Background

As with land ambulance services, the provision of air ambulance services in Ontario is governed by the *Ambulance Act*, under which 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.” The air ambulance program was established in 1977 to serve remote areas, primarily in Northern Ontario, that are inaccessible to land ambulances or that land ambulances would take too long to reach. At the time of our 2005 audit, the Ministry contracted with private operators to provide aircraft, pilots, paramedics, and bases to house the aircraft when not in use. Ministry expenditures for the air ambulance program totalled approximately $112 million in the 2006/07 fiscal year ($93 million in 2004/05).

In our 2005 Annual Report, we found that the Ministry needed to take action to ensure that its expectations for the delivery of air ambulance services, including patient care, would be met in a cost-effective manner. In particular, we noted the following:

- Although the Ministry had implemented a recommendation from our last audit to establish dispatch reaction-time standards, it was not monitoring actual dispatch reaction times against the standard. In addition, the Ministry monitored the reaction times of only certain air ambulance operators, and for these operators, contractual reaction times were met only between 38% and 67% of the time.

- In about 70% of the Ministry’s operator service reviews that we examined, the Ministry certified air ambulance operators even though either the operator had clearly not met the certification criteria or it was not certain whether the operator had met the criteria. In addition, we saw little evidence of follow-up to ensure that identified deficiencies had been corrected.

- The percentage of helicopter calls being cancelled after the helicopter had already been dispatched had been increasing, from about 27% in the 2003/04 fiscal year to 33% in 2004/05. The Ministry had not formally analyzed the reasons for the high level of cancellations to determine whether changes to the dispatch process were required. Aside from the costs of cancelled flights, dispatched helicopters are generally unavailable to respond to another call, and therefore reaction times for subsequent patients may be increased.

- One key recommendation arising from a 2003 accreditation review of the air ambulance
program, that a clear line of authority be established to better ensure consistent quality in the delivery of air ambulance services, had not yet been satisfactorily implemented.

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

Current Status of Recommendations

Responsibility for co-ordinating all aspects of Ontario’s air ambulance system was transferred to Ornge (formerly the Ontario Air Ambulance Services Co.), a non-profit body accountable to the government through a performance agreement. The transfer was completed in January 2006, with Ornge assuming responsibility for all air ambulance operations, including the contracting of flight service providers, medical oversight of all air paramedics, air dispatch, and authorization of air and land ambulance transfers. Notwithstanding this transfer of responsibility, the Ministry was able to provide us with information on the current status of our recommendations as of late spring 2007. According to this information, some progress has been made in addressing all of the recommendations in our 2005 Annual Report, although it will take several years for most to be implemented. The current status of the action taken on each of our recommendations is as follows.

REACTION TIMES

Recommendation
To help ensure that the air ambulance dispatch centre and operators respond to calls in a timely manner, the Ministry should more closely monitor actual reaction times against ministry standards and contractual requirements and develop a strategy to improve both dispatch and operator reaction times, especially where these reaction times are being significantly exceeded.

Current Status
The Ministry indicated that, in May 2007, Ornge deployed in its communication centre a new integrated computer program, OPTIMAS, which measures both dispatcher and operator reaction times. Once more data are collected, the reaction times are to be analyzed and the Ministry is to receive a copy of this analysis. At the time of our follow-up, what actions will be taken by Ornge when reaction times exceed reaction-time standards and contractual requirements had not yet been shared with the Ministry.

DECISION TO DISPATCH

Recommendation
To better ensure that air ambulances are used only when necessary, the Ministry should require that the reasons for air ambulance use and for the selection of particular aircraft be sufficiently documented. The Ministry should also periodically review this information to identify the need for any corrective action.

Current Status
According to the Ministry, OPTIMAS, the newly deployed computer program, is to include fields for the flight decision, as well as a comment field to enable the dispatcher to document the rationale for the decision to utilize a particular aircraft. The Ministry indicated that these enhancements are to be implemented during 2007 and are expected to improve the ability to review and assess the use of a particular aircraft and dispatch decisions.
**CANCELLED CALLS**

**Recommendation**

To better ensure that air ambulances are available to meet patient needs and are used in a cost-effective manner, the Ministry should:

- periodically review the level of cancelled calls;
- where the level of cancelled calls is high, analyze the reasons for cancellations; and
- take action to minimize unnecessary dispatch of aircraft.

**Current Status**

The Ministry informed us that, at the time of our follow-up, Ornge had a manual process in place for tracking cancelled calls, and was reviewing these calls on a monthly basis by type. However, this manual process is to be replaced during 2007 by the OPTIMAS computer program, which is to track the reason for cancelled calls, using a predetermined list of standard reasons. The Ministry expects that standard reasons for cancellation will further support regular reporting and analysis of cancelled calls.

As well, the Ministry indicated that, to help reduce cancelled calls resulting from patients being transported by land ambulance, eight communities have implemented a process of readying an air ambulance but not dispatching it until more detailed information has been received from the land ambulance dispatch centre, as part of a pre-alert system.

**OPERATOR SERVICE REVIEWS**

**Recommendation**

To help ensure proper patient care by air ambulance operators, the Ministry should:

- ensure that deficiencies identified in service reviews are corrected on a timely basis; and
- determine the circumstances under which it will apply sanctions or consider revoking an operator’s certification.

**Current Status**

The Ministry indicated that, as of the time of our follow-up, deficiencies noted in the service reviews conducted by the Ministry were typically being corrected on a timely basis, with the complete process from initial review to verification that deficiencies were corrected taking four to eight months, depending on whether a second follow-up visit was required. Service reviews were to be conducted at least once every three years.

The Ministry also indicated that, at the time of our follow-up, it was in ongoing discussions with Ornge regarding the use of sanctions and the revocation of operators’ certificates. The Ministry noted that sanctions and the revocation of an operator’s certificate should be considered when all other reasonable efforts to resolve deficiencies have failed, or there is an immediate threat to patient or public safety.

**LOCATION OF AIR BASES AND AIRCRAFT**

**Recommendation**

To better ensure that air ambulances are available to meet patient needs, the Ministry should formally assess the number and type of aircraft needed, the required hours of operational availability, and the optimal locations for aircraft bases and landing areas, including helipads.

**Current Status**

The Ministry informed us that it anticipates that, by 2009, Ornge will have formally assessed the number and type of aircraft needed, and the rationale for existing base locations and aircraft allocation, as well as utilization trends within the system. The results of this analysis are to be used to design an optimal configuration for Ontario’s air transport ambulance system.

The Ministry also indicated that, at the time of our follow-up, a helipad expansion program was under way, with new locations being selected on the basis of a number of factors, including distance.
from hospitals and number of trauma patients, and that sites that were no longer required were being decommissioned.

**LINES OF AUTHORITY**

**Recommendation**

*To enable the effective co-ordination and delivery of air ambulance services, the Ministry should ensure that the lines of authority are clarified among air ambulance dispatch, base hospital, and operators.*

**Current Status**

The Ministry advised us that the lines of authority were clarified with the creation of Ornge, which is responsible for co-ordinating all aspects of Ontario’s air ambulance system, including dispatch, base hospital, and operators.

**ACQUISITION OF OPERATOR SERVICES**

**Recommendation**

*To better ensure that air ambulance helicopter services are delivered economically, the Ministry should evaluate the risks posed by its significant dependence on one preferred service provider and develop a long-term strategy to encourage a more competitive environment.*

**Current Status**

The Ministry indicated that, at the time of our follow-up, Ornge was evaluating the contract models with service providers, and is expected to complete by summer 2008 a long-term strategy to help mitigate the risks of its significant dependence on one provider. Ornge is bound by the terms and conditions of existing contracts until they expire in fall 2008.

**PATIENT BILLINGS**

**Recommendation**

*To help ensure that the costs of air ambulance services are recovered in those circumstances where the Ministry has determined recovery is appropriate, the Ministry should consider billing actual costs similar to other Ontario health program billing practices.*

**Current Status**

The Ministry indicated that, in conjunction with Ornge, a proposed method has been developed for determining the average actual cost to be billed when an uninsured person is transported by an air ambulance. This method, if approved by the Minister of Health and Long-Term Care, is expected to be implemented in 2008.

**INTEGRATED AIR INFORMATION SYSTEM PROJECT**

**Recommendation**

*To more efficiently meet patient needs with respect to ambulance services, the Ministry should ensure more timely and economical integration of air ambulance information systems, as well as balanced communication between air and land dispatch systems.*

**Current Status**

According to the Ministry, the newly deployed computer program, OPTIMAS, is the first step in integrating the air ambulance information systems. As well, the Ministry informed us that Ornge plans to develop a dispatch architecture that is to enhance communications between air and land ambulances. It is expected to be implemented in 2009.