



## STAFF REPORT INFORMATION ONLY

### LEAN Methodology and KAIZEN Events – Ontario Health Quality Council

<b>Date:</b>	September 3, 2009
<b>To:</b>	Advisory Committee on Long-Term Care Homes and Services
<b>From:</b>	General Manager, Long-Term Care Homes and Services Division
<b>Wards:</b>	All
<b>Reference Number:</b>	

#### SUMMARY

The Ontario Health Quality Council (OHQC) was established in September 2005, under the *Commitment to the Future of Medicare Act, 2004*, as an operational service agency, to report to the Minister of Health and Long-Term Care on the quality of the provincial healthcare system and to encourage/support the principles of quality improvement in healthcare organizations. Section 4 of the *Commitment to the Future of Medicare Act* sets out the mandate of OHQC as follows:

- (a) To monitor and report to the people of Ontario on: (i) access to publicly funded health services; (ii) health human resources in publicly funded health services; (iii) consumer and population health status; and (iv) health system outcomes; and
- (b) To support continuous quality improvement in Ontario's healthcare organizations.

Section 5 of the *Commitment to the Future of Medicare Act* requires OHQC to deliver an annual report on the state of healthcare in Ontario and any other reports required by the Minister. Since inception in 2005, OHQC has published three reports on Ontario's healthcare system. In June 2008, the government asked OHQC to extend its reach, measuring and reporting on the quality of long-term care and resident satisfaction.

OHQC began to work with the provincial long-term care associations to determine the best ways to measure, promote and improve quality. As a pilot project, OHQC proposed to introduce LEAN methodology and KAIZEN events into long-term care homes and assess their practicality and success in the long-term care homes system.

Castlevue Wychwood Towers was the first long-term care home in the province to be invited by OHQC to pilot LEAN and KAIZEN and complete a Value-Stream Map. This report summarizes the work to date and the plans for the future.

## **Financial Impact**

There is no financial impact beyond what has already been approved in the current year's budget.

## **ISSUE BACKGROUND**

As a catalyst for change, OHQC champions evidence on how to achieve the best possible processes and outcomes by encouraging the adoption of formal QI methodologies and skills and by providing expertise in quality improvement to healthcare organizations.

In 2008, OHQC collaborated with the Ontario Hospital Association and the Canadian Institute for Healthcare Information to focus on Hospital Standardized Mortality Rate, and with Family Health Teams and Community Health Centres to improve access to Primary Care. Currently, OHQC is working with the Registered Nurses Association of Ontario and the Canadian Association of Wound Care in a Pressure Ulcer Awareness Program.

More recently, OHQC began to work with the Ontario Association of Non-Profit Homes and Services for Seniors (OANHSS) and the Ontario Long-Term Care Association (OLTCA) in encouraging formal quality improvement tools and techniques in long-term care homes.

OHQC approached the Long-Term Care Homes and Services Division to explore the division's interest in participating in a pilot project related to LEAN methodology and KAIZEN. Castlevue Wychwood Towers (CWT) submitted an Expression of Interest and was selected to hold a KAIZEN event related to medication reconciliation.

By being selected, CWT benefited from having OHQC facilitators available to a three (3) day KAIZEN event, to assist the team in learning about LEAN and KAIZEN and to focus exclusively on analyzing and redesigning the pre-selected key process (i.e., medication reconciliation). The medication reconciliation pilot project was designed by OHQC to examine work flow processes and search for ways to reduce duplication, standardize inconsistent steps and make them more reliable and eliminate any work that does not add value to residents.

The OHQC consultant visited the CWT team for one day of shared learning prior to the planned 3-day KAIZEN and then provided advice and support throughout the KAIZEN event itself. The team has since followed up with additional learning and improvement efforts. The pilot project includes a commitment for the OHQC consultants to revisit the team 60-90 days after the event to address the sustainability of the improvement efforts.

## **COMMENTS**

LEAN is a strategy that optimizes the performance of care provision and/or operational systems by improving work processes and minimizing waste. LEAN identifies eight (8) common forms of waste: defects, over-production, wait time, non-utilized talent, transportation, excess inventory, motion and extra processing. For LEAN to be effective

in a long-term care environment, it is important to understand the seven (7) key work flows: residents, providers, information, medications, supplies, equipment and instruments.

A KAIZEN event is defined as “a quality improvement activity in which cross-functional teams learn how to make improvements in a methodological way. The teams learn how to apply specific improvement tools, establish relevant metrics programs and sustain their gains. They learn to work together to solve problems rapidly in a highly effective way.”

The CWT KAIZEN event was extremely successful. On day 1, the team identified the steps in the current processes of medication reconciliation and resident admission. They identified waste in current and identified opportunities and ideas for improvement. On day 2, the team designed the “ideal state process” and ranked the improvement ideas in order of priority. Many useful LEAN tools and concepts to complement the division’s standardized PDSA toolkit were learned: i.e. streamlining systems/processes to decrease waste, time, variation in quality and facilitate improved workflow; types of waste; tools to prioritize action steps and gain group consensus. Value stream maps were developed as visual tools to engage stakeholders involved in the processes to see where issues and potential improvements might lie.

Process improvement activities by the CWT team included developing a Medication Reconciliation Checklist which OHQC has now viewed and observed to be of very high quality. They have asked if they may share it with other long-term care homes.

Sustainability of the process improvements implemented will be monitored and evaluated in three months, six months and one year. To date the home has realized some additional quality improvements.

The success at CWT has resulted in both OHQC and the division being interested in trialling another KAIZEN event at another home. Cummer Lodge (CL) has agreed to participate in a KAIZEN related to RAI-MDS and documentation.

In addition to strengthening our knowledge and competence in formal integrated quality management, a component of the division’s interest in LEAN and KAIZEN was to assess its feasibility for long-term care, especially smaller homes without significant resources.

The CWT team found many useful LEAN tools and concepts to complement the division’s own PDSA toolkit. The KAIZEN was an excellent vehicle to truly engage frontline staff in problem-solving in a way that could be sustained. The concepts learned by both managers and staff through this process are being put to good use and the team has already used the techniques for other process improvements. There was a high level of satisfaction from all participants and the KAIZEN was a great team building exercise. Teamwork has been strengthened and team communication has been enhanced. The team feels empowered to continue to initiate and make quality improvements in the home.

However, the CWT also found that the KAIZEN methodology will be challenging in long-term care homes with limited resources, as KAIZEN events cannot be scheduled without staff replacement. As a result, although the KAIZEN methodology is a viable process for long-term care homes, it is improbable to be used as the sole or primary approach to quality improvement unless funding is provided to offset staff replacement. The KAIZEN methodology will more likely be reserved for specific key process improvements, to complement and add value to the entire slate of quality improvement tools and techniques. It is a highly motivational process that includes staff involvement and participation.

## **CONTACT**

Vija Mallia, Administrator, Castleview Wychwood Towers

Tel: (416) 392-5712; Fax: (416) 392-4157; E-mail: [vmallia@toronto.ca](mailto:vmallia@toronto.ca)

## **SIGNATURE**

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Sandra Pitters  
General Manager, Long-Term Care Homes & Services