Chapter 40
Saskatchewan Health Authority—Triaging Emergency Department Patients in Saskatoon Hospitals

1.0 Main Points

Emergency departments must prioritize (triage) patients quickly and appropriately to provide immediate care to patients experiencing life-threatening medical conditions and timely care to other patients.

By August 2018, the Saskatchewan Health Authority had implemented two of the five remaining recommendations we first made in 2013. These recommendations related to the effectiveness of the former Saskatoon Regional Health Authority's processes to triage patients in its three City of Saskatoon hospital emergency departments.

Monthly, the Authority assesses its triage process to confirm it is appropriately prioritizing patients. It also improved signage in each of its emergency departments so patients can more easily find assessment and waiting areas.

The Authority needed to do further work when it comes to triaging patients in its Saskatoon hospital emergency departments. It needs to:

- Continue to develop alternate care models for consultants (specialist physicians) to meet with non-emergent patients outside of the emergency department to avoid overcrowding in emergency departments
- Document the reassessment of the medical condition of patients in emergency waiting rooms, and implement plans to support physicians seeing patients within required timeframes to reduce the risk of patients sitting in waiting rooms without being seen for a significant length of time and their condition deteriorating

2.0 Introduction

In 2017-18, 12 health regions, including Saskatoon Regional Health Authority, combined to form the Saskatchewan Health Authority. The Authority, under The *Provincial Health Authority Act*, is responsible for planning, organizing, delivering, and evaluating health services within the region. This includes providing emergency healthcare services in hospitals previously overseen by the Saskatoon Regional Health Authority.

The chapter describes our second follow-up of management's actions on five remaining recommendations we first made in 2013 about processes to triage patients in three city hospital emergency departments located in Saskatoon.[1]

These emergency departments handled about 121,500 patients in 2017-18. They employ about 228 full-time equivalent positions.

[1] The original report regarding these recommendations can be found at www.auditor.sk.ca/publications/public-reports. We reported the original audit work in *2013 Report – Volume 2*, Chapter 30, pp. 219-235.

Our *2013 Report – Volume 2*, Chapter 30 concluded that for the year ended August 31, 2013, Saskatoon Regional Health Authority did not have effective processes to triage patients in its three city hospital emergency departments. We made eight recommendations. By March 2016, the Saskatoon Regional Health Authority had implemented two of eight recommendations, and one was considered no longer relevant.[2]

To conduct this audit engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance* (CSAE 3001). To evaluate the Saskatchewan Health Authority's progress towards meeting our recommendations, we used the relevant criteria from the original audit. Saskatoon Regional Health Authority's management agreed with the criteria in the original audit.

To complete the audit, we discussed with management progress they made in meeting our recommendations, reviewed supporting documentation, and visited the three Saskatoon hospital emergency departments to verify progress.

3.0 Status of Recommendations

This section sets out each recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendation, the status of the recommendation at August 31, 2018, and the Authority's actions up to that date.

We found that the Authority had implemented two recommendations and had made progress in implementing the other three.

3.1 Accuracy of Triage Levels Being Assessed

> ***We recommended that Saskatoon Regional Health Authority review the triage process to determine whether emergency department patients are appropriately categorized.*** (2013 Report – Volume 2; Public Accounts Committee agreement January 15, 2015)
>
> **Status** – Implemented

Since spring 2017, the Saskatchewan Health Authority shared with emergency department staff the results of its monthly audits of the reliability of the triage assessments done by staff when a patient comes to an emergency department. These audits determine whether emergency department staff appropriately triaged patients.

Triaging patients requires assessing the severity of a patient's health condition. The assessment of a patient's health condition is then used to prioritize how quickly a healthcare provider should see a patient. An initial triage assessment is the first assessment of a patient's health condition.

The Authority uses Emergency Department CTAS triage scoring guidelines for patients accessing service through Saskatoon's emergency departments.[3] For example, as shown in **Figure 1**, a physician should see a patient assessed as a CTAS Level I (resuscitation)

[2] See our *2016 Report – Volume 1*, Chapter 32, pp. 293-298.
[3] Canadian Triage Acuity Score (CTAS) is a tool that helps emergency departments to prioritize or rank patient care needs based on illness conditions.

immediately, and see a patient assessed as CTAS Level V (non-urgent) within 120 minutes.

Figure 1—CTAS Levels and Time Goals

CTAS Level	Severity of Condition	Goal to be seen or reassessed by healthcare provider
CTAS I	Resuscitation	Immediate
CTAS II	Emergent	15 minutes
CTAS IIII	Urgent	30 minutes
CTAS IV	Less Urgent	60 minutes
CTAS V	Non-Urgent	120 minutes

Source: CTAS Implementation Guidelines.

In 2017-18, the Authority conducted 236 audits of initial triage assessments, in total, at the three Saskatoon emergency departments. These audits found staff at emergency departments performed accurate triage assessments about 70% of the time. Based on our research, a 70% reliability of scoring is not unreasonable given the subjectivity of the CTAS scoring scale.[4]

The audit results are shared monthly with emergency department managers. Managers use the results to educate staff to improve triage accuracy.

3.2 Documented Reassessments of Patients Waiting in Emergency Departments Needed

We recommended that Saskatoon Regional Health Authority staff routinely reassess patients in emergency department waiting rooms to determine that their conditions have not deteriorated. (2013 Report – Volume 2; Public Accounts Committee agreement January 15, 2015)

Status – Partially Implemented

Staff are not documenting the reassessment of patients in emergency department waiting rooms.

Since 2015, all hospitals in Saskatoon have implemented a Triage Captain role in their emergency departments. In June 2016 the Authority developed work standards to clarify the role of Triage Captain and their staff (e.g., greeting patients, assessing their condition, and assigning and reassessing triage level).

We found that staff are not documenting reassessments of patients in emergency waiting rooms to determine that their conditions have not deteriorated. At August 2018, none of the Saskatoon emergency departments could show they routinely assessed patients' conditions when patients did not see a physician within the Authority's specified goal

[4] A study published in the North American Journal of Medical Science (July 2015) found that CTAS scoring guidelines showed acceptable level of overall reliability in the emergency department but need more development to reach almost perfect consistency in assessments. Findings indicated agreement with CTAS assessments 67.2% of the time.

times (see **Figure 1**). Management indicated the Authority was seeking a solution to efficiently document the reassessment of a patient's condition.

Not regularly reassessing patients' medical conditions increases the risk of not identifying deterioration in patients' conditions in a timely manner.

3.3 Working to Make Emergency Services More Timely

We recommended that Saskatoon Regional Health Authority put processes in place to ensure emergency department patients see physicians within established time goals. (2013 Report – Volume 2; Public Accounts Committee agreement January 15, 2015)

Status – Partially Implemented

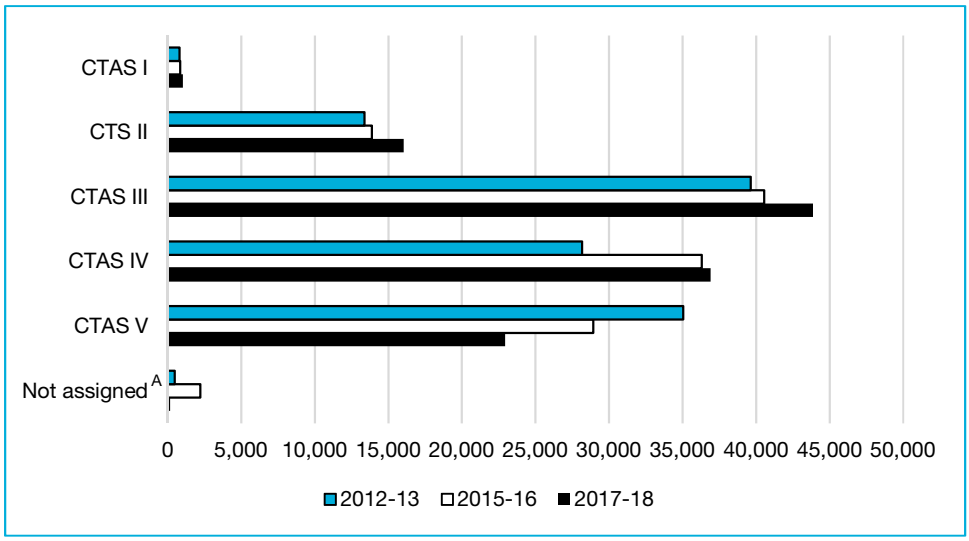
We recommended that Saskatoon Regional Health Authority provide consultant care for less-urgent or non-urgent patients outside of its emergency departments. (2013 Report – Volume 2; Public Accounts Committee agreement January 15, 2015)

Status – Partially Implemented

The Authority has not developed strategies to help ensure physicians see patients within the established time goals. Saskatoon's emergency department physicians are not seeing patients within established time goals.

Saskatoon has experienced almost 3% growth in the number of patients going to the city's three emergency departments since our audit in 2013 (see **Figure 2**). As **Figure 2** shows, consistent with our past audits, the majority of these patients are prioritized as CTAS Level III (with urgent medical needs).

Figure 2—Number of Patients Presenting at the Three Saskatoon Emergency Departments by CTAS Level in 2012-13, 2015-16, and 2017-18[B]

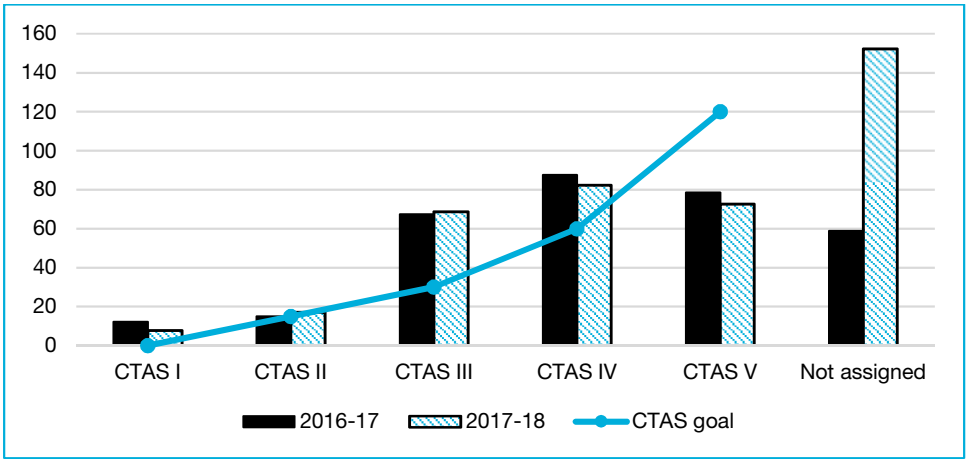


Source: Saskatoon Regional Health Authority Strategic Health Information and Performance Supports (SHIPS).
[A] The not assigned category is where patients did not have a documented CTAS level in the IT system.
[B] 2012-13 was the timing of our initial audit, 2015-16 was the timing of our first follow-up audit, and 2017-18 is the timing of this follow-up audit.

As shown in **Figure 3**, the length of time to receive a physician initial assessment continues to take longer than the Authority's CTAS goals for patients categorized as CTAS III (urgent) and IV (non-urgent).

On average, patients categorized as urgent waited more than two times longer than the CTAS goal of 30 minutes to see a physician in both 2017-18 (68.6 minutes) and 2016-17 (67.3 minutes). As previously noted, the highest proportion of patients presenting in Saskatoon's emergency departments are categorized as urgent.

Figure 3—CTAS Average Wait Times in Minutes for 2016-17 and 2017-18[A]



Source: Saskatoon Regional Health Authority Strategic Health Information and Performance Supports (SHIPS).
[A] See **Figure 1** for CTAS time goals.

At August 2018, management advised us that the Saskatchewan Health Authority was developing an overarching strategy that focuses on connecting patients to community services in Saskatoon (connecting services strategy). One desired outcome of this strategy is for Saskatoon's emergency departments to meet the CTAS time goals.

In addition, the Authority had a number of planned interventions related to the strategy. For example,

- In April 2018, it changed the physical space of the emergency department at Royal University Hospital in Saskatoon. The Authority has developed a separate seven-bed area for patients experiencing mental health issues. This area is quieter than the emergency department, and staffed with healthcare providers specifically trained to deal with mental health issues.

- In October 2019, it plans to move the location of both emergency departments at Royal University Hospital to an area within the new Jim Pattison Children's Hospital. It expects the new area to be larger. This will enable accommodating space for diagnostics. Diagnostics conduct various lab tests, x-rays, and CT Scans. Having these services available within the emergency department will reduce the need to transport patients to another area of the hospital for tests. It will also enable emergency department physicians to obtain test results faster.

- In 2017, the Authority began diverting non-emergent patients in the Orthopaedics and Neurology specialties to the ambulatory care department at one of its hospitals when it is open (i.e., Monday - Friday normal business hours). Management notes that the

Authority plans to assess if it can divert other speciality area patient consultations in the future.

The Authority plans to implement its connecting services strategy over the next two years.

In summer 2018, the Authority conducted multiple modelling exercises on the new emergency department to be located in the Jim Pattison Children's Hospital. The modelling exercise team identified that the greatest potential opportunity to improve efficiency within the emergency department was to reduce the length of time an admitted patient is waiting in the emergency department for an inpatient bed. The time gained would allow physicians to see patients sooner in the emergency department, therefore improving the time to physician initial assessment. The Authority told us it plans to act on this information to create improvements in patient flow from the emergency department at Royal University Hospital by October 2019.

Formulating strategies to meet emergency department triage goals can aid in reducing overcrowding of emergency departments and reduces the risk of not providing patients with timely access to service.

3.4 Directing Emergency Patients Improved

We recommended that Saskatoon Regional Health Authority implement a process to direct patients entering its emergency departments to the appropriate areas for assessment and reassessment. (2013 Report – Volume 2; Public Accounts Committee agreement January 15, 2015)

Status – Implemented

Since 2016 (the time of our last follow-up audit), Saskatoon's emergency departments have improved their signage making it easier for patients to find the assessment and waiting room areas.

In the 2013 audit and later in 2016, we identified issues patients had with the physical layout of Saskatoon's emergency departments. Our 2018 visit of the three hospitals found the Authority had addressed those issues with the physical layout. All three emergency departments had signs directing patients to the assessment and waiting areas.

Clear signage that allows patients to find appropriate areas of the emergency department should help to improve patient care and not increase anxiety in patients who are already in a stressful state.