Ministry of Health and Long-Term Care

Hospital Emergency Departments

Follow-up on VFM Section 3.05, *2010 Annual Report*

Background

Hospital emergency departments provide medical treatment for a broad spectrum of illnesses and injuries to patients who arrive either in person or by ambulance. The quality and efficient delivery of patient care in emergency departments depend on a variety of interrelated elements, such as prompt off-loading of ambulance patients, quick and accurate triage (that is, the process of prioritizing patients according to the urgency of their illness or injury), nurse and/or physician assessment, diagnostic and laboratory services, consultations with specialists, and treatment. In the 2011/12 fiscal year, there were about 5.9 million emergency-department visits (5.4 million in 2009/10) in Ontario, at a cost of approximately $1.1 billion ($960 million in 2009/10).

The public suspects that the main underlying causes of what can be lengthy emergency-department wait times are walk-in patients with minor ailments and hospital administrative issues such as understaffed emergency departments. However, our 2010 audit found that lack of available in-patient beds for emergency patients requiring hospitalization may well have had an even greater impact on emergency crowding and wait times. While the Ministry and the hospitals had been actively attempting to address the problem at the time of our audit, emergency-department wait times had not yet shown significant improvement or met provincial targets, especially for patients with more serious conditions. In our *2010 Annual Report*, some of our more significant observations were as follows:

- The Canadian Triage and Acuity Scale (CTAS) guidelines recommend that patients be triaged within 10 to 15 minutes of arrival at the emergency department. Yet at all three hospitals we visited, some patients waited more than an hour to be triaged.
- In about half of the triage files reassessed by nurse educators, the CTAS levels originally assigned by triage nurses were found to be incorrect. Of these, the majority were under-triaged, underestimating the severity of the patients' illnesses or injuries.
- Provincially, only 10% to 15% of the patients with emergent and urgent conditions were seen by physicians within the recommended timelines, and sometimes these patients waited for more than six hours after triage before being seen by nurses or physicians.
- At the three hospitals we visited, the timeliness of accessing specialist consultations and diagnostic services affected emergency-patient flow. More than three-quarters of the

hospitals that responded to our province-wide survey of 40 hospitals indicated that limited hours and types of specialists and diagnostic services available on-site were key barriers to efficient patient flow.

- At the time of our audit, emergency-department patients admitted to in-patient units across the province spent on average about 10 hours waiting for in-patient beds. Some waited 26 hours or more. Delays in transferring patients from emergency departments frequently occurred because empty beds had not been identified or cleaned on a timely basis.
- Two of the three hospitals we visited had difficulty finding staff to fill nursing schedules, especially for night shifts, and on weekends and holidays. A number of emergency-department nurses worked significant amounts of overtime or took extra shifts, leading to additional costs and increasing the risk of burnout.
- Paramedics often had to stay in emergency departments for extended periods of time to care for patients waiting for emergency-department beds or until emergency-department nurses could accept them.
- Province-wide, about half of emergency-department visits were made by patients with less urgent needs who could have been supported by alternatives such as walk-in clinics, family doctors, and urgent-care centres.

We made a number of recommendations for improvement and received commitments from the Ministry and the three hospitals we visited that they would take action to address our concerns.

Status of Actions Taken on Recommendations

According to information provided to us by the Ministry and the hospitals, good progress has been made in implementing most of the recommendations we made in our *2010 Annual Report*. Efforts to identify reasons for excessive wait times and to reduce them have resulted in some improvements in patient flow, and these efforts continue. New legislative requirements have expanded the reporting that hospitals do on the quality of care they provide. However, the hospitals indicated that ensuring that there are sufficient nurses and physicians to adequately staff their emergency departments remains a challenge. The Ministry and the hospitals indicated that it will therefore take additional time to fully address some of our recommendations. The current status of the actions taken on each of our recommendations is as follows.

ONTARIO'S WAIT TIME STRATEGY FOR EMERGENCY DEPARTMENTS

Recommendation 1

To ensure that emergency departments are operating in the most effective way to provide high-quality emergency care as quickly as possible to all patients:

- *hospitals should identify causes of delays in patient flow and examine ways of reducing wait times in emergency departments accordingly;*
- *the Ministry of Health and Long-Term Care should work with the LHINs and with hospitals to identify and disseminate best practices from Ontario and other jurisdictions; and*
- *the Ministry should provide funding to hospitals in a timely manner to enable hospitals to have adequate time to implement the funded initiatives cost-effectively.*

Status

All three hospitals we visited informed us that they have taken actions to identify causes of delays

in patient flow and examine ways of reducing wait times in emergency departments. One of the hospitals has developed strategies that include promoting the use of its urgent care centre to the community as an alternative to the emergency department and reviewing discharge patterns in the in-patient units. Another hospital has created a Process Improvement Office with a focus on the root-cause analysis of delays. The third hospital has introduced a Medical Assessment and Consultation Unit for rapid assessment, treatment and admission of emergency-department patients.

The Ministry indicated that it has expanded and continued the Pay-for-Results program and the Emergency Department Process Improvement Program (ED PIP) in the 2010/11 and 2011/12 fiscal years. The ED PIP trains staff on best practices and supports hospitals in funding the implementation of best practices and local solutions to improve patient flow and reduce wait times.

- As part of the ED PIP, staff teams across 81 hospitals were trained in the use of Lean methodology (a methodology focused on process speed, efficiency and elimination of waste) and engaged in follow-up activities to improve patient flow in their emergency departments and in-patient units by eliminating duplicative or unnecessary steps. The Ministry told us that it has also developed a comprehensive toolkit and web resources for hospital use that will be maintained by Health Quality Ontario (formerly the Health Quality Council of Ontario).
- The Pay-for-Results program, covering 74 hospitals, continues to have a positive impact on reducing the wait times at emergency departments for patients with minor conditions. Ninety percent of these patients were treated within 4.2 hours, almost achieving the four-hour target, according to the most recent data in June 2012. For patients with complex conditions, in June 2012 the longest that 90% of them could possibly spend in emergency departments was 10.3 hours, an improvement of about 26% as compared to 14 hours in April 2008, but still above the eight-hour target.

In order to ensure that hospitals receive funding to implement the initiatives in a timely manner, the Ministry has created a Transfer Payment Operating and Capital Funding Packages Roadmap to streamline its funding processes and increase operational efficiencies. The Roadmap is an interactive reference document that shows hospitals how to prepare a Transfer Payment Funding Package by providing connections to the necessary templates, documents and information.

TRIAGE PROCESS

Recommendation 2

To ensure that triaging is done appropriately and consistently within the recommended time frame:

- *hospitals should conduct periodic audits to monitor the quality and accuracy of triage and identify areas for improvements;*
- *hospitals should consider performing a quick "pre-triage" on patients who cannot be triaged immediately upon arrival at emergency departments;*
- *the Ministry of Health and Long-Term Care should work with the LHINs and with hospitals to assess whether the reported length of stay at emergency departments should include the time that patients wait for triage; and*
- *the Ministry should work with the Emergency Medical Services (EMS) to provide updated training for paramedics to ensure that hospitals and paramedics are using consistent triage practices.*

Status

All three hospitals we visited stated that they have conducted triage audits on a routine basis and received positive results. For example, one hospital informed us that its triage audits have consistently demonstrated a level of completeness and reliability of about 80%, which is a significant improvement over the 44% reported in our 2010 audit. In order

to reduce the burden of auditing triage records and to improve the completeness and reliability of triage, one of the hospitals implemented an electronic triage system in February 2012 that includes automated prompts and mandatory fields in triage records. All three hospitals we visited in 2010 have either put "pre-triage" in place or made other improvements in their triage process. For example, one hospital has introduced a process called "walk the line," which requires the triage nurse to walk through the waiting area to take patients at the greatest risk to triage first, and another hospital has renovated the design of its emergency department to ensure that staff can see all patients in the waiting area.

Regarding the time from arrival to triage, the Ministry has obtained advice from Cancer Care Ontario (CCO), which has managed emergency-department data through the National Ambulatory Care Reporting System (NACRS). CCO identified technical limitations in collecting accurate patient arrival times at emergency departments. In August 2011, CCO conducted an analysis and found that monitoring and reducing the time from patient arrival to triage would have a negligible effect on the total length of stay in emergency departments. Therefore, the Ministry will continue to focus on capturing the wait time after triage or registration, whichever is performed first.

To ensure that hospitals and paramedics use consistent triage practices, the Ministry has developed a Pre-hospital Canadian Triage and Acuity Scale (CTAS) Paramedic Guide, which will support paramedics in assigning, communicating and documenting the appropriate CTAS levels. At the time of our follow-up, the Ministry expected that the guide would be released at the end of August 2012 and would be posted on the Ministry's website and distributed to all municipalities (municipalities have the primary responsibility for dispatching land ambulances).

ASSESSMENT AND TREATMENT

Recommendation 3

To ensure that patients receive timely assessment and treatment and an appropriate level of care at emergency departments:

- *hospitals should work with the respective LHINs to develop, document, and implement procedures for monitoring and reassessing the status of patients in the time interval between triage and treatment in accordance with their assigned triage level; and*
- *the Ministry of Health and Long-Term Care should encourage hospitals to track critical quality-of-care measures with respect to the most serious time-sensitive illnesses commonly seen in emergency departments and consider the applicability of protocols or best-practice guidelines for those illnesses on a system-wide basis.*

Status

Regarding the procedures for monitoring the status of patients in the time interval between triage and treatment, only one of the hospitals we visited indicated that it has a reassessment triage nurse in place to reassess patients waiting to be seen on a regular basis and to alert physicians immediately if a patient's status changes. The other two hospitals have relied on staff to follow their existing guidelines in reassessing the condition of patients.

The Ministry indicated that the following actions have been taken subsequent to our audit to ensure that patients receive a timely, high-quality and appropriate level of care at emergency departments:

- Through the *Excellent Care for All Act, 2010*, the Ministry has required every public hospital to establish a Quality of Care Committee that reports on issues related to the hospital's quality of care. All public hospitals are required to submit their annual quality improvement plans to Health Quality Ontario and to make the plans available to the public.
- As part of the Pay-for-Results program, the Ministry has continued to require all hospitals

with 30,000 or more annual emergency-department visits to submit information on quality-of-care indicators regularly to their Quality of Care Committees.

- The Ministry has held regular meetings with the CEO at each LHIN to discuss wait times and quality of care at the hospitals in each LHIN.

CO-ORDINATION WITH OTHER HOSPITAL DEPARTMENTS

Recommendation 4

To better allow hospitals to assess the impact that timely specialist consultation and diagnostic services have on patient care, especially for high-acuity patients, hospitals should track targeted and actual wait times for specialist consultation and diagnostic services for emergency patients, so that the impact of these wait times on providing timely and appropriate patient care can be periodically assessed.

Status

All three hospitals we visited informed us that they have tracked wait times for specialist consultation and diagnostic services for emergency patients. They have also taken actions to reduce wait times. One of the hospitals has increased its ultrasound hours to serve the needs of emergency patients, completed a study to identify areas for improvement and developed a work plan to improve those areas accordingly. Another hospital's emergency department has worked with its diagnostic imaging department to identify waste and redundancies in the process of obtaining diagnostic services. The third hospital has implemented a Model for Specialist Consultation to ensure that high-acuity patients from its emergency department have prompt diagnosis and treatment plans.

According to the Ministry, through the Emergency Room/National Ambulatory Care Reporting System (ER/NACRS) Initiative led by Cancer Care Ontario (CCO), emergency departments have been collecting data relating to specialist consultation since April 2011. Monthly reports have been provided to the Ministry, hospitals and LHINs to assist hospitals in assessing the impact of specialist consultations on the total time patients spent in the emergency departments. As well, the Ministry and CCO are currently evaluating the feasibility of and technical requirements for collecting wait-time data for MRI and CT scans for emergency patients. The Ministry informed us that preliminary data would be available by the summer of 2014.

PATIENT DEPARTURE FROM THE EMERGENCY DEPARTMENT

Recommendation 5

To ensure that vacant in-patient beds are identified, cleaned, and made available on a timely basis to admitted patients waiting in emergency departments:

- *hospitals should have an effective process in place to identify vacant beds and communicate their availability between in-patient units and emergency departments; and*
- *the Ministry of Health and Long-Term Care should work with the LHINs and with hospitals to identify and disseminate best practices that enable hospitals to reduce unnecessarily long stays of admitted patients in emergency departments.*

Status

All three hospitals we visited have put processes in place to ensure that vacant beds are being identified on a timely basis and to improve communication of bed availability between in-patient units and emergency departments. One of the hospitals has been able to capture the times at which beds are cleaned. Another hospital has a central bed allocation team to manage an automated system that provides a real-time report to identify vacant beds that are ready to receive patients from the emergency department. The third hospital is in the beginning phase of implementing a new technology that will provide real-time direct communication across the hospital of information including discharges and changeover of beds, and the need for cleaning.

The Ministry informed us that the Emergency Department Process Improvement Program (ED PIP) and the Pay-for-Results program have focused on reducing unnecessarily long stays of admitted patients in emergency departments. Specifically:

- The key focus of the ED PIP is to improve patient flow through engaging housekeepers, nurses and porters to develop a streamlined process and to reduce the overall bed-turnaround time ("bed-empty time"). The Ministry has engaged the Institute for Clinical Evaluative Sciences (ICES) to evaluate the effectiveness of the ED PIP. According to the preliminary results of the evaluation, the hospitals that participated in the ED PIP have improved their emergency-department wait times. The final report is expected in March 2013.
- As part of the Pay-for-Results program, the Ministry has provided 24 emergency departments with dedicated funding of about $26 million in the 2011/12 fiscal year to create and operate 212 short-stay in-patient beds in order to place admitted patients from emergency departments quickly in in-patient units. The results from May 2012 showed that the time patients waited in emergency departments for transfer to in-patient units was 21 hours, a reduction of 11% from the 23.6 hours patients waited in May 2011.

STAFFING

Recommendation 6

To ensure that emergency departments are operating cost-effectively with adequate nurses and physicians:

- *hospitals should deal with chronic overtime by setting targets for reducing overtime costs to acceptable levels and implementing effective measures for achieving these targets; and*
- *the Ministry of Health and Long-Term Care should work with the LHINs and with hospitals to conduct studies to assess the requirements, availability, and regional distribution of emergency physicians across the province in order to develop a sustainable human resources strategy that will ultimately eliminate the use of agency physicians.*

Status

Two of the hospitals we visited indicated that overtime has continued to be an issue because recruiting and retaining skilled emergency-department nurses have continued to be a challenge. All three hospitals we visited have implemented some measures to reduce overtime costs. Two of the hospitals have reviewed staff schedules as well as trends of maternity leaves, sick days, vacations and overtime to ensure appropriate staffing patterns and to keep ahead of possible vacancies, thereby reducing the need for overtime. Another hospital has made reducing overtime a corporate goal, and its emergency department has had some success over the past two years in reducing overtime hours as a percentage of total worked hours from 6.6% in the 2008/09 fiscal year to 5.8% in 2010/11. It is also in the process of finalizing a recruitment and retention strategy for implementation in 2012/13.

The Ministry informed us that it has introduced several initiatives to ensure that an adequate number of physicians are available in emergency departments. For example:

- The Ministry offered the Summer Incentive for Designated Emergency Departments in 2011 to provide additional emergency-physician coverage and to keep emergency departments open during the challenging summer months. Up to $2.1 million was provided to help keep 97 emergency departments open during the summer of 2011. The incentive is being continued in 2012.
- The Ministry has provided one-time funding of about $2.5 million over the three fiscal years 2011/12 through 2013/14 for a pilot program, called the Supplemental Emergency Medicine Experience (SEME) program, to provide family physicians with three months

of full-time, remunerated continuing education and training in emergency departments. The University of Toronto has implemented the SEME program to enhance emergency-medicine skills for up to 20 family physicians a year and to improve coverage in small rural emergency departments.

- The Ministry, in collaboration with the Ontario College of Family Physicians, has offered an Emergency Medicine Primer for Family Physicians to reintegrate family physicians into emergency departments. This course has been offered in locations across Ontario as an update course for family physicians who are currently working in an emergency department and as a refresher course for family physicians who have worked in emergency departments before.

IMPACT OF EMERGENCY-DEPARTMENT WAIT TIMES ON AMBULANCE EMERGENCY MEDICAL SERVICES (EMS)

Recommendation 7

To ensure the efficient use of the ambulance Emergency Medical Services (EMS) and to enhance co-ordination between EMS providers and emergency departments, the Ministry of Health and Long-Term Care should:

- *determine whether the recommendation in the 2005 expert panel's report on ambulance effectiveness of a benchmark ambulance offload time of 30 minutes 90% of the time should be accepted as a province-wide target;*
- *work with hospitals, EMS providers, and Cancer Care Ontario to improve the validity and reliability of ambulance offload data and to ensure that such data are standardized, consistent, and comparable; and*
- *work with hospitals and EMS providers to evaluate on a province-wide basis the effectiveness of the Offload Nurse Program in reducing offload delays and improving patient flow within emergency departments.*

Status

The Ministry informed us that the Pay-for-Results program has included a benchmark for ambulance offload time of 30 minutes 90% of the time. The 74 hospitals that have participated in the Pay-for-Results program are required to submit ambulance offload data and to demonstrate their progress toward meeting the 30-minute target.

The current challenge, according to the Ministry, is the lack of a provincial definition of Ambulance Transfer of Care. To address this, the Ministry has been working with the hospitals, EMS and CCO on data collection by using the current National Ambulatory Care Reporting System definition for Ambulance Transfer of Care as a provincial definition for both hospitals and EMS.

The Ministry introduced the Offload Nurse Program in 2008/09 by providing $4.5 million to 14 municipalities experiencing offload delays, creating 42 offload nurse positions. In the 2010/11 fiscal year, the Ministry expanded the program to 16 municipalities and increased the funding to $9.6 million, providing about 191,000 additional nursing hours. In 2011/12, the Ministry further expanded the program to 18 municipalities with total funding of $11.7 million to provide about 225,400 additional nursing hours. According to the evaluation by the Ministry, the municipalities have reported improvements in ambulance offload delays, as the Offload Nurse Program has freed up six fully staffed ambulances per day to respond to new urgent calls in a timely manner.

All three hospitals we visited informed us that they have been working closely with their respective LHINs and other hospitals in monitoring ambulance offload time. They have also compared their results with peer hospitals within their regions and across the province. As well, they have continued to collaborate with the Ministry and the EMS in their regions to evaluate the effectiveness of the Offload Nurse Program in reducing ambulance offload time.

PERFORMANCE MONITORING

Recommendation 8

To ensure that emergency departments are providing high-quality emergency care to all patients, hospitals should:

- *promote a culture of patient safety by using a non-punitive and "lesson-learned" approach to ensure that adverse events are reported and summarized for analysis and corrective actions; and*
- *follow up with patients who have been triaged as having serious medical conditions but who have left emergency departments without being seen by doctors or having completed treatment.*

Status

All three hospitals we visited advised us of actions taken to promote a culture of patient safety. One of the hospitals has a newly implemented Critical Incident Process. Another hospital introduced an automated incident-reporting system called SAFE in June 2010 and has a separate review process for critical incidents. The third hospital has implemented a Good Catch Campaign and an online incident-reporting process.

To protect and promote a culture of quality improvement in hospitals, the Ministry also informed us that the government has made several legislative changes. For example:

- According to the *Excellent Care for All Act, 2010*, all hospitals are required to develop annual quality improvement plans that include critical incident data. Hospital boards are required to ensure that hospital administrators have established a system for analyzing critical incidents and developing plans to avoid or reduce the risk of further similar incidents.
- As of January 1, 2011, Regulation 965 of the *Public Hospitals Act* was amended to ensure that hospital administrators provide aggregated critical incident data to their hospitals' Quality of Care Committees at least two times per year.
- The Ministry issued a directive that as of October 1, 2011, all public hospitals are required to report all critical incidents related to medication and IV fluids through the National System of Incident Reporting (NSIR) within 30 days following the disclosure of the critical incident to the Ministry's Medical Advisory Committee, the hospital administrator and/or the patient.
- The 2011 *Better Tomorrow for Ontario Act* has created an exemption under the *Freedom of Information and Protection of Privacy Act* that would give hospitals the discretion to refuse to disclose records in cases where people providing the information have an expectation of confidentiality. The exemption, effective since January 1, 2012, encourages hospital staff to engage in full, free and frank discussions on quality-of-care issues without fear that their comments will be publicly revealed.

All three hospitals we visited have procedures in place to deal with patients who have left emergency departments without having being seen by doctors or having completed treatment. Two of the hospitals have required their nurses or the manager of the emergency department to follow up by phoning those patients. As well, all three hospitals have shown improvements, with fewer patients leaving their emergency departments without being seen, as a result of the ED PIP and the Pay-for-Results program. One hospital has reduced its percentage of patients who leave without being seen from 4% to 0.4%; another hospital has reduced the percentage from 6.1% to 3%; and the third hospital has reduced the percentage from 5.4% to 0.5%.

ALTERNATIVES TO EMERGENCY-DEPARTMENT SERVICES

Recommendation 9

To ensure that the needs of patients are met appropriately, the Ministry of Health and Long-Term Care should:

- *work with hospitals to conduct further research on the impact of low-acuity patients on emergency services and on what province-wide initiatives can be undertaken to encourage people to seek the right treatment from the right medical provider; and*
- *assess and promote the availability and public awareness of health-care alternatives to emergency departments on a regional basis, including walk-in clinics, urgent care centres, family physicians, and other community-based supports, to optimize the right care in the right environment.*

Status

The Ministry informed us that it has continued its efforts to increase public awareness of alternative services to emergency departments in order to encourage people to seek the right treatment from the right health-service provider. For example:

- In November 2010, the Ministry re-launched the Your Health Care Options website, which includes an online registry for Health Care Connect to help any Ontarian who is without a family doctor to find one, and searchable tools to obtain information on wait times for surgeries and diagnostic services. From May 2011 to August 2011, the Ministry launched a campaign for the Your Health Care Options website through television, radio, online advertising and materials distributed to health-care providers.
- In May 2011, the Ministry deployed 20 kiosks at selected emergency departments to provide users with access to the Your Health Care Options website and a directory where they can search for health-service providers in their community as an alternative to the hospital emergency department. All 20 kiosks were implemented by August 2011, and users had made over 220,000 searches as of April 2012.
- In the 2011/12 fiscal year, the Ministry provided $3.5 million as base funding for 42 full-time nursing positions for the Nurse-Led Outreach Teams (NLOTs), which provide care directly to long-term-care-home residents to avoid unnecessary visits to emergency departments. Supplemental funding of about $1.5 million was provided to support the creation of 30 additional full-time nursing positions to augment existing NLOTs in selected LHINs.

At the time of our follow-up, ministry data showed that these efforts had reduced the volume of low-acuity patients visiting emergency departments as a percentage of total emergency-department visits from 45% in 2009/10 to 41% in 2011/12.

Apart from the Ministry's efforts, all three hospitals we visited have also taken actions. One of the hospitals informed us that it opened an urgent care centre in April 2011 and has worked with its public relations staff to educate the community regarding the appropriate use of the emergency department and the urgent care centre. Two of the hospitals have worked with their stakeholders, including LHINs, peer hospitals and long-term-care homes, to promote the use of alternative services such as out-patient clinics in order to reduce emergency-department visits and hospital admissions.