

Chapter 4

Section 4.02

Ministry of Health and Long-Term Care

Ambulance Services— Land

Follow-up to VFM Section 3.02, 2005 Annual Report

Background

Under the *Ambulance Act*, the Minister of Health and Long-Term Care must ensure “the existence throughout Ontario of a balanced and integrated system of ambulance services and communication services used in dispatching ambulances.” On January 1, 2001, responsibility for providing land ambulance services was transferred from the province to the 40 upper-tier municipalities and 10 designated delivery agents in remote areas (municipalities). Under the *Ambulance Act*, municipalities are responsible for “ensuring the proper provision of land ambulance services in the municipality in accordance with the needs of persons in the municipality.” However, the Ministry is responsible for ensuring that minimum standards are met for all aspects of ambulance services.

The Ministry of Health and Long-Term Care pays 50% of approved eligible costs of municipal land ambulance services and 100% of the approved costs of ambulance dispatch centres, ambulances for the First Nations and for territories without municipal organization, and other related emergency services. In the 2006/07 fiscal year, ministry expenditures on land ambulance services were approximately \$424 million (\$358 million in the 2004/05 fiscal

year), including \$308 million (\$260 million in 2004/05) provided to municipalities for land ambulance and dispatch services.

In our 2005 Annual Report, we found that the Ministry still needed to take additional action to address many of the challenges identified in our 2000 audit of Emergency Health Services and the related recommendations made subsequently by the Standing Committee on Public Accounts. Specifically, two-thirds of land ambulance operators were not meeting their legislated response times even though total costs had increased by 94% in the previous four years. As well, the Ministry had not ensured that municipally operated land ambulance services were providing integrated and balanced service across the province. We noted that:

- Municipal boundaries could impact the delivery of health services. For example, at the time of our audit, at least two municipalities were not participating in the Ontario Stroke Strategy and were not transferring patients to the nearest stroke centre because it was outside their respective boundaries.
- The Ministry was not determining whether transfers of patients between institutions were performed in the most appropriate and cost-effective manner; as a result, patient treatment may be delayed or hospital stays may be longer than necessary.

- Ambulance response times increased in about 44% of municipalities between 2000 and 2004, even though the Ministry had provided about \$30 million in additional funding. In addition, 64% of municipalities did not meet their legislated response times in 2004, even though the requirements were based on meeting their actual 1996 response times. Also, 15 of the 18 dispatch centres that reported information did not dispatch ambulances within the time required by the Ministry. Despite a previous recommendation by the Standing Committee on Public Accounts, response times were still generally not being publicly reported.
- Total provincial and municipal costs of providing land ambulance services increased by 94% over four years, from \$352 million in the 1999/2000 fiscal year to \$683 million in 2003/04. However, total ambulance calls involving patients remained at about the same level.
- At the time of our 2005 audit, the division of responsibilities and funding of land ambulance services, as well as significant differences in funding levels among municipalities (varying from \$57 to \$150 per household among 12 municipalities), could result in varying levels of service across the province for people with similar emergency-care needs living in similar municipalities.
- For about 40% of all high-priority ambulance calls province-wide, once the ambulance arrived at the hospital, it took more than 40 minutes for the hospital to accept the patient.
- While service reviews of ambulance operators were generally conducted within the required three-year period, reviews conducted between 2002 and 2004 found that over 40% of all operators failed to meet certification standards, even though they had received advance notice of the review.

We made a number of recommendations for improvements at that time and received commitments from the Ministry that it would take action to address our concerns.

Current Status of Recommendations

According to information we received from the Ministry of Health and Long-Term Care in late spring and summer 2007, the Ministry is considering the recommendations of various committees and working groups regarding how best to address many of our recommendations and the issues raised in our report. While specific action has been undertaken to address our recommendations in some areas, decisions on the best approach and implementation plans for others are still in progress. The current status of the action taken on each of our recommendations is as follows.

RESPONSIBILITY FOR LAND AMBULANCE SERVICES

Balanced and Integrated Service

Recommendation

In order for the public to receive the best possible emergency care, the Ministry should assess what measures are required to ensure that land ambulance services are seamless, accessible, and integrated regardless of municipal boundaries.

Current Status

The Ministry indicated that, to help ensure that land ambulance services are seamless, accessible, and integrated regardless of municipal boundaries, it had convened a Land Ambulance Committee (Committee), comprising municipal and ministry representatives, which began work in late 2005. The Committee provided its advice to the Minister in

early 2006 on various topics, including inter-facility critical care transfers, billings when ambulances cross municipal boundaries, and a land ambulance response time standard.

The Ministry indicated that it was reviewing the Committee's advice regarding changes to the response time standard and had requested further information from the Committee regarding billings when ambulances cross municipal boundaries. In addition, in summer 2007, the Minister's office requested that the Ministry consult with stakeholders regarding various proposed regulatory changes, including those relating to response times and cross-border billings. The Ministry anticipated that decisions would be made with respect to these areas during the 2008/09 fiscal year.

As well, the Ministry stated that a critical-care inter-facility transfer service was being implemented for the transfer of critically ill patients. According to the Ministry, this service is expected both to improve the care of these patients and to result in efficiencies for both hospitals and land ambulance services. Implementation is expected to be completed in spring 2008.

Non-emergency Scheduled Institutional Transfers

Recommendation

As recommended in our previous audit of *Emergency Health Services* published in our 2000 Special Report on Accountability and Value for Money, the Ministry should work jointly with municipalities and the hospital community to:

- develop and put in place standards for non-ambulance medical transport services to address passenger safety; and
- take steps that will encourage the use of the most cost-effective resources for the scheduled transfer of non-emergency patients.

Current Status

The Ministry of Health and Long-Term Care (Ministry) indicated that non-ambulance medical transportation services are part of the Ministry of Transportation's mandate. While the Ministry told us that it was aware of meetings between the Ministry of Transportation and the Medical Transportation Association of Ontario (which represents the non-ambulance medical transportation industry), the Ministry was not involved in these meetings. At the time of our follow-up, the Ministry indicated that it was engaged in dialogue with the Ministry of Transportation regarding the regulatory framework for such medical transportation services, and it planned to continue this dialogue with this and other relevant ministries in order to reassess the regulatory framework and standards in use and determine if they are adequate.

RESPONSE TIMES

Ambulance Response Times

Recommendation

To help ensure that response times for emergencies, including cardiac arrest, meet the needs of patients throughout the province, the Ministry should:

- together with municipalities, review current response-time requirements for reasonableness and consistency and, where necessary, make adjustments;
- work closely with municipalities to help them meet the response-time requirements; and
- assess the costs and benefits of a fully co-ordinated emergency response system that includes strategically placed publicly accessible automatic external defibrillators.

Current Status

The Ministry informed us that, through the Land Ambulance Committee, it convened a multi-stakeholder Response Time Working Group in early 2006 to review current response-time requirements

for reasonableness and consistency, and to review issues related to meeting these requirements. The Ministry indicated that it had reviewed the Group's proposed standard and that it expected that it would make recommendations to the government in winter 2008 on a new methodology for defining, measuring, and reporting response time performance; if approved, the methodology is to be implemented over a three-year time period. And, as previously mentioned, the Ministry was planning to consult with stakeholders regarding proposed changes to response times.

The Ministry informed us that, at its request, the Ontario Health Technology Advisory Committee had conducted a review to determine the settings in which automatic external defibrillators are warranted. This Committee made its recommendations in December 2005. In particular, the Committee did not recommend the installation of automatic external defibrillators in public buildings (for example, casinos and arenas) because of the very low probability that a person would suffer a cardiac arrest in these locations. However, the Committee's recommendations did include support for the current policy of making automatic external defibrillators available to emergency health services, the police, and firefighters. The Committee also supported the use of the devices on aircraft and in those areas of hospitals not readily accessible to "code blue" teams.

Dispatch Response Times

We noted in our *2005 Annual Report* that the Ministry had commenced a project to integrate Automatic Vehicle Locator (AVL) technology, which uses global positioning satellites and land-based transmitters to identify the geographic location of vehicles, with the computer-aided dispatch systems. For health emergencies, AVL technology can assist dispatchers in identifying the closest ambulance to a patient. At the time of our follow-up, the Ministry

indicated that AVL technology had been implemented in 19 of the 23 dispatch centres.

Recommendation

To ensure that dispatch centres meet the required ambulance dispatch response times, the Ministry should monitor dispatch-centre performance throughout the province and take timely corrective action where necessary.

Current Status

At the time of our follow-up, the Ministry indicated that it was conducting monthly monitoring of call-processing-time performance at computer-aided dispatch centres. According to the Ministry, this monitoring commenced on a trial basis in the fall of 2005, and the process was formalized in the 2006/07 fiscal year. When dispatch response times fall below expected standards, measures such as staff training and requests for additional resources are to be instituted to improve the performance. As well, the Ministry told us that, beginning in October 2007, the three paper-based dispatch centres were also expected to report dispatch processing times.

Ambulance Time Spent at Hospitals

Recommendation

To help ensure the efficient use of emergency health services and enhance emergency patient care, the Ministry, in conjunction with municipalities and hospitals, should take appropriate action to minimize situations where patients are waiting for extended periods of time in an ambulance before being accepted by a hospital.

Current Status

The Ministry announced the recommendations of the Hospital Emergency Department and Ambulance Effectiveness Working Group in January 2006. The recommendations included ways to transfer patients more efficiently from the care of ambulance paramedics to hospital emergency

departments. To help implement these recommendations, in January 2006 the Ministry established an Emergency Department and Ambulance Quality Committee, as well as the Working Group on Improving Access to Emergency Services. At the time of our follow-up, the Ministry indicated that the work of this committee and this working group was ongoing, and accordingly the implementation plan was not yet completed. As well, in August 2007, the Emergency Department Expert Panel was announced as part of the Ministry's Wait Time Strategy. The Ministry anticipates that this panel will make recommendations to improve the flow of emergency patients and therefore enable patients to be transferred more quickly from ambulances to hospital emergency departments. In addition, according to the Ministry, ambulances in Toronto have begun transporting certain low-risk patients to two urgent-care centres, rather than to hospital emergency departments. The Ministry anticipates that when this initiative is completely implemented, it will lead to improved ambulance response times by freeing up ambulances and paramedics from hospital offload delays.

FUNDING

Ministry-funded Costs

Recommendation

The Ministry, in conjunction with the municipalities, should develop a process to better achieve the existence throughout Ontario of a balanced and integrated system of land ambulance services.

Current Status

In February 2006, the Premier announced that the province would spend about \$300 million to move to 50/50 sharing of the cost of municipal land ambulance services by 2008. The Ministry expects that this will better promote the existence of a balanced and integrated system of land ambulance services.

Ministry Monitoring of Costs

Recommendation

To better ensure the cost effectiveness of funding for land ambulance services, the Ministry should reassess its position on the size of municipal reserve funds allowed and consider obtaining third-party or internal-audit assurance on costs claimed by municipalities where warranted.

Current Status

At the time of our follow-up, the Ministry indicated that it had reviewed and assessed all municipal reserve funds relating to land ambulance services for 2004 and 2005, and found that all such funds were valid. A similar review was being conducted for 2006, with results expected in late fall 2007.

Cross-boundary Billings

Recommendation

To encourage the quickest response time regardless of municipal boundaries, the Ministry should work with municipalities to help facilitate inter-municipal billing, including:

- *clearly defining the chargeable amount when an ambulance crosses a municipal boundary; and*
- *ensuring that municipalities have timely access to accurate data for billing purposes.*

Current Status

According to the Ministry, a working group of the Land Ambulance Committee provided the Ministry with a report in spring 2007 containing advice related to billings when ambulances cross a municipal boundary. At the time of our follow-up, the Ministry was considering the Committee's advice. As well, the Ministry indicated that working with municipalities to provide them with timely access to accurate data for billing purposes is an ongoing activity.

DISPATCH OPERATIONS

Dispatch Priority

Recommendation

To help dispatch centres better respond to each patient's needs, the Ministry should expedite a decision on its choice of dispatch protocols.

Current Status

At the time of our follow-up, the Ministry indicated that a medical review of the dispatch protocol, in use at most of the dispatch centres, was completed in 2006, and that an update to the protocol had been developed and is to be evaluated in 2007. According to the Ministry, the anticipated date of full implementation had yet to be determined because it will require the development and testing of software. As well, the Ministry noted that its evaluation of one internally used dispatch protocol was ongoing as part of the Niagara Ambulance Communication Service pilot project discussed below.

Responsibility for Dispatch

Recommendation

To help ensure that ambulance services are integrated, balanced, and efficient, the Ministry should expedite its evaluation of the pilot project, particularly with respect to the issue of municipal versus centralized dispatch, and incorporate best practices and research from other jurisdictions in its determination of the appropriate number, location, and management of ambulance dispatch centres.

Current Status

At the time of our follow-up, the Ministry indicated that it had reached an agreement with the Niagara region on the pilot project evaluation methodology. The Ministry told us that it plans to use consultants to develop the project evaluation plan and criteria, as well as to conduct a comprehensive evaluation of the project on the basis of this plan and criteria.

The evaluation of the pilot project is expected to be complete by 2010. However, we saw no evidence that the Ministry would also be incorporating best practices and research from other jurisdictions in its determination of the appropriate number, location, and management of ambulance dispatch centres.

Dispatch Staffing

We noted in our *2005 Annual Report* that recruiting and retaining staff at dispatch centres continued to be difficult and indicated we would follow up on the status of dispatcher turnover rates. At the time of our follow-up, the Ministry indicated that, while information on dispatcher turnover rates was not immediately available, it expected to complete an analysis of these rates for the 2006/07 fiscal year by fall 2007.

REVIEWS

Reviews of Land Ambulance Operators

Recommendation

To better ensure that land ambulance service operators meet certification standards, the Ministry should:

- *conduct, based on risk, a reasonable number of service reviews on an unannounced basis to increase assurance of consistent quality of practice by operators;*
- *where operators do not meet certification standards, conduct the required follow-up service reviews and inspections on a more timely basis; and*
- *clarify when Director's Orders should be issued and under what circumstances formal consideration of revoking an operator's certification should be undertaken.*

Current Status

At the time of our follow-up, the Ministry indicated that in its view, conducting unannounced

service reviews is not practical. The Ministry said service review teams can be quite large, and so the timing of the service review must be carefully co-ordinated to ensure that emergency services are not disrupted. Therefore, the Ministry indicated that, at the time of our follow-up, it continued to provide 90-days' notice to land ambulance service operators, in accordance with the Ministry's Land Ambulance Service Certification Standards. However, the Ministry indicated that, during 2006, it had conducted unannounced inspections at 13 operators to determine the operators' compliance with certain aspects of the *Ambulance Act*.

With respect to follow-up reviews, the Ministry stated that it was discussing the Service Review Standard with municipal representatives, to determine the reasonableness of conducting these reviews on a more timely basis. Consultations with municipal representatives were ongoing at the time of our follow-up.

The Ministry indicated that, at the time of our follow-up, each situation was unique and therefore senior ministry staff assess each ambulance service review on a case-by-case basis to determine if the need exists for a Director's Order or the revocation of an operator's certification. Consequently, the Ministry considers that further guidance and clarity on the circumstances that should lead to a Director's Order or a licence revocation are not necessary.

Reviews of Dispatch Centres

Recommendation

To help ensure that land ambulance dispatch centres are effective and comply with ministry standards, the Ministry should:

- *perform periodic reviews of the dispatch centres' operations, including a review of a sample of calls to determine whether they are appropriately handled and prioritized; and*

- *implement a standardized quality-assurance process to monitor and assess the overall operational performance of all dispatch centres and the individual performance of dispatchers.*

Current Status

The Ministry indicated that routine reviews of dispatch centres, including reviews of call priority and management, commenced in summer 2006. At the time of our follow-up, five dispatch centres had been reviewed, and six others were scheduled for review during the 2007/08 fiscal year.

The Ministry also noted that a standardized quality-assurance process for monitoring overall operational performance of dispatch centres as well as the individual performance of dispatchers had been completed during the 2006/07 fiscal year. This included the training of reviewers. In addition, according to the Ministry, in April 2007 most dispatch centres started routinely monitoring key performance indicators.

BASE HOSPITALS

Recommendation

To better ensure that paramedics provide quality patient care, the Ministry should determine the optimal number and distribution of base hospitals (since such hospitals train, certify, and provide medical direction to paramedics) and ensure that base hospitals adhere to consistent standards regarding areas such as quality assurance and the continuing medical education of paramedics.

Current Status

At the time of our follow-up, the Ministry stated that it was planning to reorganize the 21 base hospitals into six regional base hospitals in 2007. The regional base hospital for Toronto and Peel was designated to be the first of the six. The Ministry expected to issue a request for interest in late summer 2007 to select the other five regional base hospitals. The Ministry also told us that it

had conducted consultations with the current base hospitals and municipalities on aspects to include in a performance agreement between the Ministry and the regional base hospitals. According to the Ministry, this performance agreement is expected to help ensure that base hospitals adhere to consistent standards regarding areas such as quality assurance and the continuing medical education of paramedics.

COMPLAINTS AND INCIDENTS

Recommendation

To help ensure that recurring potential problems are identified as early as possible, the Ministry and the municipalities should jointly develop and implement a process to ensure that the Ministry receives adequate information on the nature and resolution of the more serious complaints made about land ambulance services.

Current Status

According to the Ministry, a meeting held with municipal representatives to discuss this recommendation, as well as municipal training, resulted in improved municipal reporting and completeness of reporting of complaints. In addition, the Ministry indicated that, at the time of our follow-up, it was considering amendments to the Ambulance Service Documentation Standards in order to define more clearly which complaints must be sent to the

Ministry. As well, the Ministry told us that it was conducting an ongoing assessment of municipal compliance with the Ministry's Investigations Protocol for complaints.

PERFORMANCE MEASUREMENT AND REPORTING

Recommendation

To help ensure that ambulance services are accountable and to support continuous improvement in services, the Ministry and municipalities should jointly establish pertinent performance measures such as response times and report publicly and regularly on these land ambulance service performance measures.

Current Status

At the time of our follow-up, performance measures were not being publicly reported. With respect to response times, as indicated earlier, the Ministry expects to make recommendations in the winter of 2008 on a new methodology for defining, measuring, and reporting response times; if approved, the methodology would be implemented over a three-year period. It was also considering advice from the previously mentioned Land Ambulance Committee on other performance measures. The Ministry told us that public reporting of performance measures would require government approval as well as legislative changes.