



KAIDEN HEALTHCARE MANAGEMENT, LLC

[Home](#) [About Us](#) [Our Services](#) [Our Team](#) [Tools & Methods](#) [Resources](#)

Lean Six Sigma in Health Care and Non-Profit Organizations

By Susan A. Kaiden, MBA, SSBB

Manufacturing and service industries have used Lean Management and Six Sigma methods for years to dramatically improve quality and reduce waste. In the past five years, these principles have been applied in health care and non-profit organizations with increasing success.

What is Six Sigma?

Six Sigma has been defined as a “process-focused strategy and methodology for business improvement. Six Sigma focuses on improving process performance to enhance customer satisfaction and bottom-line results¹.” When I speak to health care and non-profit organizations about Six Sigma, I often hear that the concern that it’s “flavor of the month” or that “it doesn’t apply to us, we don’t make cars”. Others can’t get excited about it because they’ve heard Six Sigma relies heavily on statistical methods.

Having studied Six Sigma in depth, I believe it has much to offer the Health Care and Non-Profit worlds. Six Sigma links quality with the bottom line. It provides valuable tools for improving work flow, focusing on customer needs and preventing errors and waste. In an era of shrinking budgets, increased competition and concerns about quality, we can use all the help we can get.

What is Lean Management?

Lean Management methods help organizations to reduce activities that don’t add value from the customer’s perspective. It is estimated that “work that adds no value in customers’ eyes typically comprises at least 50% of total cost” in service industries². Lean’s focus on increasing the speed of transactions and reducing wait times has tremendous potential for both health care and non-profit organizations. However, Lean doesn’t explicitly address quality which is why many organizations now blend Lean and Six Sigma techniques.

Is it Just a Fad?

Since the 1980’s, Six Sigma and Lean methods have contributed to the success of

- ◆ Our Approach
- ◆ Network Members
- ◆ Our Projects
- ◆ Contact Us

“The significant problems we have cannot be solved at the same level of thinking with which we created them.”

Albert Einstein

many large organizations such as GE, DuPont, Motorola, 3M and Honeywell. Many of the techniques have their roots in research stretching back to the 1920's. The principles have stood the test of time. Some shy away from learning more about Lean Six Sigma because they perceive it as an onerous task. If you haven't already, attend a workshop geared towards managers or read a book on the subject (see our reading list). You don't need to earn your 'Black Belt' (recognized level of Six Sigma knowledge) to get started applying these principles.

Is it different from TQM or CQI?

While some of the tools and concepts are the same, Lean and Six Sigma differ from TQM/CQI in several important ways: link to bottom line and strategic plan, breakthrough improvement, tighter time frames and formal support structure. Lean Six Sigma projects are explicitly linked to the bottom line and organizational strategic objectives. In most organizations, projects are expected to produce a minimum of \$175,000 to \$250,000 in benefits to the bottom line. Lean and Six Sigma both stress breakthrough improvement of 30-60% as opposed to the incremental improvements experienced with TQM. The time frames are also tighter, with most projects completed over 4-6 months. Six Sigma provides a robust improvement model with a strong framework for integrating and supporting the improvement process.

¹Snee, RD, and RW Hoerl. *Six Sigma Beyond the Factory Floor*. Upper Saddle River, NJ: Pearson Prentice Hall, 2005

²George, ML. *Lean Six Sigma for Service*. New York: McGraw-Hill, 2003.

Does It Apply to Us?

Lean Six Sigma methods have already been used by hospitals, schools and non-profits to make dramatic improvements. If you have a process, you can use these methods. However, some tools are more applicable in health and non-profit settings than others. Lean methods, such as mapping the value stream, can help you identify steps in the process that don't add value for the customer. This is often an eye-opener for health care and non-profit organizations. On the other hand, Design of Experiments, used extensively in manufacturing to test various solutions before rolling out changes, is more difficult to implement in health care.

How Should We Get Started?

Some organizations avoid using "Lean" or "Six Sigma" terminology and quietly incorporate the methods into existing improvement efforts. If your organization has a culture of continual improvement and a focus on the customer, this may be a natural next step. Starting with a focused area of your organization (such as the Radiology department) can be an effective first phase for implementation. In *Six Sigma Beyond the Factory Floor*, the authors identify three keys for successful Six Sigma implementation that apply across all settings:

- Committed and involved leadership
- Utilize top talent in the organization
- Develop supporting infrastructure

Every organization is unique, but including these three elements in your implementation plan will help to ensure long term success with Six Sigma in your organization. For more details about Lean Six Sigma and its implementation, we recommend the reading list below.

Suggested Reading

- Snee, RD, and RW Hoerl. *Six Sigma Beyond the Factory Floor*. Upper Saddle River, NJ: Pearson Prentice Hall, 2005.
- George, ML. *Lean Six Sigma for Service*. New York: McGraw-Hill, 2003.
- Brexler, J, Caldwell C, Gillem T. *Lean-Six Sigma for Healthcare: A Senior Leader Guide to Improving Cost and Throughput*. Milwaukee, WI: Quality Press, 2005.

For information or assistance with Lean Six Sigma in your organization, call us at 610-627-1124.