



**Phase 1 Current State Report**  
**June 2013**

**Coordinated Health Service and Infrastructure Planning for the Edmonton Zone,  
Alberta Health Services**

# Edmonton Zone 2030 Plan

## Phase 1 Current State Report

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# **1.0 Introduction**

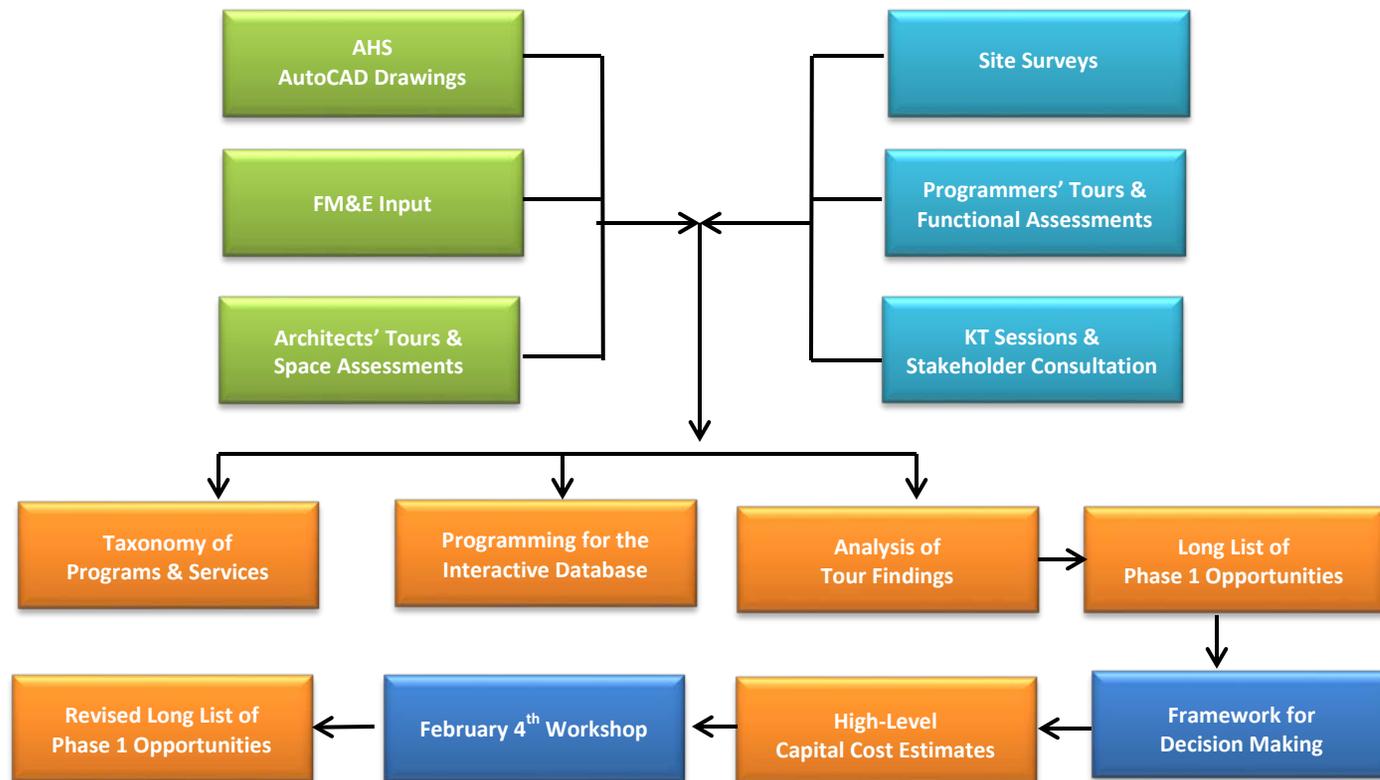
# 1.0 Introduction

## 1.1 Scope of Work

The purpose of the 2030 Plan is to create a coordinated health service and infrastructure plan for the Edmonton Zone through two phases of work:

- Phase 1 is a short term plan (to 2015/16) that focuses on 18 facilities in the Edmonton Zone with the objective of optimizing the location of health services and the use of built space to address operational concerns and capacity needs; and
- Phase 2 will produce a comprehensive zone-wide health service plan and infrastructure strategy for the years 2015 through 2030.

This report addresses the first half of the work of Phase 1, as illustrated below:



The goals and objectives of Phase 1 are:

**Goal #1: To identify pressing operational and clinical needs in 18 selected Edmonton Zone facilities.**

**Objectives:**

1. Document the current use and functionality of the space in 18 selected Edmonton Zone facilities.
2. Gather information on current service locations (adjacencies), pressing operational concerns, capacity pressures as well as any initiatives that are proposed or in place to address these issues.

**Goal #2: Create a short-term plan (to 2015) to optimize the location of services and the use of built space.**

**Objectives:**

1. Determine priorities, constraints and other factors that will guide problem-solving and decision-making.
2. Create a plan that optimizes the location of health services and the use of built space in the 18 facilities. Wherever possible, the plan will align with expected long-term health and infrastructure strategies to be developed in detail in Phase 2.
3. Propose operational and capital strategies to achieve the short-term plan.

The Current State Report addresses the work completed toward Goal #1.

## **1.2 Methodology and Limitations**

The facilities that were toured are listed below:

- |  |   |
|--|---|
| 1. Alberta Hospital Edmonton           | 10. Stollery Children's Hospital              |
| 2. Devon Community Hospital            | 11. Strathcona Community Hospital             |
| 3. Fort Saskatchewan Hospital          | 12. Sturgeon Community Hospital               |
| 4. Glenrose Rehabilitation Hospital    | 13. Walter Mackenzie Health Sciences Centre   |
| 5. Grey Nuns Community Hospital        | 14. WestView Health Centre                    |
| 6. Leduc Community Hospital            | 15. Aberhart Centre                           |
| 7. Mazankowski Alberta Heart Institute | 16. Edmonton Clinic                           |
| 8. Misericordia Community Hospital     | 17. Edmonton General (not including LTC beds) |
| 9. Royal Alexandra Hospital            | 18. Northeast Community Health Centre         |

Data were collected through the following steps:

- BlackwellParkin conducted two tours of each of the 18 sites in October and November of 2012: a full-site tour was conducted by architects and a second tour – significantly more limited in scope - was conducted by the functional programmers;
- Information was provided by AHS staff to help prepare the BlackwellParkin team for the tours. On the first day of the tours, kick-off meetings were held to discuss the data provided by the sites and to fine-tune the plan for the site tour. After the tours were substantially complete, close-the-loop meetings were held where preliminary findings were presented, critiqued and revised; and

- BlackwellParkin collated the data provided by AHS staff as well as data collected using our own tools. The findings were summarized and compared across all 18 facilities (Section 2). At the request of AHS, data were also presented by program (Section 3).

The findings from the tours were summarized by site and by program in the following manner:

- The programs/services and facilities on each site were briefly described;
- Issues and opportunities identified by the site and/or the consulting team were summarized;
- High-level functional and facility ratings were provided;
- A workshop was held where preliminary findings were presented and revised based on AHS feedback.

The facility and function ratings are graphically displayed in a matrix with the functional (programmer's) rating on the top of each square and the facility (architect's) rating on the bottom. The meanings of the functional ratings are:



Department is performing well for current use. Even if money were made available, funds would not be used to renovate or change the design of this unit.



There are some functional or design concerns that decrease efficiency and increase potential risks; upgrade/remediation is required in the intermediate term.



There are major operational or design issues that have a negative impact on operations and/or elevate risk to an unacceptable level; immediate upgrade/remediation is required.

The meanings of the facility ratings are:



The building appears to be in general compliance with current standards and expected condition for its age. (Note that engineering assessments were not conducted as part of our work, hence the cautious language).



There are some physical concerns that do not meet current standards or expected condition. The building fabric has characteristics that would allow renovations to bring it up to, or close to current standards.



There are major physical problems that do not meet current standards or expected condition. The building fabric does not have characteristics that would allow it to be renovated to bring it up to, or close to current standards.

**There are limitations to this report:**

- Although the architects toured all areas in each facility, the programmers' tours were restricted to clinical areas that were in the scope of work for Phase 1 of the 2030 Plan. Programmers' tours were further restricted to 'representative' units or departments, especially in facilities where multiple nursing units (for example) had the same or similar floor plates or functional uses. This report provides functional and facility assessment information for areas that were toured and assessed by *both* the architects and the programmers;
- If time permitted, tours were occasionally conducted for information purposes in departments that were not part of the Edmonton Zone (i.e. Pharmacy or Diagnostic Imaging) or that were not part of the Phase 1 scope of work (i.e. Palliative Care on the EGH site). Information on these tours is not included in this report;
- The report reflects information provided by AHS and observations by the BlackwellParkin team at the time of the site tours (October – November 2012). It provides a 'snapshot' from that time that was not updated to reflect any changes that occurred after the tours were conducted;
- Anecdotal information may be included in some sections of this report. This information was provided by the sites and/or discussed during the tours and is presented to demonstrate that the information was collected and considered by the consulting team. Anecdotal information was accepted at face value – no further analysis or validation of information was conducted; and
- Additional deliverables from this phase of work (the current state drawings, facility database and inventory of facility-related studies) are not included in this report but have been submitted under separate cover.

## **2.0 Facility Summary and Assessment By Site**

# Aberhart Centre

## Overview

### Programs & Services

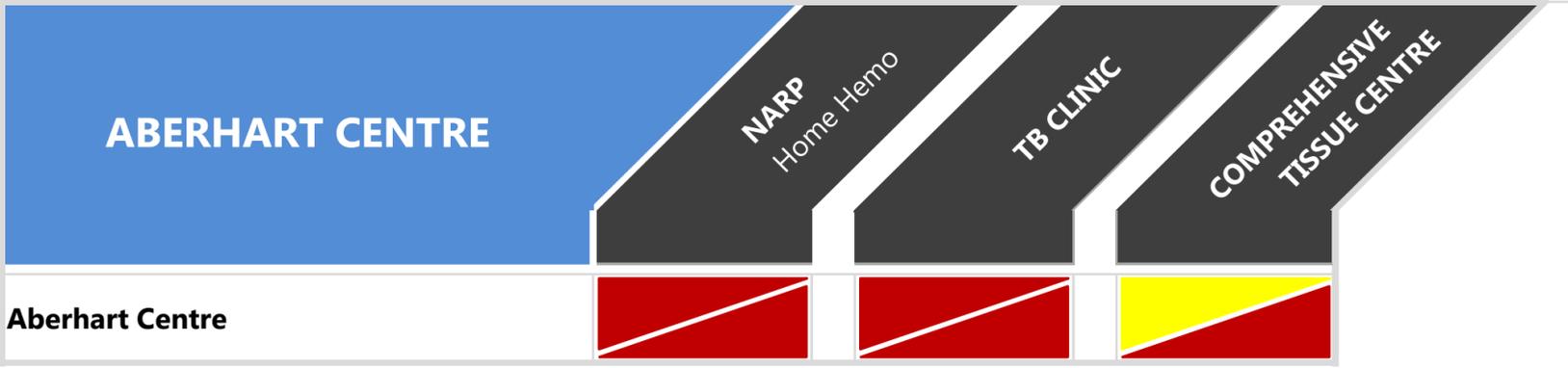
- NARP: Home Hemodialysis and Peritoneal Dialysis
- Comprehensive Tissue Centre
- TB Clinic
- This building is a pressure-relief valve for office space needs that cannot be otherwise met.

### Facilities

- Original Construction 1954
- 4 storeys plus basement
- Fire sprinklers throughout, but not to current code requirements
- Floor To Floor height of 3.4 metres (below average)

## Issues and Opportunities (not prioritized)

1. Capacity and operational pressures in NARP. Currently have 57 patients but will grow to >100 in the next two years...simply do not have the space for this. Also provide support and chart storage for ~1000 patients in 21 satellite locations outside of Edmonton and are running out of room for this function as well. Issues with inadequate storage and with distance from NARP operational areas. Stakeholders have planned to move NARP to the Edmonton Clinic and want to see this happen as soon as possible.
2. Comprehensive Tissue Centre needs additional tissue storage space. Issue of future access to OR for recovery of tissue needs to be confirmed. Suggestion...CTC should be moved to off-site to ground-level space in warehouse-grade construction.
3. The TB Clinic as a whole is a negative space but does not have any negative pressure rooms. Staff have to close exam rooms for 45-60 minutes after each use to recirculate air before next patient. There is no internal communication system (using walkie-talkies). Flooding has caused 2 closures in the past year. General DI room/function in the TB Clinic should be decanted to the Edmonton Clinic.
4. What is the future for this building? How should it be used? At this time, there is quite a bit of vacant space and a patchwork of office accommodations. Many stakeholders feel that this building should not be used for patient care.
5. This is an old building in aged condition. There are some structural issues in the area of TB clinic. HVAC systems are not to current standards. 3.4m floor-to-floor heights limit the ability to renovate with adequate air handling.



# Alberta Hospital Edmonton (AHE)

## Overview

### Programs & Services

- As of Oct, 2012, Adult Mental Health and Addiction (182 beds) and Forensic (123 beds) programs. Total: 305 plus 6 OCP beds (see additional notes below)
- Renovations to Building 12 provides immediate additional capacity of 40 beds.
- Renovations to Building 12 provides a further additional capacity of 40 beds once approved to operationalize.
- Adult MH outpatient clients are served in the community.
- Forensic Program operates programs in the community.

### Facilities

- Forensic Building #3, built 1981, 2 storeys + part basement
- Adult Psychiatry #8, built 1950, 2 storeys + part basement
- Adult Psychiatry #10, built 1968, 2 storeys + part basement
- Adult Psychiatry #12, built 1970, 3 storeys + part basement
- Clinics and Offices #9, built 1955, 3 storeys
- Fire Sprinklers in Forensic Building #3 only
- Floor to floor heights below 3.8 metres (below average)

## Issues and Opportunities (not prioritized)

1. AHE has been planned for redevelopment several times but none of the plans have been acted upon. Partial closure of the site was announced several years ago and then reversed.
2. Very large campus (169 acres) in an area of major planned growth (~60,000 to 70,000 people). This site has the potential to create an integrated health campus; would require upgrading of site infrastructure.
3. Historically, there have been a total of 27 buildings on the site, with many now decommissioned. Expansion over time has created a dysfunctional campus with poor access between key buildings and confusing wayfinding.
4. Addiction services are not available on-site. Henwood, a residential addictions treatment centre, is close by and requires major capital redevelopment (previously approved capital project now on hold). It could be considered for rebuilding on-site as part of an overall Health Campus concept.
5. On-site diagnostic / testing services (general radiology, CT, EEG) with relatively low rates of utilization. Access to services is a challenge for community clients; located in the Forensic Building.
6. Acuity of psychiatric illness as well as rates of medical comorbidity are increasing. Very difficult to manage these clinical needs in the current facilities.
7. Patients with developmental disabilities are admitted into the general population, presenting programming and safety challenges.
8. The size and design of the adult inpatient units is below current standards. This is critical for those units where patients do not have off-unit privileges; patient crowding leads to increased safety and security concerns. Poor lines of sight for staff supervision are common.

- 
9. Generally insufficient infection control measures such as hand sinks, private rooms with private washrooms. There are no negative pressure / isolation rooms.

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  10. In total, there is not sufficient seclusion capacity on the campus. It has been noted that 3 more rooms have been developed since the site tours / review.

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  11. General lack of anti-ligature features, even in the newly renovated Units in Building 12.

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  12. While one of the new units in Building 12 was in the process of being opened, the tour leaders and the team, through its MH planning experience, were able to identify functional constraints that will be present, due in large part to the nature of the base building configuration and constraints to the scope of renovation (e.g. see note above re anti-ligature).

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  13. Many areas have no coverage for duress alarms for staff and visitors. The system, where available is outdated. The overall situation creates higher levels of risk.

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  14. Under-utilized and vacant spaces are scattered throughout AHE. There are many non-mental health services using space in the buildings; these services are from provincial programs, Edmonton Zone and other Zones outside Edmonton. It was reported that a number of services were identified that could be downsized or decanted off-campus.

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  15. Very nice recreation and leisure facilities (pool, gym, woodworking, arts/crafts, etc.).

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  16. Generally low floor to floor heights in buildings limit future renovation abilities.

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  17. Non sprinklered buildings creates a significant safety issues, especially in a mental health facility.

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  18. Very limited air handling systems.

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  19. Building fabric generally appears to be old with numerous functional issues.

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ALBERTA HOSPITAL EDMONTON	ADULT MENTAL HEALTH INPATIENT	FORENSIC INPATIENT	CENTRE FOR PSYCHIATRIC ASSESSMENT	TREATMENT MALL	ECT
<b>Building 10</b>					
<b>Building 12</b> (see Facility Summary notes re Inpatient Unit)					
<b>Building 8</b>					
<b>Building 3 (Forensic)</b>					
<b>Building 9</b>					

# Devon General Hospital

## Overview

### Programs & Services

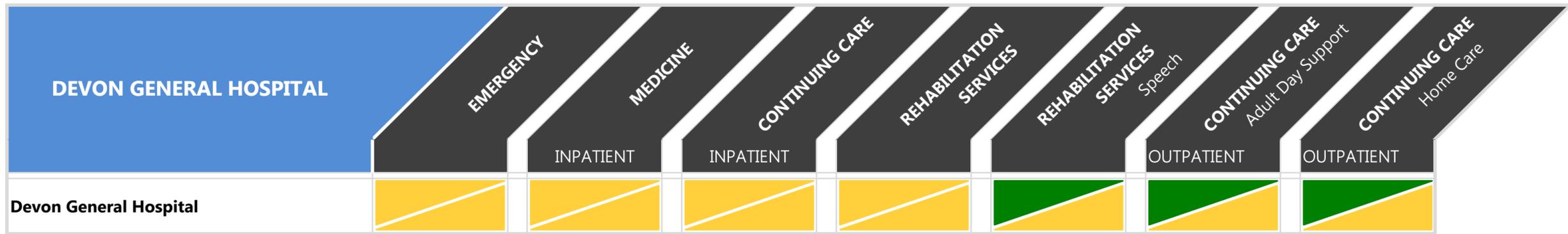
- “Hybrid model” for inpatient care - 10 acute, 3 transition, 10 continuing care, and 1 respite beds with a common staff providing care
- Emergency, public health, home care, adult day programs, mental health, speech language, rehabilitation.

### Facilities

- Original construction 1984
- ER renovation in 2008
- 2 storeys including basement
- Fire Sprinklers throughout
- Floor to floor height over 4.4 metres (above average)

## Issues and Opportunities (not prioritized)

1. Major population growth is projected for Leduc/Devon/Beaumont region.
2. Develop into a community/primary care facility – with acute and continuing care needs being met by Leduc and Westview
3. The combination of patient care levels ('hybrid model') on the inpatient unit has issues with care standards and efficiencies. Suggestion has been made that the facility should not have any beds; or, minimally, convert to only one level of care.
4. All inpatient bed rooms have the capacity to provide various levels of care (acute, sub acute, transition, continuing care) so there is potential to alter the existing service delivery model.
5. Until 2010, there was a demonstrated ability to reduce ER volumes with “Right Care in the Right Place” initiatives (e.g., after hours clinic); since then the after hours clinic has reduced hours of operation, is at capacity, and ER volumes have been impacted (volumes; increasing ratio of CTAS 4 and CTAS 5 patients). Should Devon have a full-service Emergency or is Urgent Care more appropriate?
6. If continued to operate as an ED, renovation is needed to implement fast track/RAZ and to provide patient care spaces that meet current standards.
7. EMS staff spaces do not meet standards; significant violation of privacy, etc.
8. Some health services could be relocated to the community to provide additional ambulatory care space (e.g., private physician offices; speech therapy; adult day program). Appropriate space and cost of leasing area in community may present with issues.
9. Facility infrastructure and site designed with capacity for 100 beds by adding 2-3 inpatient unit pods (24 beds each)
10. Does not appear to be designed for vertical expansion
11. Reported to have well maintained infrastructure – recent system upgrades and replacements
12. Underutilized space throughout including laundry in former CSR & pharmacy, DI, shell/storage space, unused OR, etc.



# Edmonton Clinic\*

## Overview

### Programs & Services

- New, large, purpose-designed clinic that has been open only a few months and is about 40-50% occupied.
- Offers a wide range of clinic and ambulatory services including Neurosciences, Medicine, Family Medicine and Surgery.
- Space also provided for Glen Sather Sports Medicine Clinic plus a full floor of Dental Clinics.
- Large DI and Lab Departments

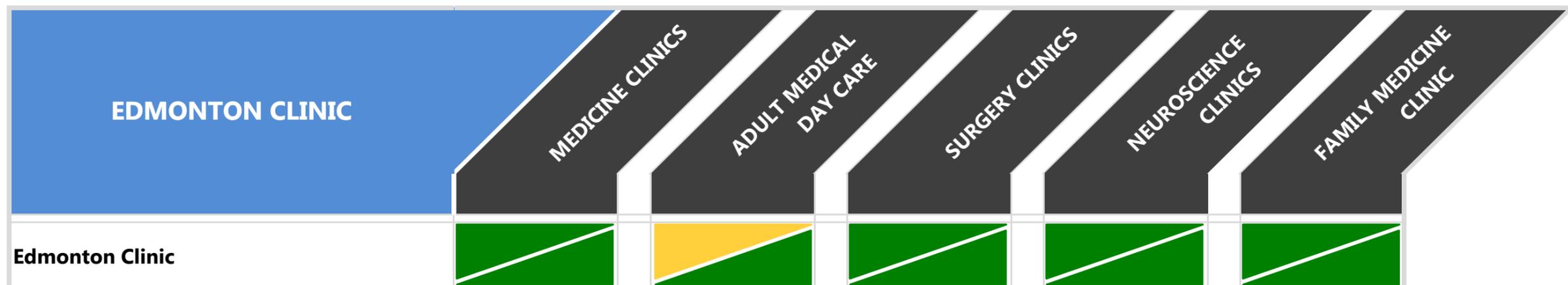
### Facilities

- Original construction 2012
- 8 storeys plus basement
- Fire Sprinklers throughout
- Floor to floor height over 4.5 metres (above average)
- Excellent construction

## Issues and Opportunities (not prioritized)

1. 8-storey building with 2.5 floors of shelled-in space, all of which has been planned for future use (Mental Health, NARP/Transplant, Northern Alberta Urology Centre)
2. 170 exam rooms (very nice design), 27 procedure rooms – 4 of which are negative pressure, 7 consult rooms with telehealth.
3. Each clinic has been individually designed to meet the requirements of current users. Renovation may be required if the designation of any clinic area is changed.
4. Very limited nurse call and medical gases in the building may restrict possible uses of the space. Code response is 9-1-1.
5. Soiled utility spaces are not consistently designed. Some have macerators, some open hoppers.
6. Communication systems are limited: no WIFI (have added printers to many exam rooms) and many areas of the building have no cell phone reception. There are no duress alarms for staff.
7. Reported concerns about building systems (inadequate emergency power, no redundant systems, plenum air returns, etc.) may limit the functions that can be located in this building.
8. Electronic information kiosks are available but not yet in full use.
9. Limited support services (i.e. retail food services)

*\*At the time of the facility tours in the fall of 2012, Edmonton Clinic had not yet been re-named to 'Kaye Edmonton Clinic'.*



# Edmonton General Site

## Overview

### Programs & Services

- 460 long term care beds, 26 hospice beds and 20 sub-acute beds as well as many ambulatory services and private-sector tenants in leased space (note: the facility tour focused on ambulatory spaces)
- Only site for pulmonary rehabilitation.
- Only Level III Sleep Lab in Edmonton.
- Large hemodialysis unit, expanding to nocturnal dialysis soon.
- Zone-wide vaccine storage is on this site.

### Facilities

- 5 buildings
  - A/B – 1939/1946 8 stories plus basement
  - C – 1965 8 stories plus basement
  - R – 1967 12 stories plus basement
  - Y – 1980 9 stories plus basement
- Buildings A,B,C,Y Fire Sprinklers, R no sprinklers
- Floor to floor heights less than 3.8 metres (below average)

## Issues and Opportunities (not prioritized)

1. Capacity and operational pressures in STI Clinic, Hemodialysis, Centre for Lung Health and the Sleep Lab.
2. What is the long term vision for this site? What should and should not be located here?
3. STI Clinic is undersized for current demand. Very limited storage. In-department lab does not meet current standards. Privacy is a concern as the Department is a thoroughfare for pedestrian traffic.
4. Community Aides to Independent Living offers ostomy services, lower leg assessments and incontinence services. Cannot provide wound services because there is no hand sink. Length of wait has doubled to 12 weeks.
5. Centre for Lung Health serves Edmonton Zone patients and provides distance services to 13 remote sites in Alberta with 7 additional sites on a wait list for service. Need additional gym space (potential to utilize the old rehab department).
6. The NARP satellite dialysis unit is in a poorly-designed unit. Only 23/24 stations are in use; there is a pillar blocking usable space; the rest are used for storage. Only have 2 private rooms but need 5. Have had flooding in this department. Nocturnal dialysis will begin soon. Plan water treatment upgrades that are contingent on funding availability (\$200K required).
7. The Sleep Lab has a 3-year wait list. Many patients are bariatric but the unit is not designed to accommodate them. Issues with vermin infestations. Significant unused space in this department.
8. This is the only site for LTC patients to receive hemodialysis. Should one unit (8Y) be converted for inpatient hemodialysis?

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9. Good palliative care program. Potential to combine ambulatory palliative care program at the CCI with the EGH services to create a Palliative Institute.

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  10. Need for psychiatric long term care for patients under the age of 65 years.

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  11. Pediatric Centre for Weight & Health should move to the Stollery.

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  12. There are many commercial tenants on this site. Leasing arrangements are often out of date and have not been standardized. Tenants are taking up valuable space that could be put to other uses.

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  13. Elevators are all outdated and function poorly.

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  14. City of Edmonton, Jasper Avenue revitalization master plan encourages street front retail/commercial street frontage for all redevelopment.

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  15. A building (1939) may be of heritage significance (currently not designated).

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  16. Very limited on-site parking.

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  17. Significantly outdated infrastructure in A,B,C & R buildings – A/B not air conditioned with perimeter radiators, security is poor – needs CCTV and access control, R is a former nurses residence with low floor to floor heights.

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  18. Partial food service renovation recently completed.

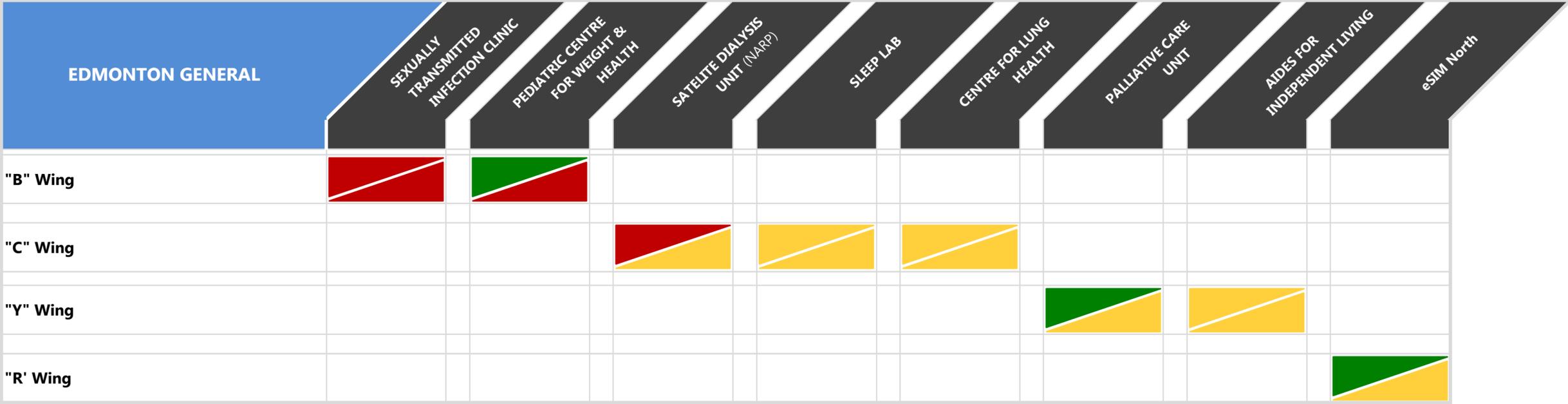
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  19. Should this site be converted to administration for the zone?

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  20. Should there be an Urgent Care Centre on this site?

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# Fort Saskatchewan Community Hospital

## Overview

### Programs & Services

- 38 built beds; 32 beds operational (includes 2 special care beds + 2 OB assessment beds); 2 LDRP suites; and 2 OCP beds
- Emergency, general/cataract surgery, endoscopy suite, public health, home care, addiction and mental health team, rehabilitation services

### Facilities

- Original construction 2012
- 3 interconnected buildings
  - Inpatient Pod 1 story
  - Acute North & South 1 story
  - Health Services Wing 2 story
- Fire Sprinklers throughout
- Floor to floor height over 4.4 metres (above average)

## Issues and Opportunities (not prioritized)

1. New, functional facility just opened in 2012.
2. A large shelled-in space that could be configured for additional ambulatory clinical space.
3. There is unused capacity in inpatient services (6 closed beds). OBS/gyne could be consolidated at either SCH or RAH.
4. There is unused capacity in the emergency department (closed stretchers). Potential to incorporate Primary Care Network after hours clinic within Hospital space.
5. Large rehabilitation space is underutilized.
6. Public Health occupies a large area that appears underutilized.
7. There is unused capacity in operative services (ORs). Emergency surgery is provided but the future of this has been questioned. The recovery room (3 stretchers) and the MDR may not be sized to support the theatres functioning at full capacity. Potential to increase % of non general anaesthetic cases not requiring PARR (recovery in Day Surgery). Staff note they would like to eliminate pediatric surgery and emergency general surgery.
8. Additional perceived clinical needs include: urgent care centre; consolidation of cataracts from WVHC to FS; consolidation of foot and ankle surgery to FS; 12-station hemodialysis and chronic renal disease clinics; among others.
9. Building infrastructure in place to accommodate renal bus.

- 
10. The triage / registration area of the ED requires reconfiguration to provide better visibility of waiting area. There are significant P&C issues in the secure room in Emergency.

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  11. The endoscopy scope cleaning has flow and potential pressure issues.

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  12. The mental health space is lacking proper secondary egress, is at full capacity with no expansion space and accessibility issues.

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  13. Home Care has no expansion space.

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  14. Some services could be located in the community to provide additional ambulatory care space (e.g., leased space/Child and Family Services; audiology services)

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  15. Health Services Building (2 stories) is built to 'commercial grade' as an office/clinic facility with a 'D' Occupancy rating (to be confirmed) and ceiling return air plenum, which limits future use options

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  16. Not planned for vertical growth, planned for horizontal growth including a future inpatient wing

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  17. Limited short term internal expansion opportunities for acute services

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  18. Pneumatic tube system not provided

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  19. Exemplary precautions undertaken during construction for infection control from construction related contaminants upon occupancy and into the future

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FORT SASKATCHEWAN COMMUNITY HOSPITAL	EMERGENCY	MEDICINE/ SURGERY	MEDICINE IV Therapy	OPERATIVE SERVICES OR/RR	OPERATIVE SERVICES DCS	OPERATIVE SERVICES Endoscopy	WOMEN'S HEALTH	ADDICTION & MENTAL HEALTH	REHABILITATION SERVICES	CONTINUING CARE Home Care	PRIM CARE/ CDM/PH
		INPATIENT	OUTPATIENT	INPATIENT	OUTPATIENT	OUTPATIENT	INPATIENT	OUTPATIENT		OUTPATIENT	
<b>Inpatient Pod</b>											
<b>Acute Care Building</b>											
<b>Health Services Building</b>											

# Glenrose Rehabilitation Hospital

## Overview

### Programs & Services

- Adult & Geriatric Rehabilitation: 201 beds (104 adult beds; 104 geriatric beds)
- Paediatric Rehabilitation: 10 beds
- Child and Adolescent Mental Health: 26 beds and 3 day programs
- General and specialty outpatient clinics for all ages related to rehabilitation and co-existing conditions
- Full range of rehabilitation assessment & therapeutic services (OT, PT, SLP, RT, Communication Disorders, Audiology, etc.)
- Full range of interdisciplinary care (Physiatry, Psychiatry, Medical, Social Work, Psychology, Rehabilitation teams)
- Technologies supporting rehabilitation (P&O, seating, CAREN, Building Trades if Alberta Courage Centre, Syncrude Centre, ICAN Centre, etc.)

### Facilities

- Gleneast constructed 1966
- 3 storeys plus basement
- Glenwest constructed 1990
- 4 storeys plus basement
- Addition to Energy Centre 2012
- Fire Sprinklers throughout
- Floor to floor height, approximately 4.25 metres (average)
- Additional Buildings: Glenrose House and Research Building

## Issues and Opportunities (not prioritized)

1. Glenrose is a tertiary rehab facility with only a few peer facilities in North America. It is a major clinical resource for the Edmonton Zone, other parts of the province, NWT, NE British Columbia, and Saskatchewan, and is at full capacity with no room for growth.
2. There are four buildings for patient care: GlenWest, GlenEast, the Annex and a trailer, all of which are currently over-capacity. GlenEast is past its expected life and should be replaced. The trailer, originally intended for short-term use about 10 years ago, has become a permanent site for patient care. It is not a convenient location in relation to the main hospital and does not have a patient washroom.
3. The patients are becoming more medically acute at the same time that there is pressure for shorter lengths of stay. Inpatient spaces have limited availability of ceiling lifts and piped gasses which may not align with patient care needs. Space is at capacity to accommodate patient care equipment and supplies and there is limited availability for access to power for charging equipment. There is limited ability to manage bariatric patients which are becoming more common. Also a lack of features to enhance infection control practices: shortage of private patient bedrooms, isolation rooms, hand sinks.
4. Inappropriate balance between private, semi-private and ward rooms on the rehabilitation inpatients units can create problems with respect to male/female cohorting, bed utilization, meeting unique needs of various patients (including bariatric patients).
5. Child and adolescent mental health is housed in small, very poor quality space with safety risks (i.e. ligature risk) and no access to secure outdoor space for children who might be in hospital for weeks or months. This is an 'orphan' program on this site; planning study currently underway to review future configuration of all child and adolescent mental health services that are currently spread across multiple sites.

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6. Programs are shifting toward a new model of ambulatory care: Specialized Rehabilitation Outpatient Program (SROP). There is a shortage of space to house these programs and insufficient and/or inappropriate accommodation of interdisciplinary care teams and students.

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  7. There is a 10-bed inpatient unit for pediatric rehab with 10 stretchers for day use. Management recently transferred from the Stollery to the Glenrose. Occupies a very large space for the small number of children treated.

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  8. Pediatric rehabilitation space is small and poorly designed; using portable dividers to create treatment spaces.

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  9. Office space is substandard throughout the site. Clinicians commonly share offices so one person must leave to allow the other to see/treat patients. Some staff are located in 'the maze'; a confusing, poorly-designed office area where many patients are seen. Control of noise and P&C in this area are problematic.

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  10. Overall lack of supplies, files, and patient care equipment storage for both day to day operational needs and mid to long term storage needs (i.e. less frequently accessed but necessary items); patient care / support spaces are often used to meet these needs, such as supplies in shower rooms).

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  11. Lack of privacy and confidentiality limits to how families can be involved in care, lack of private spaces for client and family consultations, group treatment, interdisciplinary team case discussions, etc.

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  12. Deteriorating facilities are limiting access to rehabilitation services (e.g. Pool, auditorium [not accessible]).

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  13. Wayfinding can be confusing in the GlenWest building due to circular building configuration and poor signage. Inefficient building design in GlenEast results in a lot of walking.

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  14. There are wonderful technologies available for patient assessment and therapy.

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  15. The Glenrose has strong and important relationships with the Canadian military, with many private corporations/donors and with rehab researchers.

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  16. Edmonton School Board runs school programs for all children at the Glenrose and kids attend class for 4 hours/day. Classroom spaces have been adapted as much as possible but do not meet current standards.

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  17. Plenum air return was reported for inpatient units. This air handling approach does not meet current HVAC standards.
-

GLENROSE REHABILITATION HOSPITAL	ADULT GERIATRIC REHAB PROGRAMS	PAEDIATRIC REHAB PROGRAMS	PAEDIATRIC REHAB PROGRAMS	CHILD & YOUTH MENTAL HEALTH	CHILD & YOUTH MENTAL HEALTH	GERIATRIC PSYCHIATRY	PROSTHETICS, ORTHOTICS, SEATING	SCHOOL PROGRAM REHAB	SROP - ADULT	CARDIAC SCIENCES REHAB	ADULT & GERIATRIC CLINICS	PAEDS CLINICS	REHABILITATION TECHNOLOGY	COMMUNICATIONS DISORDERS	AUDIOLOGY	ADULT CENTRALIZED REHAB: OT, PT	RECREATION THERAPY	POOL	CLINICAL TEAM ACCOMMODATION	
	INPATIENT	INPATIENT	OUTPATIENT	INPATIENT	OUTPATIENT	INPATIENT	IP/OP	OUTPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	IP/OP	IP/OP	IP/OP	IP/OP	IP/OP	IP/OP	IP/OP	IP/OP	
GlenWest	Yellow					Yellow	Yellow		Green	Green	Green				Green	Green				Yellow
GlenEast		Red	Red	Red	Yellow			Yellow				Yellow	Yellow	Red			Yellow	Red	Red	Red
Annex								Yellow							Yellow					Red

# Grey Nuns Community Hospital (GNCH)

## Overview

### Programs & Services

- 360 adult beds, 25 Level 2 NICU beds, 20 palliative care
- 24-hour ED, surgery (including general, vascular, gynecology, ENT, dental, plastics, orthopedics, urology), critical care, general medicine, adult psychiatry, women's health, ambulatory care and cardiac rehab.
- Primary site for vascular surgery

### Facilities

- Original Construction 1988
- 5 storeys plus basement
- St Marguerite's Health Services Centre Constructed in 2006
- 4 storeys
- Fire sprinklers throughout
- Floor to floor height over 4.4 metres (above average)

## Issues and Opportunities (not prioritized)

1. Capacity pressures in Emergency, vascular surgery, obstetrics/NICU, medicine (especially BiPap beds), inpatient psychiatry, hemodialysis.
2. Emergency layout impedes patient flow, undersized and poorly designed to meet the needs of 60,000 visits/year. The waiting room is split in two. There are only 2 seclusion rooms (need 4) and only one negative pressure treatment space. Continue to use 6 hallway spaces routinely plus additional parking spaces for EMS. There are only 12 monitored beds out of 26 spaces. RAZ is chaotic and congested with no privacy. Satellite DI cannot accommodate a stretcher so only extremity studies can be done here.
3. Storage is a problem throughout the clinical areas. Tub rooms and shower rooms have been converted to storage spaces.
4. IPC issues...Not enough hand hygiene sinks on inpatient units. The only true negative pressure room on the site is in Emergency.
5. Very nice Obstetrical and NICU Units, both newly renovated.
6. Aside from the 10-bed secure psychiatric unit (Unit 92), GNCH has OCP beds for psychiatry as well as for the Zone (OOCB beds). Major capacity issues....may put 3 patients with serious psychiatric problems in the same room. There is only one room that can be secured on Units 91/93 but it is not a true seclusion room.
7. CCU and ICU is a discreet unit.
8. Patient flow is also an issue in Diagnostic Imaging (DI), Day Medicine (DM) and Endoscopy program areas.
9. There are two theatres for vascular surgery that are not optimal, specifically due to lack of fixed imaging capability. Major capital project has been proposed for vascular ORs and surrounding areas.

- 
10. Child Health Clinic occupies Unit 23 which could be converted (back) into 29 inpatient beds.

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  11. MDR has poor flow process areas. Oversized sterile stores with additional space for storage – not well utilized.

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  12. St Marguerite Health Services Centre is undersized to meet demands on Edmonton's South-East, noted problems also include both heating in winter and cooling in summer systems

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  13. Parking at this site is a major issue, any growth or loss of site due to construction will need to address this issue in the future

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GREY NUNS COMMUNITY HOSPITAL	EMERGENCY	MEDICINE INPATIENT	MEDICINE OUTPATIENT	SURGERY INPATIENT	SURGERY OUTPATIENT	CARDIAC SCIENCES / CRITICAL CARE INPATIENT	CARDIAC SCIENCES OUTPATIENT	ICN	PEDIATRIC CLINICS OUTPATIENT	WOMEN'S HEALTH INPATIENT	RENAL & TRANSPLANT OUTPATIENT	ADDICTION & MENTAL HEALTH OUTPATIENT	REHABILITATION SERVICES
Grey Nuns Community Hospital	Red and Yellow	Yellow	Green	Yellow	Red and Green	Yellow	Green	Green	Green	Yellow and Green	White	Green	Yellow and Green
Family Medicine Clinic			Green										
St. Marguerite's Health Services Centre			Green		Green						Green	Green	

# Leduc Community Hospital

## Overview

### Programs & Services

- Inpatient Services: 34 beds (medicine; surgery; special care unit) and 36 sub-acute and transition beds
- Emergency department, day surgery, endoscopy, outpatient clinics
- Leduc Business Unit (LBU) contracts with WCB to expedite services to injured workers, utilizing operative services and visiting specialist clinics

### Facilities

- 2 buildings
  - Administration building 1960 1 story plus basement
  - Main building 1987 3 story plus basement
- Renovations in 2006 – ER, 2007 – DI, 2008 - day surgery, endoscopy
- Fire Sprinklers throughout
- Floor to floor height between 3.8 and 4.4 metres – admin building (average)
- Floor to floor height over 4.4 metres – main building (above average) – Level 1 is higher than other floors

## Issues and Opportunities (not prioritized)

1. Major population growth projected for Leduc/Devon/Beaumont region.
2. There is capacity pressure on the inpatient beds.
3. Sub acute and transitional patients require better access to communal/group area for therapy/socialization.
4. Non acute care could be moved to adjacent sites (Westview/Devon) to allow for increased numbers of patients requiring higher acuity care.
5. Clinic areas/leased space on levels 2 and 3 are closed inpatient care units.
6. Palliative care is 2<sup>nd</sup> highest CMG relating to inpatient activity – no residential hospice in community.
7. The emergency department requires reconfiguration at entrance and elsewhere to provide increase in capacity (RAZ/fast track); staff note that department has flow issues and not all patient care spaces are fitted with suction/oxygen.
8. There is no CT/MRI on site but shelled in space for CT scanner and recovery area in DI developed in 2007.
9. Until 2010, there was a demonstrated ability to reduce ER volumes with “Right Care in the Right Place” initiatives (i.e., after hours clinic); since then the after hours clinic has reduced hours of operation, is at capacity, and ER volumes have been impacted (volumes).
10. Unused capacity in the ORs; however MDR is short of space, has flow issues and likely can’t increase capacity. Staff feel there is potential to be used for subzone OR/procedure work -could take over surgical activity from WVHC.

- 
11. Approximately 33% of surgical activity relates to Leduc Business Unit.

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  12. Orthopedic surgeons assigned to Leduc by 'surgery template for the zone': No facility input into these assignments (impacts volumes) and allocated support (i.e. equipment/supplies) to the site may not be reflective of the assigned surgeons activities

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  13. Mental Health team moving off site will allow for very usable vacant space for ambulatory clinical activity.

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  14. Some health services presently in the facility could be relocated to the community to provide additional ambulatory care space (e.g., leased space/private physician offices; community rehab svcs).

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  15. Very little vacant space

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  16. Limited potential for expansion on the site

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  17. Parking demand is over capacity

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LEDUC COMMUNITY HOSPITAL	EMERGENCY	MEDICINE + SUB/TRANSITION INPATIENT	MEDICINE Op Clinics OUTPATIENT	OPERATIVE SERVICES OR/RR INPATIENT	OPERATIVE SERVICES DCS OUTPATIENT	OPERATIVE SERVICES Endoscopy OUTPATIENT	ADDICTION & MENTAL HEALTH Adult OUTPATIENT	REHABILITATION SERVICES
Leduc Community Hospital	Yellow	Green	Yellow	Yellow	Yellow	Yellow		Yellow
Leduc Public Health Centre							Green	

# Mazankowski Alberta Heart Institute (MAHI)

## Overview

### Programs & Services

- This 2009 addition to the Walter C. MacKenzie Centre offers comprehensive cardiac surgery, cardiology and patient education in excellent facilities
- Inpatient services, operating rooms, catheterization labs, extensive diagnostic capacities
- ABACUS, a state-of-the-art research centre provides a shared environment for patient care and research

### Facilities

- Original Construction 2009
- 8 storeys plus basement
- Fire sprinklers throughout
- Interstitial mechanical space
- Floor to floor height over 4.8 metres (above average)

## Issues and Opportunities (not prioritized)

1. ABACUS includes echocardiography, stress testing, catheterization lab with stereotaxis, CT as well as pulmonary and neuro diagnostics. Also has access to MRI in Diagnostic Imaging (next door). Houses basic science laboratories and a sophisticated multi-media conference centre.
2. Concerns expressed about increasing workloads associated with ventricular assist device (VAD) and lung transplant patients.
3. The short stay unit is vacant.
4. The three top floors are not developed and remain vacant.
5. Excellent building constructed to contemporary codes and standards.
6. Interstitial space provides ample opportunity for renovations and ability to reconfigure mechanical and electrical systems for spaces below.
7. Locate lower acuity/low risk cardiac rehabilitation to a community setting.

**MAZANKOWSKI ALBERTA  
HEART INSTITUTE**

ABACUS

OUTPATIENT  
SERVICES

HOLDING AND  
RECOVERY

EP/CATH LAB

OPERATING SUITE

CVICU (& SSU)

CV SURGERY

ECHO/ECG/ STRESS

CARDIOLOGY

CCU

Level 2 (2A)

Level 2 (2A)

Level 2 (2A)

Level 3

Level 3 (3A)

Level 4 (4A)

OUTPATIENT

INPATIENT

Mazankowski Alberta Heart Institute

# Misericordia Community Hospital

## Overview

### Programs & Services

- Varies between 290 and 315 adult beds with 10-15 OCP; 12 Level 2 NICU beds.
- 24-hour ED, surgery, critical care, general medicine, adult psychiatry, child health, women's health and ambulatory care.
- iRSM is a specialty program that provides reconstruction and rehab for defects to the head and neck.
- Only site for hyperbaric oxygen therapy.
- Only site for lithotripsy.
- Chronic incontinence/urodynamics service.
- Villa Caritas, a designated mental health facility for continuing care patients, has 120 acute geriatric psychiatry beds and 30 transition beds.

### Facilities

- 6 buildings, plus Villa Caritas
- |                 |      |                  |   |
|-----------------|------|------------------|---|
| ATH             | 1969 | 8 stories        | Partial fire sprinklers, ER Renovated in 1991 |
| ATH             | 1989 | 3 stories        | OR's, Womens, Day Surgery, Clinics, MDRD      |
| CC              | 1969 | 10 stories       | Fire sprinklers                               |
| FMC, WA, SB     | 1969 | 1 st, 2 st, 3 st | FMC/WA no sprinklers, SB has fire sprinklers  |
| MR (HSC)        | 2006 | 3 stories        | fire sprinklers                               |
| ATH             | 1989 | 3 stories        | OR's, Womens, Day Surgery, Clinics, MDRD      |
| Central Service | 1969 | 1 story          |   |
- Floor to floor height varies, 3.8 to 4.4 metres (average), CC less than 3.8m (below average)

## Issues and Opportunities (not prioritized)

1. Major capacity pressures in Emergency, Surgical Day Ward, Endoscopy, Cast Clinic, Lithotripsy, Women's Health /ICN, Orthopedic Surgery, Psychiatry, Diabetes Clinic, Continence/Urodynamics, Home Care office space.
2. There are major facility issues that interfere with patient care and lead to daily crisis management. Frequent sewage leaks in the OR are a major concern. Issues include leaking building envelopes causing regular room closures, patient juggling and elevated risk of mould; failing elevators that disrupt patient flow, are wasteful of staff time and increase risk to patient safety; obsolete medical gas system that cannot be counted on to meet minimum standards, elevates risk to patients and wastes staff time. There is an obsolete nurse call system that is failing on a regular basis. Plumbing failure is frequent in patient areas causing closure of patient rooms. Hot water demands cannot be met – cross connection with cold water is an issue. Aging/worn surfaces and finishes require daily terminal cleaning in patient care areas instead of normal housekeeping routines. Security system does not meet minimum standards, access doors are easily breached. Wireless IT is not available at this site.
3. Failing electrical motor control centers contribute to the risk of a catastrophic patient care failure. Emergency generators do not meet minimum backup needs, breakers do not meet code.
4. Barrier free access is an issue throughout the facility, outdated 4 bed in-patient wards lack privacy, do not have wheel chair accessible washrooms and create major operational issues on a daily basis. End of life care – Palliative care is an issue. Orthopedics cannot accommodate Balkan frames. In-patient areas do not have adequate access to Physiotherapy program space
5. Lack intermediate care beds for close observation of patients.
6. It was reported that Breast Health provides nearly 60% of the Edmonton zone work.

- 
7. Emergency has 26 treatment spaces is poorly configured, undersized and all areas including trauma rooms are undersized. Hallway spaces used for patient care and for ECGs. Medication storage is not secured. Only one negative pressure room. Seclusion room poses safety concerns. 1 shared entrance for ambulance and walk in patients

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  8. Surgical Day Ward is congested, waiting room is poorly designed. Soiled utility has an open hopper. Storage is a problem.

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  9. Poor HVAC in Endoscopy leads to use of curtains instead of doors on procedure rooms. Rooms are not negative pressure. There is no scrub sink.

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  10. Outpatient Clinic is used by MCH during the day and by a PCN at night. Very busy. Gowned patients wait in public areas and have histories taken while in the waiting room. Open storage in hallways. Soiled utility does not have a waste disposal system.

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  11. Psychiatry is a 28-bed unit was never configured to meet this patient population needs, cannot be secured but that accepts involuntary patients – up to 15 at a time. ECT poorly configured, lacks recovery space and is undersized. There is no seclusion room. OCP patients are put in the group room and the bed must be moved out of the room during the day. There are only 4 single rooms and 1 double room. Remaining 4-bed rooms have L-shape design that reduces line of sight and creates safety concerns. There is no space for Mental Health Review Panel meetings. The dining room is located outside the unit. ECT room does not meet current standards.

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  12. High-Intensity Beds in ICU do not have doors on the rooms, have open hopper in each patient room, do not have washrooms, and do not have negative pressure.

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  13. Undersized and poorly configured OR's share HVAC with L+D and have open floor drains. The Sterile Core has been through mould remediation following flooding. The dumb waiter and clean elevators do not work up to 50% of the time. The Recovery Room bays have a head-out orientation.

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  14. NICU does not meet current space/design standards. Have been cited by HFRC for space issues, high noise levels, lack of family space.

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  15. The wait time for lithotripsy is 12-18 months. This service is expected to move to the Edmonton Clinic.

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  16. iRSM requires additional, consolidated dedicated program space

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  17. Cafeteria design creates significant staff down time – waits in line often exceed 10 minutes.

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  18. Washrooms on the medical units are not fully wheel-chair accessible. There are no ceiling lifts in the unit toured. Not enough medical isolation capacity – commonly have up to 25% of patients on isolation protocols. Inadequate family spaces, patient lounges, staff work areas.

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  19. The Diabetes Clinic is at capacity.

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  20. Pharmacy does not meet current process standards, flow issues and mechanical issues

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  21. Endoscopy and Cast Clinic space is too small and creates significant flow issues for patients and staff.

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  22. Continence/Urodynamics wait time is over 1 year.

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  23. Wait list for CT/MRI is 6-9 months.

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  24. Villa Caritas is a new building but does not have air conditioning.

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  25. Mother Rosalie building is a 'commercial grade' clinic building. No medical gases. May limit options for future use.

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MISERICORDIA COMMUNITY HOSPITAL	EMERGENCY	MEDICINE	MEDICINE	MEDICINE Diabetic Education	MEDICINE Urodynamics	SURGERY	SURGERY	SURGERY Ortho/General	SURGERY Day Ward + Endoscopy	SURGERY IRSM	CARDIAC SCIENCES	WOMEN'S HEALTH	WOMEN'S HEALTH	ICN	CRITICAL CARE & BURNS	ADDICTION & MENTAL HEALTH	ADDICTION & MENTAL HEALTH	REHABILITATION SERVICES	PRIMARY CARE / CDM / PUBLIC HEALTH	
	INPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	INPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	INPATIENT	INPATIENT	OUTPATIENT			INPATIENT	OUTPATIENT				
Clinical Support Building (M.R.B.)																				
Active Treatment Hospital																				
Family Medicine Centre																				
Villa Caritas																				

# North East Community Health Centre (NECHC)

## Overview

### Programs & Services

- Full-service Emergency Department.
- Wide range of community-based services tailored to the high-needs residents in northeast Edmonton.
- Use telehealth to provide pediatric/adolescent outreach to Slave Lake, Jean D'Or, Fox Lake, etc.

### Facilities

- Original construction 1998
- Minor renovations to administration and clinics
- 1 storeys plus basement
- Fire Sprinklers throughout
- Floor to floor height over 4.4 metres (above average)

## Issues and Opportunities (not prioritized)

1. Emergency was built for 25,000 patients and is now seeing 53,000 people per annum (9.2 patients/stretcher/day) with growing numbers of CTAS 1 and 2. NECHC has the second highest pediatric emergency volumes in the Zone. Emergency has full ambulance service but no covered ambulance bay/garage. Triage/Patient Registration is small and poorly-designed. The Emergency Department is undersized for volumes, has very small trauma room, inadequate storage and poorly-designed negative pressure room. No CT or inpatient beds to back up Emergency. Should Emergency continue to be a service offered on this site?
2. Capacity pressures or operational needs: Emergency, Bridging Clinic for unattached patients seen in Emergency, Cast Clinic (AMSAFE), mental health services especially in Emergency, Diabetic Neuropathy Clinic (second-highest volumes in the Zone).
3. Strong community programs: public health, family health, seniors' health, women's health, pediatric/adolescent clinic, asthma, diabetic neuropathy.
4. Service planning for this site should be done in conjunction with AHE, Strathcona and Fort Saskatchewan.
5. Lab area is small and does not meet accreditation standards. There are no backup analyzers. Need more POCT. Don't have the right space for bariatric collections.
6. General radiology and ultrasound available on-site. No stretcher waiting in DI. Cannot get a stretcher into Ultrasound exam room.
7. Parking is very poorly-designed (can be dangerous at times) and inadequate in size.
8. Pedestrian access across very busy streets is uncontrolled and can be dangerous.
9. Cannot secure the site after-hours.
10. No vacant space on this site.

- 
11. Land locked site - very little horizontal expansion space, no vertical expansion capacity (structural).

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  12. Building designed for clinics (commercial grade) with return air ceiling plenums and roof top air handling units

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  13. Ambulance garage project awaiting funding approval (spring 2013?)

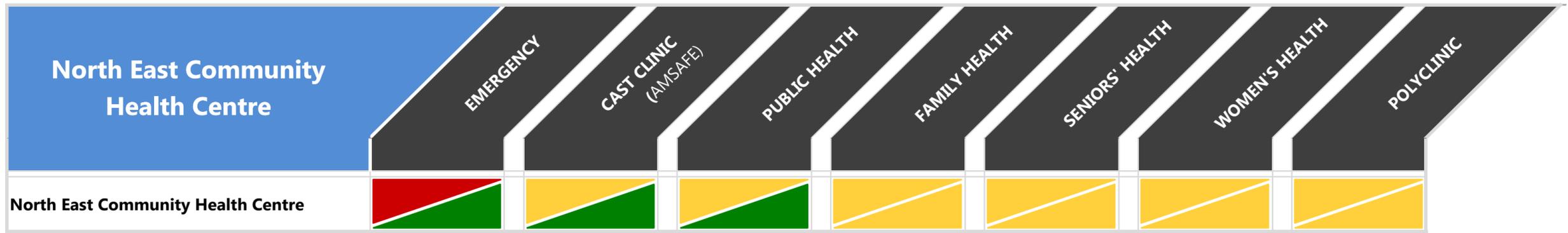
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  14. Loading dock is undersized and restricts the types of equipment that can be received here.

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  15. Need additional space for Pharmacy (Pyxis).

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# Royal Alexandra Hospital (RAH)

## Overview

### Programs & Services

- 1,114 built beds with 882 in operation.
- Together with UAH provides trauma care for the Zone.
- Centre for Thoracic Surgery for Northern Alberta.
- Emergency Department tracking at close to 80,000 visits for 2012/13.
- Provides complex/tertiary obstetrics to Northern Alberta. Projecting 6,000 obstetrical deliveries for 2012/13. Over 60 NICU beds on the site.
- Provincial centre for bariatric surgery.
- U of A Departments of Ophthalmology and Obstetrics/Gynecology.

### Facilities

- 12 buildings, various heights up to 8 stories

<b>Building</b>	<b>Age</b>	<b>Sprinklers</b>	<b>Building</b>	<b>Age</b>	<b>Sprinklers</b>
ATC	1960	Y	SSS	2004	Y
CC	1964	Y (most areas)	WC	1951/68	Y (most areas)
CSC	1958	Y (most areas)	MMC	1993	N
EC	1993	Y	DTC	1994	Y
RDC	2003	N	AH	1968	N
RP	2009	Y	OSC	2010	Y

- Floor to floor height varies by building – AH below average, RP & OSC above average, others average

## Issues and Opportunities (not prioritized)

1. RAH is a major tertiary site but also functions as a community hospital for inner-city residents.
2. There are significant operational and capacity pressures in gyne surgery, medicine, cardiac sciences (inpatients), trauma, cancer surgery, NARP, Ophthalmology Clinic, Emergency, Psychiatry, Adult ICU, and NICU.
3. Key support areas, notably MDR and Pharmacy, are either at capacity or have significant space/design problems that hinder productivity.
4. The ATC inpatient tower – which currently houses over 500 inpatient beds – is truly obsolete and requires replacement.
5. The Emergency Department needs major redesign *and* expansion to meet its current workload demands.
6. There is a shortage of Observation (Intermediate Care/Monitored) Beds throughout the facility that affects all programs. Surgery can be cancelled due to shortage of Observation Beds & movement of patients out of Emergency and ICU can be obstructed by lack of available beds. Some of these beds need to have isolation capacity.
7. There is pressure to expand the bariatric programs and to add bariatric operating rooms.
8. Would like to have the Spine Program (neuro + ortho) formally recognized and all zone activity should be consolidated here. Some feel this should be a provincial program.
9. There are major IPC concerns in the older buildings with a shortage of negative pressure / isolation rooms.
10. Psychiatry programs for children, adolescents and adults are all in substandard spaces that present risks to patients and to staff.
11. Operational infrastructure such as elevators and lifts are often not working reliably and impair productivity.

- 
12. This is a complex, congested campus. Wayfinding is a major problem as is parking for patients, visitors and staff (wait list of 650 people).

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  13. There is unused capacity in the form of closed beds on Units as well as shelled-in space that could be developed for inpatient beds, ORs, etc.

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  14. It was noted that a number of programs (mostly ambulatory) could be decanted off-site but stakeholders worry about splitting integrated services with these moves.

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  15. Currently provide 2/3 of zone arthroplasty and want to consolidate all low-risk procedures on this site.

---

  16. Ophthalmology Clinic is large and busy...does this program need to expand or should its operations be optimized in the current space?

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  17. NARP is at full capacity for its hours of operation and looking at major increases in demand. Some feel that outpatient dialysis should go off-site. Others would like to see co-location of inpatient and outpatient services.

---

  18. Outpatient clinic is small and doesn't have needed spaces. Initial patient assessments and some patient recovery take place in hallways.

---

  19. The Bridging Unit and Transition Units are in very poor quality spaces that do not meet the needs of vulnerable, frail elderly patients.

---

  20. DI needs a recovery room that is sized to meet demand. Want to increase Ultrasound capacity and to add PET/CT.

---

  21. Lab needs space/facility upgrade, especially in the collections area. The morgue cannot accommodate bariatric patients and this is a bariatric centre.

---

  22. The main MDR is very efficient but close to capacity. Needs new equipment (cube washers). The MDR in the Orthopedic Surgery Centre is very small and already close to capacity.

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  23. Pharmacy is poorly-designed and is missing some key work and support spaces.

---

  24. Neither the Adult ICU or the NICU meet current space or design standards. Both services believe they need more beds as well as increased fetal echo capacity.

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  25. Gestational Diabetes Program is in very poor space; it needs to be moved (high priority).

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  26. The IVF Clinic must move from its current location because of the impact of diesel fumes and vibration from the transit centre on embryos.

---

  27. There are large psychiatry/mental health populations served by RAH but there are insufficient or inadequate spaces for program delivery.

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  28. The trauma program is currently operating on two sites, however, they are encountering operational difficulty in maintaining this model with the need to sustain full coverage from trauma, neurology and orthopedics at all times.

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  29. There is no acute stroke program. Patients requiring thrombolytic therapy bypass RAH and go to UAH.

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  30. How should OT/PT services be offered? Inpatients only? Centralized or decentralized?

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  31. A site-wide wireless communication system is needed and should be a top priority.

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  32. There is a major proposal for Food Service renovation/expansion to serve RAH and GRH from this site.

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  33. "The Pit" (Health Records space in the sub-basement) presents OH&S and fire safety concerns
-

Royal Alexandra Hospital	EMERGENCY	MEDICINE	MEDICAL OUTPATIENT CLINIC	OPHTHALMOLOGY CLINIC	SURGERY	CAST CLINIC	DAY SURGERY and ENDOSCOPY	OR and PARR	CHILD HEALTH CLINICS	PEDIATRIC DAY SURGERY	CARDIAC SCIENCES	CARDIAC SCIENCES	NEUROSCIENCES	CAMHS	WOMEN'S HEALTH and NICU	WOMEN'S HEALTH	CRITICAL CARE & BURNS	RENAL & TRANSPLANT	RENAL & TRANSPLANT	ADULT MENTAL HEALTH	ADULT MENTAL HEALTH	MENTAL HEALTH HOUSING	CHILDREN'S MENTAL HEALTH	ADOLESCENT MENTAL HEALTH	REHABILITATION SERVICES
	INPATIENT	OUTPATIENT	OUTPATIENT	INPATIENT	OUTPATIENT	OUTPATIENT		OUTPATIENT	OUTPATIENT	INPATIENT	OUTPATIENT	INPATIENT		INPATIENT	OUTPATIENT		INPATIENT	OUTPATIENT	INPATIENT	OUTPATIENT	OUTPATIENT	INPATIENT	INPATIENT		
Active Treatment Centre																									
Diagnostic & Treatment Centre																									
Short-Stay Surgery Centre																									
Emergency																									
Robbins Pavillion																									
Women's Centre																									
Children's Centre																									
Orthopedic Surgery Centre																									
Community Services Centre																									
Renal Dialysis Satellite Unit																									
Anderson Hall																									

# Stollery Children's Hospital

## Overview

### Programs & Services

- Specialized pediatric services for children from northern and central Alberta, Saskatchewan, NWT, Northern British Columbia as well as parts of Manitoba. It is the cardiac surgery referral centre for Western Canada and is a leader in organ transplantation.
- Note that most programs and services are located at the Walter MacKenzie Centre with some also in the Clinical Services Building and the Medical Sciences Building on-site. In addition, Stollery programs and services are located at the Royal Alexandra Hospital (RAH) and the Edmonton General Hospital (EGH). Because our tours were organized by facility/site, see also the RAH and EGH facilities for references to the Stollery programs and services at those sites.

### Facilities

- Original Construction 1981 (phase 1) and 1986 (phase 2)
- Renovations for Stollery Children's Hospital in 2004
- Emergency construction 2012
- 5 storeys plus basement
- Fire sprinklers throughout
- Interstitial mechanical space
- Floor to floor height over 4.8 metres (above average)

## Issues and Opportunities (not prioritized)

1. As the majority of programs and services are imbedded in the large Walter MacKenzie Centre, horizontal distances from main entrances to programs and services can be lengthy and way finding is complex. In addition, vertical transportation is stressed and inadequate to meet current requirements/demand.
2. Some departmental relationships are not ideal for the provision of services, i.e. one inpatient unit is isolated on the 5<sup>th</sup> floor (while all other wards are on the 4<sup>th</sup> floor and the NICU and PICU are on the 3<sup>rd</sup> floor); adult inpatient psychiatry services are immediately adjacent to a pediatric inpatient unit; ambulatory services are located in several areas within the WMC and in the Clinical Services Building and the Medical Sciences Building.
3. Both the PICU and NICU do not meet current space or design standards. There are significant safety, IPC and privacy issues. It is intended that the Cardiac PICU will be relocated to the MAHI.
4. The inpatient units generally lack storage space and support spaces for patients, families and staff. In addition, there is a lack of separation (private) and isolation rooms and the ability to cohort immunosuppressed patients away from infectious diseases patients.
5. There is a lack of pediatric psychiatry, ophthalmology and gynecology in the pediatric emergency department.
6. There is a major capital project to redevelop the Level 1 Surgical Suite and Day Ward.

- 
7. There is a major capital project to redevelop Level 2 for Pediatric Outpatient Clinics.

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  8. There is a proposal for a pediatric DI department and for the consolidation of pediatric inpatient services on the 4<sup>th</sup> level.

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  9. The satellite pharmacy has space, design problems that hinder productivity.

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  10. The telelift system is unreliable.

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  11. Interstitial space provides ample opportunity for renovations and ability to reconfigure mechanical and electrical systems for spaces below.

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STOLLERY CHILDREN'S HOSPITAL	EMERGENCY	MEDICINE 4E4, 4E2, 5G4	DAY MEDICINE 5F3	ONCOLOGY 4E3	ONCOLOGY 4E2	MED/SURG 4D2/4D3	PEDIATRIC CLINICS	PEDIATRIC CLINICS	OR & PACU	DAY SURGERY UNIT 1A2	SAME DAY ADMIT	CARDIOLOGY (incl transplant) 4C	CARDIAC SCIENCES 4C	NEUROSCIENCES Sleep Lab - 5H	PCU 3A1/3A2	NICU 3A3	GENETICS CLINIC & LAB Level 8
		INPATIENT	OUTPATIENT	INPATIENT	INPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	INPATIENT	OUTPATIENT	OUTPATIENT	INPATIENT	INPATIENT		
University of Alberta Hospital																	
Medical Sciences Building																	
Clinical Services Building																	

# Strathcona Community Hospital

## Overview

### Programs & Services

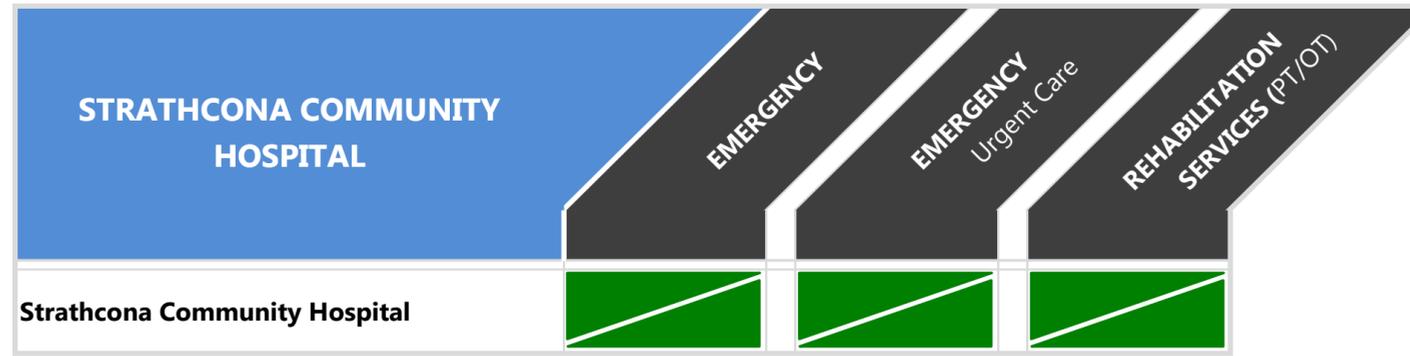
- Expected to be operational spring 2014.
- Designed to include emergency services; urgent care centre; rehabilitation services; chronic disease management program; laboratory; ultrasound and CT. There are no beds on this site.

### Facilities

- Original construction 2013 (yet to be completed)
- 1 storey
- Fire Sprinklers throughout
- Floor to floor (roof) height well over 4.4 metres (+/-6.0m well above average)

## Issues and Opportunities (not prioritized)

1. What should the role of this facility be?
2. Both Emergency and Urgent Care are planned for this site. Is this optimal? Potential to incorporate Primary Care Network after hours clinic within Hospital space.
3. Recruitment of sufficient numbers of medical staff for the ED is expected to be a challenge for the first 1-2 years of operation.
4. A second phase was originally planned with an inpatient bed tower but this is on hold. Clinical support (lab/DI/rehab) and support services (contract procurement and supply management) are designed for activities of a much larger facility (i.e., two phases of development).
5. A large shelled-in space is available (potentially Mental Health/Addiction).
6. Place MRI here to support all sites in Eastern corridor (FS, NECHC, Leduc, Devon and Strathcona).
7. There is a very large allied health/rehab space. Based on experience at other facilities where this space is very under-utilized (i.e. Fort Saskatchewan) how should this space be used?
8. A large conference area is available that could be for community use or rental purposes.
9. Additional perceived clinical needs include: expanded programming for a range of chronic disease programs, possible Day Medicine (endoscopy +/- chemotherapy), low-risk prenatal care, seniors' health, cardiac rehab, hand centre care, among others.
10. Planned for future horizontal expansion (not vertical) including a future Phase 2 inpatient unit(s).
11. Exemplary precautions undertaken during construction for infection control from construction related contaminants upon occupancy and into the future.



# Sturgeon Community Hospital

## Overview

### Programs & Services

- Serves St. Albert, County of Sturgeon, County of Parkland and North Edmonton and surrounding areas.
- 150 + 4 unfunded adult beds; 23 LDRPs and 23 bassinets;
- 24-hour ED, surgery, critical care, general medicine, cardiac clinic, women's health and ambulatory care

### Facilities

- Original construction 1992
- Health Services Centre opened in 2006
- Major ER and Main entrance addition 2010
- 2 storeys plus basement
- Fire Sprinklers throughout
- Floor to floor height over 4.4 metres (above average)

## **Issues and Opportunities (not prioritized)** Note: Lab, DI, Pharmacy and Support Services not reviewed

1. Capacity / operating pressures in Women's Health/NICU, ICU, Medicine, Observation Beds, Home Care office space.
2. Poorly designed dissimilar inpatient units require greater capacity, lifts, support spaces including staff workstations, public washrooms, staff washrooms, kitchens, and patient lounges. Tub rooms are used for clean supply storage.
3. Operating Room/PARR: Lack of laminar air flow in OR resulted in stopping upper extremity orthopedic surgery. Use open case carts that move through public corridors because lifts are often broken down. There are decommissioned sterilizers in the sterile core. Pick lists for surgery are hand-written with no computerized surgical instrument inventory. PARR has head-out orientation of patient care bays. Frozen sections are being done in PARR now; this is an accreditation issue. Cesarean Sections require a dedicated OR with back up. Consider Ophthalmology Services with surgical component at SCH. Requires frozen section pathology area.
4. CCU/ICU case mix activity levels (data required). Propose the conversion of Unit 28 to a telemetry/step-down (close observation unit) to help address this.
5. Opportunity to convert pediatric bedrooms to 13 adult medical beds on Unit 19.
6. Poor access to Endoscopy redesign and potential expansion (data required), procedure room is very small and does not have proper sinks or staff work areas.
7. Need more mental health services; currently rely almost exclusively on community-based services. In patients not supported at this site.
8. The only negative pressure rooms are in Emergency and ICU.
9. Significant areas of vacant space located in former ED, adjacent to DI and Health Records area. Vacated administration area on second floor is adjacent to OR's – excellent high ceiling space.

- 
10. About 2800 (need data) deliveries per annum but do not have a Level II NICU.

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  11. Emergency is in very large, new space. 50 built treatment spaces but only 20 in use. Fast Track area is remote. Clinical Decision Unit in Lean review - not being used...sits vacant. Mental Health Services need to be considered

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  12. Women's Health is located on 2 levels and in mixed Units with medicine and surgery.

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  13. Hospitalist medical coverage is being strained with high caseloads. Physician Extenders being considered by AHS.

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  14. Site FM noted that mechanical system in the Health Services Centre presents problems.

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  15. Morgue does not meet site needs.

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  16. Consider expansion of DI to provide Echo, second CT Scanner and Nuclear Medicine.

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STURGEON COMMUNITY HOSPITAL	EMERGENCY	MEDICINE INPATIENT	MEDICINE OUTPATIENT	SURGERY INPATIENT	SURGERY OUTPATIENT	CARDIAC SCIENCES OUTPATIENT	WOMEN'S HEALTH INPATIENT	WOMEN'S HEALTH OUTPATIENT	WOMEN'S HEALTH INPATIENT	CRITICAL CARE & BURNS OUTPATIENT	ADDICTION & MENTAL HEALTH	REHABILITATION SERVICES
Sturgeon Community Hospital	Green	Yellow	White	Yellow	Yellow	Green	Green	Green	Green	White	Green	Yellow
Health Services Centre	White	White	Yellow	White	Yellow	White	White	Green	White	Yellow	Green	Green

# University of Alberta Hospital (UAH)

## Overview

### Programs & Services

- Wide range of diagnostic and treatment services, including specialized services within cardiac (see Mazankowski Alberta Heart Institute for more details), neurosciences, surgery, medicine, renal, critical care, emergency trauma and a burn unit.
- Referral centre for tertiary and quaternary services.

### Facilities

- Original Construction 1981 (phase 1) and 1986 (phase 2)
- Emergency construction 2000
- 5 storeys plus basement
- Fire sprinklers throughout
- Interstitial mechanical space
- Floor to floor height over 4.8 metres (above average)

## Issues and Opportunities (not prioritized)

1. Walter MacKenzie Centre is a very large, complex facility. Horizontal distances from main entrances to programs and services can be lengthy and way finding is complex; patient, visitor and staff flow is compromised. In addition, vertical transportation is stressed and inadequate to meet current requirements/demand.
2. Capacity pressures in all critical care units, observation beds, EEG telemetry, trauma, inpatient beds. Need appropriate services for higher-level-care patients who are too sick to be admitted to an inpatient bed but not sick enough to be admitted to critical care.
3. Some departmental relationships are not ideal for the provision of services, i.e. the adult day surgery unit is remote from the adult operating rooms and the PACU; one neurology unit is distant and disconnected from other inpatient neurosciences services; adult inpatient psychiatry is immediately adjacent to a pediatric inpatient unit (Stollery Children's Hospital).
4. The Eating Disorders Day Program requires a home, i.e. so patients have an appropriate place to be observed after their meal-time.
5. The inpatient units (medical, surgical, mental health) are considerably out-of-date based on current planning practices and guidelines. This creates safety and IPC risks and lack of privacy for patients and families and staff. Storage is a major problem on all units. In addition, units lack centralized support spaces for staff and patients, including for example, classrooms and rehabilitation space. The size of the units (18 beds) reduces operating efficiency.
6. There is a plan to reconfigure, consolidate and improve the provision of neuroscience services on Level 5 (and in conjunction move the Stollery pediatric inpatient units from the 5<sup>th</sup> to the 4<sup>th</sup> floor and thus also consolidating the pediatric inpatient services) and to co-locate the Adult Same Day Admit Services with the Adult ORs on Level 3.
7. Physician offices are located in 'prime' clinical space.

- 
8. Zone administration offices are located in 'prime' clinical space. Other corporate services may be located off-site, i.e. IT.

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  9. There is vacant space as a result of the decanting of services to the Edmonton Clinic.

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  10. Most of the lab (except the core lab) and the provincial lab could be located off-site.

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  11. MDR is at capacity.

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  12. The pharmacy has space and design problems that hinder productivity.

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  13. The satellite dialysis unit should be relocated, i.e. off-site, ground floor access, not in an inpatient area.

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  14. The scope cleaning area in the ENT clinic does not meet standards.

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  15. The telelift system is unreliable.

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  16. Interstitial space provides ample opportunity for renovations and ability to reconfigure mechanical and electrical systems for spaces below.

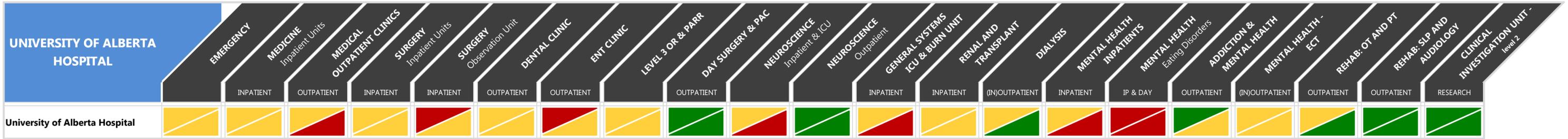
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  17. Some clinics may be considered for off-site/community locations or Edmonton Clinic locations including the Eating Disorders Clinic, Mental Health Clinics, Dental Clinic.

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  18. There is poor wireless or lack of wireless capability throughout the site.

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# Westview Health Centre

## Overview

### Programs & Services

- 23 acute care beds; 4 OCP beds; and 50 long term care beds
- Emergency, day surgery, endoscopy, outpatient clinics, public health, community care, rehabilitation services, dental health, mental health.

### Facilities

- Original construction 1992
- Minor renovations to ER and inpatient units in 2008
- 1 storeys plus basement
- Fire Sprinklers throughout
- Floor to floor height is between 3.8m and 4.4m (average)

## Issues and Opportunities (not prioritized)

1. Designed as a primary health care centre but under pressure to provide community hospital services.
2. There is capacity pressure on the inpatient beds.
3. Emergency requires major renovations to deal with capacity issues, patient flow, security, lack of clean and soiled supply areas, small trauma room, etc. Cannot secure the Unit after hours.
4. Three inpatient beds (in old central maternal area) are not appropriate for patient care. They have no exterior windows and are isolated from the rest of the nursing unit.
5. There are in-line medical gases in all the long term care bedrooms. Subacute care is provided by staff in LTC.
6. Palliative care is the top CMG for inpatient beds (14% of 2011/12 total IP days) – there is no residential hospice in community. Staff would like to convert long-term care space to palliative care (potentially by moving some LTC patients to Copper Sky to allow this to happen).
7. The IV therapy clinic is undersized and requires an increased amount of purpose-designed space.
8. There is capacity within the ORs, endoscopy area, and the MDR but renovations may be required.
9. There is no vacant space in the facility.
10. The rehabilitation space (gym) is large, but underutilized.
11. Some health services presently in the facility could be relocated to the community to provide additional ambulatory care space. Appropriate space and cost of leasing area in community may present with issues.
12. Staff feel dialysis services are appropriate for the facility (12-station outpatient hemodialysis as well as chronic renal disease clinic).

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13. The site has a desire to repatriate community-based services onto the health centre site.

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14. East wing appears to be designed for vertical expansion (1 additional story), has 1 elevator with a 2<sup>nd</sup> shaft for a future elevator

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15. OR designed for horizontal expansion/building addition

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Westview Health Centre	EMERGENCY	MEDICINE INPATIENT	MEDICINE OP Clinics OUTPATIENT	MEDICINE IV Clinic OUTPATIENT	OPERATIVE SERVICES OR/RR INPATIENT	OPERATIVE SERVICES DCS OUTPATIENT	ADDICTION & MENTAL HEALTH Adults OUTPATIENT	REHABILITATION SERVICES	CONTINUING CARE INPATIENT	CONTINUING CARE Home Care OUTPATIENT	PRIM CARE/CDM/PH Public Health
Community Health Centre											
Continuing Care Wing: Pod 1											
Continuing Care Wing: Pod 2											

## **3.0 Facility Summary and Assessment By Program**

## Presentation of Phase 1 Interim Findings by Program

At the request of AHS, interim findings have been reformatted and are presented by program. As the site tours were not conducted with this deliverable in mind, there are limitations to the information that is presented in this section, as listed below.

- Although the architects toured all areas in each facility, the programmers' tours were restricted to clinical areas that were in the scope of work for Phase 1 of the 2030 Plan. Programmers' tours were further restricted to 'representative' units or departments, especially in facilities where multiple nursing units (for example) had the same or similar floor plates or functional uses. This report provides functional and facility assessment information for areas that were toured and assessed by *both* the architects and the programmers. As a result, the sites/services where Programs operate are not comprehensively reported;
- If time permitted, tours were occasionally conducted for information purposes in departments that were not part of the Edmonton Zone (i.e. Pharmacy or Diagnostic Imaging) or that were not part of the Phase 1 scope of work (i.e. Palliative Care on the EGH site). Information on these tours is not included in this report;
- The report reflects information provided by AHS and observations by the BlackwellParkin team at the time of the site tours (October – November 2012). It provides a 'snapshot' from that time that was not updated to reflect any changes that occurred after the tours were conducted; and
- Anecdotal information may be included in some sections of this report. This information was provided by the sites and/or discussed during the tours and is presented to demonstrate that the information was collected and considered by the consulting team. Anecdotal information was accepted at face value – no further analysis or validation of information was conducted.

# Addiction & Mental Health Facility Summary

## Issues and Opportunities (not prioritized)

### ***Alberta Hospital Edmonton***

1. Addiction services are not available on-site. Henwood, a residential addictions treatment centre, is close by and requires major capital redevelopment (previously approved capital project now on hold). It could be considered for rebuilding on-site as part of an overall Health Campus concept.
2. Acuity of psychiatric illness as well as rates of medical comorbidity are increasing. Very difficult to manage these clinical needs in the current facilities.
3. Patients with developmental disabilities are admitted into the general population, presenting programming and safety challenges.
4. The size and design of the adult inpatient units is below current standards. This is critical for those units where patients do not have off-unit privileges; patient crowding leads to increased safety and security concerns. Poor lines of sight for staff supervision are common.
5. Generally insufficient infection control measures such as hand sinks, private rooms with private washrooms. There are no negative pressure / isolation rooms.
6. In total, there is not sufficient seclusion capacity on the campus. It has been noted that 3 more rooms have been developed since the site tours / review.
7. General lack of anti-ligature features, even in the newly renovated Units in Building 12.
8. While one of the new units in Building 12 was in the process of being opened, the tour leaders and the team, through its MH planning experience, were able to identify functional constraints that will be present, due in large part to the nature of the base building configuration and constraints to the scope of renovation (e.g. see note above re anti-ligature).
9. Many areas have no coverage for duress alarms for staff and visitors. The system, where available is outdated. The overall situation creates higher levels of risk.
10. Very nice recreation and leisure facilities (pool, gym, woodworking, arts/crafts, etc.).

### ***Edmonton General***

11. Need for psychiatric long term care for patients under the age of 65 years.

### ***Fort Saskatchewan Community Hospital***

12. The mental health space is lacking proper secondary egress, is at full capacity with no expansion space and accessibility issues.

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***Glenrose Rehabilitation Hospital***

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13. Child and adolescent mental health is housed in small, very poor quality space with safety risks (i.e. ligature risk) and no access to secure outdoor space for children who might be in hospital for weeks or months. This is an 'orphan' program on this site; planning study currently underway to review future configuration of all child and adolescent mental health services that are currently spread across multiple sites.
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***Grey Nuns Community Hospital***

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14. Capacity pressures inpatient psychiatry.
15. Aside from the 10-bed secure psychiatric unit (Unit 92), GNCH has OCP beds for psychiatry as well as for the Zone (OOCB beds). Major capacity issues....may put 3 patients with serious psychiatric problems in the same room. There is only one room that can be secured on Units 91/93 but it is not a true seclusion room.
- 

***Leduc Community Hospital***

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16. Mental Health team moving off site will allow for very usable vacant space for ambulatory clinical activity.
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***Misericordia Community Hospital***

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17. Major capacity pressures in Psychiatry
18. Barrier free access is an issue throughout the facility, outdated 4 bed in-patient wards lack privacy, do not have wheel chair accessible washrooms and create major operational issues on a daily basis.
19. Psychiatry is a 28-bed unit was never configured to meet this patient population needs, cannot be secured but accepts involuntary patients – up to 15 at a time. ECT poorly configured, lacks recovery space and is undersized. There is no seclusion room. OCP patients are put in the group room and the bed must be moved out of the room during the day. There are only 4 single rooms and 1 double room. Remaining 4-bed rooms have L-shape design that reduces line of sight and creates safety concerns. There is no space for Mental Health Review Panel meetings. The dining room is located outside the unit. ECT room does not meet current standards.
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***Royal Alexandra Hospital***

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20. There are significant capacity pressures (i.e. inability to meet the demand for service in a timely and efficient manner).
21. Psychiatry programs for children, adolescents and adults are in substandard spaces that present risks to patients and to staff. Should the child/adolescent mental health services be moved off-site?
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***Sturgeon Community Hospital***

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22. The site reported the need more mental health services; currently rely almost exclusively on community-based services.
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**University of Alberta Hospital**

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23. Some departmental relationships are not ideal for the provision of services: adult inpatient psychiatry is immediately adjacent to a pediatric inpatient unit (Stollery Children's Hospital).
  24. The Eating Disorders Day Program requires a home, i.e. so patients have an appropriate place to be observed after their meal-time.
  25. The inpatient units (medical, surgical, mental health) are considerably out-of-date based on current planning practices and guidelines. This creates safety and IPC risks and lack of privacy for patients and families and staff. Storage is a major problem on all units. In addition, units lack centralized support spaces for staff and patients, including for example, classrooms and rehabilitation space. The size of the units (18 beds) reduces operating efficiency.
  26. Some clinics may be considered for off-site/community locations or Edmonton Clinic locations including the Eating Disorders Clinic, Mental Health Clinics
-

ADDICTION & MENTAL HEALTH		ADULT MENTAL HEALTH	FORENSIC	CENTRE FOR PSYCHIATRIC ASSESSMENT	TREATMENT MALL	ECT	ADDICTION & MENTAL HEALTH	GERIATRIC PSYCHIATRY PROGRAMS	CHILD & YOUTH MENTAL HEALTH	CHILD & YOUTH MENTAL HEALTH	MENTAL HEALTH HOUSING	MENTAL HEALTH Eating Disorders
SITE		INPATIENT	INPATIENT				OUTPATIENT	INPATIENT	INPATIENT	OUTPATIENT	OUTPATIENT	IP & DAY
AHE	Building 10											
AHE	Building 12 (see Facility Summary notes re Inpt Unit)											
AHE	Building 8											
AHE	Building 3 (Forensic)											
AHE	Building 9											
Fort Saskatchewan	Health Services Building											
Glenrose	GlenWest											
Glenrose	GlenEast											
Grey Nuns	Hospital											
Grey Nuns	St. Marguerite's Health Services Centre											
Leduc	Leduc Public Health Centre											
Misericordia	Clinical Support Building											
Misericordia	Active Treatment Hospital											
Misericordia	Villa Caritas											
RAH	Active Treatment Centre											
RAH	Women's Centre											
RAH	Anderson Hall											
RAH	Children's Centre											
Sturgeon	Health Services Centre											
Westview	Health Centre											
WMC	UAH											

# Cardiac Sciences Facility Summary

## Issues and Opportunities (not prioritized)

### ***Mazankowski Alberta Heart Institute***

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1. Concerns expressed about increasing workloads associated with ventricular assist device (VAD) and lung transplant patients.
  2. Locate low risk patients needing cardiac rehabilitation to a community setting.
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### ***Royal Alexandra Hospital***

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3. There are significant capacity pressures (i.e. inability to meet the demand for service in a timely and efficient manner) in cardiac sciences (inpatients), Adult ICU
- 

### ***Strathcona Community Hospital***

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4. Additional perceived clinical needs include cardiac rehab

CARDIAC SCIENCES		ABACUS	OUTPATIENT SERVICES	HOLDING AND RECOVERY	EP/CATH LAB	Operating Suite	CVICU (& SCU)	CV SURGERY	ECHO/EKG/ STRESS	IP CARDIOLOGY	CCU	CARDIAC SCIENCES REHAB
SITE			Clinics	Procedure	Procedure	IP / OP	IP/ICU	INPATIENT	Proc/Diagn	INPATIENT	IP/ICU	OUTPATIENT
WMC	Mazankowski Alberta Heart Institute											
Glenrose	Glenrose West											
Grey Nuns	Hospital											
Misericordia	Active Treatment Hospital											
RAH	Robbins Pavillion											
Sturgeon	Hospital											

# Child Health Facility Summary

## Issues and Opportunities (not prioritized)

### ***Edmonton General***

1. Pediatric Centre for Weight & Health should move to the Stollery.

### ***Grey Nuns Community Hospital***

2. Capacity pressures in the ICN.
3. Child Health Clinic occupies Unit 23 which could be converted (back) into 29 inpatient beds or another function suitable for this location in the hospital.
4. Very nice ICN, newly renovated.

### ***Misericordia Community Hospital***

5. ICN does not meet current space/design standards. Have been cited by HFRC for space issues, high noise levels, lack of family space.
6. Major capacity pressures in the ICN.

### ***Royal Alexandra Hospital***

7. There are significant capacity pressures (i.e. inability to meet the demand for service in a timely and efficient manner) in the NICU.
8. NICU does not meet current space or design standards
9. Pediatric Day Surgery could be moved to the Stollery

### ***Stollery Children's Hospital***

10. Both the PICU and NICU do not meet current space or design standards. There are significant safety, IPC and privacy issues. It is intended that the Cardiac PICU will be relocated to the MAHI.
11. The inpatient units generally lack storage space and support spaces for patients, families and staff. In addition, there is a lack of separation (private) and isolation rooms and the ability to cohort immunosuppressed patients away from infectious diseases patients.
12. There is a lack of pediatric psychiatry, ophthalmology and gynecology in the pediatric emergency department.
13. There is a major capital project to redevelop the Level 1 Surgical Suite and Day Ward.
14. There is a major capital project to redevelop Level 2 for Pediatric Outpatient Clinics.
15. There is a proposal for the consolidation of pediatric inpatient services on the 4<sup>th</sup> level.

CHILD HEALTH		EMERGENCY	MEDICINE 4E4, 4F2, 5G4	DAY MEDICINE 5F3	ONCOLOGY 4E3	ONCOLOGY 4E2	MED/SURG 4D2/4D3	PEDIATRIC CLINICS	OR & PACU	DAY SURGERY UNIT	SAME DAY ADMIT	CARDIOLOGY (incl. transplant) 4C	CARDIAC SCIENCES 4C	NEUROSCIENCES Sleep Lab - 5H	PCU 3A1/3A2	NICU/ICN	GENETICS CLINIC & LAB Level 8
SITE		INPATIENT	OUTPATIENT	INPATIENT	INPATIENT	INPATIENT	OUTPATIENT		OUTPATIENT		INPATIENT	OUTPATIENT	OUTPATIENT	INPATIENT	INPATIENT		
Edmonton General	B Wing																
Grey Nuns	Hospital																
Misericordia	Active Treatment Hospital																
RAH	Children's Centre																
WMC	UAH - Stollery Children's Hospital																
	UAH - Medical Sciences Building																
	UAH - Clinical Services Building																

# Critical Care and Burns Facility Summary

## Issues and Opportunities (not prioritized)

### *Misericordia Community Hospital*

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1. High-Intensity Beds in ICU do not have doors on the rooms, have open hopper in each patient room, do not have washrooms, and do not have negative pressure.
- 

### *Royal Alexandra Hospital*

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2. There are significant capacity pressures (i.e. inability to meet the demand for service in a timely and efficient manner) in Adult ICU .
  3. Adult ICU does not meet current space or design standards.
- 

### *Sturgeon Community Hospital*

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4. ICU is getting busier, driven by site needs in addition to Zone needs. Propose the conversion of Unit 28 to a telemetry/step-down unit to help address this.
  5. The only negative pressure rooms are in Emergency and ICU.
- 

### *University of Alberta Hospital*

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6. Capacity pressures in all critical care units, observation beds, EEG telemetry, trauma, inpatient beds. Need appropriate services for higher-level-care patients who are too sick to be admitted to an inpatient bed but not sick enough to be admitted to critical care.

CRITICAL CARE & BURNS		GENERAL SYSTEMS ICU & BURN UNIT
SITE		INPATIENT
Grey Nuns	Hospital	
Misericordia	Active Treatment Hospital	
RAH	Diagnostic & Treatment Centre	
Sturgeon	Hospital	
WMC	UAH	

# Emergency Facility Summary

## Issues and Opportunities (not prioritized)

### ***Devon General Hospital***

1. Until 2010, there was a demonstrated ability to reduce ER volumes with “Right Care in the Right Place” initiatives (e.g., after hours clinic); since then the after-hours clinic has reduced hours of operation, is at capacity, and ER volumes have been impacted (volumes; increasing ratio of CTAS 4 and CTAS 5 patients).
2. Renovation is needed in the ED to implement fast track/RAZ and to provide patient care spaces that meet current standards.
3. EMS staff spaces do not meet standards; significant violation of privacy, etc.

### ***Fort Saskatchewan Community Hospital***

4. There is unused capacity in the emergency department (closed stretchers).
5. The triage / registration area of the ED requires reconfiguration to provide better visibility of waiting area. There are significant P&C issues in the secure room in Emergency.

### ***Grey Nuns Community Hospital***

6. Capacity pressures in Emergency.
7. Emergency layout impedes patient flow, undersized and poorly designed to meet the needs of 60,000 visits/year. The waiting room is split in two. There are only 2 seclusion rooms (need 4) and only one negative pressure treatment space. Continue to use 6 hallway spaces routinely plus additional parking spaces for EMS. There are only 12 monitored beds out of 26 spaces. RAZ is chaotic and congested with no privacy. Satellite DI cannot accommodate a stretcher so only extremity studies can be done here.

### ***Leduc Community Hospital***

8. The emergency department requires reconfiguration at entrance and elsewhere to provide increase in capacity (RAZ/fast track); staff note that department has flow issues and not all patient care spaces are fitted with suction/oxygen.
9. Until 2010, there was a demonstrated ability to reduce ER volumes with “Right Care in the Right Place” initiatives (i.e., after hours clinic); since then the after hours clinic has reduced hours of operation, is at capacity, and ER volumes have been impacted (volumes).

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**North East Community Health Centre**

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10. Emergency was built for 25,000 patients and is now seeing 53,000 people per annum (9.2 patients/stretchers/day) with growing numbers of CTAS 1 and 2. NECHC has the second highest pediatric emergency volumes in the Zone. Emergency has full ambulance service but no covered ambulance bay/garage. Triage/Patient Registration is small and poorly-designed. The Emergency Department is undersized for volumes, has very small trauma room, inadequate storage and poorly-designed negative pressure room. No CT or inpatient beds to back up Emergency. Should Emergency continue to be a service offered on this site?
11. Capacity pressures were noted in: the Bridging Clinic for unattached patients seen in Emergency, Cast Clinic (AMSAFE), and mental health services especially in Emergency.

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**Misericordia Community Hospital**

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12. Major capacity pressures in Emergency
13. Emergency has 26 treatment spaces is poorly configured, undersized and all areas including trauma rooms are undersized. Hallway spaces used for patient care and for ECGs. Medication storage is not secured. Only one negative pressure room. Seclusion room poses safety concerns. 1 shared entrance for ambulance and walk in patients

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**Royal Alexandra Hospital**

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14. There are significant capacity pressures (i.e. inability to meet the demand for service in a timely and efficient manner) in trauma, Emergency, Adult ICU.
15. The Emergency Department needs major redesign and expansion to meet its current workload demands.

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**Strathcona Community Hospital**

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16. Both Emergency and Urgent Care are planned for this site. Is this optimal?
17. Recruitment of sufficient numbers of medical staff for the ED is expected to be a challenge for the first 1-2 years of operation.

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**Sturgeon Community Hospital**

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18. The only negative pressure rooms are in Emergency and ICU.
19. Emergency is in very large, new space. 50 built treatment spaces but only 20 in use. Clinical Decision Unit was poorly designed and cannot be used...sits vacant.

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**Westview Health Centre**

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20. Emergency requires major renovations to deal with capacity issues, patient flow, security, lack of clean and soiled supply areas, small trauma room, etc. Cannot secure the Unit after hours.

		EMERGENCY		EMERGENCY	URGENT CARE
SITE					
Devon	Hospital				
Fort Saskatchewan	Acute Care Building				
Grey Nuns	Hospital				
Leduc	Hospital				
Misericordia	Active Treatment Hospital				
NECHC	Community Health Centre				
RAH	Emergency Wing				
Strathcona	Community Hospital				
Sturgeon	Community Hospital				
Westview	Health Centre				
WMC	Stollery Children's Hospital				
WMC	UAH				

# Medicine Facility Summary

## Issues and Opportunities (not prioritized)

### ***Aberhart***

1. TB Clinic as a whole is a negative pressure space but it does not have any negative pressure rooms. Staff close exam rooms for 45-60 minutes after each use to re-circulate air before next patient. There is no internal communication system (using walkie-talkies). Flooding has caused 2 closures in the past year. Have a general radiology exam room here

### ***Devon General Hospital***

2. The combination of patient care levels ('hybrid model') on the inpatient unit has issues with care standards and efficiencies
3. All inpatient bed rooms have the capacity to provide various levels of care (acute, sub acute, transition, continuing care) so there is potential to alter the existing service delivery model.

### ***Edmonton Clinic***

4. Each clinic (including Medicine & Family Medicine) has been specially-designed to meet the requirements of current users. May require renovation if the use of any clinic area is changed.

### ***Edmonton General***

5. Centre for Lung Health serves Edmonton Zone patients and provides distance services to 13 remote sites in Alberta with 7 additional sites on a wait list for service. Need additional gym space.
6. The Sleep Lab has a 2-year wait list. Many patients are bariatric but the unit is not designed to accommodate them. Issues with vermin infestations. Significant unused space in this department.

### ***Fort Saskatchewan Community Hospital***

7. There is unused capacity in inpatient services (6 closed beds).

### ***Grey Nuns Community Hospital***

8. Capacity pressures in medicine (especially BiPap beds and need for step down beds)

### ***Leduc Community Hospital***

9. There is capacity pressure on the inpatient beds.

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10. Sub acute and transitional patients require better access to communal/group area for therapy/socialization

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11. Clinic areas/leased space on levels 2 and 3 are closed inpatient care units.

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12. Palliative care is 2<sup>nd</sup> highest CMG relating to inpatient activity – no residential hospice in community.

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### ***Misericordia Community Hospital***

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13. Major capacity pressures in Diabetes Clinic

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14. Barrier free access is an issue throughout the facility, outdated 4 bed in-patient wards lack privacy, do not have wheel chair accessible washrooms and create major operational issues on a daily basis. End of life care – Palliative care is an issue. In-patient areas do not have adequate access to Physio Therapy program space

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15. Lack intermediate care beds for close observation of patients

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16. Poor HVAC in Endoscopy leads to use of curtains instead of doors on procedure rooms. Rooms are not negative pressure. There is no scrub sink.

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17. Outpatient Clinic is used by MCH during the day and by a PCN at night. Very busy. Gowned patients wait in public areas and have histories taken while in the waiting room. Open storage in hallways. Soiled utility does not have a waste disposal system.

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18. High-Intensity Beds in ICU do not have doors on the rooms, have open hopper in each patient room, do not have washrooms, and do not have negative pressure.

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19. Washrooms on the medical units are not fully wheel-chair accessible. There are no ceiling lifts in the unit toured. Not enough medical isolation capacity – commonly have up to 25% of patients on isolation protocols. Inadequate family spaces, patient lounges, staff work areas.

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### ***North East Community Health Centre***

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20. Capacity pressures or operational needs: Diabetic Neuropathy Clinic (second-highest volumes in the Zone).

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### ***Royal Alexandra Hospital***

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21. Pressure to expand bariatric programs

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22. There are significant capacity pressures (i.e. inability to meet the demand for service in a timely and efficient manner) in medicine, Adult ICU.

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23. There is a shortage of Observation (Intermediate Care/Monitored) Beds throughout the facility negatively impacting patient flow in all services. Some of these beds need to have isolation capacity.

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24. Acute stroke thrombolytic therapy goes to UAH...should have TPA capacity at RAH?

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25. There are major IPC concerns with a shortage of negative pressure / isolation rooms. Available isolation rooms are sometimes used to house patients who should not be close to one another only because they both need isolation (i.e. renal transplant patient in a room next to a patient with C. Diff.).

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26. Outpatient clinic is small and doesn't have needed spaces. Initial patient assessments and some patient recovery take place in hallways

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***Strathcona Community Hospital***

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27. Additional perceived clinical needs include: expanded programming for a range of chronic disease programs, possible Day Medicine (endoscopy +/- chemotherapy), seniors' health, among others.

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***Sturgeon Community Hospital***

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28. Inpatient units are short of support spaces including staff workstations, public washrooms, staff washrooms, kitchens, and patient lounges. Tub rooms are used for clean supply storage.

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29. Endoscopy has good prep/recovery space but procedure room is very small and does not have proper sinks or staff work areas.

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30. The only negative pressure rooms are in Emergency and ICU.

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***University of Alberta Hospital***

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31. The inpatient units are considerably out-of-date based on current planning practices and guidelines. This creates safety and IPC risks and lack of privacy for patients and families and staff. Storage is a major problem on all units. In addition, units lack centralized support spaces for staff and patients, including for example, classrooms and rehabilitation space. The size of the units (18 beds) reduces operating efficiency.

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**Westview Health Centre**

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- 32. There is capacity pressure on the inpatient beds.
  - 33. Three inpatient beds (in old central maternal area) are not appropriate for patient care. They have no exterior windows and are isolated from the rest of the nursing unit.
  - 34. Palliative care is the top CMG for inpatient beds (14% of 2011/12 total IP days) – there is no residential hospice in community. Staff would like to convert long-term care space to palliative care
  - 35. The IV therapy clinic is undersized and requires an increased amount of purpose-designed space.
-

		MEDICINE										
		MEDICINE Inpatient Units	MEDICAL OUTPATIENT CLINICS	TB CLINIC	ADULT MEDICAL DAY CARE	FAMILY MEDICINE CLINIC	CENTRE FOR LUNG HEALTH	MEDICINE IV Therapy	MEDICINE Diabetic Education	MEDICINE Urodynamics	FAMILY HEALTH	
SITE		INPATIENT	OUTPATIENT	OUTPATIENT		OUTPATIENT		OUTPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	
Aberhart Centre	Aberhart											
Devon	Hospital											
Edmonton Clinic	Clinic Building											
Edmonton General	B Wing											
Edmonton General	C Wing											
Fort Saskatchewan	Inpatient Pod											
Fort Saskatchewan	Acute Care Hospital											
Grey Nuns	Hospital											
Grey Nuns	St. Marguerite's Health Services Centre											
Leduc	Hospital											
Misericordia	Clinical Support Building											
Misericordia	Active Treatment Hospital											
Misericordia	Family Medicine Centre											
Misericordia	Villa Caritas											
NECHC	Community Health Centre											
RAH	Active Treatment Centre											
RAH	Robbins Pavillion											
RAH	Children's Centre											
RAH	Community Services Centre											
Sturgeon	Hospital											
Sturgeon	Health Services Centre											
WMC	UAH											

# Neurosciences Facility Summary

## Issues and Opportunities (not prioritized)

### *Edmonton Clinic*

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1. Each clinic has been specially-designed to meet the requirements of current users. May require renovation if the use of any clinic area is changed.
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### *Royal Alexandra Hospital*

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2. Would like to organize the Spine service (neuro + ortho) into a formal program. Suggestion that this should be a provincial program.
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### *University of Alberta Hospital*

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3. Some departmental relationships are not ideal for the provision of services: one neurology unit is distant and disconnected from other inpatient neurosciences services
4. The inpatient units are considerably out-of-date based on current planning practices and guidelines. This creates safety and IPC risks and lack of privacy for patients and families and staff. Storage is a major problem on all units. In addition, units lack centralized support spaces for staff and patients, including for example, classrooms and rehabilitation space. The size of the units (18 beds) reduces operating efficiency.
5. There is a plan to reconfigure, consolidate and improve the provision of neuroscience services on Level 4 (and in conjunction move the Stollery pediatric inpatient units from the 5<sup>th</sup> to the 4<sup>th</sup> floor and thus also consolidating the pediatric inpatient services)

SITE		NEUROSCIENCES	
		INPATIENT/ICU	OUTPATIENT
Edmonton Clinic	Clinic Building		
Grey Nuns	Hospital		
RAH	Hospital		
WMC	UAH		

# Rehabilitation Facility Summary

## Issues and Opportunities (not prioritized)

### *Fort Saskatchewan Community Hospital*

1. Large rehabilitation space is underutilized.

### *Glenrose Rehabilitation Hospital*

2. The patients are becoming more medically acute at the same time that there is pressure for shorter lengths of stay. Inpatient spaces have limited availability of ceiling lifts and piped gasses which may not align with patient care needs. There is limited ability to manage bariatric patients which are becoming more common. Also a lack of features to enhance infection control practices: shortage of private patient bedrooms, isolation rooms, hand sinks.
3. Inappropriate balance between private, semi-private and ward rooms on the rehabilitation inpatients units can create problems with respect to male/female cohorting, bed utilization, meeting unique needs of various patients (including bariatric patients).
4. Programs are shifting toward a new model of care: Specialized Rehabilitation Outpatient Program (SROP). There is a shortage of space to house these programs and insufficient and/or inappropriate accommodation of interdisciplinary care teams and students.
5. There is a 10-bed inpatient unit for pediatric rehab with 10 stretchers for day use. Management recently transferred from the Stollery to the Glenrose. Occupies a very large space for the small number of children treated.
6. Pediatric rehabilitation space is small and poorly designed; using portable dividers to create treatment spaces.
7. Office space is substandard throughout the site. Clinicians commonly share offices so one person must leave to allow the other to see/treat patients. Some staff are located in 'the maze'; a confusing, poorly-designed office area where many patients are seen. Control of noise and P&C in this area are problematic.
8. Overall lack of supplies, files, and patient care equipment storage for both day to day operational needs and mid to long term storage needs (i.e. less frequently accessed but necessary items); patient care / support spaces are often used to meet these needs, such as supplies in shower rooms).
9. Lack of privacy and confidentiality limits to how families can be involved in care, lack of private spaces for client and family consultations, group treatment, interdisciplinary team case discussions, etc.
10. Deteriorating facilities are limiting access to rehabilitation services (e.g. Pool, auditorium [not accessible] ).
11. There are wonderful technologies available for patient assessment and therapy.

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**Strathcona Community Hospital**

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12. There is a very large allied health/rehab space. Based on experience at other facilities where this space is very under-utilized

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**Westview Health Centre**

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13. The rehabilitation space (gym) is large, but underutilized

REHABILITATION																												
SITE		ADULT/GERIATRIC REHABILITATION		PAEDIATRIC REHABILITATION		SROP - ADULT		REHABILITATION THERAPIES (PT, OT)		COMMUNICATIONS DISORDERS (SLP)		ADULT & GERIATRIC REHAB CLINICS		PAEDS REHAB CLINICS		REHABILITATION TECHNOLOGY		AUDIOLOGY		ADULT CENTRALIZED REHAB: OT, PT		RECREATION THERAPY		POOL		CLINICAL TEAM ACCOMMODATION		
		INPATIENT	INPATIENT	OUTPATIENT	OUTPATIENT	IP/OP	IP/OP	OUTPATIENT	OUTPATIENT	IP/OP	IP/OP	I/P & O/P	IP/OP															
Devon	Hospital																											
Edmonton General	Hospital																											
Fort Saskatchewan	Inpatient Pod																											
Glenrose	GlenWest																											
Glenrose	GlenEast																											
Glenrose	Annex																											
Grey Nuns	Hospital																											
Leduc	Hospital																											
Misericordia	Clinical Support Building																											
Misericordia	Active Treatment Hospital																											
RAH	Active Treatment Centre																											
Strathcona	Hospital																											
Sturgeon	Hospital																											
Sturgeon	Health Services Centre																											
WMC	UAH																											
Westview	Health Centre Building																											

# Renal and Transplant Facility Summary

## Issues and Opportunities (not prioritized)

### ***Aberhart***

1. Capacity and operational pressures in NARP. Currently have 57 patients but will grow to >100 in the next two years...simply do not have the space for this. Also provide support and chart storage for ~1000 patients in 21 satellite locations outside of Edmonton and are running out of room for this function as well. Issues with inadequate storage and long travel distance between storage and NARP operational areas.
2. Comprehensive Tissue Centre needs additional tissue storage space. Issue of future access to OR for recovery of tissue needs to be confirmed. Suggestion...CTC should be moved to ground-level space in warehouse-grade construction.

### ***Edmonton General***

3. The NARP satellite dialysis unit is in a poorly-designed unit. Only 21/26 stations are in use; the rest are used for storage. Only have 2 private rooms but need 5. Have had flooding in this department. Nocturnal dialysis will begin soon. Plan water treatment upgrades that are contingent on funding availability.
4. This is the only site for LTC patients to receive hemodialysis. Should one unit be converted for inpatient hemodialysis?

### ***Grey Nuns Community Hospital***

5. Capacity pressures in hemodialysis
6. Staff feel dialysis services are appropriate for the facility (12-station outpatient hemodialysis as well as chronic renal disease clinic).

### ***Royal Alexandra Hospital***

7. There are significant capacity pressures (i.e. inability to meet the demand for service in a timely and efficient manner) in the hemodialysis unit.
8. There are major IPC concerns with a shortage of negative pressure / isolation rooms. Available isolation rooms are sometimes used to house patients who should not be close to one another only because they both need isolation (i.e. renal transplant patient in a room next to a patient with C. Diff.).
9. The hemodialysis unit is at full capacity for current hours of operation (18/6) and looking at major increases in demand. Should outpatient dialysis be moved off-site? Inpatient hemodialysis space is too small.

### ***University of Alberta Hospital***

10. The satellite dialysis unit should be relocated, i.e. off-site, ground floor access, not in an inpatient area.

SITE		RENAL & TRANSPLANT	NARP Home Hemo	NARP Haemodialysis Unit	NARP	RENAL & TRANSPLANT	RENAL & TRANSPLANT	COMPREHENSIVE TISSUE CENTRE
SITE			IP/OP		INPATIENT	OUTPATIENT		
Aberhart Centre	Aberhart Centre							
Edmonton General	C Wing							
Grey Nuns	St. Marguerite's Health Services Centre							
RAH	Active Treatment Centre							
RAH	Renal Dialysis Satellite							
WMC	UAH							

# Surgery & Operative Services Facility Summary

## Issues and Opportunities (not prioritized)

### ***Edmonton Clinic***

1. Each clinic has been specially-designed to meet the requirements of current users. May require renovation if the use of any clinic area is changed.

### ***Fort Saskatchewan Community Hospital***

2. There is unused capacity in inpatient services (6 closed beds).
3. There is unused capacity in operative services (ORs). Emergency surgery is provided but the future of this has been questioned. The recovery room (3 stretchers) and the MDR may not be sized to support the theatres functioning at full capacity.
4. The endoscopy scope cleaning has flow and potential pressure issues.

### ***Grey Nuns Community Hospital***

5. Capacity pressures in vascular surgery
6. Can only do one vascular procedure at a time; very inefficient. Major capital project has been proposed for vascular ORs and surrounding areas.

### ***Leduc Community Hospital***

7. There is capacity pressure on the inpatient beds.
8. Clinic areas/leased space on levels 2 and 3 are closed inpatient care units.
9. Unused capacity in the ORs; however MDR is short of space, has flow issues and likely can't increase capacity.
10. Approximately 33% of surgical activity relates to Leduc Business Unit.
11. Orthopedic surgeons assigned to Leduc by 'surgery template for the zone': No facility input into these assignments (impacts volumes) and allocated support (i.e. equipment/supplies) to the site may not be reflective of the assigned surgeons activities

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**Misericordia Community Hospital**

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12. Major capacity pressures in Surgical Day Ward, Endoscopy, Cast Clinic, Lithotripsy, Orthopedic Surgery, Continence/ Urodynamics
13. Barrier free access is an issue throughout the facility, outdated 4 bed in-patient wards lack privacy, do not have wheel chair accessible washrooms and create major operational issues on a daily basis. End of life care – Palliative care is an issue. Ortho cannot accommodate Balkan frames. In-patient areas do not have adequate access to Physio Therapy program space
14. Lack intermediate care beds for close observation of patients
15. Surgical Day Ward is congested, waiting room is poorly designed. Soiled utility has an open hopper. Storage is a problem.
16. Poor HVAC in Endoscopy leads to use of curtains instead of doors on procedure rooms. Rooms are not negative pressure. There is no scrub sink.
17. Outpatient Clinic is used by MCH during the day and by a PCN at night. Very busy. Gowned patients wait in public areas and have histories taken while in the waiting room. Open storage in hallways. Soiled utility does not have a waste disposal system.
18. Undersized and poorly configured OR's share HVAC with L+D and have open floor drains. The Sterile Core has been through mould remediation following flooding. The dumb waiter and clean elevators do not work up to 50% of the time. The Recovery Room bays have a head-out orientation.
19. The wait time for lithotripsy is 12-18 months. This service is expected to move to the Edmonton Clinic.
20. Endo and Cast Clinic space is too small and creates significant flow issues for patients and staff.
21. iRSM requires additional, consolidated dedicated program space

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**Royal Alexandra Hospital**

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22. There are significant capacity pressures (i.e. inability to meet the demand for service in a timely and efficient manner) in cancer surgery, Ophthalmology Clinic
23. There is a shortage of Observation (Intermediate Care/Monitored) Beds throughout the facility negatively impacting patient flow in all services. Some of these beds need to have isolation capacity.
24. Pressure to expand bariatric programs and to add bariatric operating rooms
25. Currently provide 2/3 of zone arthroplasty and want to consolidate all low risk procedures on this site.
26. Ophthalmology Clinic is large and busy...does this program need to expand or can its operations be optimized in the current space? Should this program be moved off-site?
27. Outpatient clinic is small and doesn't have needed spaces. Initial patient assessments and some patient recovery take place in hallways.

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**Strathcona Community Hospital**

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28. Additional perceived clinical needs include: expanded programming for endoscopy EZ hand centre care, among others.

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**Sturgeon Community Hospital**

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29. Inpatient units are short of support spaces including staff workstations, public washrooms, staff washrooms, kitchens, and patient lounges. Tub rooms are used for clean supply storage.

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30. Operating Room/PARR: Lack of laminar air flow in OR resulted in stopping upper extremity orthopedic surgery. Use open case carts that move through public corridors because lifts are often broken down. There are decommissioned sterilizers in the sterile core. Pick lists for surgery are hand-written with no computerized surgical instrument inventory. PARR has head-out orientation of patient care bays. Frozen sections are being done in PARR now; this is an accreditation issue.

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31. Endoscopy has good prep/recovery space but procedure room is very small and does not have proper sinks or staff work areas.

---

32. The only negative pressure rooms are in Emergency and ICU.

---

33. Women's Health is located on 2 levels and in mixed Units with medicine and surgery.

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**University of Alberta Hospital**

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34. Capacity pressures in all critical care units, observation beds, EEG telemetry, trauma, inpatient beds. Need appropriate services for higher-level-care patients who are too sick to be admitted to an inpatient bed but not sick enough to be admitted to critical care.

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35. Some departmental relationships are not ideal for the provision of services, i.e. the adult day surgery unit is remote from the adult operating rooms and the PACU

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36. The inpatient units are considerably out-of-date based on current planning practices and guidelines. This creates safety and IPC risks and lack of privacy for patients and families and staff. Storage is a major problem on all units. In addition, units lack centralized support spaces for staff and patients, including for example, classrooms and rehabilitation space. The size of the units (18 beds) reduces operating efficiency.

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37. There is a plan to co-locate the Adult Same Day Admit Services with the Adult ORs on Level 3.

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38. The scope cleaning area in the ENT clinic does not meet standards

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**Westview Health Centre**

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39. There is capacity pressure on the inpatient beds.

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40. Three inpatient beds (in old central maternal area) are not appropriate for patient care. They have no exterior windows and are isolated from the rest of the nursing unit.

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41. There is capacity within the ORs, endoscopy area, and the MDR but renovations may be required.

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SURGERY & OPERATIVE SERVICES		OPHTHALMOLOGY CLINIC	SURGERY	SURGERY Observation Unit	SURGERY CLINICS	DENTAL CLINIC	ENT CLINIC	CAST CLINIC / Ortho	DAY SURGERY and ENDOSCOPY	OR and PARR	SURGERY IRSM
SITE		OUTPATIENT	INPATIENT	INPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT	OUTPATIENT
Aberhart	Aberhart										
Edmonton Clinic	Clinic Building										
Fort Saskatchewan	Inpatient Pod										
Fort Saskatchewan	Acute Care Building										
Grey Nuns	Hospital										
Grey Nuns	St. Marguerite's Health Services Centre										
Leduc	Hospital										
Misericordia	Clinical Support Building										
Misericordia	Active Treatment Hospital										
NECHC	Community Health Centre										
RAH	Active Treatment Centre										
RAH	Diagnostic & Treatment Centre										
RAH	Short-Stay Surgery Centre										
RAH	Robbins Pavillion										
RAH	Orthopedic Surgery Centre										
Sturgeon	Hospital										
Sturgeon	Health Services Centre										
UAH	Hospital										
Westview	Health Centre Building										

# Women's Health Facility Summary

## Issues and Opportunities (not prioritized)

### ***Grey Nuns Community Hospital***

1. Capacity pressures obstetrics
2. Very nice Obstetrical Unit; newly renovated.

### ***Royal Alexandra Hospital***

3. There are significant capacity pressures (i.e. inability to meet the demand for service in a timely and efficient manner) in gyne surgery; Consideration to be given to developing the shelled-in Women's Health OR.
4. Gestational Diabetes Program is in very poor space; it needs to be moved (high priority).

### ***Misericordia Community Hospital***

5. Major capacity pressures in Women's Health
6. Breast Health provides nearly 60% of zone work.

### ***Strathcona Community Hospital***

7. Additional perceived clinical needs include low-risk prenatal care, among others.

### ***Sturgeon Community Hospital***

8. About 2,800 deliveries per annum but do not have a Level II NICU.
9. Women's Health is located on 2 levels and in mixed Units with medicine and surgery.

SITE		WOMEN'S HEALTH	
		INPATIENT	OUTPATIENT
Fort Saskatchewan	Inpatient Pod		
Grey Nuns	Hospital		
Misericordia	Clinical Support Building		
Misericordia	Active Treatment Centre		
NEHC	Community Health Centre		
RAH	Diagnostic Treatment Centre		
RAH	Robbins Pavillion		
RAH	Women's Centre		
RAH	Community Services Centre		
RAH	Anderson Hall		
Sturgeon	Hospital		
Sturgeon	Health Services Centre		

# **4.0 Appendix**

## Programming Tool – Inpatient

Site Name:
Department Name:
Date of Tour:
Programmer Lead:
AHS Tour Lead:

Capacity and Utilization	Open Beds	Closed Beds	Total Beds	OCP	Capacity with OCP	Comments
			0		0	

Functional Assessment Scores	10	6	2				Score	Comments
Spaces match workload and day-to-day clinical demands	FALSE	FALSE	FALSE	0	0	0	0	
Good <u>internal</u> adjacencies and flow	FALSE	FALSE	FALSE	0	0	0	0	
Appropriate storage	FALSE	FALSE	FALSE	0	0	0	0	
Wheel-chair accessible	FALSE	FALSE	FALSE	0	0	0	0	
Appropriate number/type of patient lifts	FALSE	FALSE	FALSE	0	0	0	0	
Medical gases meet clinical needs	FALSE	FALSE	FALSE	0	0	0	0	
Meets IPC standards / requirements	FALSE	FALSE	FALSE	0	0	0	0	
Privacy & confidentiality	FALSE	FALSE	FALSE	0	0	0	0	
Safe and secure	FALSE	FALSE	FALSE	0	0	0	0	
Good <u>external</u> functional adjacencies	FALSE	FALSE	FALSE	0	0	0	0	
<b>Total Score</b>							<b>0</b>	<b>0%</b> <i>Major operational or design issues with negative impact on operations and elevated risk for users; immediate upgrade/remediation is required</i>

<b>Score Aide:</b>	<b>10</b>	Good quality space, design and function
	<b>6</b>	Does not meet all contemporary standards but still functions well
	<b>2</b>	Any one of: poor design, major breaches of standards, elevated risk, important spaces are missing

<b>Department Overall Rating</b>	<b>100-70</b>	Department is performing well for current use
	<b>69-39</b>	Some functional or design concerns that decrease efficiency and flag risks; upgrade/remediation needed in the intermediate term
	<b>40 or less</b>	Major operational or design issues with negative impact on operations and elevated risk for users; immediate upgrade/remediation is required

Department Re-Use?	Yes	No	Specify or Comment
Vacant or underutilized space?	FALSE	FALSE	
Potential to be a specialized inpatient unit (ICU? Specify...)	FALSE	FALSE	
Potential to be a general inpatient unit	FALSE	FALSE	
Potential to be an OR, Emergency, Lab or DI (specify...)	FALSE	FALSE	
Potential to be a clinic or specialized ambulatory space (specify...)	FALSE	FALSE	
Potential to be an office space	FALSE	FALSE	
Potential to be support service (specify...)	FALSE	FALSE	
Potential for other use (specify...)	FALSE	FALSE	

<b>Other Comments</b>	
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## **4.0 Appendix**

### Programming Tool – Ambulatory

Site Name:	
Department Name:	
Date of Tour:	
Programmer Lead:	
AHS Tour Lead:	

Capacity and Utilization	Open Tx Spaces	Closed Tx Spaces	Total Tx Spaces	Comments
			0	

Functional Assessment Scores	10	6	2				Score	Comments
Spaces match workload and day-to-day clinical demands	FALSE	FALSE	FALSE	0	0	0	0	
Good <u>internal</u> adjacencies and flow	FALSE	FALSE	FALSE	0	0	0	0	
Appropriate storage	FALSE	FALSE	FALSE	0	0	0	0	
Wheel-chair accessible	FALSE	FALSE	FALSE	0	0	0	0	
Meets IPC standards / requirements	FALSE	FALSE	FALSE	0	0	0	0	
Privacy & confidentiality	FALSE	FALSE	FALSE	0	0	0	0	
Safe and secure	FALSE	FALSE	FALSE	0	0	0	0	
Good <u>external</u> functional adjacencies	FALSE	FALSE	FALSE	0	0	0	0	
<b>Total Score</b>							<b>0</b>	<b>0%</b> <i>Major operational or design issues with negative impact on operations and elevated risk for users; immediate upgrade/remediation is required</i>

<b>Score Aide:</b>	<b>10</b>	Good quality space, design and function
	<b>6</b>	Does not meet all contemporary standards but still functions well
	<b>2</b>	Any one of: poor design, major breaches of standards, elevated risk, important spaces are missing

<b>Department Overall Rating</b>	<b>100-70</b>	Department is performing well for current use
	<b>69-39</b>	Some functional or design concerns that decrease efficiency and flag risks; upgrade/remediation needed in the intermediate term
	<b>40 or less</b>	Major operational or design issues with negative impact on operations and elevated risk for users; immediate upgrade/remediation is required

Department Re-Use?	Yes	No	Specify or Comment
Vacant or underutilized space?	FALSE	FALSE	
Potential to be a specialized inpatient unit (ICU? Specify...)	FALSE	FALSE	
Potential to be a general inpatient unit	FALSE	FALSE	
Potential to be an OR, Emergency, Lab or DI (specify...)	FALSE	FALSE	
Potential to be a clinic or specialized ambulatory space (specify...)	FALSE	FALSE	
Potential to be an office space	FALSE	FALSE	
Potential to be support service (specify...)	FALSE	FALSE	
Potential for other use (specify...)	FALSE	FALSE	

<b>Other Comments</b>	
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# **4.0 Appendix**

## List of Acronyms

## List of Acronyms

<b>ABACUS</b>	Alberta Cardiovascular and Stroke Research Centre
<b>AH</b>	Anderson Hall (Royal Alexandra Hospital)
<b>AHE</b>	Alberta Hospital Edmonton
<b>AHS</b>	Alberta Health Services
<b>ATH</b>	Active Treatment Hospital
<b>BiPap</b>	Bilevel Positive Airway Pressure
<b>BP</b>	BlackwellParkin
<b>CAMIS</b>	Centre for the Advancement of Minimally Invasive Surgery
<b>CC</b>	Cabrini Centre (Misericordia)
<b>CC</b>	Children's Centre (Royal Alexandra Hospital)
<b>CCI</b>	Cross Cancer Institute
<b>CCTV</b>	Closed-Circuit Television
<b>CCU</b>	Coronary Care Unit
<b>CDM</b>	Chronic Disease Management
<b>CMG</b>	Case Mix Group
<b>CSC</b>	Community Services Centre (Royal Alexandra Hospital)
<b>CSR</b>	Central Supply Room
<b>CT</b>	Computed Tomography
<b>CTAS</b>	Canadian Triage and Acuity Scale
<b>CTC</b>	Comprehensive Tissue Centre
<b>CVICU</b>	Cardiovascular Intensive Care Unit
<b>DCS</b>	Day Case Surgery
<b>DI</b>	Diagnostic Imaging
<b>DM</b>	Day Medicine
<b>DTC</b>	Diagnostic Treatment Centre (Royal Alexandra Hospital)
<b>ECG</b>	Electrocardiogram
<b>ECT</b>	Electroconvulsive Therapy

## List of Acronyms

<b>ED</b>	Emergency Department
<b>EEG</b>	Electroencephalogram
<b>EGH</b>	Edmonton General Hospital
<b>EMS</b>	Emergency Medical Staff
<b>ENT</b>	Ear, Nose and Throat
<b>EP</b>	Electrophysiology Study
<b>ER</b>	Emergency Room
<b>eSIM</b>	Provincial Simulation Program
<b>FMC</b>	Family Medicine Clinic
<b>FS</b>	Fort Saskatchewan
<b>GNCH</b>	Grey Nuns Community Hospital
<b>GRH</b>	Glenrose Rehabilitation Hospital
<b>HFRC</b>	Health Facilities Review Committee
<b>HSC</b>	Health Services Centre
<b>HVAC</b>	Heating, Ventilation and Air Conditioning
<b>ICN</b>	Intensive Care Nursery
<b>ICU</b>	Intensive Care Unit
<b>IP</b>	Inpatient
<b>IPC</b>	Infection, Prevention and Control
<b>iRSM</b>	Institute for Reconstructive Sciences in Medicine
<b>IT</b>	Information Technology
<b>IVF</b>	In Vitro Fertilization
<b>L+D</b>	Labour and Delivery
<b>LBU</b>	Leduc Business Unit
<b>LDRP</b>	Labour, Delivery, Recovery and Post-Partum
<b>LTC</b>	Long Term Care
<b>MAHI</b>	Mazankowski Alberta Heart Institute

## List of Acronyms

<b>MDR</b>	Medical Device Processing
<b>MH</b>	Mental Health
<b>MMC</b>	Material Management Centre (Royal Alexandra Hospital)
<b>MRI</b>	Magnetic Resonance Imaging
<b>NARP</b>	North Alberta Renal Program
<b>NECHC</b>	North East Community Health Centre
<b>NICU</b>	Neonatal Intensive Care Unit
<b>NWT</b>	Northwest Territories
<b>OB</b>	Observation Beds
<b>OCP</b>	Over Capacity Beds
<b>OH&amp;S</b>	Operational Health and Safety
<b>OP</b>	Outpatient
<b>OR</b>	Operating Room
<b>OSC</b>	Orthopedic Surgery Centre (Royal Alexandra Hospital)
<b>OT</b>	Occupational Therapy
<b>P&amp;C</b>	Privacy and Confidentiality
<b>P&amp;O</b>	Prosthetics and Orthotics
<b>PACU</b>	Post Anesthesia Care Unit
<b>PARR</b>	Post Anesthetic Recovery Room
<b>PCN</b>	Primary Care Network
<b>PET</b>	Positron Emission Tomography
<b>PH</b>	Public Health
<b>PICU</b>	Pediatric Intensive Care Unit
<b>PT</b>	Physiotherapy
<b>RAH</b>	Royal Alexandra Hospital
<b>RAZ</b>	Rapid Assessment Zone

## List of Acronyms

<b>RDC</b>	Renal Dialysis Satellite Unit (Royal Alexandra Hospital)
<b>RP</b>	Robbins Pavilion (Royal Alexandra Hospital)
<b>RR</b>	Recovery Room
<b>RT</b>	Respiratory Therapy
<b>SB</b>	Services Building
<b>SCH</b>	Sturgeon Community Hospital
<b>SLP</b>	Speech Language Pathology
<b>SRQP</b>	Specialized Rehabilitation Outpatient Program
<b>SSS</b>	Short Stay Surgery Centre (Royal Alexandra Hospital)
<b>SSU</b>	Short Stay Unit
<b>STI</b>	Sexually Transmitted Infection
<b>TB</b>	Tuberculosis
<b>TPA</b>	Tissue Plasminogen Activator
<b>UAH</b>	University of Alberta Hospital
<b>VAD</b>	Ventricular Assist Device
<b>WA</b>	West Annex
<b>WC</b>	Women's Centre (Royal Alexandra Hospital)
<b>WCB</b>	Worker's Compensation Board
<b>WMC</b>	Walter Mackenzie Health Sciences Centre
<b>WVHC</b>	Westview Health Centre

