4.13 Teletriage Health Services

Ministry of Health and Long-Term Care

Follow-up on VFM Section 3.13, *2009 Annual Report*

Background

Ontario's teletriage health services provide callers from Ontario area codes with free, confidential telephone access to a registered nurse for health-care advice and information. The services comprise Telehealth Ontario—available to all Ontario callers 24 hours a day, seven days a week—and the Telephone Health Advisory Service (THAS)—available Monday to Friday, 5 p.m. to 9 a.m., and all day on weekends and holidays, to 9.5 million patients (8.4 million in the 2008/09 fiscal year) enrolled with physicians participating in various primary-health-care arrangements, such as Family Health Teams. For THAS callers, nurses can access the on-call physician from the caller's physician's practice, and, if needed, the physician may speak directly with the caller.

The Ministry of Health and Long-Term Care (Ministry) contracts with a private service provider to deliver the teletriage health services. The service provider employs almost 300 registered nurses at its five call centres located throughout Ontario. All calls are handled in one virtual queue, with the first available nurse at any of the service provider's locations answering the call. The nurses use their clinical judgment in conjunction with medical decision support software to assist callers. During the 2010/11 fiscal year, 896,000 calls were responded to by the service provider (905,000 calls in 2008/09), and payments to the service provider totalled $39 million ($35.1 million in 2008/09).

We noted in our *2009 Annual Report* that the Ministry had contracted for the delivery of teletriage health services using a competitive process and that the contract included a number of key performance requirements, mostly dealing with timely access to services. Although only a small portion of Ontario's population uses the services, our independent survey indicated that those who used Telehealth Ontario were generally satisfied. However, we believed that improvements could be made to both Telehealth and THAS to enhance the services and better communicate their availability. Our observations included the following:

- Not only had the number of calls to teletriage health services been declining over the previous few years, but the number of calls as a proportion of the population was significantly lower in Ontario than that for similar services offered in Alberta and Quebec. Furthermore, although over 60% of Ontarians were eligible to use THAS, only 1% of eligible individuals used it in 2008/09.
- British Columbia and Quebec had already begun using the easily remembered "811" phone number for their teletriage health

services, and certain other provinces were planning to adopt that phone number. Quebec reported a 15% increase in call volume following its implementation. At the time of our audit, Ontario had no plans to adopt the "811" phone number.

- The service provider's records indicated that about 25% of the callers in the live queue hung up before their call was answered. We calculated that 85% of callers who waited spoke to a nurse within 23 minutes. Eighty-five percent of callers who left a call-back number spoke to a nurse within 34 minutes.
- Physicians who were on call to THAS had to be paged more than once in over 70% of calls requiring a page during 2008, and 9% of pages were never returned.
- Although advice to callers deviated from the clinical guidelines and protocols only 5% of the time in 2008/09, almost 30% of the deviations did not indicate the reason for not following the guidelines.
- Although the proposal submitted by the service provider to the Ministry in 2007 indicated that the service provider's nurses would have at least three years of any type of nursing experience, 20% of our sample of nurses hired in 2008 had less experience than that.
- Because callers were not asked to provide their Ontario health card number to the service provider, it was not practicable to check Ontario Health Insurance Plan records to determine whether the caller followed the advice given. This would show, for instance, whether the teletriage health services were influencing callers to use the most appropriate health service, such as going to a hospital or seeing their family doctor the next day.
- Unlike most provinces we spoke with, Ontario generally did not tape calls for subsequent quality assurance review. Rather, the service provider's quality assurance reviewers sampled calls only as they were taking place and seldom did so during peak periods, when nurses experience pressure to respond to waiting callers within established time frames. The quality of advice was also not independently evaluated.
- In 2008/09, the Ministry paid the service provider about $39 for each of the first 900,000 registered calls to teletriage health services and about $27 per call after that. Teletriage health services costs for the three other provinces that shared cost information with us averaged about $20 per call. The Ministry had not determined the reason for the significant difference.
- The Ministry had not recently assessed the effectiveness of the teletriage health services.

STANDING COMMITTEE ON PUBLIC ACCOUNTS

The Standing Committee on Public Accounts held a hearing on this audit in April 2010. In October 2010, the Committee tabled a report in the Legislature resulting from this hearing. The report contained nine recommendations and requested the Ministry to report back to the Committee with respect to the following:

- the results of its survey on public awareness and use of teletriage health services, including measures to ensure that THAS is better communicated to patients, and whether new measures were being considered to address the underutilization of teletriage health services by certain segments of the population, as well as the timeline for introducing any new measures to address the survey results;
- the results of the Ministry's business case analysis on the costs and benefits of introducing an "811" number in Ontario;
- whether the service provider had changed its calculation of the average-wait-time measure to start when the call was first received rather than starting when the caller was put in the queue to wait to talk to a nurse, and any

measures that are being considered to address excessive wait times;
- what steps had been taken to reduce the number of unanswered physician pages, including the results of discussions with the Ontario Medical Association and any technological improvements being considered;
- its assessment, in conjunction with the service provider, of the impact of the work-from-home option to enhance nurse recruitment and retention while maintaining safeguards to protect the privacy of callers;
- the results of the Ministry's deliberations on whether callers should be asked for their Ontario health card number;
- whether taping calls to allow for enhanced quality assurance processes would be acceptable to the Office of the Information and Privacy Commissioner, and the Ministry's current position on this issue;
- actions taken by the Ministry to reduce the overall cost of the teletriage health services program; and
- the results of the service provider's assessment of whether an Ontario-based company could perform the call centre translation services.

The Ministry formally responded to the Committee in March 2011. A number of the issues raised by the Committee were similar to our observations. Where the Committee's recommendations are similar to ours, this follow-up includes the recent actions reported by the Ministry to address the concerns raised by both the Committee and our 2009 audit.

Status of Actions Taken on Recommendations

The service provider as well as the Ministry provided us with information in spring 2011 on the current status of our recommendations. According to this information, significant progress has been made in implementing about half of the recommendations we made in our *2009 Annual Report*, while some progress has been made on the rest, which will require more time to be fully addressed. The current status of the actions taken by the service provider and the Ministry are summarized following each recommendation.

ACCESS TO TELETRIAGE SERVICES

Recommendation 1

In order to provide more accessible teletriage health advice and information, the Ministry should:
- *consider the continued need for a separate Telephone Health Advisory Service (THAS) or options for increasing the level of awareness and acceptance of teletriage services, especially among individuals eligible to use THAS and among those demographic groups, such as seniors, that underutilize the services; and*
- *explore the use of an easily remembered phone number, such as "811" (which is used or being planned for in several other large provinces), for both Telehealth Ontario and THAS.*

Status

At the time of our follow-up, the Ministry indicated that it has a contractual obligation with physicians to provide THAS and that any changes would be discussed in upcoming negotiations with the Ontario Medical Association. The Ministry also noted that it completed a survey in March 2010 that provided the Ministry with information on the level of Ontarians' awareness of teletriage health services. Commencing in November 2010, and partly in response to the survey information, the Ministry conducted a campaign meant to educate Ontarians regarding health-care choices, including Telehealth Ontario. The Ministry further indicated that significantly more calls were received by the service provider during December 2010 and January 2011, including significantly more calls to THAS. The

Ministry also noted that although the number of calls increased, the caller demographic groups remained similar to other months.

As part of a 2010 jurisdictional scan of teletriage health services in five other Canadian jurisdictions, the Ministry included questions to help it explore the use of an easily remembered phone number, such as “811.” The Ministry found that provinces that implemented an “811” number subsequently experienced increases of up to 15% in the volume of calls made to their teletriage health services. At the time of our follow-up, the Ministry indicated that an “811” number could be implemented in Ontario only if any increased call volumes could be handled by the service provider with little to no increase in total funding. In this regard, the Ministry noted that the service provider has implemented a couple of initiatives to handle more calls without increasing the resources used to do so. As yet, however, no decision has been made on whether or not to introduce “811” in Ontario.

CALL MANAGEMENT

Recommendation 2

To help ensure that all callers’ questions are answered within a reasonable time frame, the Ministry should:

- *ask the service provider to instruct its nurses to redirect information requests for phone numbers and addresses of community services to non-nursing staff;*
- *review alternative ways to promote timely physician responses to pages for Telephone Health Advisory Service callers, such as financial penalties when on-call physicians do not respond when paged or financial incentives for those physicians who consistently exceed standards; and*
- *require the service provider to measure the wait time for callers from the time the call was initially received for both the live and call-back queues.*

As well, to ensure that caller information remains confidential:

- *the service provider should sign agreements with its vendors that handle confidential caller information, such as those providing its translation and off-site storage services, to maintain appropriate physical and electronic security, in accordance with its contract with the Ministry; and*
- *the Ministry should ensure that periodic vulnerability and penetration testing is completed at the service provider to identify and correct any security weaknesses.*

Status

The Ministry indicated that, effective March 2011, the role of the service provider’s non-clinical staff was expanded to answer calls requesting information about community services, rather than having nurses answer these calls. The service provider further clarified that although the non-clinical staff now respond to callers requesting information on local services, nurses still respond to callers requesting health information or requiring symptom assessment.

The Ministry sent two bulletins to physicians in fall 2010 regarding after-hours requirements, which highlighted the physician’s responsibilities for responding to pages from the Telephone Health Advisory Service. Further, the Ministry indicated that it now receives and reviews monthly reporting from the service provider regarding how many pages, for each group of primary-care physicians, are not being answered within 30 minutes, and how many are not answered at all. However, at the time of our follow-up, the Ministry noted that financial penalties could not be imposed for pages not returned within 30 minutes, because its agreements with the physicians do not include time limits for answering pages. Potential changes to the existing agreements would have to be negotiated with the Ontario Medical Association.

At the time of our follow-up, the Ministry indicated that, because of technology limitations, the service provider was unable to measure wait times for callers from the time a call is initially received.

However, the Ministry now receives reports on and monitors the wait times experienced by callers who remain on the phone in the live queue, as well as wait times for callers to receive a call back from a nurse.

With respect to maintaining appropriate physical and electronic security for confidential caller information, the service provider indicated that it signed agreements with its vendors in early 2010 that included requirements related to the *Personal Health Information Protection Act*, in accordance with its contract with the Ministry.

The Ministry noted that a Threat Risk Assessment for teletriage health services was completed in 2008, and that penetration testing was completed in March 2011. The Ministry, in conjunction with the service provider, reviewed the results of the penetration testing and determined that, while there were no urgent security issues, the items noted would be followed up.

ADVICE TO CALLERS

Recommendation 3

To better ensure that callers to teletriage services receive and follow the most appropriate advice to address their health concerns, the service provider should:

- *hire nurses who have at least three years of nursing experience, including at least one year of acute-care or clinical experience, in accordance with its proposal to secure the contract to provide teletriage services and its internal policies;*
- *ensure that nurses complete their ongoing training in accordance with policies; and*
- *require nurses to document the reason for providing advice that does not follow a clinical guideline or protocol.*

As well, to better determine the impact of the advice provided to callers, the Ministry, in conjunction with the service provider, should develop a process (such as obtaining Ontario health card numbers and following up on a sample of the callers' subsequent actions) for periodically assessing the extent to which callers follow the nurses' advice.

Status

At the time of our follow-up, the Ministry indicated that it had discussed the qualifications of newly hired nurses with the service provider, and as a result, the service provider had committed to hiring only nurses with at least three years of experience, including at least one year of acute-care or clinical experience. The service provider noted that all nurses hired since March 2010 had these qualifications at the time of hire.

The Ministry noted that the service provider has established a new quality assurance department, which has implemented nurse training and coaching schedules. The service provider further commented that the revised ongoing training requirements for nurses commenced January 1, 2010, and that attendance is tracked. Information on compliance with the training requirements is reported on a monthly basis to the service provider's quality assurance department and on a quarterly basis to the Medical Liaison Committee, of which the Ministry is a member.

The Ministry stated that the service provider has adjusted its call management process such that nurses are now required to document, before completing a call, the reason for providing advice that deviates from clinical protocols.

At the time of our follow-up, the Ministry indicated that it was continuing to review the feasibility of obtaining Ontario health card numbers for the purpose of tracking whether callers followed the advice provided by the teletriage health service's nurses. The Ministry expected to have a decision by fall 2011. The Information and Privacy Commissioner advised the Ministry that obtaining Ontario health card numbers is acceptable from a privacy perspective. However, the Ministry indicated that it remained concerned that collecting Ontario health card numbers could cause wait times for callers as well as costs to increase because the average length of calls could increase due to

the time it takes callers to find their health card. As an alternative, the Ministry is considering a project to determine the extent to which callers to the Telephone Health Advisory Service (THAS) follow the advice they receive, because calls to THAS are automatically matched to Ontario health card numbers through the callers' physicians. The Ministry also indicated that it would be conducting an external evaluation of the teletriage health services to address whether the services provide appropriate health advice to Ontarians and are useful. This evaluation was expected to commence in fall 2011 and be completed by summer 2012.

QUALITY ASSURANCE

Recommendation 4

To better ensure the quality of teletriage services and identify areas for improvement:

- *the service provider should have independent reviewers conduct an established number of random audits on calls received at different times of the day and on different days of the month, including weekends and holidays;*
- *the service provider should periodically analyze the overall issues noted in call audits and complaints by call centre and by nurse to determine whether there are any systemic issues or trends that warrant follow-up; and*
- *the Ministry should conduct periodic independent satisfaction surveys of individuals impacted by teletriage services, including callers, physicians, and emergency department staff.*

The Ministry should request the Information and Privacy Commissioner's input on whether calls to the service provider can be taped for periodic review to determine the appropriateness of advice provided by teletriage nurses. If calls are not taped for periodic review, the Ministry should seek another way to obtain independent assurance on the appropriateness of advice provided by teletriage nurses (for example, through the use of mystery callers).

Status

At the time of our follow-up, the service provider indicated that it established its new quality assurance department in August 2010 and implemented updated quality monitoring processes in September 2010. Quality analysts, who do not have a direct reporting relationship with the nurses they review, monitor a random sample of calls each month. These samples comprise calls received at various times of the day and on various days of the month, including weekends and holidays. The service provider's revised policy requires that each quality analyst review at least eight calls a day, so that a minimum of two calls per nurse are monitored each month.

The service provider stated that issues identified as a result of call audits and complaints are reviewed at each call centre monthly. With respect to call audits, the service provider indicated that it was developing a process for analyzing trends by call centre and nurse, which it planned to implement by fall 2011. With respect to complaints, the service provider noted that it tracks data by nature of complaint, because detailed data are not readily available that would allow analysis of complaints by call centre or by nurse. The service provider uses this information to identify systemic complaints. The service provider noted that in 2009, it introduced additional training initiatives to address systemic issues that had been identified.

The Ministry noted that the previously mentioned evaluation of the teletriage health services will include satisfaction surveys for teletriage stakeholders, including callers, physicians, and emergency department staff.

The Ministry stated that the Information and Privacy Commissioner had advised that recording calls for the purpose of quality assurance would be acceptable as long as the callers were told in advance and could request not to be recorded. As a result, the service provider is now recording calls, with selected calls being reviewed by its quality assurance team to determine whether appropriate advice is being provided by teletriage nurses. As

well, the Ministry indicated that it is arranging an internal audit, anticipated to start in winter 2012, which will review among other things the service provider's adherence to its standards and processes for call recording and quality assurance.

PAYMENTS FOR TELETRIAGE SERVICES

Recommendation 5

To ensure that the amount paid for teletriage services is reasonable in comparison to other jurisdictions and in accordance with the Ministry's contract with the service provider, the Ministry should:

- *obtain information on the delivery of teletriage services in other provinces to determine whether there are areas where Ontario's teletriage services could be delivered more economically; and*
- *confirm that payments made to the Ontario Pharmacists' Association's Medication Information Service are reasonable, based on the actual number of calls that the Telehealth Ontario service provider reports having referred to the Medication Information Service.*

Status

The Ministry's previously mentioned 2010 jurisdictional scan of teletriage health services included a request for information regarding the cost per call of the services. According to the Ministry, it received only high-level information on costs in other Canadian jurisdictions, and these costs varied based on the different standards and types of services offered in these jurisdictions. Therefore, to help ensure that Ontario's teletriage health services are as cost-effective as possible, the Ministry obtained a proposal from the service provider to modify the current call management process with a goal of creating efficiencies. According to the Ministry, one resulting change, effective March 2011, was to expand the role of the service provider's non-clinical staff to include answering calls requesting information about community services. This change enables nurses, who previously handled these information requests, to be available for additional health-care–related calls. Further, the Ministry noted that in conjunction with the service provider, and with input from the College of Nurses of Ontario (which governs both registered nurses and registered practical nurses), it is exploring the possibility of having registered practical nurses (RPNs), rather than registered nurses, answer certain types of calls to the teletriage health services. The service provider indicated that the use of non-clinical staff, as well as the possible use of RPNs, where appropriate, could reduce the cost per call of teletriage health services in Ontario. The cost per call has risen to more than $43, about a 12% increase since the 2008/09 fiscal year. As well, the Ministry noted that its planned evaluation of the teletriage health services may also help in determining ways in which calls could be managed more efficiently.

With respect to ensuring that payments made to the Ontario Pharmacists' Association's Medication Information Service are based on the actual number of calls it handles, the Ministry stated that the Association and the service provider now meet monthly to reconcile call volumes. The Ministry indicated that this approach has resolved the concern we raised during our 2009 audit.

EFFECTIVENESS OF TELETRIAGE SERVICES

Recommendation 6

To better ensure that teletriage services are meeting their objectives, the Ministry, in conjunction with the service provider, should expand the performance standards to include indicators on callers who wait in the live queue (including how long they wait and how many hang up before speaking to a nurse) and on the quality of the nurses' advice.

As well, because it has been almost five years since the effectiveness of the teletriage services in meeting their established objectives has been assessed, the Ministry should consider conducting a formal evaluation. One area to consider including in the evaluation is an assessment of whether using a teletriage service improves callers' health-related decision-making.

Status

At the time of our follow-up, the Ministry indicated that in April 2010 it began receiving monthly reports from the service provider on wait times for callers in the live queue. More specifically, these reports indicate how long callers wait in the live queue until one of the following three events occurs: a nurse answers the call; the caller leaves a message asking to be called back; or the caller hangs up. The Ministry also indicated that in April 2011 it began receiving monthly reports from the service provider on the results of its call audits, which reflect the quality of the nurses' advice to callers.

The Ministry noted that the previously mentioned evaluation of the teletriage health services will review whether the services are meeting their intended objectives, including whether the program is improving consumer health education and callers' health-related decision-making. It will also identify ways to better meet those objectives.