



## Lean/TPS for Savings in Healthcare – Cuts Don't Cut It

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This series was created to share best practices with healthcare leaders. We present Lean/TPS as the missing piece in healthcare's continuous improvement efforts.

### Healthcare Leader's Summary

#### *Bringing another missing piece to the Lean healthcare puzzle*



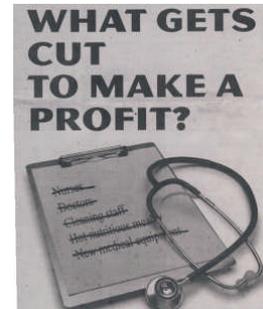
Cost cutting and traditional accounting methods are not sufficient to balance hospital and healthcare budgets. Traditional approaches to budget-based interventions in healthcare are similar to what manufacturers attempted to do 20-30 years ago. As manufacturers learned to use Lean/TPS to reduce then eliminate wastes and unnecessary costs, they discovered large revenue streams of realizable savings.

Hospitals and healthcare organizations must grow along a similar path. As tax-based contributions shrink with demographic shifts, demand for services will only increase. The Quebec Health Minister stated healthcare needs to learn from Toyota in order to meet escalating challenges to services with a dwindling cash base.

This Lean in Healthcare series article addresses bias in healthcare administration decision-making, the size of realizable savings and how to keep those savings.

## Cuts Don't Cut It

Healthcare must stop using cost-cutting to balance budgets. Healthcare needs to create savings. Cuts cause service shortages, longer wait times and negative patient outcomes. Lean, as based on the Toyota Production System (TPS), has been cited as the medicine for healthcare:



- The Quebec Health Minister has turned to Toyota for inspiration, saying the Toyota Way is a "common sense approach to improving quality."<sup>i</sup>
- "If we could understand the Toyota system in health we would save thousands of lives and billions of dollars."<sup>ii</sup>
- "Managers -- without more money or federal action -- can use Toyota management principles to create an environment where it is difficult to make a mistake and people can take joy in work and deliver better and better patient care."<sup>iii</sup>
- At a time when we are overwhelmed by the staggering evidence that health care systems that we depend on often fail us, Lean captures the power of real transformation.<sup>iv</sup>
- **For 2008-2009:** Based on no service cuts, 75 Ontario hospitals (49 per cent) project deficits for 2008-09. For 46 hospitals (30 per cent), the deficits will be greater than two per cent in 2008-09.
- **For 2009-10:** 104 hospitals (68 per cent) project deficits. For 66 hospitals (43 per cent), the deficits will be greater than two per cent in 2009-10.<sup>v</sup>

The Health Council of Canada (HCC) was created to monitor how money for healthcare is being spent. HCC reported that:

- "(T)he state of health-care reform in Canada today is largely a patchwork of pilot projects, not a model of system-wide change." In a report this year it listed nine areas of disappointment, including home care, primary care (family doctors) and accountability.<sup>vi</sup>

Tom Closson noted in his President's Address at the Ontario Hospital Association's HealthAchieve2008 conference<sup>vii</sup> that cost cutting, while it might have been useful in the 1990s has been displaced by greater concerns. Access to healthcare was cited as the leading concern in the early 2000s. Lean/TPS is the best answer.

Hospitals around the world that have been successful at implementing Lean/TPS have seen patients and staff benefits. They have lowered costs, kept savings and responded to growing demand for services with shrinking tax contributions. These hospitals are building on experience and similarities to the manufacturing sector:

Manufacturing Then	Healthcare Now
<ul style="list-style-type: none"><li>• Rising costs and dropping profits</li><li>• Currency exchange rates dropped</li><li>• No communications – business silos</li><li>• Unaware of the need to drive down errors and cycle times</li><li>• Leaders made budget cuts &amp; did not reduce operational costs</li></ul>	<ul style="list-style-type: none"><li>• Rising costs and dropping budgets</li><li>• Tax-based budget funding dropped</li><li>• No communications – business silos</li><li>• Unaware of the need to drive down errors and cycle times</li><li>• Leaders made budget cuts &amp; did not reduce operational costs</li></ul>

Healthcare knew the tax base would shrink. They knew demand would skyrocket. They knew about losing half their nurses by 2010-2015. The health crisis is the largest, most expensive issue in North America. IBM looked at healthcare and concluded that:

Healthcare is in crisis. While this is not news for many countries, we believe what is now different is that the current paths of many **healthcare systems around the world will become unsustainable by 2015**. This may seem to be a contradiction, given the efforts of competent and dedicated healthcare professionals and the promise of genomics, regenerative medicine, and information-based medicine. Yet, it is also true that costs are rising rapidly; quality is poor or inconsistent; and access or choice in many countries is inadequate. ... **In Ontario, Canada's most populous province, healthcare will account for 50 percent of governmental spending by 2011, two-thirds by 2017, and 100 percent by 2026.**<sup>viii</sup>

The question should never be "What do we cut to save money?" but "How do we reduce costs, errors, waste, waiting and improve quality?" The answer is the same as found in other sectors – make smarter decisions with Lean/TPS. **Lean/TPS is not driven by cuts; it's about the sustainable successes with wits, not wallets.**

For example, we know at least 30-40% of a typical nurse's time is spent on waste, such as rework and searching for medication or supplies. Some reviews place that value at 90% and higher. Analysis of healthcare processes shows that **roughly 80-99% of time spent is on waste or non-value added activities.**

Lean/TPS improvements focus on removing non-value-added steps and mistakes. One hospital had raised \$3.5 million for a new building. Lean/TPS savings in space requirements and money that the new building was no longer needed and the money was redeployed.

**From a recent Canadian Lean in Healthcare project:**

- Within days of completing proper Lean/TPS training, one team believed they had reduced errors to zero for patient test data ...
- Another team showed how a simple solution could save 2-6 years of patient wait time **per every month** of their work ...
- An additional salary was saved from preventing loss of lab consumables ...
- 2.4 years of wasted time in process recovered ...
- Savings equal to several new salaries were found ...

**One team commented:**

We were surprised at the size of the expected results. There were years of patient wait time that we could eliminate with a few improvements. We found we could save hundreds of days of waiting from some processes and unexpected dollar savings in other areas.

**In Virginia Mason Hospital, another Lean leader:**

- Inventory costs were slashed by 51%
- Lead times were reduced by 708 days
- Gains in productivity freed up 77 fulltime equivalents (the number of full-time employees) with many being reassigned work in the newly developed lean promotion office
- Defects in patient-care reduced by 47%
- Kaizen event workshops saved the hospital over US \$12m during 2002-2004.

**The crisis in healthcare is real and can be met.** Lean/TPS methods are also used to improve patient flow through Emergency Departments, Operating Rooms, or other patient care environments. We can move forward with sustainable Lean/TPS to generate cost savings. We can bring healthcare out of crisis and meet the growth needs to come.



For more information about the Lean in Healthcare series contact:

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## Notes & References

<sup>i</sup> CBC News, Quebec health minister inspired by Toyota philosophy: Management approach used in Boston, Pittsburgh, Seattle hospitals. From:

<http://www.cbc.ca/canada/montreal/story/2008/07/10/qc-healthminister0910.html>

<sup>ii</sup> Newt Gingrich, Former House Speaker, Founder, Center for Health Transformation

<sup>iii</sup> Clare Crawford-Mason, co-author, *The Nun and the Bureaucrat: How They Found an Unlikely Cure for America's Sick Hospitals and Thinking About Quality: Progress, Wisdom and the Deming Philosophy*.

<sup>iv</sup> Frank Christopher, PBS producer of the series *Remaking American Medicine*. Note: "Remaking American Medicine" won First Place at 2006 Association of Health Care Journalists Awards.

<sup>v</sup> Hospitals forecast deficits: Half of Ontario's hospitals say without cuts, they'll break an Ontario law banning red ink. John Miner, Sun Media, Thu, March 13, 2008.

<sup>vi</sup> Health care's appetite, Friday, November 13, 2008, *Globe and Mail*

<sup>vii</sup> <http://www.longwoods.com/product.php?productid=20249>

<sup>viii</sup> IBM. *Healthcare 2015: Win-win or lose-lose?*