Cardiovascular Health Program Report

Alberta Health Services

Fall 2022 Survey September 18-23



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About this Accreditation Report

Alberta Health Services (referred to in this report as "the organization") is participating in Accreditation Canada's Qmentum accreditation program. As part of this ongoing process of quality improvement, an on-site survey was conducted September 18-23, 2022. Information from the survey, as well as other data obtained from the organization, were used to produce this Accreditation Report.

Accreditation results are based on information provided by the organization. Accreditation Canada relies on the accuracy of this information to plan and conduct the on-site survey and produce the Accreditation Report.

About the AHS Accreditation Cycle

Since 2010, Alberta Health Services (AHS) has embraced a sequential model of accreditation. This model supports a more continuous approach to quality improvement by providing additional opportunities to assess and improve year-over-year, relative to a traditional accreditation approach that adopts one assessment per accreditation cycle.

In 2019, Accreditation Canada and AHS co-designed an accreditation cycle that further enhances a sequential accreditation model. Under this new approach, Accreditation Canada will conduct two accreditation visits per year for the duration of the cycle (2019-2023). Accreditation visits are helping AHS achieve its goal of being *Accreditation Ready* every day by inspiring teams to work with standards as part of their day-to-day quality improvement activities.

Focused assessment for the foundational standards of Governance, Leadership, Infection Prevention, and Control, Medication Management and Reprocessing of Reusable Medical Devices occurred in the first year of the cycle (Spring and Fall surveys for 2019).

During the cycle (2019- 2023), site-based assessments for rural hospitals use a holistic approach and integrate assessments for all clinical service standards applicable at the site, as well as the foundational standards of Medication Management, Infection Prevention and Control, Reprocessing of Reusable Medical Devices and Service Excellence. Program-based assessments are applied to large urban hospitals where clinical services are assessed against the respective clinical service standard along with the foundational standards. This integrated assessment approach for both small rural hospitals and large urban hospitals provides a more comprehensive assessment.

To further promote continuous improvement, AHS has adopted a new assessment method referred to as Attestation. Attestation requires teams from different sites throughout the province to conduct a self-assessment against specified criteria and provide a declaration that the self-assessment is both accurate and reliable to the best of the organization's knowledge. These ratings are used to inform an accreditation decision at the end of the four-year accreditation cycle.

After each accreditation visit, reports are issued to AHS to support their quality improvement journey. At the end of the accreditation cycle, in Spring 2023, an overall report will be issued that includes the province's overall accreditation award.

Cardiovascular Program Assessment – Sites Visited

- Alberta Children's Hospital
- Foothills Medical Centre
- Mazankowski Alberta Heart Institute

Cardiovascular Program Assessment – Standards Assessed

- Ambulatory Care Services
- Critical Care Services
- Infection Prevention and Control
- Inpatient Services
- Medication Management
- Perioperative Services and Invasive Procedures
- Service Excellence

Confidentiality

This report is confidential and is provided by Accreditation Canada to the organization only.

Accreditation Canada does not release the report to any other parties.

In the interests of transparency and accountability, Accreditation Canada encourages the organization to disseminate its Accreditation Report to staff, board members, clients, the community, and other stakeholders.

Any alteration of this Accreditation Report compromises the integrity of the accreditation process and is strictly prohibited.

Executive Summary

Surveyor Observations

Mazankowski Heart Institute

The Institute is part of the University of Alberta campus and shares some of its support services. The programs are all cardiac related and separated into divisions of cardiology and cardiac surgery. The staff work closely and collaboratively to provide cardiac care to the northern areas of the province as well as the entire northwest region of the country. There are good liaisons with all health care providers throughout the region and investigations and treatments are streamlined as much as possible to decrease wait time and travel.

There is "state of the art" equipment and personnel to manage the large volume of urgent and elective pediatric and adult cardiac cases in the operating theaters, catheterization labs, and ambulatory clinics. "Learners" at all levels avail of the opportunities to observe and participate in an educational environment.

There is good evidence of significant patient and family involvement at the individual care level and at the higher strategic and planning level through the patient advisory committees and Strategical Clinical Network.

Alberta Children's Hospital

This is a pediatric hospital which has a pediatric cardiac ambulatory care clinic, providing screening, diagnosis, consultation, follow up and counselling for pediatric cardiac conditions. Referrals are primarily made from the community and pediatrician offices.

This hospital has a strong working relationship with the Mazankowski Heart Institute, working collaboratively with clients and family to determine cardiac surgical options, and facilitate consultations.

The team works in tandem with the clients and families to provide a very focused and compassionate client-centered approach. They have resources in their clinic to provide scheduling of multiple services for their clients the same day as their appointment.

Foothills Medical Centre

This hospital has a comprehensive cardio sciences program, including Cardiac Surgery and Interventional Cardiology as well as ambulatory clinics. It is a tertiary hospital and specialized referral centre for southern Alberta.

It provides services in Cardiovascular Intensive Care, Cardiovascular Surgery, Inpatient Unit, and stepdown area. There are good links with the healthcare providers throughout the region and wait times are monitored and reviewed to make improvements.

There is a challenge with space confinements and physical constraints, having three separate areas for their operating theatres. The patient area in the CVICU is very confined and crowded, as is the stepdown unit. Medication areas are not secured in the two critical care areas.

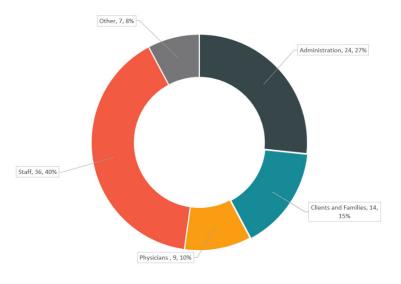
This cardiology team is highly cohesive and collaborative. They have ongoing quality improvement initiatives directed to improving client care. They have been pioneering the MICS (minimal invasion cardiac surgery) program over the past few years which has become increasingly popular. This program has succeeded in resulting in better patient outcomes, less pain, and less post-operative recovery time.

Survey Methodology

The Accreditation Canada Surveyors assessed the Cardiovascular program.

To conduct their assessment, the survey team gathered information from the following groups¹

Groups	Total #
Administration	24
Client & Families	14
Physician	9
Staff	36
Other	7



¹ "Other" interviewees refer to individuals such as students or volunteers

Key Opportunities and Areas of Excellence

The Accreditation Canada survey team identified the following key opportunities and areas of excellence for this site:

Key Opportunities

- 1. Open presently closed beds to accommodate volume
- 2. Improve the restricted access to the ORs
- 3. Expansion of the MICS (minimal invasion cardiac surgery) program
- 4. Continued attention to physical space and challenging infrastructure

Areas of Excellence

- 1. Dedicated and attentive staff
- 2. Full participation by families in individual care
- 3. Seamless transitions with good communication
- 4. Utilization of ACATS (Alberta Coding Access Targets for Surgery) system to triage patients

Results at a Glance

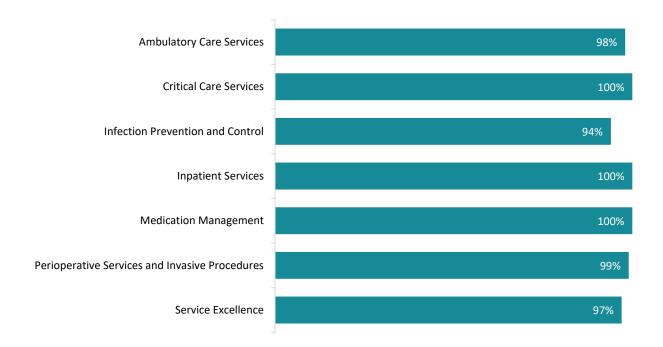
This section provides a high-level summary of results by standards, priority processes and quality dimensions.

Compliance Overall¹

Percentage of criteria		eria	Attestation:
Attested 100% met	On-Site 99% met	Overall 99% met	A form of conformity assessment that requires organizations to conduct a self-assessment on specified criteria and provide a declaration that the assessment is accurate to the best of the organization's knowledge. This data is used to inform an accreditation award.
Number of attested criteria		criteria	On-site Assessment: Peer Surveyors from Accreditation Canada visit one or more facilities to assess compliance
Attested 221 criteria	Audited 20 criteria		against applicable standards.

¹ In calculating percentage compliance rates throughout this report, criteria rated as 'N/A' and criteria 'NOT RATED' were excluded. Data at the 'Tests for Compliance' level were also excluded from percentage compliance calculations. Compliance with ROPs and their associated 'Tests for Compliance' are detailed in the section titled *Detailed Results: Required Organizational Practices (ROPs)*.

Compliance by Standard



STANDARD	MET	UNMET	N/A	NOT RATED
Ambulatory Care Services	48	1	0	0
Critical Care Services	90	0	0	0
Infection Prevention and Control	17	1	0	0
Inpatient Services	67	0	2	0
Medication Management	33	0	0	0
Perioperative Services and Invasive Procedures	148	1	0	0
Service Excellence	74	2	0	0

Compliance by Quality Dimension



DIMENSION	MET	UNMET	N/A	NOT RATED
Accessibility	23	1	1	0
Appropriateness	135	3	0	0
Client Centered Services	134	0	0	0
Continuity of Services	27	0	0	0
Efficiency	7	0	0	0
Population Focus	2	0	0	0
Safety	141	0	1	0
Worklife	8	1	0	0
Total	477	5	2	0

Compliance by Required Organizational Practice (ROP)

ROP	STANDARD	RATING
COMMUNICATION		
Client Identification	Ambulatory Care Services	MET
	Critical Care Services	MET
	Inpatient Services	MET
	Perioperative Services and Invasive Procedures	MET
The 'Do Not Use' list of Abbreviations	Medication Management	MET
Medical Reconciliation at Care	Critical Care Services	MET
Transitions	Inpatient Services	MET
	Perioperative Services and Invasive Procedures	MET
	Ambulatory Care Services	MET
Information Transfer at Care	Ambulatory Care Services	MET
Transitions	Critical Care Services	MET
	Inpatient Services	MET
	Perioperative Services and Invasive Procedures	MET
Safe Surgery Checklist	Perioperative Services and Invasive Procedures	MET
MEDICATION USE		
Concentrated Electrolytes	Medication Management	MET
Heparin Safety	Medication Management	MET
Narcotics Safety	Medication Management	MET
Infusion Pump Safety	Service Excellence	MET
INFECTION CONTROL		
Hand-hygiene Education and Training	Infection Prevention and Control	MET

RISK ASSESSMENT		
Falls Prevention and Injury	Critical Care Services	MET
Reduction	Inpatient Services	MET
	Perioperative Services and Invasive Procedures	MET
Pressure Ulcer Prevention	Critical Care Services	MET
	Inpatient Services	MET
	Perioperative Services and Invasive Procedures	MET
Venous Thromboembolism Prophylaxis	Critical Care Services	MET
	Perioperative Services and Invasive Procedures	MET
	Inpatient Services	MET

Detailed Results: System-level Priority Processes

Accreditation Canada defines priority processes as critical areas and systems that have an impact on the quality and safety of care and services. System-level priority processes refers to criteria that are tagged to one of the following priority processes: Emergency Preparedness; Infection Prevention and Control; Medical Devices and Equipment; Medication Management; Patient Flow; People-Centred Care; Physical Environment. Note that the following calculations in this section exclude Required Organizational Practices.

Emergency Preparedness

Priority Process Description: Planning for and managing emergencies, disasters, or other aspects of public safety. This system-level priority process refers to criteria that are tagged to one of the following standards: Infection Prevention and Control.



This service has an ongoing pandemic preparation process. Team members and volunteers are provided access to the Infection Prevention and Control (IPC) manual for identifying and managing outbreaks. IPC clinicians were front and center in providing guidance and leadership during the COVID-19 pandemic.

Information is communicated about outbreaks to clients, families, team members, partners, other organizations, and the community as appropriate.

There is a coordinated response to outbreaks across the organization with feedback and communication that is well sourced and timely. Education and training were identified as a priority for safety to the teams, clients, and families. Donning and doffing education was amplified, and FIT testing (N95 masks) was undertaken ensuring safe utilization of PPE (Personal Protective Equipment).

Infection Prevention and Control

Priority Process Description: Providing a framework to plan, implement, and evaluate an effective IPC program based on evidence and best practices in the field. This system-level priority process refers to criteria that are tagged to one of the following standards: Infection Prevention and Control.



Staff are well versed in the infection prevention and control policies. Annual competencies and education are maintained. Hand hygiene and monitoring are ongoing with a compliance close to 80%. Proper techniques are posted for proper hand washing. There are alcohol-based hand rubs at all points of care.

Safety engineered devices are utilized and tamper resistant sharps containers are readily available. Environmental services are engaged, the physical environment is

categorized on the risk of infection and monitored for compliance of cleaning.

There is a surveillance plan to monitor healthcare associated infections which are tracked, reviewed for quality improvement, and benchmarked. These include central line infection, Ventilator-associated pneumonia (VAP), and catheter acquired infection. Patients and families are actively included in infection prevention and control through education and feedback.

STANDARD	UNMET CRITERIA	CRITERIA
Infection Prevention and Control	9.5	Compliance with policies and procedures for cleaning and disinfecting the physical environment is regularly evaluated, with input from clients and families, and improvements are made as needed.

Medical Devices and Equipment

Priority Process Description: Obtaining and maintaining machinery and technologies used to diagnose and treat health problems. This system-level priority process refers to criteria that are tagged to one of the following standards: Perioperative Services and Invasive Procedures.

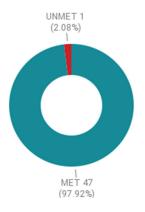


All equipment and devices are labelled allowing continuous tracking to be facilitated. Regular maintenance and calibration are provided by the bio-med department and medical device reprocessing. All contaminated equipment is transported post usage in covered bins to the reprocessing area and instruments are returned appropriately packaged to the OR area. Equipment failures are tracked and replaced, as necessary.

Equipment and devices utilized throughout the Cardiac Sciences program are up to date and appropriate for the services provided. New equipment is purchased through a capital funding mechanism and there would appear to be no difficulties in the supply chain as articulated by the staff.

Medication Management

Priority Process Description: Using interdisciplinary teams to manage the provision of medication to clients. This system-level priority process refers to criteria that are tagged to one of the following standards: Medication Management; Perioperative Services and Invasive Procedures.



In the operating rooms medications are provided via dedicated Pyxis machines. Anesthetists "pick" their required medications and document the dosing and wastage appropriately. All anesthetic carts are standardised, checked regularly, and restocked appropriately.

In the patient care areas medications are provided via Pyxis machines - stocked and maintained by the central pharmacy. Medication carts on the inpatient units at Foothills Medical Centre do not appear to be standardized. Clinical pharmacists are part of the care teams and facilitate the

management of individual patient medications. There is physician order entry via Connect Care, and this has enhanced avoidance of medication error, the "do not use" abbreviations and drug interactions.

All medication standards concerning concentrated electrolytes, heparin, and narcotics are in compliance.

There are strong education programs for new staff and for continuous staff learning. These are provided by the nurse educators in conjunction with the clinical pharmacists.

STANDARD	UNMET CRITERIA	CRITERIA
Perioperative Services and	3.3	The contents of medication carts for the surgical
Invasive Procedures		area are standardized across the organization.

Patient Flow

Priority Process Description: Assessing the smooth and timely movement of clients and families through service settings. This system-level priority process refers to criteria that are tagged to one of the following standards: Perioperative Services and Invasive Procedures.



All elective patients are managed through a central booking module. There are processes for prioritization and lists are regularly updated. Block booking is done with OR management oversight and there is adequate accommodation for OR returns and new emergencies. Daily bed management sessions take place during which availability of critical care beds, discharges, and transfers are discussed so that resources can be maximized.

Invasive procedures (non-surgical) are prioritized, and urgent cases may come from the emergency department or directly from the EMS ambulance. Short-

stay space for these cases is at a premium and transfer is often necessary post-procedure. Efforts should be made to enlarge short-stay space to minimize the need for external transfer.

Ambulatory care clinics provide a variety of sub-specialized care and where possible try to have a "one stop shop" for multimodal investigations. Since COVID, about 50% of the follow-up care is provided in a virtual setting - convenient and efficient for both patients and staff.

People-Centred Care

Priority Process Description: Working with clients and their families to plan and provide care that is respectful, compassionate, culturally safe, and competent, and to see that this care is continuously improved upon. This system-level priority process refers to criteria that are tagged to one of the following standards: Ambulatory Care; Inpatient Services; Critical Care Services; Service Excellence.



There is strong engagement with clients and family. Clients are empowered to self-manage through education, tools, and resources. They are encouraged to be involved in their care and have opportunity to identify and set their goals.

Transitions of the clients are seamless with standardized and formally developed tools and templates to exchange information. Clients are involved in their transition of care and evaluated for their readiness.

There is an active and engaged Patient and Family Centred-Care (PFCC) committee at the unit level. Staff and family speak highly regarding the collaboration and have been successful in making positive changes. There are pamphlets and surveys to compile feedback regarding care.

Physical Environment

Priority Process Description: Providing appropriate and safe structures and facilities to achieve the organization's mission, vision, and goals. This system-level priority process refers to criteria that are tagged to one of the following standards: Perioperative Services and Invasive Procedures.



The physical environment for invasive procedures would appear to be adequate at all sites. There is some space restriction at Foothills Medical Centre which may compromise the need for levels of restricted access. Adherence to standards of restriction and sterility is well done. All engineering parameters concerning air flow and exchanges etc., are regularly monitored by facilities management and alarm systems are in place for failures.

There are dedicated cleaning and support staff in the procedural areas and cleaning schedules and processes are regularly monitored and reviewed.

Detailed Results by Service-Level Priority Process

Accreditation Canada defines priority processes as critical areas and systems that have an impact on the quality and safety of care and services. Service-level priority processes refer to criteria that have been tagged to one of the following priority processes: Clinical Leadership; Competency; Decision Support; Episode of Care; Impact on Outcomes.

Ambulatory Care Services

Episode of Care Bundle Description: Partnering with clients and families to provide client-centred services throughout the health care encounter.



There is a process to respond to requests for services in a timely way. Goals and expected results of the client's care and services are identified in partnership with the client and family and an individual care plan is developed. Clients are encouraged to actively engage in their care and their wishes are respected.

The number of clients who fail to present at scheduled appointments are monitored, followed up and rebooked at the next earliest time. Strategies are utilized to reduce

waiting times and to reduce absenteeism at appointments.

Should the team be unable to meet the needs of the client, access to other services is facilitated. Diagnostic, laboratory testing, and expert consultation are available, and the result of the assessments are shared with the client and other team members in a timely way.

STANDARD	UNMET CRITERIA	CRITERIA
Ambulatory Care Services	1.4	Clients are provided with information on eligibility for insured services.

Critical Care Services

Episode of Care Bundle Description: Partnering with clients and families to provide client-centred services throughout the health care encounter.



Admission and discharge criteria are identified and there is a process of outreach that aids in patient selection and follow-up. Standardized assessments are completed, and care plans developed with input from patients and families. Family members are encouraged to participate in the ongoing management of the patient and to attend procedural and resuscitative events. Psychosocial support is readily available for families and directives for care are encouraged and regularly reviewed.

All safety issues are monitored and addressed appropriately-skin care, falls prevention, VTE prophylaxis, and medication reconciliation are recorded. All charting is done electronically via Connect Care and all clinical parameters are monitored.

Critical care surveillance measures such as sedation, delirium, glycemia are all entered in the record. Infection prevention and control bundles such as urinary tract infection (UTI), Central Venous Catheter (CVP) lines, and ventilator pneumonia are recorded and communicated to staff.

Transitions of care within the unit or beyond are facilitated verbally, by transfer tool/Connect Care, and/or by paper depending on the transfer site. Communication methods seem to work well and facilitate smooth patient movement.

Inpatient Services

Episode of Care Bundle Description: Partnering with clients and families to provide client-centred services throughout the health care encounter.



The transition of care from other services to inpatient care have standardized reporting templates and formalized handover. Goals and expected results of the care and services are identified in partnership with the client and family.

There are some rooms that have four patient beds making privacy and confidentiality more challenging, and the environment noisy.

Transition nurses are a part of the team, engaging the client to ensure a smooth transition to the home or community. Venous thromboembolism (VTE) prophylaxis, universal fall precautions, and pressure ulcer prevention are ingrained practices, focusing on the safety and well-being of the client.

Perioperative Services and Invasive Procedures

Episode of Care Bundle Description: Partnering with clients and families to provide client-centred services throughout the health care encounter.



Patients for the perioperative program are pre-selected by a panel of cardiologists and cardiac surgeons. Patients are prioritized and booked centrally. This list is constantly being reviewed and updated to be sure that the most urgent cases are done first. There is a pre-operative clinic designed to provide education to patients and families, streamline investigations, and maximize safety. Pre-anesthesia consultations are performed here, and all pre-operative materials reviewed.

Upon access to the OR all parameters are reviewed and confirmed. The team meets the patient and family to begin the surgical checklist and reconfirm the case and resolve any queries.

In the OR the surgical checklist is compliant and recorded. All intra-operative standards are in compliance and the team functioning is smooth and efficient. There is a "live" record of the proceedings which becomes part of the patient's permanent chart.

Upon completion of the procedure the patient moves directly to the post-operative cardiac care unit (CCU) accompanied by the anesthetist and nursing team. The handover is done verbally face-to-face.

Similar processes occur in the invasive procedure's locales such as the catheterization lab.

Service Excellence

Episode of Care Bundle Description: Partnering with clients and families to provide client-centred services throughout the health care encounter.



Clients and family representatives are regularly engaged to provide input into the service. Information and feedback are collected about the quality of services to guide quality improvement initiatives. Patient safety incidents are analyzed to help prevent recurrence and make improvements.

Education and training are provided on ethical decision making and how to work respectfully and effectively with clients and families with diverse cultural backgrounds. A

documented and coordinated approach for infusion pump safety including training and evaluation is completed to ensure staff competency.

The team members are recognized for their contributions. Through the Patient and Family Centred-Care (PFCC) committee, families had suggested a kudos box be placed on the unit for staff recognition and appreciation, which was done.

STANDARD	UNMET CRITERIA	CRITERIA
Service Excellence	3.11	Team member performance is regularly evaluated and documented in an objective, interactive, and constructive way.
Service Excellence	8.3	There is a standardized process, developed with input from clients and families, to decide among conflicting evidence-informed guidelines.

Criteria for Follow-up

Criteria Identified for Follow-up by the Accreditation Decision Committee

There are no criteria identified for Follow-up.