

Quality Improvement Plans in Long-Term Care: Lessons Learned

Our Partners



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Executive Summary

The Residents First initiative strives to ensure that every resident enjoys safe, effective and responsive care that helps him or her achieve the highest potential quality of life. As part of this program, 214 long-term care (LTC) homes in Ontario volunteered to submit 279 Topic Specific Quality Improvement Plans (QIPs). This analysis examines these QIPs and suggests how to improve them. It also highlights QIPs that stood out for having a clear vision and strategy for improvement, so that other LTC home leaders can learn from them.

Quality improvement plans are the key to driving quality in a healthcare organization. A QIP provides the means to communicate to residents, families, staff and the public about the commitment of LTC home leaders to quality improvement. It also gives LTC home leaders the opportunity to clearly communicate their dedication to providing personalized and high-quality care for residents.

This report analyzes results from the first year in which LTC home leaders submitted QIPs, so most of the QIPs were created before these leaders received support from Residents First Quality Improvement Coaches.

The purpose of this review is to:

- Acknowledge the commitment of LTC leaders to improving quality;
- Analyze the number and type of priorities identified by LTC home leaders;
- Identify any challenges that LTC home leaders encountered during the development of their QIPs; and
- Provide information and guidance to help LTC home leaders improve their next QIPs and set the stage for future success.

This analysis examined the following aspects of QIPs:

Priority setting: The majority of LTC home leaders chose one topic as their priority. A number of leaders chose to work on 4–10 priority topics, however. Long-term care home leaders should consider a few solid priorities, so that resources are made available to achieve and sustain set aims. While the “right” number of topics is not known, Residents First encourages leaders to focus on 2–4 priority topics at a time.

Aim setting: Most LTC homes set aims that were consistent with Residents First guidelines, and also set stretch goals. This is an encouraging result, because it suggests that homes are taking an important step toward quality improvement. The aims for ED visits tended to be more ambitious than the suggested guidelines, while the aims set for improving continence fell slightly below the guidelines. For all topics, there was considerable variation in the aims set by homes.

Change ideas: Change ideas are important. They help leaders develop a strategy for improvement, identify key evidence-based best practices to be implemented, anticipate common barriers to implementation and create a plan to address those barriers. In their QIPs, LTC home leaders were asked to identify three change ideas for their selected Residents First topic. This analysis highlights some excellent change ideas generated by LTC home leaders in their QIPs, showing how leaders and staff creatively adapted ideas from the Residents First change packages to work in their own environments.

Background

The Residents First initiative strives to ensure that every resident enjoys safe, effective and responsive care that helps him or her achieve the highest potential quality of life. This will be achieved by increasing the long-term care (LTC) sector's capacity for quality improvement, so that "the quality of each resident's care is the best in Canada and comparable to leading jurisdictions the world over."¹

As part of the Residents First initiative, 214 LTC homes volunteered to submit 279 Topic Specific Quality Improvement Plans (QIPs). This analysis examines these QIPs and suggests how to improve them. (More detailed recommendations for improvement in QIPs can be found in Health Quality Ontario's *2012/13 Quality Improvement Plans: An Analysis for Learning*, which analyzes the QIPs submitted by all hospitals in Ontario.) This analysis also highlights QIPs that stood out for having a clear vision and strategy for improvement, so that other LTC home leaders can learn from them.

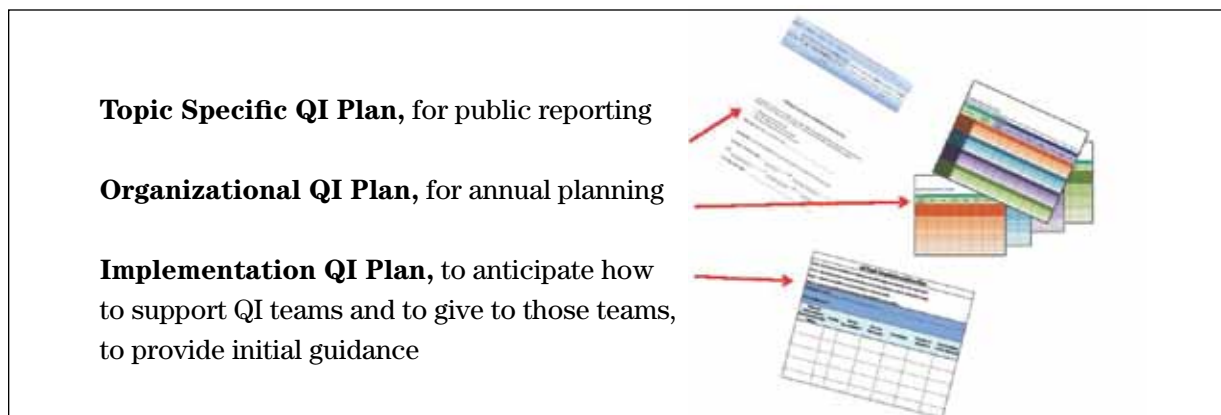
The *Excellent Care for All Act* (ECFAA), 2010, mandates that all health care organizations develop and make public an annual quality improvement plan (QIP). These QIPs are the key way through which healthcare organizations across the province, including LTC homes, can improve the quality of care they deliver. The Ministry of Health and Long-Term Care (MOHLTC) has mandated that, "the hospital sector will implement these legislative changes first, and results from hospitals will be assessed before extending the requirements to other health sectors."² Other sectors will thus have an opportunity to learn from the quality improvement work being done in the hospital sector before they implement their own QIPs.

Quality Improvement Plans: What Are They? Why do They Matter?

Quality improvement plans are the key to driving quality in a healthcare organization. A QIP provides the means to communicate to residents, families, staff and the public about the commitment of LTC home leaders to quality improvement. It also gives LTC home leaders the opportunity to clearly communicate their dedication to providing personalized and high-quality care for residents.

The Residents First initiative provides three types of QIPs for LTC home leaders (see Figure 1). These QIPs are intended to help LTC homes share their quality improvement work with different stakeholders and organize the information for different purposes and users.

Figure 1: The Three Types of LTC Quality Improvement Plans



¹ Residents First (2011), "Our Mission," available at <http://www.residentsfirst.ca>.

² Ministry of Health and Long-Term Care, *The Excellent Care for All Act*, available at http://www.health.gov.on.ca/en/legislation/excellent_care.

A **Topic Specific QI Plan** is a plan developed for each specific topic that LTC home leaders want to improve (see Appendix B). This plan is intended for external use — for public reporting. The Topic Specific QI Plan template provides the framework for focused quality improvement work that includes:

- Specific and measurable aim statements
- Specific change ideas to be implemented

It also outlines each home's unique characteristics, to help the reader understand the QIP and its aims.

An **Organizational QI Plan** is developed by LTC home leaders to help them plan their annual quality improvement initiatives (see Appendix C). This plan is intended for internal use. It identifies:

- Priorities for strategic areas;
- Topics for improvement within each strategic area;
- Outcome and baseline measures for each improvement topic; and
- Long-term goals, aims/targets, target justification, timeframe, quality attributes, priorities and the executive responsible.

An **Implementation QI Plan** is developed by LTC home leaders for use by their QI teams. It identifies the individuals who are accountable, process measures to be collected and evaluated, and timeframes and resources needed to implement the change ideas. Like the Organizational QI Plan, the Implementation QI plan is also for internal use.

A strong QIP is an indicator of strong organizational leadership commitment to quality improvement, and that the home's leader intends to provide excellent resident care. It helps the organization stay focused on its selected priorities within the given timeframe. A strong QIP is also aligned with the organizational strategic/business plan and ensures that the necessary resources to implement it are provided. A QIP is also a reflection of an evolving culture of quality within the home.

Approach to Quality Improvement Plans

The Residents First concept and format for LTC home QIPs is based on the Model for Improvement,³ which is used to accelerate improvements developed by the Associates in Process Improvement. The Model for Improvement has two parts:⁴

1. Three fundamental questions, which can be addressed in any order (see Figure 2); and
2. The Plan–Do–Study–Act (PDSA) cycle, which tests changes in real-life work settings. The PDSA cycle guides teams in determining if a change is an improvement.

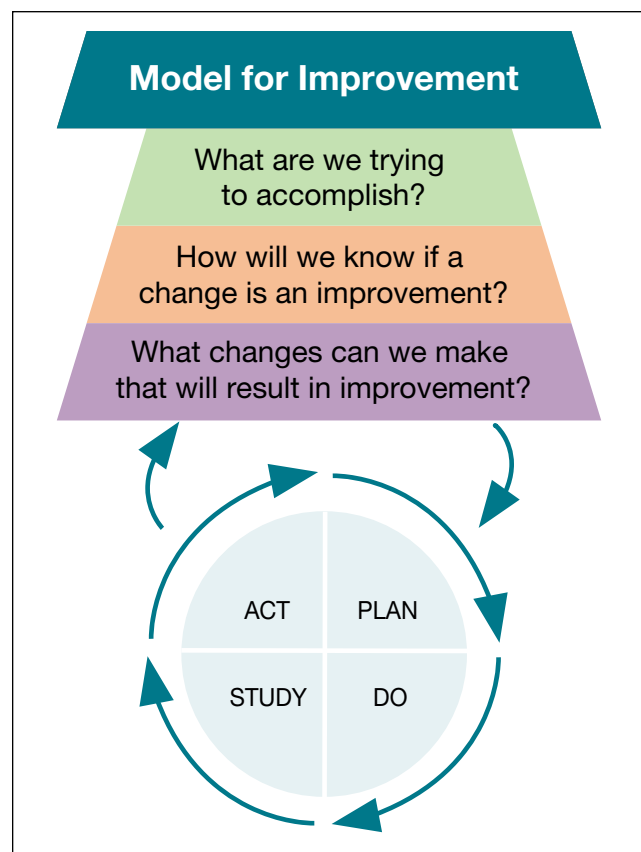
The Model for Improvement's first question, "What are we trying to accomplish?" is reflected in all three types of QIPs. As Don Berwick, former CEO of the Institute for Healthcare Improvement (IHI), said: "Some is not a number, soon is not a time."⁵ LTC home leaders are encouraged to set a clear and numeric aim for improvement, to be accomplished within a specific timeframe.

³ Langley GL, Nolan KM, Nolan TW, Norman CL, and Provost LP (2009), *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (2nd Edition). San Francisco: Jossey-Bass Publishers.

⁴ Institute for Healthcare Improvement (IHI) (2012), "Science of Improvement: How to Improve," IHI Knowledge Center. Available at <http://www.ihi.org/knowledge/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.aspx>.

⁵ Don Berwick (December 2005), Institute for Healthcare Improvement (IHI), 100,000 Lives Campaign slogan.

Figure 2: The Model for Improvement



The second question, “How will we know if a change is an improvement?” is also reflected in all three types of QIPs. According to H. James Harrington, “Measurement is the first step that leads to control and eventually to improvement. If you can’t measure something, you can’t understand it. If you can’t understand it, you can’t control it. If you can’t control it, you can’t improve it.” The Residents First change packages provide outcome, process and balancing measures for a range of topics. Long-term care QI teams should collect those measures if they want to see whether improvement has occurred.

The third question, “What changes can we make that will result in improvement?” can help QI teams tap into the innovation and creativity that exists within the LTC sector and beyond. Answers to this question are provided in all three types of QIPs. William Pollard has noted that, “Without change there is no innovation, creativity, or incentive for improvement. Those who initiate change will have a better opportunity to manage the change that is inevitable.”⁶ Best practices guidelines, Residents First change packages and innovative solutions generated by LTC staff may help answer this question.

The PDSA cycle helps teams to plan the test change idea, observe the results and act on what is learned. The cycle is a “scientific method, used for action-oriented learning.”⁷ It is important to continue to measure small, implemented changes and share these measurements with each home’s QI team. This kind of consistent feedback will ensure that QI teams are heading toward the desired aim. As John E. Jones notes, “What gets measured gets done, what gets measured and fed back gets done well.”⁸

⁶ William Pollard (1996), *The Soul of the Firm*, Downers Grove, Illinois: HarperCollins Publishers, p. 116.

⁷ IHI (2012), “Science of Improvement: How to Improve”, IHI Knowledge Center. Available at <http://www.ihl.org/knowledge/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.aspx>.

⁸ John E. Jones (1996), *360° Feedback: Strategies, Tactics, and Techniques for Developing Leaders*, Amherst, MA: HRD Press.

When developing change strategies, LTC home leaders should consider the six change concepts listed in the Residents First change packages:

1. Recognition and assessment (e.g., risk assessment completed, early identification of pressure areas)
2. Education and engagement (e.g., provide education to staff on what constitutes the need to transfer to ED, evaluate the effectiveness of provided education to staff)
3. Care planning for prevention (e.g., increasing the mobility and function of residents by increasing strength and balance, helping to instill the confidence to ambulate around the home and their environment)
4. Improve work flow (e.g., streamline assessment tools, standardize care products)
5. Develop routine practices (e.g., ongoing medication reviews)
6. Design systems to avoid mistakes (e.g., install motion-activated lighting in residents' rooms)

Purpose of This Analysis

Residents First reviewed 279 QIPs that were voluntarily submitted by 214 LTC home leaders. The purpose of this review is to:

- Acknowledge the commitment of LTC leaders to improving quality;
- Analyze the number and type of priorities identified by LTC home leaders;
- Identify any challenges that LTC home leaders encountered during the development of their QIPs; and
- Provide information and guidance to help LTC home leaders improve their next QIPs and set the stage for future success.

This analysis examined the following aspects of QIPs:

Priority setting: What priority topics did LTC home leaders choose most often? How can leaders improve their priority setting?

Aim setting: What types of aims did LTC home leaders set? Were there examples of well-articulated stretch aims? How can LTC home leaders improve their aim setting?

Change ideas: What types of change ideas did LTC home leaders describe? How can LTC home leaders strengthen their change ideas?

Lessons Learned

Priority Setting

A QIP is an important tool for identifying key priorities for improvement. Priorities help organizations focus on what they want to accomplish.

Long-term care home leaders who participated in Residents First 2011 Leading Quality events were given QIP templates and examples of completed QIPs, and shown how to use them. Leaders were also given a Priority Calculator (see Appendix A) to help them determine which improvement(s) will have the biggest impact on quality in their home. (A copy of the Priority Calculator can be downloaded from the Residents First website.⁹)

The Priority Calculator lists a set of questions that are grouped into three categories:

- **Impact:** The questions in this section focus on identifying a quality problem that is common, whether it has consequences for residents, if it has an impact on related areas, if there is a gap between the current and desired state, the costs to the organization and if the problem constitutes a business case.
- **Ease of implementation:** The questions in this section focus on a quality problem for which there is already a good change package, measurement tools available or in use, the successes achieved by other LTC homes and the change ideas that are actionable by the LTC home staff.
- **Alignment:** The questions in this section ensure that the organization's efforts are focused on a quality problem that is aligned with the provincial priorities, accountability agreements, public reporting and organizational strategic plans.

The impact and ease of implementation questions are rated on a scale from 1 to 8, while the alignment questions are rated on a scale from 1 to 10. Alignment questions are given more weight in order to ensure that LTC home leaders focus on quality topics that are aligned with provincial priorities and organizational strategic plans.

Findings

Number of Topics for Each Long-Term Care Home

The number of topics for improvement chosen by LTC home leaders QIPs ranged from 1 to 10. The majority of leaders submitted one Topic Specific QIP.

There is no simple answer to the question of how many priority topics a home should focus on. Too many topics may lead to a lack of focus and diluted effort; too few may mean that a number of key areas of quality are being neglected. It may take several years of analyzing and reviewing QIPs to determine whether LTC homes' successes in attaining aims are related to the number of priority topics they have chosen. The "right" number of priority topics is not known, but HQO encourages LTC home leaders to focus on no more than 2–4 priority topics at a time.

⁹ Residents First (2011), "Leading Quality — Priority Calculator.xls." Available at <http://www.residentsfirst.ca/documents/qiresources/1leadingquality/tools/10-leading-quality-priority-calculatorxls>.

Most Frequent Topics Chosen

The 279 QIPs submitted by 214 LTC home leaders contained a total of 33 different topics for improvement. The most frequently chosen topics were falls, restraints, pressure ulcers, continence, responsive behaviours, personal support worker (PSW) consistency, ED utilization, reduced transfer time to the emergency department (ED), resident satisfaction and medication errors (see Figure 3). Other submitted topics are outlined in Figure 4.

Figure 3: Most Frequent Priority Topics, 2011/12 QIPs (From 231 of 279 QIPs Submitted)

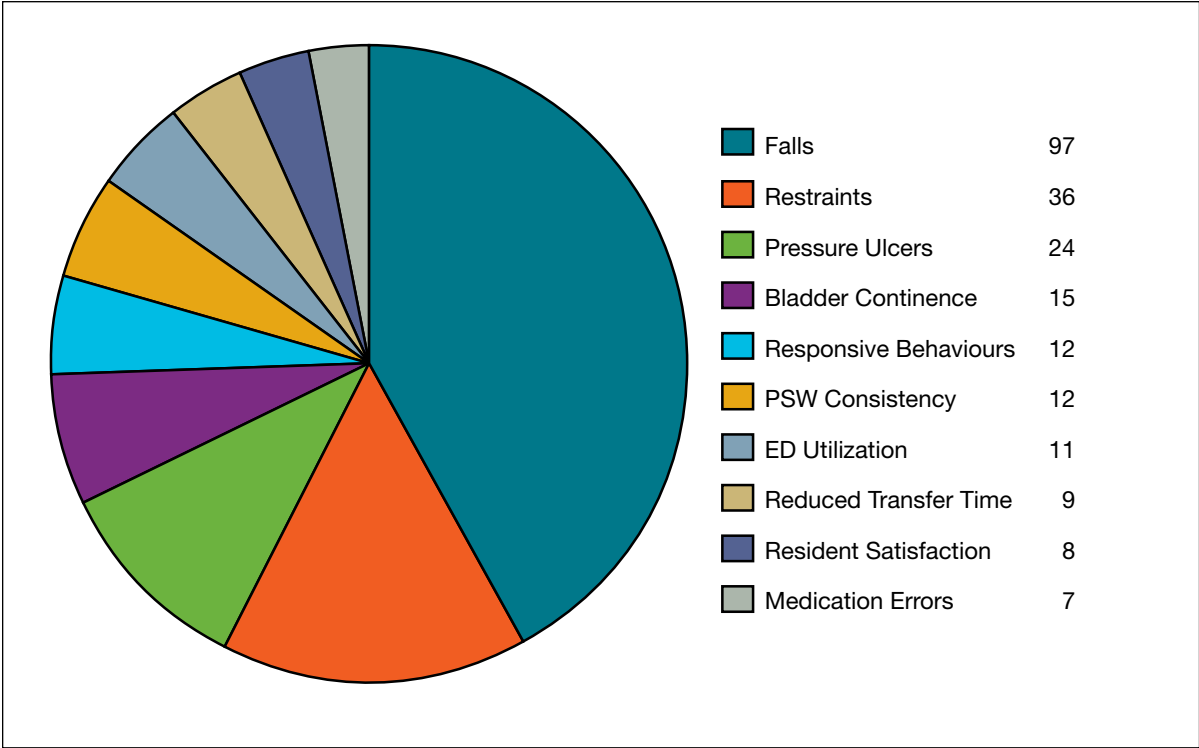
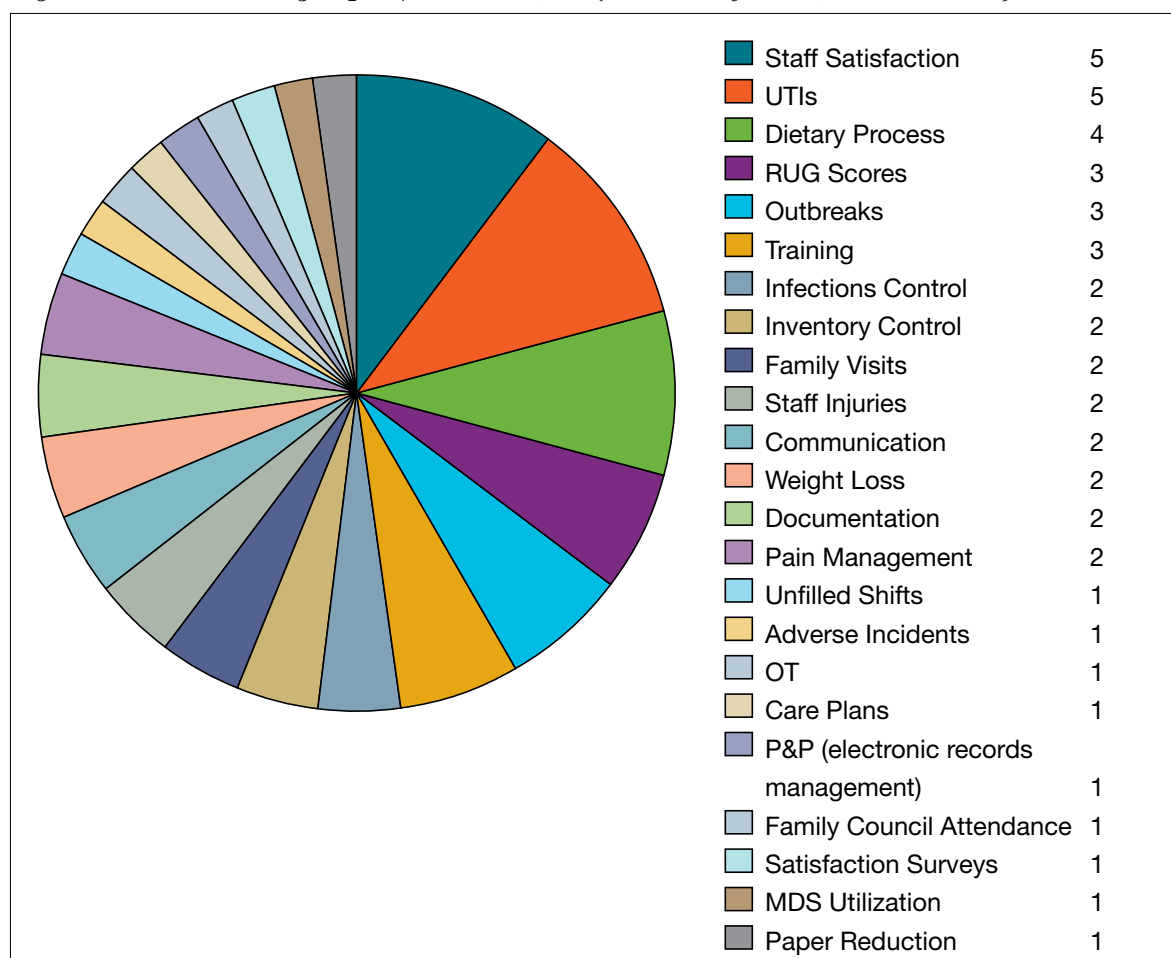


Figure 4: Other Priority Topics, 2011/12 QIPs (From 48 of 279 QIPs Submitted)



Aim Setting

Leaders need to set aims and oversee measurement collection, analysis and interpretation, because what leaders focus on will become what their organization focuses on. Most LTC home leaders provided baseline measures and set aims in their QIPs. A clear aim and a specific time frame within which a home wants to reach that aim are essential to success.

LTC home leaders are more likely to achieve their quality improvement aims when they set a stretch aim — that is, one that is challenging yet achievable — rather than simply stating a vague or minimal aim, or no aim at all (e.g., “Just do your best,” or, “Do better”). Stretch aims can be inspirational. They motivate staff and, when accomplished, can engender confidence in staff’s ability to tackle the next major challenge.

Residents First offered some specific suggestions for stretch aims: a 50% relative reduction in falls, pressure ulcers, responsive behaviours and consistent PSW assignment topics; and a 25% relative reduction in ED visits and incontinence.

Findings

Table 1 illustrates the range of aims that LTC homes set in their QIPs. Most LTC homes set aims that were consistent with the above guidelines, and also set stretch goals. This is an encouraging result, because it suggests that homes are taking an important step toward quality improvement. The aims for ED visits tended to be more ambitious than the suggested guidelines, while the aims set for improving continence fell slightly below the guidelines. For all topics, there was considerable variation in the aims set by homes.

Table 1: Relative Reduction/Improvement Aims Set by LTC Home Leaders, 2011/12 QIPs

Topic	Aim (as per Residents First Change package)	Set Aims (Median)	Aim Range
Responsive behaviours	50%	50%	20–100%
Pressure ulcers	50%	50%	15–100%
Falls	50%	50%	1–100%
ED visits	25%	50%	25–60%
Continence	25%	22%	5–25%
Consistent PSW assignment	50%	50%	20–80%

Some indicators may not have benchmarks to help leaders set their aims. The Residents First change packages offer examples of possible criteria for stretch aims. The suggested 25% and 50% targets are intended to be an initial guideline for LTC homes to consider as they begin their quality improvement journey. As organizations look for improvement targets for next year's QIPs and consider other topics for improvement, they should think about adopting one of the following four guidelines for setting stretch aims. In analyzing the 2011/12 QIPs, several good examples of stretch aims were identified.

1. Aim for the Theoretical Best

For certain indicators, there may be a theoretical best that LTC home leaders may aim for, particularly in areas that measure defects, wait times or use of a best practice. For example, a theoretical best could be to aim for zero waste (e.g., defects, overproduction, unnecessary waiting, too much motion, etc.) or 100% adoption of a recommended clinical practice (e.g., Registered Nurses' Association of Ontario [RNAO] Best Practice Guidelines). For some indicators, however — particularly those that are related to part of the disease process — it is not realistic to aim for a theoretical best, because these indicators can be reduced but not eliminated (e.g., responsive behaviours).

Several LTC home leaders set realistic stretch aims based on theoretical bests, such as:

- Reduce the number of restraints by two per month until reaching zero restraints by December 2013.
- Reduce the number of residents with pressure ulcers from two to zero by December 2011.

2. Aim to Cut a Defect or Waste in Half in the Current Planning Cycle

Residents First used the RNAO Best Practice Guidelines to create recommendations for the relative percentage of reduction/improvement aims in change packages, and LTC homes were shown how to convert this relative percentage into absolute numbers. One home, for example, aimed to reduce defects by 50%, by reducing staff-incurred muscular-skeletal injuries from 25 to 13 by March 31, 2012. Other leaders aimed at reducing defects beyond 50% by, for example,

- Reducing unfilled shifts by 75%, from 63 to 19 by September 2011; or
- Reducing medication errors by 90%, from 10 to 1 by October 2011

3. Aim for Best Achieved Elsewhere

Health Quality Ontario recently conducted an LTC benchmarking exercise that set quality indicator benchmarks to which homes can aspire. The process examined Ontario's performance, as well as that of other provinces and countries, on a selected number of quality indicators in order to determine benchmarks that represent high-quality care. Once these benchmarks become available, LTC home leaders can use them as targets for their own performance. This may be of particular relevance to those organizations that already have above-average performance. Homes can also use HQO's LTC public reporting website to identify the best performers in Ontario and aim for the same results.

4. Aim for Performance Achieved by Peers

Another strategy is to aim for a particular rank or placement compared to other LTC homes. For example, a home that is already performing well might want to aim to be among the top 20 homes in the province. Data posted on HQO's LTC Public Reporting Website can help support this type of aim setting by allowing homes to compare their performance to others on certain quality indicators.

Areas for Improvement

In order to achieve breakthrough results on priority LTC topics, we encourage LTC home leaders to choose the stretch aims outlined in the Residents First change packages.

The following issues were identified with aim setting:

- A number of QIP aims represented insignificant or minimal improvement (see Table 2 for some common root causes of poor-quality change ideas).
- A number of QIPs were missing baseline measures, future state measures, aims and/or dates; for example, 34 of the 279 QIPs were missing baseline measures.

Aims That Represent Insignificant or Minimal Improvement

Setting very modest or unclear aims for improvement may feel like a prudent goal, but "playing it safe" simply encourages leaders and staff to continue using old methods and practices. As well, modest or unclear aims could be interpreted as a leader's intent to engage in improvement work, while at the same time keeping the status quo intact.

Possible root causes for these problems may include:

- Lack of clarity about what constitutes a stretch aim
- Reluctance to set a stretch aim in an environment of competing priorities in the LTC home
- Staff turnover and lack of human resources available to drive the quality improvement agenda

Missing Aims, Baseline Measures and/or Dates

A few LTC home leaders did not define a numerical aim or a deadline by which they want to reach that aim in their QIPs. In other cases, leaders did not provide a baseline performance measure, so it was difficult to assess whether the aim could be considered a stretch aim. Lack of baseline data makes it difficult for Residents First to evaluate whether the LTC home leader set a realistic aim. Baseline measurements are important both for setting aims and for calculating future (i.e., desired) measures after improvement has been attained.

For example, to calculate a 25% reduction for relevant Residents First topics, leaders should use the following formula:

$$\text{Baseline measure}/4 = \text{future state measure}$$

For example, if a home's baseline measure for the number of residents who fell is 27, then a 25% reduction would be

$$27/4 = 6.75 \text{ (i.e., rounded up = 7 residents who fell)}$$

This figure represents roughly 25% of the baseline data, so in order to calculate the future measure we need to subtract 7 from 27, which will give us 20 (residents who fell). Thus, the aim statement will be: "Our QI aim is to reduce the number of residents who fell in our home by 25%, from 27 to 20, by December 2012."

Possible root causes for not providing baseline measures, aims and future state measures include:

- Lack of knowledge of what a baseline is or how to calculate it
- Baseline data have not been previously collected
- Lack of clarity about the importance of baseline and future measures
- Lack of clarity about the importance of setting specific dates

Recommendations

LTC home leaders are encouraged to:

1. Set stretch aims, as provided in the Residents First change packages.
2. Engage frontline staff, residents and families in the aim-setting process.
3. Collect baseline data, if staff previously has not done so. Leaders need to set specific timeframes for baseline data collection, after which a stretch aim can be set.
4. Set a specific date on which to achieve the planned improvement.
5. Align the QIP with the organizational business plan. This will help leaders and staff stay focused on the implementation of their QIP.

Residents First can help LTC leaders set clear achievable aims through:

- Building quality improvement capacity, by encouraging LTC home leaders and staff to attend Residents First webinars, Improvement Facilitator training, collaboratives and quality events. Quality Improvement Coaches are assigned to LTC home representatives who are engaged in Residents First training sessions and collaboratives.
- Encouraging LTC home leaders to engage Improvement Facilitators and frontline staff in the aim-setting process; this will help ensure that aims are challenging but realistic, and promotes ownership of aims and buy-in for performance improvement initiatives.

Change Ideas

Change ideas are important. They help leaders develop a strategy for improvement, identify key evidence-based best practices to be implemented, anticipate common barriers to implementation and create a plan to address those barriers.

In their QIPs, LTC home leaders were asked to identify three change ideas for their selected Residents First topic. When identifying change ideas, LTC home leaders should think of change strategies in three ways:

1. **What do our residents want?** What do residents need, want and are required by regulation to have?
Both residents and staff should be considered when identifying change ideas. For example, knowing which residents would prefer to sleep through snack pass and which would like to be awakened can help staff deliver snacks in the most effective manner.
2. **What specific practices or activities will satisfy residents and fulfill their needs?** This could include value-added steps in providing personalized care for residents, or certain treatments, drugs or tests/assessments that need to be given to certain types of residents and are often found in clinical practice guidelines.
3. **What changes can we all make (including frontline staff, residents and families) to ensure that best practices are tailored to residents' needs, and implemented and continually improved upon?**
A large body of evidence suggests that best practices are often not implemented consistently — in fact, many are only implemented half the time, 15 to 20 years after the evidence becomes clear.¹⁰

To develop effective change ideas, LTC home leaders must understand their current situation and collect baseline data. Leaders should always conduct their own internal root cause analysis using quality improvement tools (e.g., Fishbone [Ishikawa] and/or 5 Whys) to ensure that they are focusing on the appropriate areas. By looking into the root causes that affect or limit the consistent use of best practices, leaders can gain a better understanding of the issues and be able to develop change ideas. Change ideas should not be limited to root cause analysis, however.

Table 2 illustrates some of the common root causes behind poor-quality change ideas, as well as the types of change concepts that can help LTC home leaders provide personalized care processes to residents.

¹⁰ Balas EA, and Boren SA (2000), Managing clinical knowledge for health care improvement. *Yearbook of Medical Informatics 2000: Patient-Centered Systems*. Stuttgart, Germany: Schattauer.

Table 2: Common Root Causes of Poor-Quality Change Ideas and Suggested Changes

Root Cause	Change Concept	Change Ideas
Providers rely on historical assumptions and are unaware of the actual performance of their current systems	Recognition and assessment	Measurement and feedback to relevant staff, residents and families (e.g., defect check sheet, survey)
Easy to forget, too complicated	Design systems to avoid mistakes	Visual management systems, error proofing, reminder systems (e.g., falling leaves, “TALL man” labels)
Busy, not enough time	Improve work flow	Streamlining documentation, removing waste from the system (e.g., streamlined assessment forms, waste walk template)
Poor processes, non-standardized	Develop routine practices	Redesigned processes to meet residents’ needs (e.g., warm, welcoming admission process)
Unaware of best practices	Education and engagement	Engage in community of practice, network with peers (e.g., RNAO Best Practices Guidelines)
Lack of skill to perform best practice, or deterioration over time	Education and engagement	Training <i>and</i> skills verification, “on-boarding” of new staff, regular refresher training (e.g., training assessment and certification upon completion)
Lack of capacity for QI	Education and engagement	Make targeted investments that have a future payback, or shift underutilized capacity to where it is needed (e.g., invest in staff quality improvement education in order to reduce waste and implement best practices)
Residents unaware of their role or options, not engaged	Education and engagement	Resident and family engagement and education, involvement in resident Plan of Care (e.g., advanced directives, end-of-life decisions)
No motivation or resistance to change	Education and engagement	Recognition, rewards, inspiring leadership, accountability (e.g., involvement of frontline staff in improvement work, communication, knowledge sharing)

Findings

The most common change ideas identified in the QIPs fall into the following three change concepts (see Table 3):

- Recognition and assessment,
- Education and engagement
- Develop routine practices

The fewest change ideas submitted were under the improve flow change concept.

Table 3: Most Common Change Ideas Submitted by LTC QI Plans

Change Concept	Most Common Change Ideas Submitted
Recognition and assessment	Implementing relevant assessment tools upon admission, quarterly assessments, re-admission from hospitals and change in condition
Education and engagement	In-service for residents, families and visitors
Develop routine practices	Implement RNAO/CNO Best Practice Guidelines; consistent communication

Table 4 highlights some excellent change ideas generated by LTC home leaders in their QIPs, showing how leaders and staff creatively adapted ideas from the Residents First change packages to work in their own environments.

Table 4: Innovative Examples of Change Ideas Submitted in LTC QI Plans

RESPONSIVE BEHAVIOURS		
Change Concepts	Change ideas	Process measures
Education and engagement	Discuss residents' responsive behaviours at morning meetings and at shift report, to raise the profile of importance and reinstruct staff on effective interventions	Number of personal support workers (PSWs) who have been reinstructed on effective interventions each shift Number of revised interventions for effectiveness Number of interventions documented in residents' plan of care
Care planning for prevention	Include responsive behaviours approaches in supportive measures binder for all PSWs	Number of responsive behaviours approaches documented in the supportive measures binder
Design systems to avoid mistakes	Use lowest-risk medications	Number of residents on psychotropic medications
Develop routine practices	Consider reduction of medication as per Best Practice Guidelines after resident is stable vis-à-vis agitation for six months	Length of time resident is on psychotropic medication
Recognition and assessment	Refer residents with responsive behaviours to psychogeriatrician	Number of referrals per month

PRESSURE ULCERS		
Change Concepts	Change Ideas	Process measures
Recognition and assessment	Ensure dietician referral to those residents who require supplements to promote wound healing	Monthly audits of referrals and administration of supplements
Develop routine practices	Physiotherapy to recommend and perform passive exercise on immobile residents, to improve circulation	Number of referrals to physical therapy Number of residents receiving passive exercise
Education and engagement	Education for staff on pressure points and identifying signs of pressure	Number of staff that received education Number of staff that successfully answered the quiz
FALLS		
Change Concepts	Change Ideas	Process measures
Care planning for prevention	Assess common cause and implement strategies to avoid falls (e.g., incontinence: implement a prompted-voiding program); target high-risk medication as a common cause (conduct quarterly chart reviews)	Number of residents on prompted-voiding program Number of quarterly chart reviews of medication for high-risk fallers
Education and engagement	Circulation of falls-prevention resources for residents and families in admission packages; provide falls-prevention display in front lobby; discuss falls prevention at annual care conferences	Number of residents and family informed Number of residents with restraints
Design systems to avoid mistakes	Provide non-slip, thinner fall mattresses, with reflection tape around perimeter Increase lumen intensity for residents' rooms, and install motion-activated bed lights Anti-slip socks to be worn by residents during the night Proper drink/bedside table placement Bedside visual logos (e.g., leaf) to indicate which residents are at moderate (yellow leaf) and high risk (red leaf) for falls	Number of reviews for effectiveness of interventions

Areas for Improvement in Change Ideas

After analyzing the change ideas included in the 2011 QIPs, Residents First identified a number of opportunities for improvement.

Lack of Process Measures

Some QIPs did not have clear process measures to monitor successful implementation of a change idea. Without these measures, LTC homes may have difficulty knowing whether an idea was implemented in the way that it was intended. For example, a home could aim to implement activities to promote safe footwear in order to prevent falls, including new policies, posters, and staff and resident training, but if no monitoring takes place, the activities may not be implemented or may be conducted incorrectly. A simple audit process can identify this kind of problem, after which the home could try different approaches to implementation.

There are many ways for homes to collect “just-enough” data to identify success without requiring excessive documentation, including occasional audits of practices on a sample of individuals. Some examples of areas to audit include:

- **Training/skills:** Percentage of staff observed to be implementing a newly learned skill appropriately, based on a representative sample.
- **Process performance:** Number of times the process was done correctly the first time (i.e., first-time pass).
- **Reminder systems:** Percentage of time the reminder was actually used.
- **Resident and family engagement:** Percentage of time residents/families, while undergoing care, understood care information when asked, as measured on a mini-survey.

Unspecified or Limited Number of Change Ideas

Many of the submitted QIPs either included no change idea or only one change idea, or did not clearly specify their change ideas.

A number of homes listed staff education, or “in-services,” as the only idea for improvement. Such an approach assumes that lack of knowledge is the only root cause of issues and may not account for deeper system issues. Long-term care home leaders who want to use staff education as a change idea should elaborate on the implementation, monitoring and evaluation of the education initiative, to ensure that they have answered the following questions:

- Do all relevant staff members attend the training program?
- If they attend, do they absorb the information?
- If they absorb the information, will they carry it out?
- If they learn a skill, how does the leader know they can perform the skill correctly?
- Do they carry out the activity well?
- Will they forget the skill over time?

Relatively few homes included change ideas related to improving work flow, care planning for prevention or designing systems to avoid mistakes. Adding more change ideas that address system issues may be particularly helpful in uncovering opportunities for improvement and reducing waste.

The lack of change ideas in this year's QIPs may be because:

- Homes were uncertain about the level of detail to include (a likely scenario, since this is first year QIPs were submitted).
- Homes may be accustomed to using education as the primary or only lever for change.
- Homes may not be aware of the breadth of options available to them.

In order to generate the right change ideas, leaders should consider engaging frontline staff, residents and families in exploring the root causes of current issues within the home, identifying a common vision and brainstorming ideas for improvement.

High Number of Change Ideas

Several organizations listed many change topics — up to 10 for one topic. A high number of ideas suggests that the home has put a lot of thought into the topic, which is very encouraging. It may be helpful for homes, however, to prioritize which ideas they will tackle in a specific order, so that they are not overwhelmed with ideas that may not be attainable. One tool that can help with this process is the Effort-Impact Matrix (see Appendix D).

Conclusion

This analysis of the 279 quality improvement plans submitted by 214 LTC home leaders has highlighted the excellent work that leaders put into creating and sharing their QIPs. These plans showed visions for improvement that will serve as templates for future QIPs.

Three key messages for LTC home leaders emerged from this analysis. Residents First would like to highlight the importance of:

1. Setting the right number of priority topics
2. Setting clear stretch aims
3. Creating a prioritized, achievable list of change ideas

Most LTC home leaders identified bold aims and innovative ideas for change; this is an encouraging finding. Setting stretch targets and having a defined strategy are key steps in the path towards improvement.

For next year, organizations can consider the following steps to make their QIPs even stronger:

- Include more change ideas related to system improvement, such as streamlined processes, standard workflow, reminders and creating systems to avoid mistakes.
- Avoid over-reliance on staff training as the sole strategy for improvement.
- Include more process measures to monitor whether change ideas are being implemented as intended.

Congratulations to all the LTC home leaders who submitted their QIPs, and to their staff for their hard work and ongoing focus on improvement. Their commitment to strengthening the quality of care in Ontario helps lay the groundwork for improved quality across the long-term care sector, and the Ontario healthcare system.

Glossary of Terms

Change package: The Residents First change package is a synthesis of key change concepts and specific examples of change ideas to help long-term care homes in their quality improvement work.

Stretch aim: An aim that cannot be achieved using what is known and with how things are done today; organizations must aim for something that is not yet attainable.

Median: The number in the middle of all data points, from smallest to largest. The median separates the upper half of data from the lower half. For, example, in the following numbers — 1, 2, 2, 3, 4, 7, 9 — the number 3 is the middle point, or the median.

Fishbone (Ishikawa): A diagram that can help QI teams get to the root cause of a problem and organize it in a meaningful way.

5 Whys: A simple brainstorming tool that can help QI teams identify the root cause(s) of a problem.

Process measures: Measures of performance of a process. Examples of process measures are provided in Residents First change packages.

Appendix A: Example of a Completed Priority Calculator

Priority Calculator This tool will help you determine which improvements will have the biggest impact on helping you to realize your vision						
			Topic (Indicator)			
Area	Questions	Rating Scale	Falls Prevention	Pressure Ulcer Prevention (Chronic)	Pressure Ulcer Prevention (New)	Medication Management
	5. Does implementing this project make subsequent projects easier?	Rate 1 to 8 (1 = not at all easier; 8 = significantly easier)	4	5	5	4
	6. Is there a business case from the home's perspective?	Rate 1 to 8 (1 = no business case; 8 = strong business case)	4	4	3	4
EASE OF IMPLEMENTATION	1. Are the ideas for improvement well documented? Is there a good "change package?"	Rate 1 to 8 (1 = no documented ideas and no change package; 8 = many documented ideas and a well-developed change package)	4	2	3	4
	2. Are measurement tools available and/or already in use?	Rate 1 to 8 (1 = not at all available; 8 = completely available and already in use)	3	2	3	5
	3. Are there many other LTCHs that have been successful from whom we can learn?	Rate 1 to 8 (1 = very few homes with success; 8 = numerous homes with success)	8	5	5	1
	4. Are ideas for improvement "actionable" by LTCH staff?	Rate 1 to 8 (1 = not at all actionable; 8 = highly actionable)	8	3	4	1
ALIGNMENT	1. Does this fit or align with provincial priorities? Accreditation? Accountability agreement? Public reporting?	Rate 1 to 10 (1 = low fit; 8 = high fit)	8	3	3	1
	2. Does this fit or align with the home's mission/vision/value?	Rate 1 to 10 (1 = low fit; 8 = high fit)	2	3	3	1

	Change Ideas							
on safety	Maximum use of mobility aids	Best possible corrected vision and hearing	No trip hazards from clutter	Pressure relieving surfaces	Implementing daily skin screening by PSWs	Regular turning for high risk residents	Pressure relieving surfaces	Implementing daily skin screening by PSWs
	3	5	5	3	3	3	3	3
	2	2	4	3	3	3	3	3
	3	3	4	2	5	5	2	5
	1	2	3	2	3	4	2	3
	8	3	4	3	5	3	1	4
	8	8	3	1	2	3	1	1
	8	8	5	8	8	3	1	7
	8	8	3	8	1	3	7	1

Appendix B: Example of a Completed Topic Specific QI Plan

Creating a Topic Specific Quality Improvement (QI) Plan

This template is to assist you in creating a Topic Specific Quality Improvement (QI) plan. A Topic Specific QI plan should be developed for every QI topic your home is working on. A Topic Specific QI plan needs to address three key questions:

- What are we trying to accomplish?
- How will we know a change is an improvement?
- What can we do that could result in an improvement?

Home Name: ***ABC Long-Term Care Centre***

Aim Statement:

A clear and measureable aim is critical to the success of a QI initiative. Fill in the blanks below:

Our QI aim is to reduce the number of falls with injuries in the ABC LTC Centre **by** 50%,
from 12/month **to** 6/month **by** December 2012.

Our change ideas include:

1. Conduct risk assessment for falls for all residents at admission/re-admission, a change in status and an updated Plan of Care, and use visual cues to easily identify residents at high risk for falls with injuries.
2. When a resident is identified at risk for falls, ensure that staff implements one intervention at a time, to evaluate effectiveness.
3. Develop and conduct an inter-disciplinary post-fall assessment to identify contributing factors to the fall with injury (e.g., vision, gait, continence, medications, environment, behaviour/cognitive status, footwear, change in health status).

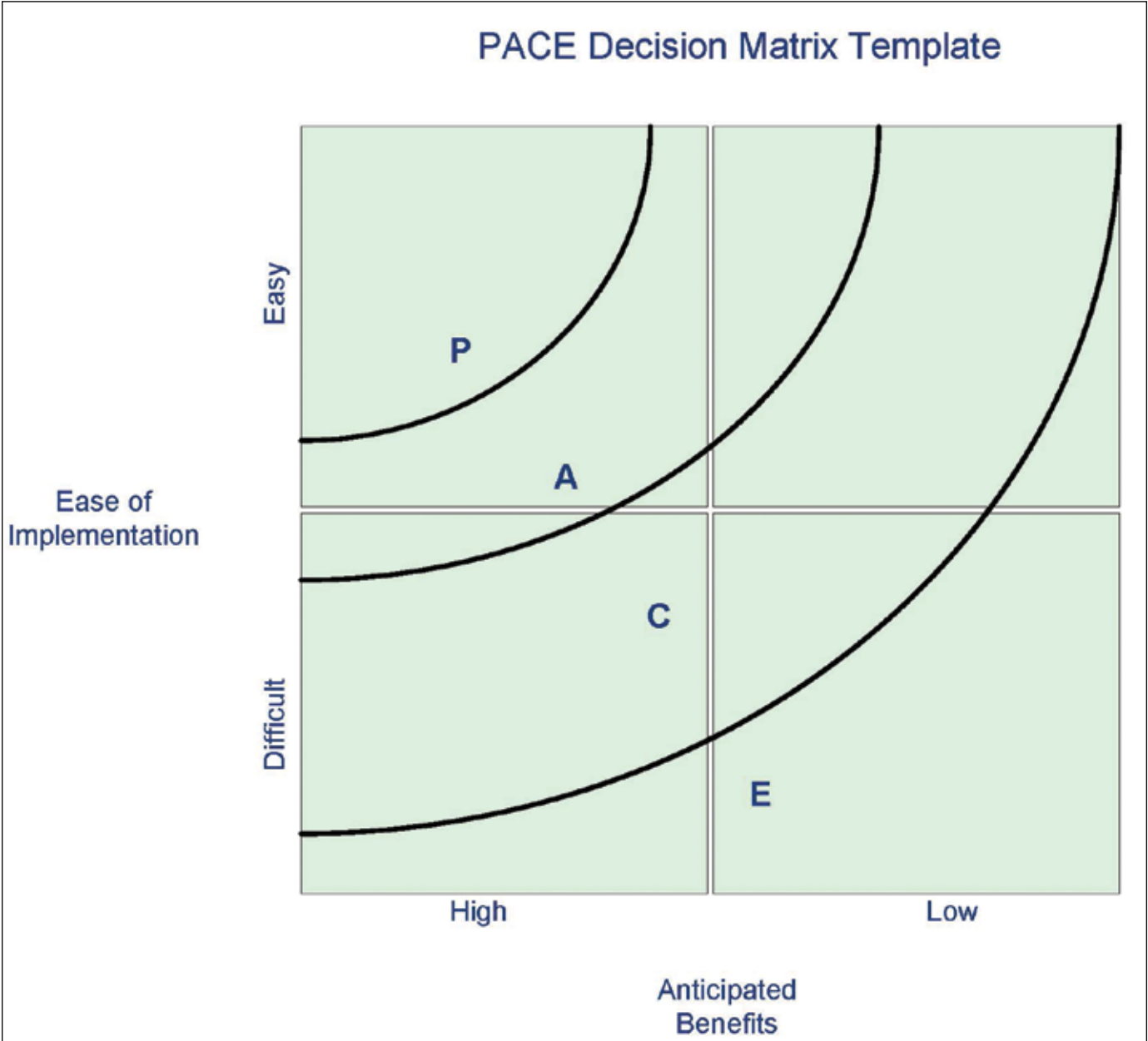
Context and/or information unique to your home that will help tell your home's quality improvement story:

- High number of residents with osteoporosis
- High number of cognitively impaired residents
- High number of incontinent residents

Appendix C: Example of a Completed Organizational QI Plan

AIM		MEASURE								
Strategic Area	Topics for Improvement Projects	Outcome Measure (Indicator)	Baseline	Long-Term Goal	Target Aim this Year	Target Justification	Executive Sponsor (Role)	Timeframe	Quality Attribute	Priority
A Safety	A1 Falls injury prevention	Residents who had a Fall in The Previous Month	12 per month	0 per month	6 per month	50% improvement as per RF change package	Director of Care	January - June	Safe	
	A2 Pressure Ulcer prevention	Residents who had a Pressure Ulcer that Recently Got Worse	2 per month	0 per month	0 per month	Achieved by other LTC Homes in Ontario	Wound Care Nurse	March - June	Safe	
		Residents with a New Ulcer (Stage 2 or higher)	0 per month	0 per month	0 per month	Achieved by other LTC Homes in Ontario	Wound Care Nurse	July - October	Safe	
	A3 Medication safety	Number of residents using antipsychotic drugs							Safe	
		Number of Medication Errors	2 per month	0 per month	0 per month	Provincial data	Pharmacist	January - June	Safe	
	A4 Responsive Behaviours	Number of high risk Behavioural Symptoms residents	35% from MDS (Feb '11)	Less than 2%			Director of Care	Quarterly	Safe	
B Staff experience	B1 Consistency of assignment	Average number of PSWs assigned to each resident per month	20 per month	8 per month	14 per month	Reference article as per collaborative	Administrator	May - August	Resident Centred	

Appendix D: Example of a Completed Effort-Impact Matrix



Source: Adapted from Joint Commission Resources (2008), *Advanced Lean Thinking: Proven Methods to Reduce Waste and Improve Quality in Health Care*, p. 29.

- P = Priority.** The ideas placed in this section of the matrix have the highest anticipated benefit and are the easiest to implement. These ideas/solutions should be implemented first.
- A = Action.** The ideas placed in this section have slightly lower benefit but are still relatively easy to implement. These ideas should occur as a follow-up after the priority items have been implemented.
- C = Consider.** Consideration must be made for ideas placed in this section as to whether the difficulty encountered with implementation is worth the benefit.
- E = Eliminate.** The ideas placed in this section may be eliminated because they have a low return on investment of time and effort. In certain instances, depending on the organization’s circumstances, the improvement team may choose to start testing an improvement idea that is plotted under “high impact” and “difficult to implement.”

Notes:

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