



# Health Quality Ontario Long-Term Care Emergency Department Utilization

# Best Practices

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"Insanity is doing things the way we've always done them and expecting different results"

Albert Einstein

**Evidence-informed best practices** are based on quality evidence and should be implemented into practice to optimize outcomes.<sup>7</sup> Listed below you will find best practices graded according to the type of evidence. To view a description of the types of evidence, [click here](#).

To help you move from best evidence to best practice, **click on the + button next to each best practice** to find details on how to implement, as well as change ideas to test using a PDSA approach.

**Change ideas** are specific and practical changes by experience and research that focus on improving specific aspects of a system, process or behaviour. To learn more about change ideas see [QI: Getting Started on the left menu bar](#).

## EVIDENCE-INFORMED BEST PRACTICES

**Early recognition of at-risk residents for emergency department visits**

**Provide early treatment for common conditions**

**Arrange for routine tests in-house**

**Establish protocol for clinical feedback**

### References

7. **Grol R, Grimshaw J. From best evidence to best practice: effective implementation of change in patients' care.**

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Available from: <http://www.ncbi.nlm.nih.gov/pubmed/14568747>  
[\[http://www.ncbi.nlm.nih.gov/pubmed/14568747\]](http://www.ncbi.nlm.nih.gov/pubmed/14568747)

# Measurement

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“Some is not a number, soon is not a time.”

Don Berwick, former President and CEO of IHI, December 2004, at launch of the 100,000 Lives Campaign

How will we know if a change is an improvement? Measurement is one of the critical steps in a quality improvement (QI) initiative that assesses the impact of your tests of change. **Quality indicators** are used to measure how well something is performing. There are three types of quality indicators used to measure your QI efforts: **outcome** (indicators that capture clinical outcomes and or system performance), **process** (indicators that track the processes that measure whether the system is working as planned), and **balancing** indicators (indicators that ensure that changing one part of the system does not cause new problems in other parts of the system).

Type of Indicator	Indicator of Quality Improvement	How to Calculate:  numerator ----- denominator	Targets/ Benchmarks	How is This Indicator Used?
Priority	1. Potentially avoidable emergency department visits for long-term care residents with select ambulatory care-sensitive conditions	See definition in HQO's Indicator Library <a href="http://http://indicatorlibrary.hqontario.ca/Indicator/Summary/Potentially-avoidable-emergency-department-visits-LTC/EN">[http://http://indicatorlibrary.hqontario.ca/Indicator/Summary/Potentially-avoidable-emergency-department-visits-LTC/EN]</a>	Targets: As low as possible (set by individual homes)	Quality improvement
Outcome	2. Number of visits to the Emergency Department (ED) each month by cause: fall, potentially preventable deterioration in condition; other	Number of ED visits in the previous month by cause: fall, potentially preventable deterioration in condition; other  ----- 1	Provincial benchmarks: not available	Quality improvement
	3. Of the residents that went to the ED from the LTC home, percentage of residents who had multiple ED visits within a 30 day period	Number of residents who had more than one ED visit in the month  ----- Total number of residents who had an ED visit in the month		Quality improvement
Process	4. Percentage of residents at high risk for an ED visit* who had a change in condition documented on the Shift to Shift report (or progress notes) in the 24 hours prior to ED visit	Number of residents at high risk for an ED visit who had a change in condition documented on the Shift to Shift Report (or progress notes) in the 24 hours prior to the ED visits in the month  ----- Total number of residents who had an ED visit in the month		Quality improvement
	5. Percentage of residents with ED visit in the previous month for whom a transfer package** accompanied the resident to ED visit	Number of residents with ED visit in the previous month for whom a transfer package** accompanied the resident to ED visit  ----- Total number of residents with an ED visit in the previous month		Quality improvement

Type of Indicator	Indicator of Quality Improvement	How to Calculate:  $\frac{\text{numerator}}{\text{denominator}}$	Targets/ Benchmarks	How is This Indicator Used?
	6. <u>Percentage</u> of residents re-admitted to the LTC home in the previous month who have ED or hospital discharge record*** accompany the resident back to the LTC home (or comes in a timely manner)	Number of residents re-admitted to the LTC home in the previous month who have ED or hospital discharge record*** accompany the resident back to the LTC home (or comes in a timely manner)  <hr/> Total number of residents re-admitted to LTC home from ED visit or hospitalization in the previous month		Quality improvement
	7. <u>Percentage</u> of residents re-admitted to the LTC home in the previous month with follow-up care documented in physician orders and care plan within a 24 hour period	Number of residents re-admitted to the LTC home in the previous month with follow-up care documented in physician orders and care plan within a 24 hour period  <hr/> Total number of residents re-admitted to LTC home from ED visit or hospitalization in the previous month		Quality improvement
	8. <u>Percentage</u> of all residents in the LTC home who have an up-to-date care plan (includes all risk assessments complete and family and resident engagement) (10% sample)	Number of residents in the LTC home who have an up-to-date care plan (includes all risk assessments complete and family and resident engagement) (10% sample)  <hr/> Total number of residents in the 10% sample drawn from all residents in the LTC home on the last day of the month		Quality improvement
<b>Balancing</b>	9. <u>Percentage</u> of residents with worsening mobility (locomotion, transfer, and walk in corridor ability) (Mid-Loss ADL) compared to previous quarter <sup>â€</sup>	Number of residents with worsening mobility (locomotion, transfer, and walk in corridor ability) (Mid-Loss ADL) [compared to previous quarter] <sup>†</sup>  <hr/> 1		Quality improvement

\*High risk residents are defined as those admitted to the LTC home within the last 30 days; re-admitted to the LTC home from an ED visit or hospitalization within the last 30 days; those who have experienced a change in medication, change in treatment plan or significant change in condition (as per RAI-MDS) within the last 7 days)

\*\*Transfer package should include: reason for initial transfer, any high risks identified with related care plan interventions, medication list, medical history, and most recent assessments

\*\*\*ED discharge record should include: Record of care and services received, discharge diagnosis, medications administered, diagnostic test results, response of resident to treatments, recommendations for follow up, consultation reports

†Speak with your RAI-MDS Coordinator for this global measure

## Run Charts

Collected measures can be presented graphically by plugging the monthly results into a [run chart](#).

# Tools & Resources

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## Tools

### QI Tools

- Communications Plan: [Instructions](#), [Tool](#)
- Fishbone Template: [Instructions](#), [Tool](#)
- Five Whys: [Instructions](#), [Tool](#)
- Measurement Plan Template: [Instructions](#), [Tool](#)
- Pareto Chart: [Instructions](#), [Tool](#)
- [PDSA Template](#)
- [Project Charter](#)
- [Tree Diagram Worksheet](#)

For a more comprehensive list of tools and resources, visit the following links on our HQO website:

- [HQO Tools and Resources](http://www.hqontario.ca/quality-improvement/tools-and-resources/) [<http://www.hqontario.ca/quality-improvement/tools-and-resources/>]

## Resources

### Emergency Department Utilization

- [Emergency Department Utilization Change Package](http://www.hqontario.ca/portals/0/Documents/qi/rf-change-package-emergency-dept-util-en.pdf) [<http://www.hqontario.ca/portals/0/Documents/qi/rf-change-package-emergency-dept-util-en.pdf>], [Poster](http://www.hqontario.ca/portals/0/Documents/qi/rf-poster-emergency-dept-util-en.pdf) [<http://www.hqontario.ca/portals/0/Documents/qi/rf-poster-emergency-dept-util-en.pdf>], and [Change Table](http://www.hqontario.ca/portals/0/Documents/qi/rf-change-table-emergency-dept-util-en.pdf) [<http://www.hqontario.ca/portals/0/Documents/qi/rf-change-table-emergency-dept-util-en.pdf>]  
*Residents First, Health Quality Ontario*
- [Emergency Department Utilization Measurement Worksheets](http://www.hqontario.ca/quality-improvement/long-term-care/tools-and-resources) [<http://www.hqontario.ca/quality-improvement/long-term-care/tools-and-resources>]
- [Prevention of Falls and Fall Injuries in the Older Adult](http://www.mao.org/Page.asp?PageID=924&ContentID=810) [<http://www.mao.org/Page.asp?PageID=924&ContentID=810>]  
*Registered Nurses' Association of Ontario*
- [Caregiving Strategies for Older Adults with Delirium, Dementia and Depression](http://www.mao.org/Page.asp?PageID=924&ContentID=797) [<http://www.mao.org/Page.asp?PageID=924&ContentID=797>]  
*Registered Nurses' Association of Ontario*
- [Screening for Delirium, Dementia and Depression in the Older Adult](http://mao.ca/bpg/guidelines/screening-delirium-dementia-and-depression-older-adult) [<http://mao.ca/bpg/guidelines/screening-delirium-dementia-and-depression-older-adult>]  
*Registered Nurses' Association of Ontario*
- [Person- and Family-Centred Care](http://http://mao.ca/bpg/guidelines/person-and-family-centred-care) [<http://http://mao.ca/bpg/guidelines/person-and-family-centred-care>]  
*Registered Nurses' Association of Ontario*
- [How-to Guide: Improving Transitions from the Hospital to Skilled Nursing Facilities to Reduce Avoidable Rehospitalizations](http://www.ihl.org/knowledge/Pages/Tools/HowtoGuidelImprovingTransitionHospitalSNFstoReduceRehospitalizations.aspx) [<http://www.ihl.org/knowledge/Pages/Tools/HowtoGuidelImprovingTransitionHospitalSNFstoReduceRehospitalizations.aspx>].  
*Hemdon L, Bones C, Kurapati S, Rutherford P, Vecchioni N. Cambridge, MA: Institute for Healthcare Improvement; 2012 June.*

### QI Resources

- [Interpreting Run Charts](#)  
*Health Quality Ontario*
- [Model for Improvement \(Clip 1\)](http://www.youtube.com/watch?v=SCYghxtioY) [<http://www.youtube.com/watch?v=SCYghxtioY>]  
*Institute for Healthcare Improvement*

- [Model for Improvement \(Clip 2\)](http://www.youtube.com/watch?v=6MIUqduINwQ&feature=relmfu) [<http://www.youtube.com/watch?v=6MIUqduINwQ&feature=relmfu>]  
*Institute for Healthcare Improvement*
- [PDSA Cycle Video \(Part 1\)](http://www.youtube.com/watch?v=-ceS9Ta820&feature=youtu.be) [<http://www.youtube.com/watch?v=-ceS9Ta820&feature=youtu.be>]  
*Institute for Healthcare Improvement*
- [PDSA Cycle Video \(Part 2\)](http://www.youtube.com/watch?v=eYoJxjmv_QI&feature=relmfu) [[http://www.youtube.com/watch?v=eYoJxjmv\\_QI&feature=relmfu](http://www.youtube.com/watch?v=eYoJxjmv_QI&feature=relmfu)]  
*Institute for Healthcare Improvement*
- [The run chart: a simple analytical tool for learning from variation in healthcare processes](http://www.ncbi.nlm.nih.gov/pubmed?term=%E2%80%A2%09The%20run%20chart%3A%20a%20simple%20analytical%20tool%20for%20learning%20from%20variation%20in%20healthcare%20processes)  
[<http://www.ncbi.nlm.nih.gov/pubmed?term=%E2%80%A2%09The%20run%20chart%3A%20a%20simple%20analytical%20tool%20for%20learning%20from%20variation%20in%20healthcare%20processes>]  
*Perla RJ, Provost LP, Murray SK. BMJ Qual Saf. 2011 Jan;20(1):46-51.*

# Background

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## Issue

Avoidable **emergency department** (ED) visits can cause clinical risk, stress, and anxiety for older, more vulnerable patients<sup>1</sup>. Overcrowding and surging costs of hospital EDs have long been a concern in Ontario's health care system, and there is a need to address this issue from all angles. There were more than 6.1 million visits to Ontario's Emergency Departments in 2014-2015<sup>2</sup>. It is important to ensure that avoidable ED visits are prevented not only to provide the best care for long-term care (LTC) residents, but also to ensure the most effective use of limited health care resources.

## Call to Action

In 2013-2014 more than 1.4 million visits to Canadian emergency departments were potentially avoidable<sup>3</sup>. Of the 1 in 3 seniors in long-term care that made a visit to the emergency department, 24% were for potentially preventable conditions and 10% were for less or non-urgent reasons<sup>3</sup>. Moreover, the odds of an ED visit for newly admitted and short-stay LTC residents have been shown to be higher compared to longer-stay residents<sup>4</sup>. The good news is that avoidable ED visits can be reduced and even prevented. Quality improvement **best practices** and change ideas for LTC homes aim to prevent unnecessary ED visits by addressing the root cause(s) of the problem at the individual and home-levels.

While the tools and information provided in this quality improvement resource focus on the process of quality improvement for the home, the ultimate goal is to provide residents with the best possible care.

### References

- 1. Bandurchin A, McNally MJ, Ferguson-ParÃ© M. Bringing back the house call: how an emergency mobile nursing service is reducing avoidable emergency department visits for residents in long-term care homes.**  
Nurs Leadersh. 2011 Apr;24(1):59-71.  
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[\[http://www.ncbi.nlm.nih.gov/pubmed/21512338\]](http://www.ncbi.nlm.nih.gov/pubmed/21512338)
- 2. NACRS Emergency Department Visits and Length of Stay by Province/Territory, 2014-2015.**  
Canadian Institute for Health Information. [cited 2016 Jul 7]  
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- 3. Sources of Potentially Avoidable Emergency Department Visits.**  
Canadian Institute for Health Information. [cited 2016 Jul 7].  
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[\[https://secure.cihi.ca/free\\_products/ED\\_Report\\_ForWeb\\_EN\\_Final.pdf\]](https://secure.cihi.ca/free_products/ED_Report_ForWeb_EN_Final.pdf)
- 4. Gruneir A, Bronskill S, Bell C, Gill S, Schull M, Ma X, Anderson G, Rochon PA. Recent health care transitions and emergency department use by chronic long term care residents: a population-based cohort study.**  
J Am Med Dir Assoc. 2012 Mar;13(3):202-6.