

**MAY
2019**

Alberta Health Services

**CORPORATE & URBAN
ACCREDITATION REPORT**



**ACCREDITATION
AGRÉMENT
CANADA**

Table of Contents

- About this Accreditation Report..... 4
 - About the AHS Accreditation Cycle 4
 - Confidentiality 5
- Section I - Corporate Report**..... 6
 - 1. Corporate Executive Summary 6
 - Opportunities and Areas of Excellence: Corporate..... 6
 - 2. Results at a Glance 7
 - Compliance Overall¹ 7
 - Compliance by Standard 8
 - Compliance by Quality Dimension..... 9
 - 3. Detailed Results: System-wide Priority Processes 10
 - Emergency Preparedness 10
 - Infection Prevention and Control..... 11
 - Opportunities and Areas of Excellence: Infection Prevention and Control ... 12
 - Medical Devices and Equipment..... 13
 - Opportunities and Areas of Excellence: Reprocessing of Reusable Medical Devices..... 14
 - Medication Management..... 15
 - Opportunities and Areas of Excellence: Medication Management..... 16
- SECTION II – URBAN HOSPITALS REPORT** 18
 - 1. Urban Hospitals Executive Summary 18
 - Sites Visited..... 18

Survey Methodology	19
2. Results at a Glance	20
Compliance Overall	20
Compliance by Standard	21
Compliance by Quality Dimension.....	22
Compliance by Required Organizational Practice (ROP) OVERALL	23
3. Detailed Results: Standards.....	24
Infection Prevention and Control.....	24
Opportunities and Areas of Excellence.....	26
Medication Management.....	27
Opportunities and Areas of Excellence.....	30
Reprocessing of Reusable Medical Devices	31
Opportunities and Areas of Excellence.....	34
4. Detailed Results: Required Organizational Practices	35
Compliance with ROP at Sites: % of Sites where ROP is Met.....	35
5. Criteria Identified for Follow-up by the Accreditation Decision Committee...	37
6. Required Organizational Practices Identified for Follow-up by the Accreditation Decision Committee	40

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 May 27 – 31, 2019.

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 to 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.

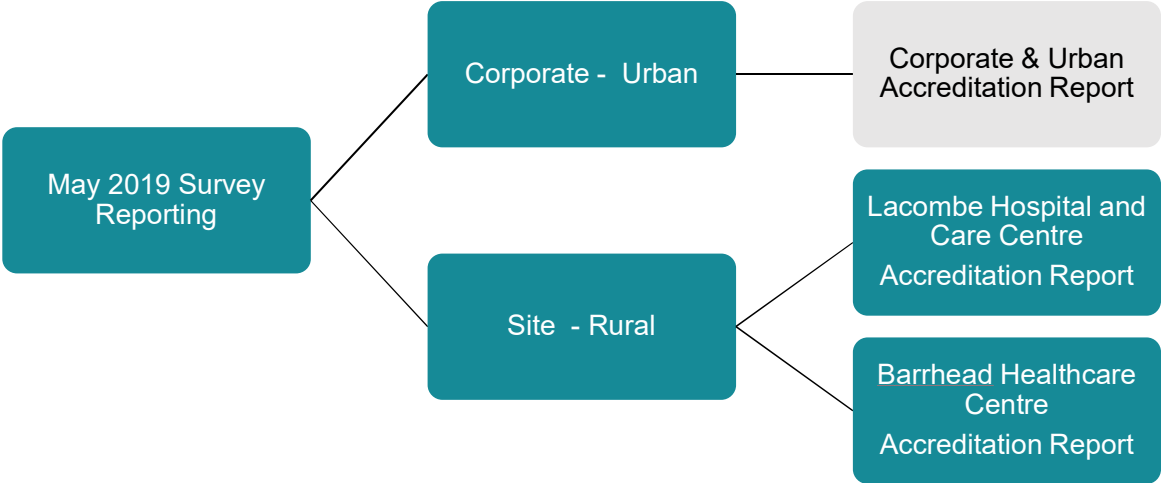
In 2019, Accreditation Canada and AHS co-designed an accreditation cycle that further enhances a sequential accreditation model. Under this new approach, Accreditation Canada will conduct two accreditation visits per year for the duration of the cycle (2019-2022). Accreditation visits are helping AHS achieve their goal of being #AHS Accreditation Ready everyday by inspiring teams to work with standards as part of their day-to-day quality improvement activities.

Site-based assessments for rural hospitals will 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 whereby specialized 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 more holistic 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, interim reports will be issued to AHS to support their quality improvement journey. At the end of the four-year accreditation cycle, in 2022, a final report will be issued that includes the province’s overall accreditation award.

The accreditation reports for the May 2019 survey are organized as follows:



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.

Section I - Corporate Report

1. Corporate Executive Summary

Accountability for the delivery of health services exists at different levels of the organization. To enhance the accreditation program fit, Accreditation Canada has created Accreditation Manuals that grouped the criteria of the standards into two levels of accountability: Corporate level and Site level. This report reflects the results of both the Corporate level as well as the Site level assessments.

This assessment focused on three foundational standards: Infection Prevention and Control, Reprocessing of Reusable Medical Devices, and Medication Management. The Accreditation Canada survey team met with AHS Corporate Service Excellence Teams (SETs) from these areas to assess compliance with Corporate Accreditation Manual criteria. Implementation of Corporate level direction setting was then validated through the tracers conducted at the Site level (See Section II results for site level at urban hospitals).

Opportunities and Areas of Excellence: Corporate

Key Opportunities

1. The infrastructure in some services should be updated.
2. The leadership team should consider the pace of change and impact on staff with the implementation of Connect Care and other new initiatives.
3. The organization is encouraged to enhance the Antimicrobial Stewardship evaluation.

Areas of Excellence

1. Leadership and staff are engaged and committed to deliver quality services.
2. There is a robust provincial medication management structure with zone connections for operations across the organization.
3. There is data available to drive quality initiatives.
4. Education, orientation, competency, and performance assessment tools are in place across the sites.

2. Results at a Glance

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

Compliance Overall¹

Attestation 99% % Met	Attestation 105 # of Criteria
On Site 95% % Met	Audit 22 # of Criteria
Overall 98% % Met	

Attestation:

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.

On-site Assessment:

Peer Surveyors from Accreditation Canada visit one or more facilities to assess compliance against applicable standards.

^[1] In calculating percentage compliance rates throughout this report, criteria rated as N/A and criteria NOT RATED were excluded. In addition, criteria tagged as Tests for Compliance were also excluded from percentage of compliance calculations. Compliance with ROPs and their associated Tests for Compliance are looked at in the section titled Detailed Results: Required Organizational Practices (ROPs).

Compliance by Standard

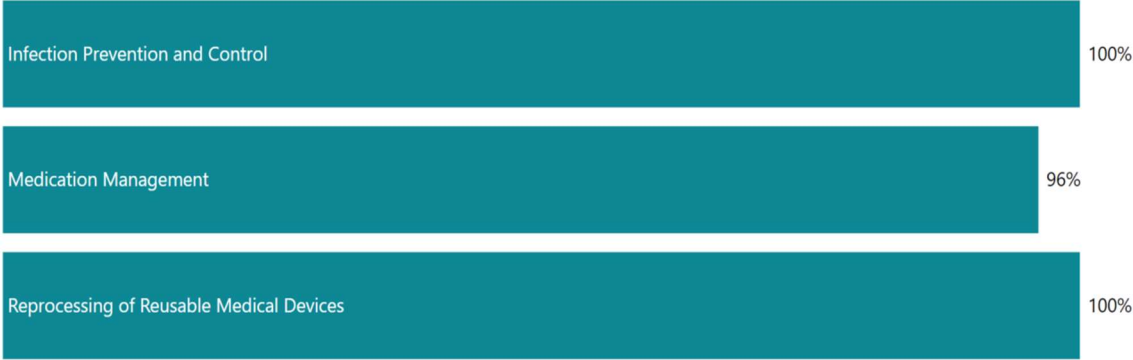


Fig. 2.1 Compliance by Standard

STANDARD	MET	UNMET	N/A	NOT RATED
Infection Prevention and Control	38	0	2	0
Medication Management	50	2	0	0
Reprocessing of Reusable Medical Devices	34	0	2	0
Total	122	2	4	0

Compliance by Quality Dimension



Fig. 2.2 Compliance by Quality Dimension

QUALITY DIMENSION	MET	UNMET	N/A	NOT RATED
Accessibility	1	0	0	0
Appropriateness	67	1	4	0
Client Centred Services	2	0	0	0
Continuity of Services	-	-	-	-
Efficiency	4	0	0	0
Population Focus	3	0	0	0
Safety	41	1	0	0
Worklife	4	0	0	0
Total	122	2	4	0

3. Detailed Results: System-wide Priority Processes

Note that the following calculations in this section exclude Required Organizational Practices.

Emergency Preparedness

All criteria are met for this Priority Process.



Priority Process Description:

Planning for and managing emergencies, disasters, or other aspects of public safety.

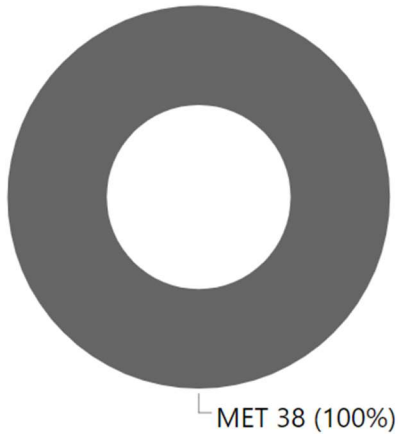
Only the emergency preparedness criteria related to the infection prevention and control (IPC) program were included in this assessment.

The organization is to be commended for the strong commitment to emergency preparedness. This was demonstrated at the sites through robust training and education processes and comprehensive emergency plans.

Input is gathered from the infection prevention and control team when planning for pandemics at the organizational level. Policies and procedures for identifying and responding to outbreaks in line with applicable regulations are in place and regularly reviewed.

Infection Prevention and Control

All criteria are met for this Priority Process.



Priority Process Description:

Providing a framework to plan, implement, and evaluate an effective IPC program based on evidence and best practices in the field.

AHS has a comprehensive Infection Prevention and Control (IPC) program with a governance arm that includes a provincial IPC committee, five zone-level IPC committees, and five zone hand hygiene committees. Committees are interdisciplinary and focus on surveillance, data capture and use, and standardization. An operational arm addresses operational activities for the provincial IPC department, including internal and external working groups. The medical and operational dyad model is well established and there is strong IPC medical leadership through dedicated IPC physicians and with tight linkages with the Medical Officers of Health. The team has strong linkages both within AHS and with other organizations (such as Covenant Health, long-term care facilities, etc.). There may be opportunity for further enhancement of these relationships to promote IPC practices across the continuum of care.

The IPC strategic plan has goal outcomes and a strategy to address customer engagement, IPC practices surveillance, education and consultation. Many systems and processes have been working well, and the organization may want to consider expanding goals and expectations.

The team maintains a robust resource manual and policies and procedures that are updated on a regular basis. The resource manual is organized to provide relevant content to staff working in acute care, community-based care, and long-term care. Educational materials are provided online and are quite thorough. The organization may have an opportunity to enhance the level of education that is provided to patients and families so that they can be engaged in promoting a safe environment.

There is good information provided to the site level about infection rates and key performance indicators. This information is compiled manually and is quite labour intensive. However, the team anticipates that this work should be streamlined and automated with the deployment of the Connect Care system.

Opportunities and Areas of Excellence: Infection Prevention and Control

The Accreditation Canada survey team identified key opportunities for improvement and areas of excellence related to infection prevention and control.

KEY OPPORTUNITIES

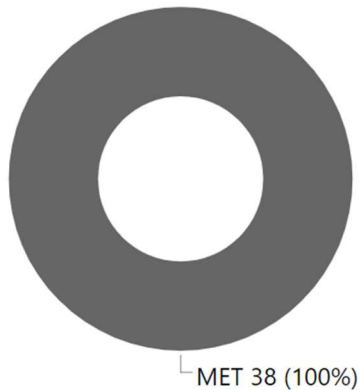
1. AHS has an opportunity to further enhance its relationship with patient partners and have the patient voice represented in the IPC program. This includes the engagement of patients and families in a systematic approach to educating them about IPC at AHS.
2. Automation of many of the IPC practices through the implementation of a single clinical information system that will allow the organization to better manage patients who cross zones.
3. There is an opportunity to continue to enhance the partnership between IPC program within AHS and partners outside the organization.

AREAS OF EXCELLENCE

1. Strong interdisciplinary teams with good representation from across the organization. The dyad model of operational and medical leadership is very effective in delivering the IPC program across AHS.
2. The team utilizes data very effectively to manage infection prevention and control across AHS. The IPC team's focus on data quality and the availability of data at the front line has allowed their efforts to be quite effective. The team has also made efforts to modify key performance indicators so that they are meaningful to front-line staff (e.g. 2.5 CDI infection per 10000 patient days reported for staff as 3 patients with CDI infection per month on a 30-bed unit).
3. Provincial standardization with opportunities for local adaptation based on unique needs of the site.

Medical Devices and Equipment

All criteria are met for this Priority Process.



Priority Process Description:

Obtaining and maintaining machinery and technologies used to diagnose and treat health problems.

AHS has developed a good framework for the oversight of medical device reprocessing (MDR) across the organization that allows for the establishment of quality standards, identification of emerging issues and prioritization of initiatives. This framework involves provincial oversight through a provincial MDR Quality committee and the provincial MDR working group. The focus of the working group is developing Standard Operating Procedures, addressing issues related to delayed endoscope reprocessing and tackling the issue of bioburden remaining on cleaned instrumentation. The organization is commended for their review of various quality reports that focused on these priorities.

The management of the operations of MDR departments is decentralized to the zones and local site managers. The collection of key quality indicators occurs at the provincial level, while the collection of service volumes and activity is assigned to the site and the zones. The organization is encouraged to consider implementing a standardized approach to the collection of service volume and activity data so that this information could be reviewed at the provincial Quality committee. This information can help guide and identify any issues related to workload and activity issues across AHS.

The MDR team, in collaboration with IPC, has made significant progress since the last accreditation in 2014 addressing many of the unmet criteria. The organization should be commended for their implementation of mandated certification of all staff who work in the MDR department. This ensures consistent skill and training levels for all.

The organization is encouraged to continue with scheduled capital investments in physical infrastructure and technology systems for MDR. There are much needed physical infrastructure deficiencies that have previously been identified and are scheduled as part of the Phase 1 capital submission. The organization is urged to work with Alberta Health to ensure these projects progress as expeditiously as possible. AHS is also encouraged to continue with the

investment in the instrument tracking system (surgical processing management) in conjunction with Connect Care to allow the organization to track instruments in a more comprehensive manner.

Opportunities and Areas of Excellence: Reprocessing of Reusable Medical Devices

The Accreditation Canada survey team identified key opportunities for improvement and areas of excellence related to medical devices and equipment.

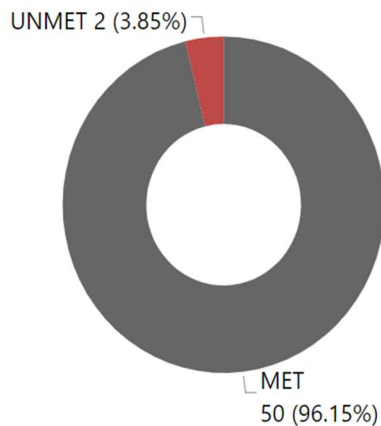
KEY OPPORTUNITIES

1. Physical infrastructure investment needs to be prioritized and actioned as soon as possible.
2. Development of a standardized provincial approach towards the collection of volume and service metrics, workload measurement, and key performance indicators.
3. Continue the work of the provincial Quality committee and working groups to address the highest priority areas for improvement in medical device reprocessing (MDR). It will be important for the organization to ensure that this work is resourced appropriately to ensure the sustainability of the improvements already accomplished.

AREAS OF EXCELLENCE

1. AHS is the only province in Canada to mandate the certification of medical device reprocessing staff. This practice ensures that there is a foundation of knowledge and expertise amongst staff working in the department.
2. Very good collaboration between the MDR department, IPC and Alberta Health. This collaboration has allowed the organization to leverage resources to ensure high quality MDR activities across AHS.
3. Significant progress in the governance and oversight of the MDR departments across AHS. Provincial Quality committee and working groups have addressed many of the previous challenges in the MDR department.

Medication Management



Priority Process Description:

Using interdisciplinary teams to manage the provision of medication to clients.

UNMET CRITERIA

- 7.6 The computerized prescriber order entry (CPOE) is integrated with other information systems used for medication management.
- 8.1 There is a process for determining the type and level of alerts required by the pharmacy computer system including, at minimum: alerts for medication interactions, drug allergies, and minimum and maximum doses for high-alert medications.

The Provincial Medication Management Committee (PMMC) serves as a coordinating body for all the medication standards through the Provincial Accreditation Medication Management Committee (PAMMCo).

A Provincial Parenteral Nutrition Steering Committee has been established to provide oversight of this high risk product. A software system has been implemented to remove the error of transcription and education modules have been developed for staff to use and understand the process.

The Clinical Practice Leaders have set a target for 90 percent of clinical pharmacists to achieve prescribing status with the Alberta College of Pharmacy. They have successfully continued to achieve this target and have supports to ensure pharmacists are competent and knowledgeable members of the inter-professional teams.

The Central Production Pharmacy in Calgary supports hospitals located in the Calgary Zone with unit dose medication and non-hazardous sterile compounding products. There is an excellent logistics system in place to ensure 24-hour turnaround time for delivery. The model

supports efficient use of manpower for the distribution system and is the model that the Edmonton Central Production Pharmacy will be based upon.

AHS is in the process of implementing the Connect Care system in nine waves with wave one planned for November 2019. Connect Care will include a standardized version of the Computerized Physician Order Entry (CPOE) system across the organization.

Opportunities and Areas of Excellence: Medication Management

The Accreditation Canada survey team identified the following opportunities for improvement and areas of excellence related to medication management.

KEY OPPORTUNITIES

1. The Alberta College of Pharmacy is requiring all hospitals to fully meet the National Association of Pharmacy Regulatory Authorities (NAPRA) standards by 2020. There are significant infrastructure costs required to build sterile clean rooms for preparation of hazardous and non-hazardous products at many of the hospitals.
2. Many of the hospitals do not have medication rooms with enough space that can be securely locked.
3. When the Connect Care CPOE system is implemented there will be a significant change of practice and workflow for all the health professionals as the plan is to roll out CPOE along with bedside medication administration at the same time. Training and staff education will be key for the successful implementation of the new system.
4. AHS should consider the implementation of Automated Dispensing Cabinets (ADC) for storage of narcotics, high alert medication and look alike and/or sound alike medications at all sites.

AREAS OF EXCELLENCE

1. The Provincial Accreditation Medication Management Committee (PAMMCo) includes Zone representation and provides guidance and resources to support safe medication practices at the local level. There is representation from the zones at Provincial Medication Committees to ensure bi-directional communication and implementation of the practices with the local teams.
2. Significant standardization has been achieved since the previous survey including the ordering and formulas throughout AHS.
3. The implementation of the Connect Care system is driving standardization of clinical practices across the organization, as well as IV pump standardization and parenteral manual harmonization.

SECTION II – URBAN HOSPITALS REPORT

1. Urban Hospitals Executive Summary

Accountability for the delivery of health services exists at different levels of the organization. To enhance the accreditation program fit, Accreditation Canada has created Accreditation Manuals that grouped the criteria of the standards into levels of accountability: Corporate level, and Site level. This section reflects the results of the site level assessment for the three foundational standards: Infection Prevention and Control, Medication Management, and Reprocessing of Reusable Medical Devices at 14 urban hospitals, and the Calgary based Central Production Pharmacy. To assess compliance against these standards, the Accreditation Canada survey team visited each site to evaluate the implementation of Corporate level policies, processes and procedures at the sites and in care delivery. This accreditation report reflects a composite rating for all urban sites included in the May 2019 survey as well as criteria and Required Organizational Practices (ROPs) identified for follow-up by the Accreditation Decision Committee. More detailed individual site information is available from AHS Accreditation department to support localized quality improvement efforts.

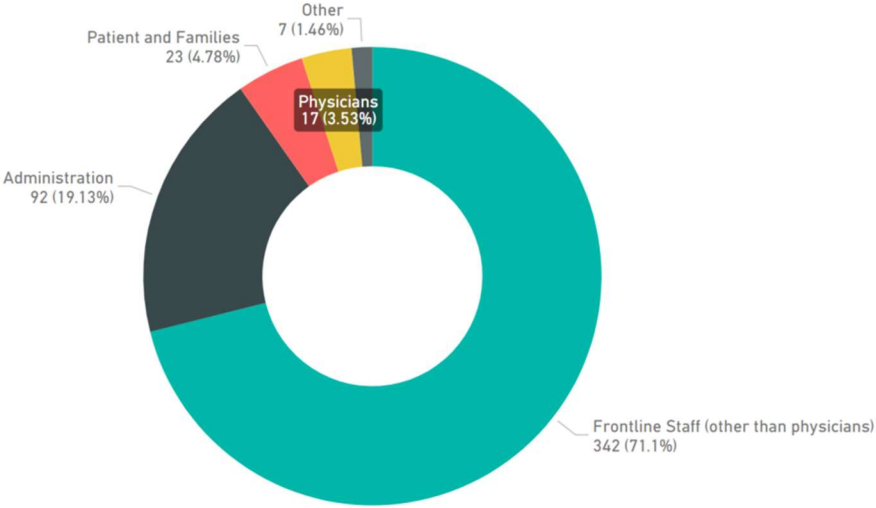
Sites Visited

Alberta Children’s Hospital	Red Deer Regional Hospital Centre
Central Production Pharmacy	Rockyview General Hospital
Chinook Regional Hospital	Royal Alexandra Hospital
Foothills Medical Centre	South Health Campus
Medicine Hat Regional Hospital	Sturgeon Community Hospital
Northern Lights Regional Health Centre	University of Alberta Hospital
Peter Lougheed Centre	Wetaskiwin Hospital and Care Centre
Queen Elizabeth II Hospital	

Survey Methodology

The Accreditation Canada survey team spent four days at 15 urban locations across Alberta.

To conduct their assessment, the survey team gathered information from the following groups, including 481 interviews¹:



¹ 'Other' interviewees refer to individuals such as students or volunteers.

2. Results at a Glance

This section provides a high-level summary of results by standard and quality dimension.

Compliance Overall²

Attestation

75%

% Met

Attestation

200

of Criteria

On Site

75%

% Met

Audit

62

of Criteria

Overall

75%

% Met

Attestation:

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.

On-site Assessment:

Peer Surveyors from Accreditation Canada visit one or more facilities to assess compliance against applicable standards.

² 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 of 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

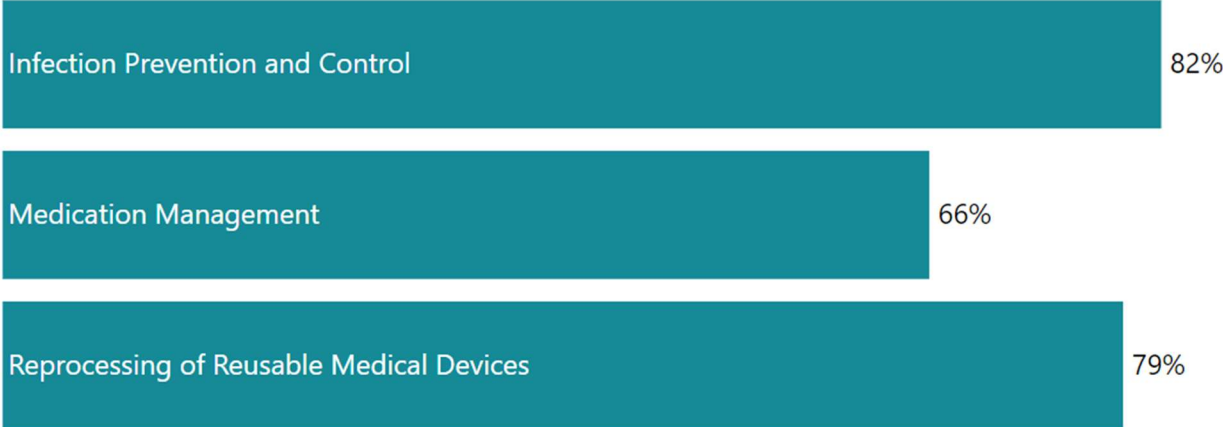


Fig. 2.1 Compliance by Standard

STANDARD	MET	UNMET	N/A	NOT RATED
Infection Prevention and Control	32	7	0	0
Medication Management	42	22	0	0
Reprocessing of Reusable Medical Devices	73	19	0	0
Total	147	48	0	0

Compliance by Quality Dimension

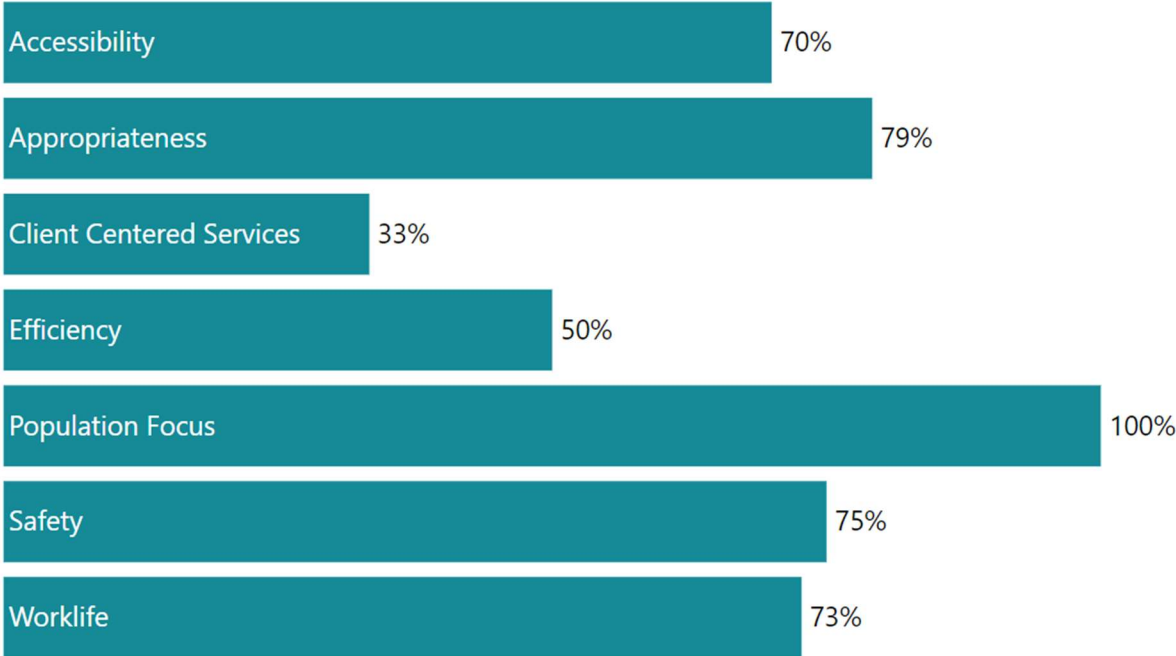


Fig. 2.2 Compliance by Quality Dimension

QUALITY DIMENSION	MET	UNMET	N/A	NOT RATED
Accessibility	7	3	0	0
Appropriateness	57	15	0	0
Client Centered Services	1	2	0	0
Continuity of Services	-	-	-	-
Efficiency	1	1	0	0
Population Focus	1	0	0	0
Safety	72	24	0	0
Worklife	8	3	0	0
Total	147	48	0	0

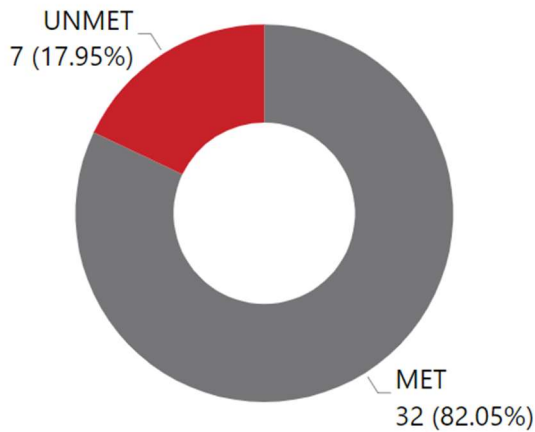
Compliance by Required Organizational Practice (ROP) OVERALL

REQUIRED ORGANIZATIONAL PRACTICE	STANDARD	RATING
COMMUNICATION		
The 'Do Not Use' List of Abbreviations	Medication Management	Unmet
MEDICATION USE		
Antimicrobial Stewardship	Medication Management	Unmet
Concentrated Electrolytes	Medication Management	Unmet
Heparin Safety	Medication Management	Unmet
High-alert Medications	Medication Management	Unmet
Narcotics Safety	Medication Management	Unmet
INFECTION CONTROL		
Hand hygiene Compliance	Infection Prevention and Control	Met
Hand hygiene Education and Training	Infection Prevention and Control	Met
Infection Rates	Infection Prevention and Control	Met

3. Detailed Results: Standards

Note that percentage calculations in this section exclude Required Organizational Practices.

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.

UNMET CRITERIA	CRITERIA
5.2	Team members, clients and families, and volunteers are engaged when developing the multi-faceted approach for infection prevention and control.
6.1	Clients, families, and visitors are provided with information about routine practices and additional precautions as appropriate, and in a format that is easy to understand.
9.3	There are policies and procedures for cleaning and disinfecting the physical environment and documenting this information.
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.
14.1	There is a quality improvement plan for the infection prevention and control program.
14.3	Input is gathered from team members, volunteers, and clients and families on components of the infection prevention and control program.

The Infection Prevention and Control (IPC) program has a very robust structure. There are several quality improvement initiatives in place across different sites, and many are driven by the results of the Auditor General Review of IPC. Sites have unique initiatives underway and are encouraged to evaluate their Quality Improvement Plans and share the learnings broadly. The organization may also wish to review the ratio of Infection Control Practitioners to the number of beds at the sites.

Leaders spoke of the readily available data that they could access through Tableau and the support they receive from the local IPC Practitioners. This sentiment was shared by staff on the units. It was evident that staff were well-informed of IPC practices and guidelines, knew how to access information, and found the website beneficial. There has been a significant decrease in *C. difficile* in the organization through a province-wide surveillance protocol, and *C. difficile* patient management algorithms. Staff spoke of the value of the patient care algorithm. Evidence and best practices are key components for the IPC program.

Hand hygiene is an area of focus with ongoing direct observation audits completed in real-time with immediate feedback. Hand hygiene compliance rates were posted on many units and staff were aware of their rates and improvement opportunities. Compliance is tracked, and improvements have focused on education and appropriate placement of alcohol-based hand rubs (ABHRs). The Leadership Toolkit was cited as being useful. To attain the goal of 90% compliance, the organization may consider auditing without letting staff know that they are being audited. Additionally, the organization may consider targeting the groups of professionals that routinely have lower rates of compliance, such as physicians.

While IPC is consistently consulted in renovations, facility projects, and medical device and equipment purchasing, there are some sites where this does not routinely take place.

Signage related to IPC varied between sites. Some entrances to Emergency had minimal signage, while others were clear with respect to infection precautions information for patients and families.

Many units at the different sites were over capacity, requiring them to place two patients in single rooms. While there are currently appropriate IPC practices in place, increased vigilance may be required to ensure that patients are kept safe, and cleanliness is maintained at the same level as the rest of the units.

While patients and families stated that they received verbal information on managing isolation and infections, there were no written materials available. There is an opportunity to intentionally engage with patients and families to understand what would be meaningful for patients. This could also be expanded to other education materials related to IPC, such as those provided

when a patient is admitted to the hospital. If brochures were available, many sites stated that they were not used. To ensure that educational materials are useful and appropriate, it would be important to ask patients and families what would be beneficial to them.

Opportunities and Areas of Excellence: Infection Prevention and Control

The Accreditation Canada survey team identified key opportunities and areas of excellence across the urban sites for Infection Prevention and Control:

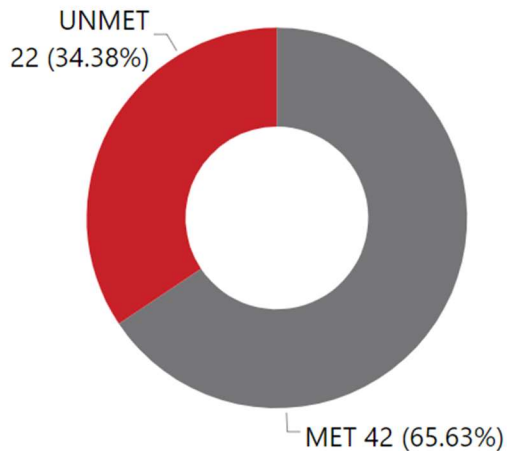
KEY OPPORTUNITIES

1. The organization is encouraged to enhance IPC program evaluation.
2. The organization is encouraged to implement consistent client and family education related to IPC practices.
3. The organization is encouraged to engage patients and families in the development of the educational materials relating to infection prevention and control.

AREAS OF EXCELLENCE

1. There are skilled and engaged IPC personnel supporting every site.
2. Reporting on hand hygiene information is evident throughout the organization.
3. There is evidence of solid integration and collaboration between internal and external partners.

Medication Management



Priority Process Description:

Using interdisciplinary teams to manage the provision of medication to clients.

UNMET CRITERIA	CRITERIA
4.1	Team members receive initial and ongoing training based on their roles and responsibilities for medication management within their scope of practice.
7.1	The type of alerts used by the computerized prescriber order entry (CPOE) include at a minimum: alerts for medication interactions, drug allergies, and minimum and maximum doses for high-alert medications.
7.2	A policy on when and how to override computerized prescriber order entry (CPOE) alerts is developed and implemented.
8.4	The pharmacy computer system is regularly tested to make sure the alerts are working.
8.5	Alert fatigue is managed by regularly evaluating the type of alerts required by the pharmacy computer system based on best practice information and with input from teams.
12.1	Access to medication storage areas is limited to authorized team members.
12.2	Medication storage areas are regularly cleaned and organized.
12.3	Conditions appropriate to protect medication stability are maintained in medication storage areas.
12.6	Look-alike, sound-alike medications; different concentrations of the same medication; and high-alert medications are stored separately, both in the pharmacy and client service areas.

12.10	Medication storage areas are regularly inspected, and improvements are made if needed.
13.1	Raw materials used for compounding are regularly assessed to determine if they should be eliminated because they are not regularly used or are considered dangerous.
13.3	Chemotherapy medications are stored in a separate negative pressure room with adequate ventilation and are segregated from other supplies.
13.4	Anesthetic gases and volatile liquid anesthetic agents are stored in an area with adequate ventilation, as per the manufacturer's instructions.
15.1	The pharmacist reviews all prescription and medication orders within the organization prior to administration of the first dose.
16.3	There is a separate negative pressure area with a 100 percent externally vented biohazard hood for preparing chemotherapy medications.
16.4	Sterile products and intravenous admixtures are prepared in a separate area with a certified laminar air flow hood.
17.5	Problems with labelling, packaging, or nomenclature for medications received from procurement are reported.
18.3	Emergency, urgent, and routine medications are dispensed within the timelines set by the organization.
18.4	When automated dispensing cabinets are used, there are policies and procedures in place that address access, location, type of medication information available, and verification and restocking of medications.
18.5	Automated dispensing cabinets are equipped with a profiling system.
19.2	A pharmacist or other qualified team member verifies, as soon as possible, that the correct medications were dispensed after hours.
22.1	There are criteria for determining which medications can be self-administered by clients.

Alberta Health Services has made significant investments in the Antimicrobial Stewardship Program (ASP) with dedicated Infectious Disease physicians and pharmacists who support the development of provincial programs and strategies. In addition, there are resources available at the Edmonton and Calgary Zones for auditing and feedback of antimicrobials, IV to PO stepdown of therapy and *S. aureus* bacteremia monitoring. There is opportunity to expand the program across the province and develop a comprehensive evaluation of the program.

At the local level, there is enhanced awareness of the high alert medications, narcotics, and heparin use within the pharmacy and on the nursing units. Many of the urban hospital sites have implemented Automated Dispensing Cabinets which provide the ability to improve the security of narcotics, and isolate look-alike and sound-alike drugs. As well, there are hospitals with very old, cramped medication rooms which cannot be locked, or where medications are being stored unlocked in the hallway. It was noted that food was being stored in the medication fridge, and these fridges were not being monitored for temperature excursions.

There are significant infrastructure challenges related to the requirement to meet the National Association of Pharmacy Regulatory Authorities (NAPRA) sterile compounding standards for hazardous and non-hazardous materials in some of the hospitals.

The clinical pharmacists are a valued member of the inter-professional team, and the majority have achieved prescribing status with the Alberta College of Pharmacy. There are Clinical Practice Leaders in the urban hospitals to support the development of professional development goals. This is not always the case in the rural hospitals where the pharmacist may not have access to the same level of support.

Currently, there are a variety of pharmacy computer systems and medication practices across the province. AHS is in the process of implementing the Connect Care CPOE system in nine waves. This project will standardize patient care processes, practices and activities, within the new integrated computer system.

Opportunities and Areas of Excellence: Medication Management

The Accreditation Canada survey team identified key opportunities and areas of excellence across the urban sites for Medication Management.

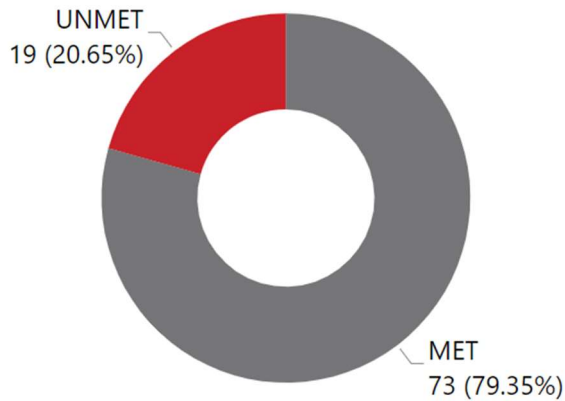
KEY OPPORTUNITIES

1. The organization is encouraged to continue to address outstanding minor gaps from the NAPRA standards.
2. The organization is encouraged to implement antimicrobial stewardship audits and evaluation.
3. Infrastructure challenges are evident at some sites.

AREAS OF EXCELLENCE

1. There is evidence of a very engaged, highly competent, and motivated staff complement.
2. The clinical pharmacists are integral members of the interprofessional teams.
3. Provincial Formulary is in place. There are sound processes in place to consider non-formulary requests.

Reprocessing of Reusable Medical Devices



Priority Process Description:

Obtaining and maintaining machinery and technologies used to diagnose and treat health problems.

UNMET CRITERIA	CRITERIA
3.1	The layout of the Medical Device Reprocessing (MDR) department is designed based on service volumes, range of reprocessing services, and one way flow of medical devices
3.2	The Medical Device Reprocessing department (MDRD) is designed to prevent cross-contamination of medical devices, isolate incompatible activities, and clearly separate work areas.
3.3	Access to the MDRD is controlled by restricting access to authorized team members only and being identified with clear signage.
3.4	The MDRD has an area for decontamination that is physically separate from other reprocessing areas and the rest of the facility.
3.6	The MDRD has floors, walls, ceilings, fixtures, pipes, and work surfaces that are easy to clean, non-absorbent, and will not shed particles or fibres.
3.7	The MDRD is clean and well-maintained.
5.3	Qualifications, requirements, and competencies are verified, documented, and up-to-date.
5.11	Team member performance is regularly evaluated and documented in an objective, interactive, and constructive way.

- 5.12 Team members are supported by team leaders to follow up on issues and opportunities for growth identified through performance evaluations.
- 7.4 Immediate-use steam sterilization (IUSS) is limited to emergencies only, and never for complete sets or implantable devices in line with the organization's policy and national or regional regulations.
- 8.1 The reprocessing area is equipped with hand hygiene facilities at entrances to and exits from the reprocessing areas, including personnel support areas.
- 8.2 The reprocessing area's designated hand-washing sinks are equipped with faucets supplied with foot-, wrist-, or knee-operated handles, electric eye controls, automated soap dispenser and single-use towels.
- 11.1 Training is provided and documented for reprocessing flexible endoscopic devices.
- 11.3 All flexible endoscopic reprocessing areas are equipped with separate clean and contaminated/dirty work areas as well as storage, dedicated plumbing and drains, and proper air ventilation.
- 11.6 Before beginning high level disinfection, each flexible endoscopic accessory is cleaned, rinsed, and dried according to the manufacturers' instructions for use.
- 11.8 Flexible endoscopic devices are appropriately stored following manufacturers' instructions in a manner that minimizes contamination and damage.
- 11.11 Preventive and scheduled maintenance, including repairs, is completed and documented for each automated endoscope reprocessor.
- 12.1 The Medical Device Reprocessing (MDR) department has an appropriate storage area for sterilized medical devices and equipment.
- 12.2 Access to the sterile storage area is limited to authorized team members.

AHS has robust and documented processes with updated Standard Operating Procedures (SOP's) and policies and procedures that are accessible both electronically and in paper format. Staff are provided with a detailed orientation upon hire, and most competencies are completed on an annual basis. AHS is to be commended for supporting all staff to become Certified Technicians and allowing for the maintenance of this certification through ongoing education, attendance at conferences, and providing paid time to complete required education. All staff are trained on new and/or loaned equipment prior to use. Training is documented by the Educators. All roles and responsibilities are identified, and at most sites, staff rotate through each area.

At each site, there were strong cohesive leaders who supported their teams. Communication between front line staff and leadership is strong, and staff are kept up-to-date on new processes and equipment that are brought into the organization.

Ergonomic improvements have been made at most of the sites, including appropriate sinks and counters that can raise or lower to meet staff needs. This initiative should be scaled across all sites, for example, the older and smaller sites.

Although there is aging equipment at some sites, a Preventive Maintenance Program (PMP) is in place. The organization has a PMP completed annually by both the facility trained staff, and contracted manufacturers. However, it is noted that the two reports are not fully integrated, which creates some challenges.

An Instrument Management system has been initiated at some of the larger sites, with a plan to scale as a provincial initiative throughout the smaller sites and into the decontamination area. The Instrument Management system can capture electronic workload statistics, which can be used for quality improvement. This information should be shared with teams to inform practice and process improvement.

Across the organization, recall policy and processes are in place. All staff are informed and aware of the steps required if a recall occurs.

Overall, flash sterilization is not routinely used, and when it is used, it is done in emergency situations across the organization. However, it was noted that one site used flash sterilization for implantable devices and full tray sets. MDR staff are testing daily for quality assurance and they have a good process in place. However, another option would be to implement in the MDR sterilizers “one step” container for one-of-a-kind instrument sets to reduce the daily testing requirements.

The physical infrastructure presents some challenges, and several reprocessing areas do not have separation of clean and dirty areas. At some larger sites, the endoscope suites are in a satellite clinic and experience the same challenges with respect to physical space. Staff working in these areas should have endoscope training from manufacturers and a train-the-trainer model would be beneficial. At some sites, endoscopy staff who are responsible for reprocessing endoscopes may collaborate with the MDR department for appropriate reprocessing procedures, however the endoscopy is managed under ambulatory care. In these situations, standards and best practices may not be identified as a priority. As such, the organization is encouraged, where possible, to centralize MDR departments with trained accountable leaders to ensure consistent education and application of best practices and standards.

Opportunities and Areas of Excellence: Reprocessing of Reusable Medical Devices

The Accreditation Canada survey team identified key opportunities and areas of excellence across the urban sites for Reprocessing of Reusable Medical Devices.

KEY OPPORTUNITIES

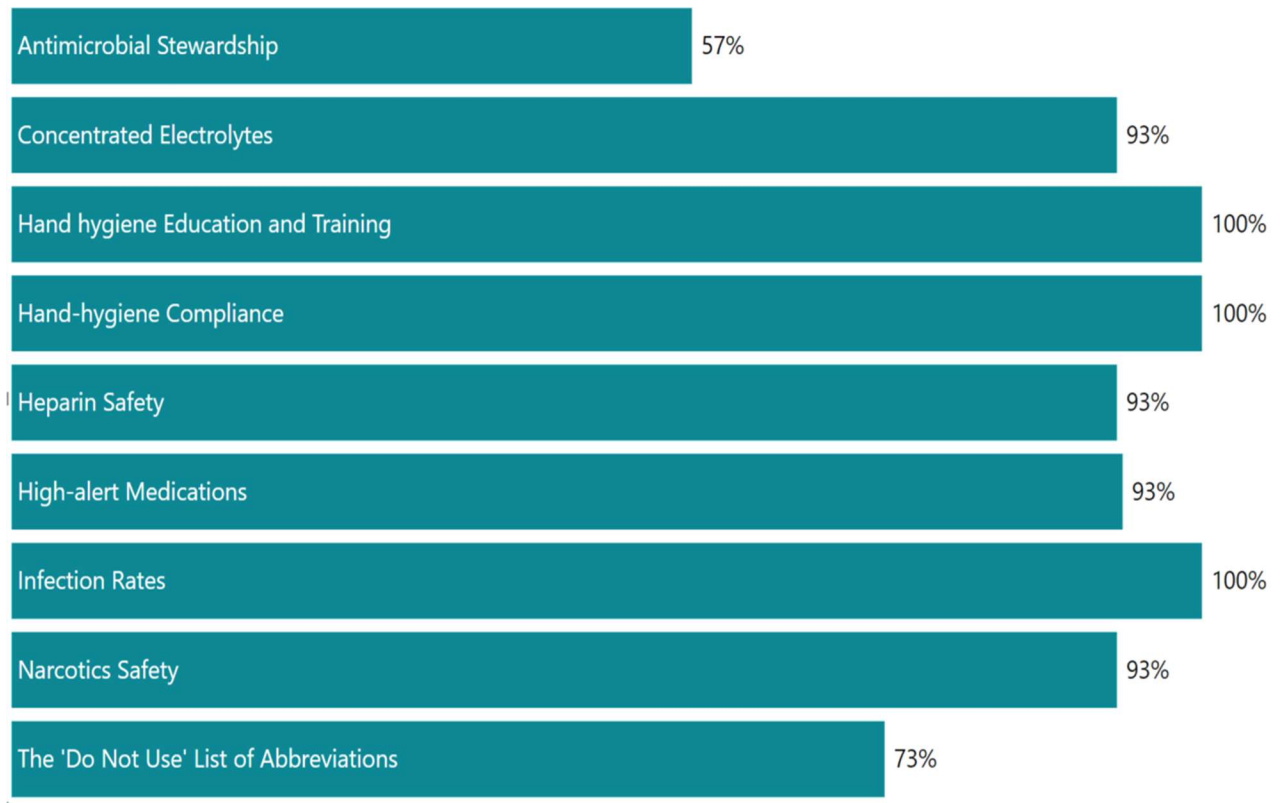
1. Challenges regarding the physical environment at some MDR departments is evident.
2. The organization is encouraged to implement regular Performance Appraisals.
3. The organization is encouraged to assess and improve endoscopic reprocessing area work flows at some sites.

AREAS OF EXCELLENCE

1. There is evidence of strong leadership teams who are focused on quality of services provided.
2. There is evidence of a comprehensive education programming.
3. All MDRD staff are Certified Technicians, and support is provided to maintain this credentialing.

4. Detailed Results: Required Organizational Practices

Compliance with ROP at Sites: % of Sites where ROP is Met



Compliance with ROPs Test for Compliance

PATIENT SAFETY AREA	ROP	TESTS FOR COMPLIANCE
Communication	The “Do Not Use” Abbreviations	1 of 7 Tests for Compliance Unmet
Medication Use	Antimicrobial Stewardship	5 of 5 Tests for Compliance Unmet
	Concentrated Electrolytes	1 of 3 Tests for Compliance Unmet
	Heparin Safety	1 of 4 Tests for Compliance Unmet
	High Alert Medications	1 of 8 Tests for Compliance Unmet
	Narcotics Safety	1 of 3 Tests for Compliance Unmet
Infection Control	Hand Hygiene Compliance	3 of 3 Tests for Compliance Met
	Hand Hygiene Education Training	1 of 1 Tests for Compliance Met
	Infection Rates	3 of 3 Test for Compliance Met

5. Criteria Identified for Follow-up by the Accreditation Decision Committee

STANDARD	CRITERIA TYPE	CRITERIA # & TEXT	LOCATION	DUE DATE
Medication Management	High	7.1 The type of alerts used by the computerized prescriber order entry (CPOE) include at a minimum: alerts for medication interactions, drug allergies, and minimum and maximum doses for high-alert medications.	<ul style="list-style-type: none"> • Alberta Children's Hospital • Central Production Pharmacy • Foothills Medical Centre • Peter Lougheed Centre • Rockyview General Hospital • South Health Campus 	January 30, 2020
Medication Management	High	12.1 Access to medication storage areas is limited to authorized team members.	<ul style="list-style-type: none"> • Chinook Regional Hospital • Royal Alexandra Hospital • University of Alberta Hospital • Wetaskiwin Hospital and Care Centre 	January 30, 2020
Medication Management	High	12.6 Look-alike, sound-alike medications; different concentrations of the same medication; and high-alert medications are stored separately, both in the pharmacy and client service areas.	<ul style="list-style-type: none"> • Chinook Regional Hospital • Queen Elizabeth II Hospital • Sturgeon Community Hospital 	January 30, 2020
Medication Management	High	13.4 Anesthetic gases and volatile liquid anesthetic agents are stored in an area with adequate ventilation, as per the manufacturer's instructions.	<ul style="list-style-type: none"> • Medicine Hat Regional Hospital • Northern Lights Regional Health Centre • Sturgeon Community Hospital 	January 30, 2020
Medication Management	High	16.4 Sterile products and intravenous admixtures are prepared in a separate area with a certified laminar air flow hood.	<ul style="list-style-type: none"> • Northern Lights Regional Health Centre • Royal Alexandra Hospital 	January 30, 2020

STANDARD	CRITERIA TYPE	CRITERIA # & TEXT	LOCATION	DUE DATE
Reprocessing of Reusable Medical Devices	High	3.2 The Medical Device Reprocessing (MDR) department is designed to prevent cross-contamination of medical devices, isolate incompatible activities, and clearly separate work areas.	<ul style="list-style-type: none"> • Foothills Medical Centre • Rockyview General Hospital • Royal Alexandra Hospital • South Health Campus 	January 30, 2020
Reprocessing of Reusable Medical Devices	High	3.4 The Medical Device Reprocessing (MDR) department has an area for decontamination that is physically separate from other reprocessing areas and the rest of the facility.	<ul style="list-style-type: none"> • Royal Alexandra Hospital • Sturgeon Community Hospital 	January 30, 2020
Reprocessing of Reusable Medical Devices	High	3.6 The Medical Device Reprocessing (MDR) department has floors, walls, ceilings, fixtures, pipes, and work surfaces that are easy to clean, non-absorbent, and will not shed particles or fibres.	<ul style="list-style-type: none"> • Peter Lougheed Centre • Rockyview General Hospital • Sturgeon Community Hospital 	January 30, 2020
Reprocessing of Reusable Medical Devices	High	3.7 The Medical Device Reprocessing (MDR) department is clean and well-maintained.	<ul style="list-style-type: none"> • Peter Lougheed Centre 	January 30, 2020
Reprocessing of Reusable Medical Devices	High	7.4 Immediate-use steam sterilization (IUSS) is limited to emergencies only, and never for complete sets or implantable devices in line with the organization's policy and national or regional regulations.	<ul style="list-style-type: none"> • Chinook Regional Hospital 	January 30, 2020
Reprocessing of Reusable Medical Devices	High	11.1 Training is provided and documented for reprocessing flexible endoscopic devices.	<ul style="list-style-type: none"> • Foothills Medical Centre • Northern Lights Regional Health Centre 	January 30, 2020

STANDARD	CRITERIA TYPE	CRITERIA # & TEXT	LOCATION	DUE DATE
Reprocessing of Reusable Medical Devices	High	11.6 Before beginning high level disinfection, each flexible endoscopic accessory is cleaned, rinsed, and dried according to the manufacturers' instructions for use.	<ul style="list-style-type: none"> • Foothills Medical Centre • Rockyview General Hospital • South Health Campus 	January 30, 2020
Reprocessing of Reusable Medical Devices	High	11.8 Flexible endoscopic devices are appropriately stored following manufacturers' instructions in a manner that minimizes contamination and damage.	<ul style="list-style-type: none"> • Foothills Medical Centre • Rockyview General Hospital • South Health Campus 	January 30, 2020
Reprocessing of Reusable Medical Devices	High	11.11 Preventive and scheduled maintenance, including repairs, is completed and documented for each automated endoscope reprocessor.	<ul style="list-style-type: none"> • Medicine Hat Regional Hospital 	January 30, 2020

6. Required Organizational Practices Identified for Follow-up by the Accreditation Decision Committee

ROP	TEST FOR COMPLIANCE	LOCATION	DUE DATE
Antimicrobial Stewardship	2.3.1 An antimicrobial stewardship program has been implemented.	<ul style="list-style-type: none"> Wetaskiwin Hospital and Care Centre 	January 30, 2020
	2.3.2 The program specifies who is accountable for implementing the program.	<ul style="list-style-type: none"> Wetaskiwin Hospital and Care Centre 	January 30, 2020
	2.3.3 The program is interdisciplinary, involving pharmacists, infectious diseases physicians, infection control specialists, physicians, microbiology staff, nursing staff, hospital administrators, and information system specialists, as available and appropriate.	<ul style="list-style-type: none"> Wetaskiwin Hospital and Care Centre 	January 30, 2020
	2.3.4 The program includes interventions to optimize antimicrobial use, such as audit and feedback, a formulary of targeted antimicrobials and approved indications, education, antimicrobial order forms, guidelines and clinical pathways for antimicrobial utilization, strategies for streamlining or de-escalation of therapy, dose optimization, and parenteral to oral conversion of antimicrobials (where appropriate).	<ul style="list-style-type: none"> Northern Lights Regional Health Centre Wetaskiwin Hospital and Care Centre 	January 30, 2020
	2.3.5 The program is evaluated on an ongoing basis and results are shared with stakeholders in the organization.	<ul style="list-style-type: none"> Chinook Regional Hospital Medicine Hat Regional Hospital Northern Lights Regional Health Centre Peter Lougheed Centre Rockyview General Hospital Wetaskiwin Hospital and Care Centre 	January 30, 2020
High Alert Medication	2.5.6 Client service areas are regularly audited for high-alert medications.	<ul style="list-style-type: none"> Wetaskiwin Hospital and Care Centre 	January 30, 2020
Heparin Safety	9.3.1 An audit of unfractionated and low molecular weight heparin products in client service areas is completed at least annually.	<ul style="list-style-type: none"> Wetaskiwin Hospital and Care Centre 	January 30, 2020

Narcotic Safety	<p>9.4.1 An audit of the following narcotic products in client service areas is completed at least annually</p> <p>Fentanyl: ampoules or vials with total dose greater than 100 mcg per container</p> <p>HYDROMORPHONE: ampoules or vials with total dose greater than 2 mg</p> <p>Morphine: ampoules or vials with total dose greater than 15 mg in adult care areas and 2 mg in paediatric care areas.</p>	<ul style="list-style-type: none"> Wetaskiwin Hospital and Care Centre 	January 30, 2020
Concentrated Electrolytes	<p>12.9.1 An audit of the following concentrated electrolytes in client service areas is completed at least annually:</p> <p>Calcium (all salts): concentrations greater than or equal to 10%</p> <p>Magnesium sulfate: concentrations greater than 20%</p> <p>Potassium (all salts): concentrations greater than or equal to 2 mmol/mL (2 mEq/mL)</p> <p>Sodium acetate and sodium phosphate: concentrations greater than or equal to 4 mmol/mL</p> <p>Sodium chloride: concentrations greater than 0.9%.</p>	<ul style="list-style-type: none"> Wetaskiwin Hospital and Care Centre 	January 30, 2020
The 'Do Not Use' List of Abbreviations	<p>14.7.7 Compliance with the organization's 'Do Not Use List' is audited and process changes are implemented based on identified issues.</p>	<ul style="list-style-type: none"> Peter Lougheed Centre Rockyview General Hospital Sturgeon Community Hospital Wetaskiwin Hospital and Care Centre 	January 30, 2020