Health Quality Ontario

The provincial advisor on the quality of health care in Ontario

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Results from Health Quality Ontario's Benchmark Setting for Long-Term Care Indicators

Ontario
Health Quality Ontario

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What is a benchmark?

A benchmark is a point of reference against which others may be measured. Benchmarks should represent a level of excellence and should exceed average performance. HQO's benchmarks are absolute values against which long-term care homes may compare their performance; they are not relative changes, such as a percent decrease or increase in performance from baseline.

When long-term care homes meet or surpass the benchmark, it is a marker that the homes are providing high quality of care for the assessed quality indicator. Homes that do not meet the benchmark for a particular indicator should consider how far from the benchmark they are and consider developing a quality improvement strategy that may include multi-year targets to bring their performance closer to the benchmark value. In this way, benchmarks can assist in quality improvement by representing high quality of care that long-term care homes can strive to reach.

For more information on setting targets and using benchmarks in quality improvement, refer to Quality Improvement (QIP) Guidance Document for Health Care Organizations, Appendix A: Approaches to Setting Targets for Quality Improvement Plans (2016).

1. Introduction

Health Quality Ontario (HQO) reports on a set of quality indicators that balance comprehensive public reporting and focused areas for quality improvement. Provincial benchmarks for quality indicators were established to support the long-term care home sector in identifying priority areas and setting local targets for quality improvement. Benchmarks are numeric values that represent high quality care and provide a standard against which performance can be compared.

In 2015, HQO conducted a review of long-term care quality indicators and confirmed four previously established benchmarks for four indicators: worsened pressure ulcers, falls, restraints, and worsened symptoms of depression. The review also identified additional indicators to be considered for benchmarking. In the spring of 2016, an expert panel facilitated by HQO recommended one additional indicator that was appropriate for immediate benchmarking: potentially inappropriate antipsychotic use.

This report includes the recommended benchmark values, provides a description of the approach that was applied for identifying which of HQO's publicly reported quality indicators are appropriate for benchmarking and the process that was used for determining the benchmark values.

1.1 Background

Since 2009, HQO has been publicly reporting performance indicators online and in printed reports that measure quality of care in Ontario long-term care homes. To complement its public reporting, HQO has supported the sector's quality improvement efforts by providing capacity building activities, private and public reporting tools, and quality improvement planning. In 2012,[1] benchmarks for selected indicators were established as an additional tool to support quality improvement. Quality Improvement Plans (QIPs) for long-term care homes were initiated in 2014, with all long-term care homes submitting a QIP to HQO the following year. The indicators that HQO publicly reports[2] and includes as priorities in QIPs[3] were revised in 2015, which initiated a review of the previously established benchmark values and the potential to set benchmarks for new indicators.

[1] Long-Term Care Benchmarking Resource Guide (2013)
[2] LTC Indicator Review Report (2015)
[3] Quality Improvement Plans: A Commitment to Improving Quality for the Year Ahead

2. Approach

2.1 Benchmark selection framework

Several approaches exist for setting benchmarks, including:

- Adopting ideal/theoretical best performance values based on evidence
- Selecting values based only on a summary measure of current performance
- Using the performance values achieved by the best performers
- Choosing values based on expert opinion

HQO uses a modified Delphi process and expert panel to establish recommended benchmark values that combines the approaches listed above. HQO's approach enables the selection of benchmarks that are evidence-based and data-driven, represent best performance, and are considered achievable by stakeholders.

This approach was applied in the 2015 process to confirm benchmarks for four indicators and in 2016 to select a benchmark for one indicator. For a detailed description of each step in the process, see Appendix A. A similar process for selecting benchmarks had been used previously in 2012.[4]

2.2 Benchmark selection panel

An expert panel was convened to guide the selection of the publicly reported indicators appropriate for benchmarking and the benchmark values for these indicators. The panel was comprised of long-term care home and resident council representatives, long-term care home association representatives, researchers, policymakers, and data providers. For a list of the panel members, see Appendix B.

2.3 Benchmarking criteria

To determine which of the publicly reported indicators were appropriate for benchmarking, the expert panel applied the HQO criteria described below to each indicator.

For an indicator to be appropriate for benchmarking it should meet the following criteria:

- Data quality should be confirmed (i.e., indicator validity and reliability),
- Variation in performance on the indicator should exist,
- High quality evidence as to what constitutes good performance should be known or performance data should suggest that there are some providers that are top performers on the indicator, and
- Quality improvement efforts should be able to impact performance on the indicator.

[4] Long-Term Care Benchmarking Resource Guide (2013)

2.4 Benchmark selection decision tree

Figure 1 describes the decision tree that was used to guide the process of determining appropriateness of benchmarking, confirming previously established benchmark values, and identifying new publicly reported indicators for which a benchmark may be established.

The panel considered each of the 12 indicators recommended through the 2015 long-term care indicator review for public reporting.[5]

Group 1: Indicators with a benchmark previously established in Ontario

The first group of indicators that the panel considered was the set of four indicators for which benchmarks had previously been established and publicly reported: worsened pressure ulcers, falls, restraints, and worsened mood from symptoms of depression.

- The objective was to first confirm appropriateness of reporting a benchmark for the indicator and then to determine if the existing benchmark value was still appropriate after reviewing updated performance data, or if the benchmark should be updated or removed.

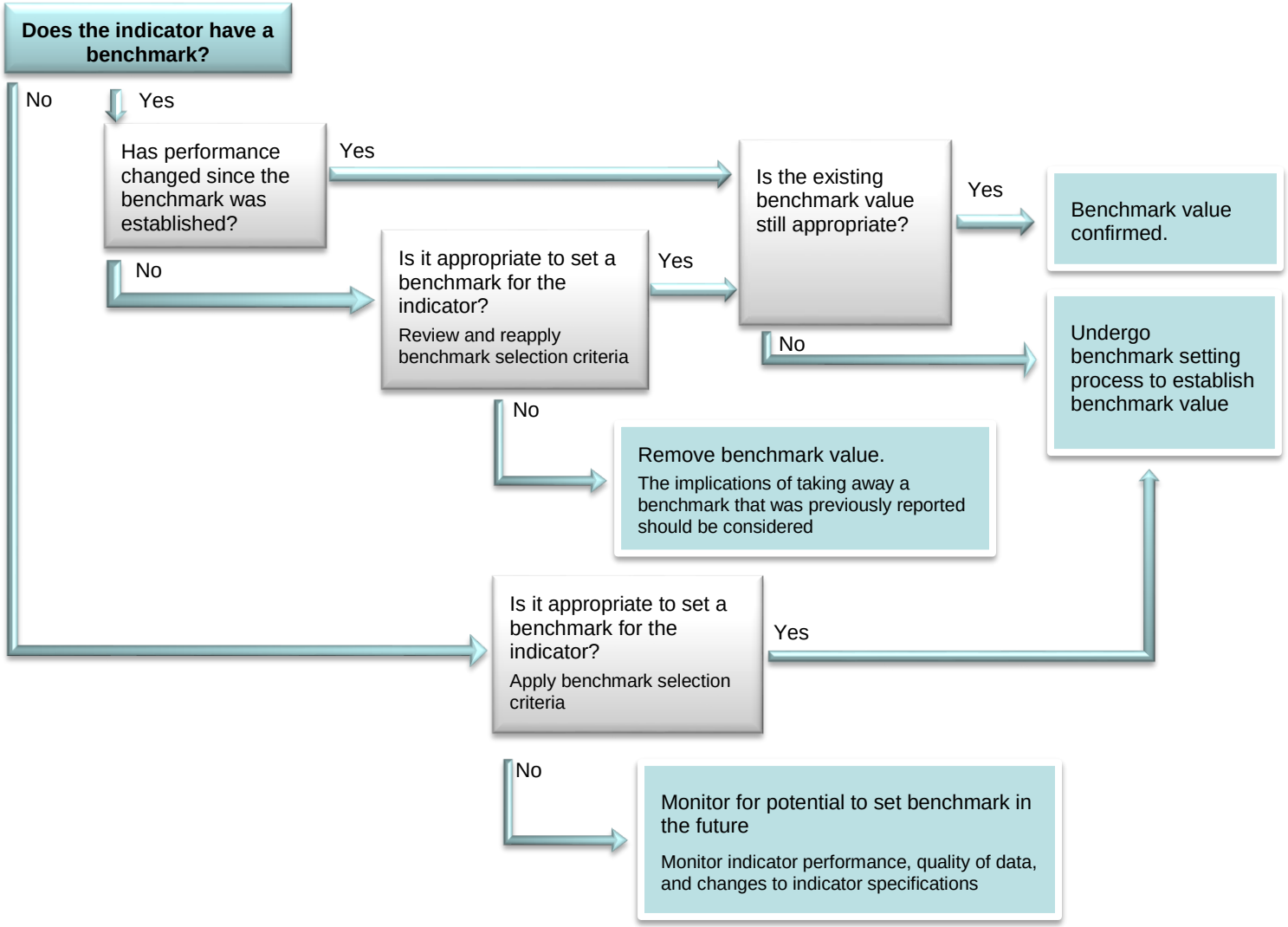
Group 2: Indicators with no benchmark previously established

The second group of indicators considered were the remaining eight publicly reported quality indicators for which benchmarks had not previously been set in Ontario: potentially inappropriate antipsychotic use, worsened mid-loss activities of daily living, improved mid-loss activities of daily living, improved behavioural symptoms, pain, time to long-term care home placement, lost-time injuries per 100 long-term care home worker, and potentially avoidable emergency department visits.

- The objective was to identify which of these indicators were appropriate for setting benchmarks and to recommend the timing for when benchmarks should be set.
- Upon completion of the first objective, the second objective was to select benchmark values for indicators deemed appropriate for benchmarking.

[5] LTC Indicator Review Report (2015)

Figure 1: Decision tree to guide the determination of appropriate indicators for benchmarking and confirming, selecting or removing benchmark value



3. Results

The long-term care benchmarking expert panel identified five indicators as appropriate for immediate benchmarking, and four indicators as potentially appropriate for benchmarking in the future.

Appendix C describes the benchmarking panel's recommendation for each of the quality indicators and their corresponding benchmark values, where one was recommended by the panel.

3.1 Appropriate for benchmarking

Of the five indicators deemed appropriate for benchmarking, four had previously established benchmarks:

Indicator	Benchmark
1. Percentage of long-term care home residents whose stage 2 to 4 pressure ulcer worsened	1%
2. Percentage of long-term care home residents who were physically restrained on a daily basis	3%
3. Percentage of long-term care home residents who fell	9%
4. Percentage of long-term care home residents whose mood from symptoms of depression worsened	13%
5. Percentage of long-term care home residents without psychosis using antipsychotic medications	19%

The benchmark values that were selected in 2012 were confirmed by the panel as achievable and still representative of good resident outcomes and high quality care. The panel recommended that HQO continue to report the benchmark values for pressure ulcers, restraints and falls alongside home level results. Although the panel also recommended the benchmark value for the worsened symptoms of depression indicator be retained as originally established in 2012, they recommended that the public reporting of the indicator and the benchmark should be phased in, starting with provincial and regional reporting before publicly reporting at the home level.

The panel identified the indicator measuring potentially inappropriate antipsychotic use as being appropriate for benchmarking at this time. Ontario did not have an established benchmark for this indicator, so the panel underwent a consensus process to select an achievable value that represents high quality care. See Appendix A for a description of this process.

The panel members reached consensus on a benchmark value for the potentially inappropriate antipsychotic use indicator based on the following rationale:

- The value was consistent with the evidence of safety and effectiveness in this population and represents good quality of care
- The value represented achievable yet high quality care based on the distribution of performance results in Ontario long-term care homes
- The value was similar to those set in other jurisdictions

3.2 Not currently appropriate for benchmarking

Seven indicators were considered by the panel as not currently appropriate for benchmarking. The panel recommended that the public reporting of these indicators be phased in over time, beginning with provincial and regional reporting and potentially home level reporting with benchmarks (if appropriate) in the future.

Indicator
6. Percentage of long-term care home residents whose mid-loss activities of daily living (ADLs) functioning worsened or who remained completely dependent in mid-loss ADLs
7. Percentage of long-term care home residents whose mid-loss activities of daily living (ADLs) functioning improved or who remained completely independent in mid-loss ADLs
8. Percentage of long-term care home residents whose behavioural symptoms improved
9. Percentage of long-term care home residents who experienced moderate pain daily or any severe pain
10. Median number of days waited to move into a long-term care home
11. Lost-time injury rates among workers in long-term care
12. Potentially inappropriate emergency department use

4. Conclusion

HQO reports on a set of indicators that balance comprehensive performance measurement and focused areas for quality improvement in long-term care. Alongside public reporting performance indicators, benchmarks are an important tool for supporting long-term care homes and sector stakeholders in tracking progress, setting priorities or targets, and learning from homes that are excelling.

Established through HQO's benchmark setting process, Ontario long-term care homes now have confirmed benchmark values aligned to HQO's home level sector-based public reporting and QIPs.

The benchmark values are included on HQO's long-term care system performance web pages,[6] in the QIP Navigator tool,[7] and within the indicator descriptions on HQO's Indicator Library.[8]

[6] www.hqontario.ca/System-Performance/Long-Term-Care-Sector-Performance
[7] https://qipnavigator.hqontario.ca/
[8] www.hqontario.ca/System-Performance/Indicator-Library

Appendix A: Description of steps in process for selecting benchmarks for long-term care home indicators in Ontario

Project initiation	**Panel invitation:** HQO assembled a group of stakeholders to participate in the panel responsible for selecting achievable benchmark values for long-term care home indicators (see Appendix B for panel membership) **Panel meeting:** HQO convened a meeting in which panel members were oriented to the objectives and benchmarking process. The panel confirmed the recommended approach, including the draft benchmarking criteria and decision tree. In the first meeting, the panel confirmed which indicators should be considered for benchmarking based on the criteria and which could be removed from consideration at this early stage (i.e., indicator requires further development or is a system-level indicator only).
Confirm, update or remove benchmark values for indicators with established benchmarks	**Online survey**: The panel completed an online survey that asked them if they believe that the previously established benchmark for each indicator still represents high quality, achievable care. If the panel member did not feel the benchmark was appropriate, they were asked to provide an explanation as to why. To help the panel respond to the survey question, HQO provided the panel members with an information package containing the definition of the indicators and performance data describing pan Canadian performance, trends over time, the distribution of Ontario home-level results, and funnel plots showing the proportion of homes meeting benchmark. **Panel meeting**: HQO presented anonymized survey results back to the panel. The panel discussed the results and followed the decision tree to make decisions on whether to confirm, update or remove the benchmark values.
Identify indicators appropriate to benchmark (among the remaining public reporting quality indicators)	**Panel meeting:** HQO described the indicator definitions and presented performance data to the panel, including pan Canadian performance, trends over time, and the distribution of home-level results. The panel considered the information provided to them against the benchmarking criteria to help determine which indicators were appropriate for benchmarking.
Select benchmark values using a modified Delphi process for indicators identified as eligible for a benchmark	*A modified Delphi process is conducted for each indicator identified in the previous steps as requiring a benchmark value to be selected or an update to a previously established value.* **Round 1 Online survey:** The panel completed an online survey that asked them to recommend a benchmark value based on information provided to them by HQO and on their own knowledge of the long-term care setting and resident care. To help the panel respond to the online survey, HQO provided the panel members with an information package containing the definition of the indicator, a summary of literature/evidence of best practice, information on target setting in other jurisdictions, description of quality improvement efforts related to the indicator topic area, and performance data

	describing pan Canadian performance, trends over time, and the distribution of home-level results. **Round 2 Panel meeting:** HQO presented anonymized survey results to the panel. The panel discussed the survey results and shared their sector/topic expertise. HQO presented updated performance data to the panel in addition to the materials provided to them in the survey information package. The panel then resubmitted an anonymous benchmark value, which was immediately aggregated and presented back for their consideration. The panel reached consensus on a benchmark value.

Appendix B: Long-term care benchmark setting panel

Anna Greenberg (chair)	Health Quality Ontario
Katherine Berg	interRAI / University of Toronto
Barb Bryan	Jarlette health Services
Dan Buchanan	Ontario Association of Non-profit Homes & Services for Seniors
Nancy Cooper	Ontario Long-Term Care Association
Allison Costello	Ministry of Health and Long-Term Care
Gail Dobell	Health Quality Ontario
Corinne Duncan	Bruyère Continuing Care
Kathy Greene	Bruyère Continuing Care
John Hirdes	interRAI / University of Waterloo
Deborah Johnston	Chartwell Retirement Residences
Paul Lee	Ministry of Health and Long-Term Care
Dee Lender	Ontario Association of Residents' Councils
Kathy McGilton	University of Toronto
Connie Paris	Canadian Institute for Health Information
Stewart Sutley	Central East Local Health Integration Network
Evelyn Williams	Ontario Long Term Care Physicians
Walter Wodchis	University of Toronto

Appendix C: Indicators and benchmarking expert panel recommendation

Indicator	Benchmarking Group	Benchmarking Panel Recommendation
1. Pressure ulcers among LTC home residents	Group 1: Previously established benchmark in Ontario	Appropriate for benchmarking Confirmed benchmark value (1%) Continue to publicly report with home-level performance
2. Falls among LTC home residents	Group 1: Previously established benchmark in Ontario	Appropriate for benchmarking Confirmed benchmark value (9%) Continue to publicly report with home-level performance
3. Use of physical restraints on LTC home residents	Group 1: Previously established benchmark in Ontario	Appropriate for benchmarking Confirmed benchmark value (3%) Continue to publicly report with home-level performance
4. Worsened symptoms of depression among LTC home residents	Group 1: Previously established benchmark in Ontario	Appropriate for benchmarking Confirmed benchmark value (13%) Phase-in reporting of the indicator, beginning with provincial and regional performance and adding home level reporting and benchmark later
5. Antipsychotic medication use among LTC home residents without a diagnosis of psychosis	Group 2: No benchmark established in Ontario	Appropriate for benchmarking Selected benchmark value (19%)
6. Diminished physical functioning among LTC home residents	Group 2: No benchmark established in Ontario	Not currently appropriate for benchmarking Phase-in reporting of the indicator, beginning with provincial and regional performance and adding home level reporting later
7. Improved physical functioning among LTC home residents	Group 2: No benchmark established in Ontario	Not currently appropriate for benchmarking Phase-in reporting of the indicator, beginning with provincial and regional performance and adding home level reporting later
8. Improved behavioural symptoms among LTC home residents	Group 2: No benchmark established in Ontario	Not currently appropriate for benchmarking Phase-in reporting of the indicator, beginning with provincial and regional performance and adding home level reporting later
9. Pain among LTC home residents	Group 2: No benchmark established in Ontario	Not currently appropriate for benchmarking Phase-in reporting of the indicator, beginning with provincial and regional performance and adding home level reporting later
10. Waiting for a place in a LTC home	Group 2: No benchmark established in Ontario	Not currently appropriate for benchmarking, system indicator
11. Lost-time injuries on the job in LTC	Group 2: No benchmark established in Ontario	Not currently appropriate for benchmarking, system indicator
12. Potentially avoidable emergency department visits by LTC home residents	Group 2: No benchmark established in Ontario	Not currently appropriate for benchmarking, requires indicator development