



AN ANALYSIS FOR IMPROVEMENT 2013-2014

ACKNOWLEDGEMENTS

This report is the result of the efforts of Health Quality Ontario (HQO).
For additional information about other resources, contact:
Health Quality Ontario www.hqontario.ca

Individuals may reproduce these materials for their use provided that proper attribution is given to the appropriate source. The recommended citation for this resource guide is: Health Quality Ontario (January 2014). HQO is funded by the Ontario Ministry of Health and Long-Term Care (MOHLTC).

© Queen's Printer for Ontario, 2014

Table of Contents

List of Tables & Figures	4
Executive Summary	5
Quality Improvement and a High-Performing Health System	7
Part 1: The Progress of Quality Improvement in Ontario	9
1.1 Patient-Centred Care	10
1.2 Integration and Continuous Quality Improvement	11
1.3 Quality Improvement and the Efficient Use of Resources	15
1.4 Supporting Quality with Evidence and Standards	17
Part 2: Overview of the 2013/14 Quality Improvement Plans	18
2.1 Aims	18
2.2 Measures	20
2.3 Changes	24
Part 3: Quality Improvement by Indicator	26
Safety: Hospital-acquired <i>Clostridium difficile</i> infection (CDI)	28
Safety: Hand hygiene compliance before patient contact	30
Safety: Medication reconciliation at admission	33
Safety: Surgical safety checklist (SSC)	34
Safety: Falls prevention	35
Safety: Pressure ulcers	38
Safety: Central line-associated bloodstream infection (CLI)	42
Safety: Ventilator-associated pneumonia (VAP)	46
Safety: Five-day in-hospital mortality following surgery	47
Safety: Physical restraints in mental health	49
Effectiveness: Hospital – total margin (OHRS)	51
Effectiveness: Hospital standardized mortality ratio (HSMR)	53
Patient Centred: Patient satisfaction	55
Integrated: 30-day readmission rate to any facility (specific case mix groups)	62
Integrated: Percentage of alternative level of care (ALC) days	67
Access: Ninetieth percentile ED length of stay for admitted patients	67
The 2013/14 QIP Analysis	71
Conclusion	71
Appendix A: Suite of Supports Provided by Health Quality Ontario	73
Appendix B: Technical Report	75

Tables

Table 1: Patient-Centred Care at Hotel Dieu Hospital.....	10
Table 2: Improving Transitions at the Ottawa Hospital	11
Table 3: Number of Hospitals Reporting on Indicators.....	19
Table 4: Hospital-Acquired CDI Rate Per 1,000 Patient Days, Ontario Hospitals, Annual Data, FY 2011/12	21
Table 5: Setting & Justifying Targets	22
Table 6: Mismatched Priorities & Targets	23
Table 7: NYGH & the “Why” Behind Targets	24
Table 8: Provincial Performance & Benchmark Information for Hospital-acquired <i>Clostridium difficile</i> infection (CDI).....	29
Table 9: Successful Change Ideas for the Prevention of Hospital-Acquired CDI	30
Table 10: Provincial Performance & Benchmark Information for Hand Hygiene Compliance	31
Table 11: Successful Change Ideas for Improving Hand Hygiene Compliance Before Patient Contact.....	32
Table 12: Provincial Performance & Benchmark Information for Surgical Safety Checklist	34
Table 13: Provincial Performance & Benchmark Information for Falls Prevention	36
Table 14: Successful Change Ideas for Improving Falls Prevention	37
Table 15: Provincial Performance & Benchmark Information for Pressure Ulcers	38
Table 16: Provincial Performance & Benchmark Information for Central Line-Associated Bloodstream Infection (CLI).....	42
Table 17: Provincial Performance & Benchmark Information for Ventilator Associated Pneumonia (VAP)	46
Table 18: Provincial Performance & Benchmark Information for Five-Day In-Hospital Mortality Following Surgery.....	48
Table 19: Provincial Performance & Benchmark Information for Physical Restraints.....	49
Table 20: Provincial Performance & Benchmark Information for Hospital - Total Margin (OHRs).....	52
Table 21: Successful Change Ideas for Improving HSMR	54
Table 22: Provincial Performance & Benchmark Information for Patient Satisfaction	56
Table 23: Provincial Performance & Benchmark Information for 30-Day Readmission Rate to any Facility (Specific Case Mix Groups)	63
Table 24: Successful Change Ideas for Improving 30-Day Readmission Rate to any Facility (Specific Case Mix Groups).....	64

Table 25: Provincial Performance & Benchmark Information for 90th Percentile ED Length of Stay for Admitted Patients.....	67
Table 26: Successful Change Ideas for Improving Ninetieth Percentile ED Length of Stay for Admitted Patients and Percentage of Alternative Level of Care (ALC)	70

Figures

Figure 1: Integration/Continuity of Care Evidence in the 2013/14 QIPs	13
Figure 2: Hospital-acquired CDI Rate Per 1,000 Patient Days (by Hospital), 2013/14 QIPs	29
Figure 3: Hand Hygiene Compliance Before Patient Contact (by Hospital), 2013/14 QIPs	31
Figure 4: Provincial Performance & Benchmark Information for Surgical Safety Checklist.....	34
Figure 5: Percent of Complex Continuing Care Residents who Fell in the Last 30 Days (by Hospital), 2013/14 QIPs.....	36
Figure 6: Percent of Complex Continuing Care Residents with a New Pressure Ulcer in the Last Three Months (Stage 2 or Higher [by Hospital]), 2013/14 QIPs.....	38
Figure 7: Rate of Central Line Blood Stream Infections (by Hospital), 2013/14 QIPs.....	42
Figure 8: Five-Day In-Hospital Mortality Rate Following Major Surgery (by Hospital), 2013/14 QIPs.....	48
Figure 9: Physical Restraints for Mental Health (by Hospital), 2013/14 QIPs.....	49
Figure 10: Total Margin (by Hospital), 2013/14 QIPs.....	52
Figure 11: HSMR (by Hospital), 2013/14 QIPs	54
Figure 12: Percent of Patients Who Would Definitely Recommend This Hospital to Family and Friends (Inpatients, by Hospital), 2013/14 QIPs	57
Figure 13: Percent of Patients Who Rate the Care They Received as Excellent, Very Good or Good (Inpatients, by Hospital), 2013/14 QIPs.....	58
Figure 14: Percent of Patients Who Would Definitely Recommend This ED to Family and Friends (EDs, by Hospital), 2013/14 QIPs	58
Figure 15: Percent of Patients Who Rate the Care They Received as Excellent, Very Good or Good (EDs, by Hospital), 2013/14 QIPs	59
Figure 16: Readmission Within 30 Days for Selected CMGs to any Facility (by Hospital), 2013/14 QIPs.....	63
Figure 17: Ninetieth Percentile of ED Length of Stay for Admitted Patients (by Hospital), 2013/14 QIPs.....	68
Figure 18: Percent of ALC Days (by Hospital), 2013/14 QIPs.....	69

Executive Summary

In April 2013, Ontario hospitals submitted their Quality Improvement Plans (QIPs) for 2013/14, the third year of provincially mandated QIPs under the *Excellent Care for All Act* (ECFAA), 2010.

Health Quality Ontario (HQO), an arms-length agency of the Ontario government, was also created by ECFAA. HQO works in partnership with Ontario's health system to support a better experience of care, better outcomes for Ontarians and better value for money. HQO's legislated mandate under ECFAA is to monitor and report to the people of Ontario on the quality of their health care system, support continuous quality improvement, and promote health care that is supported by the best available scientific evidence.

HQO is responsible for finding evidence of what works best and translating it into concrete tools and guidelines that providers and institutions from across the health system can put into practice to benefit patients and improve outcomes. Conducting a thorough analysis of hospital QIPs and providing detailed feedback is a key way HQO supports hospitals, assists them in the achievement of their goals, and helps them exceed their improvement targets.

This analysis of the 2013/14 QIPs is divided into three distinct sections:

1) The Progress of Quality Improvement in Ontario

This section addresses the progress Ontario's hospitals have made on the principles of the province's [Excellent Care for All Strategy](#). It assesses the extent to which Ontario's health system delivers patient-centred, evidence-informed, continuously improving care that makes efficient use of health system resources.¹ Significant progress has been made on these principles, yet there is still work to be done if the health system is to deliver excellent care for all Ontarians.

The first principle of the Excellent Care for All Strategy is that care should be organized around the person to support their health. Delivering patient-centred

care entails the involvement of patients in the design and delivery of the care they receive. Soliciting the opinions of patients through surveys is an important step in the delivery of patient-centred care. In fact, some hospitals have successfully gone beyond surveying and have begun collaborating with their patients on the design and delivery of their care.

For care to be truly patient-centred, it must be coordinated. Although many hospitals have taken steps to deliver more patient-centred, evidence-informed care, there is an opportunity for greater integration between sectors, to help ensure that patients move seamlessly from one care setting to another. Ninety-two percent of Ontario's hospitals discussed integration in their QIPs, which indicates their appreciation of its importance to a high-performing health system. However, it was often unclear how hospitals planned to actually improve on integration indicators.

2) Overview of the 2013/14 Quality Improvement Plans

This section discusses the Model for Improvement (which is the basis for the format and structure of QIPs) and addresses the steps hospitals have taken to achieve the principles expressed in the Excellent Care for All Strategy. Specifically, it details hospitals' identification of ambitious aims, effective targets, and innovative methods for improvement. While many hospitals identified ambitious goals in their QIPs and strove to improve, others set targets that were worse than their performance last year or included ideas that have not led to demonstrable improvement in the past.

Identifying, implementing, and sustaining effective ideas for improvement is essential to improving quality of care in Ontario. It is equally important to identify methods for measuring the success of these ideas, which will help hospitals

determine whether or not the changes they make actually lead to improvement. Quality improvement occurs when ambitious goals are linked to effective measurement methodology. Many of the targets that were set in the 2013/14 QIPs were conservative and fewer hospitals selected the core recommended indicators for improvement than in previous years. There was also a lack of detail around how organizations planned to reach their improvement targets over the coming year, which does not allow for a thorough understanding of the quality improvement strategies that are being implemented and does not allow hospitals to learn from the successes of their peers.

3) Quality Improvement by Indicator

This section of the report is an analysis of each of the core indicators included in the 2013/14 QIP submissions, and an examination of the impact hospitals' ideas for improvement have had on these indicators over the past year. Hand hygiene, for example, is one of the primary ways of reducing the risk of hospital acquired infections and is an indicator that was commonly selected by hospitals in their QIPs. Provincially, hand hygiene rates have improved compared to last year. Although this is an achievement, there is room for improvement in other areas. Ontario's performance on preventing patient falls worsened over the last year and the provincial rate is now nearly double the provincial benchmark. Performance on pressure ulcer prevention, restraint use, and readmission rates also did not improve.

Overall, the 2013/14 QIPs highlight the excellent work that is underway in Ontario's hospitals to improve quality of care. The majority of Ontario's hospitals provided descriptions of how their quality improvement work aligned with internal hospital, local health integration network (LHIN), and health system priorities. This is a positive trend, as HQO's examination of QIPs in the past has demonstrated that the most effective plans come from organizations whose leaders use the QIP as a lever to drive information gathering and productive quality improvement conversations.²

Similarly, many of Ontario's hospitals are investing in innovative quality improvement initiatives and quality improvement training for their staff to ensure that everyone - from front-line staff to administrators and doctors to senior management - plays a role in improving the quality of care that is delivered in their organizations. In order to ensure that quality of care does improve, hospitals are encouraged to incorporate patients in the design and delivery of the care they receive, collaborate with their colleagues in other sectors, and set ambitious targets for improvement.

In the year ahead, HQO will continue to play a key support role while organizations work to meet their quality improvement goals and the goals outlined in [Ontario's Action Plan for Health Care](#). We will do this by continuing to build capacity for using measurement for improvement and by working with stakeholders to assist them in the application of quality improvement knowledge and skills.

Ontario's hospitals shaped this report by providing rich and diverse perspectives on quality improvement and on Ontario's health system as a whole. The differences between hospitals in terms of their patient populations and communities are reflected in this report, as they naturally result in differing quality improvement priorities. Similarly, differing organizational priorities mean that hospitals face unique challenges and, as such, develop unique quality improvement programs.

Nevertheless, despite diverse opportunities and challenges, clinical practices and health care quality should be consistent, all across Ontario. Although all health system stakeholders share the common goal of improved patient experiences and health care quality, there are differing opinions on how to achieve our shared aims. This analysis of the 2013/14 QIPs is a learning tool that will help all hospitals share innovations, effective strategies and success stories, and communicate QI progress achieved.

Quality Improvement and a High-Performing Health System

The common goal of a health care system that provides the right care, at the right time, and in the right place has ensured that quality improvement is a priority in Ontario. This prioritization of quality is supported by the following legislation and strategies.

The Excellent Care for All Act (ECFAA): In 2010, the provincial government passed the *Excellent Care for All Act* (ECFAA), which is designed to support the health system and help enhance the quality and safety of care that it provides.³ ECFAA established a set of requirements for health care providers (beginning with hospitals), which includes:

- The creation of quality committees to report to each hospital board on quality related issues, including the annual Quality Improvement Plan
- Linking executive compensation to the achievement of quality improvement targets
- The implementation of patient and employee satisfaction surveys and a patient complaints process

Quality Improvement Plans: The *Excellent Care for All Act* stipulates that health care organizations develop an annual QIP and make that plan available to the public, enhancing accountability in Ontario's health system. Quality Improvement Plans (QIPs) play a pivotal role in improving the quality of care that is delivered in Ontario. They allow organizations to formalize their quality improvement activities, articulate their goals, and identify concrete ways of achieving those goals. Organizations also use QIPs to communicate their ongoing commitment to delivering high-quality care and to demonstrate their dedication to the transformation of Ontario's health system.

Ontario's Action Plan for Health Care: In January 2012, the Ministry of Health & Long-Term Care released *Ontario's Action Plan for Health Care*. The Action Plan lays out an ambitious blueprint for health system transformation, with health care integration as the centerpiece of this transformational change.⁴

The Hallmarks of a High-Performing Health System

Ontarians share the vision of a high-performing health system that is safe, effective, accessible, integrated, patient-centred, equitable, efficient, appropriately resourced, and focused on population health. These nine hallmarks of a high-performing health system are defined below.

1. **Safe** - People should not be harmed by an accident or mistakes when they receive care
2. **Effective** - People should receive care that works and that is based on the best available evidence
3. **Accessible** - People should be able to receive the right care, at the right time, in the right setting and from the right health care provider
4. **Integrated** - All parts of the health system should be organized, connected and work with one another to provide high-quality care
5. **Patient-centred** - Health care providers should offer services in a way that is sensitive to an individual's needs and preferences.

6. **Equitable** - People should receive the same quality of care regardless of who they are and where they live
7. **Efficient** - The health system should continually look for ways to reduce waste, including waste of supplies, equipment, time, ideas and information
8. **Appropriately resourced** - The health system should have enough qualified providers, funding, information, equipment, supplies and facilities to look after people's health needs
9. **Focused on population health** - The health system should work to prevent sickness and improve the health of the people of Ontario

The indicators that were recommended for this year's QIP reflect the first five of the attributes listed above, namely: safety, effectiveness, accessibility, integration, and patient-centredness. Improving performance on the indicators related to these attributes may have a positive influence on all nine.

These features appear throughout this report:



INSIGHT — Information on quality improvement best practices, the activities of other hospitals, and methods for improvement



Opportunity for Improvement — Identifies areas where there is room for improvement and includes information on how hospitals may improve.



QIP TIP — Helpful ideas to consider during the development of next year's Quality Improvement Plan



Learning from Success — Success stories from the field which may be used to inform future quality improvement initiatives.

Part 1: The Progress of Quality Improvement in Ontario

Health Quality Ontario received 138 Quality Improvement Plans for 2013/14. These 138 QIPs represent all of Ontario's 151 hospitals, as some were jointly submitted by hospital alliances.

The 2013/14 QIPs were more structured and strategic than submissions in previous years. In general, hospitals selected fewer indicators this year, which is a very positive sign of progress. HQO recommends focusing on a few key priorities, which will enable hospitals to concentrate their improvement efforts for greatest effect. The majority of Ontario's hospitals also included all of the information that was recommended in the QIP guidance documents and more relevant information regarding target justifications in this year's submissions.



Opportunity for Improvement:

Indicator Definitions and Reporting Periods

It is laudable to include additional indicators when addressing local priorities. However, in regard to the core indicators, it is necessary for hospitals to follow the established definitions and reporting periods to allow for robust, provincial, year-to-year comparison. The practice of modifying core indicators to suit local needs, while understandable, made it difficult to determine whether or not indicator performance is improving provincially.

As it states in the 2013/14 Quality Improvement Plan Guidance Document for Ontario Hospitals: "To ensure comparability and consistency with year-over-year reporting, as much as possible the reporting periods align with the time periods used to develop the current fiscal year QIPs. The reporting periods will vary depending on what indicators were chosen, but in general organizations are to report on progress as per the period indicated in the template provided."*

*Source: Ministry of Health & Long-Term Care (2012). *2013/14 Quality Improvement Plan Guidance Document for Ontario Hospitals*, p. 15

Progress on the Principles of the Excellent Care for All Strategy

During the QIP development process, a number of hospitals requested that HQO share examples of how their colleagues incorporated the province's Excellent Care for All Strategy in their QIPs. The Excellent Care for All Strategy, which is outlined in the QIP guidance documents,⁵ is based on the following principles:

- Care is organized around the person to support their health
- Quality and its continuous improvement is a critical goal across the health care system
- Payment, policy and planning support quality and efficient use of resources
- Quality of care is supported by the best evidence and standards of care

This section of the report is an analysis of how Ontario's hospitals are progressing with respect to these principles.

1.1 Patient-Centred Care

As outlined in the Excellent Care for All Strategy, patient-centred care is the idea that care is organized around the person to support their health and wellbeing. There is the potential for costs to decrease, provider satisfaction to increase, and the patient experience to improve in a patient-centred, integrated health care system. Most definitions of patient-centred care include one or all of the following components: ^{6,7,8}

- Having access to services when needed
- Being treated with dignity and respect
- Having information shared in a way that can be easily understood
- Participating in shared-decision making
- Receiving care that is coordinated

When developing their QIPs, hospitals examined survey results, patient feedback and critical incident data to better understand the needs of their patients and staff, and to ascertain the degree to which the care they deliver is truly patient-centred.

Patient Surveys

ECFAA states that “every health care organization shall carry out surveys...of persons who have received services from the health care organization in the past 12 months and of caregivers of those persons who had contact with the organization in connection with those services.”⁹

Regularly surveying patients and developing an understanding of their experiences is essential to the delivery of patient-centred care. Many of Ontario’s hospitals used patient surveys to listen to what patients have to say about the care they receive and incorporated the opinions of patients in their quality improvement planning processes. Although surveys are an effective method of gathering this information, many health care providers across the province are moving beyond surveys and adopting a collaborative “doing with” approach, in which administrators and clinicians work in partnership with patients and their families to design and deliver health care that is linked to their needs.

Hospitals are encouraged to reflect on the degree to which the care they deliver is patient-centred and discover ways of working with their patients to deliver care that is organized around them. Below is an example of how one hospital is engaging its patients to improve quality:

Table 1: Patient-Centred Care at Hotel Dieu Hospital

HOSPITAL	FINDINGS	QUALITY IMPROVEMENT COMMITMENT(S) FOR 2013/14
Hotel Dieu Hospital	Expand implementation of patient and family-centred care to include patient engagement	<ul style="list-style-type: none"> • Include patient experience advisors on key hospital committees and hospital policy reviews • Refresh the patient survey review process to implement the Canadian Incident Analysis Framework • Include patient and family centred care concepts in job descriptions

Employee/Provider Surveys

ECFAA states that “every health care organization shall carry out surveys...of employees of the health care organization and of persons providing services within the health care organization.”¹⁰ For this reason, and in order to better understand the opinions and needs of their staff, many hospitals included employee/provider surveys in their quality improvement planning.

Engaged health care employees produce enhanced patient outcomes and satisfaction levels.¹¹ Engaged employees are also problem solvers and thus key to successful quality improvement initiatives.

Patient relations data

ECFAA requires all of Ontario’s hospitals to have an impartial, confidential, easily accessible and robust patient relations process. An effective patient relations process ensures that patients and their family members have the ability to raise concerns about their experiences and provide feedback. A patient relations process also gives hospitals a method of tracking the quality of the patient

experience and helps them identify opportunities for improvement. The patient relations process should inform the QIP development process for all hospitals.

Critical incident data

ECFAA stipulates that annual QIPs take into account critical incident data, as compiled based on disclosures of critical incidents pursuant to regulations made under the [Public Hospitals Act](#).¹²

Many hospitals use critical incident data to inform their improvement efforts. However, many hospitals were unspecific about how they used this data in the development and implementation of their QIPs. Hospitals are encouraged to include this data in their QIPs and to elaborate on how critical incidents led to or shaped their quality improvement efforts. It takes courage to publicly acknowledge and learn from critical incident situations (e.g., receiving the wrong medicine or wrong dose of medicine that results in kidney damage).¹³

Below is an example of the quality improvement commitment that one hospital made public as a result of their review of incident data:

Table 2: Improving Transitions at the Ottawa Hospital

HOSPITAL	FINDINGS	QUALITY IMPROVEMENT COMMITMENT(S) FOR 2013/14
The Ottawa Hospital (TOH)	Poorly executed transitions and lack of communication at transition points was having a negative impact on patients.	In October 2011, a multidisciplinary continuing care team was established to identify and implement strategies to improve transitions between TOH and community settings. This year the hospital will continue its collaboration with the Champlain Community Care Access Centre, in alignment with the Champlain LHIN's Primary Care Physician Lead to meet the needs of its patients across the continuum of care.

1.2 Integration and Continuous Quality Improvement

Many Ontarians do not know how to access the care they need and the services available to them. Many are also waiting in hospital until home care or long-term care becomes available. *Ontario's Action Plan for Health Care* calls for better integration to ensure that the right care is delivered in the right place, for the benefit of both patients and the system. An integrated system of care can inspire trust and confidence and has the potential to improve patient/client outcomes and experiences, smooth transitions of care, and lower total health system costs.¹⁴

Care plans, interprofessional teams and care coordinators are just a few of the initiatives that were identified in the QIP submissions to integrate health care services across the continuum of care.



Learning from Success:

Health Links, North York General, and Coordinated Care

In order to foster and promote health system integration, the Ministry of Health & Long-Term Care launched the Health Links initiative in December, 2012. Health Links encourage collaboration between health care providers, including family care providers, specialists, hospitals, long-term care, home care and other community supports. With improved coordination and information sharing, patients should receive faster care and should spend less time waiting for services.

North York General identified that they are an early adopter of the Health Links initiative in their QIP. Through their Health Link, the hospital is working in partnership with the North York Family Health Team, Central Community Care Access Centre, and community service providers to ensure coordinated care. This coordinated model of care was designed to facilitate faster follow-up and referrals to services like home care, ultimately reducing the rate of readmission to hospital, and improving experiences for patients and their families.

INSIGHT: Measuring Health System Integration

Hospitals are not the only sector interested in measuring and tracking integration:

- **Local Health Integration Networks (LHINs)** are collecting integration data for their Service Accountability Agreements (SAAs)
- **Primary care organizations** are using an integration indicator in their QIPs, which were submitted for the first time this year

There are many opportunities for collaboration between primary care and the hospital sector. Consider ways in which primary care providers and hospitals can collaborate on improvement initiatives, and how these improvement projects can be incorporated in organizational QIPs. For example, cooperating on the development of medication reconciliation and readmission indicator change plans.

INSIGHT: Why Focus on Transitions?

A care transition describes the transfer of a patient/client between different settings and health care providers during the course of an acute or chronic illness. Transitions can occur at many different times and places in a person's health care journey, and might include: referrals from a person's primary care provider to specialist care; admission into a hospital; discharge out of the emergency department (ED) or hospital; or admission to a long-term care home from the person's home.

Visit the HQO website to download the [Transitions of Care Evidence-Supported Improvement Package](#)

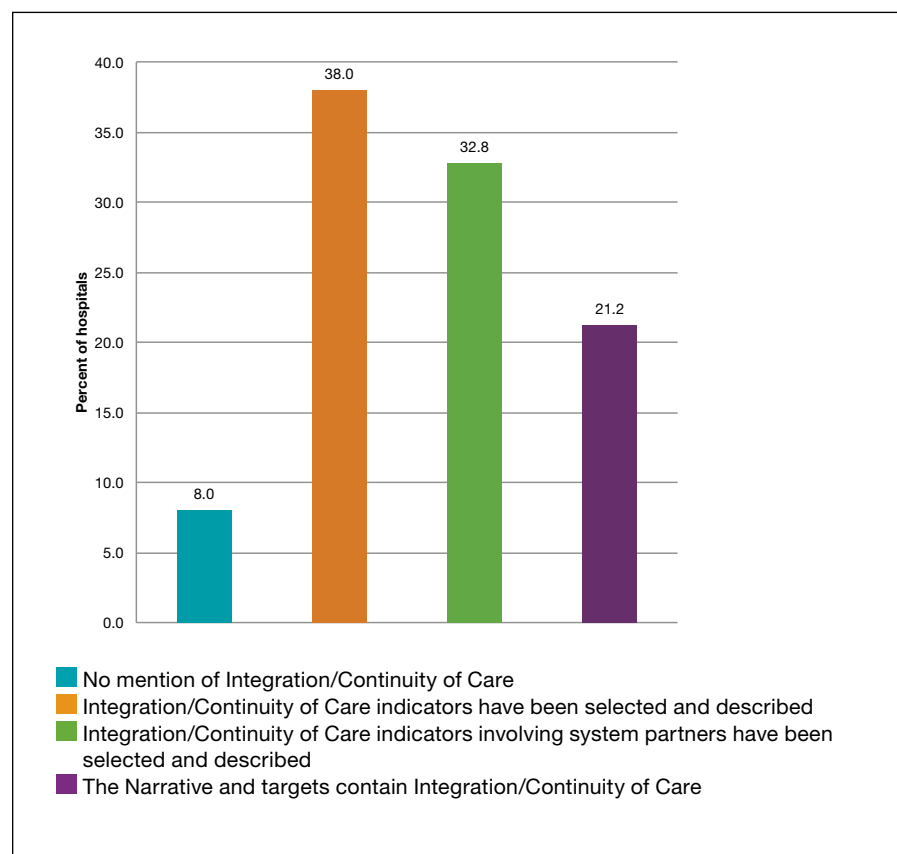
By focusing on improving transitions, providers can:

- Bring together providers and organizations from across the continuum of care
- Ensure services are coordinated and complement one another
- Share information between providers accurately, promptly, and with a consistently high standard
- Collaborate to ensure that continuity of care is not a 'nice to have' but rather an obligation to the individual who must manage chronic disease and illness

“Transforming how we work with our partners will lead to improved access to health care services in our region, and will make it easier for patients and families to get the appropriate level of care...”

~William Osler Health

Figure 1: Integration/Continuity of Care Evidence in the 2013/14 QIPs



A stronger focus on patient-centred care and integration was evident in the 2013/14 QIPs. For example, in their QIP Narratives, some hospitals reported working with LHINs on regional initiatives, participating in Home First to reduce Alternate Level of Care (ALC) days, and participating in the province's new Health Links initiative.

Despite the large number of hospitals describing the importance of integration and continuity of patient care, only a small number chose ALC days (19%) and readmissions (7%) as Priority 1 indicators. This year's QIPs also revealed that Ontario's performance on the 30-Day Readmission Rate has worsened over the past year, rising from 15.1% to 16.3%. At the same time, fewer hospitals

are choosing to focus their improvement efforts on readmissions (53 in 2013/14, down from 74 in 2012/13). As a result, specific change ideas involving other sectors or organizations did not frequently appear in the 2013/14 QIPs. Hospitals are encouraged to share their innovative ideas for health system integration and their success stories so that others can learn from and emulate their achievements.

Over the coming years, it will be increasingly important to integrate care across sectors to deliver the care that Ontarians deserve. Hospitals are encouraged to collaborate with primary care providers and community care access centres (CCACs) to map the discharge process, identify root causes, and discover methods for addressing readmissions.



INSIGHT: It is all about demand, capacity and flow

A common response to backlogs and service delays is that there is not enough staff, access to information, or data to deal with the volume of patients. However, it may be that resources are being deployed in the wrong place or at the wrong time. To make process improvements, it is necessary to have an understanding of challenges and risks and how they affect the demand, capacity and flow of an organization. The **top four** challenges mentioned in QIP narratives included: funding, lack of supports available in the community, aging infrastructure, and human resources.

While these were the challenges most frequently referenced by hospitals in their QIPs, these challenges were not examined with respect to their effect on demand, capacity and flow within the organizations. Ontario hospitals are encouraged to review their demand for services and continue to plan for the future.

Two helpful resources for understanding demand and capacity management are:

1. [Patient Flow in Hospitals: understanding and controlling it better](#) by Roger Resar and Carol Haraden.
2. [The Referral Wizard](#) developed by the National Health Service

Learning from Success: Dryden Regional Health Centre (DRHC) and Dryden Area Family Health Team (DAFHT)

CHANGE		
Planned improvement initiatives (Change Ideas)	Methods and process measures	Goal for change ideas (2012/13)
1) Patient Order Sets Usage	Percentage of COPD/CHF patients with patient order sets (POS) in place during admission. POS not completed at admission, should be completed by the Most Responsible Physician.	100% (Q4)
2) Survey of access and integration	Percentage of admitted medical patients surveyed	90% (Q4)
3) Hospital visit by chronic disease management nurse prior to discharge and within 48 hours of a home visit	Percentage of admitted patients with diagnosis of COPD and CHF will be visited by DAFHT RN prior to discharge and % follow-up with home RN visit within 48 hours.	75% In hospital visit (Q4) 75% In home visit (Q4)

Challenge: Improve capacity in terms of reduced number of readmissions

Goal: To reduce unnecessary hospital readmission within 30 days for Chronic Obstructive Pulmonary Disease (COPD) from 20% to 16.4% and for Congestive Heart Failure (CHF) from 31% to 17.6% as per their Hospital Service Accountability Agreement.

How did they do it?

“The transition from hospital to home can be a vulnerable period of care discontinuity — and we recognized that there is potential for adverse events and patient readmissions. Our solution? Rather than viewing patient discharge as an end to our obligation to our patients, we saw it as an opportunity to work with the Dryden Area Family Health Team (DAFHT) to promote a safer and more efficient transition of care.

Here is a change idea we implemented to help bridge the gap between inpatient and outpatient care. A chronic disease management nurse visited each patient in hospital prior to discharge — and followed up with a home visit within 48 hours after discharge.

The results of this added touch of care were remarkable. By starting the therapeutic relationship early on at the hospital — even before the patient is

discharged — patients reported feeling they had a better understanding of their disease, and felt more comfortable about the follow-up home visit by the nurse post-discharge. Patients felt better prepared to prevent their condition from becoming worse and having to return to the hospital.

In addition, patients appreciated the care action plan they received from the nurse upon discharge. The action plan not only gave patients a better understanding of how to take their medications, but also made it simpler for patients to be prescribed antibiotics or steroids without having to return to the emergency room.

From a point-of-care perspective, the immediate follow up home visit was especially important because many patients were elderly with no family or supports, and the nurse was quickly able to assess the patient’s home environment. Approximately 70% of the patients were not CCAC clients, and where they might have otherwise fallen through the cracks, the nurse was able to make referrals as required to CCAC, Meals on Wheels, self-management programs, and others.”

Results

Readmission rates decreased from a baseline 20% to 10.9% for patients with COPD, and from a baseline of 31% to 7.5% for patients with CHF in Q3 2012/13.

1.3 Quality Improvement and the Efficient Use of Resources

An aging population, coupled with a renewed focus on ensuring that every health care dollar is used to provide the best possible care, means that there is a renewed focus on quality and sustainability in Ontario. Health System Funding Reform (HSFR), one of the key priorities of *Ontario's Action Plan for Health Care*, is designed to address this sustainability challenge.¹⁵

With HSFR, Ontario is moving from a “provider-centred” funding model (i.e., hospitals are given a lump sum each year) to a patient-based funding (PBF) model, meaning hospitals receive funding for the number of patients they treat for select Quality-Based Procedures (QBPs). Health System Funding Reform should strengthen the link between the delivery of high quality care and fiscal sustainability. In effect, this patient-based funding model is designed to ensure that payment, policy and planning follow the patient as they make their way through the health system.

The implementation of evidence-informed pricing for select QBPs encourages health care providers to adopt best practices in their care delivery models and maximize their efficiency and effectiveness. Clinical process improvements may include better discharge planning, eliminating duplicate or unnecessary investigations, and paying greater attention to the prevention of adverse events, such as post-operative complications. These process improvements, together with the adoption of evidence-informed practices, have the potential to improve the overall patient experience and clinical outcomes, and help to create a sustainable model for health care delivery.¹⁶

Some hospitals discussed in their QIPs how they are incorporating the new HSFR model into their larger quality improvement goals and linking it to their annual budgeting processes. Hospitals are also adapting to the changes brought about by HSFR by developing care pathways for QBPs, which are designed to improve outcomes while lowering length-of-stay. Similarly, many hospitals are working with their LHINs on service capacity planning to gain a better understanding of the role organizational processes play in the promotion and maintenance of quality improvement over the long term.

Some hospitals incorporated the “Lean” approach to address patient flow and access issues, while satisfying patient expectations for service quality. Lean is the concept that there is a simpler, better way of doing day-to-day work through the elimination of waste (e.g., inefficiencies, errors, and non-productive or non-value-added activity). Lean is not about making people work harder, but about removing waste from the environment so that people can work more efficiently with fewer errors.¹⁷ Although Lean is not a panacea, it can help organizations implement QBPs related to health system funding reform. Using Lean methodology, organizations can identify bottlenecks, waste, and other issues that may increase the cost of services. During the development of next year's QIP, it may be helpful to contemplate how resources can be used more efficiently across the health system, and how Ontario's health care providers can become leaner, in order to better serve Ontarians.

Learning from Success: Listowel Wingham Hospitals Alliance (LWHA) prepares for HSFR

CHANGE		
Planned improvement initiatives (Change Ideas)	Methods and process measures	Goal for change ideas (2013/14)
Skills development and training: 1. Education and understanding of Health System Funding Reform (HSFR) & Quality Based Procedures (QBP) 2. Determine impact of QBP funding on LWHA	External training session - Share learnings at Leadership Meetings and Staff meetings (by Oct 2013). Measure and monitor length of stay for pertinent QBP	Share at all applicable meetings for adequate dissemination
Processes: Development of integrated care plans based on QBP best practices and funding	Clinical committees or working groups, including physicians and interdisciplinary staff, develop integrated care plans as appropriate	Implement integrated care plans over the course of the year as available; measure compliance with use of care plans and order sets as implemented
Measure and monitor per case costs and clinical indicators (i.e. Length of Stay - LOS) for QBPs	Average length of stay versus expected length of stay consistent with QBP funding methodology; review quarterly at Utilization and Review	LOS information shared at 100% of quarterly Utilization and Review meetings

Challenge: Prepare for Health System Funding Reform (HSFR) and incorporate best practices into organizational processes.

How did they do it?

In preparation for HSFR, the Boards, at the alliance-level, spent considerable time preparing a Clinical Services Plan that considered the critical mass of the patient population served by hospitals. Patient processes were reviewed and streamlined to reduce waste and cost. Staffing configurations were examined against the best practice guidelines published as part of HSFR.

As a result, LWHA has created new care plans for COPD and CHF.

A Perth (and Huron) County Health Links Business Plan, which is currently in development, is aimed at integrating the work of the hospitals, South West Community Care Access Centre and the local Family Health Teams to provide earlier assessments and interventions, and support further information sharing amongst providers.

LWHA anticipates this integrated model of care will improve both patient outcomes and the overall patient experience within the health care system. The change ideas LWHA identified in their 2013/14 QIP to improve total margin are listed above.

1.4 Supporting Quality with Evidence and Standards

Strong change ideas are rooted in scientific evidence. Where evidence exists, it is important to incorporate it into ideas for improvement and process measures to ensure that quality improvement teams are implementing the most demonstrably effective practices. HQO recommends that hospitals include a rationale for change ideas in the comments section of the QIP Work Plan. By explaining the rationale behind change ideas and by identifying their sources, hospitals will equip their colleagues with the tools necessary to implement the same changes in their own organizations.



Opportunity for Improvement: Evidence-Informed Change

The change concepts most often identified by hospitals are related to: skills development (education/training), incentives/motivation (awards), measurement/feedback (audits), and process interventions (finding new ways to work). HQO encourages hospitals to go beyond these concepts, investigate other ways of improving, and to consider that a single strategy for improvement may not always be successful.

Health Quality Ontario offers providers a variety of resources to assist in the development and implementation of evidence-based best practices. The Ontario Health Technology Advisory Committee (OHTAC), a standing advisory committee of HQO's Board of Directors, makes recommendations about the uptake, diffusion or removal of interventions within the health care system. [OHTAC Recommendations](#) are based on evidence provided by HQO's Evidence Development and Standards branch and its research partners.

As part of quality-based implementation, Health Quality Ontario, in partnership with the Ministry of Health & Long-Term Care, produced three QBP clinical handbooks: Chronic Obstructive Pulmonary Disease (COPD), Congestive Heart Failure (CHF), and Stroke. These Clinical Handbooks were created to serve as a compendium of the evidence-based rationale and clinical consensus driving the development of the policy framework and implementation approach for stroke, COPD, and CHF patients seen in hospitals.

Health Quality Ontario's [Quality Compass](#) is another resource that hospitals can draw upon for evidence-informed best practices. Quality Compass is centred on priority health care topics, which a focus on change ideas, indicators, targets and measures, as well as the tools and resources necessary to bridge gaps in care and improve the uptake of best practices.



INSIGHT: Best Practices

HQO convened a series of roundtable discussions with hospitals that submitted successful QIPs in 2012/2013. Representatives of these hospitals shared their thoughts on how teams can support quality improvement and made suggestions on how to submit a robust QIP. These suggestions included:

- **Think big picture:** Incorporate other/additional information to get the big picture and improve the team's ability to assess practices and processes
- **Communicate:** Use visual management systems to help close the feedback loop for staff
- **Be persistent:** A sustained focus on the improvement of the quality of health services is essential
- **Secure the commitment of organizational leadership:** The support of organizational leadership is key to the success of quality improvement initiatives
- **Involve patients and their families:** Patients and their families want to have a voice, and to be involved in care decisions and process redesign
- **Quality improvement requires continuous improvement:** The QIP is not an annual plan. Rather, it is a working, living document that evolves throughout the year and year-after-year
- **Focus your quality improvement efforts:** Choose a few priorities and focus the efforts of your team on those key issues
- **No change is too small:** A number of small, successful change ideas greatly contribute to sustained quality improvement



Part 2: Overview of the 2013/14 Quality Improvement Plans

The concept and format of the QIP aligns with the Model for Improvement framework for quality initiatives, originally developed by the Associates in Process Improvement (API).¹⁸ The Model asks three simple questions, which can be used to effectively guide any improvement initiative. These questions are:

1. What are we trying to accomplish? (*Aim*)
2. How do we know that a change is an improvement? (*Measure*)
3. What changes can we make that will result in the improvements we seek? (*Change*)

This section provides an overview of how Ontario's hospitals addressed these questions in their 2013/14 Quality Improvement Plans.

2.1 Aims

Hospitals chose from a list of 16 core indicators. Organizations were asked to prioritize indicators and pay particular attention to those indicators that will have active improvement initiatives (i.e., Priority 1). Priority 1 indicators signal those critically important quality aims on which quality improvement teams will focus their attention, energy and resources.

For each Priority 1 indicator identified in a QIP, hospitals were encouraged to set a stretch target; identify a change idea; and designate process measures to ensure the change idea is going according to plan. As it states in the *2013/14 Quality Improvement Plan Guidance Document for Ontario Hospitals*:

“Be courageous: set stretch targets for both outcome and process measures and aggressively pursue the processes to achieve desired outcomes over time.”¹⁹ When performance on an indicator is below the target set by an organization, and/or the indicator’s current performance is below the established provincial benchmark, it is appropriate to list that indicator as Priority 1. Using current performance data, 75% of Ontario’s hospital appropriately identified indicators as Priority 1.

HQO’s Analysis of Aims in the 2013/14 QIP Submissions

The table below outlines the most frequently selected core indicators in 2013/14 and provides a comparison to the indicators selected last year. For example, *Clostridium difficile* Infection, which was the sixth most commonly selected indicator last year, was selected by 97 hospitals this year, making it the fourth most commonly selected indicator in 2013/14.

Table 3: Number of Hospitals Reporting on Indicators

QUALITY ATTRIBUTES	CORE INDICATOR	2012/13 (QIP2)	2013/14 (QIP3)
Safe	<i>Clostridium difficile</i> infection (CDI)	91	97
	Hand hygiene compliance before patient contact	119	97
	Medication reconciliation at admission	New in QIP 2013/14	74
	Surgical safety checklist	60	51
	Falls in complex continuing care (CCC)	40	41
	Pressure ulcers in CCC	44	39
	Central line associated blood stream infection (CLI)	38	32
	Ventilator-associated pneumonia (VAP)	38	31
	5-Day in-hospital mortality after major surgery	New in QIP 2013/14	26
	Physical restraints in mental health	30	20
Effective	Hospital – total margin	121	104
	Hospital standardized mortality ratio (HSMR)	41	37
Accessible	90th percentile ED length of stay for admitted patients	94	80
Integrated	Percentage of alternative level of care (ALC) days	103	82
	30-day readmission rate to any facility for any causes (specific case mix groups)	74	53
Patient-centred	Patient satisfaction	129	115

2.2 Measures

Quality improvement teams must not only determine the priority level of indicators, they must also develop realistic but challenging targets, also known as “stretch targets,” for those indicators. A stretch target requires reaching beyond the normal and easy capabilities of a team, without being set so far that the goal is unattainable. Targets that are too difficult hinder an improvement effort, while targets that are too easy lead to disengagement.

A stretch target is a goal shared by an entire health organization and drives quality improvement in two ways: it communicates to the organization that maintaining the status quo is not an option, and it allows senior leadership and boards to mobilize the resources necessary to drive quality improvement. Quality improvement occurs when ambitious, effective target setting and Priority 1 indicators are aligned.²⁰



INSIGHT: Stretch Targets and Long-Term Goals

It may take years to achieve certain targets. In such instances, consider setting “interim” stretch targets. For example, Queensway Carlton’s current performance for ALC was 24.7% — and their ultimate goal is to reach the LHIN target of 16%. The hospital set an interim stretch target for 2013/14 of 20%, with plans to work toward 16% in 2014/15.

Target setting is an important aspect of every QIP and part of HQO’s role is to help hospitals set effective targets. For several recommended indicators, theoretical bests and peer comparisons may not provide enough information to assist hospitals in target setting. The indicators listed below did not have well-established benchmarks, and theoretical best values may not have been realistic or achievable. For this reason, the following indicators were benchmarked by HQO:²¹

Patient Satisfaction:

- 70.6% - Percentage of patients who would recommend to others (EDs)
- 81.8% - Percentage of patients who would recommend to others (Inpatients)
- 91.8% - Percentage of patients who rate the care and services as excellent, very good and good (EDs)
- 96.4% - Percentage of patients who rate the care and services as excellent, very good and good (Inpatients)

Safety:

- 1.6% - Percentage of complex continuing care residents with a new pressure ulcer in the last three months (stage 2 or higher)
- 5.0% - Percentage of complex continuing care (CCC) residents who fell in the last 30 days

These benchmarks were established for the purposes of quality improvement. Organizations can use this information to assist in the development of achievable but stretch improvement targets. Although some hospitals may already be performing close to (or above) the benchmarks indicated, these organizations should continue to strive for excellence. For example, if a hospital’s current performance on falls in complex continuing care over the last 30 days is better than the benchmark of 5.0%, they may consider setting their target against the best performance achieved by the top 10% of hospitals (i.e., 0.9%).

Hospitals that are currently performing below these benchmarks should consider setting targets that are achievable and aligned with the organization's goals for ongoing improvement. Please consider the following when setting improvement targets: the provincial average or median, matching the rate of improvement achieved by others, cutting defects/waste in half. For instance, if a hospital's current performance on patient satisfaction is well below the provincial average, they may consider setting more realistic targets, instead of setting targets using the established benchmarks. However, it is recommended that hospitals adjust their targets each year to align them more closely to the established benchmarks. More guidance and information about target setting can be found in Appendix C of the *2013/14 Quality Improvement Plan Guidance Document for Ontario Hospitals*.

Hospital-Acquired *Clostridium difficile* Infection (CDI) Rate Data to Support Target Setting

Establishing an Ontario hospital-acquired CDI benchmark is difficult, due to the many factors that may affect the rate (hospital size, changing lab testing method, geographical variations, etc). However, hospital-acquired CDI rate data by hospital type and bed count is provided in the table below, to help hospitals set realistic but aggressive targets for this indicator. Data on best achieved-to-date and the provincial average for hospital-acquired CDI can be found in Appendix C of the *2013/14 Quality Improvement Plan Guidance Document for Ontario Hospitals*.

The ranking analysis in the table below is based on the most recent hospital-acquired CDI data. Health Quality Ontario will continue to monitor and analyze hospital level data as it becomes available. For the rate of hospital-acquired CDI, better performance is reflected by a lower rate of infection. In the table below, the highest performers are identified in the top row – i.e., 90th percentile performance.

Table 4: Hospital-Acquired CDI Rate Per 1,000 Patient Days, Ontario Hospitals, Annual Data, FY 2011/12

	Teaching, large, and small community hospitals				
	0-100 beds	101-300 beds	> 300 beds	CCC & Rehab	Mental Health
90 th percentile performance	0	0.18	0.25	0.04	0
75 th percentile performance	0	0.23	0.42	0.05	0
Median performance	0.13	0.36	0.50	0.10	0
25 th percentile performance	0.31	0.48	0.60	0.19	0.01
10 th percentile performance	0.53	0.83	0.68	0.22	0.03

HQO's Analysis of Measures in the 2013/14 QIP Submissions

Hospitals were asked to indicate the expected outcome for each indicator and justify annual performance targets. The table below contains examples of targets and the effective justifications that were provided for each.

Table 5: Setting & Justifying Targets

STRATEGY	APPLICATION	EXAMPLES FROM 2013/14 QIPS
Aim for theoretical best	Theoretical best represents the maximum or optimal performance. It is most applicable in areas that measure defects, wait times, or use of a best practice (e.g., aim for zero defects, zero wait time, or 100% compliance with best practice bundle)	<p>Headwaters Health Care Centre set a target of 100% to improve safety of care by performing the three phases of the surgical safety checklist. Currently the hospital performs this 99.19% of the time.</p> <p>Justification: "Review surgical cases without completed phases of the surgical safety checklist for trend identification to reach theoretical best."</p>
Match the best performer	Matching the best achieved elsewhere may be of particular relevance to those organizations that already have above-average performance and still wish to do better	<p>To improve patient satisfaction ratings, Bluewater Health in Sarnia set a stretch target to match the best performer in Ontario (90.2%).</p> <p>Justification: In 2011/12, Bluewater Health in Sarnia had already achieved a rate of 80.9% on their patient satisfaction measure from NRC Picker; Respect for Patient Preferences Dimension Score in 2011/12.</p>
Cut the defects/waste in half	An organization may decide that the theoretical best is not achievable in the current year, and so may opt to reduce the gap between baseline and theoretical best by half.	<p>To reduce wait times in the ED, Hôpital Notre-Dame's (Hearst) current performance is 19.38 hours for patients that are admitted to hospital.</p> <p>Justification: "Target is based on LHIN average ED wait times of 17.5 hrs. Provincial target of 11.5 hours is not achievable due to delays in transferring by air and the fact that there is no intensive care unit (ICU) in our organization."</p>

Although the majority of Ontario's hospitals set effective stretch targets in their plans, some experienced difficulties when setting targets. The following three issues account for many of the ineffective stretch targets identified in the 2013/14 QIPs:

- **Issue 1 - Planning to do worse:** A number of QIP submissions had targets that were worse than current performance or baseline measures. Hospitals should not set targets worse than their baseline performance. If targets have been set lower than current performance, it is important to consider whether:
 - o The target will reassure patients and their families
 - o There is a reason the target is lower than current performance. If the target is lower, it is important to explain why in the 'Target Justification' column

An example of a poorly formulated target can be seen in the Insight box below:

INSIGHT: What Not to Do

This hospital is already exceeding their target for 2013/14, so the target justification that is provided should be reevaluated.

Measure/ Indicator	Current Performance	Target for 2013/14	Target Justification	Priority level
Hand Hygiene	84%	81%	Matching best performance elsewhere	1

- **Issue 2 - Mismatch between priority level and target:** Many Priority 1 targets were set at or slightly below maintenance levels (which is too low), while many Priority 2 or Priority 3 targets were set too high. When an organization has regularly achieved its target on an indicator, it is recommended that it be converted to Priority 3 ("monitor") in their QIPs. This allows hospitals to switch gears and focus their efforts on more pressing improvement priorities. Priority setting is an essential component of continuous quality improvement, as it helps to ensure that the quality improvement team is focusing their efforts on the most pertinent issues. The table below contains examples of mismatched priority levels and targets.

Table 6: Mismatched Priorities & Targets

FACTORS TO CONSIDER	TARGETS SET IN 2013/14 QIP	ISSUE / RECOMMENDATION
Effort level	Hospital A had a current hand hygiene compliance rate of 91%. The target was set to 100% to match "the best achieved elsewhere". However, the priority was set to level 3.	The level of effort required to increase compliance from 91% to 100% is substantial, so hand hygiene should likely be considered Priority 1.
Current performance	Hospital B's current performance on 'surgical safety checklist use' was 79% — and their internal target was to reach 85%. The benchmark for 'surgical safety checklist use' is 100%. The priority was set to level 2.	Hospital B's current performance is below target, and well below benchmark. This indicator should therefore be considered Priority 1.

Issue #3 - Not justifying the “why” behind targets: Thirty-six percent of Ontario’s hospitals provided a clear justification for the annual performance targets that they set in their QIPs. Although in some instances the reasoning behind targets may be quite clear, justifying targets allows people to understand the goals identified in organizational QIPs and helps rally support for those aims. The table below contains examples of effective target justifications, which were taken directly from North York General Hospital’s (NYGH) QIP.

Table 7: NYGH & the “Why” Behind Targets

INDICATOR	TARGET JUSTIFICATION	COMMENTS
Patient Safety – Falls	In 2012/13 NYGH achieved a 50% reduction over the 2011/12 baseline and exceeded the target by a further 25%. As there is no established baseline for falls in acute care, we strive to continually reduce the number and severity of falls based on previous performance. In 2013/14 the target is set at a 25% decrease from the 2012/13 target.	NYGH provided context (e.g. cut the defect rate in half), and without an established benchmark, justified a lower target in the 2013/14 fiscal year.
Patient Safety – Medication reconciliation upon discharge from hospital	“There is no established benchmark for this indicator, though peer hospitals identify a 75% rate. The target is set to bridge the gap from current performance to the 75% by 35%.	With no benchmark available, NYGH looked to its peers, setting an interim target of 65%, with the goal of reaching the rate established by their peers.

2.3 Changes

The 2013/14 QIPs identified promising change ideas to improve quality throughout the coming year. Change ideas are actionable steps for improving specific processes. They often emerge from evidenced-based practices, brainstorming, and creative thinking by front-line staff, providers and patients. Due to the fact that not *all* change leads to improvement, HQO recommends that hospitals include three or more change ideas for each of the Priority 1 indicators mentioned in their QIPs.

Hospitals also identified process measures (the “voice of the workings of the system”) to capture whether their ideas were contributing to improvement. Continuous evaluation of process measures is a key component of quality improvement. Using process measures involves assessing a system or process before changes are implemented, and re-evaluating once changes have been made, to ascertain whether the system or process has actually been improved. The data that emerges from these measurements will reveal further opportunities for improvement.

HQO’s Analysis of Change in the 2013/14 QIPs

Clearly expressed ideas for improvement and methods for measuring their impact is essential to the success of any quality improvement initiative. Ontario’s hospitals dedicate time and effort to the development of effective change ideas for their QIPs. This dedication of time and effort is one of the primary ways that annual QIPs differ from a straightforward scorecard or dashboard. As a result of their efforts, hospitals were generally successful in the development of effective ideas for improvement. In regard to change ideas and their effective measurement, HQO identified the following trends in the 2013/14 QIPs:

The majority of Ontario's hospitals effectively employed a variety of improvement ideas: Seventy-two percent of the submitted QIPs identified change ideas for each Priority 1 indicator. Thirty-seven percent of Ontario's hospitals exceeded expectations by carefully examining their systems and processes and developing change ideas for all indicators, regardless of priority level.

Hospitals incorporated new change ideas in their QIPs: The majority of the submitted QIPs included new and innovative change ideas. However, many used ideas for improvement that they had used in the past. In some instances, these hospitals achieved their interim targets so this was an appropriate strategy. In other cases, where no progress has been made, it is necessary to reconsider and refresh the change ideas being used, or combine them with other, new ideas.

Change ideas need to be clearly explained: Although many hospitals described how they planned to implement their change ideas in the "improvement initiative" column of their QIPs, some hospitals simply repeated the aim (e.g., "Maintain 0% CLI"), provided few details on the change idea (e.g., "processes to analyze and reduce readmission rates"), or did not include information on how they planned to implement their ideas. For the purposes of comparative qualitative analysis and the sharing of success stories, it is important to explain how identified change ideas are implemented.

The linkages between change ideas and process measures were not always clear: The identification of concrete change ideas and associated process measures was the component of the 2013/14 QIPs that required the most improvement. Thirty-eight percent of Ontario's hospitals identified a change idea but did not include a method of measuring its success.

Measures for improvement perform a similar function to the vital signs of a patient. Like vital signs, they signal to the observer if internal functions are working as intended. They also provide a common basis for communication. However, measures may be misused when they are used for judgement and comparisons, not for learning and improvement.²²

To determine if change ideas are having the desired effect and are leading to improvement, it is imperative that organizations collect, analyze, and review data. An effective method for analyzing data is to use a run chart. By using run charts to plot data over time, hospitals get a snapshot of the progress of their change idea, which helps to determine whether the changes being made are improving quality.

Part 3: Quality Improvement by Indicator

In order to focus the quality improvement activities that will be underway in Ontario in the coming year, hospitals were asked to consider at least one core indicator from each of the following attributes of a high performing health system: safety, effectiveness, accessibility, integration, and patient-centredness.

Reporting periods for each of the core indicators were outlined in the *2013/14 Quality Improvement Plan Guidance Document for Ontario Hospitals*. These recommendations were based on a thorough review of hospital-level data over a set period of time (e.g., 12 months).

This section is an analysis and discussion of each of the core indicators included in the 2013/14 QIP submissions. The following information is provided on each indicator, to the extent possible based on the data available:

- 1) **Definition:** A definition of the core indicator, along with the number of hospitals that chose the indicator as Priority 1 in their 2013/14 QIPs. Hospitals are encouraged to reflect on whether the indicator in question is an area in which they are performing poorly, and whether they should have selected the indicator as a priority.
- 2) **Recommended reporting period:** This describes the reporting period for the specified indicator, as recommended in the *2013/14 Quality Improvement Plan Guidance Document for Ontario Hospitals*.
- 3) **Why it is measured:** This provides some background information on the indicator.
- 4) **HQO's Analysis of the Indicator in the 2013/14 QIP Submissions:** This section includes a brief written summary, which describes the number of hospitals that selected the core indicator for inclusion in their QIPs, as well as the number of hospitals that selected the indicator as Priority 1.

A bar graph which depicts the current performance and targets set by each

hospital that selected the indicator as Priority 1 is also included (where possible) in this section. These graphs include the provincial average, as shown in the tables summarizing provincial performance. Please note that the provincial average is based on publically reported data, which includes all hospitals in Ontario, not only those hospitals shown in the bar graphs. For some graphs, the number of hospitals may not match the total that reported on the indicator, as some hospitals did not provide the necessary data to graph. When examining these graphs, hospitals should consider how their performance compares to that of their peers (acute teaching, large community, small community, CCC and rehab) and to the provincial average.

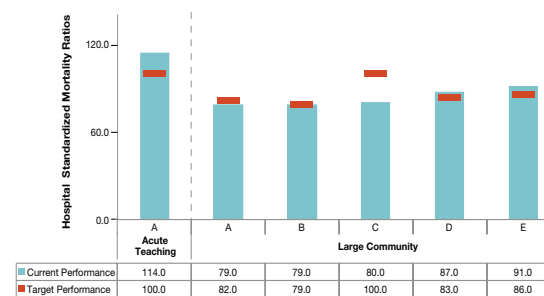


INSIGHT: Where is your red target line?

Take a close look at the blue current performance bars, and more specifically at the red target line.

If improvement involves a reduction in a rate or percentage (e.g., readmissions), it is acceptable for the target to sit on the blue bar.

If improvement involves an increase in a number (e.g., hand hygiene percentage), the stretch target should be above the bar.



Finally, this section includes tables on provincial performance on each QIP: An Analysis for Improvement | 2013-14 | Health Quality Ontario

indicator, based on all hospitals in Ontario (not just those including the indicator in their QIPs). Hospitals were asked to consider the benchmarks (where available) and provincial averages to help them establish stretch

targets for 2013/14 QIPs. A detailed explanation of each field of these tables is presented below.

BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
The benchmark value for indicators that have gone through the benchmarking process at HQO. For a list of these indicators, see page 20.	This is the provincial average for all hospitals in Ontario (for which the indicator applies) for the year prior to the current reporting period. This is reported where data at the provincial level were available.	This is the provincial average for all hospitals in Ontario for the current reporting period. This is reported where data at the provincial level were available.	This field is a visual indication of whether the provincial performance for this year improved or worsened compared to the provincial average for the previous year.

When reviewing these tables, there are few things to bear in mind. First, the information presented in this table is not restricted only to hospitals that have included an indicator within their QIPs; the data reflect provincial performance for all hospitals for which the indicator is relevant. This is true for current and previous provincial averages and for the progress since last year. These provincial averages were obtained from the publicly reported indicators or from administrative data sources, and not from the QIP submissions. Second, benchmarks are not available for all the indicators; where an HQO-developed benchmark was not available, it will be indicated as 'N/A'. Finally, although the table provides a visual indication of progress on each indicator compared to a previous provincial average, it is important to keep in mind the fact that provincial progress is determined by a single data point.

- 5) **Change ideas and process measures:** A list of change ideas that hospitals may have considered when addressing areas for improvement, as well as suggested process measures which can be used to ensure the selected change ideas are working.
- 6) **Best practices:** A review of the change ideas identified in the 2013/14 QIPs that were successfully implemented by hospitals in the past year. Examples are highlighted in change tables and in success stories.



Safety: Hospital-acquired *Clostridium difficile* infection (CDI)

Definition: Hospital-acquired CDI rate is defined as the number of patients newly diagnosed with hospital-acquired CDI, divided by the number of patient days in that month, multiplied by 1,000, consistent with publicly reportable patient safety data.

Recommended reporting period: January to December 2012

Why it is measured: Hospital-acquired CDI is the most common cause of infectious health care-associated diarrhea in hospitalized patients. Hospital-acquired CDI can have a range of detrimental effects, from diarrhea to even death.

HQO's Analysis of this Indicator in 2013/14 QIP Submissions

Priority

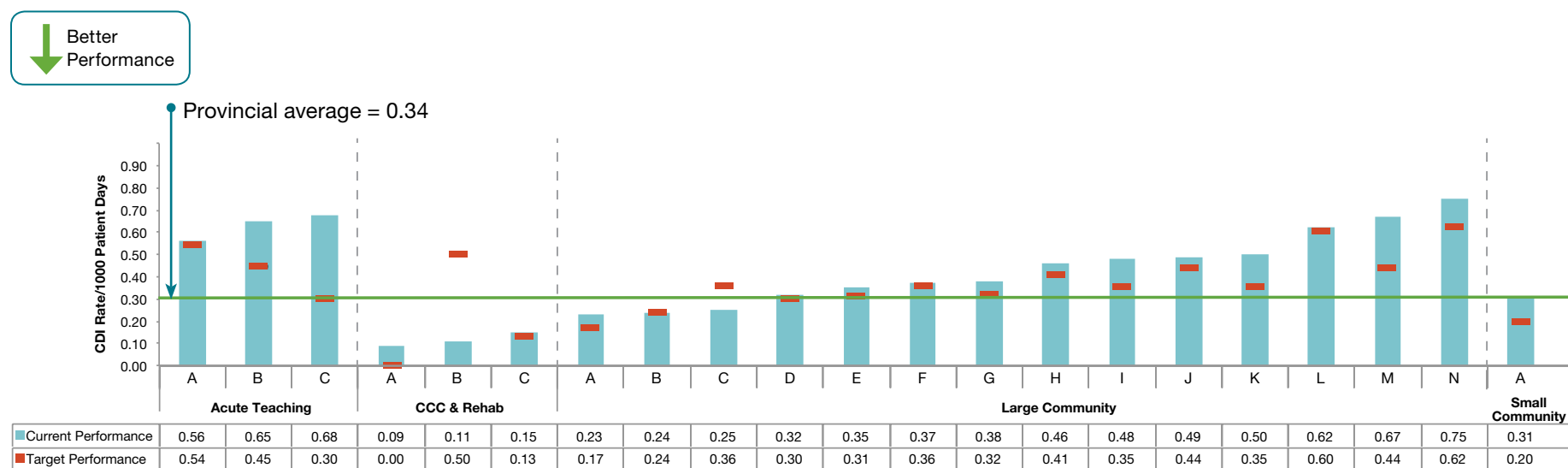


Of the 97 hospitals that included hospital-acquired CDI in their QIP, 22 hospitals (23%) went on to choose this indicator as Priority 1. In 2012/13, 91 hospitals included hospital-acquired CDI in their QIP and 29 of these hospitals (32%) selected this indicator as Priority 1.

Table 8: Provincial Performance & Benchmark Information for Hospital-acquired *Clostridium difficile* infection (CDI)

BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
N/A	0.36 (Dec 2011)	0.34 (Jan-Dec 2012)	✓ Improved

Figure 2: Hospital-acquired CDI Rate Per 1,000 Patient Days (by hospital), 2013/14 QIPs.



Of the 22 hospitals that chose hospital-acquired CDI as Priority 1, eight are already performing at a rate better than the provincial average. On the other hand, two hospitals chose targets that were worse than their current performance. HQO recommends organizations review their QIPs thoroughly to ensure that targets are set appropriately. Retrograde targets do not signal to patients, the staff, or the public that long-term quality improvement is an organizational goal.

Change ideas

New prevention and control measures identified by the [Provincial Infectious Diseases Advisory Committee \(PIDAC\)](#) include:

- Use of gloves when CDI is suspected
- Use of a sporicide (twice daily) in patient rooms and bathrooms when CDI is suspected
- Double cleaning on discharge/transfer
- Cleaning supplies used in a room with a patient infected with CDI should be dedicated to that patient's room or disinfected before re-use
- Effective waste management is an important consideration in preventing cross-contamination (e.g., bedpan-washer units, hygienic bags, etc.)
- Fidaxomicin, while more expensive than Vancomycin as a treatment for CDI, is equivalent in its initial treatment and superior in preventing recurrence

Consider these process measures to guide improvement

- Percentage of patients with hospital-acquired CDI associated disease
- Time between hospital-acquired cases of CDI
- Percentage of occupied patient rooms with complete environmental cleaning of high touch surfaces
- Hand hygiene (HH) compliance as a percentage (number of appropriate HH observations in a patient encounter divided by the number of patient encounters, multiplied by 100)
- Percentage of patient encounters with compliance for contact precautions (CP)
- Percentage of patient encounters in which the preprinted isolation order (PPO) was used

Table 9: Successful Change Ideas for the Prevention of Hospital-Acquired CDI

HOSPITAL	CHANGE CONCEPT	IMPROVEMENT INITIATIVES (CHANGE IDEAS)
Sunnybrook Health Sciences Centre	Process intervention	Dispose of point-of-care bedpans and urinals and remove spray wand cleaning tools
	Targeted investment	Install new microfiber cloth system
	Process intervention	Implement new isolation policy for patients with diarrhea

Safety: Hand hygiene compliance before patient contact

Definition: The hand hygiene compliance rate is defined as the number of times hand hygiene was performed before initial patient contact, divided by the number of observed hand hygiene indications before initial patient contact, multiplied by 100, consistent with publicly reportable patient safety data.

Recommended reporting period: January to December 2012

Why it is measured: Hand hygiene continues to be the number one way to reduce the risk of hospital-acquired infections. For health care providers to improve their hand hygiene, clean hands must become part of their workplace culture.²³

HQO's Analysis of this Indicator in 2013/14 QIP Submissions

Priority

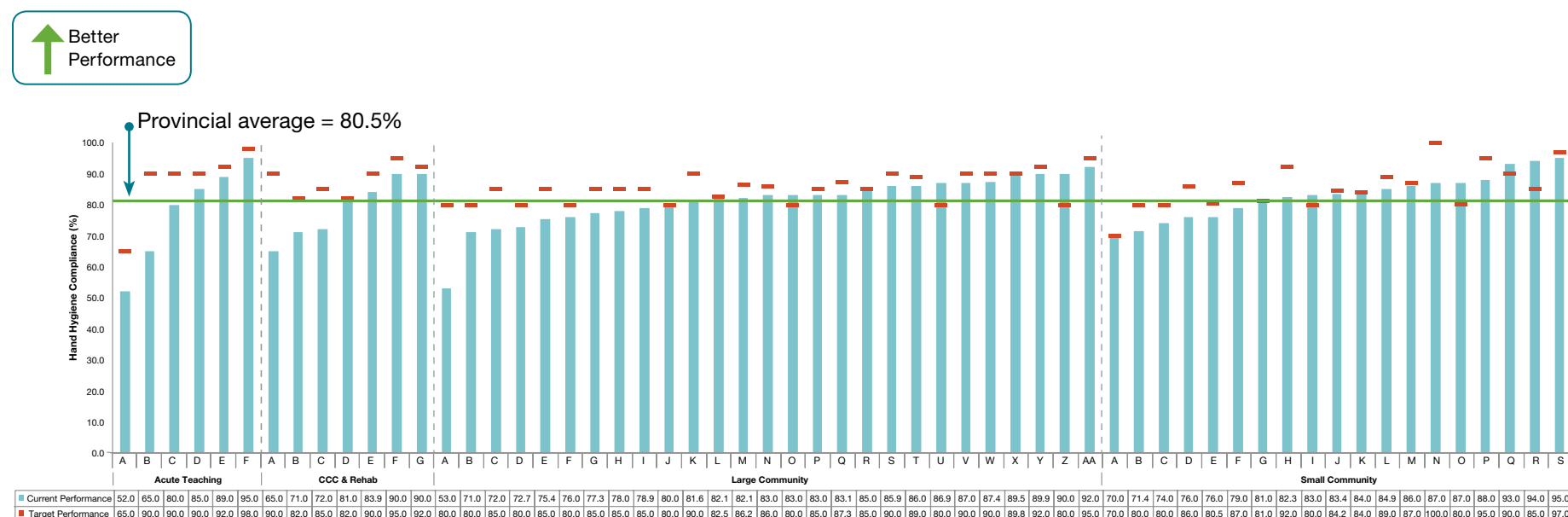


Of the 97 hospitals that included hand hygiene within their QIP, 62 hospitals (64%) went on to choose hand hygiene as Priority 1. This is down from last year where 85 of 119 hospitals (71%) that included hand hygiene chose it as a Priority 1. This indicator has made the largest gains provincially, and will hopefully continue to improve towards the theoretical best of 100%.

Table 10: Provincial Performance & Benchmark Information for Hand Hygiene Compliance

BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
N/A	72% (FY 2010/11)	80.5% (FY 2011/12)	✓ Improved

Figure 3: Hand Hygiene Compliance Before Patient Contact (by Hospital), 2013/14



Hand hygiene was the most frequently selected Priority 1 indicator for Ontario hospitals over the past two years. However, in their 2013/14 QIP submissions, seven hospitals did not set targets to improve or their targets were set at a level worse than current performance. Similarly, eight hospitals set targets

to maintain current performance or stay very close to it. Hospitals are commended for improving the provincial average by nearly 10%. However, given the importance of clean hands to health and patient safety, hospitals should be striving to achieve the theoretical best.

It takes more than a single intervention such as a poster campaign to change hand hygiene behaviour; it takes a multifaceted intervention. The Just Clean Your Hands program offered by Public Health Ontario helps overcome the barriers to proper hand hygiene and improves compliance with hand hygiene best practices in hospitals. This year, the program expanded to include long-term care and retirement homes.

Consider these process measures to guide improvement

There are three chief methods for measuring hand hygiene performance: directly observing, measuring product use, and conducting surveys.



QIP TIP

Refer to the latest tools that have been added to the *Just Clean Your Hands* program

Table 11: Successful Change Ideas for Improving Hand Hygiene Compliance Before Patient Contact

HOSPITAL	CHANGE CONCEPT	IMPROVEMENT INITIATIVES (CHANGE IDEAS)
William Osler Health System	Incentives/ motivation	<ul style="list-style-type: none"> Launch incentive and reward programs to foster sustained compliance and commitment to practice, particularly in the “before patient contact” moment
Humber River Regional Hospital		<ul style="list-style-type: none"> Recognition awards for commitment to practice from the CEO
St. Michael's Hospital		<ul style="list-style-type: none"> Report unit compliance in a competitive, transparent way
Sault Area Hospital		<ul style="list-style-type: none"> Report to management those health care providers who are not complying with hand hygiene protocols
Hôpital Montfort Hospital	Skills development	<ul style="list-style-type: none"> Develop and post on employee portal training videos to demonstrate proper hand hygiene sequences for specific complex scenarios
Cambridge Memorial Hospital	Change the work environment and skills development	<ul style="list-style-type: none"> Install additional hand hygiene cleaning stations in locations as identified by staff Provide hand hygiene education to all nursing staff at the New Knowledge Best Practice Fair in February
Headwaters Health Care Centre	Change the work environment	<ul style="list-style-type: none"> Design shelves near hand hygiene cleaning stations to allow care providers to empty hands before washing hands. However, manufacturing challenges were encountered in this process. The shelf was tested outside of one room with great feedback
University Health Network	Measurement/ feedback	<ul style="list-style-type: none"> Focus on positive deviance, diligent measurement, and reporting of results at the unit level
Toronto East General Hospital		<ul style="list-style-type: none"> Perform leadership audits and publically post individual unit compliance results

Safety: Medication reconciliation at admission

Definition: This indicator measures the number of patients with reconciled medications as a proportion of the total number of patients admitted to hospital. Every health care organization is at a different stage with respect to conducting and measuring medication reconciliation upon admission.

Recommended reporting period: Most recent quarter available

Why it is measured: Medication reconciliation is a systematic and comprehensive review of all the medications a patient is taking to ensure that medications being added, changed or discontinued are carefully assessed and documented. Medication reconciliation is intended to ensure accurate communication at care transition points, such as when patients enter a hospital, transition to another service or provider, or are discharged home.

Communicating effectively about medications is a critical component of safe care. Twenty percent of patients discharged from acute care facilities experience an adverse event and, of those, 66% are drug-related. The total cost of preventable, drug-related hospitalizations is about \$2.6 billion per year.²⁴

QIP TIP

Visit [ISMP Canada](#) for the latest tools and information on medications, or download the [2011 “Medication Reconciliation in Acute Care” Getting Started Kit](#) from the Safer Healthcare Now! website to learn more about medication reconciliation strategies.

HQO's Analysis of this Indicator in 2013/14 QIP Submissions:

Priority



Of the 74 hospitals that included medication reconciliation at admission in their QIPs, close to half (45%) went on to choose this indicator as Priority 1.

Change Ideas

The following change strategies have been helpful in ensuring effective medication reconciliation:

- **Secure the commitment of senior leadership:** Present progress to senior leadership on a monthly basis. Include data on errors that were prevented by the medication reconciliation process and identify the resources necessary for success.
- **Form a multidisciplinary team:** The team should include both a group to coordinate the implementation of medication reconciliation and a smaller team at the patient care unit level to conduct tests of change. Clinical champions can significantly contribute to the medication reconciliation process.
- **Employ small tests of change:** Embed medication reconciliation into normal processes of care. The forms that are available to facilitate this process will require modification to ensure they are effective. As with any changes being made, it is best to test them on a small scale and modify them as necessary.

QIP TIP

Consider applying the indicator's methodology to a specific unit or target population. For example:

- Patients currently prescribed three or more medications
- All patients 65 years and older
- Patients admitted for multiple day, overnight elective surgery

Consider these process measures to guide improvement

- Mean number of unintentional discrepancies per patient
- Mean number of undocumented intentional discrepancies per patient
- Percentage of patients with at least one outstanding discrepancy

Safety: Surgical safety checklist (SSC)

Definition: The surgical safety checklist rate is defined as the number of times all three phases (“briefing”, “time out” and “debriefing”) of the Surgical Safety Checklist (SSC) were performed, divided by the total number of surgeries performed, multiplied by 100, consistent with publicly reportable patient safety data.

Recommended reporting period: January – December 2012

Why it is measured: The SSC was developed by the Canadian Patient Safety Institute with the goal of improving the safety of patients undergoing surgical procedures in Canada. The aim of the checklist is to reinforce accepted safety practices and foster better communication and teamwork between clinical disciplines. The use of the SSC has been demonstrated to reduce the complications and mortality associated with a variety of surgical procedures.²⁵ For more information on this indicator, visit the [Patient Safety Indicators](#) website.

HQO's Analysis of this Indicator in 2013/14 QIP Submissions:

Priority

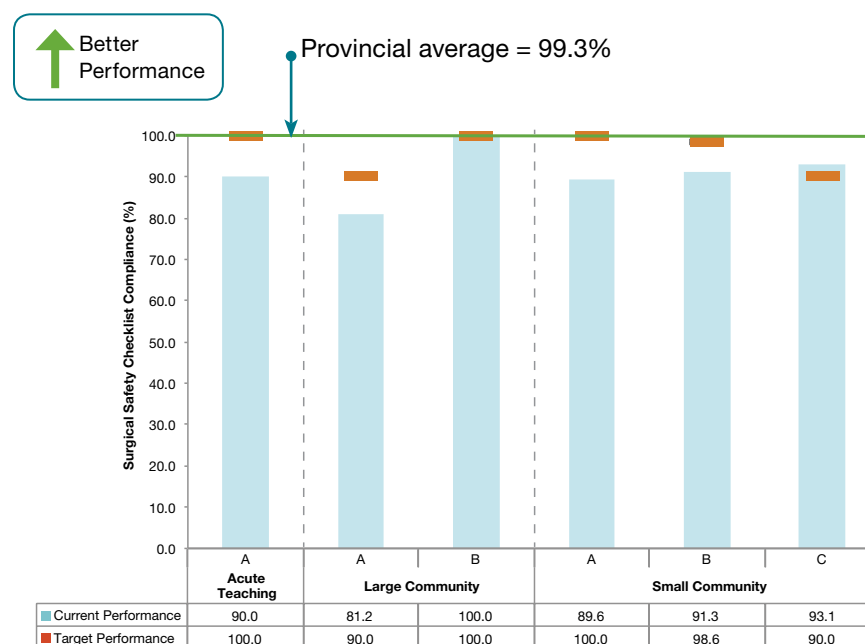


Of the 51 hospitals that included SSC within their QIP, seven hospitals (14%) went on to choose the indicator as Priority 1. In 2012/13, 60 hospitals included SSC in their QIP and 8 of these hospitals (13%) selected SSC as Priority 1

Table 12: Provincial Performance & Benchmark Information for Surgical Safety Checklist

BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
N/A	99.2% (Q2 to Q3 2011/12)	99.3% (Jan-Dec 2012)	✓ Improved

Figure 4: Provincial Performance & Benchmark Information for Surgical Safety Checklist



Of the seven hospitals that chose SSC as Priority 1, six are profiled in the above graph. Small Community hospital C should reflect on their target, which is worse than current performance and is worse than the provincial average of 99.3%. Large community hospital B has set a maintenance target at the best possible rate, and the remaining hospitals have set stretch targets for improvement.

Change ideas

Building on the Ministry of Health and Long-Term Care's patient safety indicator initiative, Ontario hospitals have been publicly reporting on their compliance with use of the SSC since July 2010, with the latest provincial compliance reported at 99.25% (from July 1 to December 31, 2012).

The following change strategies have been helpful in ensuring safe surgical experiences:

- **Obtain leadership support:** The support of organizational leadership was deemed the strongest independent predictor of a successful checklist implementation²⁶
- **Build multidisciplinary teams:** The checklist gives a voice to all members of the surgical team, from anaesthesiologists, nurses, to surgeons. Start with one small surgical team, and expand the use of the SSC

- **Create awareness:** Use data to create a shared understanding of the impact of the SSC on patients and other providers
- **Train in surgical safety:** Align the SSC with staff training on the importance of good communication and patient safety

Consider these process measures to guide improvement

- Number of interdisciplinary champions at each level of the organization
- Percentage of multidisciplinary (surgery, anaesthesia, nursing, and providers in the perioperative settings) staff educated about the checklist
- Percentage of cases reviewed for root causes where the SSC was not used

Safety: Falls prevention

Definition: The falls rate is defined as the percentage of complex continuing care residents who fell in the last 30 days.

Recommended reporting period: Q2 Fiscal Year 2012/13

Why it is measured: Prevention of falls in the hospital setting is an important patient safety and public health issue. According to *Quality Monitor 2012*, 10% of complex continuing care patients had a fall.²⁷

HQO's Analysis of this Indicator in 2013/14 QIP Submissions

Priority



Of the 41 hospitals that included falls in their QIPs, eight hospitals (20%) went on to choose falls as Priority 1. This is slightly down from last year, in which 12 of 40 hospitals (30%) chose falls as Priority 1. The provincial average is almost double the benchmark, yet only eight hospitals selected this indicator as a priority. Hospitals are encouraged to consider how their falls rate compares to the provincial average and benchmark, and to question whether more can be done to prevent patient falls and improve patient experiences of care.

Table 13: Provincial Performance & Benchmark Information for Falls Prevention


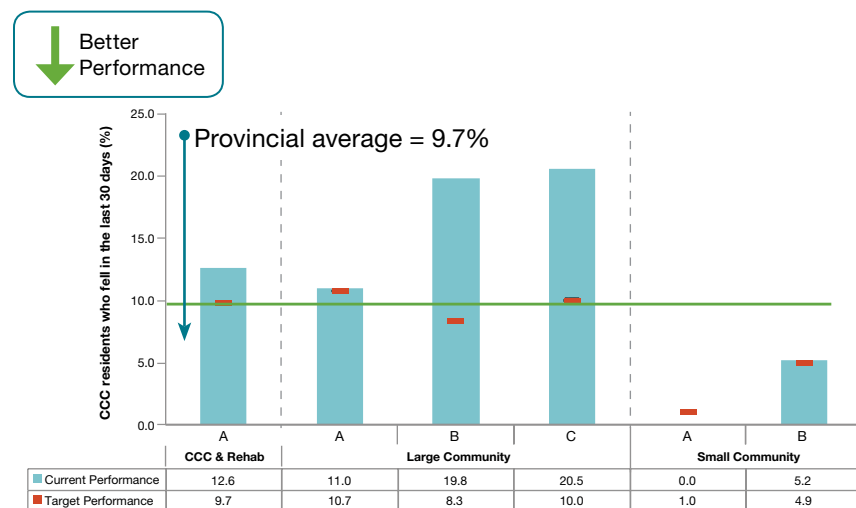
BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
5.0%	8.4% (Q2 2011/12)	9.7% (Q2 2012/13)	 Worsened

Figure 5: Percent of Complex Continuing Care Residents who Fell in the Last 30 Days (by Hospital), 2013/14 QIPs



1. According to the QIP guidance document, the data should include complex continuing care cases and be sourced from CIHI's CCRS database. However, some results presented in the graph may not apply to the bed type. In addition, some results should be used with caution as the small sample size.

2. Results presented in the data might be a mix of unadjusted and adjusted rates. As such, cross-hospital comparisons on current performance/target may not be appropriate.

Of the eight hospitals that chose falls as Priority 1, only six included performance and/or target data that can be included. Large community hospital B and C are commended for setting aggressive targets for performance.

Change ideas

To reduce the incidence of falls and resulting injuries, many hospitals and other health care organizations are undertaking well thought-out improvement programs. There are four main approaches to reducing falls and preventing injury from falls. These are:

- Risk assessments
- Communication and education about falls risk
- Implementation of interventions for those at risk of falling
- Customization of interventions for those at highest risk of falls-related injury

Consider these process measures to guide improvement

When focusing on falls prevention, hospitals may wish to consider the following measures:

- The rate of restraints use as well as the rate of falls resulting in harm as balancing measures
- Percent of patients who were admitted in the previous month for whom a falls risk assessment was completed on admission
- Percent of patients for whom a falls risk assessment was completed following a fall in the previous month
- Percent of patients assessed to be medium-high risk as per the Morse Fall Scale, and/or who had a falls intervention implemented and documented in their care plan

Table 14: Successful Change Ideas for Improving Falls Prevention

HOSPITAL	CHANGE CONCEPT	IMPROVEMENT INITIATIVES (CHANGE IDEAS)
Orillia Soldiers Memorial Hospital	Improve workflow	<ul style="list-style-type: none"> Revise screening form to link assessment to intervention and make care planning easier Implement Universal Falls Precautions on all patients in the pilot units
Niagara Health System	Measurement/feedback Reminder system Skills development	<ul style="list-style-type: none"> Complete monthly audits of falls risk assessment within 72 hours of admission Monitor daily falls at huddles and quality cross review Post standard visual “orange triangle” trigger at bedside for patients at risk for falls Introduce PEEK-IN initiative: Pain, Environment, Elimination, Key items within reach, IN hourly Post a weekly PEEK-IN hourly staff sign off sheet on the patient’s door so everyone can see the last time the patient was checked Provide education for nurses, housekeepers, and allied health care staff who are asking patients key questions related to patient falls
Listowel Wingham Hospitals Alliance	Measurement/feedback	<ul style="list-style-type: none"> Implement a Quality Falls Audit Board for daily audits to provide immediate feedback and learning opportunities for staff. Auditing as close to the patient care area as possible provides immediate feedback.



Download the [Reducing Falls and Injuries from Falls Getting Started Kit](#) from the Safer Healthcare Now! website to learn more about fall prevention strategies.

Safety: Pressure ulcers

Definition: Pressure ulcer rate is defined as the percentage of complex continuing care residents with a new pressure ulcer in the last three months (Stage 2 or higher).

Recommended reporting period: Q2, Fiscal Year 2012/13

Why it is measured: Those at risk of developing pressure ulcers include the elderly and critically ill, as well as persons with neurological impairments and those who suffer conditions associated with immobility.²⁸ Pressure ulcers cause considerable harm to patients, hindering functional recovery, frequently causing pain and the development of serious infections. Pressure ulcers have also been associated with an extended length of stay, sepsis, and mortality.²⁹

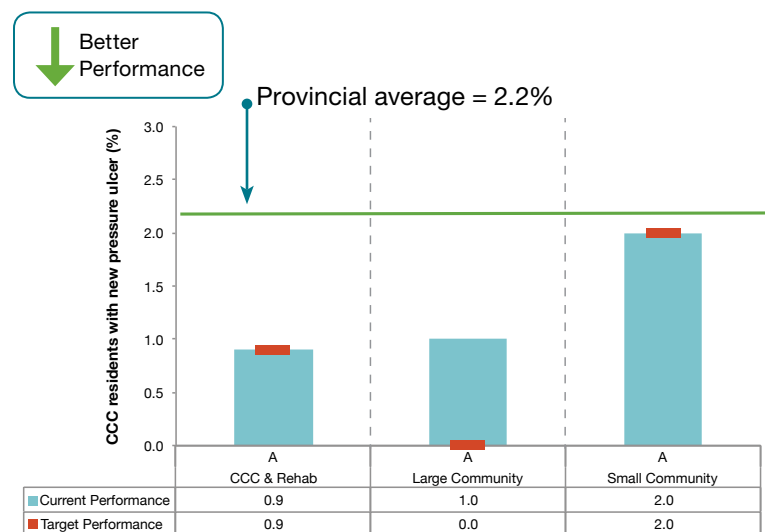
HQO's Analysis of this Indicator in 2013/14 QIP Submissions:

Priority



Of the 39 hospitals that included pressure ulcers in their QIP, only four hospitals (10%) went on to choose pressure ulcers as Priority 1. With the new benchmark of 1.6% released in January 2012, more hospitals may focus on pressure ulcers next year and set stretch targets in order to improve their performance.

Figure 6: Percent of Complex Continuing Care Residents with a New Pressure Ulcer in the Last Three Months (Stage 2 or Higher [by Hospital]), 2013/14 QIPs



1. According to the QIP guidance document, the data should include complex continuing care cases and be sourced from CIHI's CCRS database. However, some results presented in the graph may not apply to the appropriated bed type.
2. Results presented in the data might be mix of unadjusted and adjusted rates. As such, cross-hospital comparisons on current performance/target may not be appropriate.

Of the four hospitals that chose pressure ulcers as Priority 1, three are profiled in the graph. Two of these three hospitals set their target equal to current performance. Maintaining the current level of performance suggests that this indicator is not a Priority 1, so providing a rationale for this decision is imperative. The large community hospital set a stretch target to eliminate pressure ulcers in their organization.

Table 15: Provincial Performance & Benchmark Information for Pressure Ulcers

BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
1.6%	2% (Q2 2011/12)	2.2% (Q2 2012/13)	Worsened

Change ideas

Preventing pressure ulcers requires two steps: first, identifying patients at risk; and second, reliably implementing prevention strategies for all patients who are identified as being at risk. For the prevention of pressure ulcers, the recommendations of the Ontario Health Technology Advisory Committee (OHTAC) for each sector are as follows:

- **Acute care:** Provide a high quality foam mattress for all persons in an acute care setting
- **Operating Room:** Use a high quality support surface (foam or gel) during surgical procedures longer than 90 minutes in duration; strongest evidence exists for using a gel pad for this population
- **Long-Term Care and Community Care:** For the prevention of pressure ulcers, a high quality foam mattress should be provided to all residents of long-term care facilities. Community Care Access Centres (CCACs) should use the Pressure Ulcer Risk Score (PURS) to assess a client's risk for developing a pressure ulcer. Where risk is identified, a high density foam mattress should be used to prevent the development of pressure ulcers
- **Emergency room care:** Use a high quality foam mattress for all persons accessing emergency room care
- **Patient re-positioning practices:** Reposition all individuals restricted to bed at least every two hours or more frequently if at high risk for pressure ulcers. There is low quality evidence to suggest that persons using a high quality foam mattress may be turned a minimum of every four hours. Until better evidence is available, OHTAC recommends all health care facilities follow the current Registered Nurses Association of Ontario (RNAO) [best practice guidelines](#)

Consider these process measures to guide improvement

- Percentage of at-risk patients receiving full pressure ulcer preventative care
- Pressure ulcer incidence per 1,000 patient days
- Percentage of risk assessments completed upon admission
- Percentage of high-risk patients who have risk level and interventions documented in their plan of care in the previous month
- Percentage of high-risk patients who received weekly high-risk rounds by a multidisciplinary team in the previous week



Learning from Success: Runnymede Hospital's 2012/13 QIP

CHANGE		
Planned improvement initiatives (Change Ideas)	Methods and process measures	Goal for change ideas (2012/13)
Begin monitoring of Adherence to Pressure Ulcer Prevention Protocol on quarterly basis by October 2012	<ul style="list-style-type: none"> • Develop audit template • Develop report template • Begin to produce reports • Clinical Managers to implement report recommendations 	<ul style="list-style-type: none"> • Three reports completed by fiscal year end • 80% of report recommendations implemented by fiscal year end

Challenge: Baseline prevalence data indicated that a significant reduction in the prevalence of pressure ulcers was required.

Goal: Decrease organizational hospital-acquired pressure ulcer rates from 2.0% in fiscal year 2010/11 to 1.8% in Q2 2012/13.

How did they do it?

“The ulcer management program developed by our Skin and Wound Care Committee helped standardize the prevention, assessment and treatment of skin and wounds at Runnymede. The program incorporates many evidence-based best practices, including: protocols/procedures, decision supports, education, enhancing organizational culture, building effective teamwork and improving communication.

We learned that charting is not enough — and that ulcer prevention plays a very big part of our program. For example, we recently implemented a Pressure Ulcer Prevention Protocol for every at-risk patient identified by the Braden Pressure Ulcer Risk Assessment. Concurrently, we developed and implemented the Bowel and Bladder Continence Program to minimize the moisture from incontinence— which can often lead to skin irritation and pressure ulcer development. Last, we worked closely with occupational therapists to pinpoint high-pressure areas especially susceptible to ulcers.

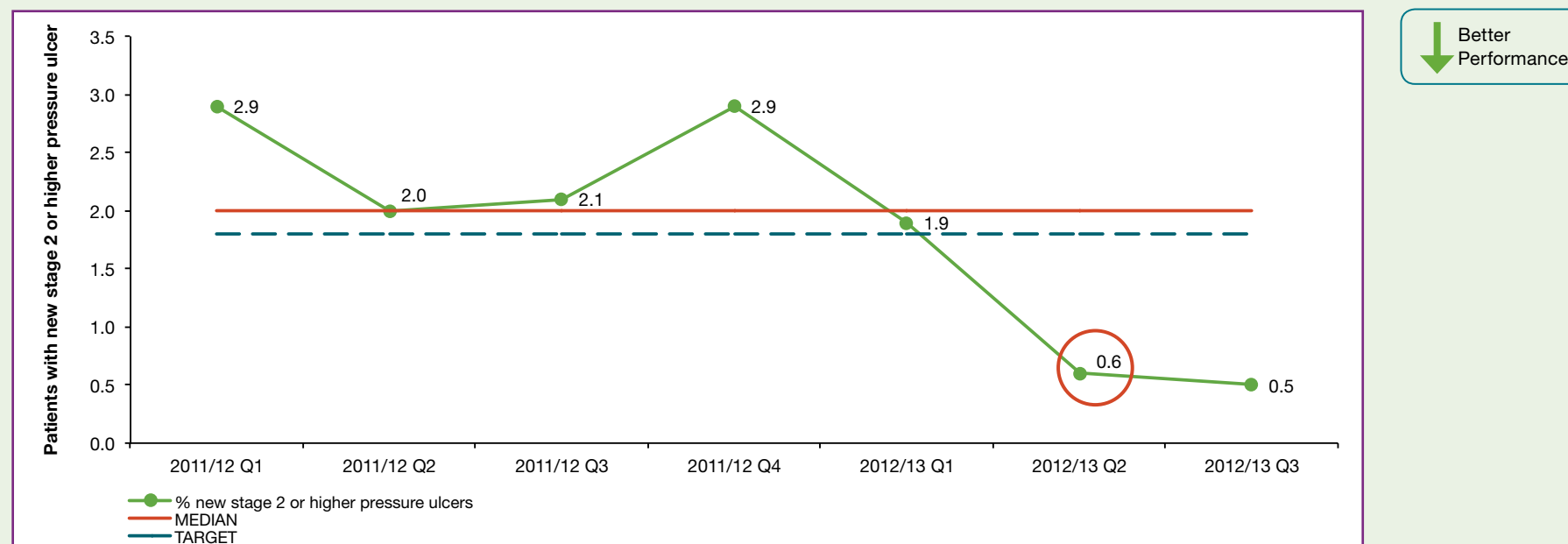
In addition, we conducted quarterly audits using patient information and minimum data set (MDS) data to monitor performance including: the percentage of patients with daily skin assessment completed; and the percentage of patients identified at-risk for pressure ulcers who have undergone the Pressure Ulcer Prevention Protocol.

Education has also played a big role. Education on wound care was provided to all staff through web seminars. Bedside instruction was also provided by an Enterostomal Therapist, as well as by the unit’s pressure ulcer Nurse Champion.”

Results

Pressure ulcer prevalence rates (stage 2 or higher) dropped from a baseline of 2.0% in Q2 2011/12 to 0.6% in Q2 2012/13, surpassing their 2012/13 QIP target of 1.8%. The run chart below, which was submitted by Runnymede Hospital, shows that the prevalence rate has the potential to demonstrate improvement.

Percent of new stage 2 or higher pressure ulcers, 2011/12 to 2013/13



Safety: Central line-associated bloodstream infection (CLI)

Definition: CLI rate is defined as the total number of newly diagnosed CLI cases in the ICU after at least 48 hours of being placed on a central line, divided by the number of central line days in that reporting period, multiplied by 1,000, consistent with publicly reportable patient safety data.

Recommended reporting period: January to December 2012

Why it is measured: CLI can lead to severe sepsis. Despite intensive efforts to prevent CLI, it remains an issue in Ontario due to the growing number of patients requiring mechanical ventilation.³⁰

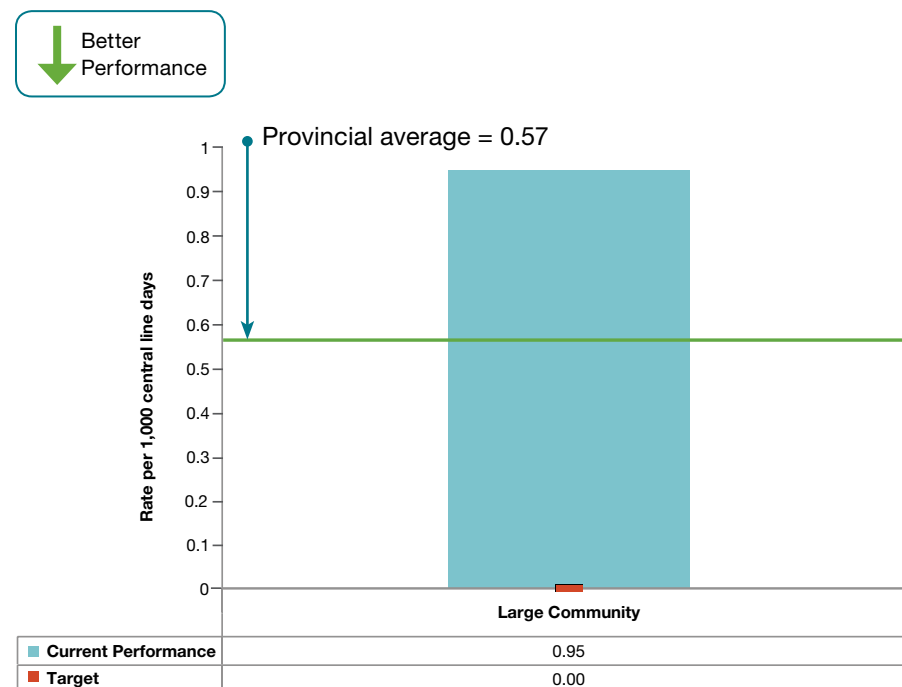
HQO's Analysis of this Indicator in 2013/14 QIP Submissions

Priority



Of the 32 hospitals that included CLI in their QIP, only one hospital went on to choose CLI as Priority 1 (this is consistent with the previous year). Although the results are not as good as last year and have risen to .57, the differing reporting periods may yield different results next year.

Figure 7: Rate of Central Line Blood Stream Infections (by Hospital), 2013/14 QIPs.



The one hospital that chose CLI as Priority 1 did so appropriately. This hospital's current performance is worse than the provincial average, and it set an appropriate stretch target at the best possible performance (zero).

Table 16: Provincial Performance & Benchmark Information for Central Line-Associated Bloodstream Infection (CLI)

BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
N/A	0.48 (Jan-Dec 2011)	0.57 (Jan-Dec 2012)	X Worsened

Change ideas

CLI Bundle recommendations have been revised based on the [Centers for Disease Control and Prevention guidelines](#) published in early 2011. The former “maintenance” bundles are now called “insertion and care” bundles.

- Central Line Insertion Bundle: The Safer Healthcare Now! insertion bundle now includes consideration of the type of line as well as optimal site selection
- Central Line Care Bundle: The SHN care bundle now includes consideration of different dressings if infection rates remain above target levels (zero). Recommendations are now also provided for arterial line insertion

Consider these process measures to guide improvement:

The bundle approach has been most successful when all evidence-based steps are executed together (e.g., an “all or none” strategy). Process measures include:

- CLI rate per thousand central line days
- Compliance with the insertion bundle
- Compliance with the maintenance bundle



Download the revised 2012 [CLI Getting Started Kit](#) from the Safer Healthcare Now! website to learn how you can prevent CLI and measure improvement.



Learning from Success: Mackenzie Health's 2012/13 QIP

CHANGE			
Planned improvement initiatives (Change Ideas)	Methods and process measures	Goal for change ideas (2012/13)	Comments
Formalize and implement SHN CLI bundle in the ICU	Audit compliance	95% compliance of all elements by March 31, 2013	As per SHN recommendations

Challenge: Mackenzie Health's ICU unit determined that central line associated blood stream infections (CLI) should not only be an important part of their infection prevention and control program, but also Priority 1 in their 2012/13 QIP.

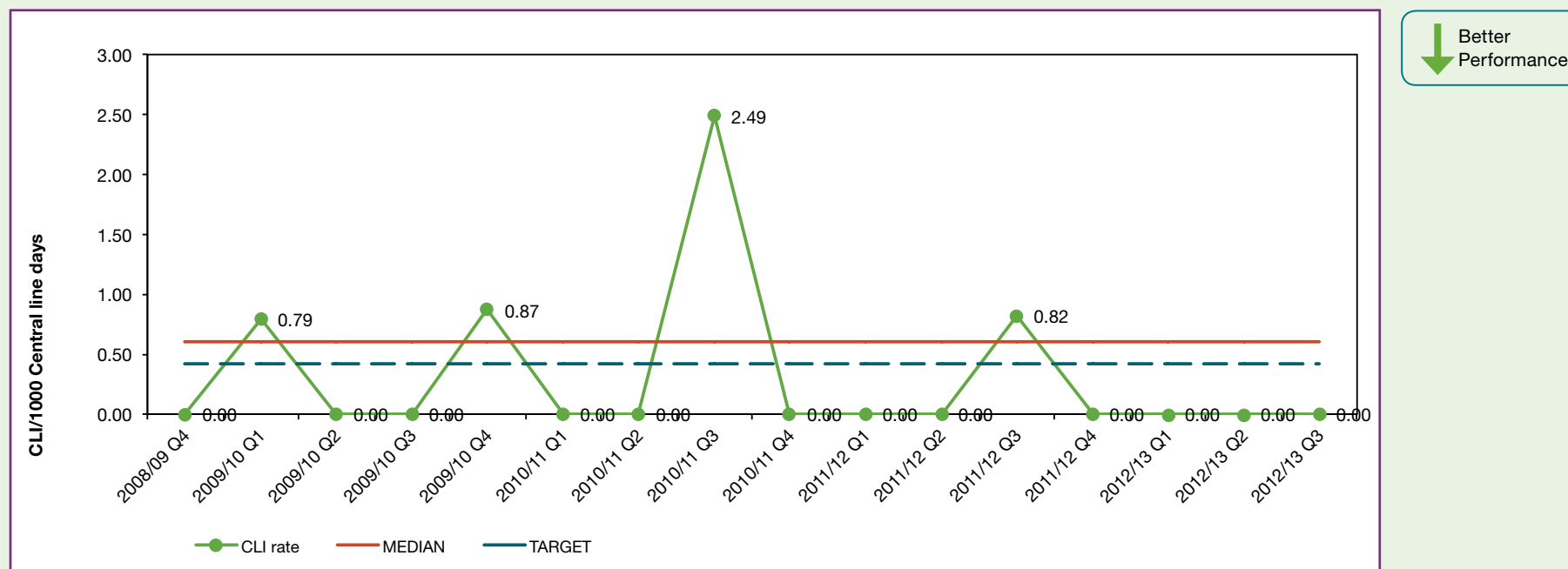
Goal: To decrease CLI from 0.6 to 0.42 or less within six months through the implementation of Safer Healthcare Now! (SHN) Central Line Insertion and Maintenance bundles. In order to achieve this overall outcome goal, Mackenzie Health's ICU set a change goal of 95% compliance on all bundle elements by the end of the fiscal year.

How did they do it?

"We decided to undertake a broad range of change ideas to introduce the SHN bundle and make sure we achieved our CLI goals within six months. At Mackenzie Health, the Patient Care Redesign program is underway to help us improve health delivery processes and patient outcomes across the system. This program helped us make sure that nurses had the appropriate equipment and supplies they needed to complete the SHN bundle steps at point-of-care.

Education was another important change idea. The unit educator and CLI champion provided SHN bundle training to physicians and nurses at meetings, staff huddles, and at the patient bedside. If staff required additional information, further support was made available online. Finally, keeping track of our progress on this indicator was an important part of our plan. To facilitate the measure of whether all the elements of the SHN bundle were being applied consistently to patients, we introduced the bundle components into our electronic medical record."

Rate of Central line infection per 1000 central line days, 2008/09 to 2012/13



Safety: Ventilator-associated pneumonia (VAP)

Definition: VAP rate is defined as the total number of newly diagnosed VAP cases in the ICU after at least 48 hours of mechanical ventilation, divided by the number of ventilator days in that reporting period, multiplied by 1,000, consistent with publicly reportable patient safety data.

Recommended reporting period: January to December 2012

Why it is measured: In a critically ill patient, VAP increases risk of mortality and, at a minimum, increases ventilator time, length of stay, and cost of care. VAP is a complex condition to diagnose and treat, so prevention is extremely important.

HQO's Analysis of this Indicator in 2013/14 QIP Submissions

Priority



Of the 31 hospitals that included VAP in their QIP, no hospital chose VAP as Priority 1. Only 1 of 38 hospitals chose it as a Priority 1 last year. The provincial average for both this year and last illustrates that VAP is still occurring in Ontario hospitals.


Change ideas

Many hospitals have achieved significant reductions in VAP rates in their critical care units by taking a comprehensive and multidisciplinary approach to ventilator care. A recent ICU collaborative improvement project conducted at the Institute for Healthcare Improvement (IHI) reported an average 45% reduction in the incidence of VAP when hospitals used a VAP Bundle.³¹

Recent Revisions to the VAP Bundle include:

- A clarified definition of VAP
- The recommendation for head-of-the-bed elevation has been reworded to: “we recommend that the head of the bed be elevated to 45°. When this is not possible, attempts to raise the head of the bed at least greater than 30° should be considered”
- The recommendation for daily evaluation of readiness for extubation has been revised to reflect new evidence
- The recommendation for endotracheal tubes with subglottic secretion drainage has been revised to reflect new evidence
- The recommendation for oral tubes has been removed from the bundle and replaced with “Initiate safe enteral nutrition within 24-48h of ICU admission”

Table 17: Provincial Performance & Benchmark Information for Ventilator Associated Pneumonia (VAP)

BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
N/A	1.26 (Jan-Dec 2011)	0.96 (Jan-Dec 2012)	 Improved

- Oral decontamination with Chlorhexidine has been upgraded to the fifth VAP Bundle element and revised to include general recommendations for oral care

Additional revisions to reflect new evidence were made for the following:

- Hand hygiene
- VTE prophylaxis
- The promotion of patient mobility and autonomy

Consider these process measures to guide improvement

- VAP rate per thousand ventilator days

- Compliance with VAP bundles (all-or-none)
- Compliance with individual components of the VAP bundle.

The bundle approach has been most successful when all five steps of the VAP bundle are executed together (e.g., an “all or none” strategy).



QIP TIP Download the revised 2012 VAP **Getting Started Kit** from the Safer Healthcare Now! website to learn to use the VAP Bundle to prevent VAP infections.

Safety: Five-day in-hospital mortality following surgery

Definition: This indicator measures the number of cases in which an in-hospital death occurred within five days of major surgery, as a proportion of the total number of hospitalizations with major surgery performed. The unit of measurement for this indicator is a single admission, and the indicator is expressed as a rate per 1,000 major surgical cases.

Recommended reporting period: Fiscal year 2011/12

Why it is measured: Despite the fact that surgical procedures are intended to save lives, complications in surgical care can be a major cause of death. By selecting this indicator and reporting and comparing mortality rates for major surgical procedures, organizations may increase awareness of their surgical safety practices and processes of care. For more information on this particular indicator, refer to the [Canadian Hospital Reporting Project: Technical Notes for Clinical Indicators](#) report.

HQO's Analysis of this Indicator in 2013/14 QIP Submissions:

Priority

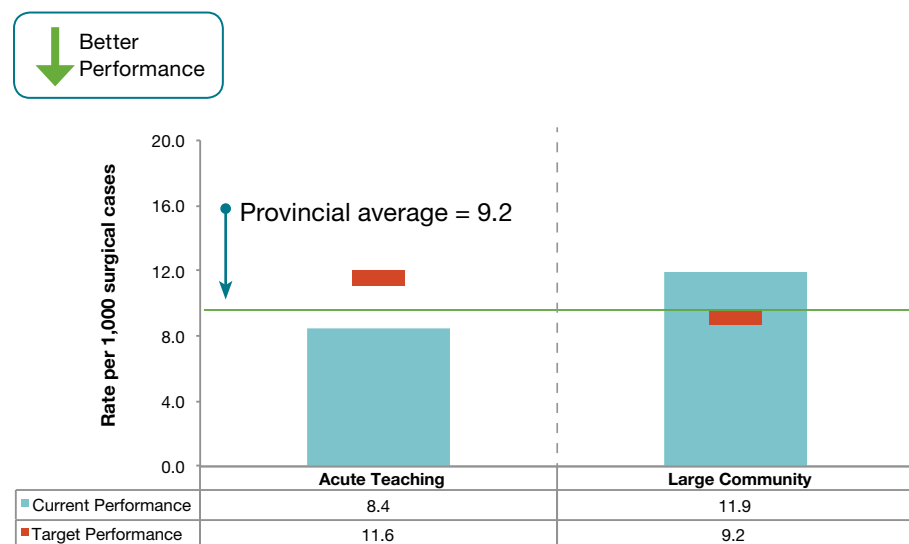


Of the 26 hospitals that included five-day in-hospital mortality following major surgery in their QIP, only three hospitals (12%) went on to choose this indicator as Priority 1. Five day in-hospital mortality was a new indicator for the 2013/14 QIPs.

Table 18: Provincial Performance & Benchmark Information for Five-Day In-Hospital Mortality Following Surgery

BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE
N/A	Data not available	9.2 (FY 2011/12)

Figure 8: Five-Day In-Hospital Mortality Rate Following Major Surgery (by Hospital), 2013/14 QIPs



Of the three hospitals that chose five-day in-hospital mortality as Priority 1, two are profiled in the graph. The teaching hospital has set a target at worse than current performance, while the large community hospital has set a target for improvement.

Change Ideas

Use the Surgical Safety Checklist to reduce complications and mortality associated with a variety of surgical procedures.³²

Consider this process measure to guide improvement

- Surgical Safety Checklist (SSC) compliance rates
- SSC defect rates

Safety: Physical restraints in mental health

Definition: The physical restraints rate is defined as the number of patients who are physically restrained at least once in the three days prior to a full admission, divided by all cases with a full admission assessment.

Recommended reporting period: Q4 Fiscal Year 2010/11 – Q3 Fiscal Year 2011/12

Why it is measured: In Ontario, the *Patient Restraints Minimization Act* (Bill 85) asks health care settings to consider alternative approaches when a person is at risk of harm to themselves and/or others and only use restraints as a last resort. When control interventions are used, they can have detrimental outcomes for both clients and hospital staff, such as further provocation of aggression, injury to staff or patients, recollections of past abuse and damage to the therapeutic alliances between patients and staff.³³

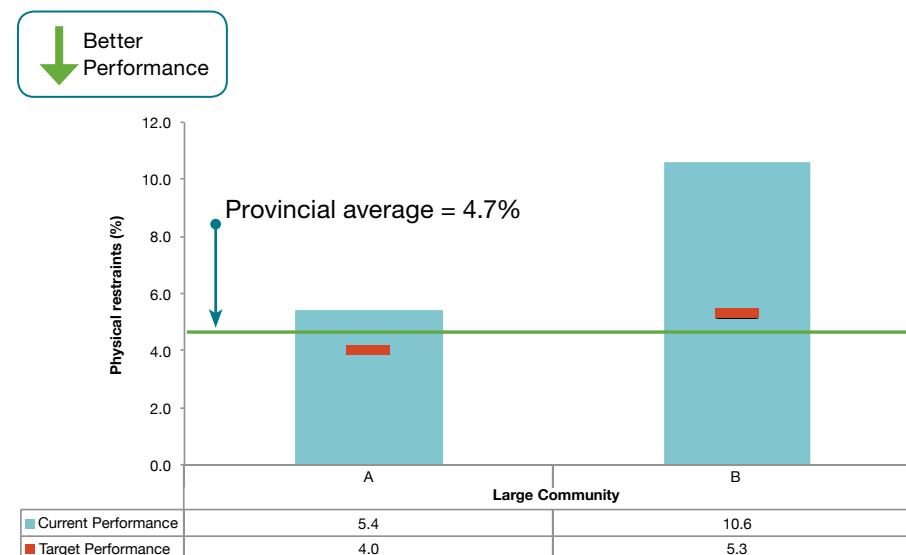
HQO's Analysis of this Indicator in 2013/14 QIP Submissions:

Priority



Of the 19 hospitals that included physical restraints in their QIP, 2 (11%) went on to choose this indicator as Priority 1. Only large community hospitals chose this indicator as a priority, which is different than last year, when it was chosen primarily by psychiatric hospitals. To be able to include this indicator, hospitals have to have inpatient psychiatric beds.

Figure 9: Physical Restraints for Mental Health (by Hospital), 2013/14 QIPs



Both hospitals that chose physical restraints as Priority 1 are profiled in the above graph and both have set targets to improve. The performance gap between current performance and the provincial average indicates an opportunity for further improvement and a more aggressive interim target.

Table 19: Provincial Performance & Benchmark Information for Physical Restraints

BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
N/A	4.5% (FY 2011/12)	4.7% (Jan-Dec 2012)	Worsened

Change ideas

There have been a number of efforts to develop best practices and guidelines for the use of control interventions, as well as a number of initiatives that emphasize least restraint.

The Registered Nurses' Association of Ontario (RNAO) provides clear guidelines for three focus areas:³⁴

- Assessment, prevention and alternative approaches
- De-escalation interventions and crisis management
- Restraint use focused on client safety

Download the RNAO's [*Promoting Safety: Alternative Approaches to the Use of Restraints*](#) for more information on how to limit the use of restraints.

Consider these process measures to guide improvement

- Duration of restraint episode
- Percentage of patients for whom alternative strategies were used prior to least restraint use
- Percentage of patients who were admitted in the previous month for whom an assessment of predisposing risk factors was completed on admission
- Percentage of patients assessed with predisposing risk factors who had an individualized plan of care with incorporated patient-preferred alternative approach strategies



Effectiveness: Hospital – total margin (OHRS)

Definition: The Ontario Hospital Reporting System (OHRS) is defined as the percentage by which total corporate (consolidated) revenues exceed or fall short of total corporate (consolidated) expenses, excluding the impact of facility amortization, in a given year.

Recommended reporting period: Q3 Fiscal Year 2012/13

Why it is measured: Health system funding reform (HSFR) is currently underway in Ontario. HSFR represents a significant transformational change from a 'provider-centred' to a 'patient-centred' funding model that ensures payment, policy and planning all support quality improvement and the efficient use of resources. The OHRS indicator is one of the ways organizations

can incorporate the province's new HSFR funding policy into their quality improvement frameworks. To access hospital-level data, visit the [MOHLTC Health Data Branch web portal](#) and click on the Health Care Indicator Tool (HIT).

HQO's Analysis of this Indicator in 2013/14 QIP Submissions: Priority



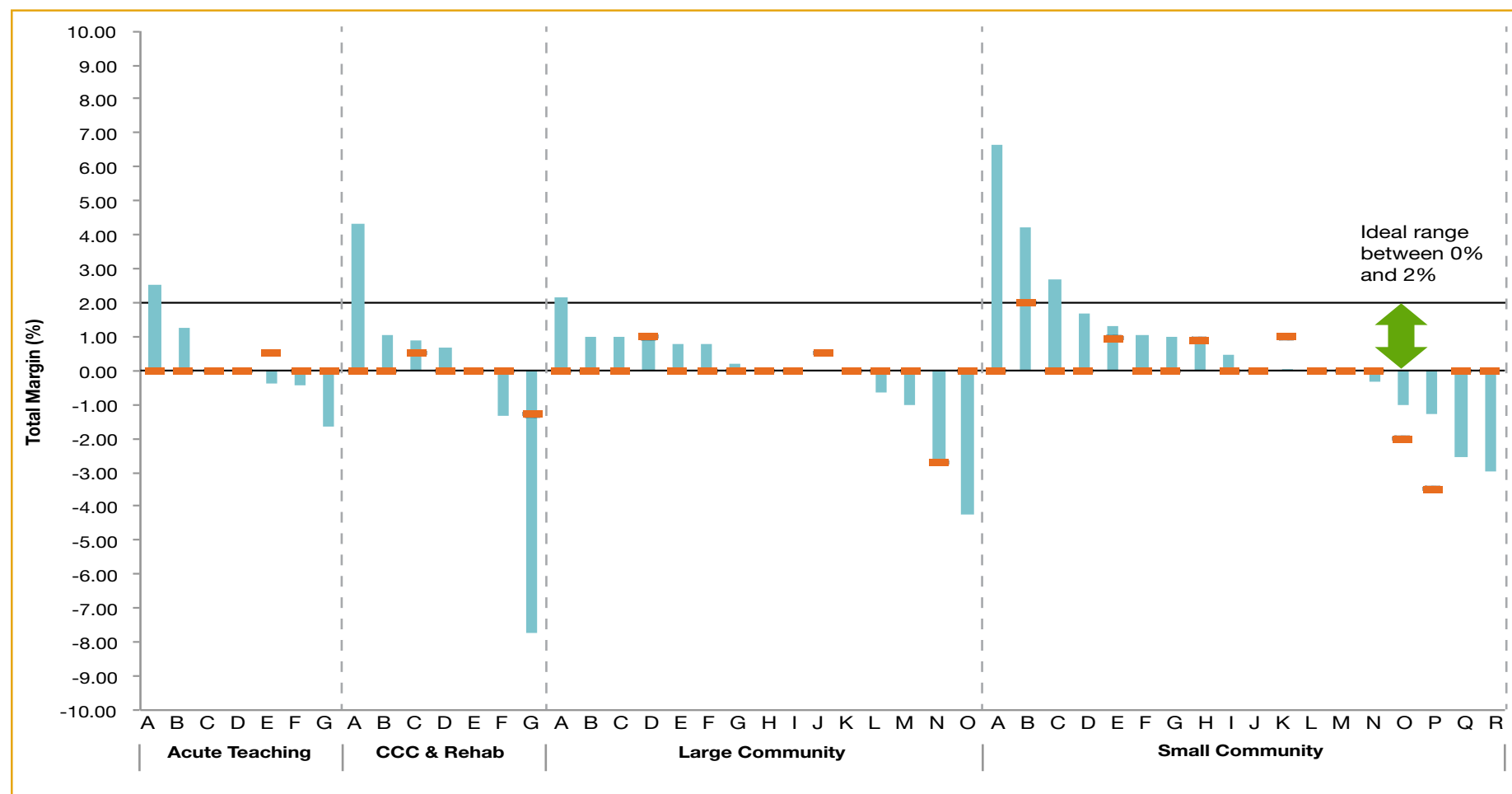
Of the 104 hospitals that included total margin in their QIPs, almost half (48%) went on to choose total margin as Priority 1. This is approximately the same as last year, when 62 out of 121 hospitals (51%) chose to report total margin.

Table 20: Provincial Performance & Benchmark Information for Hospital - Total Margin (OHRHS)

BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE
0% to 2%	Data not available	2.4% (FY 2011/12)

Figure 10: Total Margin (by Hospital), 2013/14 QIPs

Most organizations set a target between 0% and 2%, which is within suggested guidelines.



Change ideas

- **Reduce the direct cost of goods:** Organizations are encouraged to work with their distributors to achieve lower costs. It may be possible to purchase more product in bulk, enter into a longer term agreement or find alternative suppliers to drive costs down.
- **Reduce inventory waste:** Organizations are often able to avoid spillage or even pilferage by managing inventory more efficiently (see HSFR section on Lean methodology).
- **Integrate to serve patients differently:** If demand for some services is low and there are other organizations offering these services, consider partnering with another provider so that the same service can be provided at a less costly rate.

Effectiveness: Hospital standardized mortality ratio (HSMR)

Definition: HSMR is defined as the number of observed deaths divided by the number of expected deaths, multiplied by 100. This means that an HSMR of 100 indicates a hospital has had no more deaths than expected. A value less than 100 suggests fewer than expected deaths.

Recommended reporting period: Fiscal Year 2010/11 as of December 2012

Why it is measured: The HSMR indicates how successful hospitals and health care providers across Ontario have been in reducing inpatient deaths, thereby leading to improved patient care. The HSMR compares the actual number of deaths in a hospital or region after adjusting for several factors that may affect in-hospital mortality rates (e.g., age, sex, diagnoses and admission status of patients).

HQO's Analysis of this Indicator in 2013/14 QIP Submissions:

Priority

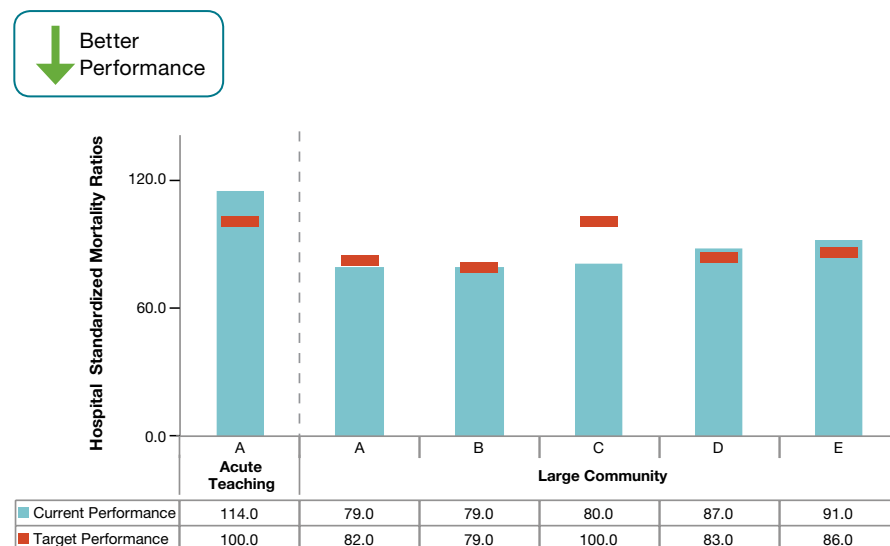


Of the 37 hospitals that included HSMR in their QIPs, six hospitals (16%) went on to choose this indicator as Priority 1. This finding is consistent with 2012/13 selection, when 41 hospitals included HSMR in their QIPs, and six (15%) selected this indicator as Priority 1.

Hospital standardized mortality ratio (HSMR)

The [Canadian Institute for Health Information](#) (CIHI) has led efforts to calculate HSMRs in Canada. As a result of new methodology, HSMR results for 2007-2010 were generally ten points higher (89) compared to the results that were provided last year. Despite these changes in methodology, HSMR trends have remained similar for the majority of organizations. The time periods considered within the QIP and by CIHI are different.

Figure 11: HSMR (by Hospital), 2013/14 QIPs



The six hospitals that chose HSMR as Priority 1 are profiled in the above graph. Large community hospital C set its target at 100, despite having achieved a performance of 80. The tendency of organizations to set targets at the provincial value, even though their current performance is better, has been a recurring issue over the past three years. If an indicator is not set to improve, then the hospital should reconsider whether it should be regarded as a priority in their QIP.

Consider these process measures to guide improvement

HSMR is calculated on a quarterly and annual basis. Organizations are encouraged to track changes in results over time, to assess how effective strategies have been in reducing overall mortality rates, and consider these process measures to guide improvement initiatives.

- Crude mortality rate per week/month
- Percentage of 'code blues' outside of ICU
- Compliance with severe sepsis bundles (with the goal of reducing mortality)

Table 21: Successful Change Ideas for Improving HSMR

HOSPITAL	CHANGE CONCEPT	IMPROVEMENT INITIATIVES (CHANGE IDEAS)
Niagara Health System	Decision support	<ul style="list-style-type: none"> • Develop an early warning tool that uses a basic vital signs flow sheet with colour coding to give staff a snapshot of a patient's health status, allowing them to see quickly if the patient's health is improving or deteriorating • Pilot the Niagara Early Warning System (NEWS) that triggers nursing staff to contact a physician when the patient's status deteriorates.



Patient-Centred: Patient satisfaction

Definition: Improving patient satisfaction involves asking patients questions about the care and services they receive at the hospital, and whether they would recommend the hospital to others. Most hospitals use NRC Picker Canada questions for hospital inpatients and ED patients. However, some hospitals use an in-house survey.

Recommended reporting period: October 2011 – September 2012

Why it is measured: When health care is perceived through the eyes of the patient and their family and/or caregivers, research shows that the quality of care rises, costs decrease, provider satisfaction increases, and the patient care experience improves.³⁵ Patient-centred care is a priority in Ontario. However, according to [Ontario's Action Plan for Health Care](#), a gap still exists between the kind of care patients receive, and the kind of care they should be receiving. About one in four adults say they do not get to ask enough questions or feel involved in their own care. One in three sicker adults do not believe someone always coordinates the care they receive from other doctors or providers.³⁶

HQO's Analysis of this Indicator in 2013/14 QIP Submissions:

Priority



Of the 115 hospitals that included patient satisfaction (including in-house surveys of satisfaction) in their QIPs, 37 hospitals (32%) went on to choose it as Priority 1. In 2012/13, 129 hospitals included patient satisfaction in their QIPs, and 59 (45%) identified the indicator as Priority 1. Although a significant proportion of Ontario's hospitals are focused on patient satisfaction, there has not been a significant improvement in provincial results. Provincial averages are still well below the benchmarks released in January 2012.

Patient satisfaction is one of the more difficult indicators to improve upon and it often takes years for an initiative focused on patient satisfaction to demonstrate improvement. It is important to consider both patient experience and patient satisfaction, and use this information to design care and services that consistently and reliably deliver an ideal patient experience.

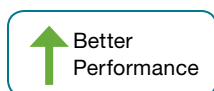
As mentioned above, HQO developed provincial benchmarks for patient satisfaction to assist hospitals in the development of their QIPs. These benchmarks were developed through an evidence-based, data-driven, modified Delphi panel process, and were established to help hospitals set effective improvement targets. The benchmark values fell on the eightieth percentile of the 2010/2011 NRC Picker Canada Ontario hospital data.

Please see the table below for more information on these benchmarks.

Table 22: Provincial Performance & Benchmark Information for Patient Satisfaction

INDICATOR	BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
% Who Recommend - Inpatient	81.8%	73.1% (FY 2010/11)	73.2% (FY 2011/12)	✓ Improved
% Overall satisfaction – Inpatient	96.4%	93.2% (FY 2010/11)	93.2% (FY 2011/12)	–
% Who Recommend – ED	70.6%	58.2% (FY 2010/11)	58.7% (FY 2011/12)	✓ Improved
% Overall satisfaction – ED	91.8%	85.1% (FY 2010/11)	85.2% (FY 2011/12)	✓ Improved

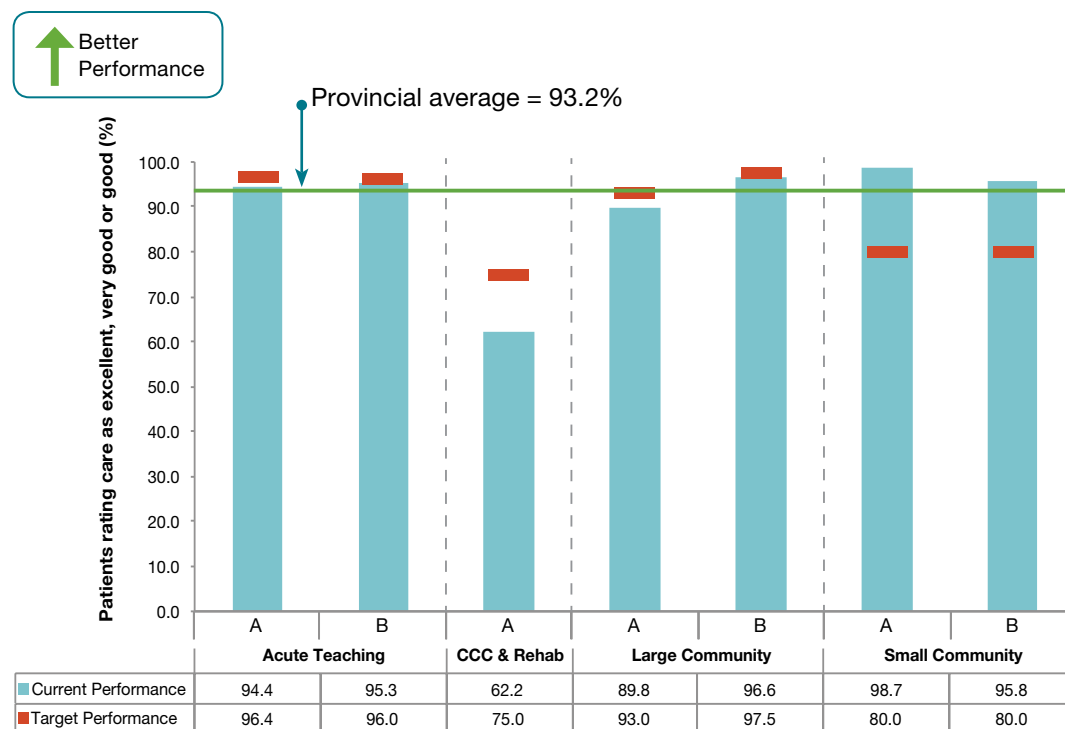
Figure 12: Percent of Patients Who Would Definitely Recommend This Hospital to Family and Friends (Inpatients, by Hospital), 2013/14 QIPs



Please note that only results with clear indication that the data is for inpatients are included.

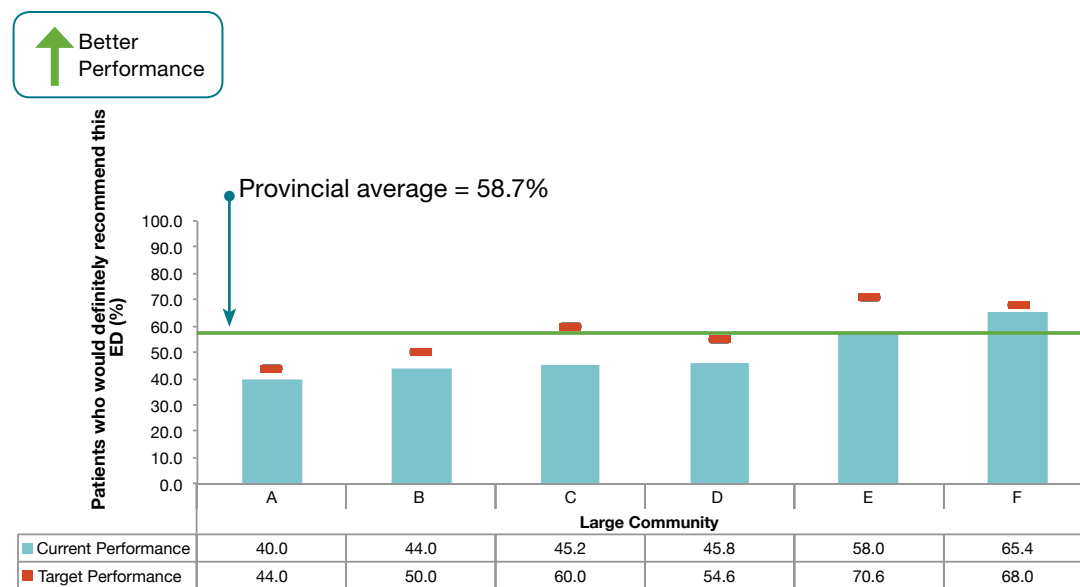
Percentage of inpatients who would recommend hospital: The majority of hospitals set a satisfaction target of 85%, which is above the benchmark 81.8%. However, the three small community hospitals depicted in the graph set their target for minimal or negative improvement. These organizations are encouraged to at least maintain their current performance.

Figure 13: Percent of Patients Who Rate the Care They Received as Excellent, Very Good or Good (Inpatients, by Hospital), 2013/14 QIPs

**Percentage of overall satisfaction for inpatients:**

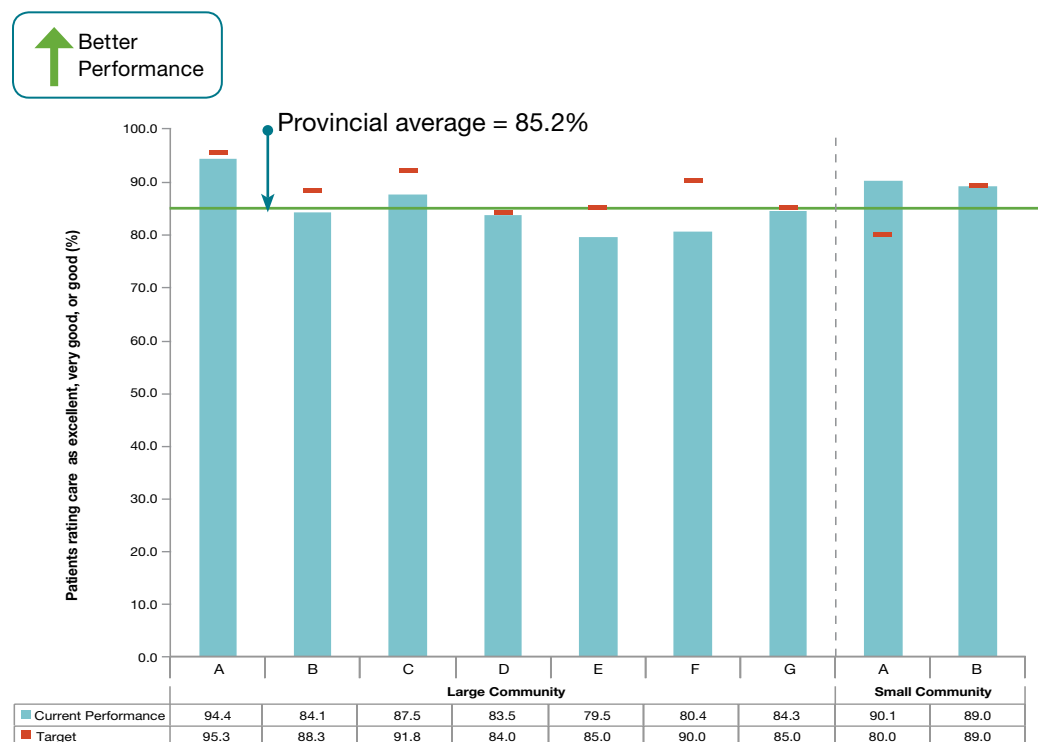
Hospitals generally achieve high satisfaction ratings on overall care received. Acute teaching hospitals have set targets at or close to the benchmark of 96.4%. The two small community hospitals depicted in the graph set their targets at approximately 20% below current performance. Hospitals should not plan to do worse than their current performance.

Figure 14: Percent of Patients Who Would Definitely Recommend This ED to Family and Friends (EDs, by Hospital), 2013/14 QIPs



Percentage who would recommend ED: Every hospital that chose this indicator as Priority 1 is currently below the benchmark of 70.6%. Each hospital has set a target above current performance, with hospital F referencing benchmark performance. The efforts of these hospitals in this regard are commendable.

Figure 15: Percent of Patients Who Rate the Care They Received as Excellent, Very Good or Good (EDs, by Hospital), 2013/14 QIPs



Percentage of overall satisfaction for ED: Of the nine hospitals that chose this indicator as Priority 1, all but the small community hospitals set targets to improve. Small community hospital B chose to remain at their current level of performance. Maintaining the current level of performance suggests that this indicator is not Priority 1, so providing a rationale for this choice is imperative. Hospitals E and G are commended for setting improvement targets and referencing the provincial average.

Change ideas

- Consult with patients and families to involve them in health care redesign and quality improvement and regularly engage with them to keep them informed.
- Create partnerships in hospital settings
 - o Bring patient stories to the hospital board/leadership team
 - o Use patient helpers (i.e., patients/family members that have a particular illness) that are willing to share their knowledge with others
 - o Help patients develop self-management skills
 - o Ensure patients/family members are key members of internal quality committees
- Educate health care professionals
- Evaluate and research patient-centred health care

- Regularly measure and provide feedback
- Create partnerships with supporting organizations

Consider these process measures to guide improvement

- Frequency of patient/caregiver participation on improvement teams
- Percentage of board meetings where patients or caregivers share their experiences
- Number of town halls or focus groups per quarter
- Survey participation rates
- Number of times board/senior team performed rounds with staff and patients
- Number of complaints/compliments
- Percentage of follow-up phone calls
- Percentage of patients/family members involved in care planning



Learning from Success: Holland Bloorview Rehabilitation Centre's 2012/13 QIP

CHANGE		
Planned improvement initiatives (Change Ideas)	Methods and process measures	Goal for change ideas (2012/13)
Clients and families included in policy, procedure, program and guideline development All projects/initiatives cannot move forward without client/family representatives	1. Include in all project charters and terms of reference 2. Percentage of projects having family representatives 3. Retrospective audit of activities	≥ 80%
Implementation of a new survey tool to quantify client/family satisfaction with authenticity of partnership	Percentage of those families that rate their experience as authentic	

Challenge: Strengthen the family complaints process to more accurately reflect the principles of ECFAA.

Goal: Holland Bloorview identified two additional indicators in last year's QIP:

- To improve the response time for complaints and ensure that the amount of time between the complaint and the initial contact/interview resolution process with families is within two business days.
- To increase the percentage of family leaders who would describe their experience with Holland Bloorview as an “authentic” partnership through the use of a new survey

How did they do it?

“Four years ago, we began a program that brought patients (clients) and their families to the forefront of all decisions made at Holland Bloorview. Last year as part of our quality improvement planning, we took a closer look at ECFAA principles, particularly in regard to our family complaints process.

We knew we could do better. Historically, all family complaints were going to a unit or program level. We designed a new family complaints process with the help of our 80 family leaders that is now more centralized, linking families to a highly trained patient relations specialist. But how should we measure whether our family complaints process is working? How long should it take for us to respond to a complaint? What is a reasonable timeframe?

We landed on ‘within two days, 80% of the time’. What we did not expect in our first year was that as a result of our new centralized family complaints process, we actually received MORE complaints — along with more compliments! And we expect this is because we were really, “authentically” listening to our families and being responsive to their needs.

Despite the larger numbers, we managed to meet our ‘within two days, 80% of the time’ goal. Next year, we will have two years of baseline data, and so our next step will be to look at how long it takes us to not only respond to, but also resolve issues — as well as identify resolution categories (e.g., simple concerns versus resource-intensive complaints).”



Learning from Success: Markham Stouffville Hospital's 2012/13 QIP

CHANGE		
Planned improvement initiatives (Change Ideas)	Methods and process measures	Goal for change ideas (2012/13)
Undertake the NRC Picker Satisfaction and Engagement Survey in May/June 2012 and establish baseline metrics for staff and physicians (First time with this tool).	Percentage of staff and physicians who complete the survey and state that they are, overall, satisfied or very satisfied with their current job.	>50% of staff and physicians will complete survey.

Challenge: Continue to elevate staff engagement levels, using a new measure to gather data

Goal: To establish a staff/physician satisfaction baseline of 70% or greater with implementation of the NRC Picker Satisfaction and Engagement Survey.

How did they do it?

"We've always achieved good results in our staff satisfaction surveys, however for 2012/13 we decided to switch from the Accreditation Canada's Worklife Pulse Survey we were using to the QIP-recommended NRC Picker Satisfaction and Engagement survey. We determined that the NRC Picker survey would allow us to better compare and break down data, as well as create specific action plans by department.

We were excited by the NRC survey results. The response rate was excellent, with almost 50% of staff and physicians participating. Moreover, it appears that our staff really like working at Markham Stouffville compared to other hospitals. Approximately 85% of staff indicated that our hospital is a great place to work (compared to the OHA average of 71.8%); and 80.6% indicated they are proud to tell others that they are part of the organization (compared to the OHA average of 64.4%).

To what do we attribute our success? Staff and physician engagement is an integral part of our culture and a top priority.

First, we have an excellent on-boarding program that welcomes new staff to the hospital on their first day of work. We recognize and reward exemplary performance through our Partners in Excellence Program, our Connections e-newsletter, the HERO program, as well as a generous Bursary Program to support staff in their pursuit of knowledge and professional development.

Second, we involve all our front line staff/physicians in daily continuous improvement using the LEAN model at the unit level. When the hospital was going through an expansion project, we also incorporated the 'Bridges Model on the Human Side of Change' to re-frame staff and physician behaviour that could be labeled as negative, disruptive or unsupportive."



Integrated: 30-day readmission rate to any facility (specific case mix groups)

Definition: This indicator is defined as non-elective readmission within 30 days for select conditions (based on case mix groups).

Recommended reporting period: Q2 2011/12 to Q1 2012/13

Why it is measured: The Canadian Institute for Health Information (CIHI) recently estimated that roughly 8.5% of patients are readmitted to hospital within 30 days of discharge.³⁷ While it is difficult to estimate how many of these readmissions could have been avoided, hospitals can reduce their rates by identifying those patients most likely to return to hospital within short periods and improving the care patients receive before and after discharge.³⁸ Sharing

information between sectors will also create a more cohesive health care system in Ontario, improving patient care, especially for those with complex issues.

HQO interpretation of 2013/14 QIP submissions:

Priority



Of the 53 hospitals that included readmissions in their QIPs, 13 hospitals (25%) went on to choose it as Priority 1. As this indicator is considered a provincial priority, it is interesting to note that less hospitals are choosing to focus on readmissions this year as compared to last year (18 of 74 hospitals [24%] chose it as Priority 1 in 2011/12).

Table 23: Provincial Performance & Benchmark Information for 30-Day Readmission Rate to any Facility (Specific Case Mix Groups [CMGs])


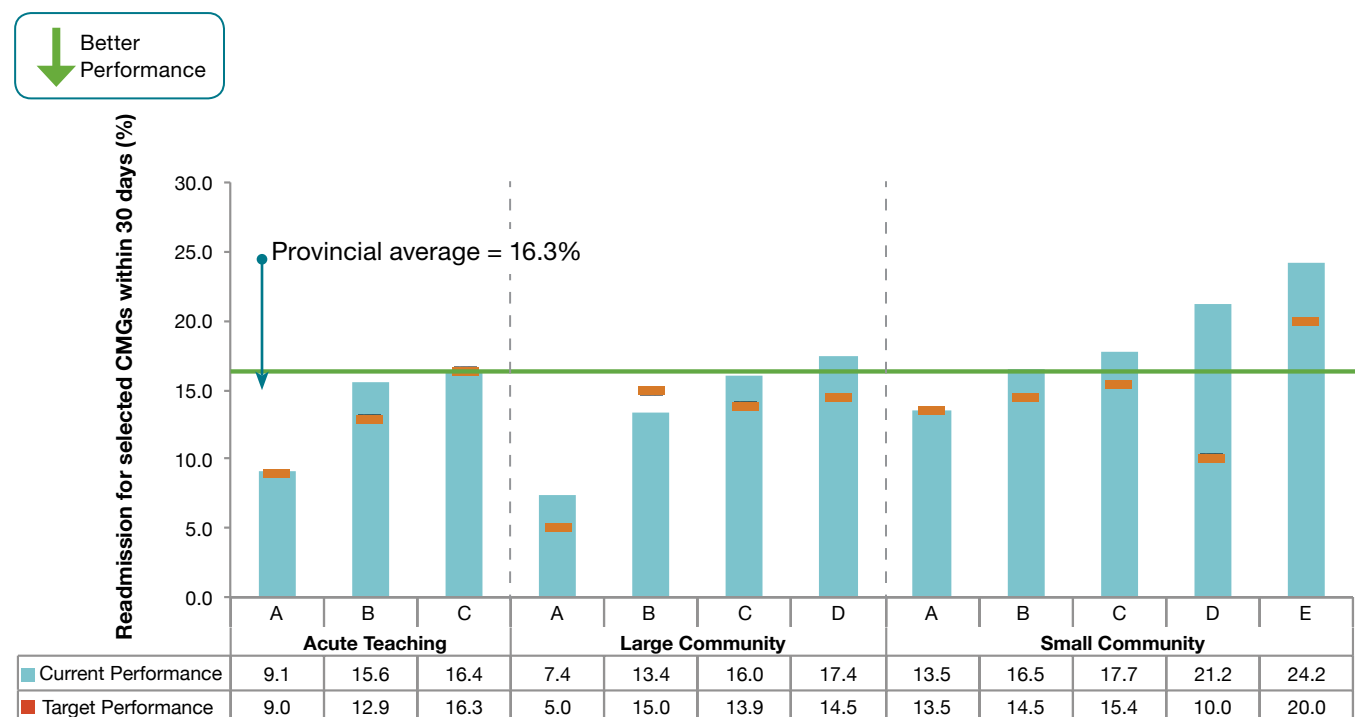
BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
N/A	15.1% (Q4 2010/11)	16.3% (Q2 2011/12 – Q1 2012/13)	 Worsened

Figure 16: Readmission Within 30 Days for Selected CMGs to any Facility (by Hospital), 2013/14 QIPs



Reducing the 30-day readmission rate to any facility is a provincial priority. Readmission rates can be improved through an integrated health focus and individualized discharge planning. Hospitals can work with their primary care colleagues to improve transitions to the home. Teaching hospital C set its target at the provincial average of 16.3%, while large community hospital B set a target that implies that they will have more readmissions over the coming year. Hospitals should consider whether they have focused enough of their improvement efforts on this high-priority target and assess whether or not there are opportunities for collaboration with other sectors to reduce readmissions.

Change ideas

- Conduct individualized discharge planning
- Assess post-transition risk and activate appropriate follow-up
- Promote self-management and provide effective education to the patient and caregiver
- Conduct medication reconciliation within 24 to 48 hours of being admitted to hospital
- Conduct medication reconciliation at discharge: create the best possible medication discharge plan

Consider these process measures to guide improvement

- Percentage of patients for whom a post-discharge risk assessment was conducted
- Percentage of patients deemed high risk with documentation that confirms that their primary care physician was consulted within 24 hours of discharge

- Percentage of discharged patients identified as high risk with documentation that confirms that they were assessed by a physician within seven days
- Percentage of discharged patients with documentation that confirms that medication reconciliation was completed at key points in the hospital
- Percentage of discharged patients with documentation that confirms that they (and their caregivers) received a written post-discharge care plan
- Percentage of discharged patients with documentation that confirms that they (and their caregivers) were consulted in the development of their post-discharge care plan
- Number of patients newly enrolled into CCAC/community care as a part of their discharge from hospital within the last 30 days
- Percentage of high-risk patients in CCAC/community care with documentation that confirms that a “collaborative care team” meets to discuss their care needs

Table 24: Successful Change Ideas for Improving 30-Day Readmission Rate to any Facility (Specific Case Mix Groups)

HOSPITAL	CHANGE CONCEPT	CHANGE IDEA(S)
Sunnybrook	Process intervention	<ul style="list-style-type: none"> • Engage community family physicians in surveys, open houses and office visits • Inform family physicians when their patient has been admitted to ED, gives birth or is discharged



Learning from Success: Queensway Carleton's 2012/13 QIP

CHANGE		
Planned improvement initiatives (Change Ideas)	Methods and process measures	Goal for change ideas (2012/13)
Increase discharge readiness of medicine inpatients whose care is being managed with a clinical pathway by providing them with a patient education discharge information sheet	Percentage of medicine patients on clinical pathway provided with a patient education discharge information sheet	70%
Improve utilization by physicians of clinical pathways for appropriate Congestive Heart Failure (CHF) and Chronic Obstructive Pulmonary Disease (COPD) patients to help prevent readmissions	Percentage increase in use of clinical pathways as measured by chart audit	15%

Challenge: In reviewing their medicine program in 2010/11, Queensway Carleton Hospital continued to see a readmission rate that was high compared to their peers, especially in several case mix groups (CHF and COPD).

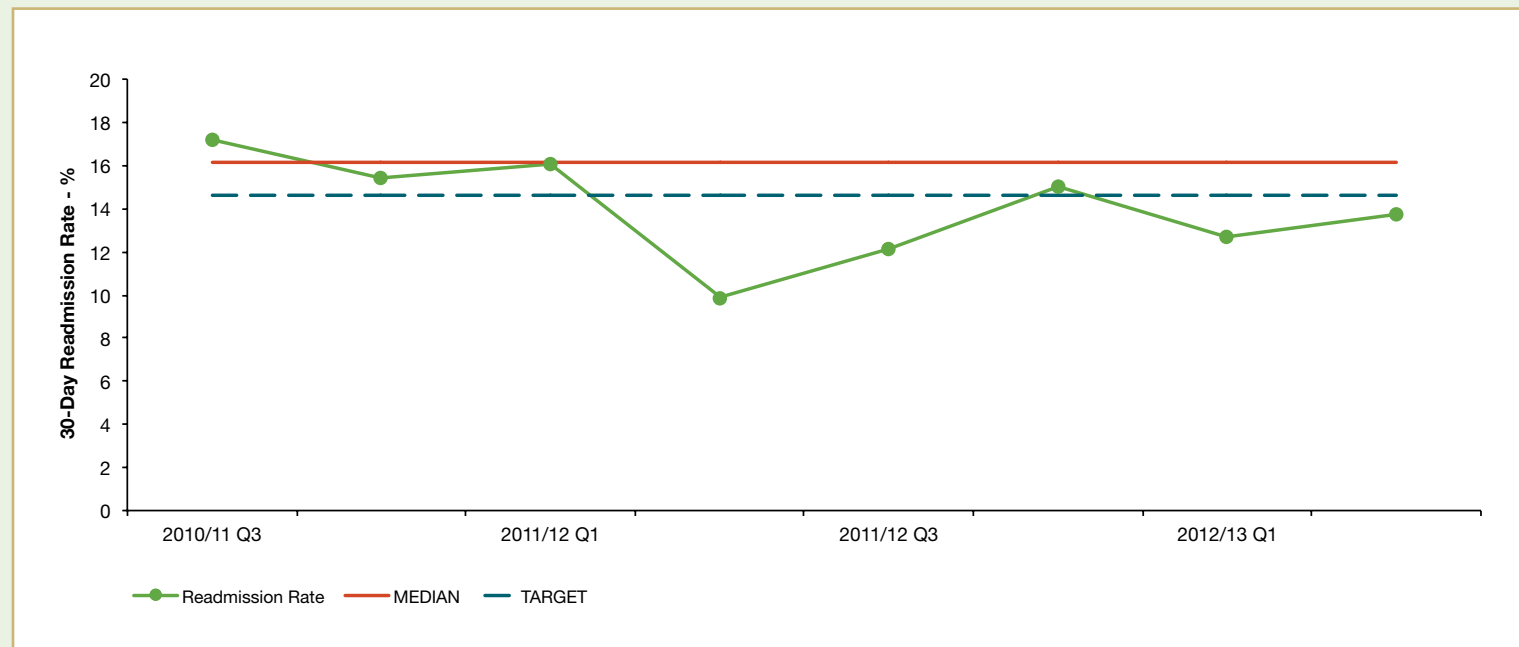
Goal: To reduce readmissions in the CHF and COPD groups by 15% over two years, and reduce overall admittance rate by 15%, from 16.14% to 14.6% over fiscal year 2012/13.

How did they do it?

“Taking the LEAN approach to mapping out our current state, we honed in on the root causes of why our readmissions rates were not where we wanted them to be. We involved our clinical experts every step of the way — their engagement was pivotal in our success. Not only do the nurses and physicians know the clinical treatment of their patients, they are also aware of the processes and tools in place in our hospital and were able to give some great feedback regarding potential improvement to clinical pathways.

Even simple, small change ideas helped immensely. For example, we now provide a patient discharge information sheet to help patients and caregivers navigate care systems and understand the types of assistance that might be available to them after a hospital stay. Second, we immediately fax the family doctor to arrange a follow-up appointment before the patient leaves the hospital. Third, we’re working more closely with the Community Care Access team to coordinate care across sites — from hospital to facility to home.”

Overall 30-Day Readmission Rate – Queensway Carleton Hospital



Results

Readmission rates dropped from a baseline of 16.4% in Q1 2011/12, to 12.92% over the period Q2 2011/12 – Q1 2012/13. The run chart below shows that Queensway Carleton Hospital’s results have been below their target of 14.6% in all but one quarter since the baseline was established.

Integrated: Percentage of alternative level of care (ALC) days

Definition: The percentage of Alternative Level of Care (ALC) days is defined as the total number of inpatient days designated as ALC, divided by the total number of inpatient days.

Recommended reporting period: Q3 2011/12 - Q2 2012/13

Why it is measured: The Emergency Department (ED)/Alternate-Level-of-Care (ALC) issue remains a critical challenge for Ontario's hospitals. Hospitals are working hard to improve the flow of patients, reduce the length of time patients are waiting in the emergency department for an inpatient bed, and the length

of time patients are waiting for the next level of care after completing their in-hospital goals.

HQO's Analysis of these Indicators in 2013/14 QIP Submissions:

Priority



Of the 82 hospitals that included ALC days in their QIPs, 23 hospitals (28%) went on to choose it as Priority 1. Last year, 103 hospitals included ALC while 36 (35%) chose to prioritize it as Priority 1.

Access: Ninetieth percentile ED length of stay for admitted patients

Definition: The Emergency Department (ED) length of stay for admitted patients is defined as the time from triage or registration (whichever comes first) to the time the patient leaves the ED.

Recommended reporting period: Q4 2011/12 - Q3 2012/13

HQO's Analysis of these Indicators in 2013/14 QIP Submissions:

Priority

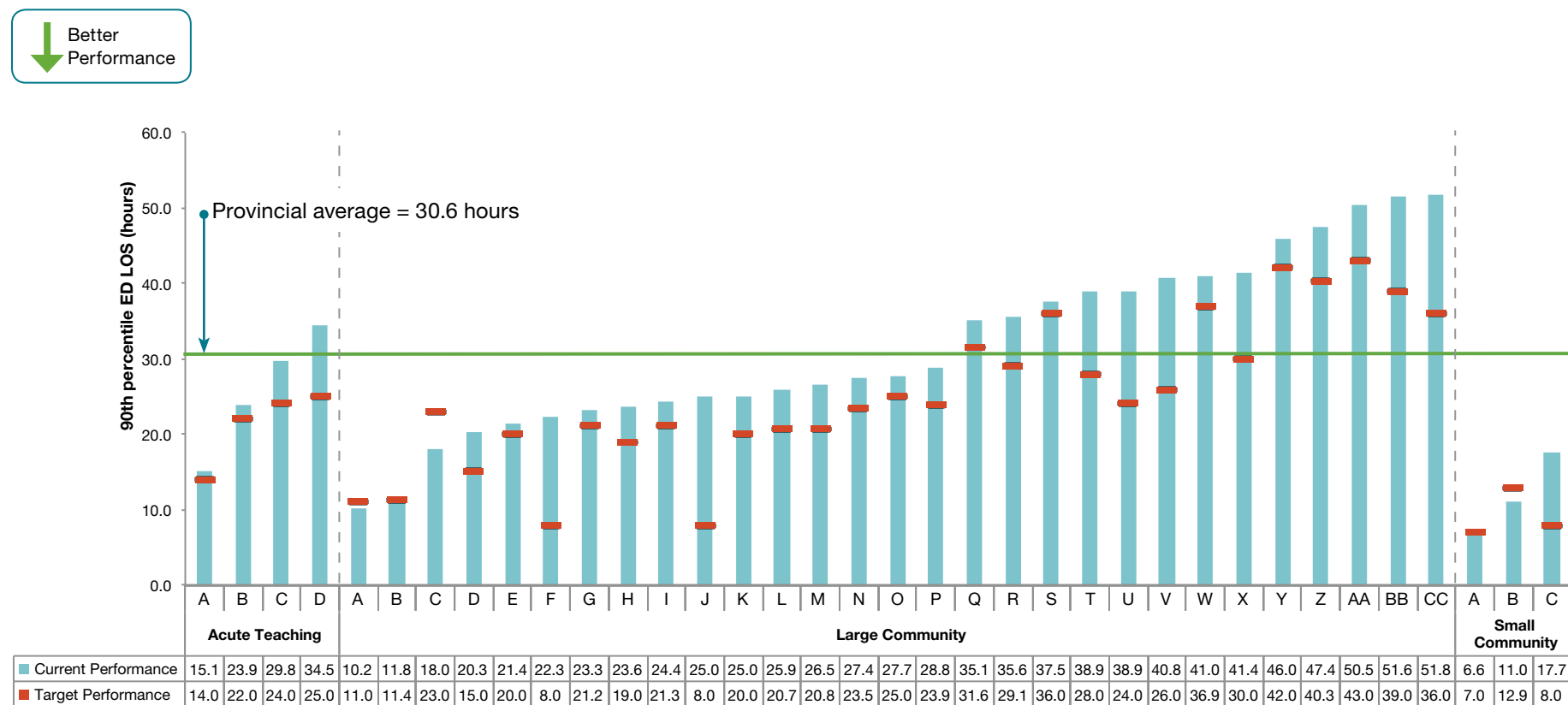


Of the 80 hospitals that included ED Wait Time in their QIPs, 37 hospitals (46%) went on to choose it as Priority 1. Hospitals should assess whether or not there are opportunities for collaboration with other sectors to improve performance on this indicator.

Table 25: Provincial Performance & Benchmark Information for 90th Percentile ED Length of Stay for Admitted Patients

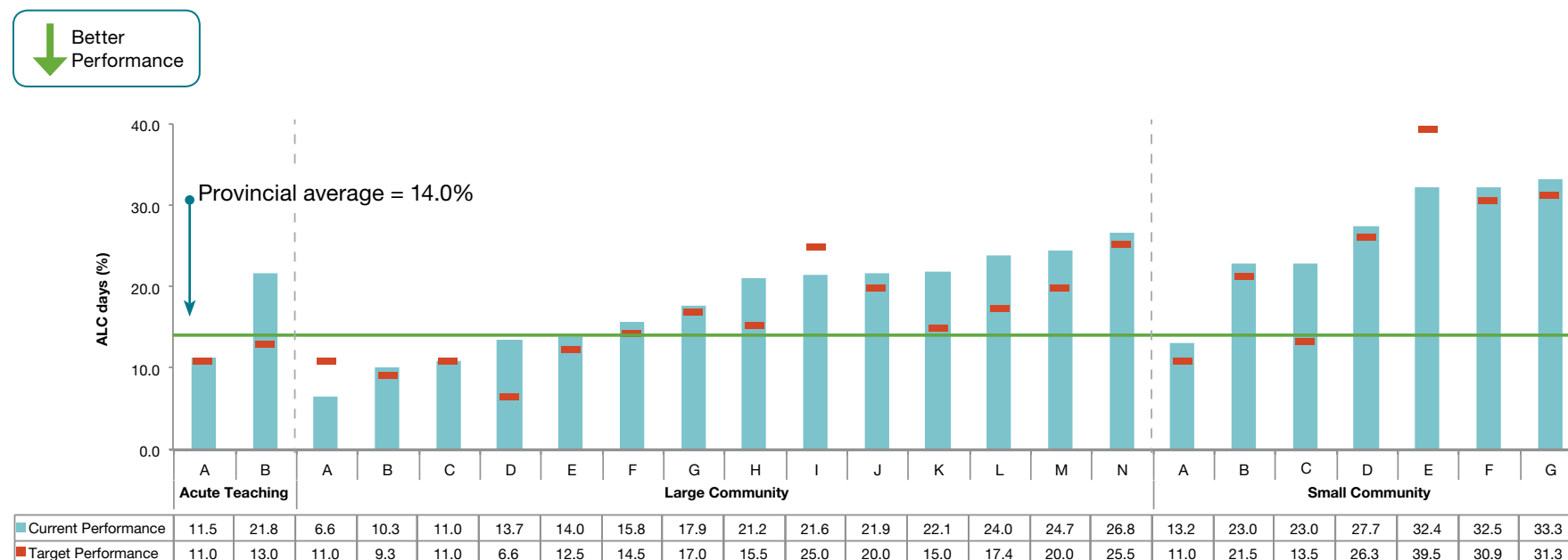
INDICATOR	BENCHMARK	PREVIOUS PROVINCIAL AVERAGE	PROVINCIAL AVERAGE	PROGRESS SINCE LAST YEAR
Ninetieth Percentile ED Length of Stay	N/A	30.6 hours (FY 2010/11)	30.6 hours (FY 2011/12)	—
ALC	N/A	17% (FY 2010/11)	14.0% (Q3 2011/12 – Q2 2012/13)	✓ Improved

Figure 17: Ninetieth Percentile of ED Length of Stay for Admitted Patients (by Hospital), 2013/14 QIPs



The majority of hospitals that selected ED length of stay for admitted patients as a Priority 1 indicator set appropriate targets for improvement. Hospitals that had the longest wait times had the most ambitious targets for improvement, which is encouraging. Large community hospital C expects to increase its wait time by five hours despite establishing ED length of stay as a top priority. This hospital should re-evaluate this target and determine whether it should be strengthened.

Figure 18: Percent of ALC Days (by Hospital), 2013/14 QIPs



It is important to set stretch targets that are below or better than the provincial average of 14%. Collaborating with other health care sectors is an effective method of reducing the rate of ALC. Three hospitals have set targets that are currently worse than their current performance and should justify these targets in the QIP.

Suggested process measures to guide improvement

- Percentage of patients referred to CCAC
- Percentage of patients that have had Restorative Care interventions
- Percentage of documented integrated discharge planning reviews
- Percentage of inter-professional staff admission assessments completed within 48 hours
- Percentage of ALC cases reviewed monthly by committee

QIP TIP

Visit the [OHA's website](#) for innovative solutions for alleviating health system pressures related to ED/ALC. [The Emergency Department Process Improvement Program \(ED PIP\)](#) also has a toolkit that provides hospitals with a structured approach to improving patient flow.

Change Ideas

Change ideas identified by hospitals that help increase patient flow and patient satisfaction, while decreasing length of stay and mortality (all without hiring any more staff or adding a single bed), are outlined in the table below.

Table 26: Successful Change Ideas for Improving Ninetieth Percentile ED Length of Stay for Admitted Patients and Percentage of Alternative Level of Care (ALC)

HOSPITAL	CHANGE CONCEPT	CHANGE IDEA(S)
Hawkesbury and District General	Process intervention	<ul style="list-style-type: none"> • Increase referrals to the Home First program • Improve discharge planning and communication through team rounds, whiteboards and concurrent coding
North Bay Regional Health Centre		<ul style="list-style-type: none"> • Collaborate with the community
Halton Health Services		<ul style="list-style-type: none"> • Joint discharge operations committee reviews all ALC and potential ALC patients twice a week to improve communication, reduce ALC days and transfer knowledge across providers and staff • Review discharge planning model every day to identify patients who should be quickly assessed and managed for safe transition to the community • Identify and refer inpatients to CCAC early • Have discharge options ready in advance of the discharge order for patients who require complex discharge planning
Môntfort Hospital	Decision support	<ul style="list-style-type: none"> • Create an integrated discharge planning review committee for ALC patients or those with more complex discharge needs
	Skills development	<ul style="list-style-type: none"> • Provide in-depth education for all health care personnel, patients, and families, informing them that the hospital is not an appropriate place for a long-term care (LTC) bed
	Process intervention	<ul style="list-style-type: none"> • Develop an internal escalation process for complex cases • Promote the Home First philosophy, which states that patients are in a better position to make decisions about their post-hospitalization living arrangements from their homes rather than from the hospital • Promote the use of vacant LTC beds for patients in need of accommodations • Increase the use and selection of a seniors' residence or home for post-discharge care • Complete "flash rounds" (e.g., daily discussions with health care teams) for care and discharge planning

The 2013/14 QIP Analysis

This analysis of the 2013/14 Quality Improvement Plans highlights many of the successes achieved in quality improvement during 2012/13, and acknowledges the hard work that hospitals put into the development of this year's QIPs.

Quality Improvement Plans can and should play a pivotal role in improving the quality of care that is delivered in Ontario, as they allow organizations to formalize their quality improvement activities, articulate their goals, and identify concrete ways of achieving those goals.

Although many effective plans were submitted this year, there are still significant opportunities for improvement. Prioritizing patient-centred care and health system integration, and identifying effective change ideas and linking them to process measures would significantly improve hospitals' QIPs. A commitment to quality improvement, which may be demonstrated via organizational QIPs, will contribute to improved processes for hospitals and better health outcomes for patients in Ontario. All of Ontario's health care providers should be asking themselves if they are doing all they can to ensure continuity of care for their patients.

Health Quality Ontario is committed to supporting hospitals in the development of their QIPs to ensure that:

- QIPs exemplify the vision of a high-quality health system established by ECFAA
- QIPs align with strategic health system priorities
- QIPs include multiple change ideas and a range of change concepts in order to learn from one another and build capacity in the system

This analysis of QIPs can be used as a resource to generate ideas about how to enhance services and incorporate best practices into current programs and processes. It is designed to be a platform for ongoing conversations that promote integration, innovation and collaboration across Ontario's health system. Health Quality Ontario is dedicated to supporting hospitals in the development of QIPs that serve as sources of inspiration and are living documents that assist in understanding and meeting patient needs.

Conclusion

For three years now, hospitals have been submitting their provincially-mandated QIPs with three goals in mind: to hold themselves accountable; to challenge themselves to continually improve; and to let others evaluate their performance on core dimensions of quality, across all settings of hospital care. The 2013/14 Quality Improvement Plan marks another step toward achieving our province's goal of "making Ontario the healthiest place in North America to grow up and grow old."³⁹

Congratulations to all of Ontario hospitals for their efforts this year. Their hard work and their commitment to developing effective QIPs is laying the groundwork for improved quality across Ontario's health care system.

1. Ministry of Health & Long-Term Care. *Ontario's Excellent Care for All Strategy*. Retrieved from <http://health.gov.on.ca/en/public/programs/ecfa/default.aspx/>
2. Sudha Kutty, Nizar Ladak, Cyrelle Muskat, Jillian Paul and Margo Orchard. The Excellent Care for All Act's Quality Improvement Plans: Reflections on the First Year. *Healthcare Quarterly*, 15(Special Issue) December 2012: 33-37.doi:10.12927.hcq.2012.23156
3. Excellent Care for All Act, 2010, SO 2010, c 14, <<http://canlii.ca/t/102j>> retrieved on 2013-09-16
4. Ministry of Health & Long-Term Care (2012). *Ontario's Action Plan for Health Care*. Toronto, ON: Queen's Printer for Ontario, p. 12
5. The Ministry of Health & Long-Term Care (2012). Quality Improvement Plans for Ontario Hospitals. Retrieved from <http://www.health.gov.on.ca/en/pro/programs/ecfa/legislation/qualityimprove/update.aspx>
6. Davis K, Schoenbaum SC, Audet A-M.A 2020 Vision of Patient-Centred Primary Care. *J Gen InternMed*. 2005; 20:953-957.
7. Gerteis M, Edgman-Levitan S, Daley J, Delbanco TL (eds). *Through the Patient's Eyes: Understanding and Promoting Patient-Centred Care*. 1993. San Francisco: Jossey-Bass Publishers.
8. Ontario Medical Association (2010). Policy Paper: Patient-Centred Care. Retrieved from <https://www.oma.org/Resources/Documents/Patient-CentredCare,2010.pdf>
9. The Excellent Care for All Act, 2010, c 5 s 1
10. Ibid
11. Bryant, Donald T. (2011). Engage Employees in Health care to Enhance Patient Outcomes. *KevinMD.com*. Retrieved from <http://www.kevinmd.com/blog/2011/03/engage-employees-healthcare-enhance-patient-outcomes.html>
12. The Excellent Care for All Act, 2010, c 8 s 2
13. A Guide to Critical Incident and Disclosure. Retrieved from: http://www.southernhealth.ca/lib/attachments/view_attachment.php?id=187
14. Ministry of Health & Long-Term Care (2012). Ontario's Action Plan for Health Care, p. 12.
15. Ministry of Health & Long-Term Care (2012). Ontario's Action Plan for Health Care, p. 13
16. Health Quality Ontario & Ministry of Health and Long-Term Care (2013). *Quality-Based Procedures: Clinical Handbook for Congestive Heart Failure*. Retrieved from <http://www.hqontario.ca/Portals/0/documents/eds/clinical-handbook-congestive-heart-failure-130425-en.pdf>, p. 15.
17. Health Quality Ontario (2013). *Quality Improvement Framework Support Document – Quality Improvement Science*. Toronto, ON: Queen's Printer for Ontario, p. 12
18. Associates in Process Improvement (2008). Retrieved from: http://www.apiweb.org/API_home_page.htm
19. Ministry of Health & Long-Term Care (2012). 2013/14 Quality Improvement Plan Guidance Document for Ontario Hospitals, p. 11
20. Ministry of Health & Long-Term Care (2012). 2013/14 Quality Improvement Plan Guidance Document for Ontario Hospitals – Appendix C: Benchmarking and Target Setting Guidance. Retrieved from http://www.health.gov.on.ca/en/pro/programs/ecfa/legislation/qualityimprove/appendix_c_2013.pdf
21. Ibid
22. Safer Healthcare Now! (2011) Improvement Frameworks Getting Started Kit. Retrieved from <http://www.patientsafetyinstitute.ca/English/toolsResources/ImprovementFramework/Documents/Improvement%20Frameworks%20GSK%20EN.PDF>
23. World Health Organization: http://www.who.int/gpsc/5may/tools/who_guidelines-handhygiene_summary.pdf
24. Accreditation Canada, the Canadian Institute for Health Information, the Canadian Patient Safety Institute, the Institute for Safe Medication Practices Canada (2012). *Medication Reconciliation in Canada: Raising the Bar*. Retrieved from http://www.cihi.ca/CIHI-ext-portal/pdf/internet/MED_RECONCIL_EN
25. World Health Organization. *Save Surgery Saves Lives: Frequently Asked Questions*. Retrieved from: http://www.who.int/patientsafety/safesurgery/faq_introduction/en/index.html
26. Hayes, Chris (2013). *Surgical Safety Checklist: Improved Patient Safety through Effective Teamwork*. *Healthcare Quarterly*, 15 (Special Issue) April 2013: 57-62. doi:10.12927/hcq.2012.22840
27. Health Quality Ontario (2012). *Quality Monitor: 2012 Report on Ontario's Health System*. Retrieved from <http://www.hqontario.ca/public-reporting/quality-monitor>, p. 30
28. Medical Advisory Secretariat (2009). *Pressure Ulcer Prevention: An Evidence-Based Analysis*. Ontario Health Technology Assessment Series, 9(2).
29. Institute for Healthcare Improvement (IHI). Pressure Ulcers. Retrieved from <http://www.ihl.org/explore/pressureulcers/pages/default.aspx>
30. Safer Healthcare Now! (2012). Prevent Central Line Infections: Getting Started Kit. Retrieved from <http://www.saferhealthcarenow.ca/EN/Interventions/CLI/Documents/CLI%20Getting%20Started%20Kit.pdf>
31. Safer Healthcare Now! (2012). Preventing Ventilator Associated Pneumonia: Getting Started Kit. Retrieved from <http://www.saferhealthcarenow.ca/EN/Interventions/VAP/Documents/VAP%20Getting%20Started%20Kit.pdf>
32. World Health Organization. Safe Surgery Saves Lives: Frequently Asked Questions. Retrieved from: http://who.int/patientsafety/safesurgery/faq_introduction/en/index.html
33. Canadian Institute for Health Information (2013). *Restraint Use and Other Control Interventions for Mental Health Inpatients in Ontario*. Retrieved from https://secure.cihi.ca/free_products/Restraint_Use_and_Other_Control_Interventions_AIB_EN.pdf
34. Registered Nurses' Association of Ontario. (2012). Promoting Safety: Alternative Approaches to the Use of Restraints. Toronto, ON: Registered Nurses' Association of Ontario. Retrieved from http://rnao.ca/sites/rnao-ca/files/Promoting_Safety_-_Alternative_Approaches_to_the_Use_of_Restraints_0.pdf
35. Institute for Patient- and Family-Centered Care (2011). *Advancing the Practice of Patient- and Family-Centered Care in Hospitals: How to Get Started*. Retrieved from http://www.ipfcc.org/pdf/getting_started.pdf
36. Health Quality Ontario (2012). *Quality Monitor: 2012 Report on Ontario's Health System*. Retrieved from <http://www.hqontario.ca/public-reporting/quality-monitor>
37. Canadian Institute for Health Information (2012). *All-Cause Readmission to Acute Care and Return to the Emergency Department*. Retrieved from https://secure.cihi.ca/free_products/Readmission_to_acutecare_en.pdf
38. Collier, Roger (2012). The High Cost of Hospital Readmissions. *CMAJ* vol. 184 no. 11 doi: 10.1503/cmaj.109-4248. Retrieved from <http://www.cmaj.ca/content/184/11/E591>
39. Ministry of Health & Long-Term Care. *Ontario's Action Plan for Health Care*, p. 3

Appendix A: Suite of Supports Provided by Health Quality Ontario

Individualized QIP Feedback	This year, every hospital in Ontario received a detailed assessment of their QIP and individualized feedback. Health Quality Ontario's QIP assessment tool allows users to effectively evaluate QIPs to determine if they contain the recommended elements of a robust quality improvement plan. Using this tool and by following the Model for Improvement's three core questions, HQO's QIP specialists are able to offer constructive feedback and suggest areas for future success. To connect with one of HQO's QIP specialists, contact QIP@hqontario.ca
QIP Navigator	Health Quality Ontario's QIP Navigator, created in consultation with the Ontario Hospital Association (OHA) and the Ministry of Health & Long-Term Care (MOHLTC), is designed to streamline QIP development and submission and enable HQO to produce a more robust analysis and more useful feedback. The QIP Navigator allows hospitals to enter and save data as it becomes available throughout the year. The tool has the added benefit of acting as a collaborative space and includes online assistance in the form of: guides, videos, tools, and other resources - which will help hospitals create and maintain their QIPs.
Yearly Report	HQO's eighth yearly report on Ontario's health system identifies significant achievements and challenges in areas such as access to health care, chronic disease management and keeping the population healthy. Read the latest yearly report on HQO's website
QIP Check-Up	QIP Check-Up is a timely and informative e-bulletin that provides brief but important updates and news to assist in the development of organizational Quality Improvement Plans. To have a question answered in the bulletin, please contact QIP@hqontario.ca
Quality Compass	A comprehensive, evidence-informed searchable tool to help leaders and providers improve health care performance in Ontario. Quality Compass is centred around priority health care topics with a focus on best practices, change ideas linked with indicators, targets and measures, and tools and resources to bridge gaps in care and improve the uptake of best practices. Visit the Quality Compass website
Quality Improvement Webinars	Presented by HQO's quality improvement coaches and specialists, these live, web-based learning opportunities are designed to facilitate the uptake of quality improvement science. A variety of improvement topics will be addressed over the course of these sessions and suggestions for future presentation topics are welcome. Join HQO's email list and be notified about upcoming events by contacting QIP@hqontario.ca
QIP Feedback	Health Quality Ontario hosted three peer to peer QIP feedback sessions in the Fall 2012, providing quality improvement teams the opportunity to share their experiences with the QIP development process and exchange ideas for improvement.

Appendix A: Suite of Supports Provided by Health Quality Ontario

Institute for Healthcare Improvement (IHI) Open School

The IHI Open School's curriculum, designed by world class faculty, focuses on skill development in the areas of patient safety, teamwork, leadership, and patient-centred care. These courses are offered online, allowing access at any time. The Open School features a growing catalog of courses, extensive content and resources, and a network of local chapters that organize events and activities on campuses around the world. In order to foster knowledge of quality improvement science, HQO will enroll two employees from each of Ontario's hospitals in the IHI Open School. Contact QIP@hqontario.ca to discuss how you can enroll.

Appendix B: Technical Report

The purpose of the Technical Report is to provide public access to details of the process used to generate indicator results. This information will be useful to others interested in replicating the indicators presented. Further details on the process and methods used to select the indicators on the Health Quality Ontario (HQO) website can be obtained from HQO.

Data Sources

The indicator results presented were provided to HQO by several sources, including the Canadian Institute for Health Information (CIHI), the Ontario Hospital Association (OHA) and the Ministry of Health and Long-Term Care (MOHLTC).

Discharge Abstract Databases (DAD)

DAD is a data collection tool used by CIHI to collect information on patients treated in acute care facilities. DAD contains administrative, clinical and demographic data. CIHI receives data directly from acute care facilities or from their respective health/regional authority or ministry/department of health.

Ontario Mental Health Reporting System (OMHRS)

OMHRS data are sourced from the Resident Assessment Instrument-Mental Health (RAI-MH), a unique standardized data collection system for mental health. OMHRS contains data about individuals admitted to adult mental health beds in Ontario. The data are collected at admission, discharge and every three months for patients with extended stays.

National Ambulatory Care Reporting System (NACRS)

NACRS is a data collection tool developed by CIHI to capture information on patient visits to hospital- and community-based ambulatory care facilities. NACRS data used in this report are collected on a routine basis by all emergency departments in Ontario.

Continuing Care Reporting System (CCRS)

CCRS is a data collection tool developed by CIHI to capture demographic, clinical, functional and resource utilization information on individuals receiving continuing care services in hospitals or residential care facilities in Canada. Participating organizations also provide information on facility characteristics to support comparative reporting and benchmarking.

Critical Care Information System (CCIS)

CCIS is a data collection tool developed by MOHLTC to collect information on admitted ICU patients, interventions performed to address care needs and the utilization of critical care response teams.

Web-Enabled Reporting System (WERS)

WERS is an easy-to-use online tool developed by MOHLTC for the complete preparation and tracking of reports prepared by hospitals and other institutional users.

Ontario Hospital Reporting System (OHRS)

OHRS databases developed by MOHLTC provide the only integrated source of data on the actual financial and operational activities of hospitals in the province.

NRC Picker/Hospital Consumer Assessment of Healthcare Providers and Systems (HCAPHS)

NRC Picker/HCAPHS uses standardized surveys to capture patients' perspectives on the quality of hospital care. This provides the public with comparable information on hospital quality.

Appendix B: Technical Report

Further details on the process and methods used to select the indicators on the HQO website can be obtained by contacting qip@hqontario.ca.

Attribute: **Safety**

INDICATOR	NUMERATOR	DENOMINATOR	DATA SOURCE
<i>C. difficile infection</i> (CDI) rate per 1,000 patient days	Inclusion: The CDI count is the number of new hospital acquired cases of CDI by month Exclusion: Children under 1 year	Inclusion: The denominator, patient day data, should be sourced from the hospital's daily bed census data Exclusion: Children under 1 year	MOHLTC
Ventilator-associated pneumonia (VAP) rate per 1,000 ventilator days	Inclusion: The total number of newly diagnosed VAP cases in the ICU after at least 48 hours of mechanical ventilation Exclusion: Any patient with a recorded incident of VAP within the first two calendar days of admission will be excluded	Inclusion: The number of ventilator days in that month Ventilator days are the number of days spent on a ventilator for all patients in the ICU 18 years and older	CCIS, MOHLTC
Hand hygiene compliance before patient contact	Number of times hand hygiene performed before initial patient/patient environment contact by hospital type	Number of observed hand hygiene indications before initial patient/patient environment contact by hospital type	MOHLTC
Rate of central line blood stream infections (CLI) per 1,000 central line days	Inclusion: Total number of newly diagnosed CLI cases in the ICU after at least 48 hours of receiving a central line Exclusion: Any patient admitted to the unit with an existing central line infection	The number of central line days in that month, multiplied by 1,000. Central line days are the total number of days a central line was used in ICU patients 18 years and older	CCIS, MOHLTC

INDICATOR	NUMERATOR	DENOMINATOR	DATA SOURCE
Percent of complex continuing care residents with new pressure ulcer in the last three months (stage 2 or higher)	Inclusion: All of the following apply: <ul style="list-style-type: none"> • M1b>0 on the target assessment • M1c>0 on the target assessment • M1d>0 on the target assessment 	Inclusion: All assessments for chronic patients in FY2011/12 that meet general inclusion/exclusion criteria for incidence indicators Exclusion: If any of the following apply: <ul style="list-style-type: none"> • M1b>0 on prior assessment • M1c>0 on prior assessment • M1d>0 on prior assessment • M1b, M1c or M1d is missing on the prior assessment • M1b, M1c or M1d is missing on the target assessment 	CCRS, CIHI
Percent of complex continuing care residents who fell in the last 30 days	Inclusion: If J4a=1 (fell in past 30 days) on the target assessment	Inclusion: All assessments for chronic patients in FY2011/12 that meet general inclusion/exclusion criteria Exclusion: J4a is missing on the target assessment	CCRS, CIHI
Surgical Safety Checklist compliance	Number of times all three phases of the surgical safety checklist was performed	Total number of surgeries	SRI, MOHLTC
Physical Restraints in mental health	Number of patients who are physically restrained at least one in the 3 days prior to a full admission	Total number of cases with a full admission assessment	OMHRS, CIHI
5-Day In Hospital Mortality Following Major Surgery	All-cause in-hospital deaths occurring in an acute care setting within five days following major surgery	Hospitalizations with major surgery performed between April 1 and March 25 of the fiscal year Exclusion: Patients age 19 and younger at admission, missing/invalid major surgery date, non-clinical criteria	DAD, CIHI
Medication reconciliation at admission	Total number of patients with medications reconciled at admission	Total number of patients admitted to the hospital	Organization level

Attribute: **Effectiveness**

INDICATOR	NUMERATOR	DENOMINATOR	DATA SOURCE
HSMR	Observed deaths, or actual number of in-hospital deaths that occurred in a hospital	<p>Expected deaths, or number of deaths that would have occurred in a hospital had the mortality of these patients been the same as the mortality of similar patients across the country, based on the reference year</p> <p>Inclusion:</p> <ol style="list-style-type: none"> 1. Discharge between April 1 of a given year and March 31 of the following year 2. Admission to an acute care institution 3. Discharge with diagnosis group of interest (that is, one of the diagnosis groups that account for approximately 80% of in-hospital deaths) 4. Age at admission between 0 and 120 years 5. Sex recorded as male or female 6. Length of stay up to 365 consecutive days 7. Admission category is elective or emergent/urgent 8. Canadian resident <p>Exclusion:</p> <ol style="list-style-type: none"> 1. Cadavers 2. Stillborns 3. Sign-outs (that is, discharged against medical advice) 4. Neonates (age of admission less than or equal to 28 days) 5. Records with brain death as most responsible diagnosis code 6. Records with palliative care as most responsible diagnosis code 	DAD, CIHI

INDICATOR	NUMERATOR	DENOMINATOR	DATA SOURCE
Readmission within 30 days for selected CMGs to any facility	The sum of readmissions for all index cases	<p>Inclusion: Select all discharges among the selected CMGs with discharge dates for period in question and age restrictions as described in Inclusions section. Include only typical and outlier cases (based on DAD RIW Exclusion Indicator) among the index cases</p> <ul style="list-style-type: none"> • Acute inpatients in the specified CMGs, age restrictions are cohort specific • The readmission hospitalization is deemed non-elective or “unplanned” if: <ul style="list-style-type: none"> o the admission date is within 30 days of the index case discharge date o the DAD field “admission category” is urgent <p>Exclusion: Deaths, transfers, patient sign-outs against medical advice; records with missing valid data on discharge/admission date, health number, age, gender</p>	DAD, CIHI
Percentage alternate level of care (ALC) days	Total bed days designated as ALC	<p>Inclusion: Total inpatient days in the year</p> <p>Exclusion: Invalid or missing discharge date from hospital, newborns, stillborns</p>	DAD, CIHI
Total Margin (consolidated)	Percentage by which total corporate (consolidated) revenues exceed or fall short of total corporate (consolidated) expense, excluding the impact of facility amortization, in a given year	Percentage by which total corporate (consolidated) revenues exceed or fall short of total corporate (consolidated) expenses, excluding the impact of facility amortization, in a given year	OHRS, MOHLTC

Attribute: **Access**

INDICATOR	NUMERATOR	DENOMINATOR	DATA SOURCE
ED Length of stay: 90th percentile	Ninetieth percentile ED length of stay for admitted patients (ED length of stay is defined as the time from triage to registration, whichever comes first, to the time the patient leaves the ED)		NACRS, CIHI
ED length of stay for admitted patients			

Attribute: **Patient-Centred**

INDICATOR	NUMERATOR	DENOMINATOR	DATA SOURCE
Would you recommend this hospital (or ED) to your friends and family?	Number of respondents who responded “yes, definitely” (NRC Picker) or “definitely yes” (HCAHPS) to the question	Number of respondents who registered any response to this question (exclude non-respondents)	NRC Picker/ HCAPHS
Overall, how would you rate the care and services you received at the hospital (or ED)?	Number of respondents who responded “excellent, very good and good” (NRC Picker)	Number of respondents who registered any response to this question (exclude non-respondents)	NRC Picker/ HCAPHS

Health Quality Ontario
130 Bloor Street West
10th Floor
Toronto, ON M5S 1N5

Telephone: 416-323-6868
Toll-free: 1-866-623-6868
Email: info@hqontario.ca

© Queen's Printer for Ontario, 2014

ISBN 978-1-4606-3223-9 (PDF)
ISBN 978-1-4606-3222-2 (Print)

www.hqontario.ca

