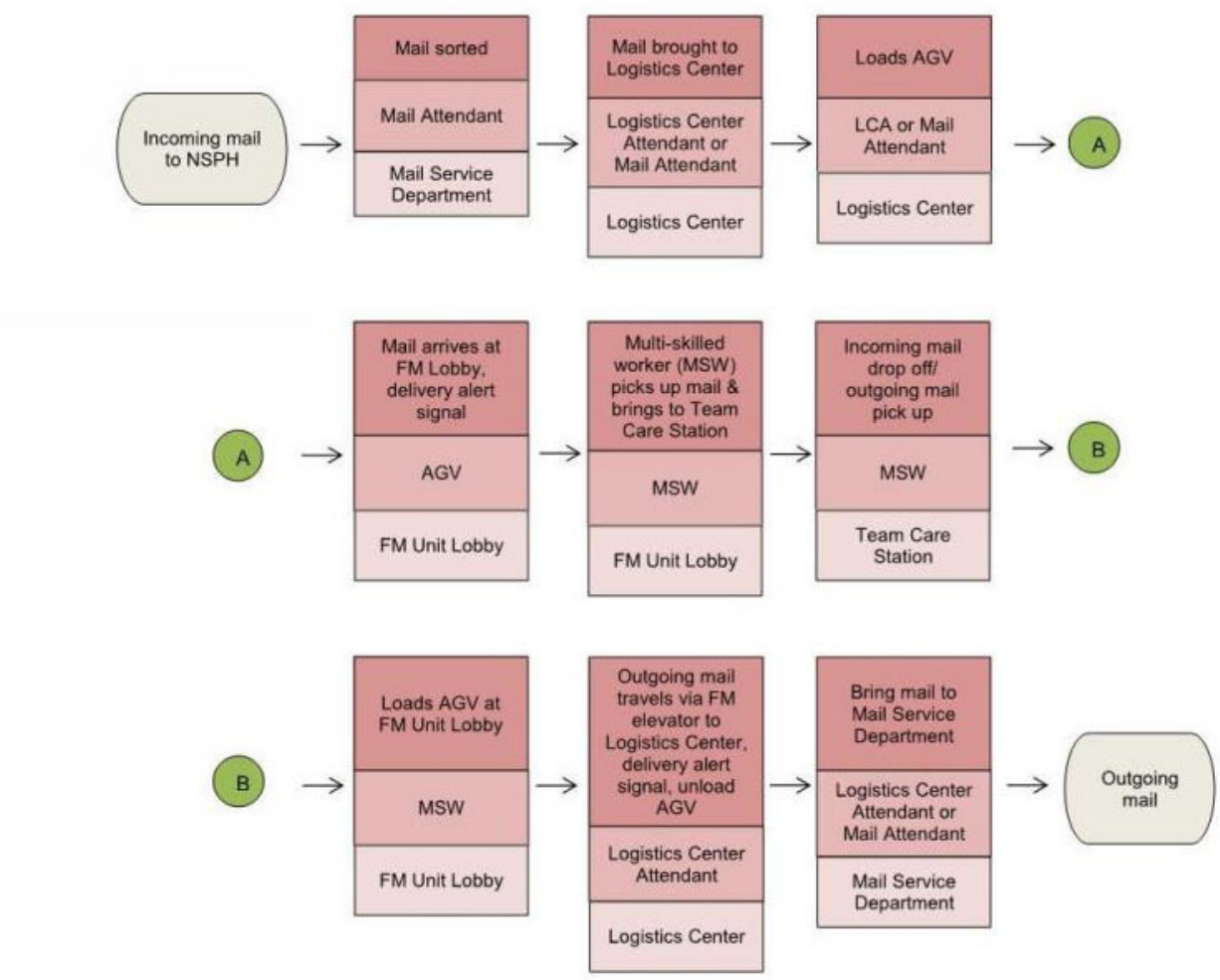


O11. LAUNDRY AND LINEN SERVICES WORKFLOW DIAGRAM



16.3.2.5 The Central Mail Services workflows are depicted in the following workflow diagram.

O12. CENTRAL MAIL SERVICES WORKFLOW DIAGRAM



16.3.3 Hours of Operation

16.3.3.1 Biomedical Engineering: 0800 - 1600 hours, Monday to Friday/Outside the routine hours of operation listed above and depending upon the nature of service(s) required, biomedical services will be available via a call-back service or by using telemedicine linkages with Staff located off- site.

16.3.3.2 MDRD: 0000 - 2400 hours, 7 days per week

16.3.3.3 CFP: 0530 – 2100 hours, 7 days per week, food production only 0600 – 1800, 5 days per week

16.3.3.4 FMO: 0000 – 2400 hours, 7 days per week

16.3.3.5 Logistics Centre: 0700 – 2300 hours, 7 days per week

16.3.3.6 IPS: 0000 – 2400 hours, 7 days per week

16.3.3.7 Equipment Depot: 0700-2300 hours, 7 days per week

16.3.3.8 EVS: 0000 – 2400 hours, 7 days per week

16.3.3.8(1) Patient spaces will be primarily cleaned and serviced from 0700 – 1500 hours or as agreed. Delivery to units will also occur during these times or as agreed.

16.3.3.8(2) Supplemental cleaning of Patient spaces, clinics, offices and ancillary departments, ORs and emergency and project cleaning (floor care) will occur from 1500 through 2300 hours, and as necessary throughout the day.

16.3.3.8(3) Housekeeping services will also be provided between 2300 – 0700 hours for 24/7 areas such as ORs and emergency.

16.3.3.9 Cycling Centre: 0000 – 2400 hours, 7 days per week

16.3.3.10 Waste Management/ Collection: 0700 – 2300 hours, 7 days per week

16.3.3.11 Laundry and Linen Services: 0700 – 2300 hours, 7 days per week

16.3.3.12 Central Mail Services: 0000 - 2400 hours, 7 days per week

16.3.3.13 Patient Transport Services (Porter Ward Aides): 0000 – 2400 hours, 7 days per week

16.3.4 Workloads

16.3.4.1 The maximum estimated workload for this Component is shown in the following table.

OPERATIONAL SUPPORT STAFF CATEGORY	PEAK SHIFT
Biomedical Engineering	
Manager	1
Supervisor	2
Biomedical Engineer	1
Biomedical Engineer Technologist	13
Clerk	1
TOTAL: Biomedical Engineering	**18**
MDRD	
Manager	1
Decontamination Technicians	20
Prep/Pack Technicians	15
Sterile Storage Technicians	5
Supervisor	3
Educator	1
Clerk	2
TOTAL: MDRD	**47**
Central Food Production	
Manager/Executive Chef	1
Admin Assist	1
Supervisor (weekend)	0.4
Receiver	2
Storeman	1.93
Ingredient Control	1
Cooks (Hot)	6
Cold prep (salads, sand fillings)	3
Baker	1
Cook's Helper (DA)	1
Bulk Assembly-VGH	2.32
Nutrition Centre/Servery Assembly - SPH	2.80
Pot Wash CFP	1.75
Pot Wash SPH	0.75

OPERATIONAL SUPPORT STAFF CATEGORY	PEAK SHIFT
Cart Wash/Sanitation	1.12
Cart Wash VGH	0.28
Cart Wash SPH	1.40
Unit Supplies SPH	1
TOTAL: Central Food Production	**29.75**
CFP Staffing in other Components	**53.8**
Integrated Protection Services	
Protection (Corporate; for PHC/VCH)	
Lead Coordinator	1
Advisor	1
Contracted Security	
security officers	8
Area Security lead	1
TOTAL: Integrated Protection Services	**11**
Logistics Centre	40
Environmental Services	60
TOTAL: Logistics Centre, Integrated Protection Services and EVS	**100**
DAYTIME PEAK TOTAL	**206**

16.4 DESIGN CRITERIA

16.4.1 General Requirements

16.4.1.1 Zones of activity within the Component include the following:

16.4.1.1(1) Biomedical Engineering

16.4.1.1(2) MDRD

16.4.1.1(3) CFP

16.4.1.1(4) FMO

16.4.1.1(5) Logistics Centre

16.4.1.1(6) IPS

16.4.1.1(7) Equipment Depot

16.4.1.1(8) Environmental Services (EVS)

16.4.1.1(9) Cycling Centre

16.4.1.1(10) Waste Management

16.4.1.1(11) Laundry and Linen Services

16.4.1.1(12) Central Mail Services

16.4.1.1(13) Support Services Administration

16.4.2 Biomedical Engineering

16.4.2.1 Biomedical Engineering functions will be supported in a centralized area, which will include workrooms, parts storage, Machine Room, staging and set-up areas and administration. Biomedical Engineering Staff will also have access to work areas located in Components where immediate equipment servicing turnaround time, or situations where equipment may be damaged if moved (i.e., Dialysis Unit) is required.

16.4.2.2 Convenient Access will be provided to the Patient Transfer/Staff Service Elevators and loading dock.

16.4.2.3 Convenient Access will be provided to Critical Care Complex, Surgical and Interventional Services, Renal Outpatient and Medical Imaging.

16.4.2.4 Convenient Access to Biomedical Engineering for vendors through General Circulation will be provided.

16.4.2.5 Biomedical Engineering will be located centrally within the Facility to minimize equipment travel distances.

16.4.2.6 The Workroom-Biomedical Engineering allows for 360 degree access around medical equipment to perform maintenance at each technologist workbench.

16.4.2.7 The Workroom-Class four (4) Laser will not have windows.

16.4.2.8 The area will be organized into three (3) major areas as follows:

16.4.2.8(1) Receiving/marshalling area;

16.4.2.8(2) Administrative work area; and

16.4.2.8(3) Technical work area including technical workbenches and laboratory area accommodating supplies storage and reference libraries.

16.4.2.9 Open Plan

16.4.2.9(1) Administrative and technical work areas will be segregated, but organized within a common, open floor plan. Staff will be able to move easily between technical workbenches and administrative workstations with minimal disruption to the work of others occupying other workstations. An Office-Private for the First Line Leader/ Supervisor will be provided in the Biomedical Engineering Component area.

16.4.2.9(2) Biomedical Engineering will have Convenient Access to the Patient Transfer/Staff Service Elevators in the Facility. The technical work area will be adjacent to the receiving/marshalling area to enable movement of large equipment

16.4.2.9(3) Dedicated and secure storage will be provided. Electrical power and data will be provided in all storage areas.

16.4.2.10 Component Security

16.4.2.10(1) Access to this Component will be controlled at all times. The receiving/marshalling area serves as the Component’s main entrance and may be accessed by other authorized Facility Staff for equipment drop-off or pick-up. This area will be accessible to authorized Staff 24 hours-a-day, 7 days-a-week.

16.4.2.10(2) Access to the administrative and technical work areas will be reserved for biomedical technologists or for Facility Staff accompanied by Component Staff. All aspects of the Biomedical Engineering Component programs will be provided in a contiguous and consolidated suite.

16.4.2.11 Lighting

16.4.2.11(1) Focused viewing of biomedical devices will benefit from a combination of natural and Task Lighting. Ceiling mounted light fixtures will cast light upwards to avoid the shadows created by direct ambient lighting. Adequate Task Lighting will be required for the technical workspaces.

16.4.2.12 Gas Service

16.4.2.12(1) Each technical workstation will be equipped with medical gases, refer to Appendix 3K [Medical Gas Matrix].

16.4.2.13 Communication Technology

16.4.2.13(1) Network connections will be required at each workbench and an access point for wireless communication will be within this Component.

16.4.3 MDRD

16.4.3.1 Access to this Component will be controlled at all times, with electronic security technology providing control.

16.4.3.2 MDRD will provide services to Surgical and Major Procedures Zone, Scopes and Minor Procedures Zone and Maternity Centre C-Section and Procedures with Direct Access through dedicated Clean and Dirty MDRD Elevators.

16.4.3.3 MDRD will have Convenient Access to Patient Transfer/Staff Service Elevators through Back of House circulation.

16.4.3.4 MDRD will provide a one-way soiled to clean process. Design of this Component will enforce the one-way flow through MDRD.

16.4.3.5 The layout will physically separate the soiled and clean, and sterile zones.

16.4.3.6 Redundancy for dedicated Clean and Dirty MDRD Elevators is required in the event of outages or demand. Design will optimize ergonomics to reduce incidence of repetitive stress injury and musculoskeletal malalignment.

16.4.3.7 MDRD will require specialized ventilation and plumbing. Medical air will be required at all assembly workstations to dry and inspect medical devices prior to direct Patient use or packing for sterilization.

16.4.3.8 Each entrance into the MDRD Decontamination Area and Clean / Assembly Area from outside the Component needs a Vestibule-Gown/De-Gown, with a dedicated hand hygiene sink, a donning and doffing area, Scrubs Dispenser and mirror. Hand hygiene sinks will be positioned on the cleaner side of the vestibule. Each vestibule will be adjacent to a Washroom-Staff.

16.4.3.9 Computer terminals will be provided at workstations within all MDRD areas to allow for tracking of medical devices inventories and electronic instrument management. Patient information tracking boards will be suspended from the

ceiling in maximum viewing areas and secured MDRD entry and exit points as determined in consultation with the Owner to allow for communication of Patient flow.

16.4.3.10 Direct service lines for steam, hot water and cold water will be supplied to MDRD to mitigate risk of variation in quality and pressure.

16.4.3.11 The design of the MDRD will meet the following criteria:

16.4.3.11(1) Access and Security

16.4.3.11(1)(a) Provide access control at all perimeter doors to the Component. Persons entering the Component will be directly visible by Staff inside MDRD.

16.4.3.11(1)(b) Access to the MDRD will be restricted and doors will always be locked and a video intercommunication system from the outside to the inside will be provided. Outside doors will have small windows to allow for identification.

16.4.3.11(1)(c) All perimeter windows of the Component and windows viewing into common areas will have a privacy film or treatment to prevent direct identification of activities inside. All offices with intra-department windows will have window coverings that facilitate cleaning as per Infection Prevention and Control protocols.

16.4.3.11(1)(d) Alarm systems and/or duress alarm system will be provided for Staff safety and security.

16.4.3.11(2) Material and Finishes

16.4.3.11(2)(a) An assessment of the cleaning methods, equipment, and frequency required throughout the component will be made before choosing finishes.

16.4.3.11(2)(b) Vision panels will be provided in doors that are frequently used.

16.4.3.11(3) Sterile Supplies Flow

16.4.3.11(3)(a) Sterile supplies will not cross paths with soiled materials or the public, and those destined for Surgical and Interventional Services and Maternity Centre C-Section and Procedures area will leave the Component via dedicated internal Clean MDRD Elevators.

16.4.3.11(4) Temperature/Humidity/Ventilation Controls

16.4.3.11(4)(a) Temperature and humidity levels will be controlled to ensure work areas are comfortable for properly attired MDRD Staff.

16.4.3.11(4)(b) Humidity loads in reprocessing areas can be extremely high. Ceiling, walls, and work services in this area will be impervious to moisture.

16.4.3.11(4)(c) Ventilation for this area will meet all latest applicable CSA standards for Health Care Facilities and requirements in Schedule 3.

16.4.3.11(4)(d) All vents within the department will be easily accessible for environment services to easily access, remove and clean.

16.4.3.11(5) Noise Control

16.4.3.11(5)(a) Special sound attenuation measures as per Appendix 3C [Acoustic and Noise Control Measures], will be provided to contain the noise generated by equipment. This may include a sound absorbent floor, wall and ceiling finishes to avoid noise pollution in all areas of the Component.

16.4.3.11(6) Lighting Controls

16.4.3.11(6)(a) Provide glare-free full-spectrum artificial or preferably natural light and special Task Lighting for technical work areas.

16.4.3.11(6)(b) In the Decontamination Area and Clean / Assembly Area, magnification inspection solution including additional Task Lighting will be installed at each workstation.

16.4.3.11(6)(c) Lighting control devices in processing and storage areas will be fully recessed and carefully selected to avoid ledges or crevices where dust can collect.

16.4.3.11(6)(d) There will be a visual indicator for when a perioperative room or core is calling MDRD for a fast track item. This alert will be broadcasted within MDRD. Location of this indicator will be determined in consultation with the Owner.

16.4.3.11(6)(e) The interior design will ensure simple unobtrusive colour schemes that minimize interference with the concentration of the MDRD Staff working on fine detail.

16.4.3.11(6)(f) Provision of natural light in offices, and Staff amenity areas is desired.

16.4.3.11(7) Occupational Health and Safety

16.4.3.11(7)(a) The use of height adjustable workstations, shelving, computer terminals and keyboards to minimize physical stress or accidents and maximize the comfort of laboratory users will be provided. Adjustability of workstation heights is required.

16.4.3.11(7)(b) Floor construction/finishes will compensate for long periods of standing, typical in the MDRD workplace; refer to Schedule 3 Section 6.9.8.3 Anti-Fatigue Flooring.

16.4.3.11(7)(c) Functional and storage space will be provided for chemicals. Space will be provided where direct read chemical monitoring equipment is required.

16.4.3.11(7)(d) Functional space will be provided to allow for the movement of carts between tasks. Counters, carts, and loading devices will be at the same height for easy horizontal movement of materials.

16.4.3.11(7)(e) Sufficient and accessible space for storing movable equipment and supplies will be provided.

16.4.3.11(7)(f) Sharps containers and eyewash stations will be provided in the appropriate quantities and locations and will be easily accessible by Staff.

16.4.3.11(8) Infection Prevention and Control

16.4.3.11(8)(a) All areas used for decontamination, preparation and packaging, sterilization and storage of medical devices will be designed and built to minimize bioburden and particulate contamination.

16.4.3.11(8)(b) Adequate space will be provided to carry out sterilization activities. Walls or partitions to control traffic flow and contain contaminants generated during processing will separate functional work areas.

16.4.3.11(8)(c) Multi-person contact, high-touch work surfaces will be minimized through the use of automated equipment and related design features, such as hands-free water faucets, and motion activated door openers.

16.4.3.11(8)(d) Building maintenance and testing will not be undertaken in the Clean / Assembly Area or Sterilization Area at times when devices are being produced or processed to prevent contamination of the area or devices. Provide Convenient Access to equipment to minimize the effects of maintenance activities. Use of interstitial spaces or external corridors will be employed for access for maintenance services.

16.4.3.11(9) Zoning

16.4.3.11(9)(a) Physical zones are to be established to achieve separation of flows for soiled, clean and sterile materials.

16.4.3.11(9)(b) The Staff working within the Clean / Assembly Area, Sterilization Area and Sterile Storage and Distribution area of the MDRD will be segregated from stores and transport Staff as well as from other Staff working within Decontamination Area of the MDRD.

16.4.3.11(9)(c) Decontamination Area

16.4.3.11.9.(c).1 The Decontamination Area requires six (6) triple sink bays each with an ultrasonic washer. Adequate circulating space of minimum 1525 mm clear distance will be provided between sink bays to allow Staff to work back to back and allow for passage of instrument racks/manifolds.

16.4.3.11.9.(c).2 All decontamination technology will interface with the regional standard for instrument tracking system and with adequate workstations to support all instrument tracking activities.

16.4.3.11.9.(c).3 The pass through washer/disinfectors will be adjacent to the sink area in Workroom-Decontamination. Space for instrument washer racks will be included next to the washer/disinfectors and the sink area.

16.4.3.11.9.(c).4 Instrument Wash includes six (6) instrument washer/disinfectors and floor space for

holding of instrument carts and loading of machines.

16.4.3.11.9.(c).5 Instrument Return includes a pass through chamber from Clean/Assembly Area to Decontamination Area located near instrument washer/disinfectors.

16.4.3.11.9.(c).6 Direction of flow will be from sinks to small lumen cleaner, TEE probe reprocessor and cavitation washers to instrument washer/disinfectors and cart washers.

16.4.3.11.9.(c).7 Provide minimum 1 m clearance around all Equipment for maintenance purposes.

16.4.3.11.9.(c).8 The Cart Washer Enclosure area will have sufficient storage space adjacent to the cart washers to hold soiled carts. It will be located to facilitate Lean Health Care process flow of work from the Workroom-Decontamination area (i.e. after the last decontamination sink workstation).

16.4.3.11.9.(c).9 The detergents and chemicals will be stored in and dispensed from a separate enclosed Store-Lubricant Detergent room in the Decontamination Area. An Emergency Shower/Eyewash will be located centrally and adjacent to the Store-Lubricant Detergent. This room will include a floor drain and appropriate flooring for wet applications and the detergents and chemicals used. Store-Lubricant Detergent will require Direct Access from Back of House corridor for large detergent deliveries in addition to Direct Access to the Decontamination Area.

16.4.3.11.9.(c).10 An Alcove-Hand Hygiene Sink is to be located within the Decontamination Area.

16.4.3.11.9.(c).11 A Disposal Hold will be included in this area with Convenient Access to FM Service Elevators and Direct Access from Back of House corridor in addition to Direct Access to the Decontamination Area.

16.4.3.11.9.(c).12 A dedicated Housekeeping Closet is required for this area. The Housekeeping Closet will require Convenient Access to FM Service Elevators and Direct Access from Back of House corridor for large deliveries in addition to Direct Access to the Decontamination Area.

16.4.3.11(9)(d) Clean / Assembly Area

16.4.3.11.9.(d).1 The Clean / Assembly Area will be located adjacent to the clean side of the Instrument Wash.

16.4.3.11.9.(d).2 Sixteen (16) assembly workstations are required which will be designed in consultation with the Owner. Workstation-MDRD area will provide adequate circulation space of minimum 1525 millimeters clear distance for Staff to move equipment carts easily around tables.

16.4.3.11.9.(d).3 The Clean / Assembly Area will have an automated sliding glass door to the Decontamination Area for the return of equipment carts and larger items and an automated sliding glass door to the Sterile Storage and Distribution area for movement of clean case carts and return of sterilizer carts.

16.4.3.11.9.(d).4 Lean Health Care processes for the flow of washer carts, clean case carts and loaded instrument carts to accommodate main circulation paths are critical.

16.4.3.11.9.(d).5 The Cart Drying Room is to be adjacent to the clean side of the cart washers, is to be protected for segregation from assembly workstations and the rest of the Clean / Assembly Area and is to include a floor drain.

16.4.3.11.9.(d).6 This area will include a Store-Implants and a Store-Non-Sterile Supplies both with Direct Access from Back of House corridor in addition to Direct Access to the Clean / Assembly Area.

16.4.3.11.9.(d).7 This area also requires a Housekeeping Closet dedicated for cleaning the Clean / Assembly Area and Sterile Storage and Distribution. The Housekeeping Closet will require Convenient Access to FM Service Elevators and Direct Access from Back of House corridor for large deliveries in addition to Direct Access to the Clean / Assembly Area.

16.4.3.11(9)(e) Sterilization Area

16.4.3.11.9.(e).1 The Sterilization Area will be equipped with five (5) pass through steam sterilizers and a minimum of four (4) Low Temperature Sterilizers to allow for sterilization of critical devices that cannot tolerate steam. The

unload side of steam sterilizers will be separated from Sterile Storage and Distribution area to prevent steam entering this area. Maintenance access will be configured to minimize the need to travel through the Clean / Assembly Area and Sterile Storage and Distribution. All sterilization technology will interface with the regional standard for instrument tracking system and with adequate workstations to support all QC and QA instrument tracking activities during this process.

16.4.3.11.9.(e).2 There will be a minimum of four (4) Low Temperature Sterilizers at service commencement. Space adjacent to the Low Temperature Sterilizers will be provided to accommodate future equipment additions. Low Temperature Sterilizers will be located in in Clean / Assembly Area adjacent to the door into the Sterile Storage and Distribution area.

16.4.3.11.9.(e).3 A Workstation in Clean / Assembly Area for incubators, biological auto readers and/or other sterility testing equipment is to be located adjacent to Low Temperature Sterilizers and Steam Sterilizer Enclosures.

16.4.3.11.9.(e).4 A designated space is required for cooling carts. The Cool Down area will be an enclosed space with full height walls, separate from the General Circulation and will not have direct airflow above the cart cooling area to prevent condensation. The room will have adequate space to store all sterilization carriages.

16.4.3.11(9)(f) Sterile Storage and Distribution

16.4.3.11.9.(f).1 Per CSA guidelines, the Sterile Storage and Distribution area will be an enclosed space. It is anticipated that the sterile instruments and other sterile medical devices will be stored on moveable, wire shelving or high density storage racks. The area will also have sufficient floor space for stocking of case carts and storage of all case carts over the weekend and statutory holidays.

16.4.3.11.9.(f).2 A control Workstation is required adjacent to Clean MDRD Elevators to manage direct and efficient workflow from each elevator. The

control Workstation will have a Patient status board to communicate Interventional Suites, ORs and General Procedure Rooms Patient information and procedure start and stop times with the MDRD for workflow management in the MDRD. A PTS will be located adjacent to the control Workstation close to the Clean MDRD Elevators serving the ORs.

16.4.3.11.9.(f).3 A dedicated Clean Cart Holding is required to hold clean case carts before the cases are picked. This space will be adjacent to the Clean Cart/Wire Shelving Hold area.

16.4.3.11.9.(f).4 The Clean MDRD Elevators are also located in this zone and will be located in an area that can be temporarily isolated for purpose of repairs. A Clean Elevator Loading Area is required adjacent to the elevators for temporary storage of carts prior to loading.

16.4.3.11.9.(f).5 A Dispatch Room will have Direct Access from corridors exterior to the Component for unit Staff to pick up sterile supplies in addition to Direct Access to the Sterile Storage and Distribution.

16.4.3.11.9.(f).6 A separate Break Down Room is required to allow for receiving of direct purchase products and to mitigate the risk of any corrugated cardboard entering clean or sterile areas. This space will have a one-way flow where only unpacked items will arrive into the sterile side of the MDRD. There will be a hand-hygiene sink to manage contamination from handling corrugated cardboard.

16.4.3.11(9)(g) Administration Area and Staff Support Area

16.4.3.11.9.(g).1 The Administration Area will have Convenient Access to the Decontamination Area and Clean / Assembly Area and will allow for shift reporting prior to MDRD dispatch to assignment area.

16.4.3.11.9.(g).2 Offices will have the associated support technology and ability to monitor the department function with Line of Sight to the department through the use of space design, cameras and windows as determined in consultation with the Owner.

16.4.3.11.9.(g).3 Entrances to the Decontamination Area and Clean / Assembly Area will have Convenient Access to the Lockers-Staff and Washroom/Shower-Staff.

16.4.4 Central Food Production

16.4.4.1 The organization of the spaces within the kitchen will follow the SoA. For example, storage areas will be grouped.

16.4.4.2 All areas within the CFP will be within one contiguous space.

16.4.4.3 The commercial kitchen plans, equipment lists and specifications will be submitted by Project Co for a Health Department Review to Fraser Health and PHSA.

16.4.4.4 Submissions will also be reviewed by the Building Department for life safety and code compliance. Walk-in coolers and freezers will comply with ASHRAE 90.1.

16.4.4.5 Location and Adjacencies

16.4.4.5(1) Provide Convenient Access (within 25m) from the CFP via Back of House circulation to the main loading dock for the receipt of food products and related food service goods.

16.4.4.5(2) The CFP will be located on the same level as the loading dock.

16.4.4.5(3) Provide Convenient Access from the CFP via Back of House circulation wherever possible, to the Nutrition Centres, Dining/Activity Areas, Serveries, Complete Nourishment centres and Nourishment Rooms for distribution of foods to the Patient areas and return of soiled service wares. Ensure that this circulation is concealed from public view to the maximum extent possible.

16.4.4.5(4) Provide Direct Access by corridor from the Serveries to a Housekeeping Closet.

16.4.4.5(5) The Nutrition Centres and Serveries will be accessed directly from a corridor within the Patient Units. Consider the location of the FM Service elevator used to transport food from the CFP and minimize travel distances to the Nutrition Centres/Serveries/Complete Nourishments.

16.4.4.5(6) The Serveries will be immediately adjacent to and will open up into the Dining/Activity Areas.

16.4.4.5(7) The Nutrition Centres will be centrally located to minimize travel distances for Patient meal service.

16.4.4.6 Material Management

16.4.4.6(1) Food service supplies will be received at Materials Management and moved to the CFP for storage.

16.4.4.6(2) Insulated food carts that will be used for delivering the chilled food to the Facility will use the loading dock.

16.4.4.6(3) Kitchen linens (i.e. towels and cloths) and Staff uniforms will be washed in the Laundry and Linen Services or by an off-site laundry service provider.

16.4.4.6(4) Waste generated within the food service areas will be collected and sorted for organics, recyclables and general waste, held temporarily and then transported to the main Waste Management area on the loading dock in closed and mobile containers.

16.4.4.7 Internal Organization

16.4.4.7(1) Locate the offices so that they have Direct Access from the corridor and have a door opening directly into the kitchen. The offices will also be positioned to enable views into the preparation and production areas.

16.4.4.7(2) Locate the internal Receiving/Sorting/Decasing so that it has Direct Access from the corridor and has sufficient space for holding up to two (2) pallets of food products.

16.4.4.7(3) Locate the major refrigerated and frozen storage areas so that they have Direct Access from the Receiving/Control area by means of an external corridor and allow forward flow directly into the preparation and production areas.

16.4.4.7(4) Locate the storage areas (dry, internal walk-in refrigerators) so that they have Direct Access from the Receiving/Sorting/Decasing area and so that they open directly into the preparation and production areas.

16.4.4.7(5) The preparation and cooking areas will be contiguous without encumbrances from high, floor to ceiling walls and have Direct Access to the storage areas and meal assembly area. Locate tabling so that they support all cooking activities.

16.4.4.7(6) The meal planning and assembly areas will be contiguous without encumbrances from walls and have Direct Access to the main cooking area.

16.4.4.7(7) The Clean Cart Hold and Cart Marshalling/Distribution areas will have Direct Access from the production centre to the main exiting corridor.

16.4.4.7(8) All insulated food carts for the Facility and VGH will exit the CFP from the cart holding and Cart Marshalling/Distribution area. This area will have Direct Access from the corridor.

16.4.4.7(9) All insulated food carts from the Facility and VGH will be returned to the CFP from the corridor. The Pot Washing Area will have Direct Access to the corridor.

16.4.4.7(10) The Cart Wash area will be accessed from the Pot Washing Area.

16.4.4.7(11) The Store-Chemical will be accessed or adjacent from the Pot Washing Area.

16.4.4.7(12) Provide all worktables to maximize work surface area.

16.4.4.7(13) The Serveries will have an opening for service directly to the Dining/Activity Areas. The opening will include an overhead rolling counter shutter that is operable from inside the Servery so that the Servery can be secured during off-meal periods.

16.4.4.7(14) In the production area, lighting fixtures will be easily disassembled for cleaning and sanitation.

16.4.4.8 Forward Work Flow and Safe Food Handling

16.4.4.8(1) The CFP will be designed to support a forward workflow from receiving and storage of food product to preparation, production, blast chilling /freezing, to meal assembly, holding and final distribution.

16.4.4.8(2) The functional areas within the CFP facilities will be arranged to accommodate a separate and non-crossing flow of waste, and to ensure separation of clean and soiled functions.

16.4.4.8(3) Refer to Workflow Diagram. The diagram indicates adjacencies for food services, showing the importance of each functional area to the overall operation and internal department adjacencies.

16.4.4.8(4) The CFP will be designed to support a HACCP program. Hazard analysis is the process of identifying and assessing where hazards may enter the food processing flow and effect quality of food safety. Critical control points are operational procedures or functions where identified hazards will be controlled and continuously monitored. Central to the HACCP program will be the control of time and temperature relationship through the food processing flow. To support this effort, equipment such as cold rooms and freezers within the central receiving will include temperature recorders and alarms tied into the Facility management system.

16.4.4.8(5) Hand hygiene sinks with soap dispensers will be provided in all work areas within the CFP.

16.4.4.8(6) Emergency eyewash stations will be provided where bulk chemical storage occurs and where chemicals are used predominantly (Pot Washing Area). Portable eyewash stations are not acceptable.

16.4.5 FMO

16.4.5.1 FMO spaces will have Direct Access to Patient Transfer/Staff Service Elevators as access to all areas of the Facility is required for FMO Staff and materials.

16.4.5.2 FMO spaces will have Convenient Access to service vehicle layby stalls and the loading dock.

16.4.5.3 Reception and Waiting will be located at the entrance to FMO spaces and will be grouped with other rooms in FMO administration area including, at minimum, Pneumatic Tube Station, Conference/Meeting Room-Small, Office-Private-FMO Manager, Office-Private-FMO, Office-3 Shared-Planning, Workstation-Touchdown, FM Maintenance Operations and Store-Office Support-Large.

16.4.5.4 Shop-Welding will be located adjacent to and between Shop-Plumbing and Shop-Mechanical.

16.4.5.5 Several dedicated engineering shops are required in this area, including: Shop-Plumbing, Shop-Mechanical, Shop-Electrical, Shop-Carpentry, Shop-Paint, Shop-Welding, Shop-Bed/Stretcher/Ceiling Lift and Shop-AGV.

16.4.5.6 Shops will be grouped with storage spaces.

16.4.5.7 Fixed hoist and rolling gantries will be provided for FMO to move large pieces of equipment within the engineering shops and within Mechanical and Electrical rooms.

16.4.5.8 Appropriate ventilation and Utilities are required to support each space.

16.4.5.9 The FMO Component will share washroom and locker facilities with another Operational Support Component like the Energy Centre or Logistics Centre. Design will provide Convenient Access to one of these other Components for Staff in the FMO to easily access them through Back of House circulation.

16.4.6 Logistics Centre

16.4.6.1 The Logistics Centre requires Convenient Access to Biomedical Engineering, CFP, and other areas in Operational Support Component.

16.4.6.2 It will have Direct Access to the loading dock.

16.4.6.3 The Logistics Centre has a wide variety of special purpose rooms and areas.

16.4.6.4 The Central Receiving & Breakdown area will be directly adjacent to the Exchange Cart/Prep/Hold-AGV Depot Area to minimise double handling.

16.4.6.5 The loading dock will have an enclosed entrance to reduce noise impact from logistics vehicle maneuvering.

16.4.6.6 A separation of clean incoming flows and soiled outgoing flows is required.

16.4.6.7 One (1) Staging Area-Logistics Centre will be used for inbound empty carts and the other Staging Area-Logistics Centre will be used for outbound packages. The two (2) areas may be combined as determined in consultation with the Owner.

16.4.7 Integrated Protection Services

16.4.7.1 Security requires Convenient Access to all areas of the Facility and will be located centrally.

16.4.7.2 IPS space includes various offices and workstations as well as an Exam Room-First Aid Clinic Nurse.

16.4.8 Equipment Depot

16.4.8.1 The Equipment Depot requires a one-way work flow (soiled in and clean out). Walls will be provided to provide separation between Receiving-Equipment Depot area, holding and storage areas and Office-3 Shared. All spaces will be immediately adjacent to each other.

16.4.8.2 Receiving-Equipment Depot

16.4.8.2(1) At the Receiving-Equipment Depot area entrance there will be video intercommunication systems for visitors to communicate with Staff inside the Workstation-OT Equipment Depot. The video intercommunication systems will have video capability and the ability to provide access remotely. There will be an audible alert in other areas of the Equipment Depot to advise Staff in those areas to manually go and open the Receiving-Equipment Depot door as necessary.

16.4.8.2(2) The Receiving-Equipment Depot area is where equipment will first come when returning from use and prior to cleaning. The equipment may be checked in this room if it is suspected that it requires repairs or maintenance. Biomedical Engineering requires a work area to assess and repair equipment. FMO will also be adjacent to this area to minimize traffic flows in corridors and elevators.

16.4.8.2(3) Access to data and power will be required.

16.4.8.2(4) All spaces will be well lit for examination of equipment.

16.4.8.2(5) Receiving-Equipment Depot will include a cleaning /disinfecting room.

16.4.8.3 Office-3 Shared

16.4.8.3(1) This area includes a shared office where the coordinator will be notified when a Patient requires an equipment item.

16.4.8.3(2) This room will have workstations, phones and enough space to have up to three (3) Staff working during high volume times if needed.

16.4.8.3(3) The office will be designed ergonomically with maximum flexibility. The physical space design will be capable of supporting organizational and operational changes.

16.4.9 Environmental Services

16.4.9.1 EVS will have Direct Access to the Logistics Centre for the movement of Staff and materials and for the use of the loading dock.

16.4.9.2 Convenient Access to the Facility's Patient Transfer/Staff Service Elevators and FM Service Elevators is required.

16.4.9.3 If natural light cannot be provided, Task Lighting will be included in selected work areas.

16.4.9.4 Appropriate flammable stores will be provided for centralized holding of flammable cleaning products.

16.4.9.5 Sound attenuation systems and finishes will be used wherever possible to keep noise to minimum levels.

16.4.9.6 Hold-Clean Equipment Charging requires additional ventilation due to fumes emitted during battery charging.

16.4.9.7 Floor care equipment and all soiled holding rooms will have floor drains, as well as wall hose bibs and hand hygiene sinks.

16.4.9.8 All EVS storage/holding rooms to have door openings appropriate for moving equipment in and out.

16.4.9.9 Access to network enabled conference and training rooms for in-service and on-going education for EVS Staff will be required.

16.4.9.10 Furniture items throughout the Facility at risk of or infested with bed bugs will be treated in the Bed Bug Sauna room. Large items such as mattresses and couches will be placed in the Bed Bug Sauna, where they will be exposed to extreme heat to exterminate bed bugs in all stages of life. The Bed Bug Sauna room will be located in a low traffic area while providing access from clinical areas to facilitate the flow of infested materials.

16.4.9.11 Cart Wash-Trash Carts will be an enclosed room adjacent to the loading dock.

16.4.10 Cycling Centre

16.4.10.1 End-of-trip amenities will be provided to enhance cycling convenience and help encourage higher cycling rate among Staff.

16.4.10.2 Lockers-Staff with fifty (50) Z-lockers, four (4) Washroom/Shower-Staff and twelve (12) Washroom-Staff are provided in this area.

16.4.10.3 This area to be located with Direct Access to bicycle storage.

16.4.11 Waste Management

16.4.11.1 A waste holding area will be required to hold waste transport equipment, waste containers for washing and drip drying purposes.

16.4.11.2 The space will be adjacent to the loading dock and waste compactor and will accommodate a variety of caged waste soiled holding areas.

16.4.11.3 Space for general waste and biomedical waste containers will be considered when developing floor space requirements for a Component and/or unit. All Components will have a designated Disposal Hold room with space for a tilt truck to be stationed to receive the general waste that is generated by the Component and/or unit and designated space for container to receive the biomedical waste generated on a Component and/or unit. Sufficient space to maneuver the carts in and out of the room is required. Walls will be fortified with impact-resistant gypsum board.

16.4.12 Laundry and Linen Services

16.4.12.1 Alcove-Clean Linen will be provided within the Components for stainless steel linen carts that hold clean linen. Soiled linen bags will be held in a bin inside the Disposal Hold rooms throughout the Facility until they are removed from the Component.

16.4.12.2 Linen Services will require Convenient Access to all areas including restricted access areas to deliver and remove soiled and clean linen.

16.4.13 Central Mail Services

16.4.13.1 Central Mail Services facilitates the process and movement of internal, federal (Postage) and small parcels for inbound and outbound items.

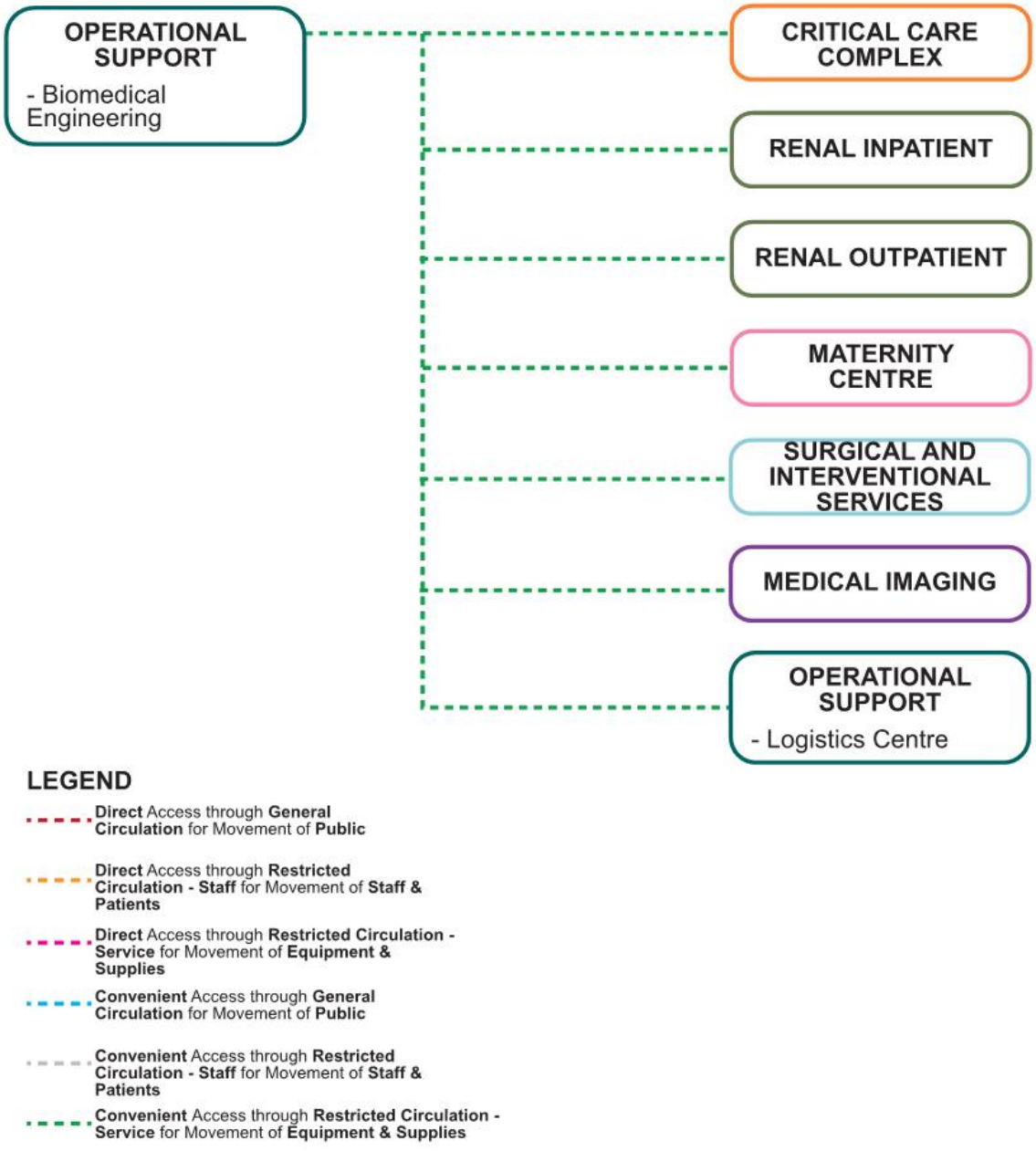
16.4.13.2 Mail stations within the Facility will be in secured locations with access control for authorized Persons only.

16.4.13.3 Central Mail Services will be located adjacent to the Receiving area. There will also be corridor access to Central Mail Services.

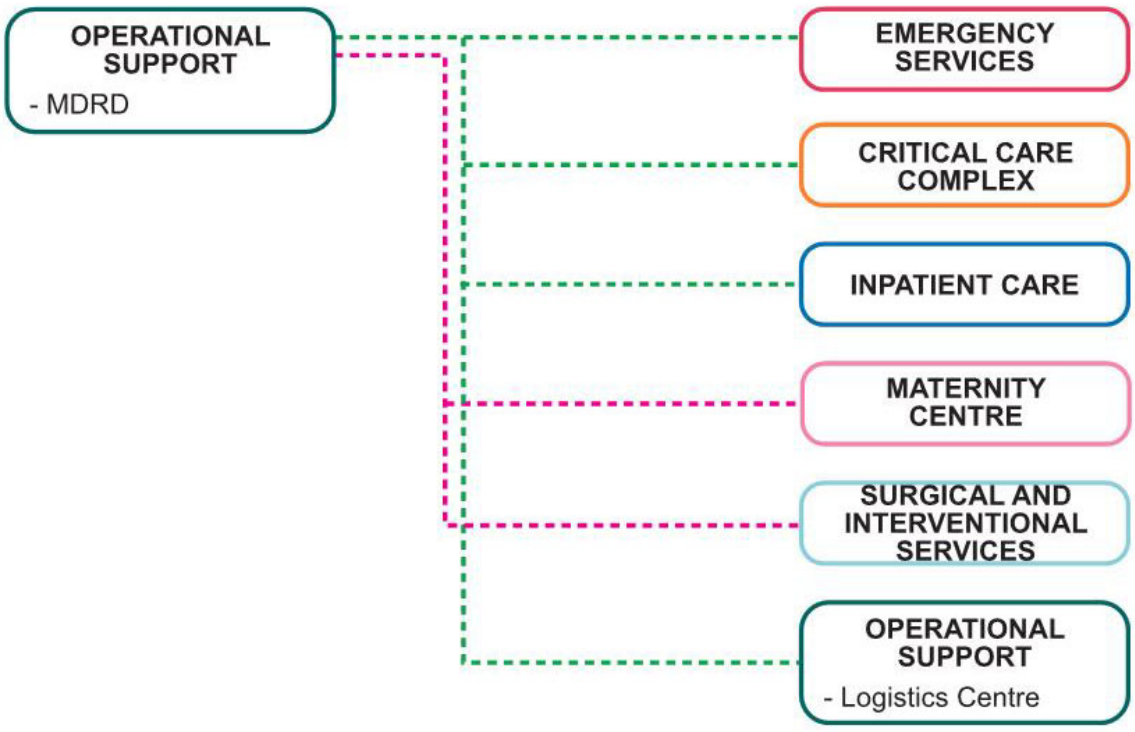
16.5 EXTERNAL RELATIONSHIPS

16.5.1 The following diagrams indicate other Functional Components that have a functional relationship with this Component.

O1. BIOMEDICAL ENGINEERING EXTERNAL RELATIONSHIPS AND CIRCULATIONS



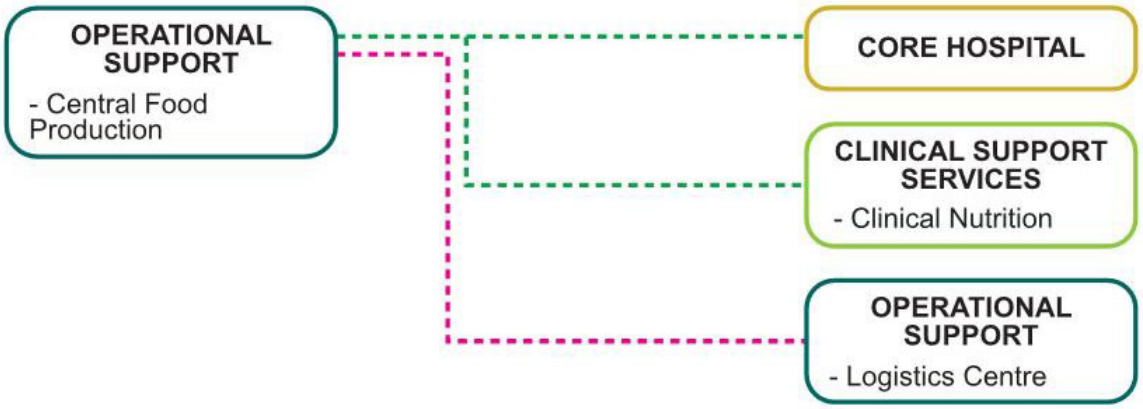
O2. MDRD EXTERNAL RELATIONSHIPS AND CIRCULATIONS



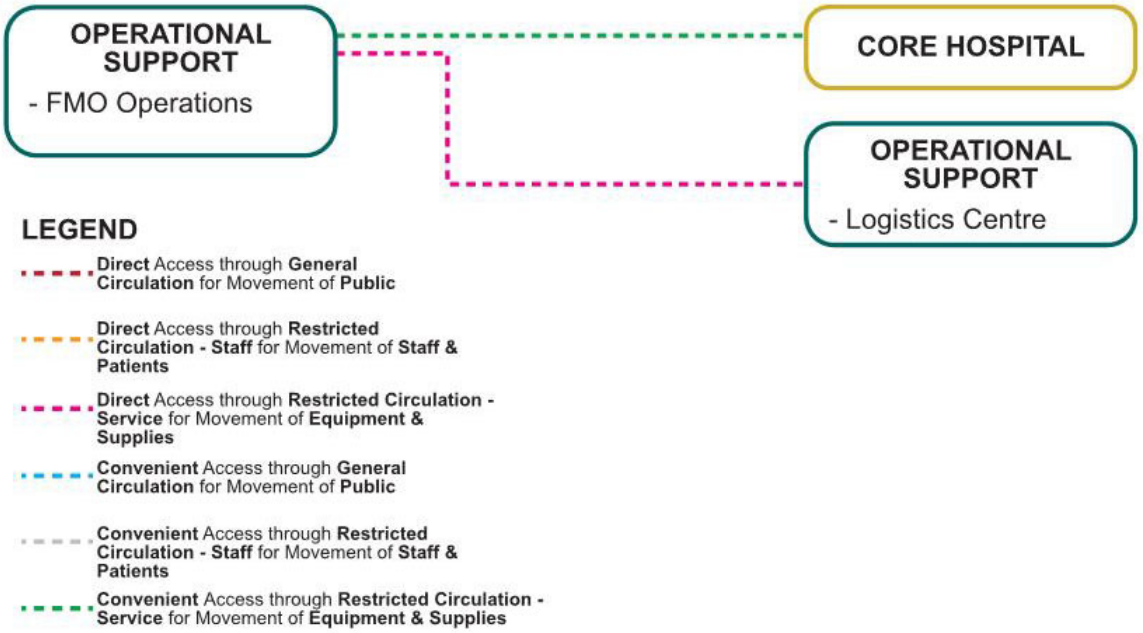
LEGEND

- **Direct** Access through **General Circulation** for Movement of **Public**
- **Direct** Access through **Restricted Circulation - Staff** for Movement of **Staff & Patients**
- **Direct** Access through **Restricted Circulation - Service** for Movement of **Equipment & Supplies**
- **Convenient** Access through **General Circulation** for Movement of **Public**
- **Convenient** Access through **Restricted Circulation - Staff** for Movement of **Staff & Patients**
- **Convenient** Access through **Restricted Circulation - Service** for Movement of **Equipment & Supplies**

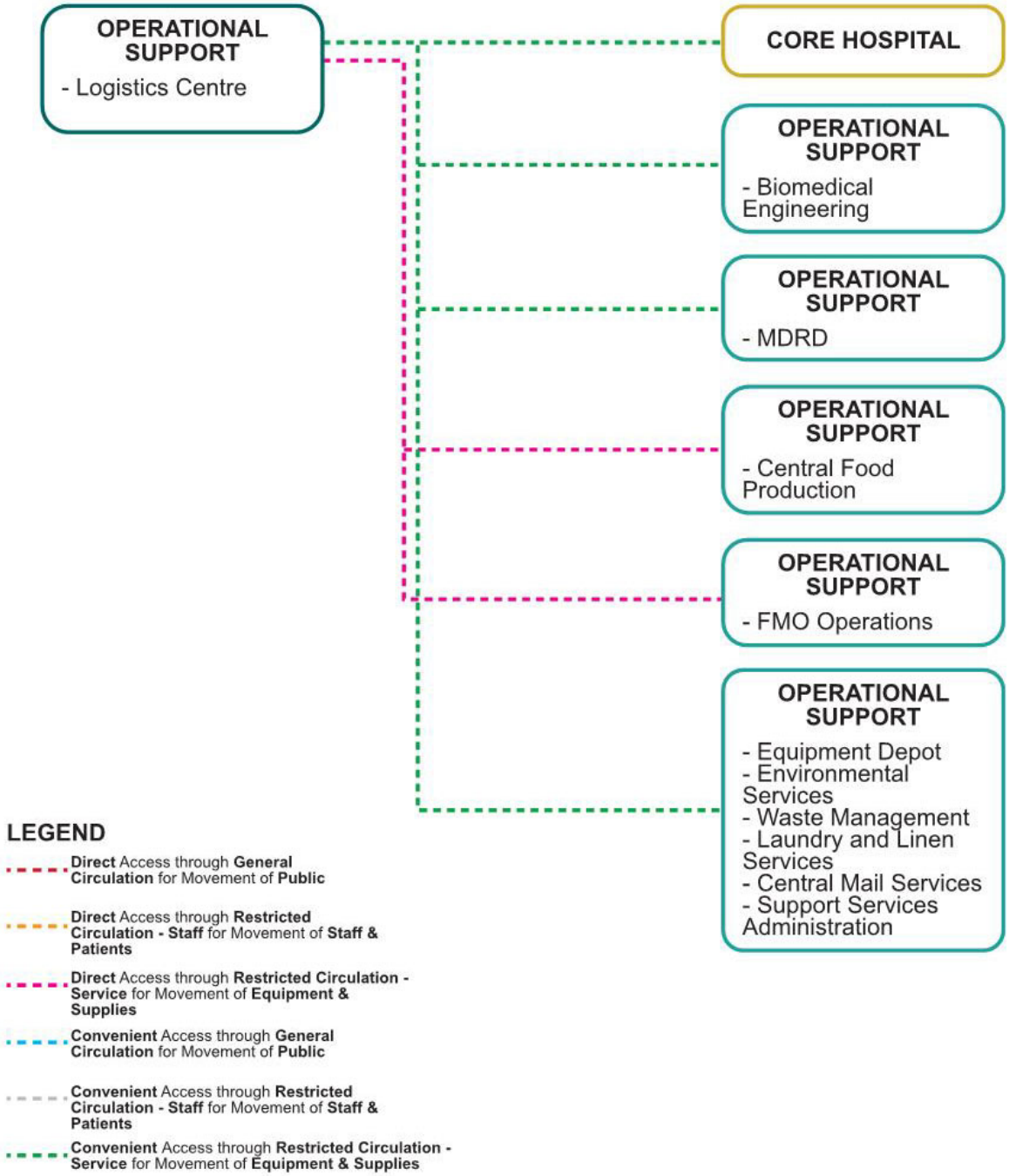
O3. CENTRAL FOOD PROPDUCTION EXTERNAL RELATIONSHIPS AND CIRCULATIONS



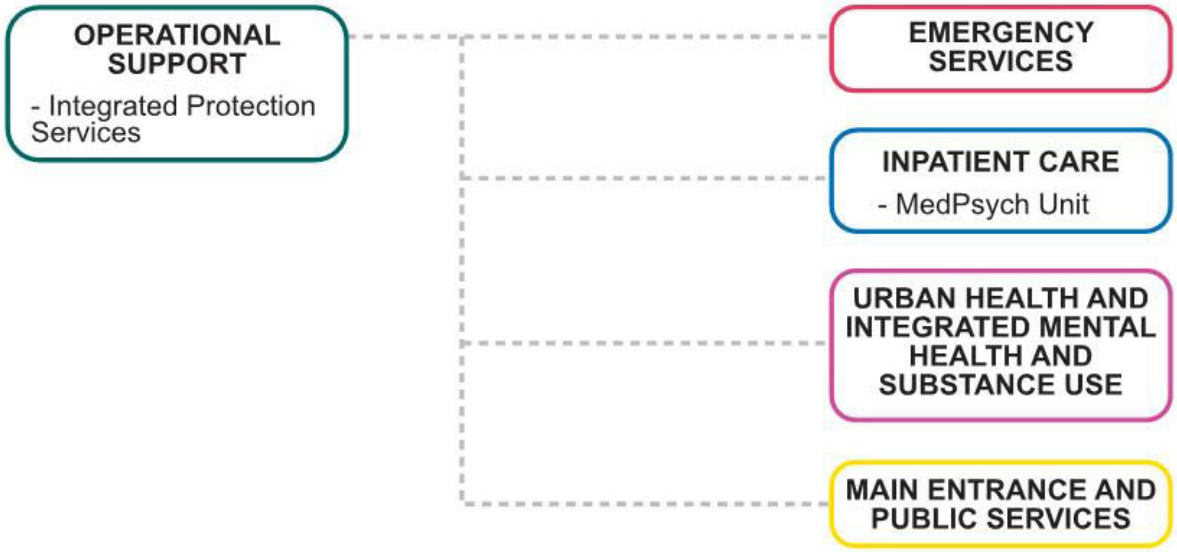
O4. FMO OPERATIONS EXTERNAL RELATIONSHIPS AND CIRCULATIONS



O5. LOGISTICS CENTRE EXTERNAL RELATIONSHIPS AND CIRCULATIONS



O6. INTEGRATED PROTECTION SERVICES EXTERNAL RELATIONSHIPS AND CIRCULATIONS



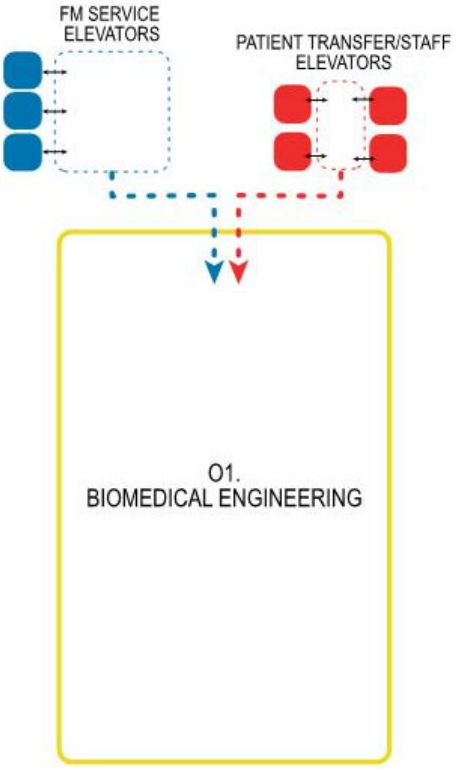
LEGEND

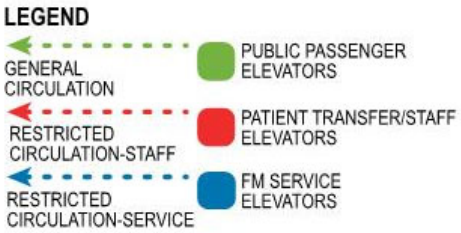
- **Direct** Access through **General Circulation** for Movement of **Public**
- **Direct** Access through **Restricted Circulation - Staff** for Movement of **Staff & Patients**
- **Direct** Access through **Restricted Circulation - Service** for Movement of **Equipment & Supplies**
- **Convenient** Access through **General Circulation** for Movement of **Public**
- **Convenient** Access through **Restricted Circulation - Staff** for Movement of **Staff & Patients**
- **Convenient** Access through **Restricted Circulation - Service** for Movement of **Equipment & Supplies**

16.6 INTERNAL RELATIONSHIPS

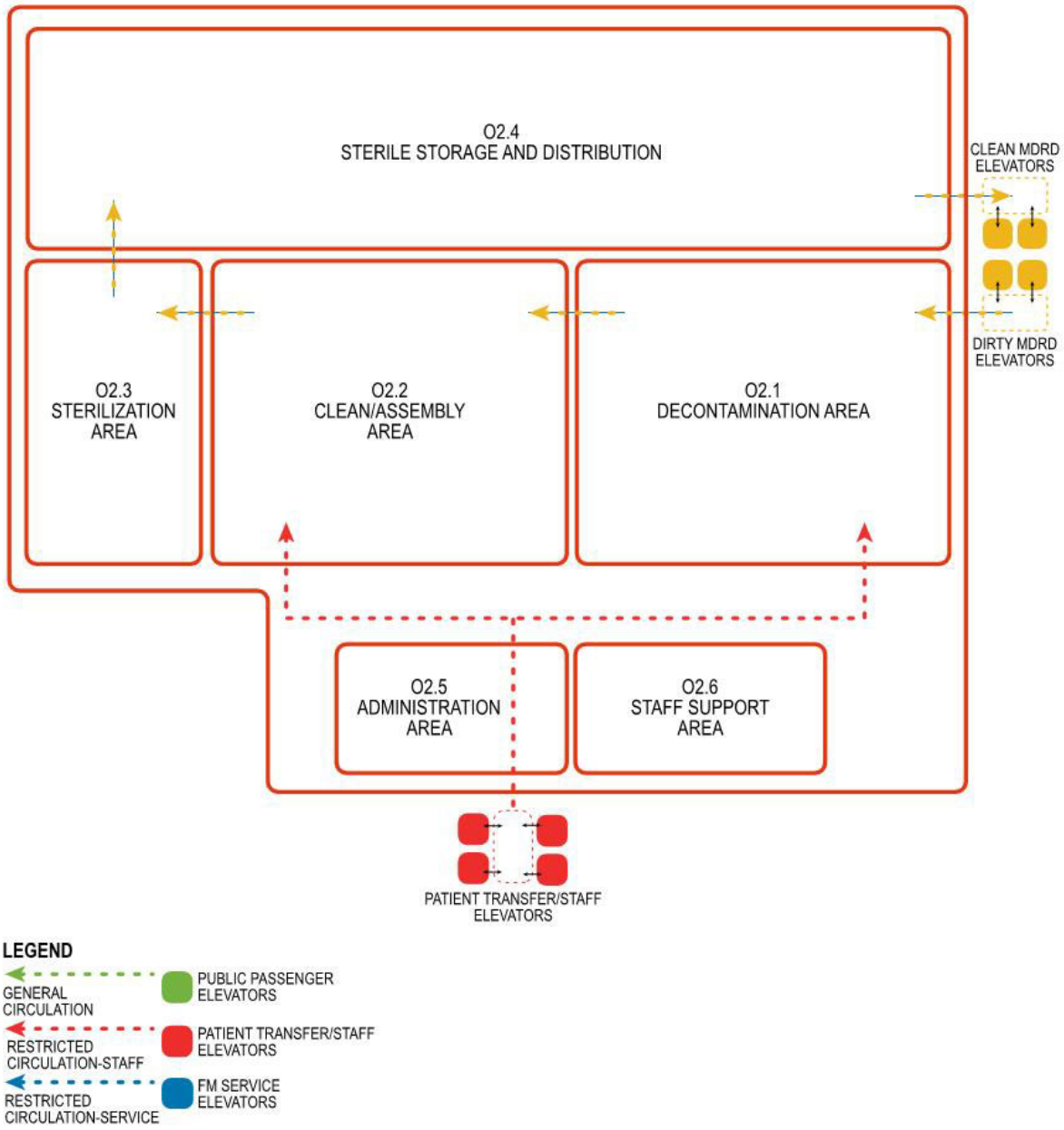
16.6.1 The following diagrams indicate internal functional relationships within this Component.

O1. BIOMEDICAL ENGINEERING INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES

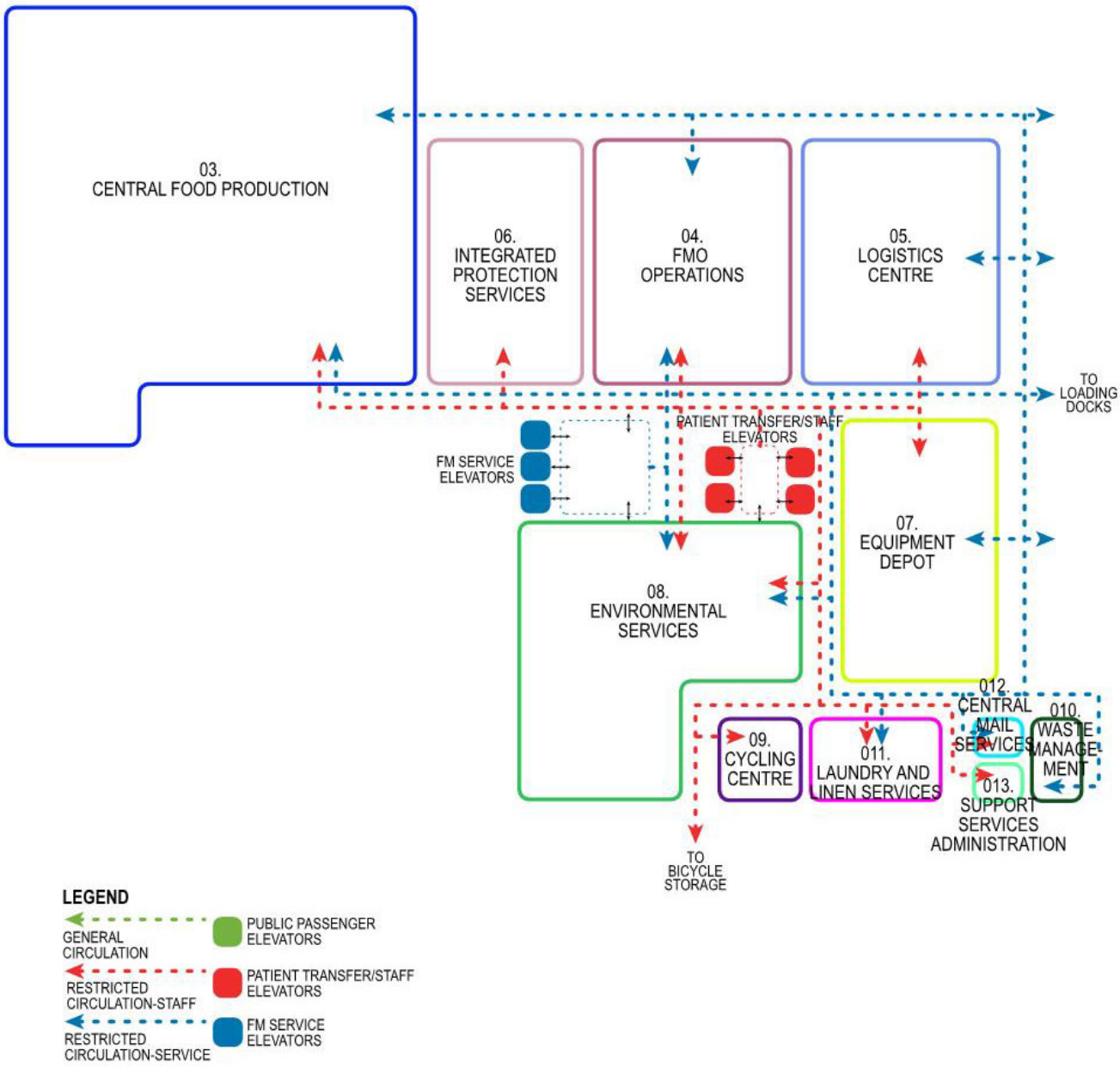




O2. MDRD INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



O. OPERATIONAL SUPPORT INTERNAL RELATIONSHIPS AND CIRCULATIONS - ZONES



16.7 SCHEDULE OF ACCOMMODATIONS

16.7.1 The following table lists the number of spaces, Net Areas and space contents as minimum requirements.

Summary of Operational Support

O1 - BIOMEDICAL ENGINEERING	415.00
O2 - MDRD	1270.70
O3 - CENTRAL FOOD PRODUCTION	1124.40
O4 - FMO OPERATIONS	721.50
O5 - LOGISTICS CENTRE	635.00
O6 - INTEGRATED PROTECTION SERVICES	159.50
O7 - EQUIPMENT DEPOT	316.00
O8 - ENVIRONMENTAL SERVICES	290.50
O9 - CYCLING CENTRE	94.00
O10 - WASTE MANAGEMENT	54.00
O11 - LAUNDRY AND LINEN SERVICES	112.50
O12 - CENTRAL MAIL SERVICES	42.00
013 - SUPPORT SERVICES ADMINISTRATION	33.50
OPERATIONAL SUPPORT PROGRAMMED SPACE NSM:	**5,268.60**

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
O1 - BIOMEDICAL ENGINEERING					
O1.1	Reception	1	6.00	6.00	Incl. 1 workstation, cabinets.
O1.2	Waiting	1	6.00	6.00	Incl. seating for 4.
O1.3	Receiving Desk	1	5.00	5.00	Incl. 1 workstation.
O1.4	Decontamination Zone	1	10.00	10.00	Incl. counters, shelving.
O1.5	Equipment Staging Area	1	11.00	11.00	
O1.6	Incoming Equipment Holding Area	1	15.00	15.00	
O1.7	Machine Room	1	14.00	14.00	Incl. workbench for 1.
O1.8	Outgoing Equipment Holding Area	1	15.00	15.00	
O1.9	Workroom-Biomedical Engineering	1	94.00	94.00	Incl. workbenches for 13.
O1.10	Workroom-Class 4 Laser	1	10.00	10.00	Incl. workbench for 1.
O1.11	Workroom-Specialized Equipment	1	20.00	20.00	Incl. workbench for 1, counters, shelving.
O1.12	Call Centre	1	11.00	11.00	Incl. 3 workstations.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
O1.13	Conference/Meeting Room-Small	1	24.00	24.00	Accommodates 12 Persons.
O1.14	Office-Private	1	9.50	9.50	Incl. 1 workstation.
O1.15	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
O1.16	Office-4 Shared	1	20.00	20.00	Incl. 4 workstations.
O1.17	Store-Office Support	1	4.00	4.00	Incl. counters, cabinets, multi-function printer.
O1.18	Store-Administrative Support	2	4.50	9.00	
O1.19	Store-Chemical	1	6.00	6.00	Incl. counters, cabinets, shelving.
O1.20	Store-Lab Specific	2	25.00	50.00	Incl. cabinets, shelving, charging station.
O1.21	Store-Parts	1	54.00	54.00	Incl. shelving.
O1.22	Store-Supplies	1	6.50	6.50	Incl. shelving.
O1.23	Washroom-Staff	1	3.00	3.00	2-piece.
	TOTAL NSM: Biomedical Engineering			**415.00**	
O2 - MDRD					
O2.1 - Decontamination Area					
O2.1.1	Vestibule-Gown/De-Gown	1	8.00	8.00	
O2.1.2	Scrubs Dispenser	1	2.50	2.50	
O2.1.3	Alcove-Hand Hygiene Sink	1	1.00	1.00	
O2.1.4	Workroom-Decontamination	1	170.00	170.00	Incl. 6 counters with sinks, pass through chamber.
O2.1.5	Instrument Wash	1	32.00	32.00	Incl. floor space for holding of instrument carts and loading of machines.
O2.1.6	Instrument Return	1	1.50	1.50	Pass through chamber
O2.1.7	Dirty Cart Hold	1	17.50	17.50	
O2.1.8	Cart Washer Enclosure	1	14.00	14.00	Located between Decontamination Area and Clean/Assembly Area.
O2.1.9	Disposal Hold	1	12.00	12.00	Incl. staged storage for garbage bins, soiled linen, biohazardous waste, sharps, recyclables, etc., dual egress, Convenient Access to FM Service Elevators.
O2.1.10	Biohazard Waste Staging	1	12.50	12.50	
O2.1.11	Store-Lubricant Detergent	1	16.00	16.00	Incl. automatic dispensing system, dual egress.
O2.1.12	Emergency Shower/Eyewash	1	1.50	1.50	Incl. emergency shower/eyewash, floor drain.
O2.1.13	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies, dual egress.
O2.2 - Clean/Assembly Area					

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
O2.2.1	Vestibule-Gown/De-Gown	1	8.00	8.00	
O2.2.2	Scrubs Dispenser	1	2.50	2.50	
O2.2.3	Alcove-Hand Hygiene Sink	2	1.00	2.00	
O2.2.4	Workstation-MDRD	1	166.00	166.00	Incl. wall mounted displays.
O2.2.5	Cart Drying Room	1	18.50	18.50	Incl. holding area for drying carts, adjacent to Cart Washer Enclosure, floor drain.
O2.2.6	Cart Wash/Hold	2	34.00	68.00	Incl. holding area for clean carts.
O2.2.7	Store-Implants	1	14.00	14.00	Incl. cabinets, shelving, dual egress.
O2.2.8	Store-Non-Sterile Supplies	1	12.00	12.00	Incl. cabinets, shelving, dual egress.
O2.2.9	Workstation	1	4.50	4.50	Incl. 1 workstation.
O2.2.10	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies, dual egress.
O2.3 - Sterilization Area					
O2.3.1	Low Temperature Sterilizers	1	3.50	3.50	
O2.3.2	Steam Sterilizer Enclosure	5	14.00	70.00	
O2.3.3	Cool Down	1	16.00	16.00	
O2.4 - Sterile Storage and Distribution					
O2.4.1	Clean Cart Holding	1	12.00	12.00	
O2.4.2	Clean Cart/Wire Shelving Hold	1	335.00	335.00	Incl. holding area for case carts.
O2.4.3	Holding Sterile Supplies Restocking	1	38.00	38.00	Incl. shelving.
O2.4.4	Clean Elevator Loading Area	1	8.00	8.00	Incl. staging area for elevator loading.
O2.4.5	Workstation	1	4.50	4.50	Incl. 1 workstation.
O2.4.6	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, adjacent to Clean Cart/Wire Shelving Hold.
O2.4.7	Break Down Room	1	13.20	13.20	Incl. 1 workstation, dual egress.
O2.4.8	Dispatch Room	1	16.00	16.00	Incl. 1 workstation, dual egress.
O2.5 - Administration Area					
O2.5.1	Receiving	1	12.00	12.00	Incl. 1 workstation, shelving.
O2.5.2	Conference/Meeting Room-Small	1	24.00	24.00	Accommodates 12 Persons.
O2.5.3	Office-Private	2	9.50	19.00	Incl. 1 workstation.
O2.5.4	Office-3 Shared	1	16.00	16.00	Incl. 3 workstations.
O2.5.5	Alcove-Hand Hygiene Sink	1	1.00	1.00	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
O2.6 - Staff Support Area					
O2.6.1	Lounge-Staff	1	32.00	32.00	Incl. seating for 10, kitchenette, mail slots, 2 touch down workstations.
O2.6.2	Lockers-Staff	2	16.00	32.00	Incl. 35 Z-lockers, 1 shoe rack, adjacent to Lounge-Staff.
O2.6.3	Washroom-Staff	2	3.00	6.00	2-piece.
O2.6.4	Washroom/Shower-Staff	3	4.50	13.50	3-piece incl. shower.
	TOTAL NSM: MDRD			**1,270.70**	
O3 - CENTRAL FOOD PRODUCTION					
O3.1	Receiving/Control	1	18.50	18.50	Incl. 1 workstation.
O3.2	Receiving/Sorting/Decasing	1	14.00	14.00	Incl. 1 workstation.
O3.3	Organic Waste Hold	1	14.00	14.00	Incl. walk-in refrigerator.
O3.4	General Waste	1	14.00	14.00	
O3.5	Workstation-Receiver	1	5.90	5.90	Incl. 1 workstation.
O3.6	Store-Dry	1	82.90	82.90	
O3.7	Store-Frozen	3	14.00	42.00	Incl. walk-in freezers.
O3.8	Store-Non-food	1	70.00	70.00	
O3.9	Store-Refrigerated	3	14.00	42.00	Incl. walk-in refrigerator.
O3.10	Tempering	1	14.00	14.00	Incl. walk-in refrigerator.
O3.11	Ingredient Control Room	1	28.00	28.00	
O3.12	Issue Refrigerator	1	14.00	14.00	Incl. walk-in refrigerator.
O3.13	Kitchen/AGV Holding	1	18.50	18.50	
O3.14	Meat Preparation	1	21.70	21.70	
O3.15	Cold Preparation	1	22.20	22.20	
O3.16	Special Diets/Nourishments	1	18.50	18.50	
O3.17	Production-Cook/Chill	1	100.00	100.00	Incl. emergency eyewash.
O3.18	Bulk Assembly	1	59.00	59.00	Incl. Walk-in refrigerator, the assembly space is inside a Cooler.
O3.19	Prepared Food Bank Refrigerator	1	80.00	80.00	Incl. walk-in refrigerator.
O3.20	Cart Marshalling/Distribution	1	84.00	84.00	Incl. walk-in refrigerator
O3.21	Bakery	1	28.00	28.00	
O3.22	Blast Chiller	1	11.10	11.10	
O3.23	Blast Freezer	1	11.10	11.10	
O3.24	Packaging Area	1	38.20	38.20	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
O3.25	Pot Washing Area	1	79.70	79.70	Incl. emergency eyewash.
O3.26	Store-Chemical	1	7.00	7.00	Incl. emergency eyewash.
O3.27	Soiled Cart Hold	1	18.00	18.00	Incl. walk-in refrigerator.
O3.28	Cart Wash	1	7.60	7.60	
O3.29	Clean Cart Hold	1	32.00	32.00	
O3.30	Store-Emergency Supplies	1	7.00	7.00	
O3.31	Alcove-Hand Hygiene Sink	6	1.00	6.00	Distributed in Central Food Production.
O3.32	Housekeeping Closet	1	7.00	7.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
O3.33	Office-Private-Central Production	1	9.50	9.50	Incl. 1 workstation.
O3.34	Office-Private-Manager	1	9.50	9.50	Incl. 1 workstation.
O3.35	Workstation-Small-Diet Techs	4	4.50	18.00	Incl. 1 workstation, combined into one area.
O3.36	Training Room/Lounge-Staff	1	46.50	46.50	Incl. seating for 20, kitchenette, mail slots, 2 touch down workstations.
O3.37	Lockers-Staff	1	16.00	16.00	Incl. 38 Z-lockers, 1 shoe rack, split into male and female if required.
O3.38	Washroom/Shower-Staff	2	4.50	9.00	3-piece incl. shower.
	TOTAL NSM: Central Food Production			**1,124.40**	
O4 - FMO OPERATIONS					
O4.1	Reception	1	6.00	6.00	Incl. 2 workstations, cabinets, forward-facing reception counter, wall mounted display.
O4.2	Waiting	1	6.00	6.00	Incl. seating for 4, adjacent to Reception.
O4.3	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, adjacent to Reception.
O4.4	Conference/Meeting Room-Small	1	24.00	24.00	Accommodates 12 Persons, adjacent to Reception.
O4.5	Office-Private-FMO Manager	3	9.50	28.50	Incl. 1 workstation, cabinets and shelving.
O4.6	Office-Private-FMO	1	13.00	13.00	Incl. 2 workstations, cabinets and shelving.
O4.7	Office-3 Shared-Planning	1	16.00	16.00	Incl. 3 workstations, cabinets and shelving.
O4.8	Workstation-Touchdown	2	2.50	5.00	Incl. 1 touch down workstation, combined into one area, adjacent to Conference/Meeting Room-Small.
O4.9	Workstation-Electrical Supervisor	1	5.50	5.50	Incl. 1 workstation, adjacent to/part of Shop-Electrical.
O4.10	Workstation-Mechanical Supervisor	1	5.50	5.50	Incl. 1 workstation, adjacent to/part of Shop-Plumbing.
O4.11	Workstation-Carpentry Supervisor	1	5.50	5.50	Incl. 1 workstation, adjacent to/part of Shop-Carpentry.
O4.12	Not Used	0	0.00	0.00	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
O4.13	FM Maintenance Operations	1	22.50	22.50	Incl. 5 workstations, counters, cabinets, wall mounted displays, combined into one area.
O4.14	Store-Office Support-Large	1	7.50	7.50	Incl. counters, cabinets, multi-function printer, adjacent to Reception.
O4.15	Locksmith	1	12.00	12.00	Incl. 1 workstation, counters.
O4.16	Shop-Bed/Stretcher/Ceiling Lift	1	46.00	46.00	Incl. 1 workstation, workbenches for 2, shelving, emergency eyewash, vertical storage for beds, adjacent to Shop-AGV, Direct Access to Equipment Depot.
O4.17	Shop-Plumbing	1	45.00	45.00	Incl. 1 workstation, workbenches for 2, counters, shelving, emergency eyewash, adjacent Shop-Mechanical.
O4.18	Shop-Mechanical	1	45.00	45.00	Incl. 1 workstation, workbenches for 2, counters, shelving, emergency eyewash, Convenient Access to Q2.2.
O4.19	Shop-Welding	1	10.00	10.00	Incl. workbench for 1, shelving, emergency eyewash, welding booth, located on exterior wall for exhaust.
O4.20	Shop-Electrical	1	68.00	68.00	Incl. 2 workstations, workbenches for 8, upper cabinets above workbenches, shelving, emergency eyewash, Convenient Access to Q3.4.
O4.21	Shop-Carpentry	1	123.50	123.50	Incl. 1 workstation, workbenches for 3, counters, shelving, emergency eyewash, adjacent to Shop-Paint.
O4.22	Shop-Paint	1	28.00	28.00	Incl. counters, shelving, emergency shower/eyewash, paint spray booth, adjacent to Shop-Carpentry.
O4.23	Not Used	0	0.00	0.00	
O4.24	Not Used	0	0.00	0.00	
O4.25	Not Used	0	0.00	0.00	
O4.26	Store-Construction Tools	1	12.00	12.00	Incl. cabinets, shelving.
O4.27	Store-Parts/Supplies	1	16.00	16.00	Incl. cabinets, shelving, Convenient Access to Shop-Mechanical.
O4.28	Store-Pipe	2	30.00	60.00	Incl. pipe racks, Convenient Access to Shop-Plumbing and Shop-Electrical.
O4.29	Store-Construction Materials	2	40.00	80.00	Incl. cabinets, shelving, Convenient Access to Shop-Carpentry.
O4.30	Shop-AGV	1	30.00	30.00	Incl. 1 workstation, workbenches for 2, counters, shelving, Convenient Access to Equipment Depot.
	TOTAL NSM: FMO Operations			**721.50**	
O5 - LOGISTICS CENTRE					
O5.1	Office-Private-Logistics Centre Clerk	1	9.50	9.50	Incl. 1 workstation.
O5.2	Office-Private-Logistics Centre Analyst	1	9.50	9.50	Incl. 1 workstation.
O5.3	Office-Private-Logistics Centre Coordinator	1	9.50	9.50	Incl. 1 workstation.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
O5.4	Office-Private-Replenishment Coordinator	1	9.50	9.50	Incl. 1 workstation.
O5.5	Office-2 Shared-Call Centre-Support Services	1	12.00	12.00	Incl. 2 workstations.
O5.6	Office-Central Dispatch-Patient Porter Services	1	40.00	40.00	Incl. 6 workstations.
O5.7	Workstation-Receiver	2	4.50	9.00	Incl. 1 workstation, combined into one area.
O5.8	Pneumatic Tube Station	1	1.00	1.00	Incl. counter, adjacent to Central Receiving & Breakdown.
O5.9	Central Receiving & Breakdown	1	50.00	50.00	Incl. 2 workstations.
O5.10	Staging Area-Logistics Centre	1	16.00	16.00	Incl. counters.
O5.11	Staging Area-Logistics Centre	1	24.00	24.00	Incl. counters.
O5.12	Exchange Cart/Prep/Hold-AGV Depot Area	1	165.00	165.00	
O5.13	Soiled Hold-AGV	1	52.00	52.00	Incl. 6 workstations.
O5.14	Store-Emergency Management Operations	1	38.00	38.00	Incl. cabinets.
O5.15	Store-ICU Back-up	1	14.00	14.00	
O5.16	Store-Hazardous Waste	1	48.00	48.00	Incl. storage of dialysis consumables.
O5.17	Store-Hazardous Waste	1	18.50	18.50	Enclosed storage for holding waste formalin, Liquid Nitrogen tanks, etc., emergency shower/eyewash.
O5.18	Medical Gas Manifold Spaces	1	40.00	40.00	To be located directly adjacent to one another and include: oxygen system reserve, nitrous oxide, nitrogen and carbon dioxide. Comply with all applicable Fire Code requirements. Provide Direct Access to the medical gas bottle storage and exchange area described in Schedule 3. Provide Convenient Access to the Logistics Centre and FMO administrative spaces.
O5.19	Lockers-Staff	2	16.00	32.00	Incl. 35 Z-lockers, 1 shoe rack.
O5.20	Washroom/Shower-Staff	5	4.50	22.50	3-piece incl. shower.
O5.21	Washroom-Staff	5	3.00	15.00	2-piece.
	TOTAL NSM: Logistics Centre			**635.00**	
O6 - INTEGRATED PROTECTION SERVICES					
O6.1	Exam Room-First Aid Clinic Nurse	1	12.00	12.00	Incl. 1 touch down workstation, counters, cabinets.
O6.2	Office-Private-First Aid Clinic Nurse	1	9.50	9.50	Incl. 1 workstation.
O6.3	Office-Private-Site Security Lead	1	9.50	9.50	Incl. 1 workstation.
O6.4	Office-Private-Area Security Lead	1	9.50	9.50	Incl. 1 workstation.
O6.5	Office-Photo ID & Parking	1	20.00	20.00	Incl. 3 workstations.

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
O6.6	Office-Report Room-Integrated Protection Services	1	16.00	16.00	Incl. seating for 8.
O6.7	Office-Security Monitoring Station-Integrated Protection Services	1	18.50	18.50	Incl. counters, wall mounted displays.
O6.8	Office-Lost & Found-Integrated Protection Services	1	28.00	28.00	Incl. shelving.
O6.9	Workstation-VPD Liaison	1	4.50	4.50	Incl. 1 workstation.
O6.10	Workstation-Integrated Protection Services	1	4.50	4.50	Incl. 1 workstation.
O6.11	Store-First Aid Supplies	1	9.50	9.50	Incl. counters, cabinets, multi-function printer.
O6.12	Lockers-Staff	1	15.00	15.00	Incl. 30 Z-lockers, 1 shoe rack.
O6.13	Washroom-Staff	1	3.00	3.00	2-piece.
	TOTAL NSM: Integrated Protection Services			**159.50**	
O7 - EQUIPMENT DEPOT					
O7.1	Office-3 Shared	1	16.00	16.00	Incl. 3 workstations.
O7.2	Receiving-Equipment Depot	1	28.00	28.00	Incl. 1 workstation, shelving.
O7.3	Hold-Central Equipment	1	56.00	56.00	Incl. 2 workstations, wall mounted displays.
O7.4	Hold-Central Equipment	1	165.00	165.00	Incl. 3 workstations, wall mounted displays.
O7.5	Workroom-Wheelchair Repair	1	28.00	28.00	Incl. 5 workstations.
O7.6	Workstation-OT Equipment Depot	1	4.50	4.50	Incl. 1 workstation.
O7.7	Store-Wheelchairs/OT Equipment	1	18.50	18.50	Incl. cabinets, shelving.
	TOTAL NSM: Equipment Depot			**316.00**	
O8 - ENVIRONMENTAL SERVICES					
O8.1	Office-Private	1	9.50	9.50	Incl. 1 workstation.
O8.2	Office-Environmental Services	1	9.50	9.50	Incl. 1 workstation.
O8.3	Office-Housekeeping Central Dispatch	1	16.00	16.00	Incl. seating for 8.
O8.4	Workroom-Environmental Services	1	26.00	26.00	Incl. 4 workstations.
O8.5	Hold-Clean Equipment Charging	1	20.00	20.00	Incl. shelving, charging station.
O8.6	Cart Wash-Trash Carts	1	28.00	28.00	Incl. floor drain, adjacent to loading docks.
O8.7	Disinfector/Washer-Wheelchairs/Gurneys	1	14.00	14.00	Incl. hose bib, floor drain.
O8.8	Mop Wash & Drying	1	18.50	18.50	Incl. cabinets, shelving, hose bib, floor drain.
O8.9	Store-Cleaning Supplies	1	28.00	28.00	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
O8.10	Store-Cleaning Supplies-Bulk	1	26.00	26.00	
O8.11	Lockers-Staff	2	30.00	60.00	Incl. 60 Z-lockers, 1 shoe rack.
O8.12	Housekeeping Closet	3	7.00	21.00	Incl. cabinets, premixed automatic system for dispensing chemical supplies. Accommodates housekeeping carts, ladders, floor cleaning machine and cleaning supplies.
O8.13	Bed Bug Sauna	1	14.00	14.00	Bed Bug Room.
	TOTAL NSM: Environmental Services			**290.50**	
O9 - CYCLING CENTRE					
O9.1	Lockers-Staff	2	20.00	40.00	Incl. 50 Z-lockers, 1 shoe rack.
O9.2	Washroom-Staff	12	3.00	36.00	2-piece.
O9.3	Washroom/Shower-Staff	4	4.50	18.00	3-piece incl. shower.
	TOTAL NSM: Cycling Centre			**94.00**	
O10 - WASTE MANAGEMENT					
O10.1	Soiled Hold-Biohazardous Waste-Red	1	7.50	7.50	Incl. caged area adjacent to loading docks. To be a cooled space.
O10.2	Soiled Hold-Biohazardous Waste-Sharps	1	4.50	4.50	Incl. caged area adjacent to loading docks.
O10.3	Soiled Hold-Biohazardous Waste-Yellow	1	11.00	11.00	Incl. caged area adjacent to loading docks. To be a cooled space.
O10.4	Soiled Hold-Pharmacy Waste	1	11.50	11.50	Incl. caged area adjacent to loading docks.
O10.5	Soiled Hold-Electronic Recycling	1	12.00	12.00	Incl. caged area adjacent to loading docks.
O10.6	Store-NM Radioactive Waste	1	7.50	7.50	Lead lined.
	TOTAL NSM: Waste Management			**54.00**	
O11 - LAUNDRY AND LINEN SERVICES					
O11.1	Lab Coat-Uniform-Scrubs Service	1	28.00	28.00	
O11.2	Laundry-Patient Clothing	1	28.00	28.00	Incl. counters, shelving.
O11.3	Store-Ceiling Lift & Transfer Sling	1	2.50	2.50	
O11.4	Store-Clean Linen Hold	1	54.00	54.00	Incl. cabinets, shelving.
	TOTAL NSM: Laundry and Linen Services			**112.50**	
O12 - CENTRAL MAIL SERVICES					
O12.1	Office-Package Receiving & Holding	1	4.50	4.50	
O12.2	Office-Mail Sorting	1	22.00	22.00	Incl. 250 adjustable height mail slots, 1 workstation, counters.
O12.3	Office-Outbound Mail Centre	1	11.00	11.00	

Ref. No.	Room Type	Area Requirements			Remarks
		units	nsm/unit	nsm	
O12.4	Workstation-Supervisor	1	4.50	4.50	Incl. 1 workstation.
	TOTAL NSM: Central Mail Services			**42.00**	
O13 - SUPPORT SERVICES ADMINISTRATION					
O13.1	Reception	1	12.00	12.00	Incl. 2 workstations, cabinets.
O13.2	Office-Private-Director	1	9.50	9.50	Incl. 1 workstation.
O13.3	Office-2 Shared	1	12.00	12.00	Incl. 2 workstations.
	TOTAL NSM: Support Services Administration			**33.50**	
	TOTAL NSM: OPERATIONAL SUPPORT			**5,268.60**	