RQHR

2009 FUNCTIONAL PROGRAM

AMBULATORY SURGICAL CENTRE

component one

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OVERVIEW

BACKGROUND

Increasing patient access to surgical services is a strategic objective of both Regina Qu'Appelle Health Region (RQHR) Surgical Care Services and the Saskatchewan Ministry of Health (MOH). The Ambulatory Surgical Centre (ASC) in Regina will provide five new operating rooms specifically designed for outpatient procedures and with the capacity to perform approximately 7,000 outpatient procedures each year. By definition, an Ambulatory Surgery Centre is a facility where patients arrive, are prepped, receive their surgery, recover and leave the centre - all on the same day. These are typically low-risk procedures.

The need to increase surgical capacity within the RQHR is primarily driven by two factors. First, the population of southern Saskatchewan in particular, the area served by the RQHR, is growing in both number and average age. This means that more people will be in need of more surgical procedures in coming years. Considering also provincial and federal benchmarks aimed at improving patient access to surgery, it is critical to anticipate and plan for growth in number of surgeries. Second, the number of surgical procedures that are being performed on an outpatient basis is growing. Improvements in technology are making less invasive arthroscopic, laparoscopic and laser procedures more common. When combined with increased use of local anesthetic, this has led to the continued growth in the number of outpatient procedures.

The Saskatchewan MOH and RQHR have an opportunity to make a significant impact on the surgical experience for patients. The Ambulatory Surgical Centre will provide an efficient, patient centric approach to the delivery of a core set of outpatient procedures:

- The ASC Will be designed to be ***Patient Centric*** with patient values at its core
- ***RQHR Values*** will be incorporated into every component of the ASC: Compassion, Respect, Collaboration, Knowledge, Stewardship
- The ASC will strive to be a ***Magnet Environment*** (Centre of Excellence) for patients, staff and healthcare providers
- The ASC will be designed with the overriding objective of ***Flawless Flow*** for patients, visitors, staff, materials and equipment
- The ASC will strive to ***Optimize*** the use of ***Technology***
- The ASC will seek ***Input from all Stakeholders***
- The ASC will ***Leverage Other Work*** by investigating other ASC's and best practice
- The ASC will strive to be ***Environmentally Friendly*** to the greatest extent possible but never to the detriment of patient or staff safety
- ***Every Person is a Contributor*** to the provision of excellent healthcare in the ASC
- The design of the ASC and its processes will have inherent in them: ***Safety, Sustainability, Flexibility and Scalability***

Only outpatient surgeries with a high degree of predictability will be performed at the Ambulatory Surgical Centre. Most cases will be relatively routine and have standard care plans. The risk to the patient will be low and the case length will be relatively predictable averaging about one hour in duration (cases can range from fifteen minutes to two hours). As the cases are predictable and there are no emergent cases to interrupt the flow, it would be rare to have a procedure postponed, delayed or cancelled. However, cancellations could occur due to poor patient health, incorrect patient preparation, patient postponement or cancellation of the procedure or the surgeon being unavailable.

The Ambulatory Surgical Centre will have seven distinct zones:

1. Patient Scheduling, Registration and Tracking
2. Patient Clinic Assessment
3. Patient Care Support
4. Patient Treatment
5. Clinical Support Services
6. Building Support Services
7. Staff Support Services

PROJECT CONCEPT

The Ambulatory Surgical Centre is the first of four distinct components in a planned Ambulatory Centre. All four components could be built at one time or each could be added as funding is made available. Although this Functional Program is focused on component one, the ASC, future expansion of components two through four has been incorporated into the planning.

Component One: Ambulatory Surgical Centre

The Ambulatory Surgical Centre will be the cornerstone of the new Ambulatory Centre with the Eye Centre, Medical Media Services and OR Scheduling located adjacent. The ASC will include five full-size, fully equipped, generic operating rooms with the capacity to perform approximately 7,000 outpatient procedures each year once fully operational. The initial focus will be on ENT (ears, nose, throat), Ophthalmology, Dental and Cosmetic Plastic procedures, with the ability to handle any outpatient procedure performed in the Region.

As the bulk of all ophthalmic surgical procedures will be performed at the ASC, it is essential that the Eye Centre be moved out of the Pasqua Hospital and be located immediately adjacent to the ASC. Not only will this free up valuable space within one of the Region's acute care hospitals, it will also allow approximately 20,000 patient visits each year to be relocated to a community-based facility. Every one of these patients would benefit from the abundant parking and ease of access of such a facility. In addition, approximately 5,000 would return to the facility every year for cataract replacement or other ophthalmic procedure performed in the adjacent ASC. Following their procedure, many would return to the Eye Centre for follow-up examination(s) or treatment(s).

An ophthalmologist office has been planned to be located adjacent to the Eye Centre.

Medical Media Services (MMS) will also relocate to the Ambulatory Centre as the Eye Centre requires immediate access to the MMS team in assessment and treatment of patient conditions.

Component Two: Diagnostic Imaging Centre, Laboratory, Pre-admission Clinic, Surgical Assessment Clinic

The Ambulatory Centre will be home to a new Diagnostic Imaging centre, where the Region's new MRI, Bone Mineral Density (BMD), CT, Ultrasound and X-ray equipment will be located. Patients are often required to have an MRI, CT scan or other radiological procedure performed prior to surgery; in some of these cases, the surgery will be performed at the ASC.

The Patient Service Centre will provide specimen collection service to the ASC patients as well as patients within RQHR. In addition, a rapid response laboratory will provide a range of clinical testing procedures requiring rapid response (stat and urgent) and routine turn-around times suited to the scope of care and treatment of the populations served.

The Ambulatory Centre will also house an expanded Pre-Admission Clinic (PAC). Here, 100% of surgical patients will receive a pre-surgical screen by telephone and up to 50% will receive further screening onsite at PAC. Between the ASC (once fully operational) and the two acute care hospitals, approximately 25,000 surgical procedures per year will be performed in the Region. Relocating PAC from the two acute care hospitals to a community-based facility will further reduce patient visits to the acute care hospitals by 12,500 per year. In addition, valuable space now occupied by PAC in the two acute care hospitals will be freed up, making room for an overnight short stay unit at the Regina General Hospital and possibly the Pasqua Hospital and increased day surgery space at the Pasqua Hospital.

The expanded use of care pathways has resulted in the creation of pre-surgery clinics for bariatric patients, hip and knee patients and patients with musculoskeletal conditions. In addition, the Region is currently developing a spine pathway that will require a clinic for assessment and treatment of patients with spinal conditions. As all of these clinics are pre-surgical in nature, they too will benefit from being located together with the Diagnostic Imaging centre, Patient Service Centre, Pre-Admission Clinic and the ASC.

Component Three: Retail, Food Services & Office Space

To round out the patient experience at the Ambulatory Centre, targeted retail, food and office space will be provided. Having a pharmacy and/or other wellness services located within the Ambulatory Centre will make it that much easier for patients to access the health care services they need. Offering physicians and other allied healthcare providers the opportunity to locate professional offices and services within the Ambulatory Centre will improve both the patient and the health care provider experience at that site. Locating food services offering health y choice options on site will also enhance the experience for patients waiting for appointments and/or families assisting with transportation and care-giving.

Component Four: Expansion of Ambulatory Surgical Centre

To ensure the viability of the Ambulatory Centre for many years into the future, consideration has been given to future expansion of the ASC up to twice the square footage. This expansion may come in many forms, including increasing the number of pre-op preparation spaces, operating rooms and recovery spaces. The expansion may also come in the form of additional services being offered through construction of endoscopy suites or short stay overnight units to accommodate procedures requiring a longer recovery period.

PARAMETERS/ASSUMPTIONS

The ASC will be a free-standing structure not attached to an existing RQHR facility requiring its own heating, power, water and other infrastructure components. Several phased components have been considered in planning the ASC.

1. **Component One**

   Ambulatory Surgical Services will include five operating theatres sized and built identically to allow for flexibility. Two will be primarily used as eye procedure rooms; one will be set up as a swing room able to accommodate eye procedures or other types of procedures; and two will be set up as regular surgical rooms.

   The average length for each eye procedure, including room turnover time, will be approximately 50 minutes (with 30 minutes being the minimum). The average length for each non-eye procedure, including room turnover time, will be approximately 90 minutes. This is a critical assumption as it determines the number of pre-operative and post-operative patient spaces necessary to support the procedures.

   The Eye Centre located onsite will provide specialized ophthalmic diagnostic & therapeutic care to patients, both children and adults.

   One ophthalmologist clinic will be located on site.

   RQHR's OR Scheduling and Medical Media Services will relocate to the ASC.

   Implementation and use of an electronic health record is expected at the ASC. However, it is necessary to plan storage, management and distribution of paper records.

2. **Component Two**

   A Diagnostic Imaging Centre will include MRI, CT, BMD, Radiology and Ultrasound imaging.

   The Pre-Admission Clinic (PAC) will vacate the Regina General and Pasqua Hospitals relocating to the ASC.

   A planned Surgical Assessment Clinic will include the Bariatric Program, providing assessment and preparation for surgery for morbidly obese persons, and the Musculoskeletal (MSK) Clinic and Hip & Knee Clinic, a multidisciplinary clinic focusing on both total joint replacements and other musculoskeletal conditions. Future clinics, such as the Spine Clinic, will be accommodated at this site.

   The Patient Service Centre will provide service to the ASC as well as an additional collection site for the city.

3. **Component Three**

   Retail space to accommodate physician clinics, pharmacy, café/food services, etc. is planned.

4. **Component Four**

   Planning includes provision for future expansion to increase surgical capacity by a further five operating rooms, all sized and built identically to allow for flexibility. Consideration will also be given to a short stay unit to hold patients for up to 23 hours post surgery.

KEY SERVICE TRENDS

The following trends in health care may have an impact on outpatient surgical services:

- Continued shift from inpatient to day surgery procedures with day procedures becoming increasingly complex
- Aging population a major force in driving significant growth in the demand for surgical services
- Transformation of the patient experience
- Safer Healthcare Now!
    - improving the safety of patient care in Canada through learning, sharing and implementing interventions known to reduce avoidable adverse events
- Releasing Time to Care
    - improving ward processes and environments to help nurses and healthcare providers spend more time on patient care thereby improving safety and efficiency
- Electronic Medical Records
- Move toward wireless capabilities; wireless access points throughout the facility will be required
- Digital and/or GPS Tracking systems (i.e. RFID)
- Automated Medication and Supply Management Systems
    - All medications need be reviewed by Pharmacist prior to entering AMD unit
    - ISMP (Institute for Safe Medication Practice)

The following trends in healthcare delivery may impact the ophthalmic care at the Eye Centre:

- Aging population
- Increasing incidence of chronic disease among the general population and focus on health promotion, illness/injury prevention and improving the management of chronic disease
- Improvements in treatment modalities, intervention and education
- Increasing frequency of Clinical Trials
- Changes in technology for cataract treatments, further computerization and integration of ophthalmic & general information
- Increasing number of community focused programs; services will continue to develop and be introduced into the community
- Continued move towards outpatient delivery of Ophthalmic Care, including early initiation of trial "Travelling Tele-Ophthalmology screening & self referral"
- Greater utilization of other healthcare professionals and implementation of full scope of practice providing continuity of care among all disciplines (onsite education & training related to Ophthalmic Assistant Certification course)
- Increase in RQHR Ophthalmologists (new graduates)

- Changes in Standards & Preferred Practice, such as implementation of National and Provincial Best Practice for Infection Prevention and Control
- Reduced costs through efficient client management and streamlining of patient visits
- Improved patient satisfaction
- Changes in actual utilization rates, population projections, referral patterns, or practise patterns will each affect future activities
- Changes in clinical practice will continue to impact the way care is delivered and space is used

NEED FOR REDEVELOPMENT

Outpatient Surgical Services require redevelopment in order to:

- Improve patient experience
- Ensure flexibility in space to accommodate future uncertainty
- Reduce surgical wait times in RQHR
- Ensure low risk of procedure cancellation or delay
- Improve patient flow
- Increase efficiency

The Eye Centre requires redevelopment for the following reasons:

- Lack of space to accommodate current demands and future volumes
- No flexibility in space to expand services
- Patient privacy and confidentiality at risk due to inefficient space and room function
- Restriction of services available due to undesirable or limited space
- Lack of equipment and supply storage
- Floor vibrations from lower level program interferes with procedures and results
- Limited equipment not capable of meeting current demand
- IT not currently integrated to maximum potential – doing so would decrease errors, allow more accurate diagnoses and treatment

FUNCTIONAL DESCRIPTION

SCOPE OF SERVICES

1. PATIENT SCHEDULING, REGISTRATION AND TRACKING

a. ASC Central Registration and Admitting

All patients/clients/visitors will be greeted by an ASC host who will assist with any needs they may have prior to proceeding to Central Registration and Admitting.

Surgical patients receiving services at the ASC will be registered at Central Registration. Three admitting stations will be provided. Three self-registration kiosks will also be provided and will be located adjacent to each admitting station. All other clients receiving services at the Centre will proceed to the designated department registration areas.

Pre-operative/clinic reception services provided on the day of surgery/appointment will include: check-in and verification of documentation.

b. Health Records

Health Records staff will not be located at the ASC, but will remain at Regina General and Pasqua Hospitals. Staff within health records oversee the collection, storage, retention and access to a patients hospital health record chart and manage inquiries and requests for copies of the hospital health record charts.

Transcription services deals with the process of transcription, or converting voice-recorded reports as dictated by physicians and/or other healthcare professionals, into text format.

Transcription services will be provided by off-site transcriptionists located at the Regina General Hospital.

c. OR Scheduling

OR Scheduling is responsible for the management of OR capacity, wait-listing and scheduling of surgical patients in the Regina Qu'Appelle Health Region and production of the daily OR slate. OR Scheduling provides services for:

- Inpatient Surgery
- Outpatient Surgery
- Preadmission Clinic (not currently done by OR scheduling – consideration for the future)

OR Scheduling also operates a waitlist hotline responding to surgical patients' inquiries pertaining to wait times.

2. PATIENT CLINIC ASSESSMENT

a. EYE CENTRE

The Eye Centre provides specialized ophthalmic diagnostic & therapeutic care to patients, both children and adults. This includes general eye care, diagnostic eye tests, specialized therapies, minor eye surgery, ophthalmic resources and patient education. The Eye Centre primarily serves outpatients with few inpatients . A High percentage of patients have Diabetes, Macular Degeneration, Glaucoma, Cataracts, etc.

The Eye Centre also offers clinics that focus on specific ophthalmic needs. The Low Vision Clinic, Orthoptics and a satellite unit of the Eye Bank of Saskatchewan, are located in the Centre. The Eye Centre participates in ongoing national and international research and educational projects and has many links to other related community and professional organizations.

Eye Centre staff include registered nurses, ophthalmic assistants, orthoptists and office assistants. Ophthalmologists use specialized equipment located in the Centre for patient care.

The following clinical activities are provided:

Assessments

Pre-Operative Assessments: Ophthalmic professionals perform assessments for patients undergoing ophthalmic surgical procedures. For patients requiring cataract extraction, with an intraocular lens implant, biometry procedures are performed and care instructions given.

Biometry measures the cornea and other ocular structures. It is often performed on both eyes and is used to determine a range of intraocular lenses.

Post-Operative Assessments: All patients are monitored following ophthalmic surgery by the ophthalmologist, with the assistance of a nurse, orthoptist or ophthalmic technician.

Visual Field Testing: This diagnostic procedure uses specialized equipment to map vision centrally and peripherally in order to monitor visual field changes. Professionals in the Eye Centre perform the procedure on referral from an ophthalmologist (automated and manual systems are used).

Ocular Coherence Tomography (OCT): OCT is a non-invasive, diagnostic procedure that produces an image of the delicate structures of the retina. It performed by ophthalmic professionals, on referral from an ophthalmologist.

Heidelberg Retinal Tomography (HRT): HRT is also a non-invasive, diagnostic procedure that produces an image of the delicate structures of the retina. It is performed by ophthalmic professionals, on referral from an ophthalmologist.

Pentacam: Pentacam is a diagnostic procedure that maps the surface of the cornea in order to monitor and detect irregularities. It is performed by ophthalmic professionals, on referral from an ophthalmologist.

Pachymetry: This procedure measures the thickness of the cornea. It is performed by Eye Centre professionals, on referral from an ophthalmologist.

Corneal Topography: Corneal Topography is a diagnostic procedure that maps the surface of the cornea in order to monitor and detect irregularities. It is performed by ophthalmic professionals, on referral from an ophthalmologist.

Ophthalmic Photography: Ocular photographs are taken by professional medical photographers at the request of an ophthalmologist. The photographs are used to determine and document pathological ocular changes, especially prior to treatment.

Consultations: Full diagnostic ophthalmic examinations are performed by ophthalmologists on referral from family physicians, emergency physicians, optometrists, as well as other ophthalmologists and specialists. Ultrasounds and scans are often used in conjunction with consultation. Emergency examinations are also performed in the outpatient clinic by staff ophthalmologists.

Cryotherapy: The use of extreme cold for treatment of retinal holes, retinal detachments, retinal tears and removal of eyelashes. This therapeutic treatment is performed by Eye Centre ophthalmologists for patients with specific ocular problems.

Lasers: Lasers used in ophthalmic treatment are housed in the Eye Centre for use by staff and ophthalmologists.

Photodynamic Therapy (PDT): PDT can be used as a treatment for macular degeneration. Following IV infusion of a light-activated drug, the ophthalmologist uses a specialized laser light to treat abnormal blood vessels present in AMD. PDT is performed by an ophthalmologist with the assistance of an ophthalmic nurse.

Minor Surgery: Minor ocular surgery is performed in the Eye Centre by an ophthalmologist with the assistance of a nurse. In addition to current Eye Centre workload, repatriation of Ambulatory Eye Surgery currently being performed at the Pasqua will include Blephs and Ptosis.

Resource Centre: The onsite centre maintains information on ophthalmology, including current articles, information sheets, books and journals for patients as well as other service providers. The centre will be located in the Non-Clinical Zone of the Eye Centre.

Clinics

Low Vision Clinic: This Clinic provides examinations, patient teaching and low vision aids to people with vision loss. A community optometrist and vision rehabilitation professional from the Canadian National Institute for the Blind (CNIB) provide this service.

Orthoptic Clinic: Orthoptists are ophthalmic health professionals who perform examinations to detect anomalies of binocular vision and the oculomotor system. They provide therapy to both children and adults.

Eye Bank of Saskatchewan: The Eye Bank of Saskatchewan's Regina laboratory, is also located in the Eye Centre. Eye Bank personnel help to acquire corneas for patients requiring transplant, and are instrumental in the retrieval, examination and documentation process, as well as monitoring the health of the recipient's corneas.

Additional services provided within the Eye Centre include:

- Ocular angiography & photography
- Pre & post op cataract teaching, assessments & biometry measurement
- Specular Microscopy
- Non-mydriatic Diabetic Screening, general ocular assessments includes visual acuity & intraocular pressure
- Laser treatments (Argon, YAG, Diode, PDT & SLT)
- Tensilon & Cocaine testing
- Fluid gas exchange
- Intraocular injections
- Ocular ultrasound

Eye Centre professionals and ophthalmologists work with the Eye Bank at the Saskatchewan Transplant Program in Saskatoon. An Eye Centre professional also participates as a member of the Saskatchewan Coalition for Organ Donor Awareness (SCODA).

The Eye Centre is currently operating a community mobile screening program that uses ocular photographs to detect disease early. The Eye Centre works closely with Medical Media to develop photographs. The program has reduced surgeries, preserved vision and facilitates access to the CNIB and MEDEC.

b. Medical Media Services

Medical Media Services, using biomedical media technicians (BMT), apply artistic ability and detailed knowledge of scientific processes. They use their skills and abilities to document scientific information that relates to biology, chemistry, medicine, and other health-related subjects with the use of photography, video and graphic design. These documented representations of medical and biological subjects are used in textbooks, pamphlets, exhibits, instructional films, civil/criminal legal procedures, and teaching models. They also document surgical procedures, record a patient's medical progress over a period of time, or photograph an autopsy. A major function of the BMT is to assist in education and research. They make prints of charts and graphs, digitize images, use photomicrography to allow microscopic objects to appear in full detail, and process photographs of many different anatomical areas in an effort to increase understanding of the human body and the diseases that affect it. BMTs use advanced computer aided technology to help perform their duties. They use the most up-to-date computers with video, graphic and photographic design software, such as Photoshop, InDesign, and Premier to clarify a variety of complicated medical concepts and processes.

MMS serve a variety of clients including RQHR staff, physicians, patients, allied healthcare providers and external agencies. MMS supports RQHR in the following ways:

- Photographs of staff and physicians in RQHR
- Participating in promotional events
- Assisting units with the production of electronic or printed materials involving images or sound
- Creation of large-scale printed materials such as posters, banners, signs, etc.

MMS photographers provide daily service to the Eye Centre in the assessment of a patient's condition. The requests are time-sensitive as patients often require immediate assessment and treatment.

3. PATIENT CARE SUPPORT

a. Surgical Day Care: Prep / Recovery (Stage II)

The Surgical Day Care Unit is where all day surgery admissions originate and recover. The Unit provides pre-operative preparation and post-operative care Monday to Friday.

The Centre will operate eighteen private prep/recovery rooms.

b. Post Anesthetic Care Unit (Stage I)

The Post Anesthetic Care Unit (PACU) will provide assessment and monitoring to surgical patients in Stage 1 of their recovery period. Patients will wear monitoring devices to monitor heart, blood pressure and breathing. Patients in the PACU will require a higher nurse to patient ratio and more advanced post anesthetic care than those in the Stage 2 recovery area. A 1:1 staff to patient ratio is required for pediatric; for adults, a 2:1 staff to patient ration is required.

Patients with the following characteristics require Stage I recovery:

- patients with a compromised airway – intubated, airway in place
- patients requiring invasive monitoring
- some patients who were under general anesthetic

Four PACU bays and one isolation room (with an adjacent ante room) have been planned. The PACU is to be located adjacent to day surgery / Stage II recovery to allow flexibility in use of beds.

4. PATIENT TREATMENT

a. Operating Rooms

Five fully equipped operating rooms will be operational at the Ambulatory Surgical Centre. Initially, the following surgical specialties are planned to perform procedures at the ASC:

- Otolaryngology (ENT)
- Dental
- Ophthalmology
- Elective Plastics (Breast Reduction and Enhancement)

To provide flexibility in service delivery, all five operating rooms will be designed generically to accommodate any outpatient procedure.

b. OR Staff Support

An OR staff, surgeon and physician lounge will be located adjacent to the OR area and equipped to provide a rest and relaxation area as well as a lunch room with a kitchenette.

Change rooms for OR staff and surgeons will be required and will need to be within close proximity to Day Surgery, OR and PACU.

5. CLINICAL SUPPORT SERVICES

a. Diagnostic Imaging Services

Intra-operative and post-operative imaging will be done at the ASC using mobile equipment. Alcoves will be provided for equipment adjacent to care areas. Space for a visiting MRT will be provided within an Interdisciplinary Room.

All pre-operative imaging will be completed offsite prior to day of surgery.

b. Pharmacy

Pharmacy services will manage the control of medications at the ASC. Pharmacists provide medical information and clinical services to patients and allied health professionals to ensure medications are therapeutically appropriate for the patient, both pre and post surgery. A pharmacy tech will supply onsite medication distribution support.

Proper storage, safeguarding, preparation, and dispensing of medications from automated dispensing units will be located in alcoves. These units will be under the supervision of a registered pharmacist or technician employed by the center.

c. Clinical Engineering

Clinical Engineering applies and implements medical technology to optimize healthcare delivery. It will be responsible for maintenance (preventative and demand) of medical equipment. It will also serve as technological consultants for hospital staff (i.e. physicians, administrators, I.T., etc.), and provide ongoing training. Clinical Engineering will also help in pre-purchase, evaluation, RFP, installation and consultation on purchases of medical equipment.

6. BUILDING SUPPORT SERVICES

a. Site Administration

Site Administration will provide leadership and management for the ASC. An ASC Director will be located onsite.

b. **Material Management**

Material Management's (MM) primary function is to provide supplies and other materials used to support patient/client care and facility operations at the ASC. MM will be responsible for planning, researching, coordinating, implementing and controlling the efficient, cost-effective flow of goods and services into the facility. It will monitor the supply chain from the point of origin until the disposal of surplus or scrap.

Material Management will provide one central inventory at the ASC to satisfy the needs of the entire facility. Materials received typically include medical supplies, pharmaceuticals, mail, equipment/furnishings and linens. The department stores materials for varying lengths of time (e.g., medical supplies, linen) while others may be delivered directly to the user departments (e.g., pharmaceuticals, linen).

Delivery frequency to the ASC to be determined.

c. **Plant & Maintenance**

Plant & Maintenance is responsible for the daily operation of facility's buildings, infrastructure and grounds. It will provide building maintenance, minor renovations and installations, including:

- Repair of buildings and equipment, office equipment and all patient-related equipment (excluding clinical engineering); pick up of maintenance supplies; snow removal and grass cutting,
- Provide safety code and general building maintenance requirements such as fire alarms, duress and security control systems
- Grounds equipment storage (e.g.: snow removal, grass cutting, grounds tools)

Construction and project management will be provided by offsite staff.

The future will require energy conservation initiatives (Gold LEED equivalent certified)

d. **Environment and Equipment Cleaning**

Environment and Equipment Cleaning Services is responsible for the cleaning of the facility. Staff will perform the following services:

- Cleaning, disinfecting & sanitizing of the environment
- Cleaning of all furnishings (excluding certain medical equipment, specific office equipment such as computers and specialized equipment (i.e. diagnostic);

- Cleaning of equipment (excluding some medical equipment);
- Cleaning of ORs, patient rooms, exam rooms and washing of beds by unit service worker and environmental service workers
- Management of Day Surgery room changeovers by unit service worker;
- Terminal cleaning of the operating theatres by environmental service worker (ESW);
- Retrieval and disposal of waste management including proper handling of recyclables ;
- Special projects as required;
- Floor refinishing, etc.

a. Laundry Services

All laundry will be delivered to the ASC from the regional laundry facility. Laundry Services will provide adequate, clean, good quality linens to all departments at the ASC.

b. Education and Conference Facilities

An Education and Conference area will be shared by the ASC and available on a bookable basis. Site administration staff will be responsible for managing room bookings. All conference and education space will be Telehealth-capable.

c. Food Services

Meal service will not be provided to patients at the Centre. Nourishment Centres will be provided throughout care areas for patients requiring a light snack.

7. STAFF SUPPORT SERVICES

a. Staff Facilities

Staff Facilities include the following centralized services:

- Staff Change Area (Male and Female)
- Staff Showers (Male and Female)
- Staff Lockers (Male and Female)
- Staff Fitness Room
- Staff Lounge

The Staff Facilities component will be located in a central location in the ASC close to staff parking with convenient access to work areas.

All staff will enter and leave the ASC through the Staff Facilities component. Staff will wear their personal clothes to work and change into their proper attire at the facility (if required).

All Staff will exit through the Staff Facilities component. Staff will change out of their facility attire (if required) and back into their personal clothes.

An onsite Staff Fitness Room will be provided to support staff recruitment and retention and to maintain a healthy workforce. The Fitness area will include three to four exercise machines and a floor area for fitness classes. It will be located adjacent to and accessible via the locker/change area.

The Staff Lounge will provide space for staff to break.

b. Patient, Staff and Surgeon/Physician Parking

Sufficient parking needs to be made available to handle the anticipated number of day patients as well as staff and surgeons.

Parking should be within easy walking distance of the ASC entrance.

Staff and surgeon parking should be separate and accessible to a separate staff entrance.

EDUCATION

The ASC will provide teaching resources for staff and students. Teaching will occur within available spaces with convenient access to group teaching facilities within the Centre. Touchdown stations for students/visiting allied health providers will be provided.

RESEARCH

The Eye Centre will participate in clinical trials and research programs. Access to consult, assessment and touchdown space is required. Study Coordinators and Technicians will perform clinical and research assessments throughout the day and require dedicated space. Space to support projects is required for data analysis, chart storage, and pharmacy support (i.e. storage area for research drug protocols). Areas of focus may include:

- Clinical research
- Outcome measurement
- Needs assessment

OPERATIONAL CONSIDERATIONS

HOURS OF OPERATION

The hours of operation for the Ambulatory Surgical Centre are:

- 07:00 to 19:00 Monday to Friday

The hours of operation for the Eye Centre* are:

- 08:00 to 16:30 Monday to Friday, often operating from 06:30 to 19:00 to accommodate workloads (patients scheduled for surgery on Friday will return Saturday morning for a check up)

**Consideration for expanded registration hours to be given for emergent workload after hours*

The hours of operation for Medical Media Services are:

- 08:00 to 16:30 Monday to Friday

The hours of operation for OR Scheduling are:

- 07:30 to 16:00 Monday to Friday

ORGANIZATION & MANAGEMENT

1. PATIENT SCHEDULING, REGISTRATION AND TRACKING

Covered entry and exit areas will exist at the ASC for all patients and visitors.

a. Patient Registration and Patient Tracking

All patients and visitors will be greeted by an ASC Host. The Host may need to provide assistance to patients (i.e. access to or assistance with wheelchair, assistance out of a vehicle, wayfinding, etc).

The registration process is expected to be quick with little wait time. All day surgical patients will be required to arrive 45 minutes prior to their scheduled procedure. Registration staff will update medical information systems and provide patients with any forms or documentation required (it is expected that hard copy medical records will still be in use at the time of opening however the assumption that Electronic Health Records will be used in the future has been used).

Patients will have the option to self-register using automated registration kiosks, which will be located at Central Registration. 3 kiosks will be available and located adjacent to each admitting cubicle. Staff will be available to assist with this process.

All patients will receive an RFID capable identification wristband to wear for the duration of their stay in the facility.

Once registered, patients and support persons will proceed to the service area or to the Central Waiting area. Most patients will be ambulant but some may be in a wheelchair or using walking aids.

Note: Payment for procedures associated costs will occur at the point of service.

Transcription Services

Information will be sent electronically between the ASC and offsite positions.

Transcription Dictaphone stations will be available at the ASC and Eye Centre.

Transcription reports may be printed at point of care. Consideration in planning needs be given to auto-fax capability in the event that the Electronic Health Record is not implemented at the ASC. To provide for this, all care areas will require access to report-printing equipment (e.g. networked photocopier/ printer or a transcription printer). Security and confidentiality issues related to printing health record documentation on the unit will need to be addressed.

Voice recognition software will be required at the ASC for dictation.

b. ASC Central Waiting

Once registered, surgical patients and support persons will proceed to the ASC Central Waiting area (some may proceed directly to Prep/Day Surgery). Most patients will be ambulant but some may be in a wheelchair or using walking aids.

Computer kiosks, vending machines, televisions, chairs and washrooms will be provided in the area.

Central Waiting will accommodate surgical clients and families/support persons. Clients of other services within the Centre and their support persons may access the Central Waiting, however separate waiting areas have been planned within each department.

Central Waiting should be subdivided into zones to separate client groups. Client privacy/confidentiality must be addressed in the overall design of this area.

The ASC Host will guide patients to the appropriate service area. Once the client is in the service area they will be attended by appropriate staff.

Family or support persons may accompany the client into clinical space or remain in the waiting area until the patient has completed their visit.

An electronic patient tracking board will be located in Central Waiting. All patients will receive a unique case identifier which will be displayed on the tracking board.

c. Exit

A covered exit will be provided. This exit will also serve as the ambulance drop off / pick-up point. Secure, direct access to the second floor (OR suites) should be provided from the exit to provide quick entry in the event of an emergency.

Patients being transferred to the ASC on a stretcher from an inpatient facility will enter through this exit.

d. OR Scheduling

OR Scheduling staff will handle scheduling of all surgical patients: inpatient and outpatient, for RQHR. Surgical patients will be contacted by Scheduling Staff via telephone.

A tentative ASC surgical slate will be prepared 72 hours in advance. The finalized surgical slate will be prepared 24 hours in advance. All pre-surgery screening will be scheduled seven to 14 days in advance or as soon as the case is booked.

Wait list clerks will manage the surgical waiting list and assist with client/patient questions and concerns.

Public access to OR Scheduling is not permitted. Location within the facility to be secure.

2. PATIENT CLINIC ASSESSMENT

a. Eye Centre

The Eye Centre will be organized into the following zones:

- Waiting
- Unit Administration
- Non-Clinical Administration
- Clinical Administration
- Exam/Clinic Area
- Clinic Support
- Staff Support

Arrival and Registration

All Eye Centre patients will enter through the main Ambulatory Surgical Centre entrance and be proceed to the department for registration.

Eye Centre Unit Admin staff will prepare all information required for the patient visit. All information is received from the referring Physician offices prior to patients visit.

Client Management

After registration, clients will wait in the Eye Centre Waiting area until the time of the scheduled appointment. Clients will then proceed to an exam/clinical room to be attended by the appropriate care provider. Patients receiving a series of services will wait in one of the five waiting pods in the exam/clinic zone.

Patients requiring dilation prior to their appointment will be seen by an Eye Centre staff in the Stretcher/Dilation Room adjacent to the Angiogram Room.

Every attempt will be made to coordinate diagnostic testing and clinical visits to the facility. All efforts will be made to minimize the time lost for a client, i.e. travel time, missed work days etc.

Post-Operative Care

Patients undergoing surgical eye procedures in the Eye Centre or Surgical Centre may be seen for a post-operative exam in the Eye Centre the following day.

Clinic Management

All Exam/Clinic rooms will be technologically integrated with digital review capability.

Staff Organization

Clinical Staff at the Eye Centre will have access to treatment spaces including Treatment Rooms, Procedures Rooms, Storage Rooms, Interdisciplinary Space, Education Space and Clinic Trial space.

Eye Centre staff may need to access the department after hours for emergency visits. Security will be provided for staff accessing the facility after hours.

e. Medical Media Services

Client Management

Clients will enter through the Main ASC entrance and be received by the ASC host who will direct them to the Medical Media department. A dedicated Receptionist will greet clients. A waiting area for six people will be provided.

Client appointments will be scheduled by the Medical Media Services receptionist.

MMS staff will meet with clients in their office/workstation, print/plotting room and edit suite to review digital media.

Print Media Management

MMS will do all printing in a Print/Plotting area. A table for reviewing large scale printing will be required. All staff require easy access to this area. Clients will also require access this area (accompanied by MMS Staff).

Photography/Video/Audio Media Management

MMS will carry out all photography, audio and video projects from an onsite Multi-Media Room. Room requirements include ability to control ambient noise, 30 foot room length and a ceiling height of 15 feet with structural area and grid.

Clients will access the Multi-Media zone from the waiting room after direction from the Receptionist or MMS staff member.

A wheelchair accessible change room will be provided adjacent to the Multi-Media Room.

OR Photography Management

Medical Media provide services within the OR Theatre during procedures and will require access to the OR area. Access by internal circulation to the OR is required.

Mobile/Off-Site Media Management

Medical Media Services perform duties offsite. Storage for mobile equipment carts with equipment is required.

Some portable equipment is heavy and if not located on ground level will require elevator access.

Courier Management

Medical Media Services requires courier service. Couriers will enter through the main ASC entrance. A courier pick-up/drop-off vestibule will located at the entrance of the Medical Media Services department.

Staff Management

MMS staff provide services from their office/workstation, the Multi-Media Room, Edit Suite, the Eye Centre and the OR.

Medical Media Services staff may access the department after hours. Security measures will be required.

Adjacency Requirements

Medical Media Services requires an adjacency (through internal circulation) to the Eye Centre for easy movement of staff.

Additional Considerations

Medical Media Services will require stretcher, wheelchair and public access.

3. PATIENT CARE SUPPORT

a. *Day Surgery Prep*

All patients will arrive in the day surgery prep area 30 minutes prior to the scheduled procedure time (*Note: patients scheduled for an eye procedure require 10-15 minutes for dilation.)* Patients will be assigned a stretcher and placed in one of the eighteen private rooms. One washroom will accommodate three day surgery rooms. All rooms should be planned to accommodate a ceiling lift.

Patients will change from street clothes into a surgical gown, if necessary. For many procedures, the patient will remain in partial or complete street clothes and put a surgical gown over top of personal clothing. All personal belongings will be placed into a mesh bag secured to the assigned stretcher.

Patients will remain on the stretcher bed for the duration of their stay. In some cases, family members will be allowed to wait in the surgery prep room with the patient.

Various healthcare team members will come to the patient's bedside in preparation for the procedure. Final chart review, nursing assessment, anesthesia interview, site marking, IV start (if necessary), EKG lead attachment (if necessary), antibiotic administration (if necessary), pregnancy test (for women of childbearing age) and topical anesthesia administration for eye cases will be performed in day surgery rooms.

All patients will be transferred to the operating room on their assigned stretcher by a porter or unit service worker. Some patients may need to be transferred from their stretcher to the OR table or procedure chair. Stretchers not required during surgery will be stored in the OR (consider locating beneath a counter). Patients will be transferred back onto the stretcher post surgery prior to being transferred to Recovery.

b. Post Anesthetic Care Unit (PACU)

If required, patients will be transferred to the Post Anesthetic Care Unit (PACU), located adjacent to the day Surgery area (consideration is to be given to shared use of Stage I & II bays), on their assigned stretcher. Patient vital signs will be closely monitored to help minimize post-operative complications. Length of stay in the PACU varies, depending on the type of surgery and type of anaesthetic. Target length of stay will be around 20 to 30 minutes. Patients will move to Second Stage Recovery based on a patient score.

Local and monitored anaesthesia patients will not stop in PACU, unless specifically requested by the anaesthesiologist, and will proceed directly to Stage II Recovery.

Once the PACU Discharge Criteria have been met, the patient will be transferred to a Surgical Day Care Room to complete recovery.

Visiting in PACU is restricted. Since the average stay in PACU is minimal, visitors will be asked to remain in the main waiting lounge.

c. Recovery (Stage II)

Post- Operative Second Stage Recovery is part of the Day Surgery unit and will be co-located with day surgery/prep.

Stage II Recovery will be provided to outpatients who have completed Phase 1 recovery in the PACU (if required). Some patients will go directly to Stage II Recovery from the OR if the anaesthesiologist approves and the patient meets the necessary requirements to be discharged from PACU. All patients will spend some time in Stage II Recovery. Target length of stay is dependent on the procedure but will range from a minimum of 30 minutes for observation to an average of 2 hours. Peak recovery patient volume will occur between 1100 hours and 1400 hours.

Patients will recover in their assigned stretcher bed and be discharged once they meet the discharge criteria. When adequately recovered, patients will change back into street clothes (if required) and proceed to the exit under the care of a responsible person.

Patient Transfer

Any patient needing to be transferred to an acute care facility will be transported by ambulance to either the Pasqua Hospital or the Regina General Hospital. The ASC will have a covered ambulance pickup/drop-off area. Direct access from the OR to exit is required.

Nourishment Centre

Light refreshments will be available for patients. A nourishment centre will be required with an ice machine, fridge, sink and cupboards.

Staff Organization

Staff in Day Surgery will typically be focused on Pre-Operative patients in the morning and Post-Operative patients in the late afternoon with a mix of both during the rest of the day.

4. PATIENT TREATMENT

a. Operating Room

All surgical patients will be transferred to the OR on an assigned stretcher bed. Where deemed appropriate by the anesthetist, a family member (with an assigned volunteer) may escort a child/elderly/cognitively impaired patient into the operating room and remain there during induction. The family member and volunteer will then leave the operating room and proceed back to the Central Waiting area.

All five OR's will be sized and designed identically to provide flexibility into the future.

One OR will be a designated ophthalmology surgical suite with a hanging microscope. Floor microscopes will be used in the other four OR's if required.

Ceiling height must accommodate the up and down movement of a boom (for use of flat panel screens). No surgical equipment booms will be used.

One case cart staging and support room will be located between two OR suites with direct access to the sterile core. A flash sterilizer will be located in this room. Sterile case carts to accommodate the daily slate for each supported OR will be housed in this room.

The Central Waiting area will be located in proximity to the operating rooms to ensure easy access for surgeons to meet with families post-surgery. A private consultation/quiet room is also available for the purpose of meeting with families.

5. CLINICAL SUPPORT SERVICES

a. Diagnostic Imaging Services

Each OR will be equipped to accommodate intra-operative imaging. Storage of mobile units will be maintained close to point of use.

b. Pharmacy

The primary function of Pharmacy Services at the ASC will be stocking and dispensing of medications. Pharmacy Techs will monitor inventory from the Central Pharmacy located at the Pasqua Hospital.

Automated Medication Dispensing

Medication required for the ASC will be located in Automated Medication Dispensing (AMD) units throughout care areas to minimize travel by care providers. AMDs provide more accuracy in patient medication dispensing and inventory management, improve security for medications stored on units, and help meet labour-saving strategies. Pyxis units are planned to be located in the following areas:

- Day Surgery
- Recovery (PACU)
- Sterile Supply
- Eye Centre
- OR Theatres (potential)

The central pharmacy will prepare cases with one week of inventory for each AMD machine. All units will be stocked by a pharmacy technician and stocked with redundancy inventory.

AMD units will be integrated with an electronic order entry system and electronic patient medication profiles (once implemented). The central pharmacy will be notified of the ASC OR slate in advance via paper or electronic order entry system by OR Scheduling.

AMD units will also be used to manage commonly used floor stock medication, including controlled substances.

Dispensing and Order Entry

Central Pharmacy staff will be responsible for purchasing all medications for the ASC directly through drug wholesalers, while large volumes of IV solutions will be ordered through Material Management.

Nursing staff will be responsible for procurement of medication for surgical procedures.

IV solutions

IV solutions are purchased commercially and are administered to patients by nursing personnel. IV solutions requiring admixing of medications will be prepared by a Pharmacy Technician in a sterile area within the Patient Care Support zone under a laminar flow hood.

The Central Pharmacy will manufacture and compound other medications not commercially available.

c. Clinical Engineering

A work area and storage for back-up equipment (anaesthesia, Electro Surgery Unit) will be provided for Clinical Engineering adjacent to the surgical area.

Clinical Engineering will be located adjacent to the OR.

6. BUILDING SUPPORT SERVICES

a. Site Administration

Site Administration will be accessed during and after hours. Security measures will be required.

Staff work areas (e.g. shared photocopies, faxes, general supplies, File Storage) managed by Site Administration should be located in proximity to Site Administration to support staff efficiencies.

Clients accessing Site Administration will include the public, staff, physicians, etc.; clients will be expected to be booked. Clients accessing Site Administration will be received at Central Registration and wait in the Central Waiting area until the employee they are meeting receives them.

The employee will bring the client into either an office or meeting room as required.

b. Material Management

All supplies will be distributed to the ASC from one of the existing acute care hospitals using a top-up system. It will not be necessary to maintain large inventories on-site at the ASC.

Inventories of consumable supplies for day to day operations will be maintained close to point-of-use, using a combination of top-up cart systems and fixed shelving. Medical supplies will be topped up and held in a clean supply room within a designated area. Sterile supplies will be provided by exchange cart in accordance with scheduled procedure needs. Supplies will be transported to the Ambulatory Surgical Centre from one of the existing acute facilities in Regina.

Case cart assembly (Procedure Based Delivery System) may be performed at one of the existing acute care hospitals. Instrument trays will typically be smaller and more standardized due to the predictability of the cases performed at the ASC.

Material Management System

An automated inventory management using RFID technology (i.e. Pyxis Supply Management system) should be considered to allow staff to accurately manage supply levels, easily monitor expired products, and efficiently track product usage.

Ordering Process

All orders will be serviced through the central Material Management office offsite so they can be scrutinized and coordinated. An ERT will be assigned to each OR suite responsible for doing all of this OR inventory management. At the ASC, you will still need someone like an ERT to be responsible for determining what inventory is required on a daily basis. Excluded from this process are some Maintenance and Pharmacy orders. The main central stores will contain all computerized inventory and accounts for the largest volume of items. Some deliveries to stores must be kept in a secure area at the ASC until they can be forwarded to the department, such as pharmacy drugs. Use of an electronic purchase order requisition should be considered.

Inventory Control & Standardization

Inventory will be monitored using a computerized inventory management system and reordered as necessary. The Inventory Manager will deal with inventory shortages or changes in the supply chain. All receiving will be done at central stores unless a predetermined drop-ship arrangement has been authorized. Planning includes Material Management run an integrated electronic software package that is linked with the finance department. A separate storage area is required for equipment.

Loading Dock

Both clean and soiled loading docks are required at the Ambulatory Surgical Centre. The following departments or functions will need easy access to the loading docks:

- Material Management
- Plant & Maintenance
- Waste disposal & Bio
- Pharmacy
- Recycle program

An overhanging roof will protect the Material Management loading dock.

An exterior dock with a scissor lift is required.

Bulk Stores Area

Temporary holding areas will be provided for short term storage of materials waiting to be delivered to end users at the ASC.

Post Receiving Area

Located adjacent to the clean receiving dock, the receiving area (short term holding) will be used to check and receive all materials. After each shipment is verified against the items purchased, it will be moved into the bulk storage area. Most materials will be delivered directly to end users.

Waste Removal Systems

Trash is held in one or more centralized rooms and then moved to a dumpster, located outdoors, on a regular schedule. Hazardous waste will be boxed and stored until a licensed hauler removes it. A compactor room for the disposal of cardboard will be provided at the ASC.

Security and Protection Services

The main holding areas will be locked when not in use and after hours. Stairwells and hallway doors cannot be locked as per fire code. A doorbell is required on the loading dock to ring for a storekeeper. A TV monitoring system is required to monitor activity on the loading dock and shipping/receiving area. Anyone coming to the area will be provided with a visitor ID card.

c. Environment and Equipment Cleaning

Environment and Equipment Cleaning Services supplies (paper supplies, gloves, etc) will be delivered to the ASC once per week and germicidal cleaner will be delivered once per month, stored in a central housekeeping supply area and stocked by housekeeping staff.

Environment and Equipment Cleaning

Housekeeping rooms will be located throughout the facility for ease of access by staff. Some equipment will be stored in the rooms (i.e. burnishers, mops, buckets, ladders, paper supplies, cleaning supplies, in-floor sinks). Large equipment will be stored in a central storage area.

Unit Service Workers will clean all Prep Recovery Rooms between patients.

Housekeeping will clean the OR environment between clients and provide a thorough clean at the end of the day. In other outpatient care/clinic areas, Housekeeping will clean at the end of the day.

A cart wash area will be located adjacent, but external to, the central Housekeeping Storage area.

Laundry

Housekeeping staff will collect the soiled laundry bags and transport to the Dirty Dock for pick up.

Infection Control

Sanitization is necessary in all areas of the ASC. The facility will incorporate products that are washable, cleanable, functional, serviceable, and aesthetically pleasing.

Waste Removal

General waste will be removed from user areas by Housekeeping and taken to the soiled utility room by the soiled dock or directly to an outside location for pick-up.

Biohazard waste will be removed from care areas by housekeeping staff; waste porters will transfer waste to the soiled utility room. Waste will be appropriately packaged by unit staff prior to pickup. Staff will transport waste to a holding area to be weighed, boxed and stored in a biohazard freezer. Biohazard waste will be picked-up by an outside contractor for disposal.

Recycling

Recycling will be collected by Housekeeping staff (paper and confidential waste, plastics, glass and cardboard). Staff and visitors will be able to sort and place items in bins throughout the facility. Housekeeping staff will collect the bins and deliver them to a central location near the loading dock where disposal and compacting will occur. An external agency will pick up all recycling for disposal.

d. Laundry

Clean linen will arrive at the clean dock from the regional laundry facility and be transported to all areas on carts. Clean linen carts will be stored in each department.

Soiled linen will be temporarily stored in various departments in soiled holding rooms. For infection control, a soiled receiving dock is necessary to keep soiled linen separate. Soiled linen will be picked up and transported back to the Regional laundry facility.

e. Sterilization Processing

All sterile processing will be performed at existing acute centre sterile processing departments.

A Procedure Based Delivery System (PBDS) will be implemented at the ASC. Pre-packaged sterile surgical kits, consisting of sterile and non-sterile components, will be fully prepared offsite and delivered to the ASC on a daily basis for procedures scheduled for that day.

A clean service elevator will have direct access from the clean side of the loading dock for delivery of sterile supplies to the OR sterile supply area. A dirty service elevator will be located adjacent to the decontamination area in the OR area with direct access to the soiled side of the loading dock.

Soiled surgical reusable items and instruments will be transferred to the decontamination room and then transferred to the soiled service elevator for delivery to the soiled dock. Instruments will be picked up and transported back to the sterile processing departments for sterilization.

Consideration should be given to the following:

- Equipment and trays for Surgery should be standardized with general and specialty items
- Sterile instrumentation should be in instrument containers. The containers will require appropriate in-process workspace and final storage locations in clean/sterile storage.
- Unit Support Worker will provide processing of all mobile patient care treatment equipment
- A sterile supply area is planned to support all operating rooms
- A Flash sterilizer is be provided in the sterile supply area for dropped/contaminated instruments
- A small decontamination area should be provided in the surgical area for Anesthesia supplies.

f. Maintenance

Building maintenance services such as plumbing repairs, light bulb replacement, repairs of furniture and hardware etc. will be provided by a resource on site for part of each day. A workshop is required onsite for maintenance. ASC staff will have a number to call for emergency maintenance service.

Routine maintenance and inspections will be performed by an onsite resource.

A maintenance parts and supplies room will be provided at the ASC stocked with supplies and equipment commonly used by the maintenance team.

A project room with storage space for blueprints will be provided.

An external building is required for storage of grounds keeping equipment.

g. Education and Conference Facilities

The Education and Conference facilities should be located close to the main ASC entrance for ease of access by public, staff & physicians on a bookable basis.

Site Administration will be responsible for the management of bookings. Public accessing the area will be received at the main Reception area.

A small servery will be provided to allow for service of small snacks and beverages and will be accessible by the large Education Room.

Booked meeting spaces should be in close proximity to Site Administration to improve the efficiencies of managing these rooms. Communication and Telehealth equipment should be located in proximity to the rooms in which the technologies are used.

h. Food Services

Food items required for nourishment centres will be delivered to the Ambulatory Surgical Centre from one of the existing acute care sites.

7. STAFF SUPPORT SERVICES

Staff will enter and leave the facility through the Staff Support component. Lockers will be available for all ASC staff.

An Exercise Area has been provided for use by staff.

CLINICAL SUPPORT SERVICES

Infection Prevention and Control (IPC)

The following are design requirements for IPC:

- Air handling in waiting rooms must meet IPC standards
- One hand-washing sink in each exam/clinic room with space for soap, lotion, paper towel dispensers and disposal
- Anti-Bacterial gel dispensers at various strategic locations throughout the facility

IT and Communications

All rooms will be pre-fitted with a variety of IT components to enable accommodation of emerging technologies. This IT infrastructure will form the "central nervous system" allowing the ASC to remain in step with advancing technologies.

Information Management

Information systems will be automated with access to information by means of desktop computers located in staff work areas. Information may also be available through handheld devices in the future.

Communication Systems

The following communication systems are required at the ASC:

- Telephone, data and fax lines in designated offices
- Closed Circuit Television (CCTV) for education
- Wireless communication system for inter-staff communications
- Hardwire services for all clinical equipment
- Separate clinical engineering network in all OR suites with uninterrupted power supply (UPS)
- Emergency call buttons throughout staff work areas
- Patient & facility management software (i.e. Picis, SCM, Automated Supply Management Systems (i.e. Pyxis), Picture Archiving and Communication System (PACS), Electronic Medical Record (Centricity), etc.)
- Telehealth capability in all ORs, conference & education rooms
- Link between all OR suites and Education Rooms
- Patient self-registration kiosks
- Electronic patient tracking system will be in use; patient status/location will be readily accessible to facilitate effective communication with family members and promote efficient room turnover. Patient Tracking Boards (monitors) should be provided in the Central Waiting area and staff work areas.
- Digital, integrated review capability in all Eye Centre Exam/Clinic Rooms
- Consideration for use of electronic communication and use of short message service (text messaging) to contact and communicate with patients

By virtue of future direction in Surgical Services (i.e. more technology and advanced equipment) significant support from IT will be required.

LOGISTICAL & MATERIAL SUPPORT

Logistical and Material Support Services will be provided within the overall strategy. See the following components for further details:

- Material Management
- Housekeeping Services
- Laundry Services

Specific Logistical and Material Support Service requirements are:

- *Document Control:* Workrooms will be provided and include the photocopier, printer, fax, shredder, clerical supplies and lockable cabinet for storage of paper supplies.
- *Portering:* To transport patients to the Surgical Suites in stretchers as appropriate.
- *Food Services:* Snacks will be provided to surgical patients as needed.
- *Surgical Supplies:* the Surgical Suite may use standardized, pre-packaged OR packs for specific cases; case carts will be prepared in advance by an offsite SPD.
- *Biomedical & Equipment Management:* To maintain equipment in the ASC as required. Dedicated technician time will be required for AMD units; onsite support will be augmented by offsite providers.

Security and Protection Services

Security and Protection Services will be provided within the overall Facility Strategy. The following security features will be employed within the facility:

- Electronic devices will aid security (e.g.: video monitoring of all entrances/exits and parking lots; automated card access will be provided)
- Access to the Patient Treatment area will be controlled
- Patient/family waiting area will be located outside the secure area

WORKLOADS

SURGICAL OUTPATIENT

Day Surgery	2009	% Capacity	2010	% Capacity	2011	% Capacity	2012	% Capacity	2013	% Capacity	2014	% Capacity
ENT	993	9%	1,043	10%	1,095	10%	1,150	11%	1,207	11%	1,268	12%
Dental	538	7%	564	7%	593	7%	622	8%	653	8%	686	9%
Eyes	4,854	48%	5,097	50%	5,352	53%	5,619	55%	5,900	58%	6,195	61%
Plastics	274	4%	288	4%	302	4%	317	4%	333	4%	350	5%
	6,659	**67%**	**6,992**	**71%**	**7,342**	**74%**	**7,708**	**78%**	**8,093**	**82%**	**8,499**	**86%**

EYE CENTRE

Eye Centre Procedures	Historical Workload					Projected
	2003/04	2004/05	2005/06	2006/07	2007/08	2023/24
Orthoptics	1,140	1,005	948	1,059	986	2000
Visual Fields	3,930	3,550	3,695	4,100	4,235	4,487
Biometry	1,466	1,843	1,934	2,021	2,402	
Argon Laser	1,158	1,242	1,109	1,101	1,157	1,326
YAG Laser	816	627	455	592	657	724
Consults	1,586	1,582	1,470	1,738	1,427	1,795
Preop	794	792	924	893	462	889
Postop[2]	1,388	1,583	1,978	2,089	2,575	2,211
Air Fluid Gas Exchange	22	15	18	8	9	15
Cocaine Tests	0	1	1	0	0	5
Cryotherapy – Retinopexy	25	28	18	21	27	27
Eye Check	3,627	3,608	4,251	6,219	5,475	5,331
Low Vision	52	87	91	80	68	87
Punctal Occlusion - Plugs	83	111	83	85	96	105
Topography	1	25	16	41	46	37
Ultrasound	54	30	27	38	45	45
*PDT-Teaching	106	98	134	130	59	137
PDT-Injection New	102	97	127	201	186	185
PDT-Angiogram	228	292	192	36	2	243
PDT-Injection Repeat	208	278	162	83	88	213
PDT-Self Pay	3	4	7	2	0	10
Drug Study	96	40	9	4	11	100
Alcohol Injection	2	1	2	1	1	2
OCT[3]	15	795	1,673	3,763	4,005	10,000
Pachymetry	0	113	1,320	1,999	1,404	2,047
AMD Injection	0	0	4	882	1,013	1,090
AMD Teaching	0	0	2	36	0	100
Visually Evoked Potentials	0	0	1	11	4	100
Electro-Retingrams	0	0	2	16	3	30
Electro-Oculograms	0	0	1	13	4	30
Specular Microscopy	0	0	0	13	12	15

Eye Centre Procedures	Historical Workload 2003/04	2004/05	2005/06	2006/07	2007/08	Projected 2023/24
Nidek Diode Laser	n/a	n/a	n/a	1	5	20
SLT Laser	n/a	n/a	n/a	29	230	600
Diabetic Screening	n/a	n/a	n/a	10	27	1,000
Goldman Perimeter Field	n/a	n/a	n/a	n/a	12	150
Eye Procedures in Ambulatory Care (Pasqua Hospital) – *to be moved with Eye Centre*						
Biopsies	9	2	3	2	0	
Blepharoplasty	1	3	0	0	0	
Chalazion	100	74	48	44	81	
Ectropion Repair	4	3	1	1	3	404
Entropion Repair	2	1	1	1	4	
Excision Lesions (3 snip proc.)	111	63	61	28	44	
Tarsorrhaphy	3	4	2	2	0	
Tear Duct Probing	9	5	8	0	0	
Total Procedures	21,214	21,942	24,715	31,120	29,582	42,000

Assumptions

[1] Assumes Pediatric Ophthalmologist on Staff. Referrals increase with school age children.

[2] 1st day post op increases with the # of cataract surgeries

[3] New technology: non invasive, quick, able to identify & record structures in retina not previously viewed in this way

MEDICAL MEDIA SERVICES

MEDICAL MEDIA SERVICES	Historical Workload 2004	2005	2006	2007	2008	Projected 2023/24
Eye Centre						
Angiogram[1]	1,123	990	1,020	1,163	943	4,000
Photo (Fundus)	2,113	1,901	1,912	1,790	1,748	2,177
External	502	572	514	500	677	2,000
Slit Lamp	220	252	23	176	170	235
MMS						
Photography, Graphics, Posters, etc.	n/a	n/a	n/a	669	746	1,100

[1] Clinical Trial results will be validated in 3 years; results to show a projected increase in Angiograms

STAFFING

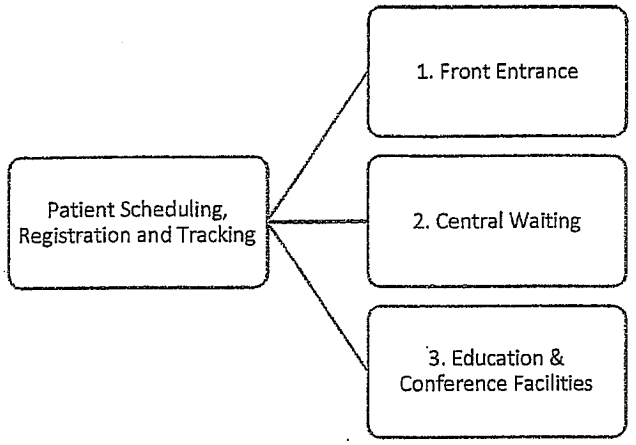
DEPARTMENT	Current (Headcount)	Future[1] (Headcount)
Central Registration		
ASC Host	n/a	1
ASC Discharge Host	n/a	1
Clerks	n/a	3
Scheduling		
Manager	1	1
Director	1	1
Administrative Assistant	1	1
OR Schedulers	7	14
Wait List Hotline Clerk	1	1
Data Entry Clerk	1	3
Medical Media Services		
Supervisor	1	1
Photographer	4	6
Receptionist	1	1
Eye Centre		
Unit Admin Support	3	4
Manager	1	1
Clinical Coordinator	1	1
Program Development Educator	1	1
Drug Study Coordinator	1	2
Orthoptist	1	2
RN/LPN	8	8
Ophthalmic Assistant	1	3
Unit Service Worker	1	2
Research Monitors	3	3
Students	1	2
Medical Media	1	2
Medical Director	1	1
Volunteer	1	1
Day Surgery: Prep Recovery		
RN	n/a	6
Unit Clerk	n/a	1
PACU		
RN	n/a	6
OR		
OR Coordinator (for PACU and OR)	n/a	2
Specialty Coordinator	n/a	3
RN	n/a	10
LPN/ORT	n/a	7
ORA	n/a	7
Anesthesiologist	n/a	1
OR Equipment and Resource Tech	n/a	1
Unit Clerk	n/a	2
Porter	n/a	3

DEPARTMENT	Current (Headcount)	Future[1] (Headcount)
Pharmacy		
Pharmacist (visiting)	n/a	1
Technician, ASC	n/a	1
Technician, Central (offsite)	n/a	1
Laboratory		
Phlebotomist	n/a	1
Administrative Assistant	n/a	1
Clinical Engineering		
Clinical Engineer	n/a	1
Material Management		
Stores Attendant	n/a	1
Housekeeping		
Unit Service Worker	n/a	n/a[2]
Environmental Services Worker	n/a	n/a[2]
Plant & Maintenance		
Maintenance Worker	n/a	1
ASC Site Administration		
Director	n/a	1
Administrative Assistant	n/a	1
TOTAL STAFF	**n/a**	**131**

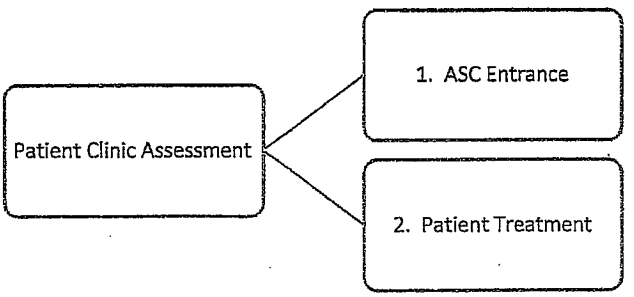
[1]Based on an 8 hour shift (Headcount at peak time)
[2]Future headcount to be determined prior to Design for parking requirements

DESIGN CRITERIA / FUNCTIONAL RELATIONSHIPS

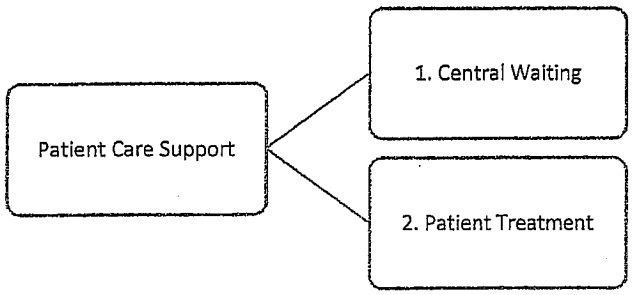
EXTERNAL RELATIONSHIPS / CONCEPTS



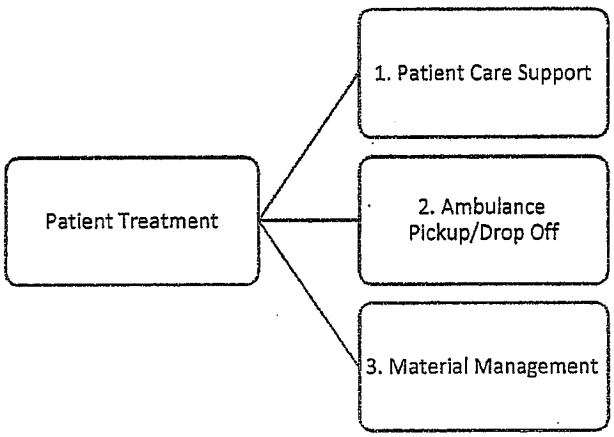
1. Provide direct access by general circulation from the ASC Entrance to Patient Scheduling, Registration and Tracking for movement of patients and visitors.
2. Provide direct access by general circulation from Patient Scheduling, Registration and Tracking to the Central Waiting Area for the movement of patients and visitors.
3. Provide direct access by general circulation from Patient Scheduling, Registration and Tracking to the Education and Conference Area for the movement of patients and visitors.



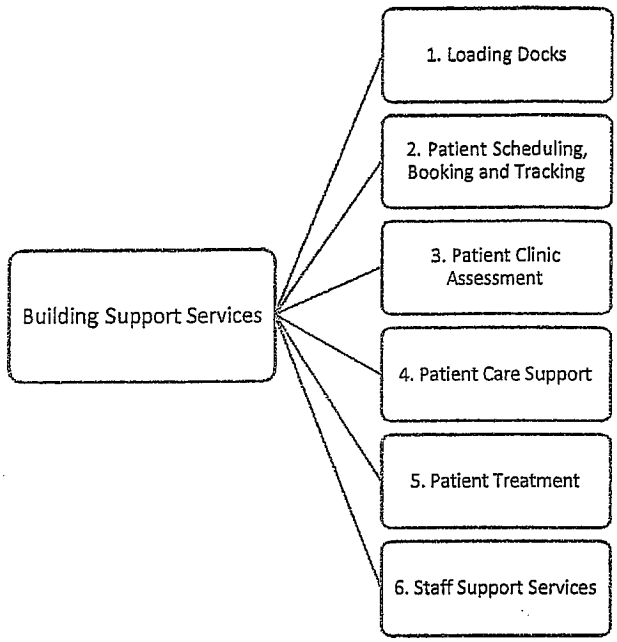
1. Provide direct access by general circulation from the main ASC Entrance to the Patient Clinic Assessment zone for movement of patients and visitors.
2. Provide direct access by internal circulation from Patient Clinic Assessment to Patient Treatment for the movement of staff (Eye Centre & Medical Media Services).



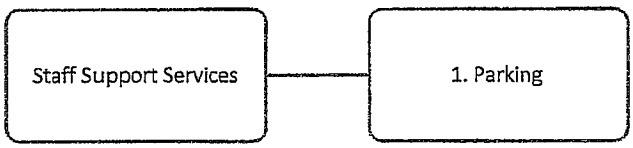
1. Provide direct access by general circulation from the Central Waiting Area to Patient Care Support for movement of patients.
2. Provide direct access by internal circulation from Patient Care Support to Patient Treatment for movement of patients and staff.



1. Provide direct access by internal circulation from Patient Treatment to Patient Care Support for movement of patients and staff.
2. Provide direct access by internal circulation (vertical) from Patient Treatment to the covered Ambulance Pickup/Drop off area for movement of patients.
3. Provide convenient access by general circulation from Material Management to Patient Treatment for movement supplies.



1. Provide direct access by internal circulation from the Loading Docks to all Building Support Service areas for the movement of supplies and equipment.
2. Provide convenient access by internal circulation from Building Support to Patient Scheduling, Booking & Tracking for the movement of supplies and equipment.
3. Provide convenient access by internal circulation access from Building Support to Patient Clinic Assessment for the movement of supplies and equipment.
4. Provide convenient access by internal circulation from Building Support Services to Patient Care Support for the movement of supplies and equipment.
5. Provide convenient access by internal circulation access from Building Support Services to Patient Treatment for the movement of supplies and equipment.
6. Provide convenient access by internal circulation access from Building Support Services to Staff Support Services for the movement of supplies and equipment.



1. Provide direct access by general circulation from staff Parking Lot to Staff Support Services for the movement of staff.

INTERNAL RELATIONSHIPS / CONCEPTS

Zoning and patient flow requirements are as follows:

1. Patient Scheduling, Registration and Tracking

a. ASC Central Registration and Tracking

Space should be designed to facilitate the flow of patients and visitors from Entry → Registration → Waiting → Exit. Zoning in the Patient Scheduling, Registration and Tracking area as follows:

i. Front Entry/ASC Host
ii. Registration
iii. Patient/Family Waiting Area
iv. Exit

b. OR Scheduling

Space should be designed to facilitate the flow of staff from a secure entrance: Administration → Staff Support. Zoning in OR Scheduling as follows:

i. Administration
ii. Staff Support

2. Patient Clinic Assessment

a. Eye Centre

Space should be designed to facilitate the flow of patients and visitors from ASC Main Entry → Waiting Area → Clinic/Exam Room → Discharge Lounge. Zoning in the Eye Centre area as follows:

i. Registration/Waiting
ii. Treatment/Exam/Clinic/Consultation Area
iii. Clinical Administration
iv. Non-Clinical Administration
v. Clinical Support

b. Medical Media Services

Space should be designed to facilitate the flow of staff and visitors from ASC Main Entry → Waiting Room → Medical Media → Discharge Lounge. Zoning in Medical Media area as follows:

i. Reception/Administration/Waiting
ii. Multi-Media Production Area Client Zone
iii. Multi-Media Finishing Non-Client Zone (Printing & Storage)
iv. Staff Support

3. Patient Care Support and 4. Patient Treatment

The Patient Care Support and Patient Treatment areas should be designed to facilitate the flow of patients from the ASC Main Entry → Central Waiting Area → Day Surgery Preparation → Surgery → Stage I Recovery → Stage II Recovery. Patients (and parents accompanying pediatric patients) entering the OR should not be exposed to any sights or sounds that may be disturbing. Materials that reduce sound transmission should be used in the design of the suites and the area should incorporate a system of one-way flow-through systems.

Zoning in the patient care support and treatment area as follows:

a. Day Surgery Preparation/Recovery (Stage I & II)
b. Day Surgery Preparation/Recovery Support Areas
c. Operating Rooms
d. Surgical Support Areas
e. Post Anesthetic Care Unit
f. Admin/Staff Support

5. Building Support Services

Space should be designed to facilitate the flow of supplies and equipment from the Clean Loading Dock → Storage → Departments → Soiled Loading Dock. Zoning within the Building Support area as follows:

a. Material Management
    i. Loading Docks (Clean & Soiled)
    ii. Bulk Stores
    iii. Recycling
b. Housekeeping
    iv. Storage
c. Maintenance
    v. General Shop and Work Room

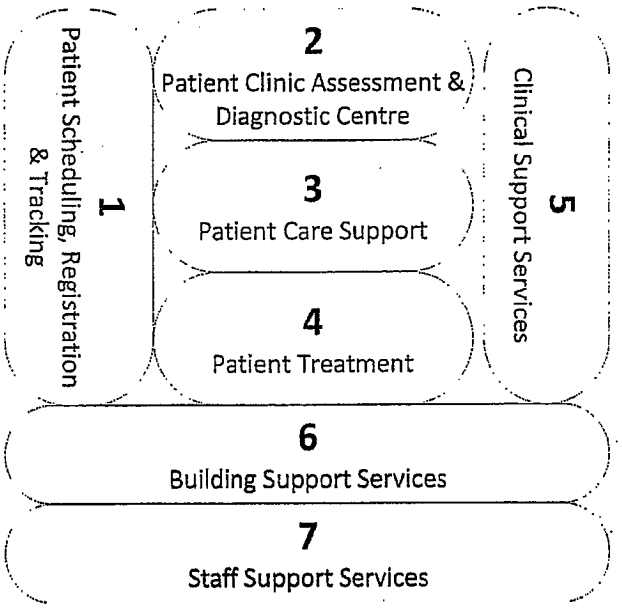
6. Staff Support Services

Space should be designed to facilitate the flow of staff from Parking → Change Rooms → Locker Area → Fitness Room. Zoning within Staff Support area as follows:

a. Change area
b. Locker area
c. Showers
d. Staff Fitness Area
e. Lounge Area

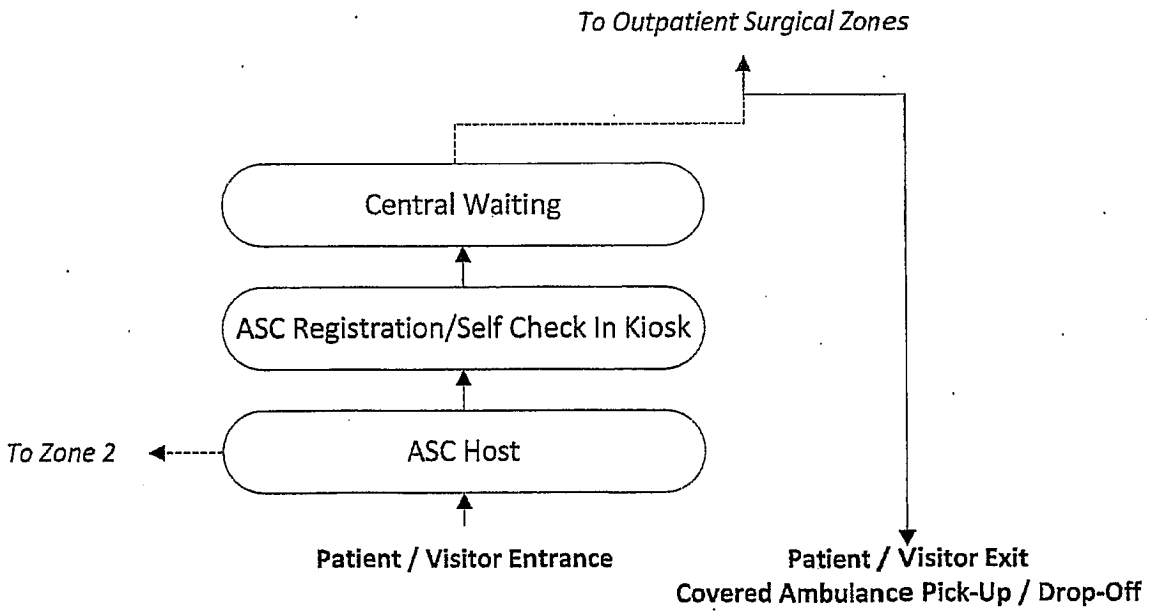
COMPONENT FUNCTIONAL DIAGRAM

AMBULATORY SURGICAL CENTRE

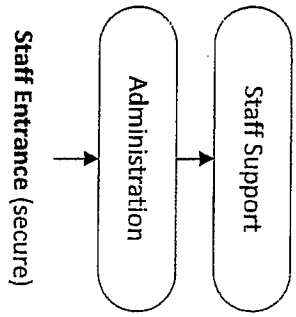


1. PATIENT SCHEDULING, REGISTRATION & TRACKING

a. *REGISTRATION & TRACKING*

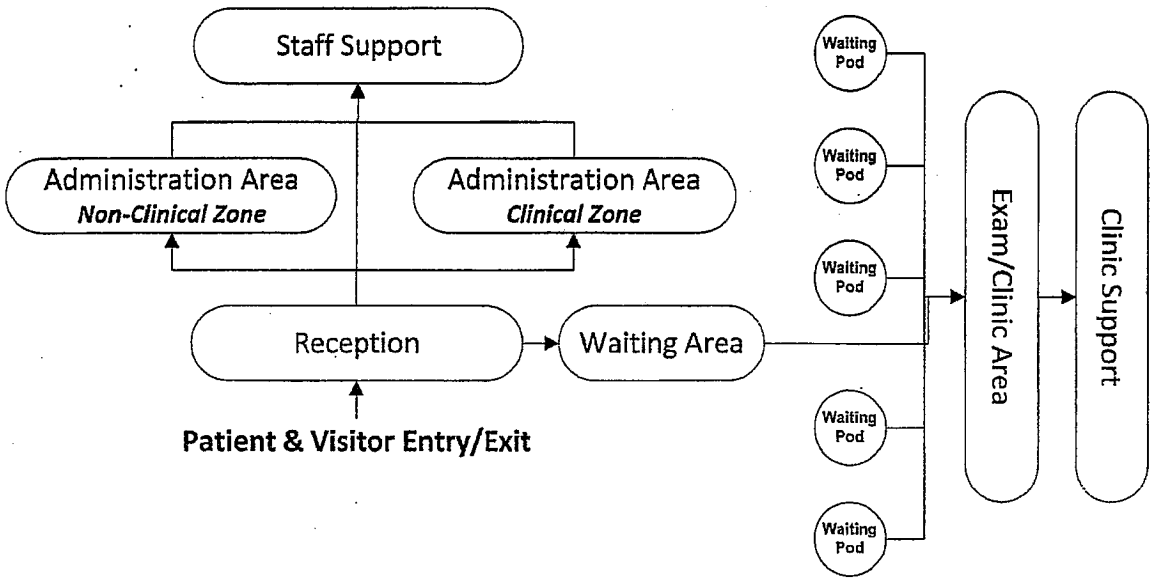


b. *OR SCHEDULING*

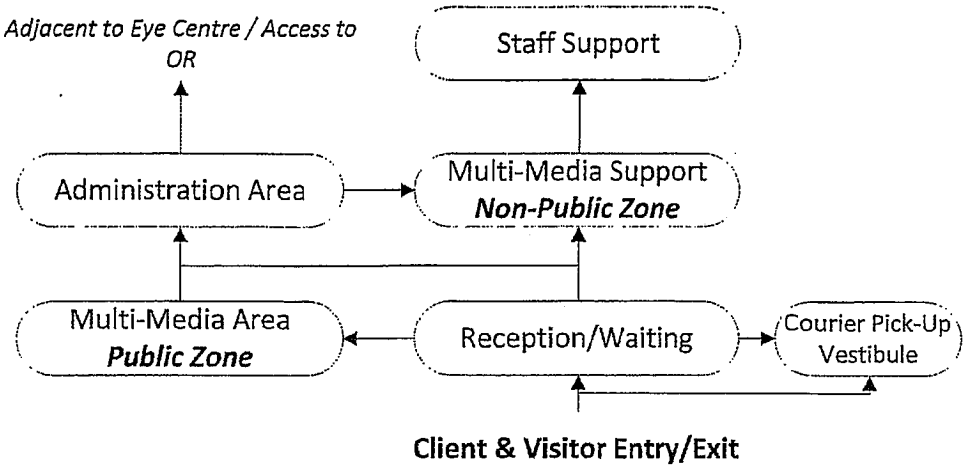


2. PATIENT CLINIC ASSESSMENT

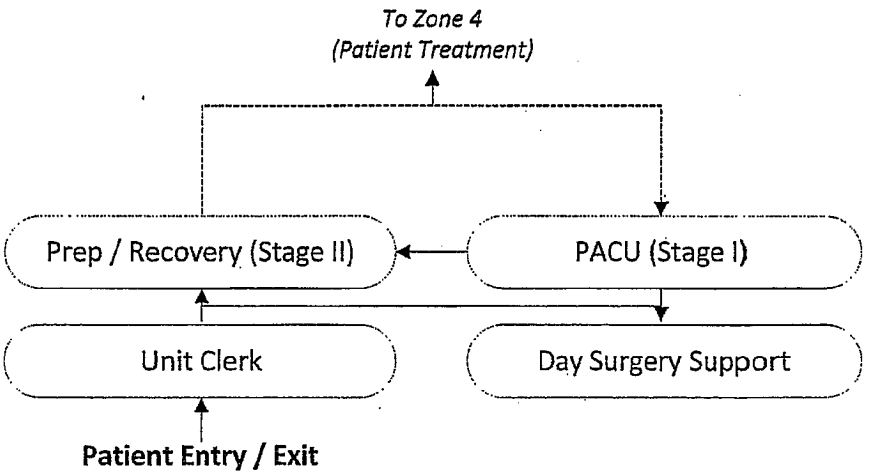
a. *EYE CENTRE*



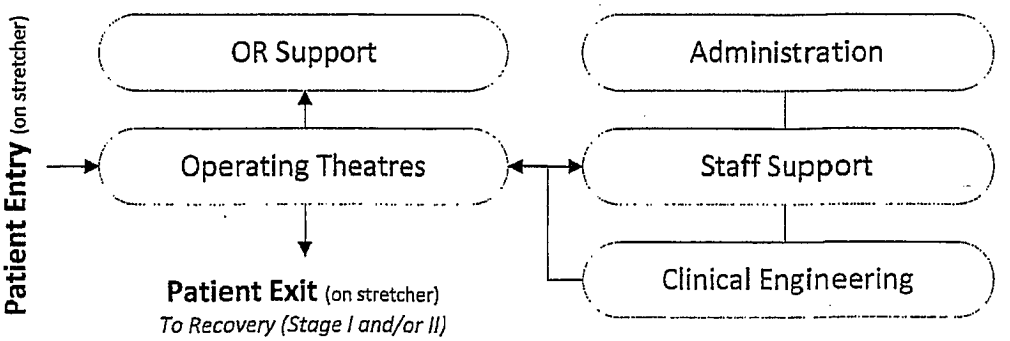
b. MEDICAL MEDIA SERVICES



3. PATIENT CARE SUPPORT



4. PATIENT TREATMENT

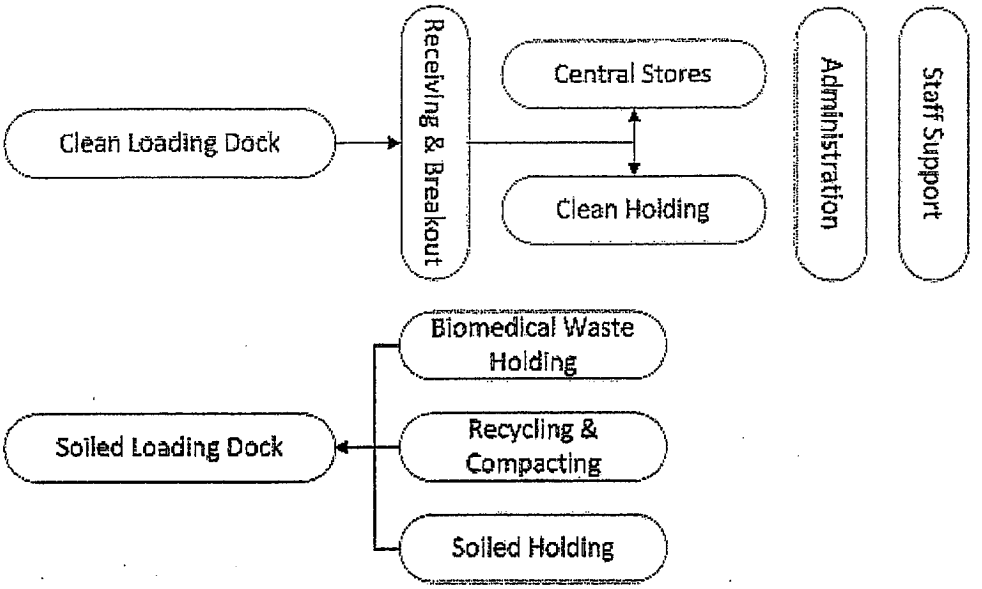


5. CLINICAL SUPPORT SERVICES

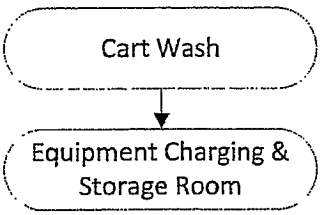
Included in Component diagrams above.

6. BUILDING SUPPORT SERVICES

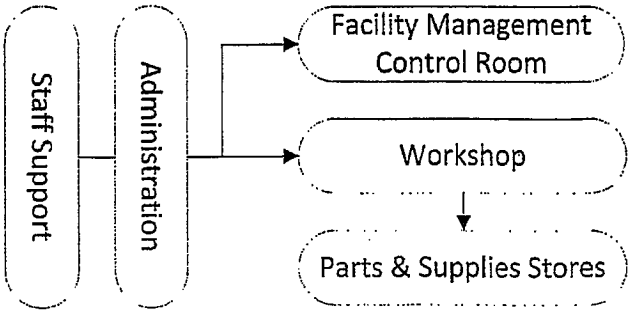
a. MATERIAL MANAGEMENT



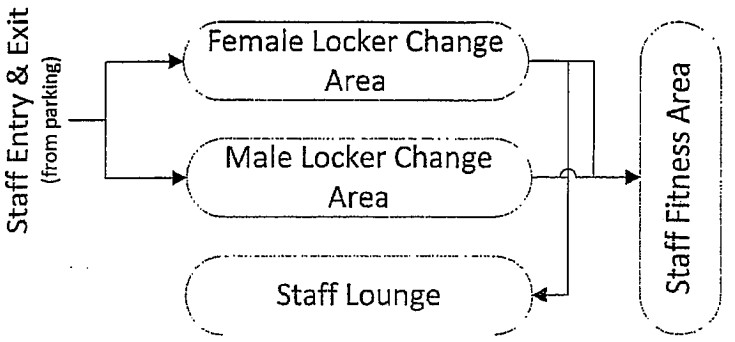
b. HOUSEKEEPING



c. MAINTENANCE



7. STAFF SUPPORT SERVICES



DESIGN REQUIREMENTS

Privacy

Design requirements provide provision of complete visual and acoustic privacy for patients in examination, treatment and procedure areas. Privacy is of the utmost importance and control of sound transmission between rooms is a critical design consideration.

The importance of client confidentiality and privacy will be reflected in the design of the area. Techniques that maximize acoustic and/or visual privacy will be incorporated where applicable, i.e. registration/check-in.

Although clients will not access staff work areas, the use of computer based communication technology, e.g. electronic patient health record, may create issues related to client privacy that will need to be addressed.

Interdisciplinary space is to be centrally located away from public areas for team discussion, physician team consults, etc.

Environment

Traffic in the patient preparation/recovery area will be minimized to reduce noise and confusion frequently experienced by patients.

The following concepts will impact the overall environment of the space:

- Facilities for patients and families should present a calm and reassuring, yet professional environment
- Doors throughout the area should be automatic to allow for easy access by stretchers, beds and wheelchairs
- Wherever possible daylight should be brought in (especially in staff work areas and the OR Suites)
    - No windows to be located in the Exam/Clinic Rooms in the Eye Centre
- Wherever possible access to outdoor views should be brought in (especially in staff work areas and the OR Suites)
- All meeting and clinical spaces should accommodate Telehealth technologies
- All work areas must be wired to support use of networked devices (e.g. computers, handheld devices)
- Staff workstations should be configured to allow for visual as well as acoustic privacy and a quieter work environment. Address acoustics and noise transference in open work areas by use of appropriate technologies (e.g. sound dampening technology)
- Clinical spaces must be appropriate for a variety of ages to accommodate pediatric to geriatric clients
- Green spaces should be planned onsite (indoor & outdoor)
- Fully integrated ORs wired for future use
- Ability to control lighting is necessary in the ORs. Availability of lighting levels is required. Dimmable lighting required when viewing flat panel displays. Consider the use of voice activated control of room lighting

- Colours will be designed to provide a comfortable environment for staff and patients
- Fresh air intake ventilation for the ORs to be located away from all parking areas to eliminate exhaust fumes into OR

Flexibility

In consideration of the future addition of components two to four to the Ambulatory Surgical Centre, flexibility must be taken into account. Locate areas of potential expansion adjacent to outside walls, such as the central waiting area.

Flexible exam and treatment space will be designed in all clinical areas to adapt to long-term growth and changes in workload. Where appropriate, exam/treatment rooms will be centralized in clusters so various clinics can share universal exam rooms.

Exam rooms will typically have space for a bed/exam table, sink, cabinets, and workspace. All exam rooms will be wired for data/telephone/nurse call systems and Telehealth. Meeting rooms and team rooms will be wired for data/telephone and telehealth.

Future flexibility will be incorporated through the use of:

- Moveable partitions and modular furnishings to create an open work environment that allows easy reconfiguration of workstations to accommodate additional staff.
- Interstitial spaces for structural, mechanical, electrical, and information systems to allow for system upgrades and modifications
- Accessible ceiling systems, grouping of similar modalities, and sharing of control/equipment spaces

Supervision of Patients

Visual supervision of all waiting clients/patients is needed from the front reception and work alcoves.

Security

The main point of entry and exit will be controlled visually by staff and by video surveillance. The main door will be open during regular hours and locked after hours. A secure staff only entrance will allow staff access on a controlled basis. All other exit doors will be locked from the outside with emergency egress where required from internal spaces. A staff card access system will be incorporated into the building and department entrances. The following security features will be employed:

- Public access to clinical areas and staff work areas will be controlled through design
- Entrances to each component will be equipped with automated card readers
- Security and safety of staff in off hours will be considered

SCHEDULE OF ACCOMMODATION

AMBULATORY SURGICAL CENTRE SPACE SUMMARY

Functional Components	NSM	CGSM	BGSM
Shared Reception/Waiting	**198**	**258**	**332**
Shared Reception/Waiting	128	167	215
ASC Exit	70	91	117
Day Surgery and OR	**1,020**	**1,478**	**1,907**
Patient Prep/Stage 2 Recovery	250	363	468
OR/Procedure Area	275	399	514
OR Support	209	303	391
Pharmacy Support	11	15	20
PACU	52	75	96
Administration / Staff Support	224	324	418
Eye Centre	**962**	**1,336**	**1,723**
Reception/Waiting	85	110	142
Administration Area	125	163	210
Exam/Clinical Area	566	820	1,058
Clinical Support	88	114	148
Staff Support	99	129	167
Medical Media Services	**242**	**315**	**406**
Reception/Waiting	44	58	74
Multi Media Production Area	125	162	209
Administration	59	77	99
Staff Support	15	19	24
OR Scheduling	**156**	**202**	**261**
Administration	130	169	218
Staff Support	26	33	43
Site Admin/Education/Conference	**242**	**314**	**405**
Site Administration	30	38	49
Education/Conference Area	212	276	356
Physician Clinic	**138**	**179**	**231**
Reception/Waiting	49	64	82
Administration Area	15	19	24
Exam/Clinical Area	36	47	60
Clinical Support	28	36	47
Staff Support	10	13	17
Building Support Services	**396**	**515**	**664**
Housekeeping Area	31	40	52
Material Management	195	254	327
Maintenance	100	130	168
Information Systems	30	39	50
Clinical Engineering	40	52	67
Staff Support Services	**143**	**186**	**240**
Staff Locker/Change	89	116	149
Exercise Area	54	70	91
Total Net Square Metres	**3,496**		
Total Component Gross Square Metres		**4,782**	
Total Building Gross Square Metres			**6,169**

Net Square Metres (NSM) – the actual occupiable area of each room or space as measured to the interior finished surfaces of all walls, partitions, or mechanical enclosures.

Component Gross Square Metres (CGSM) and **Component Gross Factor (CGF)** – the portion of a building assigned to a specific component including net areas, internal circulation, partitions, building structure and small mechanical shafts/areas as measured from the inside fact of exterior walls and to the centre line of partitions adjoining other components or general circulation space.

Building Gross Square Metres (NSM) – the portion of a building assigned to stairs, elevators, corridors, structure and utility needs.

PATIENT SCHEDULING, REGISTRATION AND TRACKING

Main Reception, Registration and Central Waiting							
Rm Code	Space	Area Requirements					Remarks
		Unit	Nsm/ unit	NSM	CGF	CGSM	
	Shared Reception/Waiting						
1	Vestibule, Entry	1	10.0	10.0			with Phone for Taxi
2	Workstation, ASC Host	1	5.0	5.0			
3	Admitting Cubicles, Main Reception (ASC)	3	4.5	13.5			3 workstations
4	Self-Registration Kiosk	3	0.5	1.5			computer registration with bar code scanner & wrist band printer; located adjacent to each admitting cubicle
5	Reception Workstation Area	3	4.5	13.5			safe
6	Workroom	1	9.0	9.0			printer/fax/copier machine, paper/office supply storage
7	Waiting/Family Lounge	1	34.5	34.5			10 Family (2.5 hrs), 5 Surgical Pts (30 mins), set up in smaller clusters/zones; comfortable seating, table, phone, vending area; tv monitor; 5 child video zone; 3 computer kiosks (internet access);
8	Family Quiet Room	1	10.0	10.0			
9	Washroom, Family Quiet Room	1	4.5	4.5			
10	Public Phone	2	0.5	1.0			for local calls only
11	Wheelchair Alcove	1	1.6	1.6			For 4 wheelchairs
12	Washroom, Male	1	12.0	12.0			no entry doors
13	Washroom, Female	1	12.0	12.0			no entry doors
	Subtotal			**128.1**	**1.30**	**166.5**	
	ASC Exit						
14	Vestibule, Exit	1	10.0	10.0			Camera linked to Pre/Recovery Nursing with local Phone
15	Secure/Ambulance Covered Holding	1	60.0	60.0			Connected to Surgery; 1 ambulance and 1 car
	Subtotal			**70.0**	**1.30**	**91.0**	
	TOTAL		**NSM =**	**198.10**	**CGSM =**	**257.53**	

OR SCHEDULING							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
	Administration						
1	Office, Manager	1	9.0	9.0			
2	Office, Director	1	11.0	11.0			
3	Workstation, Admin Assistant	1	5.0	5.0			
4	Workstation, OR Schedulers	14	6.0	84.0			*with file cabinet ***Staff based on growth of Scope*
5	Workstation, Wait List - "Hotline"	1	6.0	6.0			workstation open on 3-sides, with adjacent alcove
6	Workstation, Data Entry Clerk	3	5.0	15.0			
	Subtotal			**130.0**	**1.30**	**169.0**	
	Staff Support						
7	Workroom	1	9.0	9.0			2 shared file cabinets (letter size), printer, fax, paper supplies
8	Staff Team Room	1	12.0	12.0			kitchenette, table, for 6
9	Washroom, staff	1	4.5	4.5			to be located and sized determined at time
	Subtotal			**25.5**	**1.30**	**33.2**	
	TOTAL		NSM =	155.5	CGSM =	202.2	

PATIENT CLINIC ASSESSMENT

EYE CENTRE							
Rm Code	Space	Area Requirements					Remarks
		Unit	Nsm/ unit	NSM	CGF	CGSM	
	Reception/Waiting						
1	Workstation, Unit Admin Support	3	5.0	15.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and bookshelf
1a	Waiting Area	1	36.0	36.0			For 20; consider locating with ASC Main Waiting
2	File Room	1	15.0	15.0			
3	Workroom	1	9.0	9.0			Photocopier/fax/printer, paper supplies
4	Workstation, Booking	1	5.0	5.0			
5	Washroom, Public	1	4.5	4.5			
	Subtotal			**84.5**	**1.30**	**109.9**	
	Administration Area						
	Non-Clinical Zone						
6	Office, Medical Director	1	12.0	12.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and bookshelf and 4 chairs and table meeting space.
7	Office, Manager	1	11.0	11.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and bookshelf and 2 chairs and table meeting space.
8	Office, Admin Support	1	9.0	9.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and bookshelf
9	Office, Visiting	1	11.0	11.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and bookshelf and 2 chairs and table meeting space.
10	Office, Program Development Educator	1	9.0	9.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and bookshelf
11	Office, Clinical Coordinator	1	11.0	11.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and bookshelf
	Clinical Zone						
12	Office, Orthoptist	1	11.0	11.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and bookshelf
13	Office, Drug Study coordinator	1	11.0	11.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and bookshelf
14	Workstation, Drug Study	2	5.0	10.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet
15	Workstation, RN/LPN/Ophthalmic Assistant	4	5.0	20.0			Each workstation shared by 2 RNs; computer, desk, phone; located throughout footprint
16	Workstation, Unit Service Worker	1	5.0	5.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet

EYE CENTRE							
Rm Code	Space	Area Requirements					Remarks
		Unit	Nsm/ unit	NSM	CGF	CGSM	
17	Workstation, Research Monitor	1	5.0	5.0			Shared by 3: Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet
18	Workstation, Medical Media	0	5.0	0.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet
	Subtotal			**125.0**	**1.30**	**162.5**	
	Exam/Clinical Area						*Note: no windows/natural light within Exam/Clinic Rooms*
19	Waiting Pods	5	10.0	50.0			each pod for 5, flat screens
20	Orthoptist Clinic Room	1	30.0	30.0			20ft Lane required, children's play area; exam chair, automated vision chart, desk, computer, screen, file storage
21	Eye Bank / Tissue Processing Room	1	13.5	13.5			Fridge for ocular tissue, laminar flow hood, blood bank fridge, 2 workstations; 2 microscopes
22	Pharmacy Tech Area	1	10.0	10.0			laminar flow hood, work bench area, computer, counter with sink, fridge
23	Pre-Op Assessment/Biometry Room	3	12.0	36.0			sink, counter, tv monitor
24	Screening Room	2	12.0	24.0			
25	Visual Field Room	6	12.0	72.0			4 Visual Field Rooms, 1 HRT Room, 1 Pentacam
26	Consult Room	1	12.0	12.0			
27	Exam Rooms, Large	4	15.0	60.0			sink, counter, tv monitor
28	Exam Rooms, Small	1	12.0	12.0			sink, counter, tv monitor
29	Minor Procedure Room	1	20.0	20.0			microscope, cautery, gases, negative air, stretcher, storage for sterile packs, suture supply, pyxis, pathology specimen containers
30	Low Vision Room	1	15.0	15.0			sink, counter, cabinets for storage of vision aids (lenses); 16ft lane required
31	Visual Electrodiagnostics	1	12.0	12.0			sink, counter, cabinets
32	Observation Room	1	6.0	6.0			adjacent to Visual Electrodiagnostics, workstation
33	YAG Laser Room	3	12.0	36.0			2 YAG Laser Room, 1 SLT Room, sink, counter, cabinets
34	Photodynamic Therapy Room	1	15.0	15.0			sink, counter, cabinets,
35	Photodynamic Therapy Prep Alcove	1	4.0	4.0			adjacent to Photodynamic Therapy Room
36	Argon Laser Room	2	12.0	24.0			sink, counter, cabinets,
37	Angiogram Room	2	15.0	30.0			sink, counter, cabinets,
38	Stretcher /Dilation Room	1	9.0	9.0			Adjacent to Angio Room
39	Angiogram Server Room	1	3.0	3.0			
40	OCT Room	2	12.0	24.0			Printer, sink, counter, cabinets,
41	Ultrasound Room	1	12.0	12.0			
42	Non-Mydriatic Camera Room	1	12.0	12.0			computer, desk, counter, sink
43	Education Room	1	12.0	12.0			
44	Consult, Drug Study	1	12.0	12.0			
	Subtotal			**565.5**	**1.45**	**820.0**	

EYE CENTRE							
Rm Code	Space	Area Requirements					Remarks
		Unit	Nsm/ unit	NSM	CGF	CGSM	
	Clinical Support						
45	Physician Viewing Room	1	6.0	6.0			PACS viewer, desk
46	Pyxis Alcove	3	1.0	3.0			3 pyxis, access to water
47	Equipment Cleaning Room	1	9.0	9.0			Equipment Sink, negative air; adjacent to laser rooms
48	Storage Room	1	15.0	15.0			
49	Soiled Holding, Large	1	9.0	9.0			
50	Clean Holding, Large	1	9.0	9.0			
51	Soiled Holding, Small	1	6.0	6.0			
52	Clean Holding, Small	1	6.0	6.0			
53	Housekeeping Closet	1	6.0	6.0			
54	Storage Room, Drug Study	1	10.0	10.0			Clinical trials; adjacent to drug study consult room
55	Washroom, Patient	2	4.5	9.0			
	Subtotal			**88.0**	**1.30**	**114.4**	
	Staff Support						
56	Interdisciplinary Room	1	36.4	36.4			for 18, 3 computer stations, table, resource area
57	Conference Room	1	18.0	18.0			
58	Staff Team Room	1	20.0	20.0			fridge, microwave, sink
59	Staff Washrooms	2	2.5	5.0			
60	Staff Lockers, Female	25	0.5	12.5			
61	Staff Lockers, Male	15	0.5	7.5			
	Subtotal			**99.4**	**1.30**	**129.2**	
	TOTAL		**NSM =**	**962.4**	**CGSM =**	**1,335.9**	

MEDICAL MEDIA SERVICES							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
	Reception/Waiting						
1	Receptionist	1	5.0	5.0			
2	Workroom	1	6.0	6.0			printer/fax/copier, paper supplies, ink cartridges
3	Waiting Area	1	10.8	10.8			For 6
4	Courier Pickup/Drop-Off Vestibule	1	4.5	4.5			
5	Conference/Meeting Room	1	18.0	18.0			For 10 people; ceiling mount digital projector; computer
	Subtotal			44.3	1.30	57.6	
	Multi Media Production Area						
	Client Zone						
6	Multi Media Room	1	42.0	42.0			control ambient noise; photo and video; high ceiling (15 ft) with structural area; grid on ceiling; 30 ft depth x 15 wide; dividable into 2 spaces (2 entries)
7	Change Room	1	4.5	4.5			adjacent to Multi Media Room
8	Storage, Multi Media Room	1	12.0	12.0			props, backdrops (12ft long), lights; 10x13; shelving for disk/tape storage
9	Edit Room	1	15.0	15.0			with 2 Editing Suites; 2 22" monitors, duplicator
	Multi Media Finishing Area						
	Non Client Zone						
10	Print/Plotting Work Area	1	27.0	27.0			large plotter (8ft), 24" printer, color printer, laser printer, photo printer, CD label printer, laminator, work table (5ftx10ft), shelving for storage, (Room is 6m x4.5m)
11	Print/Plotting Supply Room	1	9.0	9.0			
12	Equipment Storage	1	15.0	15.0			Mobile Equipment: cameras, 6 tripods (1m2), 3 video carts (each at 1m), 3 light stand (1m), teleprompter (1m2), wall of shelving (10ftx20" - 5m2) for cords, VCR, audio mixers, video mixers
	Subtotal			124.5	1.30	161.9	
	Administration						
13	Office, Supervisor	1	11.0	11.0			ability to meet with 3 people; p-top
14	Office	3	11.0	33.0			ability to meet with 3 people; p-top
15	Workstation	3	5.0	15.0			
	Subtotal			59.0	1.30	76.7	
	Staff Support						
16	Staff Team Room	1	12.0	12.0			kitchenette, table, for 6
17	Washroom, staff	1	2.5	2.5			
	Subtotal			14.5	1.30	18.9	
	TOTAL		**NSM =**	**242.3**	**CGSM =**	**315.0**	

SURGEON CLINIC							
Rm Code	Space	Area Requirements					Remarks
		Unit	Nsm/ unit	NSM	CGF	CGSM	
	Reception/Waiting						
1	Waiting Area	1	18	18			For 10
2	Workstation, Admin Support	1	7.5	7.5			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and bookshelf
3	Workroom	1	9	9			Photocopier
4	File Room	1	10	10			
5	Washroom, Public	1	4.5	4.5			
	Subtotal			**49**	**1.3**	**63.7**	
	Administration Area						
6	Office, Physician	1	12	12			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and bookshelf and 4 chairs and table meeting space.
7	Touchdown Station	1	2.5	2.5			
	Subtotal			**14.5**	**1.3**	**18.9**	
	Exam/Clinical Area						
8	Exam Room	3	12	36			
	Subtotal			**36**	**1.3**	**46.8**	
	Clinical Support						
9	Clinic Supply Storage Room	1	10	10			
10	Soiled Holding	1	6	6			
11	Clean Holding	1	6	6			
12	Housekeeping Closet	1	6	6			
	Subtotal			**28**	**1.3**	**36.4**	
	Staff Support						
13	Staff Washroom	1	2.5	2.5			
14	Staff Lounge	1	7.5	7.5			
	Subtotal			**10**	**1.3**	**13.0**	
	TOTAL		**NSM =**	**138**	**CGSM =**	**179**	

PATIENT CARE SUPPORT AND PATIENT TREATMENT

Day Surgery and OR							
Rm Code	Space	Area Requirements					Remarks
		Unit	Nsm/ unit	NSM	CGF	CGSM	
	Patient Prep/Stage 2 Recovery						
1	Nursing Station	1	5.0	5.0			computer, phone, desk, printer, fax;
2	Workstation, Unit Clerk	2	5.0	10.0			computer, phone, desk, printer, fax;
3	Workstation, Physician	1	5.0	5.0			computer, phone, desk,
4	Prep/Recovery Room	18	9.0	162.0			Like-sided Rooms with stretcher, weigh scale, sink
5	Prep/Recovery Washroom	6	4.5	27.0			1 washroom per 3 Pre/Recovery Rooms; accessible, toilet, sink
6	Nourishment Station	1	6.0	6.0			ice machine, fridge
7	Storage Area	1	9.0	9.0			blanket warmer, bed pan, stretcher, IV poles
8	Soiled Utility	1	9.0	9.0			macerator
9	Clean Supply	1	9.0	9.0			
10	Recycling Room	1	2.0	2.0			close proximity to unit clerk
11	Housekeeping Room	1	6.0	6.0			
	Subtotal			**250**	**1.45**	**363**	
	OR/Procedure Area						
12	OR Theatre	5	45.0	225.0			Stretcher; O2, suction; crash cart, anesthesia area, floor drain; storage; direct access to soiled CSR; adjustable lighting; adjacent to scoping room; PACS viewer; ceiling mounted telescope column; access Telehealth; pyxis for med and supply; stretcher holding area (under counter): ***NOTE:*** 1 OR dedicated to ophthalmology with handing microscope
13	Scrub Alcove	3	2.0	6.0			with scrub supply organizer
14	Stretcher Alcove	5	2.0	0.0			To be located within each OR
15	OR Case Cart Staging and Support Room	3	12.0	36.0			Between or adjacent each OR. Includes Blanket Warmer, Flash Sterilizer, Case Cart and OR Support. With direct access into the OR and Sterile Core. Used to accommodate Day slate Case Carts
16	Dictation Station	2	1.5	3.0			
17	Nursing Station	1	5.0	5.0			computer, phone, desk, printer, fax;
	Subtotal			**275**	**1.45**	**399**	
	OR Support						
18	Anesthetic Workroom/Workstation	1	18.0	18.0			Crash Cart (1.5m2), computer, desk,
19	Anesthesia Storage	1	10.0	10.0			blood fridge, drug fridge, storage, ice machine, fluid warmer, bair hugger, IV Pumps, syringe pumps, PCA pump, calf compressor, ultrasound, O2 mobile tank holder (3)
20	Workstation, ERT	1	5.0	5.0			
21	Workstation, Surgical Info. System Tech	1	5.0	5.0			
22	Soiled Holding Room	1	9.0	9.0			
23	Mobile Radiology Alcove	1	10.0	10.0			C-Arm, portable Radiology Unit

Day Surgery and OR							
Rm Code	Space	Area Requirements					Remarks
		Unit	Nsm/ unit	NSM	CGF	CGSM	
24	Decontamination/Soiled Workroom	1	9.0	9.0			counter, sink, cupboards; adjacent to Dirty Service Elevator to Soiled Dock
25	Clean Supply/Sterile Core	1	80.0	80.0			assume holding for 8 case carts, etc.; incl. a total of 8 carts; storage for 50 packs; blanket warmer; material pyxis, medication pyxis; dumbwaiters
26	Linen Supply Alcove	3	2.0	6.0			
27	Equipment Storage	1	40.0	40.0			Positioning equip., stealth, ENT microscope, opthal. microscope, plastics microscope, stainless steal tables, pillows, Dental Drill, Dental Cart, OR Table pieces, Vitrectomy Machine, Tourniquet (2 @)
28	Clinical Engineering Workroom	1	11.0	11.0			
29	Housekeeping	1	6.0	6.0			
	Subtotal			**209**	**1.45**	**303**	
	Pharmacy Support						
30	Tech Workroom	1	10.5	10.5			with cart holding, lockable, laminar flow hood, IV mixing, needles, syringes,
	Subtotal			**11**	**1.45**	**15**	
	PACU						
31	Nursing Station	1	5.0	5.0			fax machine, phone, computer,
32	Recovery Bays	4	7.5	30.0			located adjacent to Prep Recovery Area; isolation capability; sound control
33	Isolation Recovery Room	1	10.0	10.0			
34	Ante Room	1	5.0	5.0			
35	Crash Cart Alcove	1	1.5	1.5			shared with Recovery
36	Storage Area	1	9.0	0.0			Shared with Prep/Recovery
37	Soiled Utility	1	6.0	0.0			Shared with Prep/Recovery
38	Clean Supply	1	6.0	0.0			Shared with Prep/Recovery
	Subtotal			**52**	**1.45**	**75**	
	Administration / Staff Support						
39	Office, OR Manager/Supervisor	1	9.0	9.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet
40	Office, Day Surgery Manager	1	9.0	9.0			
41	Office, Specialty Coordinator	1	9.0	9.0			
42	Office, Educator	1	9.0	9.0			
43	Workstation	2	5.0	10.0			
44	Interdisciplinary Room	1	18.0	18.0			resource area, computer workstations,
45	Conference Room	1	21.6	21.6			For 10-12
46	Staff/Physician Lounge	1	60.0	60.0			For 30; with Kitchenette, dictation stations
47	Staff Washroom	2	2.5	5.0			
48	Change Area, Female	1	30.0	30.0			
49	Change Area, Female, Washroom	1	6.5	6.5			Toilet, Sink and 2 showers
50	Change Area, Male	1	30.0	30.0			
51	Change Area, Male, Washroom	1	6.5	6.5			Toilet, Sink and 2 showers
	Subtotal			**224**	**1.45**	**324**	
	TOTAL		**NSM =**	**1,020**	**CGSM =**	**1,478**	

BUILDING SUPPORT SERVICES

Site Administration, Education and Conference							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
	Site Administration						
1	Office, ASC Director	1	11.0	11.0			
2	Workstation, Admin Assistant	1	5.0	5.0			
3	Office, Educator	1	11.0	11.0			
4	Touchdown Station	1	2.5	2.5			
	Subtotal			**29.5**	**1.30**	**38.4**	
	Education/Conference Area						
5	Education Room	1	180.0	180.0			For 100 People; sub-dividable into 2 rooms for 50; telehealth capable; ability to accommodate Bariatric walking program
6	Education Room Servery	1	12.0	12.0			
7	Education Room, Storage	1	20.0	20.0			
	Subtotal			**212.0**	**1.30**	**275.6**	
	TOTAL		**NSM =**	**241.5**	**CGSM =**	**314.0**	

Building Support Services							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
	Housekeeping Area						
1	Equipment and Storage Charging Room	1	16.0	16.0			power, sinks (regular and floor), and storage for main supplies - attached to main storage area
2	Cart Wash Area	1	15.0	15.0			
	Subtotal			**31.0**	**1.30**	**40.3**	
	Material Management						
3	Clean Dock	1	10.0	10.0			
4	Soiled Dock	1	10.0	10.0			
5	Workstation	1	5.0	5.0			
6	Pallet Storage Bay	1	10.0	10.0			
7	Linen Cart Holding Room	1	20.0	20.0			
8	Clean Holding Area	1	20.0	20.0			
9	Soiled Holding Area	1	20.0	20.0			Chilled room
10	Compactor Processing	1	30.0	30.0			
11	Recycling Room	1	20.0	20.0			card board, plastics, glass, paper
12	Bio-Medical Waste Holding	1	10.0	10.0			Freezer
13	Central Stores	1	30.0	30.0			Medical supplies
14	Medical Gas Holding	1	10.0	10.0			require retaining system for cylinders
	Subtotal			**195.0**	**1.30**	**253.5**	
	Maintenance						
15	Facility Management Control/Project Room	1	15.0	15.0			Computer, server, manuals, commissioning books, racks for drawings, flat layout space for drawings; 4 chairs and table
16	Workstation	2	5.0	10.0			

Building Support Services							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
17	Workshop	1	55.0	55.0			
18	Parts and Supplies Stores	1	20.0	20.0			Plumbing supplies, electrical supplies
	Subtotal			**100.0**	**1.30**	**130.0**	
	Information Systems						
19	Management Control Room	1	10.0	10.0			Computer, server, manuals, commissioning books, racks for drawings, flat layout space for drawings; 4 chairs and table
20	Server Room, Repair and IT Stores	1	20.0	20.0			
	Subtotal			**30.0**	**1.30**	**39.0**	
	Clinical Engineering						
21	Office, Clinical Engineer	1	9.0	9.0			
22	Work Area	1	11.0	11.0			workbench, fume extractor, anti static flooring
23	Storage, Back Up	1	20.0	20.0			
	Subtotal			**40.0**	**1.30**	**52.0**	
	TOTAL		NSM =	396	CGSM =	424	

STAFF SUPPORT SERVICES

Staff Support Services							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
	Staff Locker/Change						
	Female Area						
1	Female Locker Vestibule	1	4.5	4.5			
2	Female Locker Room	60	0.5	30.0			
3	Female Washroom	3	2.5	7.5			
4	Female Shower	2	2.5	5.0			
	Male Area						
5	Male Locker Vestibule	1	4.5	4.5			
6	Male Lockers	60	0.5	30.0			
7	Male Washroom	2	2.5	5.0			
8	Male Shower	1	2.5	2.5			
	Subtotal			**89.0**	**1.30**	**115.7**	
	Exercise Area						
9	Staff Fitness Area	1	30.0	30.0			Room for 4-6, 3 pieces of equipment, wall with mirrors - linked to Centralized Locker Area
10	Staff Lounge	1	24.0	24.0			Lounge for 10 people with kitchenette
	Subtotal			**54.0**	**1.30**	**70.2**	
	TOTAL		NSM =	143.0	CGSM =	185.9	

RQHR

2009 FUNCTIONAL PROGRAM
AMBULATORY SURGICAL CENTRE
component two

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OVERVIEW

BACKGROUND

Increasing patient access to surgical services is a strategic objective of both Regina Qu'Appelle Health Region (RQHR) Surgical Care Services and the Saskatchewan Ministry of Health (MOH). The Ambulatory Surgical Centre (ASC) in Regina will provide five new operating rooms specifically designed for outpatient procedures and with the capacity to perform approximately 7,000 outpatient procedures each year. By definition, an Ambulatory Surgery Centre is a facility where patients arrive, are prepped, receive their surgery, recover and leave the centre - all on the same day. These are typically low-risk procedures.

The need to increase surgical capacity within the RQHR is primarily driven by two factors. First, the population of southern Saskatchewan in particular, the area served by the RQHR, is growing in both number and average age. This means that more people will be in need of more surgical procedures in coming years. Considering also provincial and federal benchmarks aimed at improving patient access to surgery, it is critical to anticipate and plan for growth in number of surgeries. Second, the number of surgical procedures that are being performed on an outpatient basis is growing. Improvements in technology are making less invasive arthroscopic, laparoscopic and laser procedures more common. When combined with increased use of local anesthetic, this has led to the continued growth in the number of outpatient procedures.

The establishment of a Surgical Assessment Centre (SAC) at the ASC, including the Bariatric Program, Hip & Knee Clinic and Musculoskeletal Clinic, will provide timely access to patients for pre-surgical assessment, screening and therapy. The co-location of these clinics will benefit from sharing of examination and consult space, equipment and staff, as well as provide ease of expansion to house future clinics including a spine pathway clinic. Locating the SAC in the community with the ASC is optimal and will provide patients with easy access to the services. Currently, patients experience lengthy wait times between referral and first consultation with a surgeon. This delay can lead to poorer outcomes for certain orthopedic conditions or diseases. The SAC is designed to address this issue through providing a mechanism by which patients can have greater access to specialized assessments.

The development of a Diagnostic Centre (DC), including a Diagnostic Imaging Centre with CT, MRI, Radiology, Ultrasound, Bone Mineral Densitometry and a Patient Service Centre (PSC), including a specimen collection centre and a rapid response laboratory, will greatly benefit the ASC patients and practitioners, as well provide additional capacity to the city of Regina and greater RQHR communities.

The Saskatchewan MOH and RQHR have an opportunity to make a significant impact on the surgical experience for patients. The Ambulatory Surgical Centre will provide an efficient, patient centric approach to the delivery of a core set of outpatient procedures:

- The ASC Will be designed to be ***Patient Centric*** with patient values at its core
- ***RQHR Values*** will be incorporated into every component of the ASC: Compassion, Respect, Collaboration, Knowledge, Stewardship

- The ASC will strive to be a ***Magnet Environment*** (Centre of Excellence) for patients, staff and healthcare providers
- The ASC will be designed with the overriding objective of ***Flawless Flow*** for patients, visitors, staff, materials and equipment
- The ASC will strive to ***Optimize*** the use of ***Technology***
- The ASC will seek ***Input from all Stakeholders***
- The ASC will ***Leverage Other Work*** by investigating other ASC's and best practice
- The ASC will strive to be ***Environmentally Friendly*** to the greatest extent possible but never to the detriment of patient or staff safety
- ***Every Person is a Contributor*** to the provision of excellent healthcare in the ASC
- The design of the ASC and its processes will have inherent in them: ***Safety, Sustainability, Flexibility and Scalability***

The Ambulatory Surgical Centre will have 7 distinct zones (this Functional Program document will focus on 2.0 Patient Clinic Assessment and Diagnostic Centre. Information on all other zones can be found in the 2009 Ambulatory Surgical Centre: Component One Functional Program (see Appendix A):

1. Patient Scheduling, Registration and Tracking
2. ***Patient Clinic Assessment and Diagnostic Centre***
3. Patient Care Support
4. Patient Treatment
5. Clinical Support Services
6. Building Support Services
7. Staff Support Services

PROJECT CONCEPT

The Ambulatory Surgical Centre is the first of four distinct components in a planned Ambulatory Centre. All four components could be built at one time or each could be added as funding is made available. Although this Functional Program is focused on component one, the ASC, future expansion of components two through four has been incorporated into the planning.

Component One: Ambulatory Surgical Centre

The Ambulatory Surgical Centre will be the cornerstone of the new Ambulatory Centre with the Eye Centre, Medical Media Services and OR Scheduling located adjacent. The ASC will include five full-size, fully equipped, generic operating rooms with the capacity to perform approximately 7,000 outpatient procedures each year once fully operational. The initial focus will be on ENT (ears, nose, throat), Ophthalmology, Dental and Cosmetic Plastic procedures, with the ability to handle any outpatient procedure performed in the Region.

As the bulk of all ophthalmic surgical procedures will be performed at the ASC, it is essential that the Eye Centre be moved out of the Pasqua Hospital and be located immediately adjacent to the ASC. Not only will this free up valuable space within one of the Region's acute care hospitals, it will also allow approximately 20,000 patient visits each year to be relocated to a community-based facility. Every one of these patients would benefit from the abundant parking and ease of access of such a facility. In addition, approximately 5,000 would return to the facility every year for cataract replacement or other ophthalmic procedure performed in the adjacent ASC. Following their procedure, many would return to the Eye Centre for follow-up examination(s) or treatment(s).

Medical Media Services (MMS) will also relocate to the Ambulatory Centre as the Eye Centre requires immediate access to the MMS team in assessment and treatment of patient conditions.

Component Two: Diagnostic Imaging Centre, Laboratory, Pre-admission Clinic, Surgical Assessment Centre

The Ambulatory Centre will be home to a new Diagnostic Imaging Centre, where the Region's new MRI, Bone Mineral Densitometry (BMD), CT, Ultrasound and X-ray equipment will be located. Patients are often required to have an MRI, CT scan or other radiological procedure performed prior to surgery; in some of cases, the surgery will be performed at the ASC.

The Patient Service Centre will provide specimen collection service to the ASC patients as well as patients within RQHR. In addition, a rapid response laboratory will provide a range of clinical testing procedures requiring rapid response (stat and urgent) and routine turn-around times suited to the scope of care and treatment of the populations served.

The Ambulatory Centre will also house an expanded Pre-Admission Clinic (PAC). Here, 100% of surgical patients will receive a pre-surgical screen by telephone and up to 50% will receive further screening onsite at PAC. Between the ASC (once fully operational) and the two acute care hospitals, approximately 25,000 surgical procedures per year will be performed in the Region. Relocating PAC from the two acute care hospitals to a community-based facility will further reduce patient visits to the acute care hospitals by 12,500 per year. In addition, valuable space now occupied by PAC in the two acute care hospitals will be freed up, making room for an overnight short stay unit at the Regina General Hospital and increased day surgery space at the Pasqua Hospital.

The expanded use of care pathways has resulted in the creation of pre-surgery clinics for bariatric patients, hip and knee patients and patients with musculoskeletal conditions. In addition, the Region is currently developing a spine pathway that will require a clinic for assessment and treatment of patients with spinal conditions. As all of these clinics are pre-surgical in nature, they too will benefit from being located together with the Diagnostic Imaging centre, Patient Service Centre, Pre-Admission Clinic and the ASC.

Component Three: Retail, Food Services & Office Space

To round out the patient experience at the Ambulatory Centre, targeted retail, food and office space will be provided. Having a pharmacy and/or other wellness services located within the Ambulatory Centre will make it that much easier for patients to access the health care services they need. Offering physicians and other allied healthcare providers the opportunity to locate professional offices and services within the Ambulatory Centre will improve both the patient and the health care provider experience at that site. Locating food services to the site will also enhance the experience for patients waiting for appointments and/or families assisting with transportation and care-giving.

Component Four: Expansion of Ambulatory Surgical Centre

To ensure the viability of the Ambulatory Centre for many years into the future, consideration has been given to future expansion of the ASC up to twice the square footage. This expansion may come in many forms, including increasing the number of pre-op preparation spaces, operating rooms and recovery spaces. The expansion may also come in the form of additional services being offered through construction of endoscopy suites or short stay overnight units to accommodate procedures requiring a longer recovery period.

PARAMETERS/ASSUMPTIONS

The ASC will be a free-standing structure not attached to any existing RQHR facility requiring its own heating, power, water and other infrastructure components. Several phased components have been considered in planning the ASC.

1. **Component One**

   Ambulatory Surgical Services will include five operating theatres sized and built identically to allow for flexibility. Two will be primarily used as eye procedure rooms; three will be set up as regular surgical rooms.

   The average length for each eye procedure, including room turnover time, will be approximately fifty minutes. The average length for each non-eye procedure, including room turnover time, will be approximately ninety minutes. This is a critical assumption as it determines the number of pre-operative and post-operative patient spaces necessary to support the procedures.

   The Eye Centre located onsite will provide specialized ophthalmic diagnostic & therapeutic care to patients, both children and adults.

   RQHR's OR Scheduling and Medical Media Services relocate to the ASC.

   The implementation and use of Electronic Health Records is expected to take place at the ASC.

2. **Component Two**

   A planned Diagnostic Imaging Centre will include MRI, CT, BMD, Radiology and Ultrasound imaging.

   The Pre-Admission Clinic (PAC) will vacate the Regina General and Pasqua Hospitals and relocate to the ASC.

   A planned Surgical Assessment Clinic will include the Bariatric Program, which provides assessment and preparation for surgery for morbidly obese persons, and the Musculoskeletal (MSK) Clinic and Hip & Knee Clinic, a multidisciplinary clinic focusing on both total joint replacements and other musculoskeletal conditions.

   The Patient Service Centre will provide service to the ASC as well as an additional collection site for the city.

3. **Component Three**

   Retail space to accommodate physician clinics, pharmacy, café/food services, etc. is planned.

4. **Component Four**

   Planning includes provision for future expansion to increase surgical capacity by a further five operating rooms, all sized and built identically to allow for flexibility. Consideration will also be given to a short stay unit to hold patients for up to 23 hours post surgery.

KEY SERVICE TRENDS

Key service trends which may impact the delivery of services over time include:

- Aging population a major force in driving significant growth in the demand for diagnostic services;
- Transformation of the patient experience
- Safer Healthcare Now!
    - improving the safety of patient care in Canada through learning, sharing and implementing interventions that are known to reduce avoidable adverse events
- Releasing Time to Care
    - improving ward processes and environments to help nurses and healthcare providers spend more time on patient care thereby improving safety and efficiency
- Electronic Medical Records and Picture Archiving and Communication System
- Move toward wireless capabilities; wireless access points throughout the facility will be required
- Digital and/or GPS Tracking systems (i.e. RFID)
- Changing technology a key factor in planning to allow for increasingly better and faster images that convey a greater amount of information;
- Expanded use of interventional techniques in DI is changing where treatments are being delivered. Ultrasound interventional procedures have grown recently and will continue to grow into the future;
- Increases in use of computed tomography supplants general radiography as a primary investigation;
- Changes to clinical practice guidelines for physicians, which would result in increased laboratory testing;
- A shift in philosophy to keep people healthy instead of focusing on taking care of the ill;
- Increased automation of laboratory processes;

NEED FOR REDEVELOPMENT

The development of the Preadmission Clinic, Surgical Assessment Centre and Diagnostic Centre is required at the ASC for the following reasons:

- Improve patient experience
- Ensure flexibility in space to accommodate future uncertainty
- Reduce surgical wait times in RQHR
- Ensure low risk of procedure cancellation or delay
- Improve patient flow
- Increase efficiency
- Vacating valuable acute care space

FUNCTIONAL DESCRIPTION

SCOPE OF SERVICES

Please see the *2009 Ambulatory Surgical Centre: Component One Functional Program (Appendix A)* for information on:

- Patient Scheduling, Registration and Tracking
- Patient Care Support
- Patient Treatment
- Clinical Support Services
- Building Support Services
- Staff Support Services

PATIENT CLINIC ASSESSMENT AND DIAGNOSTIC CENTRE

a. Preadmission Clinic

The Pre-Admission Clinic (PAC) prepares patients for surgery or procedures. The PAC is an outpatient clinic and visits will facilitate admissions on the day of surgery. Some clients who are scheduled for day surgery procedures are also seen in the Pre-Admission Clinic if they require medical consultations or special tests prior to their surgery.

Pre-admission appointments are booked for patients prior to their scheduled operation. It may be booked anywhere from a month to a day before the operation date with the ideal timeframe being 7 to 14 days before their procedure and takes approximately 1-2 hours to complete. 100% of all surgical patients will receive a pre-surgical screen by phone and up to 50% will come in to the PAC for further screening.

During this clinic patients may have any number of the following activities:

- A nursing assessment of your health needs which may include a nursing medical history and physical examination
- Teaching about your operation or procedure
- Laboratory specimen collection, x-rays or a heart tracing.
- Consultation with a medical specialist such as an anesthetist, internist or cardiologist.

Pain Clinic

The Pain Clinic will operate out of the Preadmission Clinic. It will serve the needs of adult patients suffering with chronic pain. The Clinic offers consultative services for the diagnosis and management of chronic pain disorders of malignant and nonmalignant sources.

The Clinic team is composed of anesthesiologists, nurses, clerical staff and radiology technicians.

b. Surgical Assessment Centre

The Surgical Assessment Centre will provide a full range of services including assessment, treatment options and pre-surgery patient preparation and education for all patients referred by a General Practitioner (GP) or an Orthopedic Surgeon with varying conditions.

i. Bariatric Program

The Bariatric Program provides services to morbidly obese clients referred for possible bariatric surgery. Clients enter into the program requiring a six-month commitment prior to surgery, including multi-disciplinary care from dietitians, nurses, exercise therapists and psychologists. Clients who comply with the program will be eligible for surgery.

The program improves access to therapy and surgery for severe obesity. It is designed to assist in the care of clients whose BMI (Body Mass Index) is between 40 and 60. In certain instances, clients with a BMI between 35 and 40 may be considered for treatment at the clinic, particularly if 2 or more additional conditions which are being managed, exist, such as:

- Cardiopulmonary problems
- Severe sleep apnea
- Severe diabetes mellitus
- Physical problems interfering with lifestyle

To be admitted to the program, a patient must be between the ages of 18 and 60, a non-smoker and cannot be pregnant, lactating or become pregnant.

Patients are referred to the Bariatric Program by a general practitioner if the patient may benefit from surgery. The patient is assessed by a general surgeon and if a candidate for surgery, the patient will receive a letter confirming an appointment for further assessment.

Patients will work with a multi-disciplinary team of health specialists. The program includes:

- an assessment and screening process;
- education and an individualized plan for nutrition, exercise and behaviour modification; and
- referral to additional support and treatment.

To be considered a surgical candidate, patients must remain in the program for a minimum of six months, have attended all assessments, appointments and all support group meetings, and have maintained or lost weight.

If all criteria are met, patients will be placed on a surgical wait list. All surgeries will be performed at the Regina General Hospital with an expected 4 days post-operative inpatient stay.

ii. **Hip & Knee Pathway Multidisciplinary Clinic**

The Hip & Knee Pathway Multidisciplinary (H&K) Clinic provides pre-operative care to patients referred by a GP to an orthopedic surgeon for a hip or knee condition that may require joint replacement surgery. The clinic will maintain high standards of orthopedic interventions while reducing wait time to specialist consultation and time for surgery, reducing average length of stay to less than 5 days, while improving patient flow and patient satisfaction. The main focus will be to improve access to orthopedic services for patients requiring a hip or knee replacement.

iii. **Musculoskeletal Screening Clinic**

The Musculoskeletal (MSK) Clinic deals with various disorders of bones and the soft tissues surrounding them including muscles, tendons, ligaments and joint capsules. The MSK Clinic is designed to provide patients greater access to specialized orthopedic assessments. The goals of the clinic are:

- Support conservative management of appropriate musculoskeletal conditions
- Support and develop the use of clinical pathways and standardized assessment tools for the management of patients with specific musculoskeletal conditions
- Allow orthopedic surgeons to focus assessments on patients who require specialized interventions and/or assessments
- Ensure orthopedic surgeons have adequate information at time of initial consultation to diagnose and develop a treatment plan with the patient

Patients with knee pain referred by their general practitioner to an orthopedic surgeon but not yet examined by the surgeon are clinic candidates. Once a patient is assessed (and possibly treated) at the Clinic, they will either be referred back to their GP or to their orthopedic surgeon for further assessment.

Patients experiencing knee pain without a clear indication of the condition will be assessed by the physicians and health care professionals at the clinic.

Some patients will require up to three visits for complete assessment. For patients with limited requirements, a treatment plan (e.g. braces, injections, physiotherapy, exercise therapy etc.) will be provided at the clinic and once completed, the patient will be referred back to their GP and removed from the orthopedic surgeons' consultation list. For patients with greater need that may include surgery, the clinic physician will document history and physical findings in a standardized fashion. Physicians will use a care map to identify investigations required for the condition, and arrange for those as required.

Any laboratory test requests required preoperatively are ordered. Once complete, the patient chart, with the complete preoperative package, will be returned to the orthopedic surgeon.

iv. Spine Clinic

The Spine Clinic provides specialist assessment and treatment for the full range of spinal problems.

c. Diagnostic Imaging Centre

The Diagnostic Imaging Centre will provide a mix of services to support the outpatient ambulatory procedures at the ASC. The DC will also provide scheduled services to residents of the Regina Qu'Appelle Health Region.

The following services will be provided from the Centre:

- ***General Radiology***: General radiography is used to produce images of the chest, spine, abdomen, skull, and extremities.

  Two Radiography Imaging Rooms will be provided.

- ***Ultrasound***: Ultrasound is used to determine size and shape of organs. Images are observed in motion during real time and can include colouration of arterial and venous blood flows.

  Two Ultrasound Rooms will be provided.

- ***Computed Tomography (CT)***: CT provides sophisticated, computerized, digitally produced multislice slice and three dimensional images to visualize soft tissue, vessels and bone in most areas of the body.

  One CT Imaging Room will be provided.

- ***Magnetic Resonance Imaging (MRI)***: A computer based cross sectional imaging modality utilizing the resonance transition between nuclear spin states of certain nuclei in an external magnetic field.

  One MRI Imaging Room will be provided.

- ***Bone Mineral Densitometry (BMD):*** A BMD scan uses x-rays to measure how many grams of calcium and other bone minerals are packed into a segment of bone to determine risk of osteoporosis.

  One BMD Testing Room will be provided.

Conscious sedation will not occur in the Diagnostic Imaging Centre.

Shell space has been planned to provide future expansion opportunities for Breast Assessment, Prostate Assessment and Outpatient Interventional Diagnostics.

Intra-operative and post-operative imaging will be done using mobile equipment. Alcoves will be provided for storage of the equipment adjacent to OR. Note: Mobile equipment operators will need to be available during operational hours.

All preoperative imaging will be completed onsite prior to day of surgery.

d. Patient Service Centre

A Patient Service Centre (PSC) providing specimen collection and laboratory services requiring rapid response will be located at the Ambulatory Surgical Centre. The PSC will provide laboratory service to ASC patients as well as to patients in the RQHR.

The PSC will provide a range of clinical testing procedures requiring rapid response (stat and urgent) and routine turn-around times suited to the scope of care and treatment of the populations served.

The laboratory consists of several components:

- Haematology
- Chemistry
- Urinalysis

All specialized tests will be sent to the hospital or to Saskatchewan Disease Control Laboratory for testing.

EDUCATION

The Ambulatory Surgical Centre will provide teaching resources for staff and students. Most teaching will occur within available spaces with convenient access to group teaching facilities within the Centre. Touchdown stations for students/visiting allied health providers will be provided.

RESEARCH

Some Clinics/Departments may participate in research activities, but will not require dedicated facilities or staff resources beyond those already provided in the facility.

OPERATIONAL CONSIDERATIONS

HOURS OF OPERATION

The hours of operation are:

Preadmission Clinic

- 07:00 to 19:00, Monday to Friday

Surgical Assessment Centre

- 07:00 to 19:00, Monday to Friday

Diagnostic Imaging Centre

- 07:00 to 19:00, Monday to Friday

Patient Service Centre

- 07:00 to 19:00, Monday to Friday

ORGANIZATION & MANAGEMENT

See *2009 Ambulatory Surgical Centre: Component One Functional Program (Appendix A)* for information on:

- Patient Booking, Registration and Tracking
- Patient Care Support
- Patient Treatment
- Clinical Support Services
- Building Support Services
- Staff Support Services

PATIENT CLINIC ASSESSMENT AND DIAGNOSTIC CENTRE

a. Preadmission Clinic

Booking

All surgical patients will have contact with the Preadmission Clinic prior to their scheduled procedure. PAC will perform telephone assessments on 100% of all surgical patients. During the assessment, a determination will be made whether a PAC visit is required (based on answers to a scoring tool). If required, the appointment will be scheduled by the telephone assessor. Visits will be scheduled 7 – 14 days prior to the scheduled surgical procedure.

Arrival and Registration

PAC clients will be required to register at central registration. Following registration clients will be directed to PAC where they wait in the designated waiting area.

Client Management

From the waiting area, clients will be directed to a clinic room to receive services. Once the client is in the clinic room they will be looked after by the appropriate staff.

PAC clients will access the Patient Service Centre and Diagnostic Imaging Centre onsite for pre surgical screening and testing.

Client privacy/confidentiality must be addressed in the overall design. Meeting, counselling and clinical spaces should have generic layouts that can accommodate various program needs. All spaces will be bookable by staff to offer services for their clients.

Family or support persons will be able to accompany the client into clinical space, or will wait in the waiting area.

Chart Assembly

Patient chart assembly and confirmation of required consults and documentation will be performed as part of the PAC. It will be completed 24 – 48 hours before the procedure is scheduled.

Until availability of an electronic health record, PAC will continue to prepare paper charts. Patients charts will be transferred from the ASC to the appropriate site as required.

Exam/Clinic Management

The Preadmission Clinic should be located adjacent to the Surgical Assessment Centre to provide shared exam/clinic and support space opportunity.

Staff Organization

Staff working in the PAC will have access to various spaces including Consult Rooms, Storage Rooms, Interdisciplinary Space (accommodates visiting staff as well), Education Space and Exercise Areas. Security will be provided for those staff accessing the facility after hours.

b. Surgical Assessment Centre

Booking

All clients will be notified of their appointment schedule by the Surgical Assessment Centre staff either by mail or by telephone.

Arrival and Registration

All clients entering the facility to receive services will proceed to the main ASC reception for registration. Following registration clients will proceed to the SAC waiting area.

Client Management

From the waiting area, clients will be directed to a clinic room or program area to receive services. Once the client is in the clinic room or program area, they will be looked after by the appropriate staff.

Clients are consulted by a variety of healthcare providers during a visit. Many SAC clients have compromised mobility; it is expected clients will remain in the same room for the entire visit while the service providers will come directly to them.

Coordination of diagnostic testing and visits to the facility is required. All efforts will be made to minimize time lost for a client, e.g. travel time, missed work days, etc.

Family or support persons will be able to accompany the client into clinical space, or will wait in the waiting area.

Client privacy/confidentiality must be addressed in the overall design of entrance / exits.

Exam/Clinic Management

The SAC is to be located adjacent to the PAC to provide shared exam/clinic and support space opportunity.

Staff Organization

Staff will have access to a variety of spaces including consult, storage, interdisciplinary (accommodates visiting staff), education and exercise. Security will be provided for those staff accessing the facility after hours.

Client Visit Schedule

i. **Bariatric Program**

The Bariatric Program consists of the following schedule:

Pre-Surgery

- Group Orientation (group of 50 clients)
- Pre-Assessment
- Initial
- Two-Month Follow Up
- Four-Month Follow Up
- Six-Month Follow Up
- Post-Graduation Follow Up
- Pre-operative Instructions

During the pre-assessment visit, clients will meet with a nurse and physician. During the initial, two, four and six month visits, bariatric clients will meet with a nurse, dietitian, exercise therapist, psychologist and social worker.

After the initial visit, the multidisciplinary team will hold a conference for each patient regarding recommendations.

Aside from the scheduled visits additional education sessions with a dietitian will occur.

Access to a room or corridor to accommodate a six minute walk test is requires for this program. Clients will be supervised by an exercise therapist.

Patients will be required to have blood work at the initial visit and then again at the six-month visit.

Patients will be seen between graduation and surgery by some members of the multidisciplinary team.

Pre-surgery diet planning will be part of the program. A dietitian will meet with patients two weeks before surgery to plan the fourteen day pre surgery diet.

Post-Surgery

Post-Surgical patients will been seen prior to discharge and at the following intervals by a dietitian and surgeon:

- Two-Week Follow Up
- Four-Week Follow Up
- Six-Week Follow Up
- Two-Month Follow Up
- Six-Month Follow Up

ii. Hip & Knee Clinic

The Hip & Knee Clinic program consists of the following schedule:

- Initial Assessment
- First Reassessment
- Second Reassessment (30% of clients)
- Third Reassessment (20% of clients)

Nurses will review all referrals from GPs and surgeons. Some clients will require replacements, not an assessment. A nurse, also the case manager, will meet with patients for approximately forty-five minutes for a health assessment. A physiotherapist will meet with the patient for one hour for an initial assessment checking range of motion etc. A GP will meet with the patient for twenty minutes to determine need for treatment or surgery.

If the patient requires surgery, the nurse will phone or meet with the patient to select an orthopedic surgeon. Some patients will require reassessment. During each assessment, the physiotherapist will meet with the patient for thirty minutes and the GP will meet with the patients for twenty minutes.

The Hip & Knee program includes education and discharge planning with a nurse and physiotherapist. A nurse will spend seventy-five minutes with a patient discussing health, co-morbidities, dressings, anti-coagulation regime, pain management, fill out OT forms, provide parking passes etc. A nurse will also perform discharge planning and a PAC phone screen.

A physiotherapist will spend seventy-five minutes to determine if pre-habilitation exercises or treatment is needed and demonstrates exercises, OT aides and equipment.

iii. **Musculoskeletal Clinic**

Integration of the MSK Clinic and the H&K Clinic will occur (visit schedule same as H&K Clinic).

iv. **Spine Clinic**

Patient visit schedule to be determined.

c. **Diagnostic Imaging Centre**

Pre-diagnostic Processes

Once registered at Central Reception, patients will wait in the designated DI waiting. A receptionist will be responsible for managing patient flow within the department.

Patients will change from street clothes in a shared change area within the Diagnostic Centre. All patient belongings will be stored in bags provided by the DI department.

Diagnostic Imaging Procedures

DI must provide settings that support patient comfort and as much patient anonymity as possible. These range of settings should include spaces to change and a gowned waiting area near the patient diagnostic area.

Patient privacy/confidentiality must be addressed in the overall design of entrance/exit and waiting areas for the Diagnostic Imaging department.

The workstation located adjacent to the BMD imaging room is to accommodate patient consults.

Staff Organization

Staff will have access to a variety of spaces including consult rooms, exercise area, storage room, interdisciplinary space (accommodates visiting staff) and education space.

A Radiologist office is required adjacent to the CT and MRI imaging rooms.

All technician workstations to be co-located in one area.

Security will be provided for staff accessing the facility after hours.

d. **Patient Service Centre**

Laboratory Requests and Reports

An integrated information system will provide the Laboratory the capability to receive test requests and transmit results electronically, for both in-house and referred testing.

Outpatient Services

Patients will arrive to the ASC Main Registration/Admitting for registration. Patients whose test requests have not been electronically placed will have lab requisitions in hand or have standing orders on file. Orders are data entered, samples collected, labelled with bar codes, processed and delivered to the appropriate workstations for analysis. Results will be reported electronically and entered in the electronic patient record. The specimen collection area will be designed with consideration for privacy understanding that occasionally patients have to remove some clothing for specimen collection or faint during phlebotomy procedures.

Samples are delivered to the testing areas on site or to the send out bench for offsite testing. The send out area tracks samples destined for other locations, packages them, and prepares containers for couriers. Couriers will pick up samples and deliver them to the appropriate locations. A separate entrance for the courier is required (locate near loading dock area).

Specimen Storage

Laboratory specimens, e.g. blood, urine, slide files in cabinets, etc. will be stored for as per applicable retention requirements. Specimens to be tested off-site will be temporarily stored, packaged by the lab staff and shipped or picked up by courier. A packing station for couriering is provided.

Access to the department must be restricted to authorized personnel. Consider the use of card access to provide security.

The lab should be open and flexible to allow for reconfiguration of the Lab to accommodate normal and frequent changes in test methods and equipment.

Convenient access to all sides of major pieces of equipment should be provided as required for servicing. The use of mobile casework/stands to accommodate countertop mounted equipment is suggested.

Barrier/hands free access to laboratory areas is required. For ease of carrying samples some doors must open outwards without requiring manual pushing, turning of doorknobs etc.

Bulk storage convenient to the laboratory available for consumables used everyday including reagents and dry items such as gloves, specimen collection equipment, tubes and paper products is required.

Waste storage for trash, recycling and biohazardous materials and sharps is required.

Laboratory Coat Storage with coat hooks/hangers adjacent to the exit doors for hanging contaminated laboratory coats as well as separate space for clean lab coats is required.

CLINICAL SUPPORT SERVICES

Infection Prevention and Control (IPC)

The following are design requirements for IPC:

- Air handling in waiting rooms must meet IPC standards
- Provide one hand-washing sink in each exam/clinic room with space for soap, lotion, paper towel dispensers and disposal
- Provide Anti-Bacterial gel dispensers at various strategic locations throughout the facility

IT and Communications

Every room will be pre-fitted with a variety of IT components to enable easy growth into new technologies over time. This network of IT infrastructure will form the "central nervous system" allowing the ASC to easily remain in lockstep with advancing technologies.

Information Management

Information systems will be automated with access to information by means of desktop computers located at all staff work areas distributed throughout the department. Information may also be available through handheld devices in the future.

Communication Systems

The following communication systems are required:

- Telephone, data and fax lines in designated offices
- Closed Circuit Television (CCTV) for education
- Wireless communication system for inter-staff communications
- Hardwire services for all clinical equipment
- Emergency call buttons
- Consideration to be given to the use of electronic communication and use of short message service (text messaging) to contact and communicate with patients
- Patient self-registration kiosks
- Patient and facility management software will be available (e.g. Picis, SCM, Automated Supply Management Systems (i.e. Pyxis), Picture Archiving and Communication System (PACS), Laboratory Information System, Electronic Medical Record (Centricity), etc.)
- Telehealth capability in all conference/education rooms
- Electronic patient tracking system will be in use; patient status/location will be readily accessible to facilitate effective communication with family members and efficient room turnover. Patient Tracking Boards (monitors) should be provided in waiting and staff work areas.

Clinical Support Specific to Diagnostic Imaging:

- Contrast medias require warmers (tabletop, approx. size of microwave oven). A nurse will administer injection and monitor client. Suction and oxygen is required.
- Emergency Kits (for allergic reactions to contrast medias, etc.) will be located throughout the department.
- Clinical Engineering will provide support to DI Centre as needed. Storage space for supplies is required.

LOGISTICAL & MATERIAL SUPPORT

Logistical and Material Support Services will be provided within the overall facility strategy. See 2009 *Component One Functional Program* for further details:

- Material Management
- Housekeeping Services
- Laundry Services
- Plant & Maintenance

Specific Logistical and Material Support Service requirements for the Patient Clinic Assessment and Diagnostic Centre are:

- *Document Control:* Workrooms will be provided and will include the main photocopier, printer, fax, shredder, clerical supplies, and lockable cabinet space for storage of paper supplies
- *Food Services:* snacks will be provided as needed by clinic patients. A nourishment centre is provided in the PAC (accessible to the Surgical Assessment Centre)
- *Biomedical & Equipment Management:* will maintain equipment in the ASC as required. Onsite support will be augmented by offsite providers

Security and Protection Services

Security and Protection Services will be provided within the overall Facility Strategy. The following security features will be employed within the facility:

- Electronic devices will aid security i.e.: video monitoring of all entrances/exits, automated card access will be provided.
- The patient/family waiting area will be located outside of the secure area

WORKLOADS

PREADMISSION CLINIC

Pre-Admission Clinic	2003/04	2004/05	2005/06	2006/07	2007/08	2023/24
# of PAC Visits	6,694	6,337	6,830	6,498	6,164	

SURGICAL ASSESSMENT CENTRE

SAC Program	2003/04	2004/05	2005/06	2006/07	2007/08	2023/24
Bariatric Clinic						
Clients	n/a	n/a	n/a	n/a	250	400
MSK						
Clients	n/a	n/a	n/a	n/a	100	2,000
Hip & Knee						
Clients – Assessment	n/a	n/a	n/a	n/a	n/a	2,000
Clients – Teaching	n/a	n/a	n/a	n/a	n/a	400
Spine						
Clients	n/a	n/a	n/a	n/a	n/a	2,000
Pain						
Clients	n/a	n/a	n/a	n/a	n/a	480

DIAGNOSTIC IMAGING CENTRE

CLINICAL SUPPORT	2003/04	2004/05	2005/06	2006/07	2007/08	2023/24*
Radiology	n/a	n/a	n/a	n/a	n/a	12,800
Ultrasound	n/a	n/a	n/a	n/a	n/a	6,400
CT	n/a	n/a	n/a	n/a	n/a	6,400
MRI	n/a	n/a	n/a	n/a	n/a	3,200
BMD	n/a	n/a	n/a	n/a	n/a	3,200

**Assumptions:*

1. Diagnostic Imaging Centre operational 8 hours a day, 250 days per year
2. Average turnaround times per procedure:
    a. Radiology: 15 minutes
    b. Ultrasound: 30 minutes
    c. CT: 15 minutes
    d. MRI: 30 minutes
    e. BMD: 30 minutes
3. 80% Room Utilization

PATIENT SERVICE CENTRE

CLINICAL SUPPORT	2003/2004	2004/ 2005	2005/ 2006	2006/2007	2007/08	2023/2024*
Specimen Collection						
In-house procedures	n/a	n/a	n/a	n/a	n/a	57,600

**Assumptions:*

1. Laboratory operational 8 hours a day, 250 days per year
2. Average turnaround times per procedure : 5 minutes (3 blood drawing cubicles)
3. 80% Room Utilization

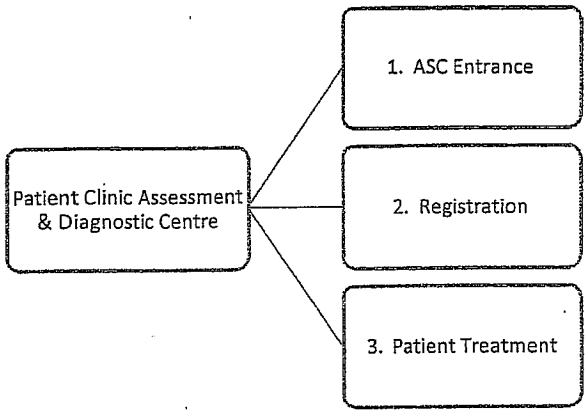
STAFFING

DEPARTMENT	Current (Headcount)	Future[1] (Headcount)
Pre-Admission Clinic		
Manager	0	1
Director	1	1
Unit Clerk	3	3
RN	8	12
Consultants	2	4
Clinical Educator	1	1
Diagnostic Imaging Centre		
Reception/Host	n/a	3
Technician, MRI	n/a	1
Technician, CT	n/a	1
Technician, Radiology	n/a	1
Technician, BMD	n/a	1
Technician, Ultrasound	n/a	1
RN	n/a	1
Radiologist[2]	n/a	1
Patient Service Centre		
Medical Laboratory Assistant	n/a	4
Medical Laboratory Technologist	n/a	2
MLT Supervisor	n/a	1
Surgical Assessment Centre		
Administrative Support	1	2
RN	1	4
Dietitian	1	2
Psychologist	1	1
Physiotherapist	n/a	2
Exercise Therapist	1	1
TOTAL STAFF	**20**	**51**

[1]Based on 8 hour shift (Headcount at peak time)
[2]Radiologist required onsite when CT, MRI and Ultrasound in operation.

DESIGN CRITERIA / FUNCTIONAL RELATIONSHIPS

EXTERNAL RELATIONSHIPS / CONCEPTS



1. Provide direct access by general circulation from the Patient Clinic Assessment zone to the main ASC Entrance to the for movement of patients and visitors.
2. Provide direct access by general circulation from Central Registration and Tracking to the Patient Clinic Assessment & Diagnostic Centre for the movement of staff.
3. Provide direct access by internal circulation from the Patient Clinic Assessment & Diagnostic Centre to Patient Treatment for the movement of staff.

INTERNAL RELATIONSHIPS / CONCEPTS

Zoning and patient flow requirements are as follows:

1. **Patient Clinic Assessment & Diagnostic Centre**

   a. **Preadmission Clinic**

   Space should be designed to facilitate the flow of patients and visitors from Registration → PAC Waiting → Clinic/Exam Room → Exit. Zoning in the Preadmission Clinic as follows:

   - Reception / Waiting
   - Treatment / Exam / Clinic / Consultation Area
   - Clinical Support
   - Staff Support

   b. **Surgical Assessment Centre**

   Space should be designed to facilitate the flow of patients and visitors from Registration → SAC Waiting → Exam/Consult Area → Exit. Zoning in the SAC as follows:

   - Reception / Waiting
   - Exam/Consult Area
   - Clinic Support
   - Admin/Staff Support

c. **Diagnostic Imaging Centre**

Space should be designed to facilitate the flow of patients and visitors from Reception → Change/Gowned Waiting → Imaging Area → Exit. Zoning in Diagnostic Imaging Centre area as follows:

- Reception / Waiting
- Decentralized Gowned Waiting and Changing,
- Diagnostic Imaging Rooms
- Admin/Staff Support.

Appropriate signage is required to facilitate ease of movement for visitors and outpatients. Gowned patients will wait in a separate area monitored by staff and accommodations will be made for relatives and friends of patients. Stretcher-patients should not be visible from visitor areas; curtained alcoves should be provided to maintain privacy of these patients.

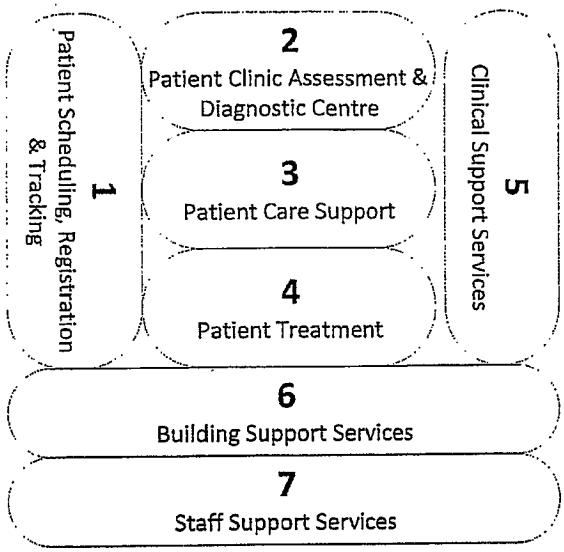
d. **Patient Service Centre**

Space should be designed to facilitate the flow of patients and visitors from Reception → Specimen Collection → Exit. Zoning in the Laboratory as follows:

- Reception / Waiting
- Specimen Collection
- Core Lab
- Lab Support
- Courier Pick-up
- Admin/Staff Support

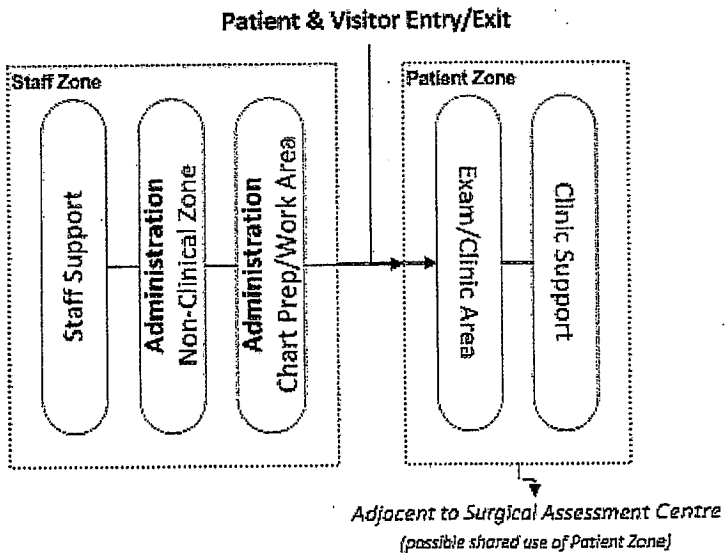
COMPONENT FUNCTIONAL DIAGRAM

AMBULATORY SURGICAL CENTRE



1. PATIENT CLINIC ASSESSMENT AND DIAGNOSTIC CENTRE

PREADMISSION CLINIC



DESIGN REQUIREMENTS

Privacy

Design requirements provide provision of complete visual and acoustic privacy for patients in examination, treatment and procedure areas. Privacy is of the utmost importance and control of sound transmission between rooms is a critical design consideration.

The importance of client confidentiality and privacy will be reflected in the design of the area. Techniques that maximize acoustic and/or visual privacy will be incorporated where applicable, i.e. registration/check-in.

Although clients will not access staff work areas, the use of computer based communication technology, e.g. electronic patient health record, may create issues related to client privacy that will need to be addressed.

Interdisciplinary space is to be centrally located away from public areas for team discussion, physician team consults, etc.

The specimen collection area will be designed with consideration for privacy understanding that occasionally patients have to remove some clothing for collection or faint during phlebotomy procedures.

Environment

Design requirements also include the creation of an environment conducive to patient relaxation. The following concepts will impact the overall environment of the space:

- Facilities for patients and families should present a calm and reassuring, yet professional environment
- Doors throughout should be automatic to allow for easy access by stretchers, beds and wheelchairs (bariatric needs to be accommodated in some program areas i.e. SAC)
- Wherever possible daylight should be brought in (especially in staff work areas)
- Wherever possible access to outdoor views should be brought in (especially in staff work areas)
- Consideration of accommodation of bariatric patients
- All meeting and clinical spaces should accommodate Telehealth technologies;
- All work areas must be wired to support use of networked devices e.g. computers, handheld devices
- Staff workstations should be configured to allow for visual as well as acoustical privacy to create a quieter work environment. Address acoustics and noise transference in open work areas by use of appropriate technologies (e.g. sound dampening technology)
- Clinical spaces must be appropriate for a variety of ages to accommodate pediatric to geriatric clients
- Green spaces should be planned onsite (indoor and outdoor)
- Colours will be designed to provide a comfortable environment for staff and patients

Administrative Offices

Staff/administration support space should be located separate from the patient testing area, but ideally in an adjacent area.

Flexibility

In consideration of future expansion to the Ambulatory Surgical Centre, flexibility must be taken into account. Locate areas of potential expansion adjacent to outside walls.

Flexible exam and treatment space will be designed in all clinical areas to adapt to long-term growth and changes in workload. Where appropriate, exam/treatment rooms will be centralized in clusters so various clinics can share universal exam rooms.

Exam rooms will typically have space for a bed/exam table, sink, cabinets, and workspace. All exam rooms will be wired for data/telephone/nurse call systems and telehealth. Meeting rooms and team rooms will be wired for data/telephone and telehealth.

Future flexibility will be incorporated into Component Two through the following mechanisms:

- Moveable partitions and modular furnishings to create an open work environment that allows easy reconfiguration of workstations to accommodate additional staff
- Images will be obtained and read by a radiologist at workstations on or off-site; electronic reports will be sent to referring physician. Any space dedicated to storage of traditional film must accommodate the needs of the program in the future
- Diagnostic Imaging rooms will be sized for future flexibility
- Provide for versatility and future convertibility of all technical areas to allow for developing laboratory procedures and changes in staffing, equipment, and instrumentation
- Most lab areas will be open and spatially contiguous
- Electrical, mechanical, and plumbing services should be designed as flexible systems (e.g. electrical power drop poles from the ceiling). Casework should be modular and moveable, and partitions should be readily demountable in order to facilitate changes in layout and function. Technical workstations require space for both instruments and manual work. Desk height surfaces for clerical and computer work in technical laboratory modules should be identified in the detailed design stage. Most lab equipment will require one computer station.

Security

The main point of entry and exit into the ASC will be controlled visually by staff and by video surveillance. The main door will be open during regular hours and locked after hours. A secure staff entrance will allow access on a controlled basis. All other doors will be locked from the outside with emergency egress where required from the internal spaces.

A staff card access system will be incorporated into the building and department entrances.

Public access to the clinical areas and staff work areas will be controlled through design.

Due to the presence of biologicals, chemicals and sharps in the Patient Service Centre, access must be restricted to authorized personnel only.

Diagnostic Imaging Equipment Requirements

Provide necessary shielding to retard particles generated during the imaging procedure (e.g., radiography). Isolate equipment (primarily MRI) from external sources of interference. Provide shielding that meets all codes and industry requirements such as lead and steel plating. Equipment and shielding for larger equipment, such as MRI units, require significant floor loading capacity. The design needs to consider all structural limitations, ceiling height and ability of the structure to accommodate any ceiling mounted equipment.

Laboratory Environment

The PSC should have natural lighting (blinds or shades that shield equipment from interference from sunlight) and proper sound attenuation to dampen the sound of the equipment. The area should provide comfort and minimal fluctuations in temperature, humidity and air quality to ensure stability of test systems and staff comfort. The ventilation systems should be of excellent quality designed to extract all fumes and prevent intake from adjacent building exhausts.

Laboratory Ventilation

Non-operable windows are essential to ensure complete control of laboratory atmosphere.

Mechanical ventilation levels in technical areas must address the presence of odours, fumes and heat emanating from specimens and equipment. Negative pressure required to ensure appropriate airflow and containment. The design of the mechanical system must include capability to temporarily increase the rate of ventilation in exceptional or emergency circumstances. The mechanical system should also be designed so that it does not negatively affect sensitive lab procedures.

Laboratory Noise

Fridges, freezers and centrifuges must have acoustic blocking to ensure the constant humming produced is contained and minimized. Noise hazards produced by the volume of laboratory equipment in a dedicated area must be addressed in order to attenuate noise levels.

Laboratory Plumbing

The PSC must be provided with a good supply of hot water. Hand wash basins must be sized appropriately for proper washing. In-counter sinks to be provided throughout entire department. Floor drainage will need to be supplied for certain equipment.

Provide de-ionized, de-mineralized, and sterile water for the lab equipment.

SCHEDULE OF ACCOMMODATION

AMBULATORY SURGICAL CENTRE COMPONENT TWO SPACE SUMMARY

Functional Components	NSM	CGSM	BGSM
PAC (Full)	463	602	776
Reception	60	78	101
Administration Area	87	113	146
Exam/Consult Area	241	313	403
Clinic Support	40	52	67
Staff Support	35	46	59
Multidisciplinary Clinic	558	725	936
Reception/Waiting	45	58	75
Administration Area	60	78	101
Exam / Consult Area	391	508	655
Clinic Support	16	20	26
Staff Support	48	62	80
Diagnostic Imaging	598	820	1,057
Reception Area	42	55	70
Administration Area	25	32	41
General Radiography	74	107	137
BMD	29	42	54
Ultrasound	38	54	70
CT	66	96	123
MRI	72	104	134
Diagnostic Change/Waiting	59	76	98
Diagnostic Imaging Support	49	64	82
Staff Support Area	39	51	65
Radiologist Work Area	26	34	44
Shell Space*	82	107	138
Patient Service Centre (Lab)	173	225	290
Reception Area	29	37	48
Specimen Collection	22	29	37
Lab Area	40	52	67
Send Out/Processing Support	14	18	23
Lab Support	34	44	56
Administrative & Staff Area	35	45	59
Total Net Square Metres	1,792		
Total Component Gross Square Metres		2,371	
Total Building Gross Square Metres			3,059

Net Square Metres (NSM) – the actual occupiable area of each room or space as measured to the interior finished surfaces of all walls, partitions, or mechanical enclosures.

Component Gross Square Metres (CGSM) and **Component Gross Factor (CGF)** – the portion of a building assigned to a specific component including net areas, internal circulation, partitions, building structure and small mechanical shafts/areas as measured from the inside fact of exterior walls and to the centre line of partitions adjoining other components or general circulation space.

Building Gross Square Metres (NSM) – the portion of a building assigned to stairs, elevators, corridors, structure and utility needs.

PREADMISSION CLINIC

PRE ADMISSION CLINIC							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
Locate adjacent to Multidisciplinary Clinic to provide opportunity for shared Exam/Consult Space							
	Reception						
1	Workstation - Reception	1	5.0	5.0			
1a	Waiting Area	1	31.0	31.0			For 20; consider locating with Main ASC Waiting; 18 @ 1.5, 2 @ 2m2 (wheelchair accessible)
2	Workroom	1	9.0	9.0			
3	File Storage	1	15.0	15.0			based on holding 6000 files for 1 month; shared with Multidisciplinary Clinic, planning to include future re-use
	Subtotal			**60.0**	**1.30**	**78.0**	
	Administration Area						
4	Office, Manager	1	9.0	9.0			
5	Workstation - Unit Clerk	3	5.0	15.0			Shared Office
6	Patient Record Workroom	1	15.0	15.0			
7	Office - Clinical Educator	1	9.0	9.0			
8	Workstation, RN	6	5.0	30.0			Shared by 12 RNs
9	Office, Anesthetist	1	9.0	9.0			
	Subtotal			**87.0**	**1.30**	**113.1**	
	Exam/Consult Area						
10	Exam/Consult Room, PAC	16	12.0	192.0			Exam Stretcher, table, sink, 3 chairs; weigh scale, medical gases, curtain around stretcher, blood pressure wall mount, thermometer wall mount, flat screen monitor, dvd player
11	Exam/Consult Room, Pain Clinic	2	12.0	24.0			Exam Stretcher, table, sink, 3 chairs; weigh scale, medical gases, curtain around stretcher, blood pressure wall mount, thermometer wall mount, flat screen monitor, dvd player
12	Pyxis Alcove	2	2.0	4.0			adjacent to Exam Room for Pain Clinic
13	Crash Cart Alcove	1	1.5	1.5			
14	Telephone Interview Room	1	10.0	10.0			Room for 4 workstations, partitioned for sound
15	Washroom, Client	2	4.5	9.0			
	Subtotal			**240.5**	**1.30**	**312.7**	
	Clinic Support						
16	Clinic Supply Storage	1	10.0	10.0			
17	Soiled Holding	1	9.0	9.0			shared with MDC
18	Clean Holding	1	9.0	9.0			shared with MDC
19	Nourishment Station	1	6.0	6.0			shared with MDC
20	Housekeeping Closet	1	6.0	6.0			shared with MDC
	Subtotal			**40.0**	**1.30**	**52.0**	

PRE ADMISSION CLINIC							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
	Staff Support						
21	Interdisciplinary Room	1	18.0	18.0			Room for 4 workstations (2 students), PACS monitors, reference materials,
22	Staff Team Room	1	14.8	14.8			For 6, kitchenette - fridge, microwave
23	Washroom, Staff	1	2.5	2.5			
	Subtotal			35.3	1.30	45.9	
	TOTAL		NSM =	462.8	CGSM =	601.6	

SURGICAL ASSESSMENT CENTRE

Surgical Assessment Centre							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
Locate adjacent to Preadmission Clinic to provide opportunity for shared File Room and Exam/Consult Space							
	Reception/Waiting						
1	Workstation, Admin Support	2	5.0	10.0			
1a	Waiting Area	1	16.5	16.5			For 8; Consider combining with PAC waiting; 5 @1.5m2, 3 @ 3m2 (accommodated bariatric pt)
2	Workroom	1	9.0	9.0			
3	Washroom, Client	2	4.5	9.0			
	Subtotal			44.5	1.3	57.85	
	Administration Area						
4	Workstation, RN	4	5	20			
5	Workstation, Dietitian	2	5	10			
6	Workstation, Psychologist	1	5	5			
7	Workstation, Physiotherapist	2	5	10			
8	Workstation, Social Worker	1	5	5			
9	Workstation, Visiting	2	5	10			
	Subtotal			60	1.3	78	
	Exam / Consult Area						*Bariatric, MSK, Hip & Knee, Spine Clinics*
10	Exam Room, Traditional	21	12	252			bariatric chair and doorway; all telehealth capable
11	Physical Testing Room	1	12	12			treadmill
12	Bariatric Weigh Scale Room	1	6	6			Shared with PAC
13	Teaching Room	4	22	88			growth capacity to be accommodated by expanded clinic hours, 2m2 for prop storage; telehealth capable; bookable; interconnect 2 pairs

Surgical Assessment Centre							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
14	Teaching Room, Demonstration	1	32.5	32.5			growth capacity to be accommodated by expanded clinic hours, 2m2 for prop storage; telehealth capable; bookable; interconnect 2 pairs; with domestic teaching kitchen stove, microwave, fridge, island; domestic teaching washroom: tub, toilet, sink
	Subtotal			**390.5**	**1.3**	**507.65**	
	Clinic Support						
15	Pyxis Alcove	1	2	2			
16	Soiled Holding	1	4.5	4.5			to be located adjacent to PAC
17	Washroom, Client	2	4.5	9			
	Subtotal			**15.5**	**1.3**	**20.15**	
	Staff Support						
18	Interdisciplinary Room	1	18	18			Room for 4 workstations (2 students), PACS monitors, reference materials,
19	Staff Team Room	1	22	22			For 6, kitchenette - fridge, microwave
20	Washroom, Staff	3	2.5	7.5			
	Subtotal			**47.5**	**1.3**	**61.75**	
	TOTAL		**NSM =**	**558.0**	**CGSM =**	**725.4**	

DIAGNOSTIC IMAGING

Diagnostic Imaging Centre							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
	Reception Area						
1	Reception	1	15	15.0			Includes 3 workstations: 2 reception, 1 Host/Patient Runner
1a	Waiting Area	1	16	16.0			For 10: 8 @ 1.5, 2 @ 2m2 (wheelchair accessible)
2	Workstation, Scheduler	1	5	5.0			
3	Workroom	1	6	6.0			photocopier, fax machine, paper supplies
	Subtotal			**42.0**	**1.30**	**54.6**	
	Administration Area						
4	Office, Supervisor	1	11	11.0			Desk, PC, PACS, Phone, 2 visitor chairs
5	Office, Radiologist	1	11	11.0			located between CT and MRI
6	Touchdown Station	1	2.5	2.5			Unassigned workstation
	Subtotal			**24.5**	**1.30**	**31.9**	
	General Radiography						
7	Radiology Imaging Room	2	28	56.0			Includes examination room
8	Workstation - PACS Viewing Control Room	1	7.5	7.5			With PACS and PC's
9	Workstation, Radiology Tech	2	5	10.0			
	Subtotal			**73.5**	**1.45**	**106.6**	

Patient Service Centre (Laboratory)							
Rm Code	Space	Area Requirements					Remarks
		Units	Nsm/ unit	NSM	Planning Factor	CGSM	
	Lab Area						
6	Bloodbank / Hematology, Open Workstation	1	20.0	20.0			Counter with sink. Space to be wired (UPS), plumbed, computer, microscopes, 1 CBC analyser, 1 coagulation analyser, 1 platelet analyser, 1 blood bank fridge
7	Chemistry/Urinalysis, Open Workstation	1	20	20.0			Counter with sink. Space to be wired (UPS), plumbed, computer, microscopes, 1 chemistry analyser, 1 urinalysis analyser, centrifuge
	Subtotal			40.0	1.30	52.0	
	Send Out/Processing Support						
8	Accession, Send-out Processing Workstation	1	8	8.0			1 biological safety cabinet, 1 centrifuge
9	Clean Area	1	6	6.0			incl hand sink, eyewash station, floor drain, shower
	Subtotal			14.0	1.30	18.2	
	Lab Support						
10	Fridge and Freezer	3	2.5	7.5			equipped with temperature control and alarm signals; locate one fridge and one freezer next to both the send-out processing area
11	Supply Storage	1	10	10.0			specimen collection tubes, gloves, reagent, flammable storage cabinet
12	Clean Holding Room	1	6	6.0			
13	Soiled Holding Room	1	6	6.0			
14	Lab coat closet (clean)	1	2.5	2.5			
15	Lab coat closet (soiled)	1	1.5	1.5			
	Subtotal			33.5	1.30	43.6	
	Administrative & Staff Area						
16	Office, MLT Supervisor/Manager	1	9	9.0			Desk, desk chair, computer, phone, bookshelf or above desk storage, file cabinet and 2 visitor chair.
17	Workstation	1	5	5.0			
18	Staff Washroom	1	2.5	2.5			
19	Staff Team Room	1	18.4	18.4			For 8, kitchenette
	Subtotal			34.9	1.30	45.4	
	LAB TOTAL		NSM=	172.9	CGSM=	224.8	