

# QHSE focus MAGAZINE

**QUALITY, LEAN &  
SIX SIGMA EDITION**

## **CHOOSING THE BEST PROCESS IMPROVEMENT STRATEGY**

**The Case Study  
From Lean  
and Six  
Sigma  
Insider**

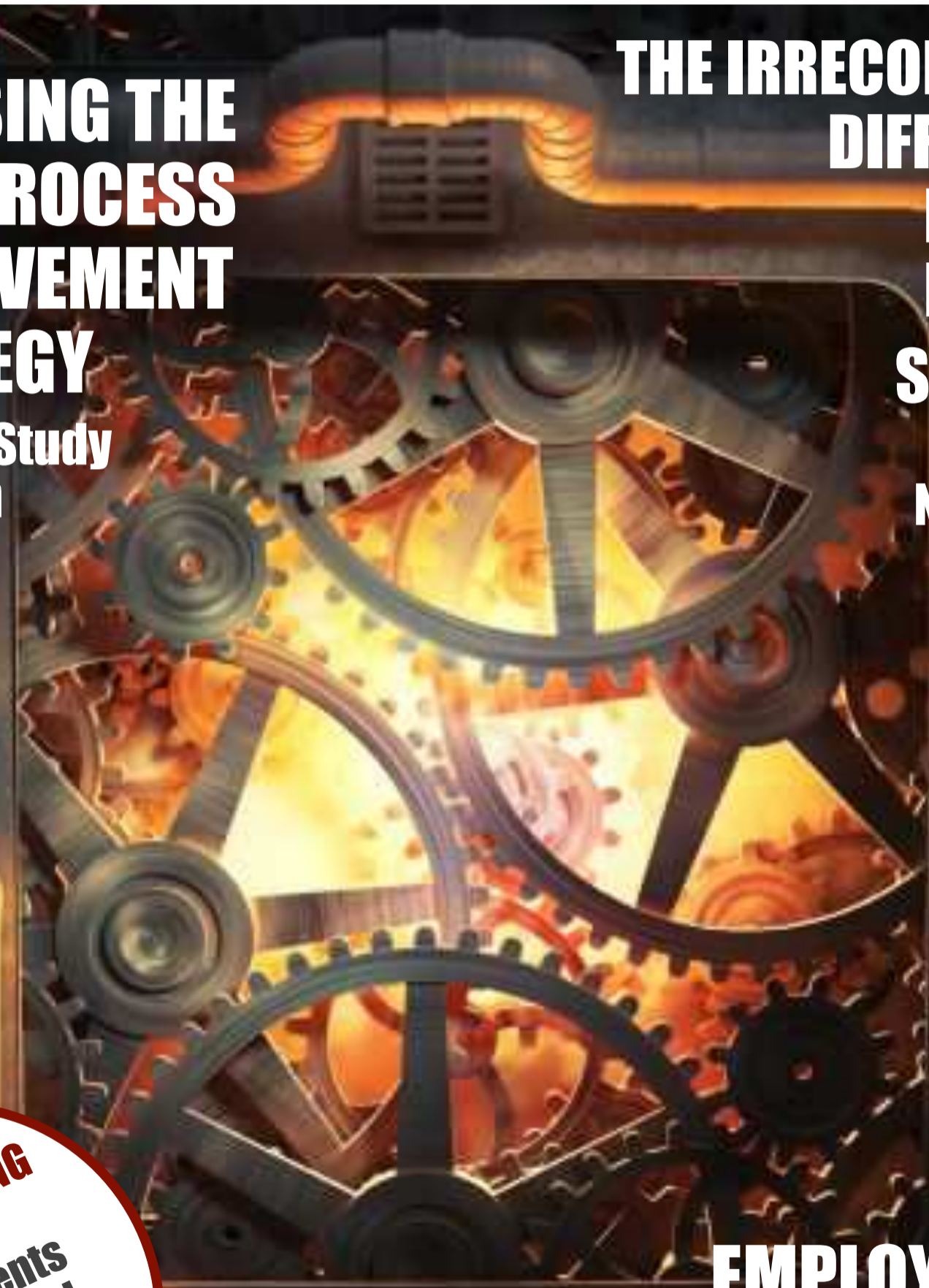
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**The  
Nuts & Bolts  
of The  
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**UNDERSTANDING  
LEAN**  
The 5 Elements  
To Understand  
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## UNDERSTANDING LEAN

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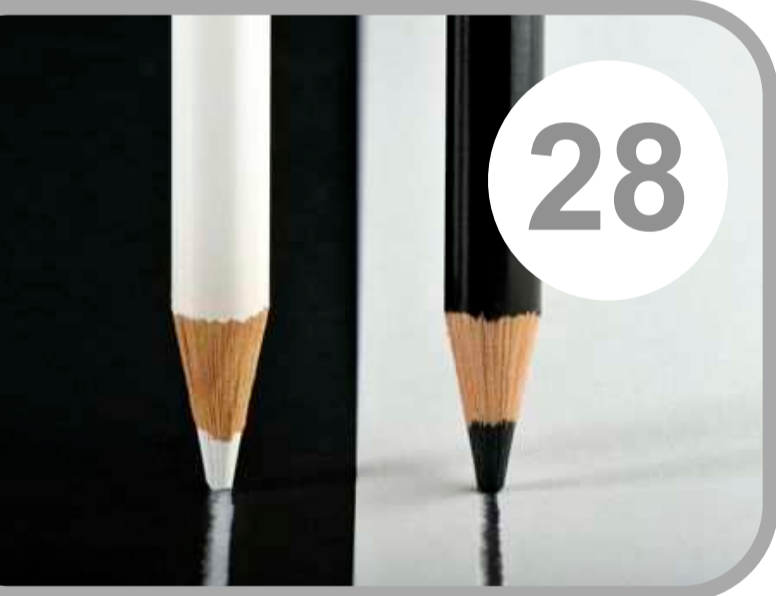
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# EMPLOYEE AND PATIENT SAFETY

The Only Moral Place to Start With Lean in Healthcare

BY MARK GRABAN

**The United States spends 50% more than other countries for healthcare and doesn't get 50% better quality for it.**

**What** should we hope to accomplish with the Lean methodology in healthcare organizations around the world? Taiichi Ohno, one of the creators of the Toyota Production System, wrote simply, "Start from need."

What are the needs, the problems to be solved in healthcare? The problems in the American healthcare system are well documented. We spent far more than the rest of the world – almost 18% of GDP compared to a group of countries that's about tied for second place in developed Western countries. Countries like Holland, France, Germany, Canada, and Denmark spend between 11 and 12% of GDP on healthcare.(1)

Patients are certainly well served by certain aspects of the American health system, such as the availability of advanced technologies and treatments (the types of care that the world's wealthy will travel here for). However, other core quality and patient safety measures are not better than the rest of the world (and are often worse). The United States spends 50% more than other countries and doesn't get 50% better quality for it.

When I've visited countries in Europe and have asked "what are the biggest challenges facing your health system?" the responses are pretty consistent:

- Costs are too high and national budgets are strained
- Costs are increasing too quickly
- Quality and patient safety needs to improve
- Waiting times are too long

It's perhaps only in the "waiting times are too long" category in which the U.S. does well – if you have insurance or access to care. Patients in Canada (2) and Europe (3) might wait longer for surgeries, but it seems to be a uniquely American problem that getting sick can bankrupt you and your family.

In hospitals around the world, quality, health, and safety (for employees and patients), are pressing concerns. Far too many patients are harmed or killed due to preventable errors and hospital acquired infections. Again, this is a worldwide problem. (4) There is a moral imperative to use Lean and other process improvement methodologies to reduce errors and harm. Better processes and systems, not asking employees to be more careful in their chaotic settings, are the key to improving patient safety.

For example, Dr. Richard Shannon has led Lean-based efforts at two different health systems in Pennsylvania, where central-line associated bloodstream infections were nearly completely eliminated, saving many lives and reducing the length of stay for patients who would have gotten infections by 17 days. (5)



1. <http://www.guardian.co.uk/news/datablog/2012/jun/30/healthcare-spending-world-country>
2. <http://www.health.gov.on.ca/en/public/programs/waittimes/surgery/default.aspx>
3. <http://www.bbc.co.uk/news/health-12964360>
4. <http://www.leanblog.org/2009/08/statistics-on-healthcare-quality-and/>
5. <http://www.leanblog.org/2011/08/podcast-127-dr-richard-shannon-lean-patient-safety/>
6. [http://www.alcoa.com/sustainability/en/info\\_page/workplace\\_safety.asp](http://www.alcoa.com/sustainability/en/info_page/workplace_safety.asp)

This is one of the best ways to reduce costs in our health system – preventing problems and doing a better job for patients (far better than the usual healthcare cost-cutting strategy of layoffs).

At the recent Lean Healthcare Transformation Summit, one of the keynote speakers, Paul O'Neill, talked about the moral obligation of improving employee safety. As CEO of Alcoa, O'Neill established an organizational culture that made safety a clear first priority, as their lost workday cases per 100 employees fell from 1.86 (lower than the national average at the time) to just 0.12 in 2012 (about one tenth the national average). The employee safety data is updated daily for Alcoa executives (O'Neill said it was currently just 0.065) and annual numbers are posted publicly. (6)

O'Neill said, "Working in healthcare and medical fields is the most dangerous industry in the U.S.," with an average lost workday rate of 3 per 100 employees. These employee injuries can range from strains and sprains to accidental "needle sticks," where the risk of contacting a deadly disease exists. While CEO of the Wisconsin health system, ThedaCare, Dr. John Toussaint learned that his hospital employees were more likely to be injured at work than workers at the local paper mills. Both O'Neill and Toussaint are advocates for setting aspirational goals of zero injuries.

Lean, of course, is not just about setting targets. It's certainly not Lean to bribe employees with bonuses for having fewer injuries (as people might just stop reporting them) and it's especially not Lean to threaten people with punishment for not meeting safety goals. O'Neill emphasizes measuring lost workdays as that is "not as easy to fudge" as reportable injuries.

To improve employee safety, we all have to work together to improve the process.

When we use 5S and other Lean methods to rearrange utility rooms to ensure patient lift assists are always easily and readily available, employee strains and sprains are reduced (and patients are less likely to be harmed in the process of being moved or repositioned). Fixing the process and making it easier for staff to do the right thing (the right way) works far better than posters or slogans reminding everyone that safety is a priority.

As O'Neill said at the Summit, organizations are either "habitually excellent" or they are not. Organizations that can get habitually excellent at safety will tend to be habitually excellent at everything else. As employee safety improves, morale improves, which leads to improvements in patient safety and patient satisfaction. It all goes hand in hand.

Far too many healthcare organizations are focused on relatively superficial improvements. In one Minnesota hospital, nurses complained in the news that they were trying to engage leaders on important safety issues but were, instead, being told to reduce the number of pens and pencils in their desk drawers. Pens and pencils just cost a few cents each. There's really no excuse for working on trivial things when employees are patients are being harmed in such large numbers.

When you visit and tour the Toyota plant near my home in San Antonio, it's made abundantly clear that employee safety is the first priority. If hospitals are aspiring to be Lean organizations, worker safety and patient safety are the only places worth working on first, even in challenging financial circumstances. As O'Neill showed at Alcoa – if you focus on safety, your organization will become habitually excellence, and financial performance will follow. Let's make the same happen in healthcare.

# ABOUT MARK GRABAN

*Mark Graban is a [consultant](#), [author](#), and [speaker](#) in the “lean healthcare” methodology. Mark is author of the Shingo Award-winning books [Lean Hospitals](#) and [Healthcare Kaizen](#). Learn more about Mark’s [on-site](#) and [public](#) workshops. He is also the Chief Improvement Officer for [KaiNexus](#).*



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By DeanAmado - May 22, 2013

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By Shere.GR - May 24, 2013

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