# Quality Improvement Plan 2013/2014

Ornge is pleased to submit this 2013/14 Quality Improvement Plan (QIP).

This is Ornge's second annual QIP, as part of our agreement with the Ministry of Health and Long-Term Care; it lays out the organization's priorities for quality improvement.

Our mission is to provide high quality air ambulance services to Ontario patients.

Our commitment, shared by more than 600 Ornge employees, is to put patients first and to be there, wherever we are needed, for the people of Ontario.

Our mandate is to provide year-round, 24/7 coverage to calls we receive. Each call we receive in our Operations Control Centre requesting service is answered and the most appropriate action is determined between the communications officer and requester.

In the average month, about 70% of the patients we are called about are transported by one of our aircraft, critical care land ambulances and Standing Agreement carriers. Of these calls:

• Approximately 93% are inter-facility transfers and 7% are scene calls.

Of the 30% of calls that are not serviced:

- Less than 1 % are due to mechanical issues;
- 50% are cancelled by the originator or Emergency Medical Services (EMS) land crews;
- 30% are cancelled because of changes to the patient's condition, duplicate bookings or other changes;
- 14% are cancelled due to weather;
- 4% are because Ornge vehicles are out on other calls; and
- 1.5% are due to staffing issues.

We strive to respond to all calls that need service, as soon as possible – which is why we will continue to improve response times, resource availability, staffing levels and mechanical issues.

## About Ornge

Ornge provides high quality air ambulance service and critical care land transport services to patients who are ill or injured anywhere in the province. Ornge serves more than 13 million people living in a landmass that covers more than one million square kilometres, which is the size of France, Spain and the Netherlands combined. More than 60% of Ornge transports occur north of Sudbury.

Our employees include paramedics, paediatric transport paramedics, pilots, aircraft maintenance engineers, physicians, communications officers, researchers and corporate support staff, and we have the largest air ambulance fleet in Canada. Every year, we perform approximately 18,000 transports – more than twice as many as any other province.

The vast majority – 93% – of Ornge transports are interfacility transports (including 2% organ transports). 7% of our calls are scene calls (i.e., landing at the scene of a medical emergency). Unlike emergency medical service providers, Ornge is not accessible to the public through 911. Our services can be requested only by hospitals, nursing stations or other healthcare facilities for interfacility transfers, and by local land ambulance dispatch centres for emergency scene calls.

We would not be a successful air ambulance service without the support of our Standing Agreement (SA) carriers who provide services for our non-urgent patients. These SA carriers are on contract to Ornge and provide approximately 40% of total patient transports each year, most of which occurs in the north.

## **Quality Improvement Plan: Contents**

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# Section I: Principles of Ornge' Quality Improvement Plan

The purpose of this Quality Improvement Plan is to provide a framework for Ornge initiatives that are designed to improve patient experience and care, clinical practice, operational and aviation service delivery to meet the defined transport needs of Ontario residents within a broader healthcare system.

In keeping with the requirements of the amended Performance Agreement, the plan is prepared annually and is influenced by the results of surveys and data relating to the patient relations process. It contains performance improvement targets and the justification for those targets, and information concerning the manner in and extent to which Ornge' executive pay for performance compensation is linked to achievement of those targets.

The amended Performance Agreement also requires Ornge to make the Quality Improvement Plan available to the public, including posting it on its public website.

#### **Dimensions of Quality**

With this Quality Improvement Plan, Ornge has adopted a similar approach to Ontario's hospitals, by aligning strategic and operational priorities with the "dimensions of quality" framework developed by Health Quality Ontario.

Health Quality Ontario's "Dimensions of Quality"
Accessible People should be able to receive the right care at the right time in right setting by the right healthcare provider
Effective People should receive care that works and that is based on the best available scientific information
Efficient The health system should continually look for ways to reduce waste, including waste of supplies, equipment, time ideas and information
Safe People should not be harmed by an accident or mistakes when they receive care
Patient-centered Healthcare providers should offer services in a way that is sensitive to an individual's need and preferences
<b>Equitable</b> People should receive the same quality of care regardless of who they are and where they live
Appropriately resourced The health system should have enough qualified providers, funding, information, equipment, supplies and facilities to look after people's health needs
Integrated All parts of the health system should be organized, connected and work with one another to provide high quality care
Focused on population health The health system should work to prevent sickness and improve the health of the people of Ontario

At Ornge, our number one priority is to provide the highest quality of care for patients. That's why feedback from patients drives the categories in Our Quality Improvement Plan.

### **Patient Satisfaction Survey**

Ornge actively surveys patients on a quarterly basis through a third party, National Research Corporation (NRC) Picker, who also provide Ontario hospitals with their patient satisfaction report cards. These surveys ensure patients have every opportunity to ask questions, raise concerns and learn more about the transport process. Ornge uses the results to identify areas of excellence as well as those requiring improvement.

Strengths identified by patient surveys include being treated with dignity and respect, professional behaviour and confidence and trust in the transport team. Opportunities for improvement include organization of the transport process and the transport team discussing anxieties and fears.

## **Patient Declaration of Values**

Ornge's Patient Declaration of Values provide the foundation for Ornge's service and help guide Ornge in strategic and operational decision-making

Descriptive comments from our most recent surveys were used as the basis for our Patient Declaration of Values. Patients were then asked to rate the importance of each of the proposed components. Ornge' Quality Improvement Plan focuses on these priorities within the Patient Declaration of Values:

- Experience is well organized and seamless (97% extremely important and important)
- Safe from harm (98% extremely important and important)
- Urgency prioritized according to need (97% extremely important and important)
- Excellence in medical care (98% extremely important and important)
- Highly skilled staff (98% extremely important and important)

#### **Patient Declaration of Values**

As a patient being transported by Ornge, it is important to me that:

- I am safe from harm in the care of competent, highly skilled staff who provide excellence in my medical care
- The urgency of my transport will be prioritized according to need
- State-of-the-art technology and equipment supports my care
- Staff respond to my anxieties, fears, concerns and questions in my time of need and in an unfamiliar environment
- The experience is well organized and seamless
- The environment is clean
- My family are involved in care and receive timely communication regarding expectations and responsibilities
- My comfort needs are met
- I receive compassionate, kind and considerate care by professionals who respect my privacy, religious and cultural background
- I receive information on the plan and any changes during transport

# Section II: 2012/2013 Report

Ornge' 2012/13 Quality Improvement Plan focused on the following five categories:

- Excellence in Medical Care
- Highly Skilled Staff
- Safe From Harm
- Organization of Transport
- Urgency According to Need

Year-end performance was as follows:

### **Excellence in Medical Care**

Excellence in medical care had two indicators: clinical and environmental.

Clinical care is measured twice yearly and was rated at 90% and 91% in 2012/13, which met our target. These metrics are based upon standards determined by evidence-based practice, or in the absence of evidence, metrics are based on industry standard<sup>1</sup>. Patient populations include: cardiac, neurological, trauma, obstetrics, pediatrics, sepsis (blood infection), intubation and mechanical ventilation. In 2012, Ornge led an initiative with international colleagues to confirm an international consensus on critical care transport performance indicators, as a first step to facilitate the ability to benchmark or compare with other aeromedical organizations. This work will be incorporated into our clinical metrics in the future.

Ornge was also focused on improvement to the interior of its AgustaWestland AW139 helicopters. A cross functional and multidisciplinary task force was in place throughout 2012/13 to focus on improvements that would address clinical transport concerns identified from a variety of sources. By February 2013, an interim interior was designed and installed in 100% of the AW139 helicopters.

### **Highly Skilled Staff**

There were two areas of focus regarding staff training in 2012/13: the Ornge Operations Control Centre (OCC) staff and the frontline paramedics.

The OCC transitioned from a generalist model, where each Communication Officer assumed responsibility for all components of call taking and planning, to a specialist model, where four categories of staff were put into place: Medical, Flight Planning, Flight Following and Patient Transfer Authorization Centre. All policies were updated and 90% have been implemented this past year. Training programs were completed for 100% of staff in one of these four specialty

<sup>&</sup>lt;sup>1</sup> Industry standard is based on best practices in hospital and transportation sector.

### areas.

The second area of focus was paramedic education. Historically, training has taken extended periods of time to complete requirements for training and education. The 2012/13 Quality Improvement Plan focused on classes for Critical Care Paramedics (CCP) and Advanced Care Paramedics (ACP) with a goal to be completed by April 30, 2013. A re-design of programs, increased controls in monitoring and scheduling and increased coordination with the operations department were put into place in 2012/13. Barriers to completion included specialty clinical availability, scheduling, and student experience availability. Paramedics from those classes are tracking to graduate in 2013/14.

Annual Continuing Medical Education is also an essential component of ensuring full staffing at the highest level of care, so 100% completion was the goal for last year. Ornge achieved 99% completion in March and in April all outstanding requirements were met for 100% of paramedics.

### Safe from Harm

The indicators in this category were aviation safety and employee safety. The aviation indicator was targeted for a 10% reduction from 0.19 to 0.17/100 flight hours, as per the Civil Aviation Daily Occurrence Reporting System (CADORS). In 2012/13, Ornge exceeded the target and achieved 0.08/100 flight hours. The analysis and follow up of the CADORS reports focused on safety related trends and actions within Ornge control.

With respect to employee safety, the indicator was compared with the targeted provincial Workplace Safety and Insurance Board (WSIB) average for Lost Time and No Lost Time (LT/NLT)<sup>2</sup> injuries and illness, which was 3.86. At calendar year end, Ornge' LT/NLT was 6.7, which is higher than the provincial average; however transport has a higher risk of employee injury by nature of the work done.

Of lost time injuries, ergonomic injuries represent the highest volume of claims for Ornge. Improvement initiatives put into place in 2012-13 include:

Primary Prevention:

- Principles of Safe Lifting program development for medical and aviation staff.
- Workplace hazard assessment (Aviation).
- Wellness programming including health measure screening (e.g. blood pressure and blood glucose), dietary and physical activity information.

<sup>&</sup>lt;sup>2</sup> The WSIB average represents the average injuries over total number of covered workers in the province, called the LT/NLT rate. For Ornge the LT/NLT rate represents injuries over total number of employees.

Secondary Prevention:

- Modified work, suitably augmented to address identified restrictions, is provided to all injured/ill employees once they are deemed ready to return to work.
- Role of Joint Health and Safety Committee (provincial) members formalized in incident investigation procedures.

**Tertiary Prevention:** 

 Close monitoring of all Long Term Disability (LTD) claims<sup>3</sup>, and those workers approaching LTD with insurance carrier, to ensure the workers have the required resources available for their management of the long term disability.

# **Organization of Transport**

This quality improvement indicator focused on coordinated readiness of human and aviation resources at 75%. The air ambulance standards in Ontario are such that in order to fly, we must have two pilots at all times: one captain and one first officer. This was measured quarterly, which indicated two pilots were available an average of 95.5% of the time. As well, there has been aircraft availability average of 97.7% of the time, which is an improvement from March 2012. Actions put into place to accomplish these improvements include recruitment to optimal staffing levels and coordinated scheduling for paramedic and aviation resources.

Paramedic staffing is more complex as different levels of care are required based upon patient needs. Ornge employs three types of paramedics – critical care paramedics (CCP), advanced care paramedics (ACP) and primary care paramedics (PCP). Different combinations of paramedic crews are able to deliver different levels of care. Overall, 95% of all our flights were covered with two paramedics. 90% of calls were at either CCP or ACP level between August 2012 and March 2013. Variables that affected staffing included a shortage of qualified ACP and CCP paramedics, timely training, and challenges backfilling paramedics.

It is important to note that even when the designated level of care is not achieved, patients are still transported and receive appropriate levels of care. For example, hospitals may assign a clinician to accompany the patient on the aircraft.

Our focus is to increase the number of available CCPs and ACPs in order to meet any potential mission profile with greater frequency. In 2012-13 we achieved 63.9% CCP level of care (or the designated level of care at the base).

<sup>&</sup>lt;sup>3</sup> At Ornge, LTD is defined as those workers who have reached and exceeded 6 months on Short Term Disability.

## **Urgency According to Need**

Areas of focus were responding to requests for scene calls and responding to hospitals for transfers between facilities. Both were targeted at 100%. Our response to requests for scene calls within 10 minutes has improved from 73% to 90%. Further improvements will be possible with a new Computer Aided Dispatch system scheduled for implementation in 2015 Confirmation with hospitals within 20 minutes when a transfer request is received was improved from an average of 95% of the time to 96 %.

## **Overview of Performance Based Compensation for Executives**

Ornge' Performance Based Compensation Plan is governed by the Board of Directors which determines the total funding available for performance pay each year. Ornge has not issued any performance-based executive compensation to its non-union employees for fiscal year 2012/13.

## Accountability Sign-Off

We have reviewed and approved the Ornge Quality Improvement Plan and attest that it meets the spirit of the Excellent Care for All Act and meet the requirements of the amended Ornge Performance Agreement, March 2012 with the Ministry of Health and Long Term Care. Specifically, the Ornge Quality Improvement Plan:

- Was driven by patient feedback
- Provides annual performance measurement targets
- Is linked with executive performance based compensation
- Was reviewed within the context of operational priorities and planning, as well as Ministry directions

lan W. Delaney Board Chair

Barry McLellan Board Quality of Care Committee Chair

Andrew McCallum President and CEO

#### Ornge Quality Improvement Plan

Section III: Indicators, improvement targets and action underway

#### (April 2013 — March 2014)

Aim		Measure				
Quality Dimension	Objective	Measure/Indicator	Baseline	Current Performance	Target for 2013/2014	Comments/Actions
Patient Expe	rience					
Patient Centred	Improve patient satisfaction	% of respondents who selected a positive score in response to the question: "Overall how would you rate the quality of care you received from Ornge?"	73%	77% Apr – Sept 2012	80%	<ul> <li>Survey results have historically demonstrated high scores, e.g. greater than 94%, when asked about being treated with respect and in a professional manner, as well as having confidence in the transport team. One of the lower indicators "organization of transport" will receive targeted attention for this next year</li> <li>Comprehensive base-specific reports have been shared with Base Managers for local action planning</li> </ul>
Excellence in	Medical Care					
		Clinical Quality Metrics Populations include: cardiac, neurology, obstetrics, paediatrics, sepsis, trauma, intubation, mechanical ventilation	90%	Exceeded the target and in two reviews averaged 92 % and 95 % for the six month periods measured	<u>&gt;</u> 90%	<ul> <li>Review metric results twice annually</li> <li>Improve practices based upon results through education and simulation experiences</li> <li>Leading an international project to determine revised performance indicators based upon evidence, to allow benchmarking comparisons with other critical care transport services</li> </ul>
<b>Highly Skilled</b>	d Staff					
Integrated	Improve coordination of paramedic training and operational requirements	5-Year Educational Strategic Plan in place	0%	87 % complete	100% complete	<ul> <li>Consistent communication with central scheduling</li> <li>Medical Advisory Committee and Clinical Affairs initiating strategic review of medical procedures, delegated medical acts</li> <li>Electronic Learning Management System implementation planned to facilitate creative and efficient options for education, revised models of initial education to meet needs. An Electronic Learning Management system offers greater flexibility for the specific needs of Ornge employees (e.g. employees who work in different parts of the province, employees who work shifts, etc.)</li> </ul>

Aim		Measure				
Quality Dimension	Objective	Measure/Indicator	Baseline	Current Performance	Target for 2013/2014	Comments/Actions
Effective	Improve knowledge of newly introduced policies	% of employee acknowledgement of newly posted policies	100% - Aviation 0% - remaining organization (Pending company- wide system)	100% Aviation 97% Operations Control Centre	Manage to 100%	<ul> <li>Staff safety survey highlighted policies as an area for improvement</li> <li>Aviation has an electronic policy distribution and tracking mechanism in place</li> <li>Organization is implementing similar process</li> <li>Cross Functional Task Force in place.</li> </ul>
Organization	n of Transport					
Accessible	Improve resource availability	% time Ornge has two pilots, two paramedics at the designated base level of care and aircraft available.				Ornge employs three types of paramedics – critical (CCP), advanced (ACP) and primary care paramedics (PCP). Different combinations of paramedic crews are able to deliver different levels of care.
		<ul> <li>(i)2 Pilots</li> <li>(ii)2 Paramedics at designated Base level of care, including off-service hours</li> <li>(iii)Aircraft available</li> </ul>	94% 69% 98%	91% pilot availability 65% paramedic availability at the CCP or base-designated required level of care 95% aircraft availability	75% for 3 resources combined	Overall, only 1.5% of calls were not serviced due to staffing issues and less than 1% was due to mechanical issues, with 87% of calls at the CCP or ACP level. Ornge measures itself to the highest possible standard: where an aircraft is available, with two available pilots, with two paramedics trained to the CCP level. While currently at 60% for all three resources combined, even when the designated level of care is not achieved, patients are still transported and measure appropriate levels of care still
						<ul> <li>transported and receive appropriate levels of care.</li> <li>Our goal, is to increase paramedic staffing and training to reach the target 75% of the time and ultimately to exceed that target in future years.</li> <li>Actions to improve resource availability: <ul> <li>Centralized scheduling in place to coordinate crew resources</li> <li>Aviation workforce plan in place</li> <li>Targeted recruitment and training of paramedics to meet level of care needs in progress</li> <li>Quarterly reviews on Key Performance Indicators</li> <li>Collective Bargaining Agreement negotiations (now completed) resulting in enhanced staffing</li> </ul> </li> </ul>

Aim		Measure				
Quality Dimension	Objective	Measure/Indicator	Baseline	Current Performance	Target for 2013/2014	Comments/Actions
Accessible	Improve service readiness levels	(i)Aircraft swaps – alternate aircraft ready for service when active aircraft goes out of service, e.g. for scheduled or unscheduled maintenance	Rotor Wing (Helicopter ) 0.52 hrs Fixed Wing (Airplane) 1.28 hrs	Rotor Wing - 0.56 hrs Fixed Wing - 1.06 hrs	RW 0.49 FW 1.28	<ul> <li>Ornge is exceeding the target for fixed wing and is making progress on rotor wing swaps (the time to ready an alternate aircraft for service when active aircraft goes out of service, e.g. for scheduled and unscheduled maintenance). The goal for this indicator is to improve time to patient contact.</li> <li>Aviation and Paramedic Operations have instituted reporting to the OCC at the beginning of each shift</li> <li>A process is in place to alert staff of a pending call and to ready the aircraft</li> <li>Process for away-from-base crew management is in place</li> <li>New Crew Responsibility Policy is under development</li> </ul>
Urgency Pric	oritized According t	o Need		I		
Accessible	Improve scene call response times	Time contacted to "wheels up" (when aircraft leaves the ground)	21.8 min	21.6 minutes	Will be set for 2014/15	<ul> <li>A new computer-aided dispatch (CAD) system is planned for 2015.</li> </ul>
Accessible	Improve response times for emergent, urgent and non urgent calls	Emergent calls Time contacted to wheels up Urgent calls Time contacted to wheels up Non Urgent calls Time contacted to wheels up	New metric	<ul> <li>73 % of the time within four hours for emergent and urgent calls combined. (Uncontrollable factors, such as weather included)</li> <li>95 % of the time within 48 hours for non-urgent calls</li> </ul>	Emergent 1 hr 15 minutes/80% of the time Urgent 4 hrs/90% of the time Non Urgent 48 hours 90% of the time	<ul> <li>Target based on targets set by the Royal Flying Doctors Service in Australia</li> <li>Current databases are not integrated to provide accurate dispatch and aviation data. A new computer-aided dispatch (CAD) system is planned for 2015 and will improve the accuracy of measurements.</li> <li>Ornge has identified barriers to response and is addressing these through strategic and operational plans, as well as a readiness initiative</li> </ul>

Aim		Measure				
Quality Dimension	Objective	Measure/Indicator	Baseline	Current Performance	Target for 2013/2014	Comments/Actions
Safe From Ha	arm					
Safe	Improve staff safety	Total number of WSIB Lost Time and No Lost Time injuries and illness/Total number of employees	6.7%	6.2 %	<u>&lt;</u> 6.7%	Target_:≤ WSIB claims experience under previous years actual. This standard indicator helps Ornge to monitor illness and injury prevention and management.
						Action controllable prevention strategies to reduce injuries in the workplace e.g. Tips for controlling stress; fitness membership drive, formalized roles for UNIFOR Base Safety representatives in incident investigations, shared with Base Safety Representatives.
Safe	Improve safety culture	One safety initiative implemented/month	On-going safety initiatives	12 safety initiatives complete	12 new safety initiatives in place	<ul> <li>Align safety initiatives to "Safety Weeks" throughout the year</li> <li>Safety Communication Task Force in place</li> <li>Steering Committee oversight over monthly deliverables (for example, weekly safety communications to staff)</li> <li>Concrete actions to address staff suggestions in safety survey to further enhance a culture of safety</li> </ul>
Financial Hea	T			1		1
Effective	Improve organizational financial health	Percent by which total revenues exceed or fall short of total operating expenses and debt service costs <i>Funding Surplus or (Deficit)</i>	(3.9%)	(1.4%)	(3.5%)	<ul> <li>Improve financial efficiency and move on a path to a balanced budget</li> <li>Quarterly forecasts</li> <li>Minimize discretionary spending where appropriate</li> <li>Implementation of efficiency tools such as computer-aided dispatch system</li> </ul>