

2021/2022 Quality Improvement Plan

Year End Report

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, and operational service delivery to meet the transport needs of Ontario residents within a broader healthcare system.





Quality Improvement Plan

Each year, Ornge prepares and publishes its annual Quality Improvement Plan (QIP) as prescribed by the Performance Agreement with the Ministry of Health. The QIP is a framework for monitoring key aspects and metrics in Ornge's delivery of its critical care service to the patients of Ontario and focusses on clinical practice and operational service delivery.

QIP indicators are chosen each year and reflect organizational priorities, including some identified areas for improvement. The indicators are aligned with Ornge's strategic priorities, and Health Quality Ontario's six quality elements for healthcare organizations. Additionally, our patient and healthcare partner surveys help to inform the QIP.

QIP indicators change from one year to the next so that the organization's areas of focus remain current. Progress is measured on a quarterly basis and reviewed internally with our quality groups and our Board of Directors.

By monitoring QIP results and other key performance indicators, Ornge maintains a steady watch over organizational quality with an overall goal of improving the effectiveness of our service delivery.

Attached are Ornge's 2021/22 Year End Report and our 2022/23 QIP Targets.

September 2022

Ornge Quality Improvement Plan — Final Year End Report - FY 2021/22

A high-quality health system is defined as "a health system that delivers world-leading safe, effective, patient-centred services, efficiently and in a timely fashion, resulting in optimal health status for all communities." This definition includes six elements of quality and forms the basis of Health Quality Ontario's framework for quality improvement.

Objective	Measure/ Indicator	Target 2021/22	Fourth Quarter FY 2022	Trend	Year End Result
				Quality Element: Patient-Centred Care	
Improve patient and stakeholder satisfaction	Timely Acknowledgement of External Complaints and Inquiries: (i) investigation, where necessary, will be completed and assigned for review by Ornge department within 15 business days of receipt (ii) closed within 45 business days of receipt	90% investigated and assigned for review within 15 business days where an investigation is necessary By Q4, 70% closed within 45 days**	92%	Quarterly Trend of Timely Acknowledgement of External Complaints and Inquiries 100.0% 100.0% 100.0% 98.0% 100.0% 100.0% 80% 72.0% 61.0% 60.0% 60% 40% 40.0% 40.0% 29.0% FY20-21 FY20-21 FY20-21 FY20-21 FY21-22 FY21-22 FY21-22 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Investigated (15 days) Closed (45 days) **Revised measure - changed from previous 30 days to now 45 days. This graph represents historical performance over time reflecting new measure at the 45 days	Target achieved and exceeded for (i) investigation, where necessary, will be completed and assigned for review by Ornge department within 15 business days o receipt. We remain below target for closure of investigations. There are some aspects of investigation closure that require external stakeholder involvement and/or front line staff interviews which can delay the process. This indicator has been removed for QIP FY 2023 however will be monitored internally through our Quality, Risk and Safety Management meetings.
Improve patient and stakeholder satisfaction	% patients delayed for transport in whom OCC staff obtain updates every 6h	60% of emergent/urgent patients delayed for interfacility transport OCC staff will obtain updates every 6h.	65%	Quarterly Trend of Patient Updates Acquired 80% 60% 51% 48% 48% 54% 51% 65% 65% 60% FY20-21 FY20-21 FY20-21 FY20-21 FY21-22 FY21-22 FY21-22 FY21-22 Q1 Q2 Q3 Q4	Target achieved and exceeded. This indicator has been removed for QIP FY 2023 but will be monitored through Corporate Performance indicators.







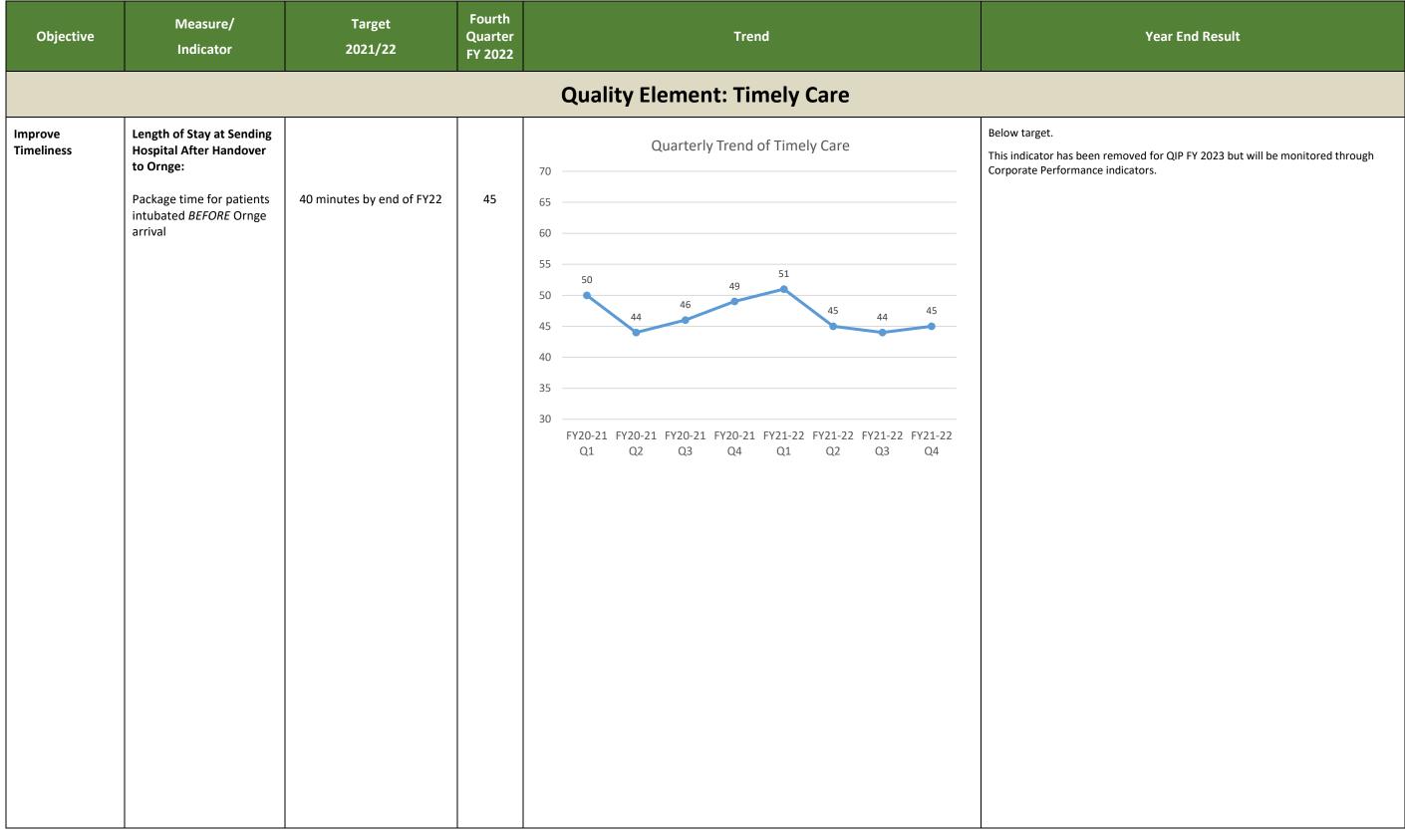
Ornge Quality Improvement Plan – Final Year End Report - FY 2021/22

Objective	Measure/ Indicator	Target 2021/22	Fourth Quarter FY 2022	Trend	Year End Result
Improve Clinical Quality	Definitive Airway Sans Hypotension/Hypoxia on 1st Attempt (DASH-1A) and Peri-intubation vitals (i) % of patients with first pass intubation success that have documented SaO2 and BP within 5 min prior to and after intubation (ii) % of patients with vital signs documented above and SaO2 >90% AND SBP > 90 mmHg prior to intubation that do NOT have a SaO2 < 90% OR a SBP < 90 mmHg post intubation. NEW	Peri-intubation 5 min vital sign documentation rate Baseline: 45.3% Target: 60% Dash 1A achieved for patients with documented vital signs within 5 minutes peri-intubation Baseline: 64% Target: 75%	73.7% 85.7%	Quarterly Trend of DASH 1A Airway and Peri Intubation Vitals 100% 85.7% 80% 62.5% 60% 48.1% 44.0% 48.0% 44.0% 48.0% 49% FY21-22 Q1 FY21-22 Q2 FY21-22 Q3 FY21-22 Q4 Peri 5 min Documentation Rate Peri 5 Target Dash 1A Peri 5 Target	Targets achieved and exceeded but only in Q4. This indicator will continue to be monitored for QIP FY 2023.
Improve Clinical Quality	HCO3 Guided Ventilation Strategy % of ventilated adult and pediatric patients with HCO3 documented on the EPCR	90% of all adult and pediatric patients will have a HCO3 documented. Adult Baseline: 75.7% Target: 90% Paediatric Baseline: 66.7% Target: 90%	78.6% 69.6%	Quarterly Trend of HCO3 Documented on Ventilated Patients 100% 80% 77.7% 78.9% 77.7% 78.9% 77.7% 78.9% 77.7% 78.9% 77.8% 74.3% 74.3% 74.3% 75.6% 69.6% 69.6% 60% FY20-21 FY20-21 FY20-21 FY20-21 FY21-22 FY21-22 FY21-22 FY21-22 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Adult Paediatric Target	Below Target. This indicator has been removed for QIP FY 2023 however will continue to be monitored through clinical metrics (auditing) and reviewed at the Medical Advisory Committee.



Objective	Measure/ Indicator	Target 2021/22	Fourth Quarter FY 2022	Trend	Year End Result
			Q	uality Element: Patient and Staff Safety	
Improve Patient Safety	% of time pre-determined areas are cleaned below the relative light units (RLU) threshold on monthly audits	90% compliance with results equal to or below the RLU reading on monthly checks	91%	Quarterly Trend of RLU Readings 100% 95% 94.0% 91% 92% 91.0% 85% 81% 82% 80% 70% FY20-21 FY20-21 FY20-21 FY20-21 FY21-22 FY21-22 FY21-22 FY21-22 Q1 Q2 Q3 Q4 Q1 Q2 Q3* Q4 *Ottawa Air and CCLA, and London are showing no data for December 2021. Kenora, Thunder Bay, and Peterborough have no data for November 2021.	Target achieved and exceeded. This indicator has been removed for QIP FY 2023 however it is an required organizational practice (ROP) for Accreditation and will continue to be monitored through the Accreditation process.
Improve Staff Safety	Soft Tissue/MSK Injury Rate: # incidents per 100 paramedic and pilot employees resulting in soft tissue and musculoskeletal injuries from loading/unloading/ carrying patient or lifting/pushing/pulling medical equipment	3.5/100 employees	0.65	Quarterly Trend of Soft Tissue/MSK Injury 8 6 4 4.83 4.58 FY 20-21 FY 21-22 O Q1 Q2 Q3 Q4 Breakdown by Group FY20-21 vs FY21-22 Land FW O 0 1 0 2 4 6 8	Target achieved and exceeded. This indicator has been removed for QIP FY 2023 and will be monitored through the Occupational Health & Safety dashboard.







Ornge Quality Improvement Plan – Final Year End Report - FY 2021/22

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Objective	Measure/ Indicator	Target 2021/22	Fourth Quarter FY 2022	Trend	Year End Result	
Objective Improve Efficiency		Target	Fourth Quarter	Trend		
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2022/2023 Quality Improvement Plan

Targets

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, and operational service delivery to meet the transport needs of Ontario residents within a broader healthcare system.



Ornge Quality Improvement Plan — Targets — FY 2022/23

A high-quality health system is defined as "a health system that delivers world-leading safe, effective, patient-centred services, efficiently and in a timely fashion, resulting in optimal health status for all communities." This definition includes six elements of quality and forms the basis of Health Quality Ontario's framework for quality improvement.

Objective	Measure/ Indicator	Target 2022/23	Trend	Target Justification
Improve Clinical Quality	Responsiveness to Mental Health Patients 90 th percentile time from first call received (T0) to arrival at sending facility for Urgent (OTAS 3) transports LHIN 13	90 th Percentile (Minute) PCP LOC Baseline: 1660 Target: 1490 ACP/CCP LOC Baseline: 2434 Target: 2190	Quarterly Trend of Responsiveness to Mental Health LHIN 13 2500 2500 2000 1773 1500 1119 1079	This measure is intended to benchmark our current level of responsiveness to patients with mental health emergencies who require two levels of paramedic certification and scope of practice: Primary Car Paramedics (PCP) and Advanced Care (ACP(f))/Critical Care (CCP(f)) level of care. The rationale for this division is that Ornge has more access to PCP aircraft vs ACP(f)/CCP(f) and that ACP(f)/CCP(f) are often subject to triage. With an organizational focus specifically targeting mental health emergencies in northern communities, we aim to improve our responsiveness and prioritize this vulnerable population from a health equity standpoint. We will measure the 90 th percentile response time calculated by TO (time of first call received from the sending facility) to time to arrive the sending facility for urgent responses (OTAS 3) serviced by PCP and ACP(or CCP(f) within LHIN 13 and 14. The 90 th percentile indicates the time takes Ornge to arrive at the sending facility for 90% of this transport request.
	LHIN 14	PCP LOC Baseline: 1151 Target: 1035 ACP/CCP LOC Baseline: 1465 Target: 1315	FY21-22 FY21-22 FY21-22 FY21-22 FY22-23 FY22-23 FY22-23 FY22-23 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 PCP PCP ACP/CCP ACP/CCP Target CONTRACTOR OF Responsiveness to Mental Health LHIN 14 2500 1988	Our goal for FY23 is to reduce our response times by 10%.
			1756 1500 1248 1000 1051 1000 1051 1000 1051 1000 1051 1000	
			PCP Target ACP/CCP Target ACP/CCP Baseline	



	Measure/	Target	Quanty improvement Fian – Targets – 11 2022/23	
Objective	Indicator	2022/23	Trend	Target Justification
Improve Clinical Quality	Definitive Airway Sans Hypotension/Hypoxia on 1st Attempt (DASH-1A) and Peri-intubation vitals (i) % of patients with first pass intubation success that have documented SaO2 and BP within 5 min prior to and after intubation (ii) % of patients with vital signs documented above and SaO2 >90% AND SBP > 90 mmHg prior to intubation that do NOT have a SaO2 < 90% OR a SBP < 90 mmHg post intubation.	Peri-intubation 5 min vital sign documentation rate Baseline: 45.3% Target: 60% Dash 1A achieved for patients with documented vital signs within 5 minutes peri-intubation Baseline: 64% Target: 75%	Quarterly Trend of DASH 1A Airway and Peri Intubation Vitals 80% 62.5% 60% 47.0% 48.1% 44.4% 44.0% 48.0% 40% FY21-22 FY21-22 FY21-22 FY22-23 FY22-23 FY22-23 FY22-23 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Peri 5 min Documentation Rate Peri 5 Target DASH 1A Target DASH 1A Target DASH 1A Baseline	Ornge has placed considerable focus upon improving our advanced airway success with targeted CME, simulation, protocols, medical directives, and CMAC video laryngoscopes. With this focus we have observed significant improvement in overall intubation success rates to > 90%. Now that we have achieved this success we must continue to refine and improve our airway management strategies. A key goal in airway management is to secure a definitive airway on the first attempt and avoiding new fall in oxygenation (hypoxia) and new negative impacts to blood pressure (hemodynamics). This measure is known as the DASH 1A (definitive airway sans hypoxia/hypotension on first attempt) and is reported by peer critical care transport organizations. Ornge submits data to the Ground Air Medical qUality Transport (GAMUT) collaborative database which enables benchmarking of transport specific quality metrics of which DASH 1A is a key measure. Due to various root causes such as lack of peri-intubation vital sign documentation, our DASH 1A values have been low. The rationale for inclusion is to improve our DASH 1A performance and mitigate root causes limiting accurate reporting. For this measure we assess our compliance with peri-intubation vital sign documentation (defined as 5min before and 5min following intubation) of all first pass success intubations, then of those first pass success intubations with peri-intubation vitals documented (excluding initially unstable patients BP<90mmHg and SAO2<90% and vital signs absent (VSA) patients) we will assess and present our DASH 1A values. Our goal is to improve documentation of VS around intubation to 60%, and improve our first pass intubation without hypoxia or hypotension to 75%.
Improve Clinical Quality NEW	TMP E1 Inter-facility Patients 90 th Percentile Patients Serviced and Transported First Review Needed time to First TMP Status time (based on TMP review status) Excludes: Teams and Scene Requests	Requested By Criticall Baseline: 13 Target: 9.75 minutes Ornge Baseline: 17 Target: 12.75 minutes	Quarterly Trend of TMP E1 Interfacility Patients 25 24 23 22 21 20 (sp 19 18 W) 17 16 (ii) 15 17 18 19 11 10 10 9 8 8 7 6 6 5 FY21-22 Q3 FY21-22 Q4 FY22-23 Q1 FY22-23 Q2 FY22-23 Q4 Criticall Criticall Target Criticall Baseline Ornge Baseline	The time required from when the patient details are complete to when the Transport Medicine Physician (TMP) assigns Level of Care (LOC) and OTAS Acuity contributes to the overall timeliness of response. It is possible that changes to TMP workflow may shorten the time required to dispatch an appropriate asset. In review of baseline data, while the Mean (7min) and Median (5min) times remain quite low, the 90 th percentile values at 17min and 13min may reflect an opportunity to improve. For the FY23 QIP, Ornge will target a 25% reduction in the 90 th percentile time for the TMP to process and assign LOC and OTAS Acuity for E1 transport requests.



Objective	Measure/ Indicator	Target 2022/23	Trend	Target Justification
Improve Efficiency	E1 Responsiveness 90 th percentile time from patient details complete (PDC) to aircraft moving towards sending hospital Exclusions - Weather Delays excluded; Moosonee (793) transports excluded; Negative response times and missing times excluded; Excludes Teams and Organ	Inter-facility Ornge Rotor Wing Baseline: 72 min Target: 60 min Ornge Fixed Wing Baseline: 132 min Target:120 min Scene Ornge Rotor Wing Baseline: 49 min Target: 40 min	Quarterly Trend of E1 Responsiveness - Interfacility 250 200 208 150 121 121 200 74 85 81 50 FY21-22 FY21-22 FY21-22 FY21-22 FY22-23 FY22-	When time is of the essence, when it is literally "Life or Limb", the measure our patients and stakeholders value is how fast can we consistently launch an aircraft to transport the patient to definitive care. In Ontario, we are often challenged with long distances to centres capable of providing specialized care (lead trauma hospitals, dedicated stroke centres capable of percutaneous coronary interventional cardiology sites capable of percutaneous coronary interventions as examples). Simply put, our mission is to save lives, restore health, create capacity and preserve dignity and when minutes matter, we must be responsive. Many variables impact our timeliness of response: asset availability, maintenance, staffing, weather, proximity of the scene to our bases. This measure will focus on how quickly (90 th percentile) we can launch or turn a rotor/fixed wing asset towards a patient with an absolute time sensitive emergency known as an Emergent 1/Life or Limb. This calculation will exclude weather precluding launch and eliminates the data confounder of variable distance to each scene from the based tasked with response. Our goal is to reduce the time to launch an aircraft by 10%.



Objective	Measure/ Indicator	Target 2022/23	Trend	Target Justification
Improve Efficiency	E1 Responsiveness – T-0 to PDC 90 th percentile time from ticket creation to Patient Details Complete (PDC) time stamp	FW Interfacility Baseline: 20.5 minutes Target: 15 minutes	Quarterly Trend of E1 Responsiveness - T-0 - PDC 25 20 15 10 FY22-23 Q1 FY22-23 Q2 FY22-23 Q3 FY22-23 Q4 FW Interfacility Target Baseline	The medical intake is the first step in initiating an Ornge response. Patient information is collected by our agents and reviewed by the Transport Medicine Physician (TMP) for priority and level of care. Once assigned, the OCC can dispatch an appropriate resource. The lengthy process can prove to be a source of frustration for our stakeholders and may delay asset assignment until completion. Our goal is to reduce time on task from a baseline of 20.5 to 15mins. We will measure 90 th percentile calculated by T0 to Patient Details Complete time stamp.
Improve Efficiency	E1 Responsiveness – Weather Check Exclusions - Weather Delays excluded; Moosonee (793) transports excluded; Negative response times and missing times excluded; Excludes Teams and Organ	Fixed Wing Baseline: 37 minutes Target: 33.3 minutes	Quarterly Trend of E1 Responsiveness - Weather Check 50 45 40 35 30 25 20 15 10 FY22-23 Q1 FY22-23 Q2 FY22-23 Q3 FY22-23 Q4	A timely weather check process allows the OCC to efficiently assign appropriate assets and reduce notification times with stakeholders. There is variability in weather check times associated with day of weather phenomena and specific airport weather and runway condition reporting capabilities. The lengthy process can prove to be a source of frustration for our stakeholders and may delay asset assignment until completion. Our goal is to reduce the 90th percentile weather check time by 10% by reducing procedural deviations and inefficiencies in the weather check process, including its recording, tracking, and reporting.



Objective	Measure/ Indicator	Target 2022/23	Trend	Target Justification
Improve Efficiency	E1 Responsiveness – % CCP Level of Care targets	%CCP Level of Care Targets System Overall Baseline: 56% Target: 75% Dedicated Fixed-Wing Baseline: 47% Target: 80% RW South Baseline: 93% Target: 90%	Quarterly Trend of E1 Responsiveness – % CCP Level of Care Targets 100%	As Ornge works toward the goal of single level of care at the CCP level through ambitious recruitment and training efforts, targets should reflect current realities and strategic training plans. An overall target of 75% CCP system-wide reflects the targets established in the performance agreement while also providing a meaningful expansion target to include all bases (versus the current exclusion of Kenora and Moosonee). A higher target value of 80% is set for fixed-wing bases in view of their role in supporting health equity in northern Ontario, especially remote communities. A target of 25% is set for northern rotor wing bases which includes Kenora, Thunder Bay and Moosonee. This represents a reasonable target with CCP training expanding to those bases for this year and Thunder Bay staffing CCP preferentially on fixed wing aircraft.
		RW North (YQK/YQT/YMO) Baseline: 28% Target: 30%	Overall FW RW South RW North - Overall Target FW Target PW South Target RW North Target Overall Baseline FW Baseline RW S Baseline RW N Baseline	