Chapter 14
Regina Qu'Appelle Regional Health Authority—Safe and Timely Discharge of Hospital Patients

1.0 Main Points

Safe and timely discharge of patients from hospitals helps ensure patients' well-being and impacts hospitals' ability to manage their beds.

This chapter focuses on Regina Qu'Appelle Regional Health Authority's (Regina Qu'Appelle) processes for safe and timely discharge of patients from its largest hospitals in Regina (Pasqua Hospital and Regina General Hospital).

Effectively discharging patients from hospital requires a multi-disciplinary approach. While a physician ultimately determines when patients are medically ready for discharge, a wider network of staff and services are involved in discharging patients from hospital and arranging for ongoing health care. Coordination of these staff and services is essential to support safe and timely discharge of patients. Coordinated transitions and effective communication may reduce the number of re-admissions into the healthcare system resulting in improved patient outcomes and significant savings.

The timeliness of hospital discharge can impact patient safety. Unneeded prolonged hospitalization can increase the risk of hospital-acquired infections, and can cause a decline in patients' physical and mental abilities given a lack of sufficient activity. Unneeded prolonged hospitalization also impacts the effective management of beds in hospitals.

We report that Regina Qu'Appelle had, other than the following, effective processes for the safe and timely discharge of hospital patients from its two largest hospitals.

To help ensure patients continue to receive appropriate health care, Regina Qu'Appelle needs to prepare comprehensive, multi-disciplinary patient care plans, and provide post-discharge healthcare providers with complete and timely transfer information to maintain continuity of care. Also, to help ensure better bed management in its hospitals, Regina Qu'Appelle needs to develop additional strategies to discharge patients in a timely manner, and enhance systems to monitor performance related to patient discharge.

We encourage other health regions to use the information in this chapter to assess their own processes for safe and timely discharge of patients from their hospitals.

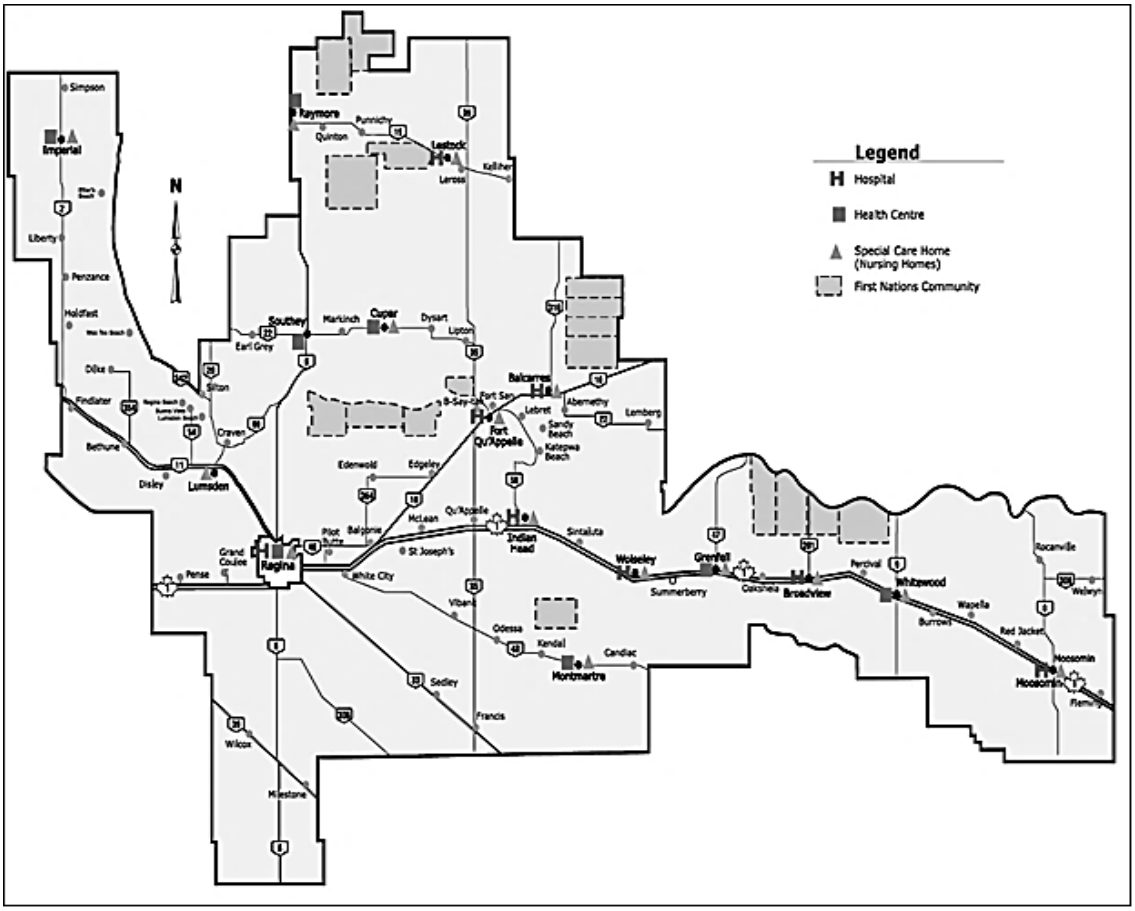
2.0 Introduction

Regional health authorities, under *The Regional Health Services Act,* are responsible for providing healthcare services to the residents of their specified region. Regina Qu'Appelle is one of Saskatchewan's 12 regional health authorities.

Regina Qu'Appelle oversees the provision of healthcare services for an area of southern Saskatchewan serving a population of 280,136.[1] Like other regional health authorities, Regina Qu'Appelle is responsible for planning, organizing, delivering and evaluating health services within its health region. As part of this mandate, Regina Qu'Appelle must establish processes to enable safe and timely discharge of patients from its hospitals.

Regina Qu'Appelle has five acute care[2] hospitals (located in Moosomin, Indian Head, Wolseley, Broadview and Fort Qu'Appelle) and two tertiary care[3] hospitals located in Regina (Pasqua Hospital and Regina General Hospital). The two hospitals in Regina account for the majority of Regina Qu'Appelle's patient discharges. **Figure 1** provides the locations of the various hospitals throughout the region and outlines its boundaries.

Figure 1—Map of Regina Qu'Appelle Regional Health Authority



Source: Regina Qu'Appelle Regional Health Authority *Annual Report 2013-14*.

Demand for Regina Qu'Appelle's acute care services continues to rise. As shown in **Figure 2**, between 2009-10 and 2013-14, the number of annual admissions into acute care facilities (and subsequent discharges) rose by approximately 7.6%. The increasing number of admissions places pressure on Regina Qu'Appelle's acute care facilities. It also increases the need for timely and safe patient discharge to maximize the utilization of a scarce supply of acute care beds.

[1] The Government of Saskatchewan, *Ministry of Health Covered Population 2013*. http://population.health.gov.sk.ca/rha4.htm (28 November 2014).
[2] Acute care is health care where a patient receives active but short-term treatment in a health facility for a severe injury or episode of illness, an urgent medical condition, or during recovery from surgery.
[3] Level of care that consists of complex procedures given in a health facility that has highly-trained specialists and often advanced technology.

Figure 2—Hospital Care Admissions (Discharges) and Average Length of Stay in Regina Qu'Appelle Hospitals

	Fiscal Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
Admissions (and subsequent discharges)	34,003	34,123	34,549	35,281	36,595
Average length of stay (days)	6.4	6.9	7.0	6.7	6.3

Source: Regina Qu'Appelle Health Region, *2010-14 Annual Reports.*

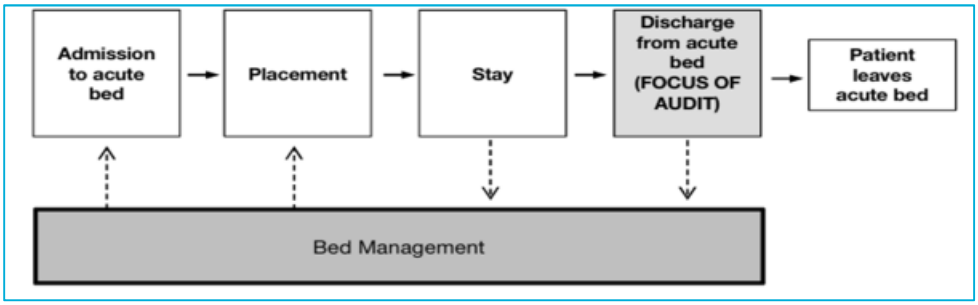
This chapter contains the results of our audit of Regina Qu'Appelle's processes for the safe and timely discharge of hospital patients from its two largest hospitals.

3.0 Background

3.1 Discharging Hospital Patients

Discharge is one of the key components of a patient's journey through a hospital. **Figure 3** provides an overview of patient movement referred to as the bed management chain. For a hospital to effectively manage its beds, acute care facilities must discharge patients in a timely but safe manner to avoid disrupting other areas of the bed management chain.

Figure 3—Overview of the Bed Management Chain

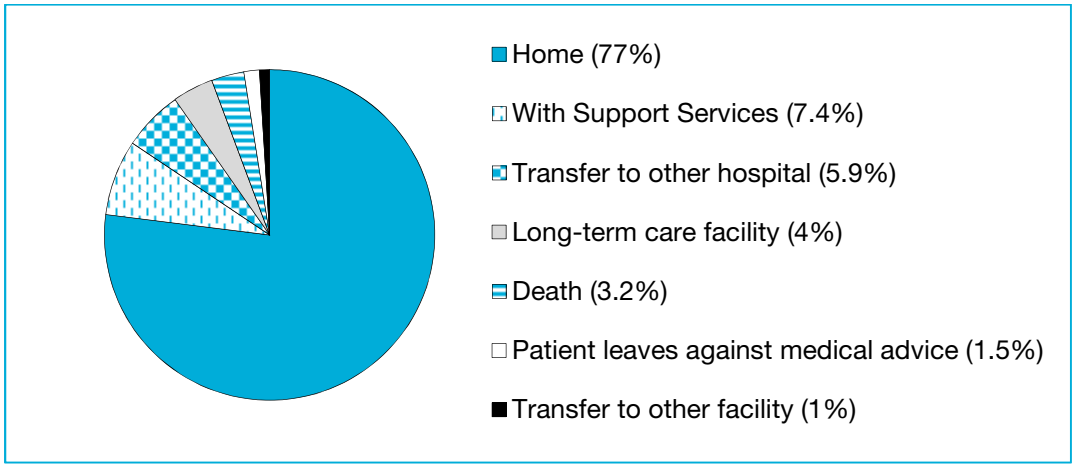


Source: The diagram above was based on information from the Emergency Medicine Journal and modified to reflect the context of the audit. (http://emj.bmj.com/content/20/2/149.full) (17 December 2014).
Note: Dashed lines indicate the flows of information required for effective bed management. While this audit did not examine admission, it recognized that the appropriateness of admissions is critical to patient flow.

Upon completion of treatment for patients' injuries or illnesses, acute care facilities discharge patients to settings appropriate for their ongoing care and needs. They intend to discharge patients promptly when patients are medically fit and arrangements are in place to meet any continuing healthcare needs or social care.

As shown in **Figure 4**, while just over three-quarters of patients go directly home when they no longer require acute care in the hospital, almost one-quarter of them continue to require various levels of support. Regardless of the discharge destination, a coordinated discharge process is required so that patients receive the information and services they require to meet their healthcare needs.

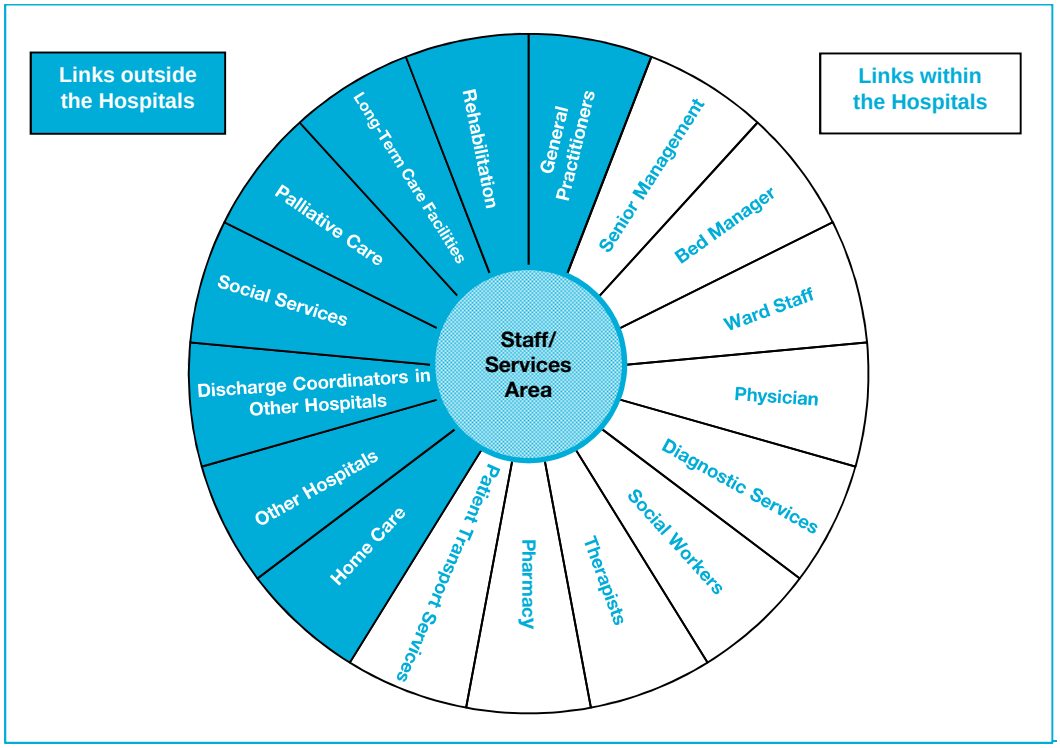
Figure 4—2013-14 Destination of Hospitalized Patients Discharged from Regina General and Pasqua Hospitals



Source: Data provided by Regina Qu'Appelle.

While a physician ultimately determines when patients are medically ready for discharge, as reflected in **Figure 5**, a wider network of staff and services are involved in discharging patients from hospitals and arranging for ongoing health care. For example, social workers, as part of Regina Qu'Appelle's System Wide Admission and Discharge Department, assess clients' care needs, arrange for services such as home care, long-term care, and a wide range of other community services.

Figure 5—Staff/Services Involved in Discharging Patients from Hospitals and Providing Ongoing Care



Source: Developed by Provincial Auditor of Saskatchewan.

The number of staff and services involved in discharging patients makes coordination essential to having an effective discharge process. Acute care facilities (hospitals) must make post-discharge healthcare arrangements in conjunction with the patients and/or families along with support from hospital staff. For example, to maintain continuity of care, staff should prepare information (e.g., discharge summaries, medical reconciliations) to share with patients' healthcare providers outside hospitals.

3.2 Importance of Timely and Safe Discharge of Patients

Timely patient discharge is key to patient flow within a hospital and plays an important role in patient safety.

Discharging patients in a timely manner is critical to bed management so that beds are available when needed. If managed well, timely discharges can significantly improve bed access and patient flow. For example, effective patient discharge can directly impact emergency wait times because new emergency admissions awaiting beds could leave the emergency department sooner. In 2013-14, the average wait time in the emergency room in Saskatchewan for patients requiring admission was 8.9 hours and for patients released after emergency treatment, 2.9 hours.[4]

Starting in 2013, the Government of Saskatchewan embarked on an Emergency Waits and Patient Flow Initiative with the goal of bringing emergency waits to zero, and improving patient experiences as they move through the healthcare system.[5]

Patient discharges that are safe and timely will contribute to meeting this goal. Remaining in hospital longer than medically needed can be detrimental to a patient's health. Prolonged hospitalization can increase the risk of hospital-acquired infections and cause a decline in patients' physical and mental abilities because of a lack of sufficient activity.[6, 7]

As previously noted, effective discharge processes include a coordinated transition to post-discharge care that meets patient needs, and effective communication with post-discharge care providers. Coordinated transitions and effective communication may reduce the number of re-admissions[8] into the healthcare system.

As shown in **Figure 6**, the re-admission of patients into Regina Qu'Appelle's hospitals vary significantly by service-line category from a low of 2.06 per 100 patients in obstetrics to a high of 13.23 per 100 patients in medical in 2013-14.

[4] Canadian Institute for Health Information. *NACRS Emergency Department Visits and Length of Stay by Province/Territory, 2013-14*. www.cihi.ca/web/resource/en/ed_quickstat_10072014_en.xlsx%20 (28 November 2014).
[5] The Government of Saskatchewan, *Emergency Department Waits and Patient Flow Initiative,* www.health.gov.sk.ca/patient-flow (11 December 2014).
[6] Auditor General Ontario. (2010). *Discharge of Hospital Patients.* Toronto: Author.
[7] Victorian Auditor General. (2008). *Managing Acute Patient Flows.* Melbourne: Author.
[8] Regina Qu'Appelle defines re-admissions as any urgent admission to any Regina Qu'Appelle acute facility for any reason within 30 days of the previous discharge episode.

Figure 6—Regina Qu'Appelle Re-Admission Rates for 2012-13 and 2013-14

Service-Line Category	Re-Admission Rate per 100 patients 2012-13	2013-14
Obstetric (i.e., pregnancy, childbirth, and postpartum period)	2.24	2.06
Pediatrics (i.e., 19 years of age and younger)	5.18	5.97
Surgical	4.25	6.06
Medical	14.34	13.23

Source: Data provided by Regina Qu'Appelle.

While a certain number of re-admissions is unavoidable, effectively arranging and providing support for post-discharge care can minimize unplanned re-admissions.[9] Unplanned hospital re-admissions within seven days of discharge may indicate a patient was discharged from hospital prematurely. Unplanned hospital re-admissions within eight to 28 days of discharge may be indicative of a systemic failure – that is, insufficient community resources.[10] Preventing unplanned re-admissions improves the quality of life for patients and the financial well-being of the healthcare system as a whole.

As shown in **Figure 7**, discharges related to medical and surgical-related episodes represent approximately 90% of re-admissions occurring within the Regina General and Pasqua Hospitals. Re-admissions within seven days were approximately 40% of total re-admissions in 2013-14. Re-admissions within eight to 30 days were approximately 60% of re-admissions. Regina Qu'Appelle does not track the costs of unplanned re-admissions.

Figure 7—Regina Qu'Appelle: 2013-14 Days Between Discharge and Re-Admission for the Regina General and Pasqua Hospitals

	# of Days Between Discharge and Re-Admission						
Service-Line Category of Previous Episode	0-3 Days	4-7 Days	8-14 Days	15-21 Days	22-30 Days	Total Re-Admissions	Percentage of Total Re-Admissions
Obstetric	26	17	18	18	14	**93**	**3.8**
Pediatrics	43	29	33	24	19	**148**	**6.1**
Surgical	136	112	124	99	95	**566**	**23.3**
Medical	302	312	396	331	285	**1,626**	**66.8**
Total Re-Admissions	**507**	**470**	**571**	**472**	**413**	**2,433**	
Percentage of Total Re-Admissions	**20.8**	**19.3**	**23.5**	**19.4**	**17.0**		

Source: Data provided by Regina Qu'Appelle.

While discharges occur at the end of patients' treatment in a hospital, discharged patients can remain vulnerable. After discharge, patients often require additional support that the hospitals must communicate and coordinate.

Ineffective processes for patient discharge could result in unnecessary risks to patient safety and significant financial pressures on the healthcare system as a whole due to the

[9]The Canadian Institute for Health Information (CIHI) defines unplanned re-admissions as the unscheduled return of a previously discharged patient to the same hospital for the same or a related condition.
[10] Auditor General Ontario. (2010). *Discharge of Hospital Patients.* Toronto: Author.

costs of preventable re-admissions. Also, this could result in loss of public confidence in our health system.

4.0 Audit Objective, Scope, Criteria, and Conclusion

The objective of this audit was to assess whether Regina Qu'Appelle Regional Health Authority (Regina Qu'Appelle) had effective processes for the safe and timely discharge of hospital patients from its two largest acute care facilities (Regina General and Pasqua Hospitals) for the period of March 1, 2014 to February 28, 2015.

We did not examine the quality of clinical care provided, such as the appropriateness of the clinical decision to discharge a patient from an acute care facility. For this audit, "patient" means an individual who stayed at least one night in an acute care facility; we did not include day surgery or emergency patient discharges.

We examined Regina Qu'Appelle's policies and procedures that relate to patient discharge including relevant sections of its Standards of Nursing Care,[11] Medical Staff Rules and Regulations,[12] Program Access Committee[13] Terms of Reference, and other relevant documents. We also visited both the Pasqua and General Hospitals in Regina to test a sample of patient files, and observe multi-disciplinary rounds[14] occurring on a sample of wards.

To conduct this audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance*. To evaluate Regina Qu'Appelle's processes, we used criteria based on our related work, reviews of literature including reports of other auditors, and consultations with management. Regina Qu'Appelle's management agreed with the criteria (see **Figure 8**).

Figure 8—Audit Criteria

To have effective processes for the safe and timely discharge of hospital patients, Regina Qu'Appelle should:

1. **Plan for patient discharge**
   - 1.1 Establish documented policies and procedures to guide discharge
   - 1.2 Consider types of post-discharge care available
   - 1.3 Determine provisional discharge destination and estimated discharge date
   - 1.4 Identify patients at risk of delayed discharge
   - 1.5 Monitor patients' readiness for discharge
   - 1.6 Prepare patient for discharge
2. **Provide transition to post-discharge care to meet patient needs**
   - 2.1 Coordinate support network for patients released home (e.g., family, social services)
   - 2.2 Facilitate long-term care, home care, and other services (e.g., rehabilitation, palliative care) if required
   - 2.3 Complete and share transfer information (e.g., discharge summary, medical reconciliation) with patient and/or family and healthcare providers

[11] Regina Qu'Appelle Regional Health Authority Standards of Nursing Care, October 2008; RQHR Nursing Professional Practice, February 2011.
[12] Established pursuant to the RQHR Practitioner Bylaws. These rules and regulations govern the practitioner staff in the health region and in a particular department, program, or section.
[13] Program Access Committee reviews requests for access to all community-based long-term care services and programs, including placement in long-term care facilities.
[14] A regular daily occurrence where a variety of medical disciplines meet with the patient at the bedside, to coordinate patient care, determine care priorities and communicate with the patient.

3. **Discharge patients in a timely manner**
   - 3.1 Coordinate access to diagnostic and other specialist/allied services required to discharge to minimize delays
   - 3.2 Optimize timing of patient discharges (e.g., staggering discharges throughout the day)
4. **Monitor performance related to patient discharge**
   - 4.1 Collect key discharge information
   - 4.2 Assess results against discharge performance benchmarks
   - 4.3 Address areas where results fall short of benchmark
   - 4.4 Report key discharge performance indicators to senior management and board

We concluded that for the 12-month period ended February 28, 2015, Regina Qu'Appelle Regional Health Authority had effective processes for the safe and timely discharge of hospital patients from its two largest acute care facilities (Regina General and Pasqua Hospital), except it needs to:

- **Require the preparation of comprehensive, multi-disciplinary patient care plans**
- **Provide post-discharge healthcare providers with complete and timely transfer information to maintain continuity of care**
- **Develop additional strategies to discharge patients in a timely manner**
- **Enhance systems to monitor performance related to patient discharge**

5.0 Key Findings and Recommendations

In this section, we set out the criteria (*expectations*) and our key findings along with related recommendations.

5.1 Planning for Patient Discharge Needs Improvement

5.1.1 Policies and Procedures in Place to Guide Discharge

We expected Regina Qu'Appelle to establish up-to-date policies and procedures to guide patient discharge.

Regina Qu'Appelle has established guidance for staff to follow when discharging patients. For example, it developed and documented processes related to patient discharge as part of its Standards of Nursing Care. It uses various tools and templates (e.g., Nursing Information System Saskatchewan documentation system, clinical pathways[15] for certain surgeries). We found Regina Qu'Appelle's Medical Staff Rules and Regulations include standards related to discharge summaries.

Regina Qu'Appelle requires a formal review of the Standards of Nursing Care every three years. At February 2015, the manual was last reviewed in early 2011. Management indicated that the Nursing Professional Practice Council is in the process of updating the

[15] Clinical pathways use current best evidence gained from systemic reviews, as well as input from multidisciplinary teams, to outline the optimal course of care for all patients who have a specific condition or who are undergoing a specific procedure.

Standards of Nursing Care with input from a variety of healthcare providers, with an anticipated completion date of June 2015.

5.1.2 Various Options for Post-Discharge Care Considered

We expected multidisciplinary teams[16] to consider various types of post-discharge options available to best suit patient needs.

We found that multi-disciplinary teams consider a variety of post-discharge care options (e.g., home care, long-term care) to best suit the needs of the patient. The multi-disciplinary teams make decisions based on the judgment of the team using standard assessment tools to help them decide what discharge destination is best for the patient.

In situations where long-term care may be needed, Regina Qu'Appelle utilizes a Program Access Committee. As described in **Section 5.2.2**, we found that the Program Access Committee met to consider different types of post-discharge care available for patients in accordance with its terms of reference.

5.1.3 Information Needed to Determine Estimated Date of Discharge Not Always Readily Available

We expected:

- *Provisional discharge destination and estimated discharge date to be determined for each patient.*
- *Discharge planning to occur immediately when a patient is admitted into hospital unexpectedly.*
- *In the case of elective admission (i.e., planned surgeries), pre-admission discharge planning to occur (e.g., screening tools, risk assessments, care pathways).*
- *Individual care plans to be regularly reviewed and updated by patients' multi-disciplinary teams. Estimated discharge dates to be discussed and revised during daily multi-disciplinary rounds.*

Use of "D-System"

Regina Qu'Appelle uses a "D-System" methodology to facilitate patient discharge. The D-System uses standard processes to develop an individualized plan of health care. Under the D-System, each patient is given a target discharge date on admission which is reviewed daily to reflect the patient's healthcare needs. Use of this system helps multi-disciplinary teams address barriers to timely patient discharge, and provides information for the electronic bed management system to notify when a bed is expected to be available.

[16] A multidisciplinary team is composed of members from different healthcare professions (e.g., nurses, physicians, dietitians, social workers, physiotherapists, occupational therapists, speech language pathologists, pharmacists) with specialised skills and expertise. The composition of the team will be dependent on the nature of a patient's condition. The members collaborate together to make treatment recommendations that facilitate quality patient care.

We observed that targeted dates of discharge were established and regularly discussed with patients. We also noted that nursing staff updated targeted dates of discharge on a daily basis into the region's clinical review information technology system called Sunrise Clinical Manager[17] during multi-disciplinary rounds.

Elective Admissions—Pre-Admission Planning

Clinical pathways set out a roadmap for a patient's stay in hospital which includes identifying an expected discharge date. Clinical pathways also address several components of care including tests, referrals, activities, medications, teaching and discharge planning, and desired outcomes.

For the patient files we examined, we found clinical pathways (i.e., cardiac and orthopedic pathways) were used for patients admitted for surgery. These clinical pathways included a pre-admission component which took place in the days leading up to the surgery.

Unplanned Admissions—Assessment at Time of Admission

Regina Qu'Appelle's Standards of Nursing Care requires that an admission assessment be completed within 24 hours of admission and placed on the patient chart as a permanent record. Information gathered from these assessments is useful to identify potential barriers to timely discharge, and develop subsequent plans to address them.

We found admission assessments were not always completed within 24 hours from when a patient was first admitted to the hospital. About 5% of the files that we examined did not meet this timeframe. While assessments were completed within 48 hours of admission (instead of 24 hours), a departure from established policy could have a significant negative impact on patient care and discharge planning.

1. **We recommend Regina Qu'Appelle Regional Health Authority follow its policy to complete admission assessments of patients within 24 hours of admission.**

Preparing Individual Care Plans

We found individual patient's nursing plans were developed and regularly updated for the patient files we examined. However, the nursing plans contained limited information from other disciplines (e.g., dietitian, pharmacist, physiotherapist). Instead, information from other disciplines outside of nursing was included in the form of notes recorded as part of the patient's file.

We noted a daily multi-disciplinary team meeting took place involving multiple disciplines; not all participants always attended the meetings.

While there was evidence that members of the multi-disciplinary team were consulted on various matters related to patient care, a documented comprehensive multi-

[17] According to Regina Qu'Appelle's website, Sunrise Clinical Management (SCM) system is a clinical review system that enables communication between authorized care providers. With SCM, all authorized care providers within the circle of care for a patient (e.g., the most responsible physician, admitting physician, consulting physician, nurse unit manager, ward nurse) can share information.

disciplinary plan did not exist. Management indicated that currently each discipline prepares its own plan separately. We noted that a multi-disciplinary plan template was developed but was not yet in use at February 2015.

Documented multi-disciplinary care plans would provide each member of the team with complete information related to the patient's health care in the hospital resulting in better patient care. Not preparing a comprehensive multi-disciplinary plan may result in an uncoordinated approach to patient care.

2. We recommend Regina Qu'Appelle Regional Health Authority require healthcare professionals involved in patient care to prepare a comprehensive, multi-disciplinary patient care plan.

5.1.4 Patients at Risk of Delayed Discharge Identified and Actively Addressed

We expected:

- *Patients to be screened for risk factors using standardized criteria to identify potential barriers that may delay discharge (e.g., cognitive ability, level of confusion, risk of falls, social supports) as part of the development of an individual care plan.*
- *Individual care plans to document potential barriers identified and interventions applied.*

For the patient files we examined, we found patients were screened for risk factors that may delay discharge as part of their admission assessment. We found the assessment used standardized criteria to gather information on various components of care (e.g., personal hygiene, mobility, psychosocial) which helped identify potential barriers that may delay discharge. We also saw evidence that identified barriers were built into individual patient care plans, and any intervention strategies developed to address those barriers were documented.

5.1.5 Ability to Effectively Monitor Patient's Readiness for Discharge Needs Improvement

We expected multi-disciplinary teams to conduct meetings regarding patients including discussions related to medical readiness for discharge and estimated discharge date. Key decisions makers (e.g., most responsible physician)[18] would be involved in the team meetings.

Multi-disciplinary teams meet daily from Monday to Friday on the majority of units within each hospital. These meetings take place in one of two formats; either through a conference meeting where team members gather to discuss all patients on a particular unit, or through rounds at the bedside with the patient and team present. Management indicated Regina Qu'Appelle is expanding the use of bedside rounds as this provides an

[18] According to Regina Qu'Appelle's Most Responsible Physician Policy, the "most responsible physician" is defined as the physician who initiates the admission of the patient to the hospital and/or who coordinates the care of the patient. The most responsible physician is charged with completing the discharge summary at the time of discharge.

opportunity for patients to ask questions, and aids in the understanding of the patient's care plan including goals for discharge (e.g., stable vital signs, pain under control).

We observed a multi-disciplinary team conference meeting at one hospital as well as a bedside round at the other hospital. While the format of the meetings differed, we noted that discussions took place regarding patients' clinical readiness for discharge and the estimated discharge date. The meetings we attended included a wide variety of care providers (e.g., hospitalists,[19] nurses, social workers, dietitians). We observed that a hospitalist attended a portion of the meeting at one hospital to provide clinical information related to patients under their care.

Management stated that nurses routinely relayed clinical information from physicians to the multi-disciplinary team, but also noted that care planning is more effective when the physicians are able to attend the meetings. Management indicated that Regina Qu'Appelle recognizes the challenges in getting physicians (other than hospitalists and psychiatrists) to attend multi-disciplinary team meetings and acknowledges that increased physician involvement is necessary to improve patient care and discharge planning.

Readily available clinical information helps improve the estimate of the date of discharge. Management indicated that while the multi-disciplinary team provides its best estimate of discharge dates, these dates are often subsequently changed by physicians with little communication to the rest of the team, resulting in unexpected discharges or discharge delays.

As a result, patients may receive inconsistent messages regarding their estimated discharge date and the barriers that need to be addressed prior to being discharged. This may cause problems in establishing arrangements for post-discharge care and potentially impact the patient's well-being. It may also impact bed management as the bed may not be available as planned.

3. We recommend Regina Qu'Appelle Regional Health Authority implement a strategy to facilitate communication with physicians to better coordinate patient discharge timeframes.

5.1.6 Patients Not Always Adequately Prepared for Discharge

We expected:

- *Discharge care plans (i.e., patient instructions) to be provided to patients and/or their families at the time of discharge, and include information (e.g., follow-up appointments, referrals, teaching materials) to prepare patients for discharge.*
- *Visual aids (e.g., whiteboards) to be used to communicate estimated discharge date and goals) that the patient must achieve before discharge.*

[19] According to the Regina Qu'Appelle website, a hospitalist is "a physician [employed by Regina Qu'Appelle] who specializes in caring for patients while they are in the hospital. While on duty, hospitalists do not see patients outside the hospital, therefore, they can give their complete attention to their hospital patients."

Regina Qu'Appelle's Standards of Nursing Care requires that each patient receive patient instructions including appropriate follow-up care with healthcare providers, medication lists, as well as referral and other pertinent instructions (i.e., information regarding sources/supply options). The standards indicate that patients can expect to have needed equipment and supplies identified/requisitioned, teaching materials provided, patient instructions explained, and family members/other caregivers contacted for transportation or interagency transfer prior to discharge.

For the patient files we examined, we found patient instructions were developed for all patients. However, the patient instructions did not always provide all the information needed to adequately prepare patients for discharge.

For example, we found:

- 5% of the patient instructions we examined did not contain a full assessment of the components of care (e.g., personal hygiene, mobility, psychosocial)
- One set of patient instructions we examined did not contain information on post-discharge medications
- 7.5% of the patient instructions we examined did not have evidence that the plan was shared and discussed with the patient
- 20% of the patient instructions we examined included no evidence of the transportation arrangements being made to get the patient home safely

Not preparing comprehensive documentation of the patient instructions increases the risk that patients may not be provided with all of the information needed to prepare them for discharge. For example, a lack of information on medications that a patient must take post-discharge increases the risk that patients may suffer a medication-related incident that could have serious negative health implications or cause unplanned re-admission.

4. We recommend Regina Qu'Appelle Regional Health Authority follow its policy to document patient instructions and discuss those instructions with patients before discharge.

Regina Qu'Appelle has provided whiteboards in patients' rooms for multi-disciplinary teams to use as a communication tool to help patients understand their estimated discharge date and discharge goals. However, we observed that the whiteboards were often left blank.

Whiteboards are an important communication tool for patients. Failure to provide relevant information on whiteboards can result in a missed opportunity to supply critical information to patients to help them meet their discharge goals. Providing this information will help patients understand the barriers they need to address prior to discharge and support a safe and timely discharge.

5. **We recommend Regina Qu'Appelle Regional Health Authority consistently use aids (e.g., whiteboards at the bedside) to provide patients with critical information about the estimated discharge date and goals.**

5.2 Lack of Transfer Information Putting Patient Safety at Risk

5.2.1 Support Network Coordinated for Patients Released Home (e.g., Family, Social Services)

For patients' discharged home, we expected:

- *Planning to include involvement of the multi-disciplinary team to identify potential barriers to discharge and develop interventions to address those barriers.*
- *Roles and responsibilities to be clearly set out.*
- *Patients to have access to necessary supports including active social work involvement in cases where a patient requires additional support upon arriving home.*

Regina Qu'Appelle has a process that staff use to manage and mitigate potential discharge barriers. The process sets out various steps to address the barriers that arise. A multi-disciplinary team member is to take responsibility if a barrier pertains to the member's area of responsibility. For example, System Wide Admission and Discharge Department social workers who work both within hospitals as well as in the community are to coordinate supports (e.g., arranging home care and other community services) needed for patients released home.

For the patient files we examined, we noted evidence of multi-disciplinary teams actively intervening (e.g., through consultations, ordering tests, arranging supports) to address barriers identified. We saw evidence these social workers actively managed patients who required coordination for social supports prior to being released home.

5.2.2 Long-Term Care, Home Care, and Other Services Facilitated as Required

We expected:

- *Planning for patients discharged to long-term care, home care, and other services (e.g., rehabilitation, palliative care) to include involvement of the multi-disciplinary team.*
- *Roles and responsibilities for discharge to long-term care facilities, home care, or other services to be clearly set out.*

- *Patient's eligibility for services to be based on greatest need (e.g., standard assessment tools in place). For patients requiring placement for community-based services, patients and caregivers to be involved in making discharge choices.*

- *Referrals to be made to long-term care services to take place in a timely manner.*

Regina Qu'Appelle clearly sets out roles and responsibilities for discharge to long-term care facilities, home care, or other services (e.g., rehabilitation, palliative care). Similar to **Section 5.2.1**, discharge planning to long-term care facilities, home care, and other services includes the involvement of a multi-disciplinary team to identify potential barriers to discharge and develop interventions to address those barriers.

The Program Access Committee (Committee) may offer advice and options for patients with complex needs. The Committee is to review access requests to all community-based long-term care services and programs. This includes prioritization and placement in long-term care facilities or for the provision of long-term care community-based programs such as respite, convalescent, palliative, or transition care and adult day support programs in long-term care facilities.

The Committee's terms of reference requires a number of standard assessment tools to be completed on each individual so services are granted based on greatest need. Based on these assessments, the Committee determines whether a patient is approved for placement in a long-term care facility or access to long-term care community-based programs.

Management indicated it only considers placement of patients into long-term care facilities after exploring all other options for care. When considering the need for placement, the social worker on the multi-disciplinary team completes a comprehensive patient assessment and presents it to the Committee for approval.

For the patient files we examined, we found that the patients requiring placement in a long-term care facility were properly approved prior to being placed in a long-term care facility in accordance with the Committee's terms of reference.

Regina Qu'Appelle's placement protocol provides a mechanism for involving patients in discharge choices related to long-term care while balancing limitations on the number of placements available. It requires that patients who need placement immediately must accept the first bed that is offered in any facility that can meet the client's care needs, with the option of later transferring to a facility of the client's preference. Patients are placed on a chronological transfer list and transferred when their preferred facility becomes available.

5.2.3 Transferring Information to Patient and/or Family and Post-Discharge Healthcare Providers Needs Improvement

Discharge Summaries

We expected:

- *Clear and documented guidance that set out what information discharge summaries must contain.*
- *Discharge summaries prepared to contain the information required by the Medical Staff Rules and Regulations.*
- *Discharge summaries to be completed and forwarded to the patient's family physician and/or other post-discharge healthcare providers in a timely manner.*

The discharge summary is a formal record prepared and signed by the most responsible physician used to transfer information from inpatient to post-discharge healthcare providers. The discharge summary provides a synopsis of a patient's admission to hospital and the clinical care provided, as well as information pertinent for the continuation of health care following discharge.

Regina Qu'Appelle has developed guidance in the form of a discharge summary template. The template outlines expectations for information to include in the discharge summary. It contains sections for physicians to fill out to capture information on diagnosis, interventions, discharge medications, discharge location, date record completed, date of discharge, and signature of physician.

In the patient files we examined, we found several instances where discharge summaries were missing key components. For example, in nearly half of the patient files, we found discharge summaries lacked information on medications that patients were to take post-discharge.

The Medical Staff Rules and Regulations set out expectations related to timeframes for recording and signing discharge summaries. According to the Medical Staff Rules and Regulations, "the dictated discharge summary and final diagnosis, written in full standard nomenclature, are to be recorded and signed by the most responsible physicians within seven days of the patient's discharge."

For the discharge summaries in the patient files we examined, we found:

- Nearly half were not recorded and signed in a timely manner (i.e., within seven days). Discharge summaries were frequently dictated months after patient discharge, and in one case, 263 days after the patient's discharge date.
- For almost 13%, there was no evidence that discharge summaries were forwarded to a patient's post-discharge healthcare provider. This issue was common to patients who were hospitalized then transferred back to their home facility (i.e., long-term care, palliative care).

- Where hospitalists prepared discharge summaries, they were completed in a timely manner and contained all information outlined in Regina Qu'Appelle's guidance.

Patient discharge summaries are the most common means of communication between inpatient and post-discharge healthcare providers. If important administrative and medical information is not provided to post-discharge healthcare providers in a timely manner, it increases the risk to patient safety. Following hospital discharge, a significant portion of patients experience errors in medication continuity, diagnostic workup,[20] or test follow-ups.[21, 22]

6. We recommend Regina Qu'Appelle Regional Health Authority ensure physicians complete discharge summary information on a timely basis as required by its rules for medical staff.

Medication Reconciliations

We expected:

- *Clear and documented guidance, tools, and templates to be available to staff to use to perform medication reconciliations at discharge.*
- *Medication reconciliations to be performed for each patient prior to being discharged.*
- *Medication reconciliation information to be shared with necessary parties in a timely manner (e.g., patient, caregivers, post-discharge prescribing physician, community pharmacy).*

A medication reconciliation is a formal process in which healthcare providers work together with patients, families and other healthcare providers to ensure accurate and comprehensive medication information is communicated consistently across transitions of care (e.g., when a patient enters a hospital, transitions to another service or provider, or is discharged home). A medication reconciliation requires a systematic and comprehensive review of all the medications a patient takes to ensure that medications being added, changed or discontinued are carefully evaluated at admission and discharge. It is a component of medication management and informs and enables prescribers to make the most appropriate decisions for the patient.[23] National healthcare organizations such as Accreditation Canada, Canada Institute for Health Information, Canadian Patient Safety Institute, and the Institute for Safe Medication Practices Canada all endorse the use of medication reconciliations.

A high proportion of adverse health incidents are drug related.[24] In Canada, 20% of patients discharged from acute care facilities experience an adverse incident, and of

[20] Diagnostic workup includes the procedures done to arrive at a diagnosis including history taking, laboratory tests, x-rays, etc.
[21] Test results pending that require action.
[22] Journal of Hospital Medicine: *Promoting Effective Transitions of Care at Hospital Discharge: A Review of Key Issues for Hospitalists.*
[23] www.ismp-canada.org/medrec (30 March 2015).
[24] Samoy, L.J., Zed, P.J., Wilbur, K., et al. (2006). *Drug-Related Hospitalizations in a Tertiary Care Internal Medicine Service of a Canadian Hospital: A Prospective Study*. Pharmacotherapy, 26, 1578-86.

those, 66% are drug-related.[25] The total cost of preventable, drug-related hospitalization in Canada is about $2.6 billion per year.[26]

Regina Qu'Appelle does not have a policy requiring medication reconciliations at discharge, nor does it provide hospital staff with guidance (i.e., templates) to assist in performing these reconciliations.

For the patient files we examined, we noted almost all patients received a listing of medications as part of their discharge instructions. We also noted that the two hospitalist patient files we examined contained medication reconciliations at discharge. However, we found that for nearly 87% of the patients where a physician discharged the patient, medication reconciliations were not prepared (i.e., by a nurse or member of the pharmacy team) and signed by the prescribing physician prior to discharge. Not performing a medication reconciliation prior to providing a list of patient medications elevates the risk of adverse medication-related incidents post-discharge.

Medication reconciliations can help to manage the risk that inaccurate medication information is communicated across transitions of care. While statistics are not available for Regina Qu'Appelle, there may be patients who have had adverse drug-related incidents or needed unplanned re-admission that could have been prevented by performing a medication reconciliation at discharge.

7. **We recommend Regina Qu'Appelle Regional Health Authority establish a policy for completing medication reconciliations prior to discharging patients.**

8. **We recommend Regina Qu'Appelle Regional Health Authority require staff to follow the policy for completing medication reconciliations prior to discharging patients.**

5.3 Discharges Not Taking Place in a Timely Manner

5.3.1 Access to Support Services Required to Minimize Delays

We expected each hospital to have a process in place to minimize delays caused by waits for diagnostic (e.g., radiology, x-rays) and other specialist/allied services (e.g., physiotherapy, pharmacy, dietetics).

[25] Forster, A.J., Murff, H.J., Peterson, J.F., Gandhi, T.K., Bates, D.W. (2003). *The Incidence and Severity of Adverse Events Affecting Patients After Discharge from the Hospital*. Ann Intern Med, 4,138(3), 161-7.
[26] Hohl, C.M., Nosyk, B., Kuramoto, L., Zed, P.J., Brubacher, J.R., Abu-Laban, R.B., et al. (2011). *Outcomes of Emergency Department Patients Presenting with Adverse Drug Events*. Ann Emerg Med, 58(3), 270-279.

Management indicated that it uses the "D-System" along with daily bed management meetings[27] to identify and address discharge delays (including those related to diagnostic and allied services).

If an issue is identified during these meetings, Regina Qu'Appelle uses the process described in **Section 5.2.1** to manage the potential discharge barriers. Its process sets out how to resolve potential discharge delays on a patient-by-patient basis. We attended a bed management meeting and observed evidence of these discussions.

While a process is in place to address potential delays on an individual basis, we found Regina Qu'Appelle did not have a systematic process to minimize delays across the hospitals as a whole. For example, as described in **Section 5.4.1**, it does not gather information on the reasons for discharge delays attributed to specific support services or other causes.

Not capturing this information increases the risk that timely action may not be taken to address delays caused by support services.

5.3.2 Timing of Patient Discharges Not Being Optimized

We expected:

- *Strategies to be in place to optimize discharges (e.g., setting targets for percentage of discharges to occur before a specified time of day).*
- *Discharges to occur at a suitable time (e.g., early in the day) to facilitate bed management.*

Management and unit staff indicated time lags often occur between when the multi-disciplinary team recommends a patient be discharged and the time the physician writes the discharge order. As a result, although patients may be clinically fit for discharge, they unnecessarily occupy beds while waiting for a physician to issue the discharge order. We found that over 50% of discharges that occurred between March 1, 2014 and February 28, 2015 took place after 2 p.m.

In early February 2015, Regina Qu'Appelle established a target for 80% of discharges to occur before 2 p.m., with compliance expected by 2019. At February 2015, it had not developed strategies to help it achieve this target. For example, Regina Qu'Appelle could consider expanding the hospitalist program, utilizing pre-authorized discharge orders, or exploring the use of criteria-led discharge.[28]

When inpatients are discharged earlier in the day, patient flow in hospitals improves because new emergency admissions awaiting beds can leave the emergency department sooner and emergency waiting room backlogs are reduced. Discharging patients earlier in the day also has the potential to increase patient satisfaction.[29]

[27] Daily bed management meetings occur at the Regina General and Pasqua hospitals. These meetings are attended by ward staff, other hospital staff, and employees of the region responsible for updating the electronic bed management system.
[28] Criteria-led discharge is a process which enables the most appropriate healthcare professional to discharge the patient (potentially nursing, allied health, or junior medical staff). This is achieved by providing supportive criteria for the discharge process and not relying solely on the admitting physician to make the decision.
[29] www.ncbi.nlm.nih.gov/pubmed/17464227 (5 March 2015).

9. **We recommend Regina Qu'Appelle Regional Health Authority develop strategies to achieve its target to discharge patients early in the day.**

5.4 Monitoring Performance Related to Patient Discharge Needs Improvement

5.4.1 Measures and Targets Needed for Assessing the Performance Related to Patient Discharge

We expected:

- *Key performance information related to patient discharge to be collected.*
- *Results to be compared against performance benchmarks.*
- *Timely action to be taken to address areas related to patient discharge performance that fall short of established benchmarks.*

Performance indicators enable hospitals to monitor the progress of initiatives, track their performance over time, and compare their performance with that of other hospitals and jurisdictions using the same indicators.

Regina Qu'Appelle has developed measures to monitor patient flow within hospitals. For example, it tracks:

- Re-admissions (i.e., the number of re-admissions; but does not analyze the cause of re-admission or capture information on costs of re-admission)
- Avoidable bed days (e.g., number of days patients are in an acute bed waiting for long-term care)
- Number of patients approved for placement but waiting for long-term care

Regina Qu'Appelle also collects information specifically related to discharge such as discharges occurring before 2 p.m. and the number of discharges taking place each day of the week. However, up until February 2015, limited analysis was performed related to the information captured. As noted in **Section 5.3.2**, Regina Qu'Appelle has now set a target of 80% of discharges occurring prior to 2 p.m. with compliance expected by 2019.

Regina Qu'Appelle also started assessing information on a performance measure directly related to discharge. In February 2015, it started to analyze the percentage of patients discharged before 2 p.m.

While Regina Qu'Appelle is collecting information and has established targets for most of the above measures, additional information on performance related to discharge could be collected and analyzed. Additional performance measures could provide valuable information to identify factors inhibiting safe and timely patient discharge. This

can help management take timely action to address areas where improvement is needed.

Examples of additional performance-based measures could include:

- Planned compared to actual discharge date
- Number of delayed discharges by cause of delay
- Post-discharge patient satisfaction surveys including questions on discharge process

Once Regina Qu'Appelle has determined what performance information to collect and analyze, it should set targets and compare to actual results. While some performance information is being collected, more comprehensive analysis of patient discharge would highlight factors inhibiting timely and safe discharge.

10. We recommend Regina Qu'Appelle Regional Health Authority establish performance-based measures and targets for patient discharge.

5.4.2 Key Discharge Performance Indicators Not Reported to Senior Management and the Board

We expected key performance indicators to be regularly reported to senior management and the Board.

It is important that individuals with the authority to facilitate change when needed such as senior management and the Board review the performance measures discussed previously.

Regina Qu'Appelle's senior leadership attend patient flow "wall walks"[30] every two weeks to discuss various performance information related to patient flow. As of February 2015, this includes some discharge-related information. When we attended one of those meetings, we observed discussions regarding discharge including comparing actual data against established performance benchmarks (e.g., the 80% target related to discharge times).

Regina Qu'Appelle provides a strategic measures dashboard to the Board quarterly. This dashboard provides information on whether provincial strategies (i.e., better health, better care, better value, better teams) are being achieved. The report includes baseline information, targets, and performance tracking over time on two measures related to patient flow and bed management strategies (i.e., acute care beds occupied by long-term care patients awaiting placement, and length of time from decision to admit from emergency until patient is in appropriate bed). However, these 2014-15 reports did not include any information on discharge-specific measures.

[30] A patient flow "wall walk" is a short, stand-up meeting which brings an area manager and staff together at the same time each day or week. The manager reviews the team's progress toward achieving regional or unit targets displayed on the area's visibility wall.

Once it has identified factors impacting discharge performance (as noted in **Section 5.4.1**), Regina Qu'Appelle should set targets, take actions, measure progress, and provide updates to senior management and the Board. These updates should describe its progress towards achieving its targets to ensure senior management and the Board have complete information on discharge performance.

11. We recommend Regina Qu'Appelle Regional Health Authority report on performance-based measures and targets for patient discharge to its senior management and Board of Directors.

6.0 Selected References

Accounts Commission for Scotland. (1998). *Managing Hospital Admissions and Discharges.* Edinburgh: Author.

Auditor General Ontario. (2010). *Discharge of Hospital Patients*. Toronto: Author.

Auditor General Queensland. (2009). *Report to Parliament No.5* for 2009*, Management of Patient Flow through Queensland Hospitals*. Brisbane: Author.

National Audit Office, United Kingdom. (2000). *Inpatient Admissions and Bed Management in NHS Acute Hospitals*. London: Author.

Nursing Times. *The Key Principles of Effective Discharge Planning*. www.nursingtimes.net/Journals/2013/01/17/x/l/m/130122-Effective-discharge-planning.pdf (10 December 2014).

Victorian Auditor General. (2008). *Managing Acute Patient Flows*. Melbourne: Author.