C6 REHABILITATION SERVICES

C6.1 SERVICE DESCRIPTION

C6.1.1 Scope of Clinical Services

This section C6 sets out the requirements for the centralized facilities for the Facility's Rehabilitation Services to be achieved or accommodated by Project Co in providing the Works and the Services. The goal of Rehabilitation Services is to enable patients to attain their optimal functional potential and to meet their desired goals. In addition, Rehabilitation Services assists in the timely and safe discharge of patients from the Abbotsford Hospital and Cancer Centre. Rehabilitation Services supports both inpatient and outpatient programs of the Abbotsford Hospital and Cancer Centre and will be integrated across all settings and coordinated with other clinical areas (e.g., audiology, pharmacy, radiology, respiratory therapy, and dietary). Inpatient rehabilitation services will be delivered to support directional plan inpatient programs (i.e., supporting acute with access to subacute in region). The scope of outpatient services will be limited to those that are not already available and accessible in the community and are an essential component of an interdisciplinary ambulatory care program and support decreasing lengths of stay, or support new and specialized programs. Preventative programs will also be developed in partnership with community resources/other organizations, and incorporated as components of existing rehabilitation programs. In addition, rehabilitation services for cancer patients will be provided to assist them to make functional gains and to manage symptoms to enable them to return home. These patients will require community follow-up rehabilitation services upon discharge to help cope with issues as they arise. The amount of rehab required will vary with the type of patients seen by the cancer clinic.

The range of services to be provided within this component include:

- Physiotherapy services
- Occupational therapy services
- Speech language pathology services
- Audiology services

A brief description of the activities in each area is as follows:

C6.1.1.1 Physiotherapy Services

The range of services/activities to be performed within this component includes:

- Assessment/examination and consultation for all age groups
- Exercise on plinths, high mats and floor mats, exercise using resistance apparatus, and free movement exercise (carried out in all treatment areas)
- Gait training, including parallel bars, stairs and open floor space
- Heat and cold therapy from a variety of fixed and mobile sources
- Hydrotherapy, using extremity tanks
- Pain and swelling reduction modalities
- Preventative programs (e.g., staff education/back care)

C6.1.1.2 Occupational Therapy Services

The range of services/activities to be performed within this component includes:

Assessment of functional abilities and deficits (incl. cognition perception) for all age groups

C6 REHABILITATION SERVICES

- Rehabilitative approaches (e.g., improving independence: self care activities, development of wheelchair mobility)
- Therapeutic activity (e.g., activity analysis, adaptation of activities)
- Health promotion approaches (e.g., education of families, work simplification, energy conservation, stress management)
- Activities of daily living (ADL)
- Seating and positioning

C6.1.1.3 Speech Language Pathology (SLP)

The range of services/activities to be performed within this component includes:

- SLP will be a required component of a comprehensive acute care program and for special populations (e.g., pediatrics, elderly with complex needs, head and neck cancer patients)
- Diagnostic and treatment services will be provided for inpatients and outpatients with communication disorders of all age groups
- The program provides screening, assessment, therapy, counselling, consultation and discharge planning for inpatients and outpatients with communication disorders of all age groups
- The main referral bases for inpatients are neurology (stroke, head injury, other neuro disorders), medicine, rehabilitation, and otolaryngology. The outpatient program provides services to the population of cancer patients including laryngectomy patients, voice disorders and neuro-rehabilitation
- Assessment and intervention for swallowing and communication needs including specialized diagnostic testing for swallowing disorders
- Diagnostic and treatment services will be provided for head and neck patients of all age groups

C6.1.1.4 Audiology Services

The range of services/activities to be performed within this component includes:

- Assessment/examination and consultation in relation to disorders of human hearing, balance and neural system functions of a pediatric and adult population
- Measurement and interpretation of electro diagnostic tests (e.g., OAE otoacoustic emissions, ENG testing, sedated ADR testing in pediatrics, and ABR – auditory brainstem response)
- Provision of audiological rehabilitation
- Supervision and conduct of newborn hearing screening programs
- Provision of hearing care by selecting, evaluating, fitting, facilitating
- Referral link to community and public health resources

C6.1.1.5 Current Trends

In providing the Works and Services, Project Co shall take into account the following trends:

- Demand for inpatient rehabilitation services intensifies as hospital lengths of stay decrease. Rehabilitation Services contribute to the achievement of these reduced lengths of stay by enabling patients to achieve functionality more quickly. In addition, a shift to outpatient service provides the patient with continued support until they reach an optimal level.
- A greater focus on providing a comprehensive continuum of services that effectively integrates hospital-based rehabilitation, community support and follow-up services.

C6 REHABILITATION SERVICES

- Providing a multidisciplinary approach to rehabilitation addressing: pain and system control
 and relief for cancer patients; improving and maintaining functional abilities; improving
 quality of life; increasing independence in activities of daily living; and providing caregiver
 support.
- There is increased focus in evidence-based care, development of outcome-based measures and multidisciplinary research.

C6.1.2 Scope of Education Services

The Rehabilitation Services will participate in the clinical training of PT, OT, SLP, and audiology students from UBC and out of province, including:

5 to 6 students at a time (incl. Rehabilitation assistant students), 6 to 8-week duration.

C6.1.3 Scope of Research Services

Any research activities taking place within this component in the future will be accommodated within the service space provided.

C6.1.4 Specific Exclusions

This specification excludes rehabilitation services/requirements provided elsewhere, including:

- Psychological, psychiatric and nutritional support will be offered through the Cancer Centre for both inpatient and outpatient cancer patients and will be coordinated with other rehab services (see section A1(g) Cancer Centre Patient Rehabilitation)
- Satellite rehabilitation treatment areas on inpatient units (see sections B2 General Medical/Surgical Inpatient Care Units, B5 Maternal Child Program, and B6 Mental Health/Psychiatry Program)
- Expertise in geriatric assessment and rehabilitation to care for the complex/frail elderly will be developed and maintained within the Fraser Health Authority, but will not be included on this site. These patients will likely be grouped together in some format in a sub-acute care setting or as a separate geriatric assessment unit in another facility within the region.

C6.2 OPERATIONAL DESCRIPTION

C6.2.1 Minimum Hours of Operation

Hours of operation for the component will vary with each service as follows:

•	Physiotherapy	0800h to	1600h, 7 days/week
	Occupational therapy		-
•	Speech language pathology	0800h to	1600h, 5 days/week
•	Audiology	0800h to	1600h. 5 davs/week

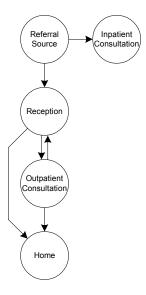
C6 REHABILITATION SERVICES

C6.2.2 Patient Management Processes

C6.2.2.1 Reception/Registration/Booking

All outpatients and visitors to the department are received at a reception desk. A variety of other tasks, including telephone call handling, appointment scheduling, answering patient queries are also undertaken here. It will accommodate patient reception and registration, appointment booking, information access, typing of reports, faxing, and a waiting area with public amenities such as a pay phone and wheelchair accessible washrooms. The waiting area should accommodate space for wheelchairs, and temporary storage space for mobility aids and pushchairs may also be required. Seating will be designed for persons with disabilities or frail patients in mind.

Most patients are ambulant while some arrive in wheelchairs. Some require portering from the Abbotsford Hospital entrance to the treatment area. Many arrive at the Abbotsford Hospital by HandiDart. Although ambulant, most patients have limited mobility and need easy access to the treatment area from the street. It is anticipated that this area will be physically related to other public amenities associated with the main entry of the Abbotsford Hospital.



Patient Flow Diagram

C6.2.2.2 Outpatient Consultation

The patient will be directed to the exercise/treatment room by a member of the rehab staff.

Patients required to re-book will be directed to a central booking service to avoid unnecessary queuing at reception. It is assumed that a dedicated outpatient scheduling system is available to co-ordinate the booking of clinics and support services. The Authorities are prepared to consider alternative proposals to scheduling where benefits can be shown.

C6.2.2.3 Inpatient Consultation

Inpatients will be treated at the bedside or in the satellite PT/OT rooms or multipurpose associated with the bed areas. Some inpatients may require treatment in the exercise/treatment room in the department. In addition, some specialty equipment is booked in conjunction with the outpatient service.

C6.2.3 Patient Information Management

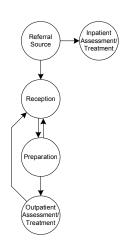
Refer to Output Specifications, Section 3: Non-Clinical Services, subsection D1 Information Management; Section 5: Design and Technical, subsection 5.3.17 Technology and Communication Systems; and Section 6: IT/Tel Services.

C6 REHABILITATION SERVICES

C6.2.4 Staff Work Processes

C6.2.4.1 Reception/Registration/Booking

All scheduled and unscheduled (i.e. urgent and emergent arrivals) patients (and/or accompanying porters and escort staff), and visitors to each of the rehabilitation areas are received at a reception/registration desk. All outpatients will register with the unit clerk. Patient information is checked against existing computer and manual records, and examination details are entered on the computer system. A variety of other tasks, including telephone call handling, appointment scheduling, patent preparation, receipt and dispatch of reports, tracings, x-ray films and notes, answering patient queries etc. are also undertaken here. All appointments will be scheduled through the clerk using the "community-wide scheduling model" currently on-line.



Process Flow Diagram

C6.2.4.2 Preparation/Changing

Some patients may require preparation and/or changing to a hospital gown prior to their assessment/treatment. Staff will direct them to a dressing cubicle in preparation for their consultation/treatment.

C6.2.4.3 Assessment/Treatment

Staff will then execute the assessment, treatment, teaching session, etc. with one or more outpatients. Rehabilitation staff will assess/treat inpatients at bedside or treat inpatients in satellite PT/OT rooms/multipurpose rooms on the inpatient unit. Staff will record patients' progress on terminals within patient treatment areas, on the units or in the charting area located in the rehabilitation services component.

C6.2.4.4 Administration

This area will accommodate the administrative offices associated with the management of rehabilitation services activities, and will provide a charting area for physical and occupational therapists. Office accommodations for the speech therapist and audiologist will be provided in rehabilitation services.

C6.2.5 Materiel Services

Refer to Output Specifications, Section 4: Facility Management Services, subsection E7 Materiel Services, and Section 2: Clinical Services, subsection C8 Sterile Processing Services.

C6.2.6 Linen/Housekeeping Services

Refer to Output Specifications, Section 4: Facility Management Services, subsections E5 Housekeeping Services and E6 Laundry/Linen Services.

C6 REHABILITATION SERVICES

C6.2.7 Equipment Asset Management

Equipment storage space will be provided within the rehabilitation services and decentralized on Inpatient Units for frequent use items (e.g. wheelchairs, mobility aids, and smaller therapy and exercise equipment). More bulky items and less frequent use items will be stored in the Abbotsford Hospital's central equipment storage located in Materiel Services.

Soiled and/or contaminated reusable equipment will be cleaned and/or decontaminated either in the soiled utilities on the unit or in the SPD in Materiel Services.

Also refer to Output Specifications, Section 4: Facility Management Services, subsection E2 Biomedical Engineering; and Section 7: Equipment.

C6.3 ACTIVITY INDICATORS

The table below summarized the projected activity for Rehabilitation Services which must be addressed by Project Co in performing the Works and the Services.

C6.3.1 Hospital Activity

Unit	Minimum Projected Yearly Activity
Total Inpatient Beds	300
Physiotherapy	_
Attendances	
Inpatient	37,500
Outpatient	10,500
Subtotal	48,000
Time Units ¹	
	066 704
Inpatient	866,784
Outpatient	210,003
Subtotal	1,076,787
Occupational Therapy	
Attendances	
Inpatient	10,518
Outpatient	800
Subtotal	11,318
Time Units	
Inpatient	438,102
Outpatient	46,826
Subtotal	484,928

¹ Not weighted.

C6 REHABILITATION SERVICES

Unit	Minimum Projected Yearly Activity
- A . W .	
Audiology	
Attendances	
Inpatient	200
Outpatient	800
Time Units	75,000
Speech Language Pathology	
Attendances	
Inpatient (Adults/Pediatrics/SCN)	2,500
Outpatient	500
Time Units	160,000

C6.3.2 Cancer Centre Activity (Incl. in Hospital Activity above)

C6.4 PEOPLE REQUIREMENTS

This component will have a total staff complement in the range of 30 FTE, consisting of 12 physiotherapists (including clinical chief), 5 rehabilitation assistant, 6 occupational therapists (including clinical chief), 3 speech language pathologists (including clinical chief), 2 audiologists, and 2 clerical/administrative personnel.

It is anticipated that the key functional areas in the component will need to accommodate the following maximum number of people.

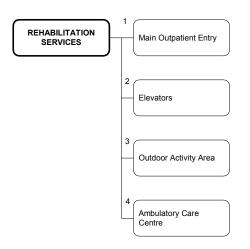
Functional Areas	Patients	Staff	Visitors	Others	Total
Reception & Control	7-8	2-3	1	1-2	11-14
Physiotherapy Activity Areas	12-15	3-4	0	1-2	16-21
Physiotherapy Support Areas	0	1-2	0	1-2	2-4
Administrative Areas	0	6-7	0	0	6-7
Occupational Therapy	4-5	3-4	0	1-2	8-11
Speech Therapy	1-2	1	0	0	2-2
Audiology	1-2	1	0	0	2-2
Staff Facilities	0	1-2	0	0	1-2

C6 REHABILITATION SERVICES

C6.5 DESIGN CRITERIA

C6.5.1 Key External Relationships

The following key relationships will be achieved in the priority order as numbered for the purposes stated:



- Provide <u>direct</u> access by <u>internal</u> circulation to the main outpatient entry for the movement of patients and staff.
- 2 Provide <u>direct</u> access by <u>general</u> circulation to the elevators for the movement of patients, staff and equipment from the Inpatient Units.
- 3 Provide <u>direct</u> access by <u>general</u> circulation to the outdoor activity area for movement of patients, staff and equipment.
- 4 Provide <u>convenient</u> access by <u>general</u> circulation to the Ambulatory Care Centre for movement of patients and staff.

C6.5.2 Key Internal Relationships/ Environmental Considerations

The following will be achieved:

C6.5.2.1 Location

Since the main focus of PT/OT work is inpatient (70%) a location close to the Inpatient Units could be ideal. However, consideration needs to be given to the implications for outpatient access.

C6.5.2.2 Accessibility

All patient care facilities in the component, and access to the component, must be designed for the disabled person to facilitate the movement and activities of patients in need of stretchers, wheelchairs, walkers, crutches and artificial limbs.

Also refer to Output Specifications, Section 1: Key Site and Building Design Criteria, subsection 1.2.4.7 Design Standards for the Disabled.

C6.5.2.3 Therapeutic Environment

In PT provide a large open versatile space. Ensure that structural elements (e.g., columns) do not interfere with functional activity space.

Provide a physical environment which helps promote positive patient attitudes towards recovery. Exterior views and natural lighting will be available to patients. Bright, cheerful interior design will be utilized.

C6 REHABILITATION SERVICES

Also refer to Output Specifications, Section 1: Key Site and Building Design Criteria, subsection 1.2.5 Indoor Environmental Quality.

C6.5.2.4 Use of Corridors/Hallways

The use of corridors/hallways/circulation space for some aspects of PT work is considered acceptable. In order to facilitate this, selected circulation areas in the Inpatient Units will be designed specifically for such functions, with grab bars, pulleys, wall mirrors, etc., incorporated into these spaces wherever deemed appropriate or possible. Different flooring colours will help to define these areas. (*To be discussed, evaluated at the design stage.*)

C6.5.2.5 Supervision

Provide staff-patient visibility throughout the treatment areas and from charting areas. One staff person may be expected to supervise the activities of several patients in a particular treatment area.

C6.5.2.6 Patient Privacy

Patients require visual privacy while in some of the various individual examination and treatment areas, particularly in the private assessment or treatment rooms.

C6.5.2.7 Outdoor Therapy Space

Access to outdoor space for PT/OT activities can be usefully provided for gait training, which ideally utilizes different ground surfaces, with ramps, steps, etc.

C6.5.2.8 Wheelchair Availability

It is essential to have good access to adjustable wheelchairs in order to carry out PT/OT work.

C6.5.2.9 Ceiling Height

Provide a small area of raised ceiling height over the stairs (3.0 metres).

C6.5.2.10 Treatment Mats

Critical dimensions are 2.3 m long by 1.6 m wide to allow for access to all sides of the mat, and up to 3 to 4 people, plus the patient. In addition, treatment mats should be height adjustable to promote good staff ergonomics.

C6.5.2.11 Ventilation

Ensure that air supply outlets are not located directly over mat areas.

Also refer to Output Specifications, Section 5: Design and Technical, subsection 5.3.15.14 Heating, Ventilation and Air Conditioning Systems.

C6.5.2.12 Finishes

Floor finishes will be non-slip and non-glare to facilitate use by elderly patients with physical and perceptual problems.

Also refer to Output Specifications, Section 5: Design and Technical, subsection 5.3.9 Finishes.

C6.5.2.13 Lighting

Provide variable lighting levels to enable patient comfort in assessment/treatment areas in which they are lying down and looking up at the ceiling.

Also refer to Output Specifications, Section 5: Design and Technical, subsection 5.3.16.11 Lighting.

C6 REHABILITATION SERVICES

C6.5.2.14 SLP and Audiologist Consultation Rooms

Provide a mechanically ventilated and acoustically treated consultation room for the speech language pathologist and audiologist to make it suitable for recording and sound-sensitive equipment.

C6.5.2.15 ADL Suite

Provide bed/bathroom, and kitchen with gas, electricity and hot/cold running water supplies to simulate domestic environment.

C6.5.2.16 Splint Room

Provide mechanical extract ventilation due to heat and dust resulting from splint preparation.

Provide sink with a drainage filter if plaster is used.

C6.5.2.17 Hydrotherapy/Wax Room

Provide washable, non-slip flooring from which wax, ice and water can be easily cleaned.

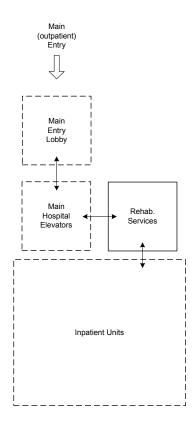
C6.5.2.18 Ergonomics Considerations

Refer to Output Specifications, Section 1: Key Site and Building Design Criteria, subsection 1.2.4.6 Ergonomics.

C6.5.2.19 Component Functional Diagrams

The spatial organization of this component will be generally as shown in the diagrams below.

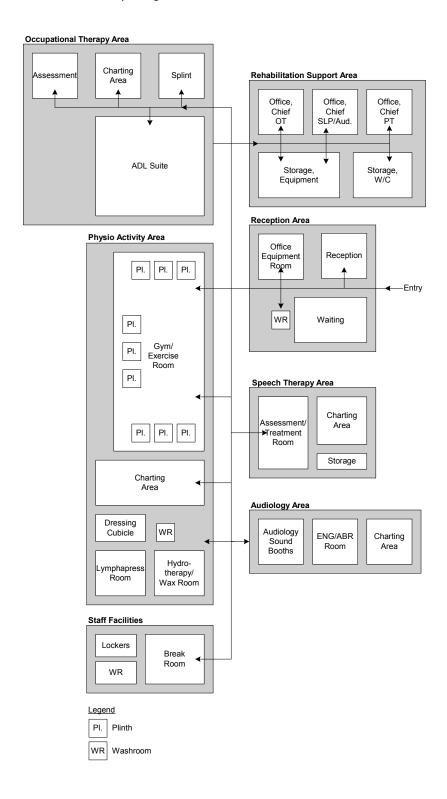
C6.5.2.19.1 Macro Relationship Diagram



Note: Ideally, main entry lobby, Rehab Services and (at least one level of) Inpatient Units would be located on the same level, thus avoiding the need for outpatients to use the elevators to access Rehab.

C6 REHABILITATION SERVICES

C6.5.2.19.2 Micro Relationship Diagram



C6 REHABILITATION SERVICES

C6.5.3 Schedule of Accommodation (Note: Spaces listed in parentheses () are spaces supporting services provided by Project Co and are included in the total net square metres.)

				Requirements	
Ref	Space	units	nsm/unit	nsm	
	Reception Area				
01	Reception/Control/Clerk	1		18.0	
02	Office Equipment Room	1		8.0	
03	Waiting, Visitor	1		12.5	
04	Washroom, Patient, Wheelchair Type	1		4.5	
	Subtotal			43.0	
	Physiotherapy Activity Areas				
05	Gymnasium/Exercise Room/ Treatment Area	1		134.5	
06	Charting Area	1		30.0	
07	Dressing Cubicle, Assisted	1		2.5	
08	Washroom, Patient, Wheelchair Access	1		3.5	
09	Lymphapress Room	1		13.0	
10	Hydrotherapy/Wax Room	1		12.0	
	Subtotal			195.5	
	Occupational Therapy Area				
11	O.T. Assessment Room	1		15.0	
12	Charting Area	1		12.0	
13	O.T. Splint Room	1		10.0	
	ADL Suite Area				
14	Kitchen	1		12.0	
15	Bathroom	1		10.0	
			ı İ		

C6 REHABILITATION SERVICES

			Area Requirements		
Ref	Space	units	nsm/unit nsm		
16	Living Room	1	18.0		
	Subtotal		77.0		
	Speech Therapy Area				
17	Assessment/Treatment Room, Speech Therapist	1	10.0		
18	Charting Area	1	13.0		
19	Storage Area	1	10.0		
	Subtotal		33.0		
	Audiology Area				
20	Audiology Sound Booth	1	10.0		
21	ENG/ABR Assessment/ Treatment Room	1	12.0		
22	Charting Area	1	10.0		
	Subtotal		32.0		
	Rehabilitation Support Areas				
23	Office, Clinical Chief of Physiotherapy	1	9.0		
24	Office, Clinical Chief of Occupational Therapy	1	9.0		
25	Office, Clinical Chief of SLP/Audiology	1	9.0		
	Conference Room		0 2		
26	Storage, Equipment	1	20.0		
27	Storage, Wheelchair	1	8.5		
28	Alcove, Linen Cart	1	(2.0)		
29	Soiled Holding Room	1	(8.0)		

 $^{^{\}rm 2}\,$ Shared use of conference in other area once/month for 2 hours.

C6 REHABILITATION SERVICES

		Are	ents	
Ref	Space	units	nsm/unit	nsm
30	Housekeeping Closet	1		(5.0)
	Subtotal			70.5
	Staff Facilities			
31	Break/Team Room, Staff	1		24.0
32	Staff Coat Closet	1		4.0
33	Washroom, Staff	1		2.5
	Subtotal			30.5
	Total			481.5

C6.6 DESIGN GUIDANCE

None

C6.7 OTHER SPECIFICATIONS

Rehabilitation services are primarily based in Rehabilitation Services department, however, other specifications that will be consulted are:

- A1(g) Cancer Centre Patient Rehabilitation
- B2 General Medical/Surgical Inpatient Care Units
- B5 Maternal Child Program
- B6 Mental Health/Psychiatry Program