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D1.1 SERVICE DESCRIPTION

D1.1.1 Scope of Services

This section D1 sets out the requirements for the centralized facilities for the Facility's information management service to be achieved or accommodated by Project Co in providing the Works and the Services.

The model on which the Fraser Health Authority (FHA) and BC Cancer Agency (BCCA)/Provincial Health Services Authority (PHSA) will develop their health information systems assumes an electronic health record (EHR) and centralized cores of patient information for the Health Authorities. Other user applications will be fully integrated with these cores. Access to the cores is assumed within the FHA/BCCA/PHSA promoting "access at point of service" among all facilities. To facilitate the provision of care, there will need to be up-loads and down-loads of information between the FHA information system and BCCA/PHSA information system (e.g., between Meditech and the Cancer Agency Information System – CAIS). In order to ensure the integration of personal health information across the various systems, a unique identifier strategy (e.g., personal health number) will be used to link personal information to provide a complete picture of care provided.

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

- Health Information Services (HIS), including:
    – Registration/Admitting
    – Health Records (HR)
    – Transcription
- Information Systems & Technology Services

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

D1.1.1.1   Health Information Services

The overall model for the provision of Health Information Services at the AHCC facility will be one of integrated service provision by the Health Authorities. Health Information Services will be provided in shared space, through shared staff and utilizing shared systems whenever possible. To the end-user of Health Information Services at the new AHCC, the provision of Health Information Services will be seamless with no distinction made between services provided by Fraser Health and those provided by BC Cancer Agency/PHSA.

Registration/Admitting activities will include:

There will be a decentralized model for Registration (Admitting) for Inpatient , Outpatient and Diagnostic Services. In a decentralized model, there remains the need for certain core functions to be maintained centrally. These functions include preferred accommodation services, data quality control and audit, autopsy/death registry, staff support functions (e.g. scheduling, payroll), training support and registration for areas that do not have sufficient staffing for hours of coverage.

- registration of inpatients, surgical day care patients and outpatients (including Emergency patients) may be centralized, decentralized or a combination of both
    – approximately 90% of Cancer Centre patients are pre-registered through the CAIS prior to arrival, and this will be the trend for all patients when possible

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- all new patient records will be paperless. The electronic information available to support treatment will be created through data entry, information exchange and scanning of existing paper documents
- the Surgical Suite, outpatient clinics, day programs, and the various clinical support services will continue to manage their own scheduling, but access to a common database will enable coordination of services during a single visit
- maintenance of an accurate bed census
- management and staffing of the main entry reception
- autopsy/death registry centrally managed services and functions
  - registration of DOA's, inpatient deaths and Morgue census
  - maintenance of notice of death, certification of death, autopsy slips and other documents related to expired patients
  - reporting to the coroner and physicians, as required
  - ensuring proper procedures are followed with respect to release of bodies
- support of patient self-registration
  - there will be self-registration for certain patient types
- Cancer Agency patients will complete a lengthy self-assessment prior to commencing treatment. There must be space available in the Cancer Centre General Clinic where these self assessments can be electronically completed privately. Additional data elements required for Cancer Agency patients will be captured by the Cancer Agency.
- implementation of Ministry of Health Services web business services
- education related to data standards
- development of registration process policies and procedures

Health Records activities will include:

- Records Processing
  Processing of patient/client records for admissions, discharges and assembling in a standardized format are initial health record functions. Verification of accurate numbers with the computerized Admission Discharge Transfer (ADT) system and loose report filing/document scanning are also key components of records processing. Oncology inpatient and surgical day care records are handled separately from the longitudinal cancer record but each is accessible electronically. Records processing and quantitative analysis processes include scanning paper records, matching records to patients, merging records, classifying documents/images and routing documents for review and signature. The end user of services at the AHCC must view the service provisions as seamless with transparency between those services provided by the FHA and those provided by the PHSA/BCCA.

- Coding and Abstracting
  The health record is coded using the International Classification of Diseases (Canadian adaptation) and Canadian Classification of Health Interventions (ICD-10-CA/CCI). This data is transmitted to the Canadian Institute of Health Information where it becomes part of the national healthcare database and to various provincial registries (e.g., trauma, renal, ICU, perinatal). Fraser Health Authority coding staff will perform inpatient and surgical day care coding. Inpatient Units, Ambulatory Care Clinics, Surgical Day Care and Emergency staff will transfer and discharge patients in the ADT system. Cancer Services staff will perform coding of ambulatory care visits using the ICD-0 methodology. Coded data must be accessible electronically to Cancer Agency staff. This data is submitted to the National Association of Cancer Registries and the Canadian Cancer Registry. The FHA abstracting system will support integrated data provisions and with a virtual record in place, will allow sharing of resources to code and abstract data from any site or from home-based staff.

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- Transcription and External Report Distribution
  Medical transcription of histories and physicals, consultation reports, operative reports, diagnostic imaging reports, laboratory reports and discharge summaries are performed by medical transcriptionists during a patient's stay in hospital and upon discharge. Centralized dictation systems allow the physician and clinical staff to dictate these reports from virtually any telephone. There will be a greater reliance on the capture of information electronically at point of care and on voice recognition technology. There is a potential for a shared dictation system for both acute care and Cancer Centre services.

  Transcriptionists will transcribe documents related to Cancer Centre services directly in CAIS and for Abbotsford Hospital services directly to the FHA HIS with all reports being distributed electronically.

- Quantitative Analysis
  Reviewing the health record for specific deficiencies in recording by the originator of the document is key in identifying incomplete or inaccurate documentation. In quantitative analysis, the health record practitioner applies knowledge of disease processes, the policies and standards established by Medical Administration and accrediting bodies such as the Canadian Council of Health Services Accreditation.

- Data Analysis
  Health record practitioners analyze the clinical data for purposes of program planning, manpower planning, strategic planning, quality review, quality improvement projects and research. Software tools such as Microsoft Office products - Excel, PowerPoint, and Access are utilized. Data will be maintained in the FHA/PHSA/BCCA information system and, wherever practical and possible, will be integrated.

  With expanding resources and technology, and further integration/coordination with integrated analysis and evaluation, the FHA will provide region-wide data for multi-users and for health profiling and provide ambulatory and emergency patient data for analysis which has not been possible in the past.

- Records Retention and Retrieval
  Health record personnel by whom records are stored and retrieved maintain on-site and off-site historical hardcopy record storage systems. At times of readmission, or for purposes such as data retrieval, historical records are tracked with electronic record tracking systems. Records for Cancer Centre services patients are retained indefinitely. All of the PHSA/BCCA and FHA new records will be stored electronically by the time the Abbotsford Hospital & Cancer Centre opens. Retrieval of records will be done on-line except in cases where the patient had a historical paper record. In the case of patients with paper-based records, their health record will either be scanned and forwarded electronically or transferred in hardcopy form to the location where the patient is receiving care and stored there until required at another location. The health record is retained at the site where the patient last received cancer services. Even though some paper-based records may still exist, core documents to support patient care will be accessible on-line. For patients with paper-based records, these charts will be stored on-site for 1-2 years post-discharge with older charts being stored off-site. At times, members of the patient care team may need to reference an historical chart either by accessing those charts that are on-site or requesting a chart retrieval from off-site storage.

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- Release of Information
  Patients/clients authorize the health care organization to release their health information to various third parties. Written consent is required to provide this access, and under the guidelines of the Freedom of Information and Protection of Privacy (FOIPPA) legislation, health record personnel support the logistics of providing this information to the requestor. Release of information related to inpatient and surgical day care episodes of care will be completed by FHA release of information (ROI) staff. Cancer Agency staff will release cancer outpatient visit information. In order to ensure customer satisfaction, the provision of this service will have to be closely coordinated between FHA and PHSA/BCCA staff, particularly with an expanding service to community agencies.

- Birth Registrar
  All births are registered and it is a responsibility of HIS to maintain the birth registrar.

- Master Person Index
  Health Records will administer and maintain the integrity of the master person indices for FHA and PHSA/BCCA.

- Incomplete Records
  Health Records administers medical staff cut-off procedures for incomplete records.

- Technological Innovations to Support Health Records Processes
  The electronic health record (EHR) will be supported by a number of technological innovations such as computerized charting modules, voice recognition products, optical scanning, home-based/off-site transcription and data capture, electronic triage and off-site referral processes and other innovative and progressive documentation models.

D1.1.1.2 Information Systems (IS) Services will provide the following:

Information Systems consist of networks of computers and peripheral devices and some special-purpose computers located in each component which will communicate with multiple locations throughout the region and possibly satellite locations elsewhere.

IS personnel will be responsible for the software installation, implementation, and ongoing support of the information systems and all modules, which rely on its storage/transmission functions.

Hardware servicing is provided on-site by personnel based off-site.

D1.**1.1.3** Technology Services will provide the following:

- Telecommunications services
- Staff and personnel training
- General maintenance of information systems
- Coordination of cable services and standards
- Network management
- Software applications
- Systems development

Technology Services will provide support services to users of the health information systems and hardware, including servers, desk-top computers, laptops, PDA's, cell phones, pagers, network management LAN, WAN, video and voice conferencing as well as telephones.

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D1.1.1.4 _Current Trends_ *(As derived from the IBI Information Management Report, February 2003)*
In providing the Works and the Services, Project Co shall take into account the following trends:

- _There is increasing recognition among health care providers of the benefits of wireless technology to improve efficiency, quality, and safety. Given the drive to reduce error rates and improve efficiencies, wireless applications will quickly emerge as a competitive advantage for health care providers._

- _Based on the current wireless technology, applications and market outlook the majority of the activity is focused on the mobile enablement of physicians and clinicians. Several health care functions that are prime candidates for wireless technology in the future include:_

  - _e-prescribing – enabling physicians to electronically write, order and renew prescriptions_
  - _e-Lab ordering and viewing_
  - _online clinical, financial, and administrative rules service include a host and display of formularies, drug utilization review, treatment guidelines etc…_
  - _patient medication histories_
  - _patient consent_
  - _automated customized messages to provide physicians with health plan specific and patient specific messages_
  - _content to enable hosting and presentation of medical information for physicians_
  - _point of care clinical decision support systems that provide clinician with information to improve decision making_

- _The current market sees rapid growth of wireless technology, in conjunction with a number of other technical competencies – these technical competencies are quickly moving into the health care environment. However, wireless LAN and mobile-in-door-hand held technologies are seen as two of the key enablers over the next three to five years._

- _By 2004, it is expected wireless physician order entry systems (POE) will require a tablet form factor, with at least 640x480 pixel display, voice recognition hardware and local storage of static data. Migration of POE to PDAs will require further advances in speech recognition and virtual displays._

D1.1.2 Scope of Education Services
- Health information management student education and training, 1 at a time
- Technical services student, 1 at a time
- Increased inservice training and education regarding FOIPPA, confidentiality, security, data standards, understanding data, policies and procedures

D1.1.3 Scope of Research Services
Not applicable

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D1.1.4 Specific Exclusions

This specification excludes health information management services/requirements provided elsewhere, including:

- Central administration for IM to be located off-site
- Transcription services and health records retrieval services from off-site archival storage (see section E10 Transcription Services)
- Information Management training room (see section D2 Learning Centre)

D1.2 OPERATIONAL DESCRIPTION

D1.2.1 Minimum Hours of Operation

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

- Health Information Services - Registration .... 24 hours/day, 7 days/week
- Health Information Services - Health Records .... 0700h to 2300h, 7 days/week
  (Emergency Filing Clerk on evenings)
- Information Systems & Technology .... 0700h to 1900h, 5 days/week (plus on-call)

D1.2.2 Patient Management Processes

D1.2.3.1 Patient Access/Reception/Registration Process

- **Inpatients**
  Patients/visitors will normally arrive at the AHCC main entry/lobby and be greeted at the information kiosk. Inpatients will be directed to the appropriate inpatient unit where they will be registered by unit staff. Self-pay patients will proceed to the cashier (managed by finance) where fees will be collected. Others will pay on discharge. Patients' cash and other valuables will be received and stored by the cashier until the patient is discharged.

  Admission documentation will be available on-line. Patients admitted on an elective basis will proceed to the care unit either unescorted or in the company of a volunteer.
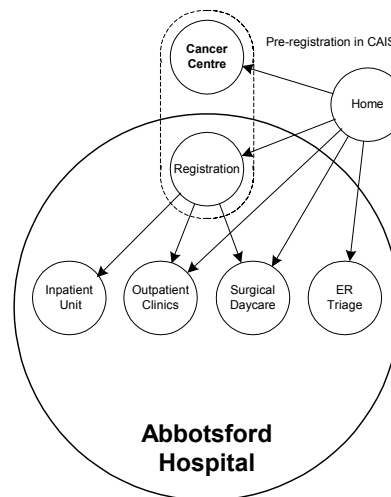
Patient Flow Diagram

- **Outpatients**
  Patients/visitors will normally arrive at the Abbotsford Hospital & Cancer Centre main entry/lobby. Outpatients will be registered by the outpatient service staff. Diagnostic areas will be responsible for their own registration. Recurring outpatients will be entered

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by clinic staff or by using self-registration swipe technology. Admission documentation will be available on line for those clinics.

- Surgical Day Care Patients
  Patients/visitors will normally arrive at the AHCC main outpatient entry. Surgical day care patients will be directed to the Surgical Day Care area for registration. Self-pay patients will proceed to the cashier (managed by Finance) where fees will be collected. Admission documentation will be available on-line.

- Emergency Patients
  Patients/visitors will normally arrive at the Emergency department triage desk where triage information is collected and forwarded to the Registration department. The Emergency registration staff will register the patient and direct to the appropriate area depending on urgency and priority identified by triage. DOA's, direct admissions and after hours add-ons or outpatient registrations will be processed by the Emergency registration staff and directed to the appropriate care area. Documentation is available on line but will be printed by the Registration staff and forwarded to the appropriate care area. Self-pay patients will be requested to pay the hospital fee and a receipt will be issued by the Registration staff.

- Cancer Services
  Patients will be pre-registered in the BCCA CAIS scheduler system. Their visit registration (check-in) will be completed at the specific clinic. The CAIS scheduler system tracks patient movement through the building through a process of check-ins/check-outs. This location tracking must include non-BCCA services (e.g., Diagnostic Services). Cancer patients' final visit (discharge) is recorded in the CAIS scheduler system. In some cases, out-of-province/out-of-country charges apply for cancer services and these will be collected and processed by FHA finance personnel in the main entry lobby area.

D1.2.2.2   Computerization
The registration function will be fully computerized, including production of admission/ registration forms and embossed addressograph cards. Future computerization may include magnetized patient health information cards that will be used to automatically access information. Verification of patient information will be facilitated through connection to the Ministry of Health Services web business services. Technology will support conversion to electronic records and data management.

D1.2.3 Patient Information Management

Patients will likely have two identification numbers (one from the FHA and one from the BCCA/ PHSA), and two electronic health records (one specific to Cancer and one for all other levels of care) which will contain all information on inpatient and outpatient encounters in the AHCC system. The FHA Meditech system and related systems like FHA PACS will provide completely digital records, but the component will also have to accommodate some hardcopy records for a period of time for historical records.

Patient rooms and staff care stations will be planned to function with an electronic 'paperless' patient information system.

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Patient information systems will be automated with access to information by means of computer terminals located at all staff work areas distributed throughout each unit. In the future, computer charting will occur at the patient bedside, likely through the use of hand-held wireless computers.

Also 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.

D1.2.4 Staff Work Processes

D1.2.4.1   Technology Services   Not Applicable
The model on which the FHA and BCCA/PHSA will develop its health   *Process Flow Diagram*
information systems assumes centralized cores of patient information.
Other user applications will be fully integrated with these cores.
Decentralized access to the cores is assumed with the region promoting
"access at point of service" among all of its facilities.

Information technology has been developed in order to maximize the use of multi-media communications systems focused on voice/data/video imaging.

Locations for facility management will be dependent on the specific applications and influenced by a number of factors, including need for security provisions, number and size of servers, etc. It is assumed, however, that both remote and on-site facility management will be utilized.

Hardware and workstations supporting a variety of user applications will be accommodated locally (i.e., within user departments at all acute care sites), but the communications technology allowing integration with the cores and with other sites will be centralized at each site.

A sample of applications that are of greatest significance include:

- remote access to a networked, secure system by physicians and other community agencies

- extending the network within and beyond the walls of the FHA/BCCA/PHSA will allow for telehealth/medicine, video conferencing, teleradiology (i.e., exchange of grand rounds information, exchange of electronic imaging/information)

- a mainly copper and fibre optic landline based WAN strategy moving to wireless and portable communication devices allowing flexibility as to place of work (70 to 80% of communications traffic will be wireless)

- "point-of-care" technology using wireless technology which will allow clinicians to document workload and patient charts electronically

- educational resources found internally and externally will be accessible (i.e., CD banks)

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D1.2.4.2   Telecommunications

The Fraser East area is currently being served by a state-of-the-art telecommunications system provided by NEC Canada Inc. The two main components of this system are the NEAX PABX, a voice/data/video switch and an integrated voice processing system, plus a 'virtual private network' allowing local-to-local calling via a 4-digit coordinated dialing plan connecting all sites within the Fraser East area. A 2- or 3-digit access code will be required to network with other sites in the FHA that are outside the Fraser East area. This will need to be addressed in concert with the network services groups within the FHA and BCCA/PHSA. The availability of this system has or will allow the following enhancements:

- Nurse Call System – Integrated.

- Wireless – (including wireless handsets in the Inpatient Units as part of the nurse call upgrade), leading ultimately to connectivity between nurse call, wireless telephone, Meditech, CAIS, patient, doctor and nurse.

- Aimworks – a comprehensive telemanagement system consisting of several modules allowing for ranging levels of self-management of the telecommunications infrastructure.

- Voice Processing – including features of the voicemail server expanded to provide enhanced voice processing, IVR, and unified messaging.

- Call Centre – allowing the FHA to configure any of its sites to function as a call centre on a dynamic basis. The call centre will also allow for provision of a centralized switchboard/ ADT patient information centre and a computer/telephone help desk. The Call Centre will be virtual and will be located off the AHCC site, and it will also serve as the routing centre for the announcement of all codes as identified in the Health Co contingency plan.

- Med Help – including a suite of communications-oriented applications (e.g., physicians office network, patient phone services, telemedicine and video conferencing, including desktop televideo-conferencing).

D1.2.4.3   Technical/Support

IS will also provide the following technical support:

- System management
- Equipment evaluation
- Network analysis and management
- User support
- Equipment cascading (relocating older equipment as new equipment is received)
- Equipment staging deployment
- System integration

D1.2.4.4   Training

Training will include general upgrading programs and project-specific training. Training facilities will be accessed by user departments on a scheduled and drop-in basis. Programs will accommodate small groups and will provide "hands-on" training using demonstrations, interactive tutorials, and one-on-one instruction at a computer. The training room will be located in the Learning Centre (see D2).

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D1.2.4.5 Staff Services
Outer clothing will be stored in coat closets located in a lockable coat hanging area. A small staff break room will be provided for beverage making, staff debriefing, and rest.

D1.2.5 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.

D1.2.6 Linen/Housekeeping Services
Refer to Output Specifications, Section 4: Facility Management Services, subsections E5 Housekeeping Services and E6 Laundry/Linen Services.

D1.2.7 Equipment Asset Management
Refer to Output Specifications, Section 4: Facility Management Services, subsection E2 Biomedical Engineering; and Section 7: Equipment.

D1.3 ACTIVITY INDICATORS

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

D1.3.1 Hospital Activity

Unit	Minimum Projected Yearly Activity
Health Information Services	
Total Inpatient Discharges	18,634
Total Patient Days	93,923
Emergency Visits	60,000
Surgical Day Care Cases	9,100
General Day Care Visits/Cases	26,499
Pre-Admit Clinic (visits)	9,800
R.O.I. Requests	4,000
Data Analysis Requests	400
Transcription Hours	17,000
Ambulatory Care Visits/Exams [1]	182,804

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[1] *Excludes Cancer Centre workload.*

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Unit	Minimum Projected Yearly Activity
Health Information Systems	
# Printers	200
# Personal Computers	700+
# Network Hubs/Switches	75+
# Servers	75+

Notes & Assumptions
*   Outpatient Visits – patients will be admitted to the system within each of the departments.; Ambulatory Care, General Day Care, Diagnostic Services, Laboratory, Imaging, etc.*

D1.3.2 Cancer Centre Activity

Unit	Minimum Projected Activity		
	2007	2010	2015
Surgical New Patient Consults (Pre-operative)	701	796	935
Surgical Follow-Up Visits	7,008	7,960	9,350
Systemic Therapy New Patient Consults	638	760	1,333
Systemic Therapy Follow-Up Visits	3,825	4,559	8,000
Radiation Therapy New Patient Consults	1,475	2,539	2,829
Radiation Therapy Follow-up Visits	5,900	10,156	11,314
Pain & Symptom Management/Palliative Care Program			
New Patient	70	85	120
Follow-Up Visits	135	170	235

D1.4 PEOPLE REQUIREMENTS

This component will have a Abbotsford Hospital staff complement in the range of 43 FTE, consisting of 9 analysts, 10 technologists, 8 transcriptionists, 1 bed utilization officer and 23 clerical/administrative personnel.

The Cancer Centre staff complement will be in the range of 18 FTE, consisting of 2 analysts, 1 CAIS trainer, 1 IT programmer, 5 transcriptionists and 10 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
Health Information Services					
Registration	10-15	6	5-6	1-2	22-29
Health Records	0	39-40	2-3	2-3	43-46
Information Systems & Technology Services	0	5	0	1-2	6-7

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D1.5 DESIGN CRITERIA

D1.5.1 Key External Relationships

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

REGISTRATION/ ADMITTING → 1 Main Entrance, 2 Inpatient Care Units and Surgical Day Care, 3 Emergency Department	1 Provide <u>direct</u> access by <u>general</u> circulation from the main entrance for inpatient/SDC/outpatient access.
	2 Provide <u>convenient</u> access by <u>general</u> circulation to all Inpatient Care Units and Surgical Day Care for the movement of patients.
	3 Provide <u>convenient</u> access by <u>general</u> circulation to the Emergency department for movement of staff.

1 Provide <u>direct</u> access by <u>general</u> circulation from the main entrance for inpatient/SDC/outpatient access.

HEALTH RECORDS
1 Site Administration (Physician's Lounge)
2 Emergency
3 Main Public Facilities
4 Ambulatory Care Centre
5 Ambulatory Care Centre (Cancer Centre)

1 Provide access by <u>general</u> circulation to Site Administration (physician's lounge) for the movement of physicians.

2 Provide <u>convenient</u> access by <u>general</u> circulation to Emergency for the movement of staff.

3 Provide <u>convenient</u> access by <u>general</u> circulation from the main public facilities (main entrance) for movement of the public.

4 Provide <u>convenient</u> access by <u>general</u> circulation to the Ambulatory Care Centre for the movement of staff.

5 Provide <u>convenient</u> access by <u>general</u> circulation to the Ambulatory Care Centre (Cancer Centre) for the movement of staff.

INFORMATION SYSTEMS & TECHNOLOGY SERV.
1 Health Records
2 Ambulatory Care Centre (Cancer Centre)

1 Provide <u>convenient</u> access by <u>general</u> circulation to Health Records for movement of staff.

2 Provide <u>convenient</u> access by <u>general</u> circulation to the Ambulatory Care Centre (Cancer Centre) for the movement of staff.

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D1.5.2 Key Internal Relationships/ Environmental Considerations
The following will be achieved:

General Considerations

D1.5.2.1   Workstations
All workstations designed for desktop PC's/monitors will require outlets for power, telephone and data transmission. All power outlets at workstations with on-line terminals must have protected power supplies. Uninterrupted power supplies and isolated grounding will be considered for all workstations as well as for the computer room and server area.

D1.5.2.2   Lighting/Computer Screen Visibility
Provide appropriate lighting for reading/general activities and for computer use that minimizes glare near computer terminals.

D1.5.2.3   Environment
Provide the ability to isolate the working environment from external noise for focused concentration and reading/report writing/data analysis.

Also refer to Output Specifications, Section 1: Key Site and Building Design Criteria, subsection 1.2.5.4 Acoustics.

D1.5.2.4   Access/Security
Provide restricted access to all electronic and hardcopy files. Access to all areas of the component, with the exception of training facilities, will be controlled at all times.

Requests to use training facilities after hours will be accommodated. Access to this area will be available without compromising security of the entire component.

Also refer to Output Specifications, Section 1: Key Site and Building Design Criteria, subsection 1.2.2.3 Security and Personal Safety.

Reception/Registration/Admitting

D1.5.2.5   Visibility
Provide high visibility and very easy wayfinding from the main entrance lobby area to provide clear direction for patients arriving for registration.

Also refer to Output Specifications, Section 1: Key Site and Building Design Criteria, subsection 1.2.4.3 Signage and Wayfinding.

D1.5.2.6   Contiguity with Emergency
Locate the admitting staff work area contiguous with the Emergency reception/triage desk to maximize interaction between staff and to minimize the distance travelled by patients between triaging and admitting.

D1.5.2.7   Waiting Area
Provide a comfortable waiting area for patients and relatives. This waiting area will be located immediately adjacent to Registration/Admitting and should offer privacy for the psychological comfort of the normally apprehensive patient.

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Provide inpatients being admitted with dedicated waiting areas separate from public waiting, to provide a degree of privacy when required.

D1.5.2.8   Seating Design
Ensure comfortable seating in waiting areas. Allow for big people as well as small people. Benches are appropriate. "Airport" type seating is not appropriate.

D1.5.2.9   Confidentiality of Patients
Ensure that patient privacy is respected during conversations with admitting staff. Visual and acoustic screening will be incorporated.

Health Records

D1.5.2.10 Visibility
The public will be able to easily locate department in order to make requests for release of information.

Provide a visible main entry for control reasons and public access. Ideally the entry and activities within Health Records will be visible from staffed areas outside the component. After hours, the department will be locked.

D1.5.2.11 Special Technical Requirements
Floor load capacity will be such to support the storage of historical paper records in a high density arrangement.

Wireless capability will be in place throughout the Health Records and Registration areas. Specifically, in the records storage area to allow for two-way communication between staff in the department and those retrieving/filing records.

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

D1.5.2.12 Environment
Provide a quiet, relaxed environment for staff, students and physicians. Sound absorptive materials and furniture will be used throughout.

Designated areas will be provided for physicians for chart completion and review as well as for clinical research staff. There will be a designated waiting area for the public as well as a private area for completion of forms for requests for information and record review.

Provide appropriate temperature and humidity control in order to maintain a work environment compatible for both staff and records storage.

Provide high-density mobile shelving in order to minimize cost and ensure user safety and to maximize storage capacity.

Modular fixtures and furniture and adequate electrical and network outlets will be used to allow for flexibility in utilization as needs change.

Good ventilation will be provided to compensate for the drying and dust collecting properties of records and paper.

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Adequate lighting will be provided to compensate for glare created by paper and computer screens. High shelving can block light emitted from a given source. Permanent ceiling fixtures must be placed such that dark areas and shadows are minimized.

Implications for earthquake preparedness should include use of a fixed/secure non-collapsible shelving system. Floor finishes should allow for fixing down shelving if necessary.

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

Information Systems Services & Technology Services

D1.5.2.13 Flexibility for Potential Expansion
Refer to Output Specifications, Section 1: Key Site and Building Design Criteria, subsection 1.2.3.3 Flexibility and Expandability.

D1.5.2.14 This number no longer used.

D1.5.2.15 Communications Rooms
Communications rooms will be distributed throughout the Abbotsford Hospital & Cancer Centre and will be stacked vertically.

D1.5.2.16 Fire Safety
Fire safety systems for the computer room and server area will be provided by preaction sprinkler system.

Also refer to Output Specifications, Section 1: Key Site and Building Design Criteria, subsection 1.2.6.2 Provisions for Disaster.

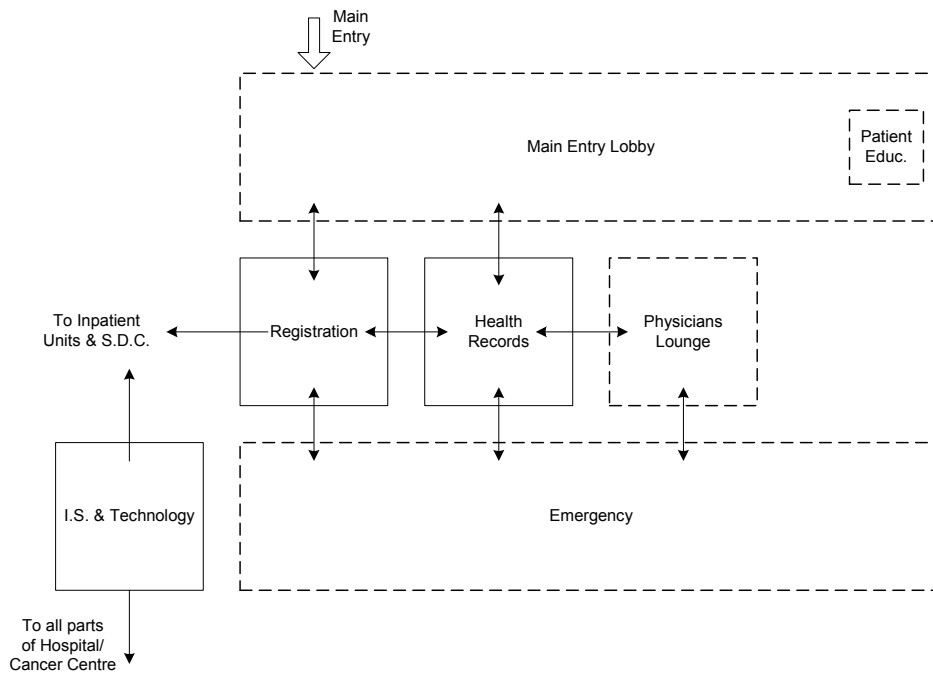**D1.5.2.17** Ergonomics Considerations
Refer to Output Specifications, Section 1: Key Site and Building Design Criteria, subsection 1.2.4.6 Ergonomics.

D1   INFORMATION MANAGEMENT
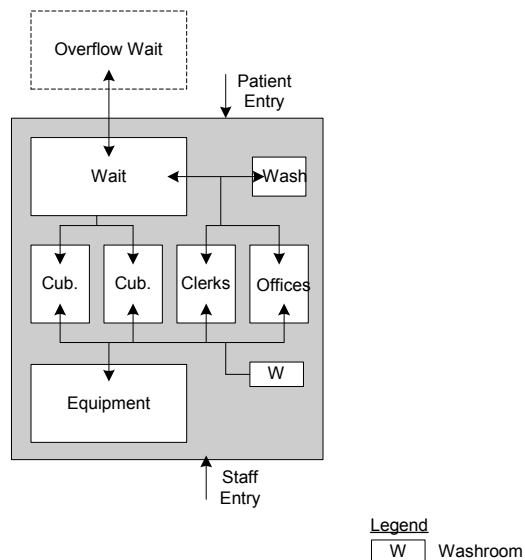
D1.5.2.18 Component Functional Diagrams
     The spatial organization of this component will be generally as shown in the diagrams below.

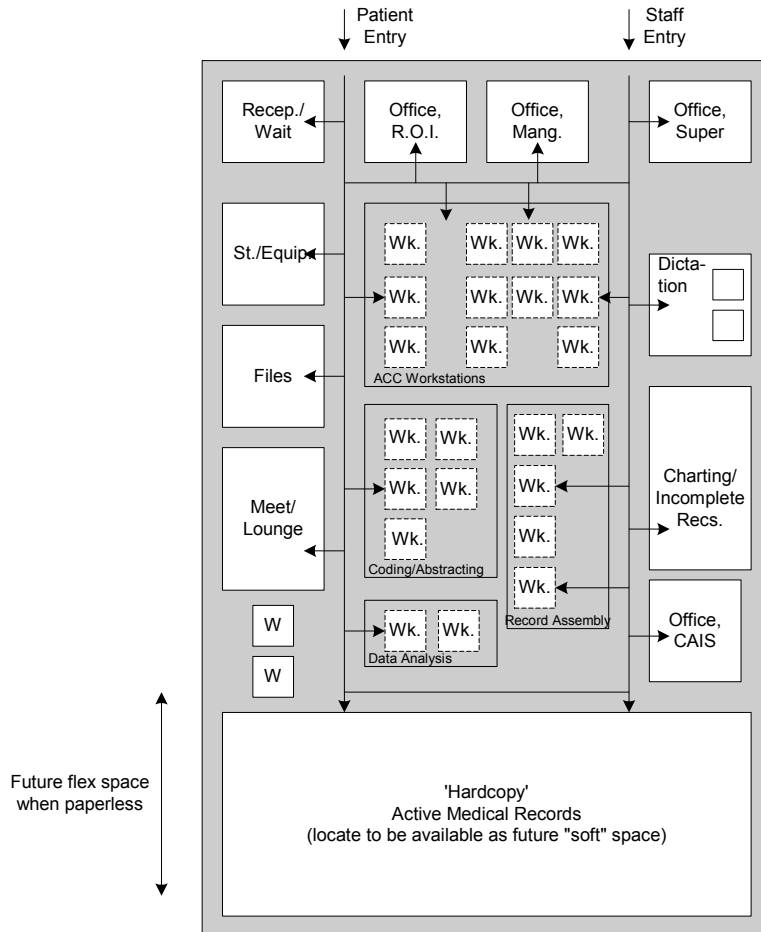**D1.5.2.18.1** *Macro Relationship Diagram*

D1.5.2.17.2 *Micro Relationship Diagram*

Registration/Admitting

Legend
| W | Washroom |

D1   INFORMATION MANAGEMENT

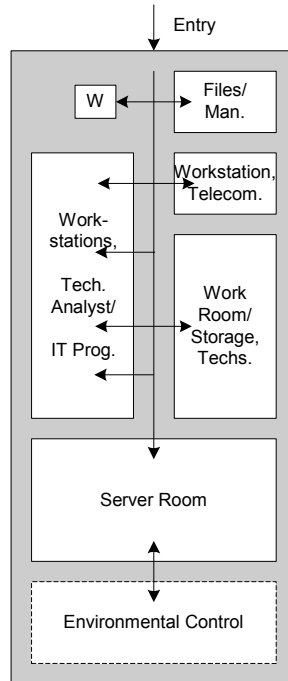Health Records

Legend

W	Washroom
Wk.	Workstation

D1   INFORMATION MANAGEMENT

Information Systems Services & Technology Services

Legend
| W | Washroom |

D1   INFORMATION MANAGEMENT

D1.5.3 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.)*

Ref	Space	Area Requirements units	nsm/unit	nsm
	Health Information Services			
	Registration/Admitting Area			
01	Patient Waiting Area	1		12.0
02	Washroom, Wheelchair Access	1		3.5
03	Registration Cubicle, Wheelchair Access	2	6.0	12.0
04	Equipment Area/Workroom/ Store Room, Stationery Supplies	1		15.0
05	Workstation, Bed Control Clerk/Preferred Accommodation Clerk	1		12.0
06	Office, Supervisor/Admitting Officer	1		9.0
07	Office, Bed Utilization Officer	1		9.0
08	Office, Autopsy Clerk	1		9.0
09	Washroom, Staff	1		2.5
	Total, Registration/Admitting Area			84.0
	Health Records Area			
10	Reception/Waiting Area	1		5.0
11	Office, R.O.I.	1		9.0
12	Charting Room/Incomplete Charts	1		20.0
13	Dictation Cubicles	2	2.5	5.0
14	Record Assembly Area	1		30.0
15	Storage, Active Medical Records	1		166.5
16	Alcove, Filing	1		10.0
17	Workstation, HRA I (ACC)	1		12.0

D1   INFORMATION MANAGEMENT

Ref	Space	units	nsm/unit	nsm
		Area Requirements		
18	Workstation, HR Technician (ACC)	1		12.0
19	Workstation, Clerk III (ACC)	1		30.0
20	Workstation, Referral Clerk (ACC)	1		12.0
21	Office Equipment Workroom	1		12.0
22	Coding/Abstracting Area	1		30.0
23	Data Analysis Area	1		12.0
23-1	Transcription Area	1		78 [2]
24	Office, Manager	1		9.0
25	Office, Supervisor	1		9.0
26	Office, Coordinator/CAIS Trainer (ACC)	1		9.0
27	Break Room (including closet)	1		18.0
28	Washroom, Staff	2	2.5	5.0
	Total, Health Records Area			493.5
	Total, Health Information Services			577.5
	Information Systems Services & Technology Services			
	Office Area			
29	Workstation, Technical Analyst	1		36.0
30	Workstation, IT Programmer (ACC)	1		6.0
31	Files/Manuals Room/Area	1		8.0
32	Workstation, Telecommunications Tech.	1		6.0
	Subtotal			56.0

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[2] *See E10 Transcription Services.*

D1   INFORMATION MANAGEMENT

Ref	Space	units	nsm/unit	nsm
			Area Requirements	
	<u>Support Area</u>			
	Training Room			0 [3]
	Coat Closet			0 [3]
	Teaching Supplies			0 [3]
33	Computer Server Room (PABX/NEAX)	1		65.0
34	Storage, Equipment	1		12.0
35	Alcove, Storage, Paper/Discs	1		2.0
36	Workroom, Technicians	1		27.0
37	Washroom, Staff	1		2.5
	Subtotal			108.5
	Total, Information Systems Services & Technology Services			164.5
	Total, IM			**742.0**

D1.6 DESIGN GUIDANCE

None

D1.7 OTHER SPECIFICATIONS

IM services are primarily based in Information Management, however, other specifications that will be consulted are:

D2   Learning Centre

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[3] *See D2 Learning Centre.*

D1   INFORMATION MANAGEMENT

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