Chapter 2
Section 2.02

Ornge Air Ambulance and Related Services

Follow-Up on March 2012 Special Report

Background

Under the Ambulance Act (Act), the Minister of Health and Long-Term Care is required to ensure the “existence throughout Ontario of a balanced and integrated system of ambulance services and communication services used in dispatching ambulances.” In addition, the “Minister has the duty and the power to fund and ensure the provision of air ambulance services.” In 2005, the Ministry of Health and Long-Term Care (Ministry) signed a performance agreement with Ornge, a not-for-profit corporation, to become responsible for all air ambulance operations. Through contractual agreements with the Ministry, Ornge was charged with providing Ontarians with both air ambulance services and critical-care land ambulance services, consisting of transferring critically ill patients between health care facilities.

Ornge and its associated companies currently employ more than 600 people, including paramedics, pilots and aviation specialists. Ornge owns and operates a fleet of aircraft and land ambulances stationed at 12 bases across Ontario. It also contracts with independent service providers throughout the province to provide air transportation services to patients and operates a dedicated paediatric transport vehicle out of the Greater Toronto Area.

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In the 2015/16 fiscal year, Ornge received $172 million in Ministry funding and was responsible for more than 18,000 patient-related transports, including patients, medical teams and organs for transplant. More than 90% of these were “inter-facility” transfers of patients between health-care facilities. In our 2012 Special Report, we found that the Ministry's accountability agreement with Ornge had hindered its ability to obtain the information it needed to exercise adequate oversight. Examples of areas where the Ministry had not received adequate information to ensure proper oversight and which would have warranted follow-up included:

- The Ministry did not periodically obtain information on the number of patients being transferred or assess the reasonableness of the cost of the services being provided on a per-patient basis.
- Ornge management, with approval of its board, created a network of for-profit and not-for-profit subsidiaries and other companies with which Ornge entered into complex financial arrangements to deliver air ambulance services.
- Ornge’s corporate head office was purchased for $15 million in 2011 using funds borrowed through a bond issue, and Ornge subsequently entered into a complex arrangement with some of the other entities it created to sell the building and lease it back to itself at an above-market rate so that it could secure $24 million in financing. This transaction enabled Ornge to extract approximately $9 million by entering into a mortgage bond—based on the value of the property—with a third-party financial services company.
- There was a lack of transparency surrounding the compensation of many senior management staff and board members.
- Ornge’s dispatch system did not automatically record the times of key events in the dispatch and patient transfer process, such as the time a call is received.

- The Ministry received limited information on whether requests for patient pick-up and transfer were being responded to in a timely and appropriate manner or whether patients received the appropriate level of care during transport.

As a result of our 2012 audit, a number of significant changes have been made to strengthen the Ministry's oversight processes of Ornge, simplify Ornge's corporate structure, and refocus the organization on its core mandate of providing Ontarians with air and land ambulance transport. These changes include the establishment of a new Ornge board of directors; replacement of Ornge’s Chief Executive Officer and other senior management; revisions to the Ministry’s performance agreement with Ornge that increased the Ministry’s oversight authority by, for example, increasing the Ministry’s audit and inspection powers, and requiring Ministry approval of key strategic and operating decisions before Ornge undertakes them; and increasing Ornge’s reporting obligations to keep the Ministry well informed of Ornge’s activities.

Standing Committee on Public Accounts

The Standing Committee on Public Accounts (Committee) held hearings on this audit in 2012, 2013 and 2014. In June 2013, the Committee tabled an interim report in the Legislature describing issues and observations identified during the 2012 hearings and in October 2014 a second report was tabled, which provided an overview of the many subject areas touched upon throughout the hearings in 2013 and 2014. The Committee’s 2014 report identified more than 60 areas of concern about Ornge’s operations and the Ministry’s oversight, but did not issue any formal recommendations. For a summary of the Committee’s concerns and our assessment of whether they have been addressed, see Chapter 3, Section 3.05 in this
Volume 2 of our Annual Report. The Committee’s report concluded that the matters identified in our 2012 report could be attributed primarily to the absence of due diligence and oversight on the part of the Ministry in applying a robust accountability framework; the lack of transparency and accountability on the part of Ornge’s management and board of directors, compounded by systemic operational issues; and shortcomings in Ornge’s first performance agreement.

Status of Actions Taken on Recommendations

Since our 2012 audit, the Ministry has revised Ornge’s performance agreement to better establish its oversight expectations, increase Ministry powers consistent with government agency agreements, and provide for more frequent reporting to enable better oversight. The Ministry has established new performance measures, such as a 15-minute target from the time of pilot acceptance of a call to the time air traffic control clearance is requested (for emergency and urgent calls) for all Ornge aircraft. The Ministry has also revised existing performance measures to increase the timeliness with which Ornge must take corrective action. For example, when Ornge has not ensured that medical staff are qualified to provide patient care they must cease using their services and establish a plan to rectify the situation within seven days (formerly it was thirty days). The Ministry has also increased Ornge’s reporting obligations. Ornge is now required to provide better information on both its financial and operational performance. For example, the performance agreement requires Ornge to report regularly to the Ministry on call volumes, number of requests for service, percentage of requests serviced, reasons why calls were not serviced, and number of patients transported.

Ornge has taken steps to streamline and simplify its organizational structure by reducing the number of total entities from nineteen to seven, with further plans for amalgamation on-going. In addition, Ornge has implemented a new computer-aided dispatch system that provides it with real-time information on the position of its air and land ambulances. This gives Ornge the ability to track and record all aircraft flight distances automatically via satellite and calculate patient distance travelled for both patient and non-patient legs of transport. It also allows for better tracking of the reason for and use of medical escorts, who may accompany patients when Ornge cannot provide the level of care required. Ornge has also investigated the reasons that a significant number of calls are cancelled after take-off. It is in the process of reducing these occurrences by working with municipal emergency medical services and central ambulance communication centres, which are responsible for directing the movement of provincial land ambulances and emergency response vehicles within set geographic areas, to more clearly define the criteria for requesting air ambulance services. According to Ornge, this process should further decrease the number of cancelled calls within these set geographic areas.

However, the Ministry has made little progress in assessing the total demand for critical-care land ambulance services, determining the optimal number of critical-care land ambulances that Ornge requires and determining the cost of different models for providing critical-care land ambulance services in Ontario. The Ministry also indicated that it would not be implementing our recommendation of expanding the service agreement’s performance requirements to measure response times from the time a call is initially received to when Ornge arrives on site, and to when the patient reaches his or her destination.

The status of actions taken on each of our recommendations is described in the following sections.
Ornge's Performance Agreement With The Ministry

Recommendation 1
To ensure that the amount paid for air ambulance and related services is reasonable for the level of service provided, the Ministry of Health and Long-Term Care should:

- consider renegotiating Ornge’s performance agreement to provide it with direct access to affiliated organizations with which Ornge has directly or indirectly entered into contracts, or develop an alternative mechanism to ensure that the public’s interest in Ontario’s air ambulance service is being protected;

Status: Fully implemented.

Details
The Ministry of Health and Long-Term Care (Ministry) signed a revised performance agreement with Ornge on March 19, 2012, and a further amended agreement on August 13, 2015. Significant revisions were made to the agreement to address concerns raised in our 2012 Special Report, including explicitly outlining actions that require Ministry approval: purchasing or leasing real property (land or buildings); borrowing money or incurring debt outside of routine business transactions; selling, leasing, mortgaging or disposing of assets; and entering into agreements with affiliated companies. The performance agreement allows the Ministry to perform unannounced inspections of Ornge regarding its obligations under the agreement and the use of Ministry funding. Ornge is also obligated under the agreement to provide over 50 reports to the Ministry at various intervals throughout the year covering aspects of its operations, finances and business activities.

In July 2012, the Ministry also established an air ambulance oversight unit to directly oversee Ornge’s compliance with the revised performance agreement. The Ministry is currently undertaking a review of the current governance model regarding how it oversees Ornge and conducting risk assessments to ensure that ongoing oversight of Ornge is appropriate. One thing it is looking at, for example, is whether the current, rigorous oversight model is necessary or whether some of the levels of approval can be discontinued. A joint Ministry-Ornge risk assessment working group was established in May 2016 to facilitate this process.

To address concerns over corporate restructuring, a key change to the revised performance agreement requires Ornge to obtain Ministry approval prior to altering its corporate structure. Whereas previous Ornge leadership created nineteen for-profit and not-for-profit entities, the new leadership team and volunteer board of directors (which assumed control in January 2012) have worked to streamline Ornge’s corporate structure, which now consists of seven entities. Entities such as J Smarts (part of Ornge’s charitable foundation) have been dissolved, and Ornge, with the consent of the Ministry, has further amalgamated various subsidiaries within its control. For example, Ornge Corporate Services Inc., Ornge Global Real Estate Inc. and Ornge Real Estate Inc. became a single entity in October 2016. Certain for-profit entities with which Ornge is no longer affiliated, such as Ornge Global Holdings LP, Ornge Global GP Inc. and Ornge Global Solutions Inc., went bankrupt in 2012, because of money owed to Ornge Global Real Estate Inc. and other private-sector companies. The Ministry has decided to let these entities shut down in due course as the appropriate tax bodies take action when they do not remit their required annual tax returns. Under Ornge’s current structure, it receives funding from the Ministry and may only direct it to entities that deliver core air ambulance and related services, such as Ornge Global Air Inc., which employs Ornge’s fixed wing aviation employees. Each of the Ornge-controlled entities is also consolidated in Ornge’s financial statements, which are provided to the Ministry. This minimizes the risk of funds being directed outside of the organization.

To further protect the public’s interest in air ambulance services, changes have been made to the Ambulance Act to legally strengthen the Ministry’s
oversight, similar to its powers over public hospitals. For example, amendments effective July 1, 2015, give the government authority to appoint special investigators or a supervisor when it is in the public interest to do so; appoint members to Ornge’s board of directors; issue binding ministerial directives; prescribe terms of the performance agreement in regulations; and provide whistleblower protection for staff members.

The revised performance agreement also requires Ornge to comply with the Broader Public Sector Executive Compensation Act, 2014; the Broader Public Sector Accountability Act, 2010; and the Broader Public Sector Expenses Directive issued by the Management Board of Cabinet, which requires Ornge to establish expense reimbursement rules applicable to board members, employees, consultants and contractors engaged by the organization, and post them publicly on its website.

- **determine whether the amount it pays Ornge is reasonable by, for example, obtaining and evaluating information on the cost and delivery of air ambulance and related services compared to previous years and to costs incurred by other operators in Ontario and other jurisdictions;**

  **Status: Fully implemented.**

  **Details**

  In February 2013, the Ministry completed a literature review and inter-jurisdictional scan of air ambulance services and produced a comparative summary document. The Ministry found that none of the other jurisdictions it looked at were comparable to Ontario in terms of the range of services provided or type of geography that is serviced by Ornge. The Ministry also found that comparable program-cost information for air ambulance services in other jurisdictions was not readily available to the public, and therefore a reliable cost comparison was not feasible. The Ministry informed us that it did not contact other jurisdictions that provide air ambulance services because Ornge provides a more diverse range of such services than any other jurisdiction, and therefore comparisons could not readily be made. As per the terms of the requirements of the revised performance agreement, the Ministry instituted a zero-based budget methodology for the 2013/14 fiscal year, which has been in place since. The annual zero-based budget (which requires that all expenses are justified for each period instead of providing justification only for changes from a previous period) that Ornge presents to the Ministry outlines its budgeted expenses in individual areas such as air ambulance, base hospitals and organ recovery, and provides justification for all expenses by function for each funding year. The Ministry receives quarterly financial reports and holds meetings with Ornge every other month to discuss its financial position. The Ministry is thereby able to oversee actual spending compared to what is forecast. In addition, the Ministry completes an annual performance and trend analysis that provides a year-over-year cost comparison of the air ambulance program.

- **establish, in consultation with Ornge, additional measurable performance indicators for air and land ambulance services, and obtain more frequent and informative reports on the extent to which these performance expectations are being met.**

  **Status: Fully implemented.**

  **Details**

  The revised performance agreement increased Ornge’s mandatory reporting requirements. The previous agreement required annual reporting of performance indicators, an operating budget, financial statements and quarterly expense reports. The revised performance agreement still requires those reports but has also increased Ornge’s reporting obligations to include a minimum of 52 reports to be provided to the Ministry throughout the course of the year. The mandatory reports are grouped into categories of operations; finances; business, labour, legal; and stakeholders. Most reports in the
operations category are required monthly including 13 reports providing the Ministry with information on call volumes, number of requests for service, percentage of requests serviced, reasons why calls were not serviced, number of patients transported, appropriate level of care provided, response times, aircraft availability, average cost of services per patient and the percentage of calls requiring medical escorts. The financial category contains ten reports, most of which are provided annually to the Ministry, including an operating budget, operational plan, in-year expenses and annual expenses.

In addition, new performance indicators have also been introduced, requiring Ornge to comply with time targets, such as requesting air traffic control clearance within 15 minutes (if already fuelled) or 25 minutes (if not already fuelled) of a pilot’s acceptance of the call for all dedicated aircraft emergency and urgent calls. The revised performance agreement further explicitly states that Ornge’s success or failure in meeting these performance indicators is a factor in establishing its annual funding. The Ministry also receives a daily update from Ornge providing a summary of call volumes, including reasons for calls not serviced and service delays.

**Land Ambulance Services**

**Recommendation 2**

*Given that Ornge has been transporting critically ill patients between health-care facilities for more than three years, the Ministry of Health and Long-Term Care should conduct a formal program evaluation, including:*

- assessing the current total demand for critical-care land ambulance transports in Ontario and whether the program is meeting the needs of the facilities that patients are being transferred between;

**Status: Little or no progress.**

**Details**

In March 2013, the Ministry hired a consulting firm to complete a program review evaluating the Critical Care Land Ambulance (CCLA) program’s ability to address our 2012 Special Report recommendations and whether it was achieving Ornge’s intended program outcomes of providing coordinated, fast and safe transport of critically ill patients; relieving pressure on land ambulance services; reducing the need for hospital escort staff for critical-care patient transfers; and reducing reliance on air transportation. The final report was provided to the Ministry in August 2013. It concluded the CCLA program has filled an essential need for critical care inter-facility land transports; the CCLA program provided safe transport for both patients and paramedics conducting the transports but there were opportunities to further enhance patient and staff safety; the program was sufficiently resourced to take on greater transport volumes; and the program has saved hospitals $3.2 million since inception in medical-escort costs for CCLA transports. The consultant was unable to definitively conclude on the current total demand for transports due to a lack of data necessary to categorize whether patients requiring critical care were more appropriately transported by land or air. As a result, the consultant’s report was only able to state that potential demand was between 16,000 to 31,000 transports annually.

In September 2013, a group of representatives from the Ministry and Ornge, as well as external health partners including the Ontario Hospital Association and Local Health Integration Networks (LHINs), came together to address the integration of inter-facility medical transportation across Ontario as part of the Enhancing Emergency Services in Ontario initiative. They concluded work in February 2014 with the Ministry recognizing a need for further integration amongst all health-care delivery partners to better serve patients and improve the quality of patient care while controlling costs. As a result, the Ministry is undertaking a multi-year strategic reform of emergency health
care services, called “Enhancing Emergency Services in Ontario 2.0,” to improve and sustain the quality of coordinated care across the patient’s journey. The Ministry advised us that determinations about the future state of the CCLA program might be considered as this work progresses. The Ministry is considering whether to assess CCLA demand as part of this new initiative, which is to commence in the next several years.

- *since the number of transfers has been significantly less than expected, determining the optimal number of land ambulances Ornge requires;*
  
  **Status:** Little or no progress.

**Details**
The August 2013 consultant’s report on CCLA services estimated the time each ambulance spent on calls and other required activities, such as the return trip to base, and multiplied this by the number of transports to determine the total “time on task.” It compared this with the total vehicle availability at each base and determined that each vehicle spent less than a third of its time on required activities. The consultant found that each base therefore required only one vehicle, and recommended that each base also have one backup vehicle. The consultant’s report on CCLA services concluded that, “considering the current number of bases, the current complement of eight vehicles is assessed to be the minimal number of ambulances required to perform current volumes and support operations safely.” However, the report did not assess whether CCLA services could be administered through a different service model throughout the province, which is information that would be necessary to determine the optimal number of ambulances needed.

- *determining the capacity for municipal land ambulances—including those of Toronto Emergency Medical Services, which currently responds to most calls—to transport these patients instead of Ornge doing so; and*
  
  **Status:** Little or no progress.

**Details**
The August 2013 consultant’s report concluded, based on discussions with four municipalities, that there was limited capacity at the municipal level, except in Toronto and Ottawa, to conduct CCLA transports given that not all municipalities had critical care paramedics on staff and did not have the mandate and/or funding to perform CCLA transports. It further noted that while Ottawa had the critical care paramedic resources available, it did not have the mandate or the funding to assume those types of transports. The Ministry has not otherwise assessed the capacity of land ambulance services in the province to provide critical care transports directly.

- *comparing the costs of different service options to help determine whether patients can be safely transported more cost effectively than under the current model.*
  
  **Status:** Little or no progress.

**Details**
The August 2013 consultant’s report included a high-level analysis that examined the feasibility of four different models for optimizing the efficiency of critically ill patient transport in Ontario. The pros and cons of each model were assessed, including a qualitative discussion on cost impacts. The report put forth the following models: 1) all CCLA services assumed by Ornge; 2) centralized management/dispatch/medical oversight (centralized either at Ornge or another entity); 3) hospital-based teams and local emergency medical services dedicated to critical-care transport, dispatched centrally by Ornge or another entity; and 4) CCLA emergency medical services managed and delivered by municipalities. The report recommended that the models should be further explored before determining a course of action.
**Dispatch Of Ambulances**

**Recommendation 3**
*To help ensure that air ambulance and related services meets patients’ needs cost-effectively, Ornge should:*

- ensure that its new dispatch system reliably tracks flight distances and cost data so that the most appropriate aircraft can be efficiently routed to pick up and deliver patients requiring transport;  
  **Status: Fully implemented.**

**Details**
On June 1, 2015, Ornge implemented a new computer-aided dispatch system for its air ambulances and critical care land ambulances. The new dispatch system provides Ornge with the real-time current position of its aircraft; time information on engine start, take-off and landing; course and altitude information; real-time current position of Ornge’s land ambulances; and estimated arrival times at facilities based on real-time traffic conditions. The dispatch system uses a flight-planning platform to track all aircraft flight distances based on origin and destination information inputted into the system by Ornge staff once a transport has been accepted. During transport, the system records aircraft position via satellite tracking. Upon call completion all tracking data is automatically transferred into the dispatch system, which calculates the distance the patient travelled and the distance travelled for each leg of the journey, and segregates information for both patient and non-patient legs of the journey.

For non-urgent and scheduled transfers, which are typically performed by standing agreement carriers, cost is always to be considered. Ornge uses its Long-Term Planning (LTP) optimization tool, which generates the most cost-effective routes for all next-day non-urgent patient transfers based on the negotiated rates for standing agreement carriers that have been programmed into the LTP tool. Ornge monitors overall flight costs through a monthly financial report on flight hours, fuel costs and other costs, such as landing fees. This monthly report is reviewed and analyzed by Ornge’s finance department and senior management to ensure costs are in line with expectations.

Ornge informed us that, in accordance with its policies, cost is not used as a basis for selecting an aircraft for on-scene calls and emergency transfers within its dispatch system. For example, for transfers involving threats to life or limb or imminent risk of deterioration if an immediate transfer is not conducted, the fastest, most appropriate ambulance is selected without consideration of costs. Ornge uses a number of tools to improve the consistency of its dispatch decision-making process, including an algorithm to address ambulance selection and a “search closest ambulance” feature that ranks ambulances by time and distance parameters. In October 2016, Ornge introduced a new requirement that its dispatch staff use this tool for urgent and emergency transfers. For urgent transfers, that is patients with conditions that could become serious enough to require an emergency intervention, Ornge’s transport medicine physicians can exercise judgment on whether a less costly flight can be used as an alternative. Ornge’s policies explicitly state that if two or more ambulances are available and meet the patient’s needs and would take the same time to provide care, Ornge staff should assign the most cost-efficient ambulance.

- work with the Ministry of Health and Long-Term Care (Ministry) to electronically link its dispatch system to the land ambulance dispatch systems run by the Ministry and municipalities;  
  **Status: In the process of being implemented by March 2018.**

**Details**
Preliminary integration efforts are underway between Ornge and the Ministry to integrate Ornge’s dispatch system with the 22 central ambulance communications centres (CACCs) that are responsible for directing the movement of all provincial
land ambulances and emergency response vehicles within given geographic areas. The Ministry has drafted a technical specifications document for this project. Ornge is part of the joint project team on systems development and implementation activities. A project kick-off meeting was held in July 2016 with members of both the Ministry and Ornge to outline the scope, timelines and governance structure of the project. The Ministry expects that initial deployment will take place at one CACC by March 2017, with future deployment at the remaining CACCs to be completed by March 2018.

- track and analyze how often hospital staff must accompany a patient because appropriately trained Ornge paramedics are not available, and determine if there are any systemic issues, such as not enough paramedics being available at a particular base, that need to be addressed; and

  Status: In the process of being implemented by March 2018.

Details
At the time of our 2012 audit, Ornge did not consistently have sufficient staff to provide medical escorts at the required level of care. Ornge addressed this in 2014 by both partnering with Cambrian College to provide an advanced-care paramedic training program and by providing internal training to upgrade the qualifications of their existing paramedic staff. Through this renewed focus on paramedic training, nine paramedics in 2014 and 16 paramedics in 2015 progressed from primary-care to advanced-care paramedic (flight) certification and 13 paramedics in 2014 and six in 2015 progressed from advanced-care paramedic (flight) to critical-care paramedic certification. This was an improvement over 2013, when only five paramedics obtained upgraded certifications.

With implementation of its new dispatch system in June 2015, Ornge is able to track the number of transports for which a hospital medical escort was required because it could not provide an escort at the required level of care. Data for the period from January 1, 2016 to March 31, 2016, indicated that less than 1% of serviced calls required a hospital medical escort due to Ornge’s inability to provide the required level of care.

However, the full implementation of this recommendation does not indicate that Ornge was always able to provide the required level of care for all calls, and in some cases medical escorts were required.

- review the reasons why a significant number of flights are cancelled after takeoff and take action to reduce such occurrences.

  Status: In the process of being implemented by March 2018.

Details
High rates of cancelled calls most commonly result from requests for an on-scene helicopter, and are variable across central ambulance communication centres (CACCs) and municipal emergency medical services. On a monthly basis, Ornge’s finance team and executive management review trends of reasons for calls not serviced along with comparative year figures. These reports highlight that the majority of calls not serviced are cancelled because of weather conditions or cancelled by local emergency medical services. To help reduce the frequency of cancelled calls, Ornge consulted with stakeholders throughout 2014 and 2015, including land ambulance emergency medical services and CACCs, to raise awareness about appropriate air ambulance requests. For example, Ornge indicated the CACCs were sometimes requesting air ambulances even when it was clear that land ambulance services would arrive first. In these consultations Ornge introduced a geographic boundary guideline to help determine whether an air ambulance should be requested or not. Specifically, boundaries were to be based on a 30-minute drive under normal driving conditions around each lead trauma hospital for specific emergency medical services near Ornge’s hospital bases in Ottawa, Sudbury, Thunder Bay, London, Hamilton and Toronto.
Requests for ambulance service within those geographic boundaries would generally not require an air response because a land ambulance could transport the patient faster. However, Ornge noted that CACCs would still be permitted to exercise judgment and could still request air response for any on-scene call. Ornge advised us that it expects that these boundaries will be used as references tools to help reduce the rate of calls not serviced within these geographic boundaries. Although adoption and implementation of these boundaries is at the discretion of the emergency medical services and CACCs, as of September 2016, 12 CACCs or emergency medical services had communicated the boundaries to their staffs. Ornge had not yet evaluated whether the guideline had resulted in fewer incidents of cancelled calls, but it planned to do so by the end of March 2018.

To assist in adequately overseeing Ornge’s ambulance operations, the Ministry should require that Ornge periodically report the number of cancelled and declined calls, categorized by the main reasons.

Status: Fully implemented.

Details
Since March 2012, the revised performance agreement requires Ornge to report call volumes to the Ministry on a monthly basis, including the number of requests for service, the percentage of requests serviced and reasons why calls were not serviced. Results for the month ending March 31, 2016 indicated that 30% of the 2,090 total requests received were cancelled. Of those cancelled, 20% were due to the patient being transported by local land ambulance services; 15% due to weather; and the remainder due to more than 15 other reasons, including transports requested in error.

Response Times

Recommendation 4
To enable air ambulance response times to be assessed against performance standards and for reasonableness:

- Ornge should ensure that all key times in the call-handling process—such as the time the call request is received, the time the call was accepted or declined, and the time the ambulance was airborne—are recorded and that any trends and significant variances from expectations are investigated; and

Status: Fully implemented.

Details
With the implementation of Ornge’s new computer-aided dispatch system on June 1, 2015, key times are recorded in the call-handling process, including request for service; patient information is complete; weather check complete; call accepted or declined; departure from base; arrival at landing site; and arrival at patient destination.

Ornge’s internal reporting on response times includes the following:

- An annual performance report to Ornge’s Operations Committee that includes response-time performance for air and land transfers. For example, Ornge must advise callers within 10 minutes of a request for service whether it is able to dispatch an aircraft for scene calls.

- A quarterly report that includes information on whether Ornge has met its response-time targets for air transfers. For example, the time from when Ornge is originally contacted to when the aircraft departs from base must be less than 16.5 minutes for scene calls.

- Daily reporting on calls via the “One Number to Call” initiative to the Ornge’s Operations Control Centre (through which CritiCall Ontario, on behalf of the referring hospitals, coordinates inter-facility transport by Ornge of patients whose life or limb is threatened). For example, the time from when Ornge
receives the referral to when the patient arrives at their destination; and

- Daily reporting on dispatch response time from Ornge’s Operations Control Centre. For example, the number of instances that Ornge advises callers, within 20 minutes of a request for a high-priority (acute-care) transfer, whether it can dispatch an aircraft.

In December 2015, Ornge’s Corporate Quality, Risk and Safety Management Steering Committee struck a multi-disciplinary committee aimed at continuing to improve internal monitoring of response time trends and variances. The “Triage and Dispatch Review Action Group” reviews dispatch decision-making for specific types of calls, including cases where a patient died before Ornge arrived on scene or at a sending facility for inter-facility transports. Cases are presented to the committee through open discussion and follow-up actions are documented along with operational recommendations to the Corporate Quality, Risk and Safety Management Steering Committee, with the intent to improve dispatch decision-making.

In March 2016, the Corporate Quality, Risk and Safety Management Steering Committee also created the “Strategic Analysis of Data Review Action Group,” which systematically reviews trends and variances in response times and other performance indicators to make operational recommendations to the Corporate Quality, Risk and Safety Management Steering Committee. The group’s first meeting was held in July 2016.

- the Ministry of Health and Long-Term Care, in conjunction with Ornge, should expand the service agreement’s performance requirements to include indicators on response times for the key stages of a patient transport (that is, from the time a call is initially received, to when Ornge is on site, and to when the patient reaches his or her destination).  

**Status: Will not be implemented.**

**Details**
The revised performance agreement does not include any measures regarding the time period from when a call is initially received to when Ornge arrives on site, or to when the patient reaches their destination. The Ministry indicated that it did not include these measures in the agreement because of feedback it received from its experts in air ambulance transport. It convened these experts in January and February of 2012 to identify performance indicators used in the air ambulance transport system. The Ministry indicated that, because Ornge’s services cover a wide geographic area, the time required to arrive on scene or at a facility depends heavily on distances travelled; therefore, measuring response times based on the time a call is received to the time an Ornge aircraft is deployed more appropriately measures whether Ornge is transporting patients in a timely manner. Consequently, the Ministry has not systematically assessed whether other jurisdictions use “arrival at destination” as a performance indicator, but will raise this issue at the next meeting of a Canadian air ambulance discussion group consisting of provincial representatives from across the country. This group meets quarterly. We continue to believe that this performance measure provides a clear picture of services that would be understandable by air ambulance users.

**Oversight of Operational Activities**

**Recommendation 5**

To better ensure the safe provision of air ambulance services:

- the Ministry of Health and Long-Term Care (Ministry) should periodically conduct unannounced service reviews of air ambulance service providers, including Ornge and its dispatch communications centre;  

**Status: Fully implemented.**
Details
The revised performance agreement allows the Ministry to enter Ornge’s premises unannounced at any time to review Ornge’s provision of services and expenditure of funds. Beginning in 2012, unannounced inspections focusing on the paramedic side of Ornge’s air and land operations became part of the service certification process, which is required of all ambulance operators (a formal certification process is required every three years to confirm an operator meets legislated certification standards).

From April 1, 2015, to June 15, 2016, the Ministry performed 12 unannounced inspections. The Ministry indicated that it has noted improvements at both Ornge and the standing agreement carriers since it started these inspections.

- Ornge should use its recently improved complaint tracking system to determine whether there are any systemic issues that warrant follow-up; and

  Status: Fully implemented.

Details
Ornge implemented a new complaint tracking system in February 2011 and indicated that currently all complaints are captured for logging and investigation purposes, and complaint investigations are centrally overseen. Specifically, Ornge re-established its Professional Standards and Compliance Unit in 2012 to report directly to the Director of Paramedic Operations instead of to numerous organizational areas as it did previously. Since 2012, this unit leads complaint investigations and corrective action planning, which includes conducting discussions of results of investigations with relevant departments.

In 2015, Ornge created a classification tool to be used at the conclusion of each complaint investigation to help make its trending analysis more consistent. Ornge’s Professional Standards and Compliance unit also reviews trends on a monthly and quarterly basis, with trending data categorized into groups including patient/family behaviour; documentation; medication; medical devices; and patient accidents while in Ornge care. In addition, patient complaint data is reported quarterly to Ornge’s Quality of Care Committee and to the Ministry. Stakeholder complaints (for example, from a health-care provider) and any related investigations are reported to Ornge’s Operations Committee, which reviews the information and asks questions. Corrective action is taken by the Professional Standards and Compliance Unit and any other applicable business units where required.

- Ornge should continue to review its quality assessment evaluation measures and update them as necessary to ensure they reflect key elements of good patient care.

  Status: Fully implemented.

Details
Ornge performs quality assessment evaluations twice per year. This is done by examining a sample of medical charts to determine its performance on a number of clinical indicators. From 2012 to 2013, Ornge conducted a review of its quality assessment evaluation measures through its participation in an international consensus group. The group used evidence-based practices to develop clinical performance indicators and benchmarking tools for critical-care patient transports by air and land.

Based on this work, changes were made in April 2015 to the clinical indicators Ornge uses. The updated indicators were first used to evaluate medical charts in the six-month period between April and September 2015, and the results were presented to Ornge’s Medical Advisory Committee in December 2015. The Medical Advisory Committee in turn presented its review of Ornge’s revised clinical metrics and related performance to its Quality of Care Committee in March 2016.

- To improve its monitoring of air ambulance services, the Ministry should clarify with Ornge which complaints, incidents and resulting investigations Ornge must forward to the Ministry.

  Status: Fully implemented.
Details
Ornge’s patient advocate is an Ornge staff member who assists patients and their caregivers by providing information on the air ambulance system, responds to their questions and concerns regarding air ambulance transport, and provides information about and assistance with Ornge’s complaints and patient-relations processes. The revised performance agreement requires Ornge to immediately submit to the Ministry any complaint received by its patient advocate. Ornge must also submit to the Ministry information on any occurrence of an incident as described in the Ambulance Documentation Standards, which municipal land ambulances are also required to adhere to. For example, the Ambulance Documentation Standards require ambulance operators to report an unusual response or service delay that may have negatively impacted the provision of patient care, or any circumstance that resulted in harm to a patient. Ornge provides this notification to the Ministry and the Ministry then determines, in consultation with Ornge, whether the Ministry, Ornge or both together will conduct an investigation into the complaint or incident. Ornge is required to submit to the Ministry for review any investigations Ornge is responsible for conducting.