

An ambulatory waiting room expedites the processing of CTAS 3 patients in a busy emergency room

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The Canadian Association of Emergency Physicians and National Emergency Nurses Affiliation (2007) launched a national awareness campaign highlighting that emergency departments throughout Canada are reporting overcrowding and excessive or unreasonable wait times for emergency care. This is placing patients at risk. Many issues related to emergency department overcrowding have external roots that impact the management of the emergency department. The most common setback is a lack of timely access to inpatient beds for admitted patients (CAEP, 2007; NENA, 2003).

At present, at Red Deer Regional Hospital Centre, there is a bed utilization committee working actively on different strategies related to improving access to inpatient beds. This article offers a solution to managing capacity challenges within the emergency department while mitigating the risk with extensive wait times that are seen, particularly with CTAS level 3 patients. Formation of an “ambulatory waiting room” may, in fact, be an innovative and effective way to improve patient flow and manage wait times within emergency departments across the country.

Prior processing of emergency patients

All emergency patients are triaged according to the Canadian Triage Acuity Scale, which offers a guideline for appropriate lengths of time patients should wait before being assessed by a physician. Consistently, our emergency department was meeting guidelines for CTAS I, most often for CTAS II, but guidelines are seldom met for CTAS III. CTAS IV and V guidelines are only met when the Fast-Track area is open.

Generally, if no treatment space is available after a patient has been assessed by the triage nurse and assigned a triage level, the patient is sent to the main waiting room to sit on a chair. Standard reassessments are to be done and documented on each patient as they wait. The observational period continues until there is a treatment space available in the main emergency department.

Improving patient flow

In 2005/2006, Red Deer health care facility participated in a nation-wide collaborative to improve patient flow throughout the emergency department. A one-year commitment to work on a variety of different strategies to improve patient flow and wait times using the “Plan-Do-Study-Act” (PDSA) improvement model was made. Frontline care providers were involved and played an integral role in helping to identify opportunities for improvement.

The emergency department at Red Deer Regional Hospital manages, on average, 60,000 emergency visits per year, with 42% of visits to the emergency department triaged at CTAS III. These patients require urgent care with CTAS guidelines suggesting physician assessment within 30 minutes of arrival. This patient population experiences the longest waits at triage before being moved into an emergency room for assessment. Wait times of more than three hours are not uncommon for patients classified as a CTAS III. Vertesi (2004) performed a retrospective cohort study on all CTAS levels in an emergency department that sees about 50,000 patients per year. Results of this study demonstrated wait times for 10% of emergent patients (CTAS II and III) were greater than 3.3 hours to reach a treatment area. Many of these patients require a stretcher for examination by the emergency physician. Often, emergency doctors are available to see patients, but unable to assess patients because there are no available stretchers.

Formation of an “ambulatory waiting room”

With a goal to find creative and innovative ways to expedite care for CTAS III patients within our resource capacity, plans were made to increase patient flow by moving patients between stretchers and chairs in an ambulatory waiting area located within the main department. One of our treatment areas was transformed into an “ambulatory waiting room” with eight chairs (enabling one room to hold eight patients) and an adjacent room with a stretcher for examinations. One additional emergency nurse was assigned to this treatment area 24 hours a day.

A critical element guaranteeing the success of this project, with respect to realizing shortened times to physician assessment, was the movement of stable emergency department patients in and out of the ambulatory waiting room. Once any patient in the

entire department is stable and appropriate to wait on a chair, that patient is moved to the “ambulatory waiting room”. Patients in this area are generally waiting for blood work to be drawn or for results, x-rays or results, specialist consults, physician reassessment, a bed on an inpatient unit, transportation home, or other treatments. This process promptly and consistently frees up acute-care stretchers, keeping ahead of patients queuing at triage, particularly the CTAS level 3 patients. The idea is to improve patient flow by mobilizing resources to manage patient activity and acuity in the main emergency department instead of using patient observation areas in the waiting room at triage.

Wait times for CTAS III before and during the trial

Improving patient flow is an extremely important challenge. Reviewing wait times for CTAS III patients the week before and during the trial strongly supported our recommended change in clinical practice internal to the emergency department.

This table shows that the average time for CTAS III patients to be assigned to a treatment area from triage prior to the initiation of ambulatory waiting room trial was 88 minutes (1 hour and 22 minutes). During the two-week trial, this time was decreased to an average of 24 minutes. The average time for CTAS III patients from arrival at triage until assessment by ER physician was 122 minutes (two hours and two minutes) prior to the trial. During the two-week trial, this time was decreased to 55 minutes. The final time measured was the average total time spent in the emergency department until disposition (decision to admit or discharge). Prior to the trial, the average time to disposition was 292 minutes (4 hours and 52 minutes). During the two-week trial, this time was decreased to 246 minutes (four hours and six minutes). The longest wait time at triage for a CTAS III patient before being moved to a treatment area noted the week prior to starting the ambulatory waiting room trial was 10 hours and three minutes. Again, during the two-week trial, the longest wait at triage was two hours and 35 minutes. These data demonstrate a significant decrease in wait

times for emergency patients, which met our goals to improve the safety of our emergency department while managing patient flow in a more efficient fashion.

Discussion

Potential for continued improvement in all wait times was evident from the results of this trial. It is now an ongoing process at the Red Deer Emergency Department. Implementing an ambulatory waiting room has increased the likelihood that patients receive timely access to appropriate care and move safely and efficiently through the system without unnecessary and unproductive delays. This innovative change in clinical practice has continued to decrease wait times for all emergency patients. Furthermore, since implementing this process, higher acuity CTAS II patients are no longer waiting in our triage area, as acute care stretchers for critically ill patients are readily accessible.

Patient satisfaction increased and no complaints associated with wait times were received during this two-week trial. Prior to implementation, the organization received one to three complaints per week specifically related to prolonged waits in the emergency department. The emergency department surveyed a number of patients who were treated in the ambulatory waiting room and found that the majority of patients treated responded with overall satisfaction with the care they received. Moreover, many expressed that they believe it is important that wait times for emergency care are reduced.

Staff morale increased, as they were involved with the initial planning phase and implementation of the new process. Staff members expressed that they are able to provide their patients with quality care that is both safe and efficient. Front-line staff members are now responsible for the continuing management of the ambulatory waiting room. All emergency physicians supported the change in clinical practice. In order to remain ahead of the queues, it is essential to keep the ambulatory waiting room open 24 hours a day. This has made the department safer by using utilization strategies and quality improvement methodology to move patients throughout the department more efficiently.

Conclusion

An “ambulatory waiting room” within the main emergency department is an innovative and effective way to improve patient flow internally for any emergency department. New ideas and strategies for change must be encouraged, and working together towards solutions based on sound methodology, while recognizing the unique needs and challenges of individual emergency departments will facilitate the creation of a positive and safer health care environment. ☑

References

Canadian Association of Emergency Physicians. **Position Statement on Emergency Department Overcrowding from Canadian Association of Emergency Physicians.** Retrieved from www.caep.ca

National Emergency Nurses Affiliation. Retrieved October 22, 2005, from www.nena.ca

Vertesi, L. (2004). **Does the Canadian emergency department triage and acuity scale identify non-urgent patients**

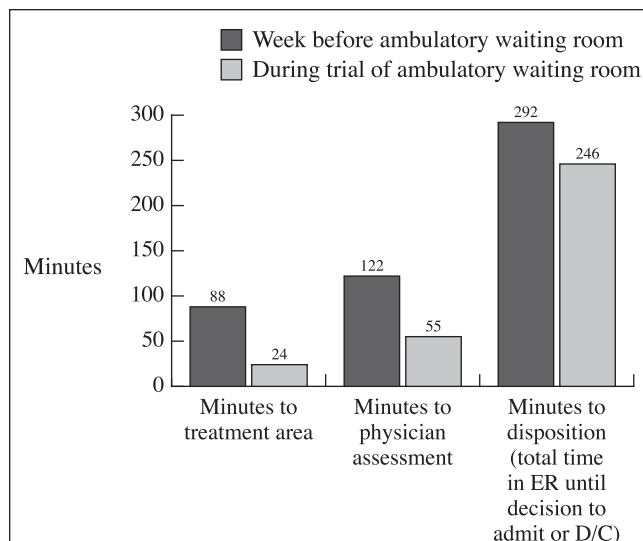


Figure One. Before and during ambulatory waiting room trial (CTAS 3 patients)