

New Watson Lake Hospital



- 1 Executive Summary
- 2 Project Parameters / Functional Program
- 3 MLCF Technical Assessment
- 4 Conceptual Design Report

Kobayashi + Zedda Architects

Resource Planning Group

DGBK Architects

Bush, Bohlman + Partners

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Dorward Engineering Services

LMDG Code Consultants

July 16, 2009



yukon
hospital corporation

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BACKGROUND

The original Watson Lake hospital was constructed in 1975 by the Federal Government when the population was larger and the local industry more active. Several renovations have occurred since that time to address changing needs.

In July 2004, a report entitled Functional & Facilities Program: Watson Lake Health Care Facilities was submitted by Options Consulting who had been hired to study the needs for both an acute care hospital and a multi-level (residential) care facility (MLCF). Following that report, it was decided that construction of a new MLCF would occur contiguous to the existing hospital.

The intended project consisted of four phases: 1) Constructing a shelled-in MLCF adjacent to the hospital; 2) Fitting the MLCF as a temporary hospital; 3) Renovating the existing hospital to current standards and needs; and 4) Transferring the temporary hospital from the MLCF to the renovated hospital, and finishing the intended MLCF.

Further study in 2007, identified extensive renovations would be required to upgrade the existing hospital to meet 1995 National Building Code Standards;

It was determined that even with the extensive renovation the existing hospital would continue to be suboptimal for the delivery of modern patient care. Based on the overall cost and significant disruption of services by renovations, the plan was deemed not cost effective.

In 2008, the decision was made to conduct a study that provided for:

1. Development of a Functional/Facilities Program for a new Watson Lake Hospital to meet current and future needs;

Note: Project scope does not include the development of an Assisted-Living or Complex Care Facility.

2. Assessment of utilizing/preparing the MLCF shell for use as the hospital facility;
3. Development of a Conceptual Plan (based on #1 and #2).¹

Kobayashi and Zedda Architects Ltd and Resource Planning Group Inc were engaged as the Consultant Team in late 2008. The project was initiated in early 2009 with the participation of Yukon Hospital Corporation who have entered into an interim management agreement for Watson Lake Hospital with Yukon Government.

¹ Source: Yukon Government: Department of Highways and Public Works, Request for Proposal, August 2008.

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FUNCTIONAL PARAMETERS This section provides background information relevant to services provided at the existing Watson Lake Hospital, and those to be provided in the new Watson Lake Hospital.

INTRODUCTION

The purpose of Project Parameters is to describe key factors expected to influence development of future facilities at the Watson Lake Hospital over the next ten years.

Functional and operational parameters are used primarily in the development of master planning and functional programming information. A health facility's intended functional content and major operating systems affecting the manner in which functions are conducted must be fully understood before they can be sized as discrete blocks of space. RPG refers to these blocks of space as "functional components" and these represent the major building blocks that will be used to construct models of future facilities in the physical planning tasks that occur later.

Physical and financial parameters are used primarily in the physical stages of planning where options regarding retention/ reuse of existing facilities, construction of new facilities, and site development options are tested. Planning alternatives must be evaluated not only in terms of their "fit" within the confines of existing and proposed structures, but also within any established capital and/or operating budgets as well.

Collectively, the Project Parameters assist subsequent planning initiatives by describing proposed upper limits on:

- The mission and services management philosophy of the region;
- The geographical setting and catchment area served;
- Services to be provided;
- The number of "users" to be provided service;
- The education and research roles (if any);
- Opportunities or constraints imposed by the existing physical resources, including the site; and
- Opportunities or constraints imposed by any capital or operating funding objectives.

The documentation that follows is organized according to four categories of project parameters:

- Functional Parameters;
- Operational Parameters;
- Physical Parameters; and
- Financial Parameters.

PLANNING HORIZON

Functional programming will be based on the status of conditions as best estimated to the year 2019/20.

REGIONAL GEOGRAPHY AND CATCHMENT AREA

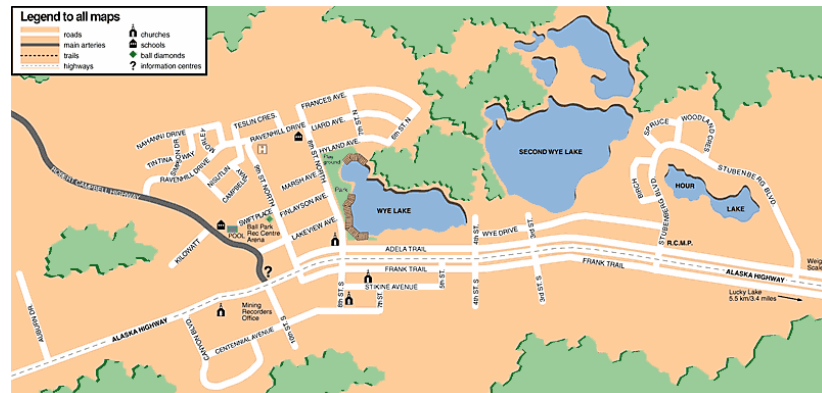
The geographic area of Yukon, approximately 482,443 square kilometres, contains significant geographic barriers, including long travel distances, severe winter conditions and communities with varying degrees or modes of access.



Yukon is bordered on the north by the Arctic Ocean, on the west by Alaska, on the south by the province of B.C., on the east by Northwest Territories.

The vast and varying terrain, the distances between communities, and the relatively small population(s) makes providing health care services a sizeable challenge.

Located in southeast Yukon, the town of Watson Lake intercepts three different highways: the Alaska Highway, Robert Campbell Highway and Stewart Cassiar Highway. Due to this strategic position, it serves as a distribution and communication junction for mining, mineral exploration, forestry, oil and gas, and tourism activity in the surrounding region.



Watson Lake Hospital provides services for up to approximately 1,500 residents residing in, and around, the immediate community of Watson Lake, including: Upper Liard, Two Mile Village and Two ½ Mile Village. Though not formally within Watson Lake's catchment, Lower Post, Good Hope Lake and Dease Lake residents seek service at Watson Lake Hospital due to its close proximity. For Community Care Services, only nurses with dual registration (i.e. those who are registered in BC, as well as the Yukon) may provide care in the home/community of these BC residents.

The Town of Watson Lake, although small in size, boasts some notable amenities, including a \$7 million recreation centre constructed in 2000, the Northern Lights Centre, the Watson Lake airport, a new community library/civic building, and plenty of outdoor recreation opportunities, including golf, downhill and alpine skiing, boating, hiking and "wilderness tourism".

Table 1 below summarizes the driving distances between Watson Lake and surrounding communities.

Table 1: Driving Distances Between Watson Lake and Neighbouring Communities

Community	Upper Liard	Lower Post	Contact Creek	Teslin	Johnson's Crossing	Whitehorse
Watson Lake	11 km	22 km	66 km	259 km	312 km	436 km

POPULATION HIGHLIGHTS The following table shows the current and projected populations for Watson Lake by age-groups:

Age Group (Years)	Current Population Dec 2008 ²	Projected Population 2018 ³	% Change from 2008 to 2018
0-4	95	136	42.86
5-9	82	113	37.60
10-14	96	101	5.06
15-19	123	99	-19.35
20-24	123	100	-18.38
25-29	94	107	13.36
30-34	76	102	33.60
35-39	99	113	13.82
40-44	127	122	-4.16
45-49	163	133	-19.02
50-54	151	128	-15.49
55-59	117	140	19.36
60-64	111	161	44.33
65-69	62	118	89.59
70-74	27	56	108.14
75+	48	80	65.50
Total	1,594	1,809	13.30

² Yukon Bureau of Statistics Population Report

³ 2019/20 population projections for Watson Lake not available at this time, the projections have been based on: Yukon Bureau of Statistics (Yukon) Population Projections to June 2018, High-growth Projections applied to current Watson Lake Populations, for planning purposes only.

The following table shows the current and projected populations for Watson Lake catchment areas by community:

Catchment Community⁴	Current Population Dec 2008	Projected Population 2018*	Total Projected Population (with Watson Lake) 2018
Lower Post (B.C.)	113	128	-
Good Hope Lake (B.C.)	32	36	-
Dease Lake (B.C.)	68	77	-
Total	213	241	2,050

**Note: Future population projections based on Yukon growth projections (13.3%)*

Population Characteristics

For high-growth population projections, Yukon Bureau of Statistics has assumed:

- Fertility rates up 10%;
- Mortality rates decrease by 10% and
- A net migration of +300 each year.

Based on the projections shown in the above table, planning assumes an overall population growth of 13% from December 2008 to June 2018.

Based on the increased fertility rate, a growth in the very young is noted, particularly for those aged 9 years and younger.

Some age groups are projected to decrease – adolescents and young adults (15-24 years old) and those in mid life between 40 – 54 years of age (by approx 19% and 13% respectively).

In general, one of the most significant trends of the population projections is the higher growth rate in older residents, particularly those persons 65 years old and older (85%). However, the absolute number of those who will be 65 years and older, is still relatively small with only 254 people projected. Yukon Bureau of Statistics reports the increase in elderly (for the Yukon as a whole) is seen in both the Aboriginal and non-Aboriginal populations.

Two recent trends affecting population projections for seniors include:

⁴ Statistics Canada, *Population and Dwelling Counts for Canada, Provinces and Territories, and Census, 2006.*

- An increasing number of seniors are staying in Yukon for retirement rather than moving to the south; and
- Individuals that left Yukon for jobs in the south are sometimes returning to the Yukon for retirement.

Planning will consider the unique characteristics of the Yukon population including, but not limited to, the local Aboriginal culture(s), and the fluctuations of population based on seasonal tourism/transients.

SERVICE ROLE

Watson Lake Hospital (and its governing authority) will work in partnership with other service delivery agencies to ensure delivery of health services are provided to residents of the Watson Lake catchment area based on needs and available resources.

In general health services are provided to Watson Lake catchment area as follows: ⁵

- Primary Care: This level of care generally refers to the first point of contact with the health services providers who are present in Watson Lake and includes: Hospital Staff, Health & Social Services Staff and Physicians.

Residents in Watson Lake's catchment generally access primary care through general practitioners, and community services, some of which are located at the community hospital;

- Secondary Care Services: This level of care refers to more advanced service requirement and may require admission to a hospital and/or referral to a specialist.

Select secondary services are provided at WLH including inpatient admission for observation, or those patients requiring more nursing and medical care than can be provided on an outpatient basis. Other (select) secondary services are provided by specialists who visit WLH (e.g. Mental Health) on a regularly scheduled basis to provide consultation and/or treatment services. All other secondary services (such as general surgery) are provided at Whitehorse General Hospital;

- Tertiary & Quarternary Care Services: This refers to more specialized diagnostic and treatment or rehabilitation services. Select tertiary care services are provided at Whitehorse General Hospital (e.g. visiting specialists for neurology, internal medicine, neurology, oncology, dermatology, rheumatology, and pediatric cardiology, orthopedics, ophthalmology and ENT). Patients are also referred out-of-Territory to either British Columbia or Alberta for most highly specialized services (e.g.) neurosurgery, cardiac surgery, etc.).

⁵ Excludes Social Services supports, which are not included within the scope of this project.

KEY CLINICAL SERVICES

Watson Lake Hospital

Current Status

The following key clinical services are provided by Watson Lake Hospital:

Ambulatory Care Services

The following Ambulatory Services are provided at Watson Lake Hospital:

- Emergency Services;
- Scheduled Outpatient Services;
- Other Services – e.g. Laboratory, X-ray (see Clinical Support Services)

Emergency Services

The Hospital provides diagnostic and treatment services of unscheduled patients, both adult and pediatric, with known or suspected illnesses or conditions. Five categories of emergency services, based on the Canadian Triage Acuity Scale (CTAS) are provided as follows:

- CTAS 1 – Resuscitation: conditions that are threats to life or limb, or imminent risk of deterioration requiring immediate aggressive intervention;
- CTAS 2 – Emergent: conditions that are a potential threat to life, limb or function, requiring rapid medical intervention or delegated acts;
- CTAS 3 – Urgent: conditions that could potentially progress to a serious problem requiring emergency intervention. May be associated with significant discomfort or affecting ability to function at work or activities of daily living;
- CTAS 4 – Semi-Urgent: conditions that relate to patient age, distress, or potential for deterioration or complications would benefit from intervention or reassurance within 1-2 hours;
- CTAS 5 – Non-Urgent: conditions that may be acute but non-urgent as well as conditions, which may be part of a chronic problem with or without evidence of deterioration.

Emergency services at the Hospital are provided 24 hours/day, 7 days/week in collaboration with the Medical Clinic/General Practitioners (one general practitioner is always on-call and available for provision of emergency services as required).

Patients requiring further care/definitive treatment that is not available at WLH are immediately transferred to Whitehorse General Hospital or the most appropriate facility.

In addition, nurses at WLH provide ambulance dispatch services for (Watson Lake) Emergency Medical Services.^{6,7}

While not a formal service, it is recognized that residents occasionally seek minor emergent care for their pets (e.g. suturing).

Scheduled Outpatient Visits

Scheduled outpatient visits generally include, but are not limited to:

- IV antibiotic therapy;
- IV Chemotherapy;⁸
- Injections (e.g., Vitamin B);
- Flu Clinics;
- Cast Clinic;
- “Lump & bump” removal;
- Abdominal and spinal X-rays (by physician);
- Dressing changes and other follow up (generally when the Medical Clinic is closed);
- Dental (select only, such as extractions, which may periodically be provided by a physician); and
- Visiting Specialists.

With the exception of minor procedures such as “lump and bump” removal, surgical procedures are not provided at Watson Lake Hospital.

Visiting Specialists (see Community Care Services, Health Centre below).

Inpatient Services

Inpatient Services are provided to primarily adult patients as required for:

- Observation and monitoring;
- Stabilization and treatment of acute conditions (primarily medical and chronic disease related);
- Respite;
- Palliative;
- Convalescent - limited due to lack of appropriate human resources (i.e. rehabilitation staff).

⁶ Planning assumes that 911 service will be available to Watson Lake in the medium to long term, and in the short term will continue to be provided by WLH.

⁷ Emergency Medical Services includes 2 full-time paramedics Mon-Friday 0800-1630. After hours, service is provided through EMS Volunteers. EMS facilities are not currently located at the Hospital. New facilities for EMS are currently being planned/constructed. Consideration should be given to (co) locating EMS facilities at the hospital site, to further leverage both human and physical resources.

⁸ The physicians conduct all preparation and administration of chemotherapy.

Inpatients often require the following medical services: isolation (e.g. TB patients), medical stabilization, detoxification, observation (e.g. concussions, abdominal pain), and mental health services.

YG-HSS reports the seven most common diagnoses, include: 1) alcohol abuse/withdrawal; 2) pneumonia; 3) frail elderly; 4) gastritis; 5) cellulitis, 6) situational crisis; and 7) trauma/cardiac (high medevac component).

Palliative care services provided at Watson Lake Hospital involve symptom management as well as end-of-life-care.

Convalescent care is occasionally provided to patients returning from outside Watson Lake (e.g. Vancouver, Whitehorse) following surgery (e.g. hip fracture) or a medical incident. Therapy services such as occupational therapy or physiotherapy are not provided onsite.

Two beds are generally available for respite care at Watson Lake Hospital. Respite involves short-term, temporary relief to those who are caring for family members (often elderly) who might otherwise require permanent placement outside the home. The duration of stay can be as brief as a weekend or extend for several weeks, depending on the situation. Although basic care needs are accommodated, activity programs are not provided at the Hospital. Family members may arrange participation in community activities and are responsible for (arranging) transportation to and from the activity and care of the client during that period of time.

When specialized expertise and/or technology are required that are not available at the Watson Lake Hospital, residents must travel outside of the region. Services provided territorially, and out-of Territory, include speciality and subspecialty services (e.g., vascular surgery, neurosurgery, medium/high-risk pregnancies, etc.).

Maternity Services are not generally provided to patients except on an emergent basis (please see Maternity Services below).

Clinical Support/Diagnostic Services

See Clinical Support Services below

Future Planning Parameters

In general Watson Lake Hospital will continue to provide services as described above with consideration of the following enhancements:

- Expanded Telehealth will also improve the delivery of services, as communication linkages will be established regionally, territorially and nationally for consultation, education and support;
- Consideration of provision of (select) rehabilitation services such as PT and OT would considerably enhance inpatient care; particularly convalescent care patient, as well as outpatient programs;
- Consideration of the inclusion of a xray/lab technician to the staff mix to enhance quality service (based on an anticipated increase of outpatient volumes related to increasing chronic disease incidence and management initiatives);

- Development of an inpatient medical detoxification program for up to two persons at one time;
- In collaboration with Health & Social Services and Medical Clinic, there will be an increased emphasis on chronic disease management (e.g. diabetes, arthritis, congestive heart failure, mental health and addictions) and frail seniors⁹;
- With the continuing development of diagnostic and treatment technologies there will be significant scope for the expansion of speciality clinics. These may include screening programs for cancer and renal patients;
- Consideration of collocating the Medical Clinic and Retail Pharmacy within the new hospital;
- Consideration for private Dental services to be located within the Medical Clinic;
- Future provision of space for use by Community and Continuing Care Services or other programs; and
- Consideration for the development of enhanced services to Aboriginal patients by:
 - linking/implementation of First Nations Liaison or integration with Whitehorse Program,
 - valuing and supporting opportunities for traditional diet and traditional medicine where possible).

Inpatient care will continue to be provided by the Watson Lake Hospital, utilizing a combined care philosophy, of acute and community support (e.g. respite, palliative, convalescent). The facilities at Watson Lake Hospital are not intended to provide on-going assisted-living or complex care facilities.

It is expected that due to the low number of births combined with increasing high-risk labours and the lack of OR access, labour and delivery services will only be provided on an emergency basis at the Hospital.

Medical Clinic & Retail Pharmacy

Current Status

Currently there are approximately 4 general practitioners¹⁰ who provide primary medical care services to the residents of the Watson Lake catchments area Monday to Friday from 0900 -1700. The Medical Clinic and retail pharmacy are not currently located on the hospital site, but are in close proximity.

Point of care lab testing is provided in the Medical Clinic. In the past x-rays have also been provided, but currently clients are referred to the hospital for xrays. This results frequently in patients being seen in the clinic, walking or driving to the hospital to have their xray taken and then having to return to the Medical Clinic (with the xray) for further

⁹ It is recommended Continuing Care Services consider development of an Adult Day Program.

¹⁰ Physicians are associated with the Hospital and provide emergency on-call service 24hrs/day as well as medical responsibility for admitted patients.

treatment by the physician. Patients are also sent to the hospital for ECGs.

Future Planning Parameters

Consideration should be given to co-locating the Medical Clinic/Retail Pharmacy within the hospital facility. Co-location of services will prevent undue patient movement between the Medical Clinic and the Hospital. Co-location would also provide increased timeliness in provision of emergency medical care (response time) and leverage other resource efficiencies (e.g. facilities).

Consideration should be given to supporting integrated participation of the Medical Clinic, Health Centre and Hospital Services in the Diabetes Collaborative.

Mental Health & Addiction Services Current Status

Emergency and some acute mental health services are provided at WLH.

Currently, community based mental health and addictions Services are provided independent of one another.

Community based mental health services as well as addiction services are provided in Watson Lake with limited assessment services provided by a GP. If required, stabilization and referral services are provided, together with access to a therapist and specialist service through visiting services.

Future Planning Parameters

Future planning assumes ongoing provision of emergency and acute services as noted above and provision of appropriate facilities for visiting specialists.

Community based addiction services is not included within this project's scope.

Community Care Services Current Status

Community Care Services includes:

- Health Centre Services;
- Child Development Services; and
- Home Care/Home Support Services

Currently, Community Care Services are located within the hospital facility.

Health Centre Services

The Health Centre provides the following services:

- Maternal and Child Health: prenatal classes, post-natal home visits, well-child clinics and follow-up assessments, and screening programs;
- Immunizations (provided both in the Centre and in the community) for:
 - routine Yukon Schedule,
 - Elementary and High School;
 - Flu Clinics, and
 - Travel Clinics;
- Child Health: preschool screening and school visits (immunization, health teaching, vision and hearing screening);
- Adult Health: health information, counselling on health conditions, mental health and addictions outpatient services, (limited) chronic disease management, immunizations, flu and travel clinics;
- Communicable Disease Control: screening, contact tracing, investigation and ongoing management of tuberculosis, sexually transmitted diseases, and follow-up on other communicable diseases;
- Health Promotion: includes, but is not limited to, community development in partnership with community groups and other health care professionals, health screenings, workshops on (illness) prevention and health promotion;
- Scheduling for visiting specialists including: Pediatrics, Rural Mental Health Nurse, Rehabilitation Therapists, and Psychology / Psychiatry;
- Arranging travel and accommodations for those clients with Non-Insured Health Benefits; and
- Arranging Telehealth.

Child Development Services

The Child Development Centre provides assessment and treatment services for children under the age of 5-6 years; (until they enter school). Services are generally provided off-site in the community. However a multidisciplinary team (PT, OT and SLP) comes to the Centre approximately every 3 months to provide additional assessment and treatment services (on site).

Home Care / Home Support Services

Home Care maintains an office and supplies on site, but service is generally provided off-site at client's homes. Home Care Services include:

- Initial and ongoing needs assessment;
- Dressing changes (simple wound/dressing changes may also be provided by Home Support workers);

- Medication(s) review;
- Home IV (day time service only);
- O2 Therapy;
- Teaching;
- PT & OT services (see Rehabilitation Services);
- Foot care (usually provided at Senior's Centre) or at home as required;
- Home Support services including personal care and home making services; and
- Lifeline system support.

Although there is not a formal bathing program, Home Care/Home Support utilizes the bathing facilities at the Hospital for clients as required.

Only Home Support Services are provided to First Nations clients in Watson as funding for home care services are provided directly to the Bands from the Federal Government. Residents living in the BC towns close to Watson Lake are not eligible for Home Support Services.

As the current Home Care nurse is also registered in BC, non First Nation clients living in those BC towns close to Watson are provided Home Care service as described above.

Future Planning Parameters

While the Health Centre is not a formal component of Hospital services, discussions have identified both value-added opportunities and efficiencies to be leveraged with continued co-location of services.

The future location of Health Centre Services in the long-term has not been confirmed. For planning purposes, the space requirements that Health Centre Services would require in the future have been identified and included within this study.

Planning assumes Home Care/Home Support Services and Child Development Service will remain co-located within the new hospital facility. In addition, provision of an Adult Day Program in the future is also being considered.

Rehabilitation Services

Current Status

Rehabilitation services enable patients to attain their optimal functional potential and to meet their desired goals. Services may be provided in a range of settings, from community to hospital settings. Rehabilitation Services provide assessment, treatment, intervention, and education services in hospitals (inpatient or outpatient setting), homes, and in the community (e.g., schools). There are four main types of rehabilitation services:

- Physiotherapy (PT) – provides services to people whose function or ability has been altered, and assist the individual to restore optimal functioning of the neuromuscular, musculoskeletal, and cardiorespiratory systems;

- Occupational Therapy (OT) – provides services to individuals to restore or develop physical, cognitive, sensory, developmental and/or psychosocial disability to achieve optimal functional independence;
- Speech Language Pathology (SLP) – provides assessment, consultation, treatment and education to regain and/or prevent communication problems in language, speech, voice, and fluency; and
- Audiology (AUD) – provides early detection and evaluation of hearing loss and recommends appropriate treatment.

Currently, therapy services are not offered through Watson Lake Hospital services.

Select therapy services are offered through the Health Centre & Child Development Centre (e.g. newborn hearing screening, PT/OT), and Home Care as required and as available.

Future Planning Parameters

Consideration will be given to including (select) rehabilitation staff including occupational therapy and/or physiotherapy as a component of hospital services for the support of both inpatient and outpatient care. Presence of rehabilitation services would support repatriation of many convalescent patients back into their home community. In addition, rehabilitation services could provide outpatient services to further support early discharge from hospital and as an aspect of chronic disease management.

Speech language pathology and audiology services, although ideally offered onsite, will continue to operate on a visiting basis (based on need and available resources).

The use of Telehealth will be maximized and promoted to develop linkages with other regional and territorial centres.

CLINICAL SUPPORT SERVICES

Diagnostic Imaging Services

Current Status

Diagnostic imaging services at the Hospital include general radiographic exams (x-rays).¹¹ Digital images are not currently available.

Ultrasounds, computerized axial tomography and diagnostic mammography are provided at the territorial centre (Whitehorse General Hospital) and more specialized procedures such as magnetic resonance imaging and nuclear medicine are referred out-of-Territory.

¹¹ Nurses may take x-rays of chest and limbs; physicians are responsible for all pelvic, spine, head and abdominal xrays.

Future Planning Parameters

Future Planning assumes WLH will continue to provide basic general radiography.

Teleradiology services will be further developed and the digital (filmless) medical imaging system utilizing a picture archiving communication system (PACS) will be provided in the Hospital with high speed internet connections to Whitehorse General Hospital and other major centres. Planning assumes a formal arrangement with Whitehorse General Hospital for teleradiology support. The addition of this technology and specialist support will provide physicians and health workers more timely information to provide more appropriate care.

Watson Lake would have access to any outreach programs that may be developed in future (example, portable/mobile mammography screening).

Laboratory

Current Status

Nursing staff currently collect specimens and provide point-of-care testing.

Body fluids and tissue samples are collected and sent to Whitehorse for analysis to provide information for patient diagnosis and monitoring. Results are received by mail.

Point-of-care testing for glucose, cardiac, electrolytes, blood gas is conducted onsite. Electrocardiograms (ECG's) are also performed onsite.

Additional specialized services such as tuberculosis testing are conducted through Whitehorse General Hospital at the territorial level or at labs in Vancouver.

Future Planning Parameters

Existing basic laboratory services will be continued into the future.

Based on anticipation of increased lab service needs in the future (aging population, increased chronic disease) consideration will be given to including technicians in the hospital staff mix (e.g., certified combined technologists).

Pharmacy Services

Current Status

Nursing staff prepare and give medications as indicated/ordered for inpatients and emergency/outpatients. All chemotherapy is prepared and administered by physicians only.

Physician prescriptions are filled by the Watson Lake (retail) Pharmacy located at the Medical Clinic.

Future Planning Parameters

Advances in health technologies are expected to result in an increase in the scope of medication stocked by the Hospital. Increased automation and computerized physician order entry will support professional

pharmaceutical support at the regional level (e.g. review of orders for dosages, contraindications, etc).

Consideration should be given to including a Clinical Pharmacist as a visiting specialist/multidisciplinary team member for chronic disease initiatives.

Planning assumes that the pharmacy, currently located offsite in the Medical Clinic, will be relocated to the WLH site.

EDUCATION AND RESEARCH ROLE

Current Status

WLH primarily provides education for patients and families and ongoing education of staff.

The Health Centre is active in education for patients and families, population groups, the community-at-large and other service providers.

In the past, students from UBC Family Practice have been accommodated at the Medical Clinic and Hospital, but this has not occurred recently.

In general research studies do not occur, though the physicians noted they participated in a qualitative research project about 2 years ago.

Future Planning Parameters

Planning assumes education of patients/clients, families and on-going education of staff will remain a key role for WLH.

With the development of the new Hospital, consideration should be given to pursuing the accommodation of students and participation in research studies, particularly those related to rural/northern health care and chronic disease management.

SCOPE OF SERVICES

Bed Summary

The following table summarizes the current and projected workload activity:

Table 4: Past, Current and Projected *Inpatient Days*

Total Patient Days	2006	2007	2008	2019/20
Acute	1,169	891	855	
Respite	17	141	86	
Palliative	2	14	35	
TOTAL	1,188	1,046	976	1,533

Note: Projected inpatient days assumes a total of 6 inpatient beds with 70% occupancy

For planning purposes, it is assumed that an emphasis on the provision of enhanced ambulatory care services will continue to be pursued. The

following projected outpatient activity will be used for functional programming purposes.

Table 5: Outpatient Activity

	2006	2007	2008	2019/20
Emergency / Outpatient Visits	3,353	3,787	3,859	4,372
Medical Clinic	N/A	N/A	N/A	15,060
Total	3,353	3,787	3,859	19,432
	06/07	07/08	08/09	19/20
Medevacs	102	101	80	

Notes:

1. Projected Emergency/Outpatient visits based on estimated 13.3% projected population growth.
2. Projected Medical Clinic visits assumes 3 physicians seeing approx 20 patients/day, 251 days/year.

Table 6: Community Care Activity

	2006	2007	2008	2019/20
Health Centre Visits				
Child Development (clients/year)				
TB Worker (clients/year)				
Visiting Specialists (visits/year)				
Home Care visits				
Adult Day Program			N/A	1,255
Total				

Notes:

1. Data for Community Care Activity not available during project.
2. Adult Day Program visits assumes an average of 5 clients/day, 251 days/year.

**STAFFING AND
OCCUPANCY ESTIMATES**

TBD

OPERATIONAL PARAMETERS

Environmental Services

Current Status

Housekeeping Services

Housekeeping Services provides direct service, with most services provided from 0900-1730, 7 days per week, to maintain a pleasant, safe and sanitary environment for clients and staff. Key functions of this service include:

- General daily cleaning of patient rooms;
- Cleaning of rooms between patients;
- On weekends, provision of janitorial service – collection of garbage, washing of floors, clearing of snow from walkways;
- Washing of general purpose equipment (e.g. lifts, carts, wheelchairs, commodes);
- Assisting with some food services (e.g. serves drinks to patients and delivery of supper trays);
- Terminal cleaning;
- Collection of soiled linen and provision of laundry service.

On evenings and nights, any urgent housekeeping activities are provided by other staff (HCA or RN).

Janitorial Services

Janitorial Services are provided Mon – Fri from 0700-1600 and include:

- Collection of garbage;
- Washing of floors;
- Washing of exterior windows;
- Disconnecting and connecting gas/O2 cylinders;
- Snow removal from walkway and driveway.

Outside of normal working hours, other staff provide janitorial services as required.

Future Planning Parameters

Planning assumes in the future laundry will be provided on a regional basis, being serviced from WGH in Whitehorse. Facilities will be provided at WLH for both patient personal laundry and as backup or adhoc hospital laundry requirements.

**Facilities and Equipment
Maintenance Services****Current Status***Facilities Maintenance*

Services for the maintenance of the facility and grounds are provided through Property Management/Yukon Government both on a regularly scheduled and “as needed” basis.

General Equipment Maintenance

A local contractor, on both a regularly scheduled and “as needed basis”, provides general equipment maintenance.

Biomedical Engineering

Annual inspection and maintenance services are provided on site at WLH by Ace Logistics through a formal agreement with WGH. For service required between annual visits, equipment is sent to WGH where Ace Logistics provides required service every 3 months.

Future Planning Parameters

Planning assumes facility and equipment maintenance services will generally continue as described above.

Food Services**Current Status**

Currently, Food Services is located onsite and is responsible for:

- Meal planning;
- Ordering and receiving of food supply inventory;
- Preparation and cooking of all meals (and snacks);
- Assembly of patient trays;
- Delivery of breakfast and lunch trays to patients; and
- Cleaning of kitchen.

In the past, Food Services were able to better meet traditional Aboriginal diets. Donated “game” such as caribou could be received and prepared for patients. Based on current regulations, non- inspected meat can no longer be served.

Future Planning Parameters

In the future, Food Services will largely continue as currently described. However consideration will be given to consultation and collaboration with Clinical Nutritionists at WGH. In addition, opportunities and strategies for a renewed emphasis on offering traditional meal options for Aboriginal patients will be explored.

A First Nations food preparation area will be included in the kitchen; families will also be able to bring food in or inpatients.

Health Records**Current Status**

Administration/clerical support compiles and maintains health records under the supervision of the Facilities Support Services Supervisor. Health records are hard copy/paper based.

Current guidelines include:

- All inactive records to be sent to Whitehorse;
- Active records of WL residents to be kept on-site;
- Active records of Yukon transient residents to be kept for up to 5 years plus current; and
- Active records of “Out- of-Territory” residents to be kept for up to 2 years plus current.

Current records are generally stored in the Reception / Registration / Administration office, with “overflow” of current records and inactive records in on site storage facilities. For the past number of years, inactive records have been retained on site.

Future Planning Parameters

Future planning assumes the compilation and maintenance of health records will generally continue as described above, however planning also considers the increasing trend towards implementation of electronic health records. Planning assumes that even as implementation of EHRs proceeds, a hybrid system of paper and electronic will continue to exist through the planning horizon for this project.

Record retention and storage practices will conform with national standards/regulations.

Materials Management**Current Status**

Facilities Support Services Supervisor has responsibility for the management of Hospital inventory, which includes the purchasing, receiving, storage, inventory control and the distribution of all items to the point of use within Watson Lake Hospital.

Currently the Facilities Support Services Supervisor is responsible for the ordering of all hospital inventories. Medical supplies are generally ordered every 2 weeks and delivered via truck from Whitehorse. In the autumn a six-month supply of “liquid medical” supplies (e.g. intravenous solutions, medications) are ordered to avoid potential freezing during transport over winter months.

On receipt of supplies, the HCA generally takes responsibility for the unpacking of supplies and distribution to point of use or storage as appropriate. The HCA also monitors levels of inventory utilizing a “minimum-maximum” system.

All staff are trained in handling of Dangerous Goods.

Future Planning Parameters

Future planning assumes the general process of materials management can be more streamlined through computerized ordering, direct issues, etc, from the Material Management department at WGH.

Reception/Registration Services

Current Status

Reception and Registration services are generally provided by Administration Support/Clerical staff and includes:

- Switchboard;
- Reception of patients and visitors;
- Collection of information to ensure positive patient identification;
- Registration/Admitting of emergency patients, scheduled outpatients, and inpatients;
- Collection of financial information for reimbursements;
- Invoicing of patients as required;
- Provision of cashier services (i.e., receipt of monies as indicated).

In addition to the Reception and Registration Services described above, Administration Support/Clerical support also provide the following:

- Health Records Services (see below);
- Arranging medical services transport as directed by nurse/physician;
- Compiling discharge summaries, coding of discharge data and submitting of reports to appropriate authorities;
- Compiling of workload activity reports for Hospital and Community Nursing;
- Receipt and distribution of and sending of mail;
- Packaging and arranging for shipment of lab work, x-rays, etc.

Future Planning Parameters

Future planning assumes that Administration Support/Clerical staff will continue to provide the services as described above. Planning also assumes increasing automation and electronic support for some of the services (e.g. Registration) described above.

Security Services

Current Status

The main door to the Hospital is locked at approximately 2200 and re-opened at approx 0700-0800. Patients wishing to access the Hospital, during the time the main door, is locked "ring the doorbell" to alert the nurse.

Two (2) portable “panic buttons” are available for staff that can be worn when staff are concerned for personal safety. The panic alarm alerts staff at reception.

Future Planning Parameters

Future planning assumes the general security processes as described above will continue but that planning and design will enhance safety features for both staff and patients while maintaining accessibility and a welcoming environment.

Sterilization and Equipment Cleaning

Current Status

Cleaning and Sterilization of reusable equipment is currently accommodated on-site at WLH and is generally conducted by the HCA.

Future Planning Parameters

Future planning assumes that cleaning and disinfecting of reusable equipment that does not require sterilization, (such as IV Pumps, commodes) will continue as currently.

Future planning assumes provision for the ability to provide sterilization of reuse instruments. Yukon Hospital Corporation may wish to explore the option of sterilizing WLH reusable instruments at WGH to better meet increasing standards of infection control; a business case of the options should be developed to support a final decision. This process change would require the need for maintaining increased inventories of supplies at WLH.

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PHYSICAL PARAMETERS

SITE

The study will determine whether the Functional/Facility Program developed for the new Watson Lake Hospital can be accommodated on the existing site. The Functional/Facility Program is not being developed based on any site parameters.

BUILDING

The study will determine whether the Functional/Facility Program can be appropriately accommodated in the MLCF. The Functional/Facility Program is not being developed based on the parameters of the MLCF.

Functional programming will promote the optimal configuration of operations. Space will be programmed on the basis of current best practices, particularly as recommended through evidence-based research. All inpatient rooms will be private.

Planning will attempt to maximize location adjacencies and relationships (i.e. considering how space may be shared so that space or staff resources are not duplicated).

Concepts of universal design will promote accessibility for people with special requirements/needs (e.g. children, elderly and those with physical and/or cognitive impairment). The facility will incorporate interior design interventions to provide a user friendly and safer environment, especially for the elderly and those with cognitive impairment.

The concepts of both client-centered and family-centered care will be used and further developed through the design process to support staff's delivery of quality patient care, including but not limited to:

- Supporting the presence and participation of families;
- Enhancing patient and family access to information and support;
- Environments that will be inviting for the diversity of clients and families served: and
- Public displays of artwork created by local artisans.

Natural light should be brought into as many areas as possible and appropriate. Sustainability concepts will be incorporated into planning and design; if it is decided that the new Hospital can be accommodated appropriately in the MLCF, this will be accomplished to the degree possible, given the project would be renovation.

Modular furniture systems will be adopted rather than a customized furnishings approach to organizing offices and examination room to maximize the long-term flexibility of interior space.

FINANCIAL PARAMETERS

CAPITAL FUNDING

No fixed capital budget has been established for the development of the new Hospital's Functional/Facility Program.

Current (2009/2010 YG-HSS Capital Budget includes \$2.5 million for the planning of the new WLH).

The Functional Program will rationalize and establish general space requirements and conceptual plans on which the proposed capital cost estimate will be generated.

OPERATIONAL FUNDING

No fixed operating budgets have been established for the programs/services of this project. All planning will be based on current and future needs. However, consideration of operational efficiencies and functional adjacencies will be central to the development of all program and project information.

GENERAL PLANNING CRITERIA

INTRODUCTION

This section of the document is intended to provide an understanding of major planning criteria related to the needs of clients, staff and visitors which may impact on the site as a whole the facilities and/or specific group of functional components.

The intention of this section is not to suggest physical planning solutions, but rather to identify the functional requirements for planning that will assist the Design Team and User Groups in development of the most appropriate environment for people and systems as design work and planning proceeds. Planning objectives include:

- to develop facilities to support Watson Lake residents acute and community care health needs as projected to the year 2019/20 with flexibility beyond this date;
- to develop a safe environment for patients, staff and visitors;
- to develop a client-friendly, culturally sensitive, and non-institutional healing environment;
- to provide improved access to health services;
- to improve the workplace environment, supporting staff recruitment and retention;
- to place greater emphasis on quality, efficiency and accountability, maximizing resource utilization;
- to build flexible facilities that can accommodate and support changing needs while maximizing efficiency; and
- to develop, plan, build, and maintain a facility that is responsive to territorial priorities for the health system as a whole.

It is recognized that some of the criteria described here may not be achievable (or may be only partially attained) due to physical, human, and economic constraints. However, they are presented here and considered useful in order to cover all-important aspects of planning in order to re-acquaint the reader and planners of the highest standards desirable.

General Planning criteria are organized as follows:

Site Planning Criteria

1. Building Siting, Massing and Orientation
2. Vehicular Circulation
3. Parking
4. Pedestrian Circulation
5. Covered Access
6. Outdoor Activity Areas
7. Snow Storage

Building Planning Criteria

1. Future Expansion/Change/Flexibility
2. Entrances
3. Image and Environment
4. Planning for Family and Patient Centred Care
5. Accessibility for All Persons
6. Planning for Culturally Sensitive Needs
7. Operational Efficiency/Quality of Service
8. Staff Access/Circulation
9. Planning for Infection Control
10. Privacy, Confidentiality and Dignity
11. Clarity of Spatial Organization and Wayfinding
12. Safety and Security
13. Staff Offices/Work Areas

Building Systems and Technology

1. Energy, Sustainability and “Green” Design
2. Security Systems Technology
3. Mechanical Services
4. Electrical Services
5. Ventilation System
6. Information Technology Considerations

SITE PLANNING CRITERIA**1. Building(s) Siting, Massing and Orientation**

Development of the new WLH should take maximum advantage of the site's positive features.

Considering prevailing winds, air conditioning system air intakes should be located so that noxious products and exhausts are not drawn into the building's air systems.

Any redevelopment of the building massing, should help vehicular and pedestrian arrival sequences to clearly focus on the main entrance as the prime entry point, especially for first time visits.

Particular attention should be given to providing protection especially at entrances and outdoor patios from high winds. The predominant year-round wind direction is from the north, and in the winter, maximum gusts of wind can occur causing high wind-chill factors and drifting snow.

The building should optimize access to sunlight on a year-round basis, and ensure that windows are located in all patient spaces and staff work areas. Views from patient rooms should receive special consideration.

2. Vehicular Circulation

The vehicular circulation system should be logical so that visitors unfamiliar with the site can readily locate their destination.

Clear, direct routes should be provided for patients, families and visitors including drives to a covered drop-off point adjacent to the facility's entrance. Drivers must be able to deliver passengers and continue conveniently to a designated parking area. Specific access points for service vehicles and other traffic may be designated depending on possibilities provided by the site.

3. Parking

Parking layouts should be orderly, well illuminated and located as close to visitor and staff destinations as possible. Separate parking areas should be provided for staff and visitors and staff parking should be located close to the staff entrance. Parking dedicated to persons with disabilities should be located close to the facilities main entrance.

Parking will need to accommodate the increased volumes resulting from the collocation of the Medical Clinic/Retail Pharmacy. Separation of parking for various services provided in the facility may be desirable.

Energized parking stalls for all staff vehicles should be provided.

4. Pedestrian Circulation

Pedestrian/vehicular conflicts should be minimized by carefully coordinating the two circulation networks. Once out of their vehicles, patients/clients and visitors should be able to enter the Facility by a short, protected walkway. Entrances should be clearly identifiable by both drivers and pedestrians. Provision of appropriate topography, including significant flat/minimally sloped areas, should be provided to support the movement of patient/clients with mobility impairments. Walkways should incorporate seats, handrails, curb cuts, gentle grades and ramps to accommodate infirm or wheelchair-bound patients. Good lighting and short routes should be provided along walkways to staff parking areas.

5. Covered Access/Weather Protection

It is essential that there be covered access to the building to serve the following functions:

- general access to main entrance;
- ambulance access;
- access to outdoor patio areas; and
- access to the receiving area.

Facility design should reduce or eliminate snow slides from roofs and snow drifts at critical locations.

6. Outdoor Activity Areas

Outdoor activity areas or gardens should be provided that are south or southwest facing and partially weather and shade-protected for prolonging outdoor activities. An external, protected sitting area should also be provided at the main entrance for use by all.

There should be access to natural and varied outdoor “green” space as well as provision of outdoor therapeutic recreation facilities and space. Facility design can support the creation of micro-climates to further support comfortable access to the outdoors.

Specific options may include:

- provision of a secure garden area outside an Adult Day Program, if one is to be located onsite. Considerations for a secure outdoor activity area include, but are not limited to:
 - a circuitous path within the garden environment, and
 - areas to provide opportunity for clients to garden (raised wheelchair accessible concrete planters), small greenhouse and secure tool shed;

- provision of an outdoor exercise area for use by rehabilitation therapy.

It is recommended to protect and where necessary, restore the site's natural systems by retaining trees and vegetation where feasible.

7. Snow Storage

It is assumed that cleared snow will remain on the site. Roads and parking lots should, therefore, be provided with areas adjacent to them where removed snow can be dumped or stored. Consideration should also be given to the impact of salt on plant materials in snow dump zones.

BUILDING PLANNING CRITERIA

1. Future Expansion/Change/Flexibility

The services provided by WLH may evolve, in response to needs of clients and staff. Building and technical services and the inventory of space must be able to respond flexibly to evolving functional requirements, if building and operational sustainability is to be achieved. The system utilized for power and data distribution will be critical in achieving this goal.

The redeveloped Watson Lake Hospital should be planned and constructed to allow for long-term future expansion, change and renovation by minimizing interior load bearing walls and allowing for open-ended design features.

2. Entrances

The facility should have a single main public entrance as its primary address, but there may be secondary public entrances/exits for some clients. For example, a separate entrance may also be provided for both the Medical Clinic and the Adult Day Program, *if* an Adult Day Program is located onsite.

A separate ambulance access should be provided and located for the movement of stretcher patients in and out of the facility.

3. Image and Environment

An image of an accessible community service combined with up-to-date technological competence will enhance the credibility of the Facility and foster the confidence of patients/clients, the support of the surrounding community, and the development of staff morale and productivity. The external image should make a symbolic statement about the values, which Yukon Hospital Corporation and Health & Social Services embody. There are many strategies for achieving this goal, examples of which may include:

- a renewed emphasis on people's individual needs and

the support of the clients, patients, family and the community;

- patients/clients, staff and visitors should also perceive the Facility's environment as warm, open and accessible rather than regimented and intimidating;
- the environment must provide for confidentiality where required. Sound attenuation between clinical/exam rooms must be provided;
- rotating public displays of 2-D and 3-D artwork created by local artisans;
- some clients will be younger, many will be older and some will be anxious and/or have diminished cognitive and physical abilities. Every effort should be made to minimize the potentially intimidating nature of the facility; and
- views of the exterior and natural light should be maximized from all client care and staff work areas wherever possible. The psychological impact of the facility concerns not only the client, but staff as well.

4. Planning for Family and Patient/Client-Centered Care

The concept of patient and family-centered care may be further developed through the design process to support staff's delivery of high quality care, including but not limited to:

- patient care spaces will be sized to accommodate patient and family members;
- supporting presence and participation of families where appropriate;
- environments that will be inviting and comforting for the diversity of patients and families served;
- providing patients with control over noise, light and degree of privacy where appropriate; and
- the physical environment will be comfortable and attractive to children and families and promote wellness and a calm, non-institutional environment to the degree possible. The level and types of visual and auditory and tactile stimulation should be interesting and appropriate for all ages.

5. Accessibility for all Persons

All areas of the facility must be accessible by persons with disabilities. Planning must be consistent with the legal requirements of applicable codes and regulations, in a manner which is aesthetically pleasing and meets the functional requirements of the users (those who may be walking disabled, wheelchair users and those with sensory disabilities).

Strategies to create universal access and safety include, but are not limited to:

- counters, desks and work areas should include wheelchair access;
- lever door handles;
- provision of adjustable height electric stretchers;
- provision of chairs that have armrests that extend to the front edge of the seat pan; well designed armrests greatly assist pregnant women, frail individuals and seniors with standing up from a seated position; sturdy frames with four legs, rather than a sled base, provide added stability;
- adequate storage for medical equipment and supplies to keep corridors barrier free;
- wheelchair accessible doors should be a minimum of 900mm wide;
- all bedrooms must have a wheelchair accessible washroom and shower that allows for two or more staff to assist with care;
- all ensuite washrooms should be wheelchair accessible from both sides of the toilet;
- where a bedroom has a vestibule, the vestibule must be large enough to permit the unobstructed passage of a stretcher, wheelchair, walker or any specialized program equipment;
- in each bedroom, there must be sufficient space to provide access by caregivers to three sides of the bed (i.e., to both sides of the bed and the foot of the bed);
- each bedroom must be designed to allow a 180 degrees change of direction of any care equipment within the room;
- all light switches should be wheelchair accessible;
- staff locker rooms should have at least one locker space and one washroom which is wheelchair accessible; and
- any elevators should be wheelchair and stretcher accessible.

A supportive facility addresses such impairments as decreased vision, limited mobility and short-term memory loss, confusion and early stages of dementia. Interventions include:

- simple flooring;
- differentiating colours on walls and floors visually separates the floor from the wall;
- using contrasting colours of furniture against flooring and walls makes it easier to see objects;
- use warm colours (e.g. red, orange, yellow) which are easier to see for older adults (avoid cool colours and pastels);

- consideration of window treatments to reduce glare;
- appropriate lighting; seniors need 3 times as much light as a 20 to 30 year old; abrupt changes in lighting and glare may disorient a senior;
- minimize overhead paging;
- consider installation of a wandering system for use with select clients;
- use same colours to camouflage exit doors and out of bounds areas;
- handrails should be in contrasting colours to wall and floor and provide a tactile clue when terminating (e.g. curve into the wall 100mm from end of rail);
- mount sink faucets on sides of sink rather than back edge;
- keep any grids or grates on the ground less than 20mm wide (to avoid mobility aides getting stuck);
- clearly identify the edges of any ramps or stairs with a yellow strip or contrasting colour; and
- program automatic doors to stay open longer than code as people with mobility impairments require additional time to clear doors.

Planning must also consider accommodation of bariatric patients and family members/visitors, including provision of general areas (waiting room and public washroom) where bariatric individuals will access. Planning for the very obese needs include¹ but are not limited to:

- provision of furniture and fixtures that comfortably and safely accommodate people who are obese; furniture that is wider and able to sustain heavier weights, elimination of seat dividers on multi-seating furniture and availability of bariatric toilets;
- at least one public washroom and one patient washroom should be bariatric-friendly;
- grab bars and toilet paper dispensers should be accessible in front of the toilet;
- situating of toilet at least 24 inches/60cm to the centre line of wall;
- sink and any countertop should be structurally sufficient to resist pulling away from the wall;
- sink should have 180 degree access (i.e. not situated in an alcove);
- sink taps should be located on lateral edge of the sink (not the back edge);

¹ Stoupe, Jocelyn et al, "Bariatrics Defined" *Health Facilities Management*, Vol. 21 No. 4, pg. 27-32

- allow a six-foot turning radius in toilet rooms;
- provision of a reflective service at baseboard height throughout inpatient room and bathroom to facilitate client visualization of feet and immediate floor area;
- patient room door width of 60 inches/152.4cm.

6. Planning for Culturally Sensitive Needs

Planning should address the special needs of diverse groups, particularly local First Nations, with regard to identity and image, traditional healing ceremonies and extended family visiting/grieving through special meal planning, celebration of special holidays or occasions, and through interior and garden design features.

Considerations for planning may include:

- possible inclusion of a family/healing room to better support Aboriginal practices, including smudging; and
- possible provision of a “fire pit” integrated with the outdoor landscaping.

7. Operational Efficiency/Quality of Service

The operational efficiency and effectiveness of caregivers in the Facility will be greatly influenced by the physical design of the facility. Most health facilities are labour-intensive organizations, which require considerable movement of materials, staff, patients, clients and visitors. The planning process must result in a physical design and organization that will minimize operating costs and maximize quality of service.

8. Staff Access and Circulation

Ensure that distance between the various activities in the Hospital are all easily accessible by all professional staff and help to maximize collaboration between team members as well as improve staff efficiency.

9. Planning for Infection Control

Recent events in the world of infectious diseases have brought to light the importance of environmental controls and health care facility design in infection control. Factors to be considered when planning for health care space include materials, layout and long-term maintenance of the area.

Example criteria to be considered include:

- hands free sinks;
- bed pan sanitizers in dirty service rooms;
- toilets with automatic flush mechanisms and manual flush override;

- toilets with automatic seat cleaning post each use;
- showering/bathing facilities with stainless steel fixtures;
- handwashing facilities available in waiting rooms and throughout the facility;
- floor sinks and mop hangers in housekeeping closets;
- furnitures and fixtures that can be easily cleaned an/or disinfected;
- limit supplies at bedside; and
- any supplies at bed sides should be enclosed within cabinet(s).

10. Privacy, Confidentiality and Dignity

Clear transition from public / semi-public spaces to semi-private / private spaces (ideally should not pass through one care grouping/care unit to access another).

Treatment rooms are away from public area.

Provide visual and acoustic privacy for patients/clients in all personal care spaces. The caregiver/patient relationship is vitally important. Privacy and confidentiality are of the utmost importance and sound attenuation between rooms is a critical design consideration. This is a particularly important consideration for a health facility in a small community such as Watson Lake.

The entrance to the ensuite washroom must be from within the bedroom. There must be no direct view of the toilet in the ensuite washroom from the outside corridor when the washroom door is open and the door must be able to swing open in both directions.

Adequate staff/education/conference/office space to ensure patient/client areas are not used for staff purposes/functions.

11. Clarity of Spatial Organization and Wayfinding

Reception points should be obvious and subsequent destinations should be visible from reception points wherever possible.

Reinforce awareness of location and direction by providing frequent sight lines to the outside, distant views for orientation with surroundings, and building elements as orientation clues.

Corridor lengths should be as short as possible to minimize confusion.

Circulation patterns should be simple and direct and complex geometries of space should be avoided.

Close proximity of patient rooms to amenity space (no long corridors) to encourage independent travel.

12. Safety and Security²

Ensure views along corridors and elimination of blind spots for staff.

Ideally, staff from the central care station should be able to see all inpatient bedroom doors on the unit.

Utility rooms (soiled/clean) are separate for infection control purposes.

Security systems will be required both to inhibit access by unauthorized persons and to inhibit inappropriate egress by patients. Alarmed doors may be required between care areas, which can be closed from time to time to restrict the movement of a wandering patient.

Exit doors may be equipped with electromagnetic door locks that will be activated by the fire alarm, but will otherwise be held open and/or controlled by staff.

Designated areas in certain components will be secured independently for after-hours security. In addition, it may be necessary to independently secure each component, and each major area of the building.

In addition to door security, consideration should also be given to use of television monitoring and other new technologies that are evolving. A more detailed investigation of these technologies will be more appropriate in the later stages of design.

Specific strategies may include:

- Panic Button System – to improve security measures, a panic button system at the main reception desk, as well as other areas of the building including the Medical Clinic and Community Care receptions, and Emergency/Trauma Room may be considered. During the day, this could be used to send a signal to the other areas to indicate a problem. During the night, ideally this system would notify a third-party monitoring the system to indicate a problem and initiate a response for assistance;
- Motion Sensor Lights – lesser used areas such as basement hallways, storerooms, and washrooms could be equipped with motion sensor lights to help reduce energy costs; and
- Access Control panels/cards (“swipe” cards) on all

² Facility design should incorporate “Crime Prevention Through Environmental Design (CPTED)” guidelines and principles. Refer to www.designcentreforcpted.org.

doors, and elimination of all keys.

Additional patient and staff safety needs for the seclusion room includes:

- recommendation to review and follow where applicable B.C. Ministry of Health Standards for Hospital Based Psychiatric Observation Units;
- mattress for seclusion room must not have any metal parts;
- water control for toilet and sink must be outside unit in an easily accessible spot for staff to access in an urgent situation;
- provision of a light fixture with dual light levels that can be controlled from outside the room;
- intercom connection to room from care station and immediately outside room; and
- video surveillance – essential to have view of entire room including toilet and sink unit. It is optimal to have a monitor at the care station and a wall mounted monitor outside the room door that is accessible only to staff via a swipe card or keyboard access – facilitates staff viewing patient just prior to entering the room.

Additional staff safety considerations include dual egress option and dual door swings for interview rooms where mental health and addiction services will be provided.

All medication rooms should be discreetly located and secure.

The environment must be free of hazards where possible. Locate all service outlets/controls out of reach and/or protected from younger visitors or other patients with cognitive impairments. Any glass walls and glass doors must have markings to ensure awareness of glass. Carts, wheeled equipment and receptacles should have alcoves or storage spaces under counter tops and not exposed in corridors.

Consider door windows near bottom of doors for select rooms; to visualize children who may be on the other side and avoid hitting when opening the door.

Use of safe cleaning agents should be used wherever possible and especially for cleaning of toys and play areas.

Planning assumes consideration of ergonomic standards in design including provision of standard modular office furnishings, chairs and keyboards.

Decontamination Room

Safety considerations for decontamination rooms within a

facility should include:

- separate, independent, secured external entrance adjacent to the ambulance entrance;
- a yellow painted boundary line 0.91 metres from each side of the door and extending 1.83 metres from the hospital wall with the word "DECON" painted within these boundaries;
- internal entrance to a corridor within the emergency room;
- air exhaust system separate from the hospital system;
- ceiling, wall and floor finishes smooth, nonporous, scrubbable, nonadsorptive, nonperforated, capable of withstanding cleaning with and exposure to harsh chemicals, nonslip, and without crevices or seams;
- floors shall be self-coving to a height of 15.24 centimetres and self-finished and require no protective coating for maintenance;
- two hospital telephones, two duplex electrical outlets, secured appropriately for a wet environment;
- at least two hand-held shower heads, temperature-controlled, curtains or other devices to allow privacy to the extent possible;
- water drainage must be contained and disposed of safely to ensure it does not enter the hospital or community drainage systems;
- the decontamination room may function as an isolation room under routine function.

13. Staff Office/Work Areas

Provide natural light and exterior view to and from all staff office/work areas to enhance the morale and psychological well being of staff. This may be facilitated by open planning, orientation and skylights.

Provide acoustic and visual privacy in offices and clerical work areas. Provide controlled access to all offices by first contact of patients/visitors with the staff at reception points.

BUILDING SYSTEMS AND TECHNOLOGY

1. Energy, Sustainability and "Green" Design

Health care facilities present both a challenge and opportunity in the development and implementation of sustainable design, construction and operations practices. Issues such as 24/7 operations, energy and water use intensity, chemical use, infection control requirements and formidable regulatory requirements can pose significant obstacles to the implementation of currently accepted sustainability protocols. Furthermore, it is appropriate that guidelines customized for

the health care sector reflect the collective fundamental mission to protect and enhance individual and community health, and that those guidelines acknowledge the intrinsic relationship between the built environment and ecological health. As health care institutions evolve a design language for high performance healing environments, they have the opportunity to highlight the associated health-based benefits³.

The following are recommendations to improve environmental quality through “green” and “sustainable” planning practices:

- the Watson Lake Hospital project should seek to conform to LEED™ Silver performance standards;
- special attention should be taken of the *Green Guide for Health Care⁴* and
- implement an “Environmental Management System” as described in *Greener Hospitals: Improving Environmental Performance⁵*. Environmental Management Systems are coordinated efforts to integrate environmental protection measures into an organization with the focus of persisting through staff change and providing measures through which an organization can regularly review, evaluate, and monitor improvement over the lifetime of the facility⁶.

2. Security Systems Technology

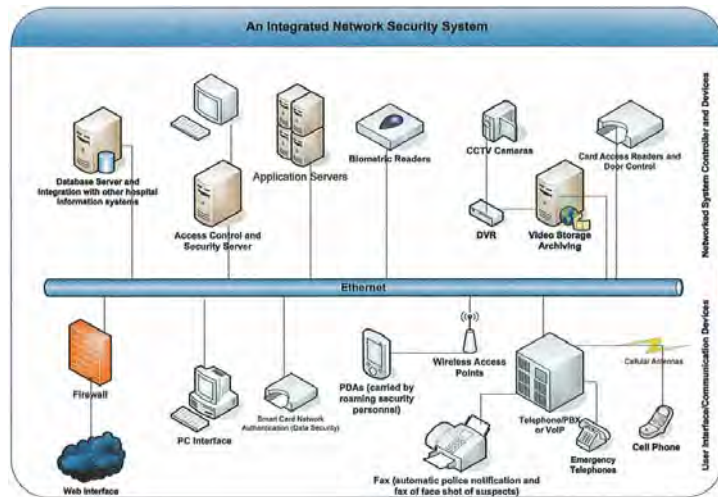
Review and establishment of an appropriate security systems infrastructure should include completion of a Vulnerability and Risk Assessment (VRA) in order to determine potential threats to security within the facility’s environment such as physical threats to staff, patients and personal security, theft of medications and/or equipment, kidnapping, natural disasters, failures in communication systems and equipment. The VRA is intended to identify vulnerable aspects of the facility’s overall security.

³ *Green Guide for Health Care, Version 2.2, January 2007, www.gghc.org.*

⁴ *Green Guide for Health Care, Version 2.2, January 2007, www.gghc.org.*

⁵ *Greener Hospitals: Improving Environmental Performance Manual, Eds. Environment Science Center, Augsburg, Germany. Bristol-Myers Squibb Company. June 2005.*

⁶ *Ibid.*



Source: Leonidas, T. O'Donnell, J. *High-Tech Sentinels: The role of equipment in an overall security effort. Health Facilities Management, July 2005, Vol. 18, (7), p. 25-29*

Establish and implement appropriate technological systems in response to the findings of the VRA, including:

- access controls in the form of proximity or smart cards and biometric sensors that can secure doors and barriers from entry (e.g., drug dispensing storage, pharmacy);
- Radio Frequency Identification (RFID) bracelets to manage assets, and track equipment;
- electronic sensors for parking and site entry security. Electronic sensor devices on staff and hospital owned vehicles may prevent removal from secured areas and protect staff as they walk to/from vehicles;
- camera technology such as basic and digital video recording devices. Complex digital devices include facial recognition cameras to provide access control for staff and patients, day/night cameras with high resolution for viewing visitors, vehicles and license plates, and thermal cameras to view infrared emissions from all living and inanimate objects;
- motion sensing systems such as outdoor surveillance or pixel-change motion detection to determine if human forms are attempting to enter or leave any surveillance area. Such enhanced electronics alert security of danger or intrusion and can allow centralized propriety guards to focus on monitoring high-activity/concern areas; and
- IT access control systems to secure data and protect patient health and personal records.

Plan and install a robust wiring infrastructure, such as application independent cabling system (aka "structured

cabling”) in order to allow for the addition of technologies over time as construction and budget timelines proceed.

3. Mechanical Services

Basic Requirements: The mechanical systems for the Watson Lake Hospital should be designed, built, and operated to provide a healing, safe, comfortable, and reliable environment for patients, families and staff. Mechanical systems should be highly flexible and adaptable for future expansion and technological advances.

Performance Criteria: The mechanical systems should conform to the following standards where applicable: the YT Building Code, CSA Standards, ASHRAE Standards, NFPA Standards, Municipal by-laws and should meet the requirements of the Authorities having Jurisdiction. Prior to occupancy, mechanical systems shall be complete, fully tested, commissioned and operational. Mechanical systems shall be highly energy efficient and chosen to minimize the impact on the natural and physical environment.

4. Electrical Services

Basic Requirements: The electrical and lighting systems provided should support the healing environment of the Watson Lake Hospital. Electrical systems should be installed to promote energy efficiency and LEED principles where applicable, in addition to assisting the facility programs in a reliable and cost effective manner. Communication systems should be integrated where integration results in advantages in efficiency, operations, and cost.

Performance Criteria: The electrical installation should conform to the following standards where applicable: the YT Building Code, Canadian Electrical Code, CSA Standards and NFPA Standards.

5. Ventilation System

Indoor Air Quality (IAQ) is important to the well being of patients, visitors and staff and a major contributor to reducing the incidence of air-borne nosocomial infections and associated treatment costs. IAQ is dependent on the provision of adequate fresh, clean air, effective natural or mechanical ventilation and the absence of VOCs and other indoor contaminants from off-gassing materials, handling of wastes and toxics produced by work processes, the selection of cleaning agents and the management of building operations and maintenance.

Ideally the whole facility should be air conditioned for control of air cleanliness, temperature, and humidity. However, in the patient/client areas, and areas such as Administration, the occupants will greatly benefit from operable windows and direct access to the natural external environment during periods of

good weather. Although potentially uneconomical, and inefficient compared to a sealed window system (due to increased dust penetration, difficulty in maintaining desired pressures, and heat loss) consideration should be given during the design stage to a means of combining an effective and efficient air-conditioning system with a system of operable windows in order to provide the benefits of both.

Air conditioning and heating to bedrooms should be individual controllable, especially to meet the needs of elderly patients, who often prefer to depend upon natural ventilation.

6. Information/Communications Technology Considerations

The following are IT considerations for the new facility:

- the regional IT department (based at WGH) will be responsible for all IT implementations and configurations within the facility. This will include, but not limited to, computer systems, monitors, printers, IP telephony, network infrastructure, and the wireless network. Space allocations for monitors should allow for LCD monitors (new equipment);
- a server room will be provided that will house all IT equipment;
- a separate network system is required for the Medical Clinic and Retail Pharmacy from the Watson Lake Hospital's network system, due to business privacy concerns;
- the various clinical areas should have a network design that will facilitate network connectivity. The network architecture should work with the workspace architecture to allow for suitable space for workstations, review stations, printers, etc. that are ergonomically sound and logically located;
- patient rooms should be supplied with a phone drop that is segregated from the corporate network. Each patient's phone will be a standard POTS line, similar to a typical residential line currently used in most homes. Consideration needs to be taken to allow cabling space for these phone lines, as well as their termination; and
- the nurse call system should be integrated into the VoIP solution. The VoIP phone system should be able to establish a nurse call dial tone and then initiate a call to a specific room. A nurse call pull station should be able to generate an alert to a VoIP phone.

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**COMPONENT PLANNING
CRITERIA****INTRODUCTION**

The basic "building block" for physically organizing health facility projects is the FUNCTIONAL COMPONENT. A functional component can be defined as a grouping of activities and assigned spaces which are physically related by their common mission to satisfy a specific group of functions or operations (e.g., component B2 Inpatient Unit).

The functional components, which comprise the Watson Lake Hospital and are included in this report, are:

A. Public Zone

A1 Main Entry/ Reception

B. Interactive Zone

B1 Ambulatory/Emergency/Diagnostic Services

B2 Inpatient Unit

B3 Shared Support Area

B4 Medical Clinic and Retail Pharmacy

B5 Community Care

B6 Multipurpose Meeting Rooms

C. Private Zone

C1 Facility Operations

C2 Administration and Staff Support Facilities

D. Optional Components

D1 Adult Day Program

D2 Emergency Medical Services

Information for each functional component is presented under the following headings:

FUNCTIONAL DESCRIPTION provides brief information on the general services or operations of the component.

OPERATIONAL DESCRIPTION provides a description of the key operations of the component under headings such as hours of operation, organization and management, clinical support services, and non-clinical support services.

WORKLOAD summarizes the historical workload in appropriate work units and estimates projected workload in appropriate units to the planning horizons in the future. The planning horizon (2019/20) is used for projecting maximum capacity and both the staffing and space requirements of the component. For the information that is not applicable, a dash (-) indicates that the information is not available or does not currently exist or is not relevant.

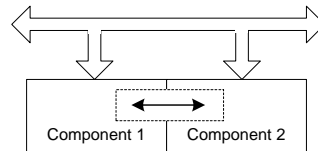
STAFFING & OCCUPANCY ESTIMATES were not available during the study as the staffing models and projected FTE's are under development. Future FTE estimates may be useful in developing order-of-magnitude staffing costs, but require review and confirmation of staffing model through established governing authorities processes prior to use in any operational and budget plan. It is strongly recommended that if possible, these numbers be estimated prior to final detail design to ensure adequacy of the program. The figures are also useful to the architect in estimating maximum occupancy load conditions for fire exiting requirements.

DESIGN CRITERIA presents information as follows:

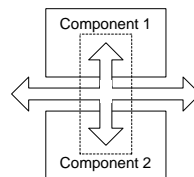
External Relationships indicates the priorities of the component for its location relative to other components.

Definitions of terms used in the external relationship description are as follows:

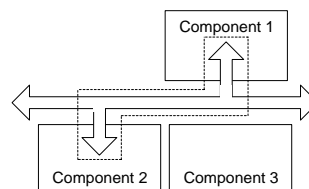
"Direct access by internal circulation" refers to components, which are horizontally contiguous and linked internally. This form of access avoids movement through the general circulation system of the facility.



"Direct access by general circulation" refers to components linked by a minimal amount of horizontal and/or vertical general circulation.



"Convenient access by general circulation" refers to components linked by extended horizontal and/or vertical general circulation.



Internal Relationships/Concepts indicates basic criteria and concepts for the organization or environmental design of space (e.g., zoning, flexibility, segregation, environmental ambiance, privacy, sound attenuation, safety features, etc.).

Space Requirements are tabulated with a reference number (Ref) used for cross-referencing within this document and which may be used in any future supplementary document. Where relevant, also illustrated is the number of projected rooms or spaces (units), the net square metres per unit (nsm/unit), the total net square metres for each room or space (nsm), and explanatory or supplementary remarks (Remarks), including major items of equipment.

Indented line items indicate a close adjacency with the preceding line item.

Proposed net square metres (nsm) is stated to the nearest 0.5 m². At the end of each space list the total net space is summarized and multiplied by an appropriate "multiplier" to produce total "component gross square metres" (CGSM) which includes an allowance for partitions, circulation corridors, and small service ducts or shafts. CGSM is rounded to the nearest square metre.

Calculations of workload, staffing and space have been based on the recommendations of staff in the existing facility, on those supplied by the DHSS and on RPG's facility programming guidelines, which are a synthesis of current standards recommended by Health Canada and the Provinces of British Columbia, Alberta, Saskatchewan and Ontario.

Square Measure

For the purposes of programming, RPG used values which are 'rounded' to the nearest 0.5 square meters (m²) - thus 9.3 m² (or 100 ft²) is stated as 9.5 m² and 9.2 m² is stated as 9.0 m²; or to the nearest 5 square feet (ft²) - thus 38 ft² is stated as 40 ft² and 37 ft² is stated as 35 ft².

For the purposes of conversion from square metres to square feet and vice-versa, use a factor of 10.76.

Example:

100 square feet \times 10.76 = 9.3 square metres (9.5 m² rounded)

9.5 square metres \times 10.76 = 102.2 square feet (100 ft² rounded)

Linear Measure

For the purposes of future space programming, RPG uses values which are rounded to the nearest 100 millimetres (mm) - thus 3040 mm is stated as 3000 mm; or to the nearest 1 foot (ft) - thus 9.8 ft is stated as 10 ft.

For the purposes of conversion from metres to feet and vice versa, use a factor of 3.28.

Example:

10 feet \times 3.28 = 3040 m (3000 mm rounded)

3 metres \times 3.28 = 9.84 ft (10 ft rounded)

Please note that the above system of "rounding" is only appropriate at the programming stage. At the architectural stage, it is necessary to be precisely accurate with both square and linear measure.

A1 MAIN **ENTRY/RECEPTION**

FUNCTIONAL DESCRIPTION

This component contains the main entry for the facility and includes a waiting area, reception and registration facilities associated with the Watson Lake Hospital and the Medical Clinic/Retail Pharmacy.



Main Entrance & Waiting Area

The majority of patients, visitors and staff use this main entrance of the building for general access and egress.

Activities associated with the waiting area portion of this component include: waiting associated with various hospital services, display of general health information and services, access to clinical areas, access to an Aboriginal Family Room, access to storage alcove for wheelchairs and strollers, and provision of vending machine/coffee. A public washroom and telephone is also available in the main entry area.

Reception & Registration

Reception and Registration services provided in this component by Administration/Clerical staff includes:

- switchboard;
- reception of patients and visitors;
- collection of information to ensure positive patient identification;
- Registration/Admitting of emergency patients, scheduled outpatients, and inpatients;
- collection of financial information for reimbursements; and
- provision of cashier services (i.e. receipt of monies as indicated).

In addition to the Reception and Registration Services described above, Administration/Clerical Support also provide the following services in this area:

- maintaining schedule of appointments;
- Health Records Services (see below);
- arranging medical services transport as directed by nurse/physician;
- compiling discharge summaries and coding of discharge data;
- compiling of workload activity reports for Hospital and Community Nursing; and
- receipt and distribution of and sending of mail.

Health Records are generally stored in the Reception/ Registration/ Administration office, with "overflow" of current records and inactive records in on site storage facilities.

Education

Educational activities in this area are generally limited to the display of health information for patient and visitor use.

Other educational activities and students are not accommodated in this area.

OPERATIONAL DESCRIPTION

Hours of Operation

The Main Entry is in Operation 24/7.

Reception & Registration is staffed 0745 to 1700 hours. After hours the main door is secured and patients/visitors requiring entry will “ring” to alert staff of their presence.

Client/Visitor Management

During normal working hours, users of the facility have the option of accessing select areas on their own (e.g. Health Centre), that is, bypassing reception and going direct to their destination. Reception staff are available to direct first time clients/visitors as required.



Patients presenting for emergency, scheduled outpatient visits, or to visit an inpatient, report to Reception/Registration for registration and care as determined by protocol.

Patients presenting for emergency, scheduled outpatient visits, or to visit an inpatient, report to Reception/Registration for registration and care as determined by protocol.

The waiting area will be able to accommodate up to 12 people comfortably at one time.

Health Records

Until such time as the electronic record is fully implemented, paper-based records will be used. Point-of-care documentation will be a goal.

WORKLOAD/ACTIVITY

Registration and admin support workload associated with _ inpatient days/year and approximately emergency/scheduled outpatient admissions/year.

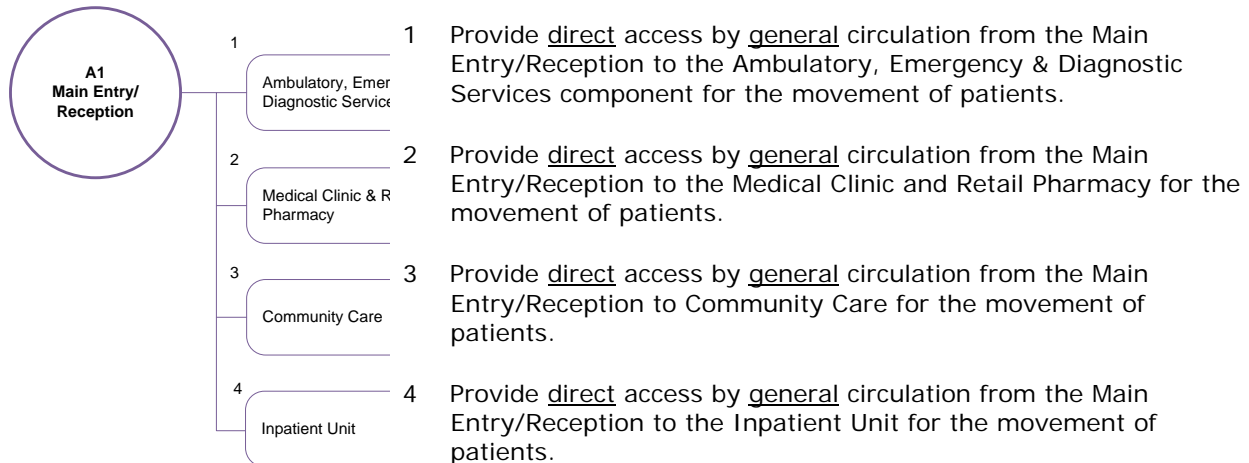
The Waiting Room will accommodate up to approximately 12 people.

STAFFING & OCCUPANCY ESTIMATES

Please see Project Parameters

DESIGN CRITERIA

External Relationships



Internal Relationships

Access and Parking

Provide suitable patient drop off and handicap parking immediately adjacent to the component and convenient, quick access to the reception area. In particular, provide easy access to wheelchairs close to the entrance for patients requiring immediate assistance.

Main Entry

Doors into the building should be automatically controlled. A draft vestibule with sufficient clearance between the two sets of doors will permit easy access to those using wheelchairs, scooters and strollers. Within the draft vestibule, a "doorbell" (that is also audible to the patient) is available to alert staff of patient/visitor presence after hours. An intercom for two-way communication is also provided. The doorbell and intercom must be wheelchair accessible.

Visibility/Open Planning

The main reception desk area will be the primary focal point of the Facility and should serve as a reference point for all users. It is the first source of information and direction to all new patients and visitors and, therefore, should be highly visible from the main entrance. However, a high degree of privacy/confidentiality should be provided, for phone conversations and for admitting/registration functions, which will be conducted in admitting cubicle.

Sufficient space must be provided between the inside vestibule door and reception to avoid congestion and draft issues for staff working in the area.

Atmosphere

This component provides a welcoming and calm atmosphere for patients, staff and visitors of all ages. Design details, such as nature-inspired artwork and a warm colour palette, are incorporated into the Main Entry.

Natural lighting and views to the outside, from both staff stations and the waiting area, contribute to a healing environment

Wayfinding

Easy wayfinding to the Main Entry is vital. Signage should be easy to read and appropriately placed in order to minimize anxiety and disorientation. Use of different materials and forms to make separate programs/services, on the same site (i.e. The Medical Clinic, Hospital, and Community Care), distinguishable from one another (e.g. colour schemes, interior design elements) would be helpful.

Waiting Areas Separate from Office Areas

Patient/client waiting should be located close to the reception areas for control and visibility and separated from the office/exam/counselling rooms to maximize confidentiality and control of access; also to allow for the office/exam areas to be closed (locked) to access during lunch and other breaks and to protect physicians from casual conversation with patients.

Subdivision of Waiting Areas

The main hospital waiting area will include a separate waiting area for the Medical Clinic/ Retail Therapy patients/clients. Community Care clients will also require a separate waiting area, to segregate 'well people' from 'sick people' to the degree possible (see component B5 Community Care).

Vending machines as well as a brochure/information resource alcove will be provided in the main waiting area.

Infection Control

Facilitation of infection control will include hand sanitizers available upon entry to the facility.

Provision for Children

A small child play area will be available; acoustic separation may be provided, but the area must be visible for easy monitoring by parents.

Discrete Accessibility

Some patients will benefit from being able to bypass the main reception area to access their counsellor discretely (e.g., mental health, addictions).

The design should also address this requirement by means of appropriate screening, grouping of counselling rooms in waiting areas and, if possible, by allowing for discrete exiting from the Facility after counselling.

Accessibility for those with Physical or Cognitive Disabilities

All counters, circulation pathways, doorways and washrooms must be wheelchair accessible. Barrier free design must also accommodate the needs of the cognitive or physically impaired patient.

Safety and Security

The following security features are employed in the area:

- entrances will be equipped with automated card readers and monitored by security cameras;
- proximity card access will be required for key areas;
- the Admitting/Triage Booth should have two-way access to enhance safety of staff;
- planning and design should provide the means to minimize theft (e.g., lockers); and
- provision for storage of minor snow/ice removal equipment for ease of keeping walkways to entrance clear of snow and ice.

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**B1 AMBULATORY/EMERGENCY/
DIAGNOSTIC SERVICES****FUNCTIONAL DESCRIPTION**

The following Ambulatory Services are provided at Watson Lake Hospital:

- Emergency Services;
- Scheduled Outpatient Services;
- Medical Imaging (x-ray);
- Laboratory Services (basic).

Emergency Services

The Hospital provides diagnostic and treatment services of unscheduled patients, both adult and pediatric, with known or suspected illnesses or conditions. Five categories of emergency services, based on the Canadian Triage Acuity Scale (CTAS) are provided.

Emergency services at the Hospital are provided 24 hours/day, 7 days/week in collaboration with the Medical Clinic/General Practitioners (one general practitioner is always on-call and available for provision of emergency services as required).

Emergency care at WLH will be provided under a philosophy that recognizes distinct needs of different patient groups, and will provide appropriate facilities for the delivery of safe and quality health care including:

- trauma patients and those requiring resuscitation;
- victims of sexual or domestic assault/abuse;
- patients requiring emergent/urgent care, including those with confirmed or suspected myocardial infarctions, strokes or time to treatment sensitive conditions;
- mental health and addiction patients deemed to be at risk to themselves or others;
- patients requiring medical care but are deemed not emergent/urgent.

Patients requiring further care/definitive treatment that is not available at WLG are transferred to Whitehorse General Hospital or the most appropriate facility.

In the short term, WLH will also provide ambulance dispatch services for (Watson Lake) Emergency Medical Services.

Scheduled Outpatient Visits

This area also accommodates scheduled sessions between clients, nurses, physicians, therapists, technicians and other health professions. Scheduled outpatient visits include, but are not limited to:

- IV antibiotic therapy;

- IV Chemotherapy;⁷
- Injections (e.g., Vitamin B);
- Flu Clinics;
- Cast Clinic;
- “Lump & bump” removal;
- Dressing changes and other follow up; and
- Visiting Specialists.

Diagnostics

Xrays/Imaging

Basic imaging services (general xray only) are provided for emergency, scheduled outpatients and inpatients as required.

Planning assumes filmless technology and that a darkroom/developer is not required.

Laboratory

Laboratory services provided in this component include

- collection of specimens;
- point-of-care testing; and
- preparation of specimens and packaging for shipping to Whitehorse General Hospital.

Point-of-care testing for glucose, cardiac, electrolytes, blood gas is conducted onsite. Point-of-care testing will be expanded as technology and quality assurance ability evolves over time.

Electrocardiograms (ECG's) are also provided at bedside for emergency, scheduled outpatients and inpatients.

Education

Education activities occurring in this component will include patient and family education, orientation of new staff and health discipline students/learners. It is anticipated there will be only 1-2 learners in the area at any one time.

OPERATIONAL DESCRIPTION

Hours of Operation

Emergency Services and Diagnostics are provided 24/7 as required.

Scheduled Outpatients/Diagnostics: Mon – Friday 0800 - 1700

Patient Reception/Admission

During normal working hours, the Administration Clerk at reception initially sees all patients. For emergency patients the

⁷ The physicians conduct all preparation and administration of chemotherapy.

clerk will notify the nurse on duty for attendance and triaging as required. Based on the nurse's initial assessment the patient may be taken directly to the appropriate treatment area.

Some emergency patients will arrive via EMS and hospital staff is generally aware of their pending arrival. These patients will generally be brought into the Hospital via a designated ambulance entrance. If their condition warrants, patients will be taken directly to the appropriate treatment area. Other patients may be taken to Reception/Registration for general non-emergent processing.

Scheduled outpatients will be initially received by reception, registered as required and wait in the main waiting area for their appointment with the health professional at which time they will be escorted to the appropriate treatment area.

The majority of patients will be discharged home after their visit. Some patients may be admitted as an inpatient for further observation or care. Some patients requiring care and treatment not available at WLH will be transferred to the appropriate facility (usually WGH). Patients who are deceased will be taken to the morgue facility in the hospital.

Patient Care

Emergency and scheduled outpatients will generally be assessed and cared for by the RN on duty. For emergency patients, the on-call physician will be notified of the patient's presence and will attend as required.

Two of emergency stretchers will provide cardiac (and other) monitoring capabilities for care of acutely ill people, including trauma and those requiring resuscitation. A seclusion room to care for those patients who are at risk of hurting themselves or others will also be available. One larger multipurpose exam room with an ensuite will also be available for the provision of care requiring additional privacy and consideration (e.g. emergency birth, sexual/domestic assault).

Other general facilities for provision of general emergency and scheduled outpatient care will be available including a procedure room.

During normal working hours, the technician will collect specimens, conduct point-of-care testing and take xrays and ECGs as required. After hours diagnostics will be conducted either by the RN, physician or an on-call tech (staffing model yet to be confirmed).

Health Records

Until such time as the electronic record is fully implemented, paper-based records will be used. Point-of-care documentation will be a goal.

WORKLOAD

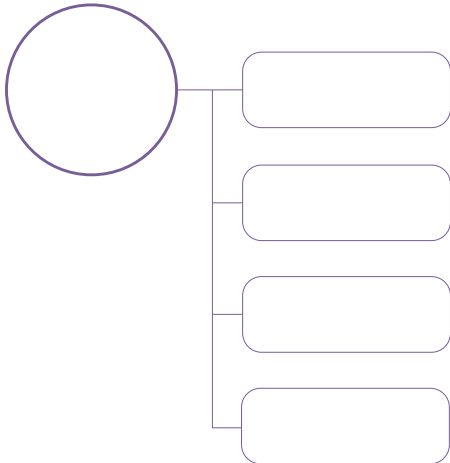
See Project Parameters

STAFFING & OCCUPANCY ESTIMATES

See Project Parameters

DESIGN CRITERIA

External Relationships



- 1 Provide direct access by internal circulation from the Ambulance Entry to the emergency trauma room for the efficient movement of patients.
- 2 Provide direct access by general circulation to the Main Entry/ Reception for the movement of patients and staff as well as for control by nursing staff.
- 3 Provide direct access by general circulation to the Shared Support Area for the movement of supplies and staff.
- 4 Provide direct access by general circulation to Facility Operations for the movement of supplies.

Internal Relationships

Triage/Registration Adjacency

Ideally, patient registration facilities should either be continuous or in close proximity with the triage booth to facilitate patient flow.

1

Ambulance Access and Bay

**B1
Ambulatory,
Emergency &
Diagnostic
Services**

Ambulance cases Ambulance Entry and direct access to the trauma/resuscitation area immediately upon entry without crossing the route taken by walk-in patients.

Ambulance unloading must be conducted within a weather protected (fully enclosed, and ventilated) facility. Provide drive through for a minimum of 1 ambulance (2 if space permits). Ensure that exhaust fumes from ambulances are not transferred into the building. Main Entry/Reception

1

Provide housekeeping closet, hose bib and appropriate electrical outlets.

3

Visual and Acoustic Privacy

Provide visual Shared Support Area for patients in all exam/counselling and consultation spaces. The caregiver/patient relationship is vitally important. Privacy is of the utmost importance and sound transmission between rooms is a critical design consideration. Conversation at normal levels should not transmit between rooms.

4

Facility Operations

Any glass walls or windows must have built-in mini blinds, or other method of providing privacy.

Accessibility

Provide wheelchair accessibility throughout the component. Provide lighting, signage, traction surfaces, and reversible door hardware suitable for patients with physical and cognitive handicaps. Further information on provisions for the handicapped is provided in Section 2: General Planning Criteria of this report.

Safety and Security

The layout and design of the component must address the dangers to staff inherent in the services provided (e.g., from violent patients). A staff "escape" route from the reception/triage area must be provided.

All glass walls or windows should be designed for maximum security.

Consider providing UPS to this component and especially the trauma/resuscitation room(s).

Decontamination

A decontamination room will be located peripheral to the component, connected to it for direct access, but able to be sealed off when contaminated. All parts of the room will be designed to be lined with a disposable polythene liner. Exit from the room will be possible directly into this component or to the outside. A separate isolated exhaust system must be provided.

It is assumed that radiation containment is not required. However, the need for a catchment sump under the shower drainage and ambulance bay wash down area will be reviewed at the design stage.

This room may also be used to provide care to animals as deemed appropriate by staff.

Please see General Planning Criteria: Safety and Security for other design requirements/considerations.

Planning for Disaster Management

In addition to being planned for normal day-to-day provision of services, the examination/treatment areas should be planned to allow for increased numbers of casualties generated by a major disaster. This could be achieved by means of the following:

- adjacency to, and ease of use of other open spaces (e.g. hospital corridors, and large meeting rooms; and
- potential to convert protected exterior areas (ambulance area garages) into triage or holding areas.

Disaster supplies will be maintained in this area.

Imaging/XRay Room

Patient Management

The layout of rooms should promote an efficient patient flow through the waiting/changing/procedure process.

Patient Environment

Provide a warm, peaceful ambiance and an aesthetically pleasing domestic décor in the x-ray room, to reduce the psychological impact of an unfamiliar technological setting and to alleviate anxiety, especially in children and the elderly. Where possible, instrument panels must be screened from view. Wall and floor finishes in the procedure room should be selected for their aesthetic qualities, as well as ease of maintenance. The use of colour and murals can help significantly to achieve this.

Privacy for Viewing Area

Ensure that privacy is provided for physician/patient discussion in the viewing area.

Privacy and Access to Changing Cubicle

A patient change cubicles/wheelchair accessible will be wheelchair accessible and located adjacent to the procedure room, ideally, with access directly from it, as well as from the patient corridor.

Laboratory Room

Patient Management

The layout of rooms should promote an efficient flow of patients to and from specimen taking areas without needing to enter the laboratory workspace.

Adaptability

Provide for adaptability to allow for change and development of laboratory procedures, equipment and instrumentation, by ensuring ease of access to electrical, mechanical and plumbing services and by means of moveable storage systems.

Safety

Safety devices must be provided for protection from chemical

- splash guards;
- special electrical outlets; and
- eye wash fountain and shower.

Environment

If possible a window opening to the exterior from the lab would be desirable to provide instant access to fresh air and relief from any odours generated in lab.

Special Surfaces

Non-corrosive materials must be used for countertops, cabinets, hardware, walls, and flooring.

Mechanical Services Considerations

Mechanical services considerations as follows:

- constant temperatures and a draft-free environment in the Lab work areas is ideal; and
- waste systems should be designed to properly handle infectious waste discharges.

Electrical Services Considerations

Electrical services considerations as follows:

- consider providing UPS:
 - computers, and
 - analyzer (point of care testing);
- ensure good glare-free lighting, both ambient and task, in the Laboratory work area.

B1 INPATIENT AREA**FUNCTIONAL DESCRIPTION**

This component provides the facilities for Inpatient Services. Inpatient Services are provided to primarily adult patients as required for:

- observation and monitoring;
- stabilization and treatment of acute conditions (primarily medical and chronic disease related);
- respite;
- palliative; and
- convalescence –

Treatment and care services typically provided will include, among others:

- assessing and monitoring patients holistic needs;
- meeting patients daily needs;
- providing basic and emergency medical and nursing interventions;
- facilitating family-centered care;
- consulting with the interdisciplinary team;
- providing nutritional, respiratory, pharmaceutical and rehabilitative support therapy;
- providing symptom management;
- providing palliative and bereavement care;
- educating patients, family, staff and learners; and
- documenting patient's progress.

Patients and families will be full partners in the care process as able and appropriate. Services will be delivered to meet ethno specific as well as individual needs.

Education

Educational activities occurring in this component will include education of patients, families, (new) staff and health discipline learners. It is anticipated there would only 1-2 learners in the area at any one time.

OPERATIONAL DESCRIPTIONHours of Operation

24 hours per day, 7 days per week.

Patient Referral, Admission and Discharge

Patient admissions will generally occur via Emergency or the Medical Clinic. Patient arrival may occur at any time during the day or night.

Access to the Inpatient Area will be through one main entrance from a public/main hospital corridor.

Patients are oriented to the unit by the staff admitting the patient to the unit.

Patients are discharged home when their condition has stabilized and they are able to receive care in the community. Some patients may be transferred to another facility, generally Whitehorse General Hospital, and occasionally outside the Territory.

Care

An interdisciplinary team, based on the patients and family's needs, will provide care.

All patients will have individualized care plans that have been developed and discussed with the patients/families. Clinical pathways will be followed as per policy.

Families may be an integral part of the patient care process and will be actively involved in decision-making and 'hands on' care activities as appropriate.

Rooming in will be accommodated as appropriate. In extraordinary circumstances, rooming-in may not be accommodated based on patient or family safety issues.

All patients will receive the majority of their (nursing) care at the bedside. Facilities will be provided for provision of selected therapies.

If an Adult Day Program is located on site, some patients (e.g. respite, convalescent) may participate in the Day Program activities as recreation and therapy.

Food Services

Meals/snacks will be provided in the patient's room. Special diets will be provided as directed by the clinical team. A coffee and snack counter will be available in close proximity to the unit for those patients and families wanting to help themselves to beverages/snacks during the day.

Communication

Appropriate noise-free nurse calling systems will be provided at care stations and patient rooms.

Health Records

Until such time as the electronic record is fully implemented, paper-based records will be used. Point-of-care documentation will be a goal.

WORKLOAD

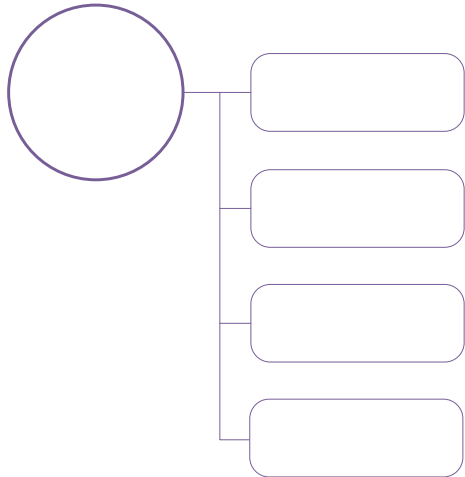
See Project Parameters

STAFFING & OCCUPANCY ESTIMATES

See Project Parameters

DESIGN CRITERIA

External Relationships



- 1 Provide direct access by internal circulation from the Inpatient Unit to Shared Support Services for the movement of supplies and food from the Kitchen (housed within the Shared Support Services component).
- 2 Provide direct access by general circulation from the Inpatient Unit to the Ambulatory, Emergency & Diagnostic Services component for the movement of staff/patients requiring diagnostic services, etc.
- 3 Provide direct access by general circulation from the Inpatient Unit to Facility Operations for the daily movement of supplies.
- 4 Provide direct access by general circulation from the Inpatient Unit to the Main Entry/Reception for the movement of visitors.

Internal Relationships

Patient Environment

**B2
Inpatient Unit**

In maintaining best practices, inpatient rooms at Watson Lake Hospital will be private rooms, equipped with 3-piece ensuites and providing rooming-in capability. Each patient room will also include an additional sink located outside of the washroom area for infection control purposes. Private rooms support reduced noise disruption, enhanced patient privacy, reduced medication errors, and overall improved patient outcomes and recovery times.

Budget limitations may not allow for true 'universal rooms' but every attempt will be made with the space available to provide the features of a universal room including: a patient zone, a caregiver zone and a family zone. The universal concept does not exclude provision for personalization of the room by the patient with pictures or other appropriate personal items.

The patient zone should include a patient sitting area to encourage patients to get out of bed as soon as possible.

All bed areas must be provided with generous space at the sides, head and end of the bed to accommodate equipment and delivery of care.

Room finishes as well as furnishings, in addition to function, should be selected so as to create a bright, cheerful, positive environment for patients and families.

Main Entry/Reception

Views to the outside and natural lighting will be provided to support a healing environment.

Accessibility

Provide wheelchair accessibility throughout the component. Wheelchair access must include additional room for assisted manoeuvring.

Provide lighting, signage, traction surfaces, and reversible door hardware suitable for patients with physical and cognitive handicaps.

See General Planning Criteria for further interventions.

Patient Privacy

Provide visual and acoustic privacy for patients in all inpatient spaces. The caregiver/patient relationship is vitally important. Privacy is of the utmost importance and sound transmission between rooms is a critical design consideration.

Infection Control

Two (2) patient bedrooms will be provided with negative pressure ventilation capability in order to accommodate patients requiring Airborne Infection Isolation. The isolation rooms will be built to airborne infectious isolation room standards, as follows:

- Airborne precautions including negative air pressure;
- Sealed walls;
- Access to a sink in each patient room for healthcare providers;
- An anteroom including sink, storage of clean gloves, masks, goggles, counter for charting, etc.; and
- Direct access to disposal for soiled gloves, masks, etc.

Facilitation of infection control will include hands-free sinks and hand sanitizers in central locations that are readily accessible to staff, and separation of clean and dirty utility areas.

Safety and Security

To ensure safety of patients, staff and visitors, special protection measures include:

- Positioning the Reception Desk and Care Station to control/monitor access to the inpatient area;
- Expanded video camera surveillance with taped capability to view all entrance/exits and identified areas of the facility in keeping with privacy regulations;
- Emergency exits locked and on alarm status;
- Consider installation of wandering alert system;

- Ability to 'lock down' the area; and
- Duress alarms.

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B3 SHARED SUPPORT AREA**FUNCTIONAL DESCRIPTION**

This component provides facilities for the Shared Support Area, which will be utilized by both the Hospital and the Medical Clinic. The Shared Support Area will include the following: clean linen and soiled utility closets, a housekeeping closet, storage, and food services.

Food Services

Activities occurring in this area include:

- meal planning;
- consultation with Clinical Nutritionists (at WGH);
- ordering and receiving of food supply inventory;
- Food Storage;
- preparation and cooking of all meals (and snacks);
- assembly of patient trays;
- warewashing;
- provision of a small First Nations food prep space (used to heat meals brought to inpatients);
- cleaning of kitchen; and
- provision of a coffee and snack counter that is accessible to inpatients and families.

General Support

Facilities in support of client care are located in this component including:

- storage of clean supplies and equipment;
- provision for sterilization of reusable equipment;
- a therapy area and bathing room (if an Adult Day Program is located within the facility, these facilities will be located to the ADP component); and
- dirty utility and housekeeping closet.

Education

Educational activity in this area would primarily focus on the patient/family during therapy or bathing. New staff would be orientated to the area.

WORKLOAD

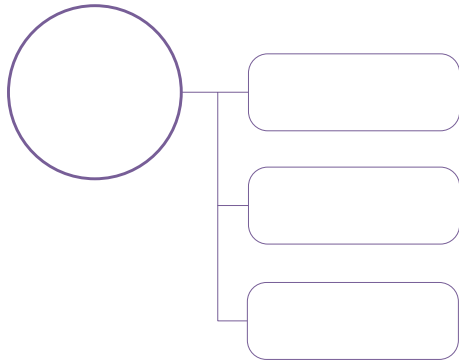
Food Services: 1,533 Annual Meal Days

STAFFING & OCCUPANCY ESTIMATES

See Project Parameters

DESIGN CRITERIA

External Relationships



- 1 Provide direct access by general circulation from the Shared Support Area to Ambulatory, Emergency and Diagnostic Services for the movement of supplies.
- 2 Provide direct access by general circulation from the Shared Support Area to the Inpatient Unit for the movement of supplies and food.
- 3 Provide direct access by general circulation from the Shared Support Area to the Medical Clinic & Retail Pharmacy for the movement of supplies.

Internal Relationships

**E3
Shared Support
Area**

**1
Food Services**

Natural Lighting

**Ambulatory, Emergency &
Diagnostic Services**

If possible, provide natural light and exterior views to the occupied areas of the kitchen.

Acoustics **2**

Isolate or enclose noisy equipment and use sound-deadening devices where practical in the dish/pot washing area

Kitchen Floors

Provide a non-skid surface that is impervious to moisture and grease, resistant to solvents, durable and able to withstand heavy wear and permits easy movement of heavy equipment.

Kitchen Walls

**Medical Clinic & Retail
Pharmacy**

Provide washable, hard, smooth, impervious, but at the same time, bright and cheerful finishes. Provide wall protection to prevent surface and corner damage by cart movement with particular attention to cart bumper and handle heights, typically at 170 mm and 900 mm above finished floor level, respectively.

Mechanical Services Considerations

Mechanical services considerations should:

- Consider provision of make-up air system with conditioned air (negative air pressure) for kitchen space and controlled air velocity to:
 - reduce transfer of excess heat to adjacent areas,
 - maintain food temperatures,
 - control odours and humidity, and
 - balance air pressure to prevent transfer of kitchen odours to other areas of the Facility;

- enclose/conceal plumbing and ducting in the production areas to the greatest extent possible to improve appearances and reduce housekeeping/maintenance;
- isolate refrigeration compressors for acoustic control;
- provide special drains and required grease traps under cooking and pot wash areas;
- provide floor drains in preparation, cooking, meal assembly and pot wash areas; and
- provide exhaust ventilation to remove heat and grease-laden vapours in cooking and dishwashing areas.

Electrical Services Considerations

Electrical services considerations to include:

- ventilation (and possibly refrigeration) and fire suppression equipment should be on emergency power; and
- special power supply for equipment.

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**B4 MEDICAL CLINIC AND
RETAIL PHARMACY****FUNCTIONAL DESCRIPTION**

This component provides facilities for the Medical Clinic as well as the Retail Pharmacy. Scheduled sessions between clients and General Practitioners are accommodated as well as dispensing of retail medications.

This component operates independently of others to the extent that a client's visit may be dealt with entirely in this one part of the integrated facility.

Medical Clinic

Activities occurring in this area include:

Client Support

General activities include:

- reception and registration of patients;
- receiving and directing calls;
- booking appointments;
- assistance with physician chart completion; and
- management of health records including filing and chart retrieval.

The Medical Clinic will maintain separate health records independent from the WLH. To the extent possible, the Medical Clinic will integrate the management of health records as per the national vision of the Electronic Health. A separate network server is required for the Medical Clinic.

Assessment and Treatment

General activities include:

- physical examinations;
- minor treatment (e.g. dressing changes);
- administration of immunizations and injectable medications;
- private dental services in a dental exam room;
- Counselling and Education; and
- administrative work in support of a client visit (e.g. updating client charts, report writing, coordinating referrals to other programs).



Specific services provided include:

- clinical diagnosis and treatment including prescribing therapeutics and referrals for diagnostics and specialist consultants;
- continuing proactive care of chronic illnesses;
- health prevention and promotion; and
- collaboration with other care providers for the patient's ongoing health including assessment, navigation and referral to appropriate health services.

Physicians at the clinic also provide 24/7 on-call services to WLH Emergency and are MRP for all WLH inpatients. Facilities to accommodate visiting specialists are also provided. A dental exam room has been included to accommodate private dental services.

Facilities for staff support in this component include a Billing Office, housekeeping closet and storage of supplies.

Planning assumes the Medical Clinic will access other facilities within WLH for the delivery of patient care (e.g., Diagnostics) and staff support (e.g. Break Room).

Pharmacy

Facilities are provided for the preparation and dispensing of prescribed medications and counselling of patients. A small waiting area is provided in close proximity to the Dispensary.

Facilities for the preparation of cytotoxic medications (generally for chemotherapy patients) by physicians are also accommodated in this component.

Education

Education activities occurring in this component are primarily focused on patient and family education. A maximum of 1 Medical student or Resident will be accommodated at any one time.

OPERATIONAL DESCRIPTION

Hours of Operation

0900 -1700 hours, Monday to Friday.

Client Management

Referral is generally by self, health professional or community organization.

Clients access the Medical Clinic Reception either directly after entering the building or as directed by the Main Entry/Reception. Once checked in, clients either proceed directly to their appointment or to the waiting area.

Clients must meet the following participation criteria:

- client consent and willingness to participate; and
- ability to travel to the clinic; home visits are limited.

Communications

As the Medical Clinic and Retail Pharmacy have distinct functions (and operate independently) from other areas of the hospital, there must be a direct phone lines/numbers to Medical Clinic Reception and Retail Pharmacy.

Health Records/Information Management

Client records used in this component are accessed either electronically using computer terminals located throughout the component, or as hard copy documents.

A secured storage facility is located in close proximity to Medical Clinic Reception. Records storage is also accessed by professional staff.

Housekeeping and Laundry

Housekeeping/Janitorial services for this component will be provided by WLH through formal arrangement.

Laundering of gowns, housecoats, linen will be provided by WLH. Minimum inventories of clean laundry items are maintained by WLH through formal arrangement.

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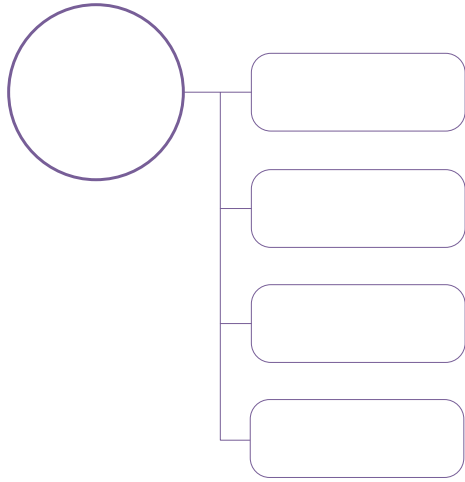
See Project Parameters

STAFFING & OCCUPANCY ESTIMATES

See Project Parameters

DESIGN CRITERIA

External Relationships



- 1 Provide direct access by general circulation from the Medical Clinic & Retail Pharmacy to the Main Entry/Reception for the movement of patients arriving for appointments and picking up prescriptions.
- 2 Provide direct access by general circulation from Medical Clinic & Retail Pharmacy to the Ambulatory, Emergency & Diagnostic Services to facilitate the movement of patients/staff for x-rays and lab work.
- 3 Provide direct access by general circulation from the Medical Clinic & Retail Pharmacy to the Shared Support Area for the movement of supplies.
- 4 Provide convenient access by general circulation from the Medical Clinic & Retail Pharmacy to the Administration and Staff Support Facilities for the movement of staff to the lounge area, change room and shower facilities.

B4
**Medical Clinic &
Retail Pharmacy**

Main Entry/Reception

Internal Relationships

Non-Institutional and Inviting Atmosphere

2

Children comprise a portion of the population accessing the Medical Clinic. Design features at registration and in multipurpose exam/interview rooms should be incorporated that create a safe, friendly and inviting environment for children. Furniture, decorations and wall colours are some of the techniques that should be considered.

**Ambulatory, Emergency &
Diagnostic Services**

Patient Privacy

3

Provide visual and acoustic privacy for patients in all exam and consultation spaces. The caregiver/patient relationship is vitally important. Privacy is of the utmost importance, visual privacy and preventing sound transmission between rooms is a critical design consideration.

Shared Support Area

Office/Exam/Consult Rooms

4

Standard room sizes and configurations are used to provide flexibility. Versatile furniture is used to accommodate a variety of disciplines and client care activities.

**Administration & Staff
Support Facilities**

Accessibility

Provide wheelchair accessibility throughout the component. Provide lighting, signage, traction surfaces, and reversible door hardware suitable for patients with physical and cognitive handicaps. Further information on provisions for the handicapped is provided in Section 2: General Planning Criteria of this report.

Safety and Security

The Medical Clinic and Retail Pharmacy component occupies a public portion of the building and benefits from a visible and accessible location. Its operations will be closed when other components remain open to the public and for this reason, the Medical Clinic/Retail Pharmacy component must be able to be independently secured from other parts of the facility.

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B5 COMMUNITY CARE**FUNCTIONAL DESCRIPTION**

Community care services in Watson Lake provide services focusing on the promotion of positive well being for individuals, families, and the community as a whole across the life span and continuum of health.

The Community Care component, located within the hospital facility, provides facilities for the following services: Health Centre, Home Care Services and the Child Development Centre.

Health Centre

The following Health Centre activities will occur in this component:

- Maternal and Child Health: well-child clinics, and follow up assessments, newborn hearing screening
- Adult Health: health information, counselling on health conditions, mental health and addictions outpatient services, (limited) chronic disease management,
- Communicable Disease Control: tuberculosis program, sexually transmitted disease program, and follow-up on other communicable diseases;
- Immunizations: including routine, specific program and travel clinics;
- Visiting specialists including: pediatrics, optometry, psychology/psychiatry, rural mental health nurse, and alcohol and drug services;
- Arranging for travel and accommodation for those with NIHB.

Services provided in this component are generally on a 1:1 or 1:2 basis (i.e. client and other).

Group activities are not provided in this component and will be accommodated in other components (i.e. Multipurpose Meeting Room).

Facilities include accommodation of resident staff and visiting specialists as well as general exam and counselling rooms.

Home Care Services

Home Care maintains an office and supplies on site, but service is generally provided off-site at client's homes. Office facilities to accommodate the Home Care nurse and touch down of Home Support workers will be provided as well as supply storage facilities.

Planning assumes Home Care will access other facilities in the hospital as required for service delivery (for example, meeting rooms, use of the bathing facilities for home patients as required).

Child Development Centre

Facilities provided for the provision of Child Development include office accommodation for one worker and storage for supplies. The office will provide sufficient area to meet with a child and 2 family members. Some assessment and treatment may occur in the office, but service is primarily provided in the community at other locations.

Planning assumes Child Development Centre will access other facilities in the hospital as required including interview rooms, and multipurpose meeting rooms.

Education

Education activities in this component will predominately be client and family education. Orientation of new staff and accommodation of health discipline learners (a maximum of 1 at any one time) will be accommodated.

OPERATIONAL DESCRIPTION

Hours of Operation

Monday to Friday: 0800 - 1700

Client/Visitor Management

Clients may access the reception area in Community Care either directly after entering the building or by direction of Reception/Registration in the Main Entry.

Community Care reception will provide:

- Reception and Registration/Check-in services; and
- Scheduling of appointments.

Once checked-in, clients either proceed directly to their appointment or to the waiting area.

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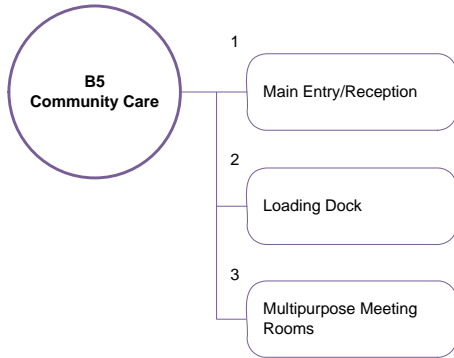
See Project Parameters

STAFFING & OCCUPANCY ESTIMATES

See Project Parameters

DESIGN CRITERIA

External Relationships



- 1 Provide direct access by general circulation from Community Care to the Main Entry/Reception for the movement of clients to/from appointments.
- 2 Provide convenient access by general circulation from Community Care to Loading Dock area for the easy loading and unloading of supplies.
- 3 Provide convenient access by general circulation from Community Care to the Multipurpose Meeting Rooms for the movement of staff and clients as necessary.

Internal Relationships

Acoustic/ Visual Privacy

Provide visual and acoustic privacy for patients in all exam/counselling and consultation spaces. The caregiver/patient relationship is vitally important. Privacy is of the utmost importance and sound transmission between rooms is a critical design consideration.

Environment

To contribute to the philosophy and practice of family-centered care, the environment should be pleasant and conducive to wellness. The following features will support this philosophy:

- features that promote independence, such as discrete wayfinding, and pediatric toilet;
- features that promote wellness and calm, non-institutional environment, i.e., as much natural light as possible, calming music, aquariums, and the absence of overhead paging;
- the physical environment is comfortable and attractive to children and families. The level and types of visual, auditory and tactile stimulation should be interesting and appropriate for a variety of ages;
- there is adequate space for families to participate in a child's care; and
- counters designed with varying levels to support varying heights of children as well as ergonomic considerations for the nurse who needs a lower counter height for lifting babies onto a scale;

Additionally, the following design features need to be accommodated in this area:

- exam rooms require a line of sight to the waiting area so that parents have direct visible access to their children in the play area; and
- provide a corridor in this component which could accommodate vision screening with a length of 20ft. at minimum;

Accessibility

Provide wheelchair accessibility throughout the component. Provide lighting, signage, traction surfaces, and reversible door hardware suitable for patients with physical and cognitive handicaps. Further information on provisions for the handicapped is provided in Section 2: General Planning Criteria of this report.

Health Records

Until such time as the electronic record is fully implemented, paper-based records will be used. Point-of-care documentation will be a goal.

Infection Control

Isolation procedures may be put into effect that will protect the staff and other clients or visitors.

Play areas and toys will require frequent cleaning with safe (i.e. non-toxic) cleaning agents.

Safety and Security

Any doors leading into the component should have windows on the bottom portion so that small children blocking the doorways will be visible.

Counselling/Interview rooms will have dual egress.

Other safety and security measures to protect staff from potentially aggressive clients, especially during after-hours visits, will include a 'safety buzzer' call system from the office/assessment room to the reception area and to the central care station.

**B6 MULTIPURPOSE MEETING
ROOMS****FUNCTIONAL DESCRIPTION**

The component provides facilities for the Multipurpose Meeting Rooms to be shared amongst the WLH, Medical Clinic, Emergency Medical Services, Community Care, and visiting specialists.

Group activity and education activities will occur in multipurpose meeting rooms, that will be used for a wide variety of purposes, including:



- staff and administrative meetings;
- staff in-service education;
- patient/community education;
- prenatal classes;
- patient/community group therapy;
- staff training and recertification activities;
- accommodation of the optometrist;
- union meetings; and
- telehealth/video conferencing supporting education.

One large room accommodating up to 25 people and one smaller room (accommodating up to 10 people) are available to support activities as noted above. The large multipurpose meeting/conference room will be dividable into two rooms by means of a moveable partition, providing appropriate visual and acoustical separation. This room includes an alcove where the optometrist's chair can be accommodated.

The meeting rooms will be available on a pre-booked basis for shared use by all staff and patients of the Facility, all community health care professionals and select community organizations.

Education

As described above.

OPERATIONAL DESCRIPTION**Hours of Operation**

Monday – Friday normal business hours.

The meeting rooms may be utilized by Community Care programs, or optometrist services outside of these hours as determined by program/service need.

Meeting rooms may be booked by other organizations by special arrangement.

Access

Admin/Clerk Support at the Main Reception area compiles and maintains information on all bookings and room availability.

Clients and visitors arriving for meetings will access the multipurpose room through the main entrance.

Food and Beverage Services

Food and beverage services are the responsibility of each booked event's host.

WORKLOAD

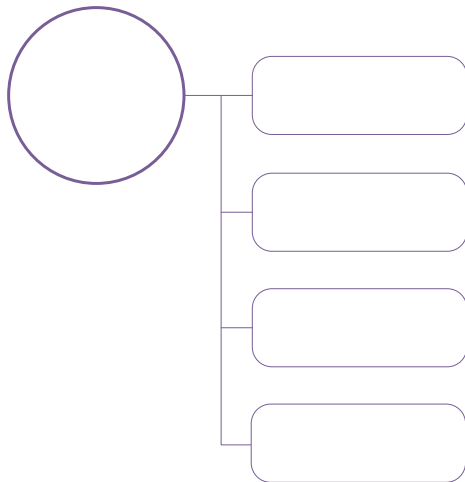
Not applicable

STAFFING & OCCUPANCY ESTIMATES

Maximum occupancy is 35 assuming both rooms at full capacity.

DESIGN CRITERIA

External Relationships



- 1 Provide convenient access by general circulation from the Multipurpose Meeting Rooms to the Main Entry/Reception to facilitate the movement of patient/client/staff.
- 2 Provide convenient access by general circulation from the Multipurpose Meeting Rooms to Community Care for the movement of patient/clients/staff.
- 3 Provide convenient access by general circulation from the Multipurpose Meeting Rooms to Ambulatory, Emergency and Diagnostic Services for the movement of patient/clients/staff.
- 4 Provide convenient access by general circulation from the Multipurpose Meeting Rooms to Shared Support Area for the movement of food from the Kitchen.

Internal Relationships

Meeting Rooms – Two Distinct Functions

The 25-seat meeting room should be designed for a wide range of activities including physical activities (e.g. PT/OT) using cleared floor space, so the furniture, chairs and tables need to be moveable. This room may be sub divided to provide facilities for two smaller groups as required.

The 10-seat meeting room should be designed mainly for meeting/conference-type activities, generally with attendees seated at a large central table.

**B6
Multipurpose
Meeting Rooms**

Main Entry/Reception

25-Seat Meeting/Training Room Flexibility

Provide indirect lighting, flexible/moveable furniture in the meeting room to facilitate a range of activities, including group therapy/counselling that requires a home-like and relaxed ambiance. The meeting room should be sub-divisible by means of

Community Care

a moveable partition to enable a smaller group room, when required.

Ensure that the room is well sound attenuated, particularly to allow for noisy group sessions, but avoiding deadening of sound inside the room. Use of triple glazing to prevent sound transmission (i.e., of confidential dialogue) to outside areas should also be considered.

The optometrist's alcove should be well-lit and should open easily to the larger room.

Communications Services Considerations

- communications systems will include telecommunications (including voice mail), fire annunciator, nurse call system, ambulance service and overhead paging system throughout all parts of the Facility.
- the tele/video conferencing system should be wired to the 25-seat and 10-seat meeting rooms.

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C1 FACILITY OPERATIONS**FUNCTIONAL DESCRIPTION**

This component provides the facilities for facility operations and morgue services at Watson Lake Hospital, including:

- Housekeeping and Laundry;
- Facilities/Equipment Maintenance;
- Materials Management and Central Storage; and
- Morgue.

Housekeeping/Laundry/Janitor

Facilities included in this component for the provision of Housekeeping/Laundry and Janitorial Services includes:

- facilities for cleaning of small equipment;
- storage of Housekeeping and Janitorial Supplies including:
 - floor scrubber (rechargeable)(1),
 - floor burnisher (1),
 - vacuum – dry (2), and
 - vacuum – wet (1);
- laundry area.

Materials Management and Central Storage

Facilities included in this component for the provision of Materials Management and Central Storage include:

- Receiving Area;
- Central Stores Area (Bulk Storage);
- Central Equipment Storage;
- Health Records Storage; and
- Gas/O2 Cylinder Room.

Facilities and General Equipment Maintenance

Facilities for the washing of small equipment are provided.

A local contractor, on both a regularly scheduled and “as needed” basis, provides general equipment maintenance.

A small workroom will be available to support on-site equipment repairs including biomedical repairs during site visits.

Ground keeping equipment will be stored in an external garage/shed.

Morgue

Deceased bodies, from both the hospital and town will be brought to the hospital morgue pending autopsy and/or burial. There is no funeral home in Watson Lake.

The morgue will provide facilities for holding 2 bodies in refrigerated storage. The morgue will also provide an area for

body preparation, as some relatives will wish to prepare the body for burial (e.g. wash hair, dress, etc). A viewing room will be provided adjacent to the body storage area with an inter-connecting door for use by relatives of the disease and staff or police.

Bodies requiring autopsy are transferred to Whitehorse General Hospital.

Education

Educational activities are not anticipated in this component, with the exception of orientation of new staff to the environment and work processes.

OPERATIONAL DESCRIPTION

Hours of Operation

Housekeeping: 0900 to 1730 hours, 7 days per week.

Janitorial Services: 0700 to 1600 hours, Monday to Friday. Outside of normal working hours, janitorial services are provided by other staff.

Materials Management: 0900 – 1730 Mon- Friday

The component is accessible by staff 24/7 as required.

WORKLOAD

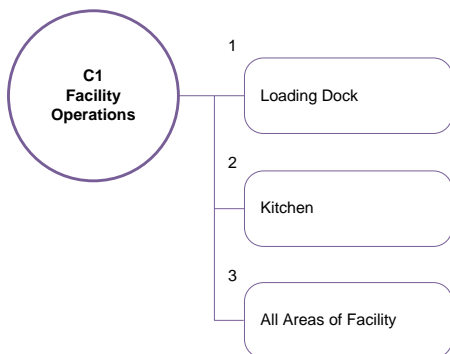
Not applicable.

STAFFING & OCCUPANCY ESTIMATES

See Project Parameters

DESIGN CRITERIA

External Relationships



- 1 Provide direct access by internal circulation from Facility Operations to the Loading Dock to facilitate movement of supplies from the delivery vehicles.
- 2 Provide direct access by general circulation to the Shared Support Area (specifically the Kitchen) for the movement of food supplies.
- 3 Provide convenient access by general circulation to All Areas of the Facility for the movement of supplies, linen and waste.

Internal Relationships

Security

The Facility Operations component is not open to members of

the public and access is restricted to authorized personnel at all times. Consideration should be given to the use of key card access and egress.

Materials Management

Exterior Access/Shipping/Receiving

This component requires direct access to delivery vehicles. Consideration should be given to a raised loading dock for the movement of heavy and large items. The loading dock is to be located next to a temporary holding/staging area where orders are checked, broken down and prepared for distribution.

Consideration should be given to locating the receiving/breakout area adjacent to the bulk storage area.

Due to WLH's remote location, adequate space for supplies and equipment is critical.

Bulk Storage Area

Consider compact storage solutions and proper ergonomics for storing and receiving of supplies.

Maintenance Area

Acoustic Separation

Provide acoustic separation between the workshop area and other adjacent parts of the facility.

Control/Security

The workshop requires the control and security of expensive tools and equipment parts.

Access to Workshop

Ensure the workshop is accessible by large pieces of equipment (e.g. patient beds). Provide area for repair of larger equipment (major equipment repairs are not expected to be conducted on site) and work benches for repair of smaller equipment.

Drainage

The storage area should include a floor drain and be constructed with the capacity to separate and contain chemical products. Proper drainage from the laundry is required.

C2 ADMINISTRATION AND STAFF SUPPORT FACILITIES

FUNCTIONAL DESCRIPTION

This component provides facilities for Administration and Staff Support. The range of activities accommodated here will be staff-centric, in that interaction with patients or the public will not routinely take place within the component. Facilities are provided for both resident and visiting staff.

- Administration Offices, including:
 - 3 Private Offices, and
 - 2 Shared Offices with 2 workstations;
- Shared Nurse’s Office with Resource Library;
- Staff Support, including:
 - Staff Lounge, and
 - Change Room and Showers.

Education

Education activities (with the exception of self study) are not anticipated in this component.

OPERATIONAL DESCRIPTION

Hours of Operation

24/7

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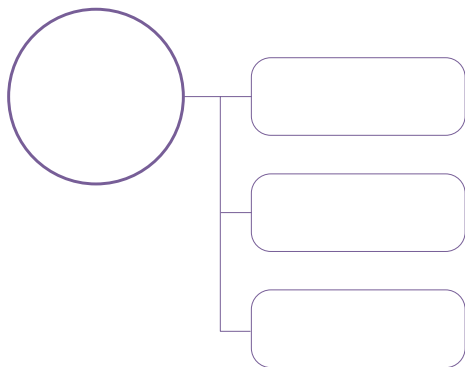
Not applicable.

STAFFING & OCCUPANCY ESTIMATES

See Project Parameters

DESIGN CRITERIA

External Relationships



- 1 Provide direct access by general circulation from Administration and Staff Support Facilities to the Main Entry/Reception for the movement of staff.
- 2 Provide direct access by general circulation from Administration and Staff Support Facilities to Ambulatory, Emergency & Diagnostic Services for the movement of staff/physicians.
- 3 Provide convenient access by general circulation from Administration and Staff Support Facilities to All Areas of the Facility for the movement of staff.

Internal Relationships**Access to Views and Natural Light**

Staff that work in this component for prolonged periods of time should have priority access to views and natural light. Likewise, staff that do not stay within this component for lengthy periods may be provided with workstations and offices that are located away from windows and natural light, if it is not possible to provide all staff with equal access to views and light.

Acoustic Privacy

Acoustic isolation is important throughout the component. Conversations occurring in the office typically involve confidential staff or patient health issues; conversations at normal voice levels should not transmit beyond the room in which they occur.

Flexibility

Standard room sizes and configurations are used wherever possible throughout the component. This achieves short and long term flexibility for change in use. Versatile office and workstations accommodate a variety of disciplines and office activities.

Character and Environment

Care should be taken in the design of the office interior to create space that is welcoming while ensuring that confidentiality and privacy are maintained. The staff lounge should offer a relaxing, yet interactive environment for staff to enjoy a lunch/coffee break, intermingle with other staff, and revitalize during a shift.

Safety and Security

In general, patients will not be present in this component. This component is designated as a staff-only zone. The operations of this component can be closed when other components remain open to the public and for this reason, the offices and support area can be independently secured.

Planning assumes consideration of proper ergonomics in design of workstations.

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D1 ADULT DAY PROGRAM**FUNCTIONAL DESCRIPTION**

This component contains facilities for an Adult Day Program, if one is to be located onsite. This component offers an enjoyable and safe day program for adults who have decreased functionality, but are still living at home in the community, and who may otherwise be at risk of losing their independence.

Daily activities offered at the Adult Day Program may include:

- crafts and painting;
- pet visitors;
- gardening;
- baking and cooking;
- board games, card games, crosswords;
- reminiscence discussions;
- exercise groups;
- sing song music group;
- bingo;
- movies;
- special events & birthday parties;
- outings;
- current events groups; and
- education sessions.

Specific elements of the program would include:

Day Program

Providing nursing and rehabilitation therapy support to restore and maintain individuals at the highest level of functioning possible so they can remain living at home or in supportive housing as long as possible.

A tub room will be available either for use by day program participants who may need assistance with personal bathing. Foot care may also be provided.

Planning assume the Kitchen at WLH would provide lunch and snacks for the program participants.

Home Support

Providing assistance to those clients requiring support in preparing for and returning home from the Day Program.

Transportation

Providing transportation to and from the Day Program as necessary.

Education

Educational activities occurring in this component will include client education, orientation of new staff and health discipline students/learners (e.g. nursing, therapists).

OPERATIONAL DESCRIPTIONS

Hours of Operation

0900 to 1500 hours, Monday to Friday

WORKLOAD

See Project Parameters

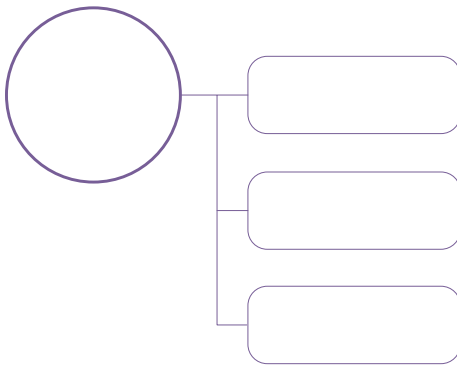
Assumes an average of 5 clients/day and a maximum of 8/day.

STAFFING & OCCUPANCY ESTIMATES

See Project Parameters

DESIGN CRITERIA

External Relationships



- 1 Provide direct access by internal circulation from the Adult Day Program to a drop-off area, segregated from the main Hospital entrance.
- 2 Provide direct access by internal circulation from the Adult Day Program to a secure Outdoor Garden Area for the enjoyment of clients and staff.
- 3 Provide direct access by general circulation from the Adult Day Program to the Shared Support Area (i.e. Kitchen) for the movement of meals.

Internal Relationships

Elder-Friendly Environmental Design

Provide a comfortable, warm and welcoming environment for participants of the Adult Day Program. Furnishings should be comfortable, wheelchair accessible, and incorporate elder-friendly design elements, such as:

- glare-free, solid-coloured floors (avoid changes in floor colour and level);
- continuous hand rails and storage alcoves for wheelchairs/walkers;
- chairs with good back and head support as well as stable armrests;
- clearly¹ labelled and sufficiently sized signage for wayfinding; and
- accessible call bells.

**D1
Adult Day
Program**

Drop-off Area

Please see General Planning Criteria for further interventions.

Provide a minimum of 300 lux from overhead lighting, between 50 to over 300 lux on floor surfaces using a system of several low

**Outdoor Garden Area
(secure)**

level downward directed lights. Provision for the ability to control the amount of lighting in any room, and in different segments of the rooms, is essential.

Provide a consistent temperature of approximately 73 degrees F, with an absence of drafts. It is helpful to have all fresh air venting as close as possible to the ceiling with ceiling fans for circulation. This system is preferable to air-conditioning since the latter is not well tolerated by the majority of elderly clients.

Many clients may have decreased hearing abilities or have difficulty with concentration when presented with distracting background noise. Minimize fan noise and other distracting sounds to the degree possible. Construction materials that reduce or absorb sound transmission would be beneficial.

Consider installation of an audio loop for use with hearing devices, as these are less expensive to install during construction.

Create a home-like environment to the degree possible. Security measures should be unobtrusive.

Accessibility

All areas must be wheelchair accessible with flush entrances. Distances to a fire exit should be carefully considered along with time and mobility factors. As the mobility of some of the participants may necessitate staff assistance during an emergency, staff assistance procedures and clean and concise escape instructions should be posted at strategic locations.

All client use washrooms should be planned as staff assist with 800mm on either side of a non-tank toilet, 1500mm clear space in front of toilet, the toilet place in line with the door and a non-tank fixture to facilitate commode use.

Circulation

Aim to provide: interesting circuitous routes for walking, highlight nodes and resting places, day lit corridors with orienting views, and continuous handrails inside and outside.

Offer Choice and Variety

Provide a range of interaction areas that allow participants to assert their independence, autonomy and choice, such as: an area for group activities, several smaller conversational seating arrangements as well as a quiet room for individual time. Undifferentiated large spaces should be avoided.

Secure Outdoor Garden Area

Incorporate an adjoining outdoor garden area that is secure for program participants. This space will be used particularly during summertime activities, such as gardening and bird watching.

Separate Main Entrance

This component will require a separate main entry from that of the WLH, due to its distinctive function. Provide an easy-to-locate drop off point and a universally accessible entrance way, possibly off the ground floor level.

Infection Control

Facilitation of infection control will include hands-free sinks and hand sanitizers in central locations that are readily accessible to participants and staff.

Safety and Security

Planning assumes one main entrance for the Adult Day Program. To ensure the safety of staff, participants and caregivers, special protection measures should include:

- controlled access and egress points during routine hours of operation; consider installation of a perimeter monitoring system;
- restricted (unsupervised) access to remaining WLH facility;
- client washrooms should be provided with a silent resident nurse call system; a simple pull-cord system works best and can be routed to pagers worn by staff; and
- where handrails are provide they should be on both sides of the walls of the corridor to serve both left-handed and right-handed people. Width between handrails should allow for easy passage of two wheelchairs.

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D2 EMERGENCY MEDICAL SERVICES**FUNCTIONAL DESCRIPTION**

EMS provides transport and acute medical care for patients with illnesses or injuries that constitute a medical emergency to the next point of definitive care, the Watson Lake Hospital.

The EMS in Watson Lake is also responsible for transporting patients to the local airport for medical evacuation (“medevac”) to larger tertiary or quaternary hospitals (e.g. Whitehorse, Edmonton) for acutely ill patients that cannot be treated locally. In addition, EMS is responsible for in-house training sessions to staff and EMS Volunteers.

This component identifies the facilities required for Emergency Medical Services (EMS), if they are co-located with the Watson Lake Hospital. While these facilities do not constitute a “true component” they are identified here for ease. In reality, the different facilities required will be located in other components within the hospital and are identified as such in the space list.

The hospital will provide facilities for day to day office/management activities, sleep room, equipment storage and ambulance garage. The hospital also launders EMS soiled linen, while EMS launder their own uniforms. The EMS ambulance is cleaned at the hospital.

Training sessions may be held in one of the Hospital’s multipurpose rooms.

OPERATIONAL DESCRIPTIONHours of Operation

EMS provides 24/7 service as follows:

Paramedics: 0800 to 1600 hours, Monday to Friday

EMS Volunteers: weekends/evenings (on-call basis)

Educational/Training Sessions

Assumes access to multipurpose meeting rooms for training sessions within hospital as required for small groups, or access to larger meeting rooms in the community (at the College) for large groups

WORKLOAD

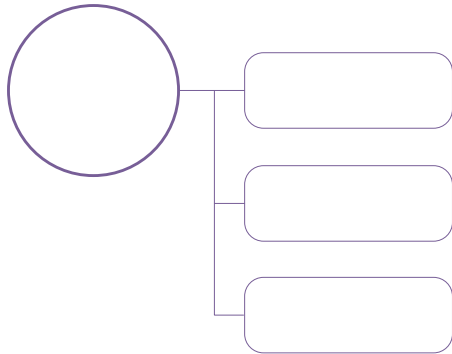
Not applicable to this component.

STAFFING & OCCUPANCY ESTIMATES

See Project Parameters

DESIGN CRITERIA

External Relationships



- 1 Provide direct access by general circulation from Emergency Medical Services to the Ambulatory, Emergency & Diagnostic Services for the movement of staff.
- 2 Provide direct access by general circulation from Emergency Medical Services to the Multipurpose Meeting Rooms for the movement of staff for group/training activities.
- 3 Provide direct access by general circulation from Emergency Medical Services to Administration & Staff Support Facilities for the movement of staff to the shower/change room and lounge area.

Internal Relationships

**D2
Emergency
Medical Services**

Integration 1

Provide opportunities for integration of EMS staff with Hospital staff to promote the sharing of ideas, skill sets and possible resources.

Ambulatory, Emergency & Diagnostic Services

Access to Shower Facilities

Due to the nature of their work, EMS personnel will require access to shower facilities located within the C2 Administration & Staff Support Facilities.

Multipurpose Meeting Rooms

Acoustic Attenuation

Provide acoustic cushioning between the EMS sleep rooms and outside components. Consider locating EMS away from noise generating hospital functions, such as the laundry room, to reduce disruptions from noise.

Administration & Staff Support Facilities

Space Requirements

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
	<u>A1 Main Entry/Reception Area</u>				
01	Vestibule Entry/Draft Control	1		7.0	Automatic doors; draft control; public telephone, intercom and entry buzzer/bell; includes closet for storage of minor seasonal equipment @ 1.5sm
02	Alcove (wheelchair/ scooter)	1		2.0	Storage and parking for up to 2 wheelchairs/scooters/
03	Alcove Overcoat/Winter Boot	1		1.0	
04	Reception/Registration	1		8.0	Accommodate 2 workstations with 1 positioned for reception
05	Health Records/File Storage,	1		8.0	Accommodates 15 linear meters of file storage; Secured access
06	Business Centre	1		9.5	Includes fax, photocopier, network printer, shredder, and physician/staff mailboxes
07	Triage/Admitting Booth	1		5.5	Affords privacy and security with dual egress. Incl. panic button. Contiguous with Reception Desk (Ref 04);
08	Waiting Area	1		15.0	Comfortable seating for up to 12; incl. 2 wheelchair spaces. Incl. 1 small sofa, TV
09	Telephone Kiosk	1		1.0	Public access telephone; wheelchair accessible
10	Public Washroom, Wheelchair	91		4.5	2 piece, wheelchair accessible; assist, baby change table; include bariatric toilet and other design features; needle disposal
11	Resource Alcove	1		1.5	Resource materials, brochure display
12	Vending Machines Alcove	1		1.5	Accommodates 1 vending machine and 1 automatic coffee dispensing machine; recycling alcove
13	Family Room/Healing Room	1		12.0	First Nation décor/design; local artwork and non-institutional atmosphere; comfortable seating consider special ventilation for smudging, fire alarm override; locate in close proximity to inpatient beds; requires dual access;

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
	<i>Subtotal A1. Main Entry/Reception Area</i>			76.5	92 CGSM (@1.2 grossing factor)
	<u>B1 Ambulatory/ Emergency/ Diagnostic Services Area</u>				
	<u>Ambulatory/Emergency Area</u>				
14	Ambulance Shelter	1		(0.0)	Allow 30.0 nsm for 1 protected drive through ambulance bay; provide hose bib, electrical outlets, drain
15	Ambulance Vestibule	1		8.0	Ambulance entry with automatic doors
16	Housekeeping Closet	1		3.0	Small Floor sink, hand sink with chemical mixer, bucket, mop hanger, shelving for cleaning supplies, floor drain
17	Supply Closet	1		1.5	Includes linen, pillows etc.
18	Decontamination Room	1		10.0	Negative pressure, include 2 stretcher shower heads, floor drain, ss sink and counter @ 1.5m; external access through vestibule (Ref 19)
19	Entry/Exit Vestibule	2	7.0	14.0	
20	Trauma/Urgent Care Patient Exam Bays	2	15.0	30.0	Stretcher, medical gases, cardiac/monitoring capability, ceiling mounted patient lift, sink; sliding glass partition between two room with built-in blinds; provide medical gases for up to 4 stretchers
21	Supply Alcove	2		2.0	Cart(s)
22	Equipment Alcove	1		4.5	Small blanket warmer; rapid infuser, crash cart
23	Exam/Gyne/Isolation Room	1		14.0	Locate in close proximity to inpatient area; include general/gyne exam stretcher; curtain track for privacy, family zone; includes small baby alcove (2.0m ²); negative pressure
24	Birthing/Emergency Supply Closet	1		1.5	Includes emergency birthing supplies
25	Ante Room	1		4.5	Sink, supplies, hamper
26	Washroom	1		4.5	Wheelchair accessible; 3 piece; breakaway door

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
27	Seclusion Room	1		11.0	Discrete easily accessible from ambulance bay; stainless steel sink/toilet fixture; floor bed; (refer to General Planning Criteria for further requirements)
28	Procedure Room	1		12.0	Adjacent to x-ray room; stretcher, 1shampoo sink (for eye flushing); 1 plaster sink with plaster trap
29	Plaster/Splint Supply Cupboard	1		1.5	
30	Treatment Room	1		12.0	Sink, 3 reclining chair positions with privacy curtains
31	Washroom, Patient, Wheelchair	1		0.0	(see patient washroom in Diagnostic- Ref 45)
32	Crash Cart Alcove	1		1.0	
33	Clean Linen Alcove	1		1.0	
34	Soiled Linen Alcove	1		0.5	
35	Charting Station	1		6.0	3 seated positions @ 2sm; counter for standing; requires proximity and direct visual access to Trauma Room (Ref 20)
36	Image Viewing	1		1.5	Lightbox, PACS
37	Medication Room	1		12.0	Secure; space for 2 ADMs, med cart; 2 narcotic cupboards, fullsize biomedical fridge, work counter with sink, cupboards, shelving; disposal bucket for discarded pills/meds
<i>Subtotal, Ambulatory/ Emergency Area</i>				156.0	
<u>Diagnostics</u>					<i>Locate central to Ambulatory/ Emergency Area Inpatient Area and Medical Clinic</i>
<i>Radiology Area</i>					
38	Change Cubicle	1		2.0	Wheelchair accessible
39	Clean Linen Alcove	1		0.5	
40	Dirty Linen Alcove	1		0.5	
41	Portable Equipment Alcove	1		3.0	Portable x-ray unit

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
42	Procedure Room	1		15.0	Ceiling mounted camera, x-ray table and chest x-ray unit, counter with sink, shielded control cubicle, oxygen, suction, minimum ceiling height 3.5m, ceiling mounted lift, call bell; storage cupboard
43	Work Room	1		7.5	Workstation with PACS monitor; shielded from Procedure room; locate between Procedure room (Ref 42) and Laboratory (Ref 46)
<i>Laboratory Area</i>					
44	Phlebotomy/ECG Room	1		9.5	Adjacent to laboratory; 1 chair; 1stretcher sink, supply cupboard
45	Washroom, Patient, Wheelchair	1		4.5	2 piece washroom; W/C accessible; adjacent to Laboratory with pass through window for specimen; also requires direct adjacency to Emergency/Ambulatory area
46	Laboratory, Accessioning/Prep/Shipping	1		12.0	Workstation, bench w/adjacent sink (s.s.) POCT analyzer; microscope, and centrifuge bench, hand washing sink, 2 fridges – 1 large, 1 small. Pass through window from washroom (Ref 45); supply cupboards
<i>Subtotal, Diagnostics</i>				<i>54.5</i>	
<i>Subtotal, B1. Ambulatory/ Emergency/ Diagnostic Services</i>				210.5	295 CGSM (@ 1.4 grossing factor)
<u>B2 Inpatient Area</u>					
47	Care Station	1		8.0	2 workstations; EHS dispatch; Adjacent/Contiguous with Reception (Ref 04) with direct access but visual/audio privacy through design; Ability to visualize inpatient bed area and ambulatory/emerg; but with auditory privacy design features; telemetry monitor
48	Team/Resource Room	1		8.0	Includes 2 touchdown workstations @ 3.0m; telehealth capability; resource shelf for incomplete charts

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
49	Patient Room, Single	4	20.0	80.0	Staff sink; Ceiling mounted patient lift to washroom. Rooms include Family Area with fold out bench/sleeping area
50	Washroom	4	6.0	24.0	3 fixtures (incl shower), wheelchair accessible, 2-side access to washroom
51	Patient Room, Single, Isolation	2	20.0	40.0	Incl. ensuite bathroom with shower, sink, toilet and ceiling mounted patient lift to bed; Wheelchair accessible; Provides negative pressure; Consider bariatric features for 1 room
52	Ante Room	2	4.5	9.0	Incl. sink, supplies, trash hamper
53	Washroom	2	6.0	12.0	3 fixtures (incl shower); wheelchair accessible; 2-side access to washroom
54	Supply Alcove	1		2.0	Clean linen & other; securable
55	Dirty Linen Alcove	1		0.5	
56	Pt/Family Lounge	1		14.0	Accommodate up to 7 people Comfortable seating, T.V.; Wheelchair accessible
<i>Subtotal, B2. Inpatient Area</i>				197.5	277 CGSM (@ 1.4 grossing factor)
<u>B3 Shared Support Area</u>					<i>Shared between Hospital and Medical Clinic</i>
57	Washroom, Staff	1		3.5	2 piece
58	Laundry Alcove	1		5.0	Domestic washer & dryer
59	Utility, Clean	1		9.0	Clean, portable equipment, supplies
60	Utility, Dirty	1		9.0	Sink, hampers, carts; bedpan washer sanitizer
61	Medication Preparation Area/Ante Room	1		9.5	work counter, open shelving, storage, computer, printer/labeler, sink, shelving for PPE, soiled linen hamper

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
62	Fume Hood Room	1		10.0	Must have appropriate ventilation and pressurization for the preparation of toxic materials (e.g. cytotoxic medications for chemo patients); Includes 1 fume hood (chemo only); emergency eyewash station; soiled linen hamper; sink, small biomedical fridge
63	Sterilization Alcove	1		6.0	Sink, counter, sterilizer
64	Housekeeping Closet	1		5.0	Incl. floor sink, hand sink, mop hanger, housekeeping cart, supply shelf; chemical mixer
65	Equipment Storage	1		8.0	
66	Tub Room	1		14.0	Disability access tub equipped with shower heads, wc (including staff assist & commode), hairwashing sink, ceiling lift, blanket warmer, dressing bench, floor drain;
67	Therapy Room	1		20.0	1 workstation; 1 treadmill; 3 wall mounted pulleys; 1 exercise bike; relocate if ADC included in facility
68	Storage	1		8.0	Relocate if ADC included in facility
<i>Subtotal, Shared Support</i>				<i>107.0</i>	<i>150 CGSM (@ 1.4 grossing factor)</i>
<u>Kitchen</u>					
69	Office, Food Services Manager	1		7.5	1 workstation with computer, phone, internet access
70	Storage, Dry Food	1		4.0	
71	Cooler	1		2.0	Reach-in
72	Freezer	1		2.0	2 small freezers (1 for uninspected meats)
73	Storage, Non-Food	1		3.0	
74	Preparation Area	1		5.0	2 sinks, counter
75	Prep area, small	1		2.0	Stainless Steel counter used for preparation of FN meals; inc. domestic fridge
76	Production Area	1		10.0	Industrial stove; microwave, equipment storage; 2 fridges

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
77	Food Servery and Patient Meal Tray Assembly Area	1		2.0	
78	Dish/Pot Washing area	1		5.0	3 sinks; commercial dishwasher
79	Cart Wash/Holding	1		2.5	
80	Coffee/snack counter	1		2.5	Counter for coffee & hot water Urns, small sink Cupboard with supplies; Accessible from corridor by patients/family/ staff; small undercounter fridge; ice machine; Locate in inpatient area if other kitchen area located away from inpatient area;
81	Housekeeping Closet	1		5.0	Full housekeeping closet; sink, floor sink/drain, room for cart storage, shelving for cleaning supplies, mop/bucket storage
	<i>Subtotal, Kitchen</i>			52.5	<i>63 cgsm (@ 1.2 grossing factor) (60 cgsm excluding snack counter)</i>
	<i>Subtotal B3. Shared Support Area</i>			159.5	207 CGSM (@ 1.3 grossing factor) (142 cgsm excluding kitchen but including snack counter)
	<u>B4 Medical Clinic & Retail Pharmacy Area</u>				
	<u>Medical Clinic</u>				
82	Medical Clinic Reception Area	1		6.0	1 workstation with telephone, internet for registration
83	Admitting Area	1		4.0	Small booth separate from registration
84	Health Records	1		8.0	15 linear metres of file storage; Consider co-locating with component A1 Main Entry/Reception Area
85	Waiting Area	1		14.5	Consideration for co-location with Hospital Waiting Area, allowing for visual distinction between waiting areas. Accommodate up to 6 people; inc. small child play area
86	Billing Office	1		13.0	Incl. 2 workstations and computers
87	Business Centre	1		7.5	Photocopier, fax, stationary supplies

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
88	Office, Manager/Coordinator	1		9.0	1 workstation and computer
89	Shared Office, Physicians	1		24.0	Accommodating 4 workstations @ 5sm each plus resource alcove
90	Dictation Alcove	1		2.0	1 computer workstation
91	Staff Coffee Counter	1		2.5	Sink, coffee counter, hot water tap, small fridge
92	Exam/Consult Room	4	11.0	44.0	Incl. sink, counter, exam stretcher; workstation capability; inc. cupboards above sink for supplies
93	Exam/Dental Room	1		9.0	Sink, counter, dental chair; cupboards secured
94	Washroom, Patient/Client	1		4.5	2 piece washroom. Wheelchair accessible
95	Height/Weight Alcove	1		2.0	Floor scale, counter with baby scale and small exam area
96	Point-of Care Testing/Supply Alcove	1		2.5	Counter with sink, cupboard, supplies; small undercounter fridge
97	Clean Linen/Supply Alcove	1		2.5	Linen, medical supplies, printed material, secure cupboard for med samples
98	Dirty Linen Alcove	1		0.5	
99	Washroom, Staff	1		3.5	2 piece washroom
100	Housekeeping (Broom) Closet	1		0.5	
101	Supply Storage	1		8.0	
102	Retail Pharmacy	1		16.0	Provide 2 workstations with raised counters, open to public beside the dispensing wicket; provide overhead shelving for oral medications, work counter, telephone and internet access, small fridge, sink, storage, multi-drawer lateral file unit. Must be secure after hours. Provide staff distress button; Includes 2 locked cupboards for high potency narcotics
103	Storage	1		8.0	
104	Counseling Booth	1		4.0	Wheelchair accessible; privacy considerations
105	Administration Area	1		8.0	Inc. workstation for Pharmacy administration

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
106	Waiting Area	1		6.0	4 seats
	<i>Subtotal, B4. Medical Clinic & Retail Pharmacy Area</i>			209.5	272 CGSM (@ 1.3 grossing factor)
	<u>B5 Community Care Area</u>				
	<u>Shared Support</u>				
107	Reception/ Clerk	1		6.0	Incl. 1 workstation; visual access into waiting room
108	Storage Room, Active Charts	1		8.0	Includes secure room for storage of active records/charts
109	Business Centre	1		9.5	Incl. 2 printers, fax, office supplies, cupboards, laminator (4' long), shredder, photocopier
110	Waiting Room	1		18.0	Seating for up to 10 people, includes access for 1 wheelchair. Includes small play area for children @ 4 sm
111	Washroom, Patient/Client	1		4.5	2 piece washroom; wheelchair accessible
112	Washroom, Staff	1		3.5	2 piece washroom
113	Housekeeping Closet	1		1.5	Broom closet; number of housekeeping closets to be reviewed during design stage
	<i>Subtotal, Shared Support</i>			51.0	
	<u>Home Care</u>				
114	Office, Home Care Nurse	1		12.0	Provide 2 workstation(s) @ 5sm, telephone, internet, shelves
115	Home Support Touchdown	1		6.0	
116	Storage	1		9.0	Floor-to-ceiling shelving unit for medical supplies and equipment, oxygen, wheelchairs, walkers, etc.
	<i>Subtotal, Home Care</i>			27.0	
	<u>Child Development Centre</u>				
117	Office/Consult Room, CDC	1		14.0	1 workstation, table for child, 2 chairs. Incl. storage alcove for toys/equipment @ 2sm
	<i>Subtotal, CDC</i>			14.0	

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
	<u>Health Centre</u>				
118	Shared Office, Community Health Nurse	1		16.0	Includes 2 workstations @5.0sm to accommodate nurses & 1 wkstn @4.0sm for student
119	Office, Nurse-In-Charge	1		9.0	Workstation
120	Inter-generational Exam/Consult Room	3	12.0	36.0	Each room incl. counter space, sink, 3 chairs; adjacent to waiting room for visual access to play area
121	Biological/Medication Room	1		9.5	Secured; special ventilation; small freezer, 2 vaccine refrigerators, 1.5m of counter space, storage cupboards.
122	Office, TB Worker	1		12.0	Workstation; small meeting area; small fridge & cupboard, sink
123	Interview Room	2	11.0	22.0	Counseling Office; dual egress, small workstation
124	Washroom, Public	1		5.0	3 piece (includes child toilet); baby change station, wheelchair accessible
125	Storage	1		9.0	Includes storage of O ₂ canisters
	<i>Subtotal, Health Centre</i>			<i>118.5</i>	
	<i>Subtotal, B5. Community Care Area</i>			210.5	274 CGSM (@ 1.3 grossing factor)

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
	<u>B6 Multipurpose Meeting Room Area</u>				
126	Group/Teaching Room, Large (Telehealth Capable)	1		60.0	Accommodates up to 25 people, and capable of dividing into 2 separate rooms; Accessible to all programs Tele/health/video conferencing capable. Accommodates the following: telehealth equipment, 3 network drops (for computer, videoconference, and networked printer/fax), automatic screen projector, proper acoustics to avoid background noise, max. 9ft ceiling, wall mounted clock. Provide convenient access to public entry; Include 2 hands free sinks, coat alcove for coat rack and up to 5 strollers; ensure plenty of hookups for computer training sessions
127	Coffee Counter/Servery	1		2.5	Counter with sink, supply cupboard above, small undercounter fridge
128	Optometry Alcove	1		5.0	Securable
129	Storage Room	1		8.0	
130	Small Meeting Room (Telehealth Capable)	1		12.0	Accommodates up to 8 people; telehealth capable
131	Washroom, Public	1		4.5	
	<i>Subtotal, B6. Multipurpose Meeting Room Area</i>			92.0	110 CGSM (@ 1.2 grossing factor)
	<u>C1 Facility Operations Area</u>				
	<u>Materials Management Area/EMS Sleep Room</u>				
132	Loading Dock	1		0.0	Assumed included in the conversion from component gross area to building gross area; large doors, ramp; space for 3 vehicles
133	Receiving/ Staging/ Holding Area	1		8.0	Includes small workstation for processing orders
134	Waste Holding	1		9.5	Separate areas for general waste, biohazardous waste, recyclable materials, temperature controlled

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
135	Soiled Linen Holding	1		5.0	
136	General Equipment Storage	1		14.0	
137	Inventory/Bulk Storage	1		18.0	Shelving with ergonomic considerations
138	Inactive Records Storage	1		10.0	Provides inactive health records storage
139	Sleep Room	2	6.0	12.0	
140	Washroom	1		3.5	Shared (Ref 139)
141	Disaster Response/ Pandemic Supply Storage	1		8.0	
142	Gas Storage	1		8.0	Hook ups; secure devices; in close proximity to loading dock
<i>Subtotal, Materials Management</i>				<i>96.0</i>	
<u>Facilities Maintenance/Operations Housekeeping</u>					
143	Work Room/ Storage	1		12.0	Shop space to support 2 work benches, equipment, shelving, electrical plugs, cupboard for supplies
144	Central Housekeeping Storage	1		12.0	Storage for housekeeping supplies, equipment, chargers, polishers, scrubbers; Includes workstation
145	Clean Linen Storage	1		7.5	
146	Laundry Alcove	1		5.0	Domestic washer & dryer, folding/ironing table; cupboard for supplies; small sink
147	Equipment Washing Bay			2.0	Stainless Steel; floor drain; hand held shower apparatus; shelving; counter space; large sink for soaking (also used by EMS)
148	Communications Room	1		0.0	Included in building gross
149	Electrical/Boiler Rooms	2		0.0	Included in building gross
150	Garage (external)	1		(65.0)	Snow removal, lawn mowers, outdoor equipment and supplies; 3 vehicles (Requirement will be assessed during site and building design)
<i>Subtotal, Facility Maintenance/Housekeeping</i>				<i>38.5</i>	

Ref	Space	Area Requirements			Remarks
		units	nsm/unit	nsm	
151	<u>Morgue</u> Body Holding/ Prep Room	1		14.0	Accommodates 2 obese bodies in refrigerated storage; (6sm); body handling and prep area @ 5sm, includes hand/hair washing sink; morgue stretcher (high-low) @ 2.5 sm;
152	Viewing Room	1		10.0	
<i>Subtotal, Morgue</i>				<i>24.0</i>	
<i>Subtotal, C1. Facility Operations Area</i>				158.5	182 CGSM (@ 1.15 grossing factor)
<u>C2 Administration and Staff Support Facilities Area</u>					
153	Private Office,	3	9.0	27.0	1 workstation, filing cabinet
154	Shared Office; 1 touchdown	2	13.0	26.0	2 workstations each with filing cabinet (1 for First Nations)
155	Shared Office, Nurses/Visiting Specialists/Students	1		15.0	2 touchdown workstations@ 4sm each and small meeting area @ 3 sm with resource area
156	Shared Office, EMS	1		0.0	See EMS component
157	Lockers/Washroom, Female	1		10.0	10 porkchop lockers (must accommodate winter boots/sorrels), shower, toilet, sink (room size and number of lockers to be confirmed once staffing numbers are developed)
158	Lockers/Washroom, Male	1		10.0	10 porkchop lockers (must accommodate winter boots/sorrels), shower, toilet, sink room size and number of lockers to be confirmed once staffing numbers are developed)
159	Break Room (Shared with all facility programs)	1		20.0	Includes 2 tables, soft seating for 8, refreshment counter with sink, microwave, hot water tap, fridge, bulletin board, mail slots, coat boot alcove at 2.5m
<i>Subtotal, C2. Administration and Staff Support Facilities Area</i>				108.0	140 CGSM (@ 1.3 grossing factor)
Total, Facility				1 422.5	1 849 CGSM Excluding ADC and EMS
Facility BGSM					2 274 SM (@ 1.23 gross up)

Optional Value Added

<u>Adult Day Program Area</u> <i>(Optional)</i>					Provide direct access to secure outdoor garden area
	<u>Day Program Area</u>				
	Foyer Area			0	Incl. in net-to-gross conversion; includes closet for outerwear
160	Waiting Area	1		4.0	2 chairs, coffee table, information display
161	Multipurpose Room	1		25.0	Accommodates approx 5 clients; 2 hands free sink. Incorporate various conversational seating/activity arrangements
162	Nourishment Centre	1		7.5	Contiguous with Multipurpose Room Provides: island, refrigerator, stove/oven, microwave, sink, dishwasher (commercial status with sterilization), dual height counters, cupboards. *Note: All appliances and working spaces should be wheelchair accessible.
163	Washroom, Client	1		5.5	W/C accessible, sink, two sided assist, toilet, sit to stand lift
164	Tub Room	1		0.0	(access to facility Tub Room – see Ref 66).
165	Storage	1		8.0	Activities supplies, wheelchairs
166	Purse Locker	1		1.0	5 purse lockers
167	Alcove, Coat and Boot	1		1.0	
168	Quiet Room	1		8.0	2 chairs (1 recliner), small coffee table
169	Office, Coordinator	1		12.0	2 workstations with telephone, computer, filing cabinet
170	Washroom, Staff	1		3.5	2-piece
171	Housekeeping Closet	1		5.0	Floor sink, equipment
172	Alcove, Soiled Linen	1		0.5	
173	Alcove, Clean Linen	1		0.5	
174	Therapy/Rehab Room	1		0.0	See Therapy/Exercise Room (Ref 67)

	<i>Subtotal, Adult Day Program Area</i>			81.5	106 CGSM (@ 1.3 grossing factor)
	<u>Emergency Medical Services (Optional)</u>				Consider co-locating with Hospital
175	Office, EMS Staff	1		18.0	Accommodates 3 workstations with computers, small storage
176	Training Room	1		0.0	See B6 Multipurpose Meeting Rooms
177	Sleep Room	2		0.0	Shared (Ref 139) Accommodates 1 bed per sleep room.
178	Washroom	1		0.0	Shared (Ref140)
179	Ambulance Garage/Equipment Storage	1		(50)	External; heated; size to be confirmed during design; electrical outlets
	<i>Subtotal, EMS</i>			18.0	23 CGSM (@ 1.3 grossing factor)
	Total Facility Including Options			1 522.0	1 978 CGSM
	Facility BGSM				2 432 SM (@1.23)