

Lee Health, Ft Myers, Florida

Lean Healthcare Transformation – Start to Finish Line

Lee Health got its start in 1916 when a group of community leaders, with \$300 and a pile of donated lumber, built the first hospital in Fort Myers, Florida. Today, Lee Health consists of four acute care hospitals and two specialty hospitals. The organization has 1,426 beds, and sees more than one million patient contacts each year, making it one of the largest public health systems in the nation. Lee Health is supported by more than 13,000 employees and 4,500 volunteers offering acute care, emergency care, rehabilitative and diagnostic services, health and wellness education, community outreach, and advocacy programs to residents across five counties.

Lean with Purpose

Lee Health reignited its lean healthcare transformation journey in 2013, when Roger Chen joined as vice president of Organization Transformation. Chen launched a new lean initiative with a firm purpose: Drive system standardizations to accelerate improvements and efficiencies across the organization. In other words, Chen and his team planned to use lean methods to identify and reduce waste across the Lee Health system without cutting jobs or pursuing top-down budget reductions.

“I was committed from day one to implement lean methods as a true management system,” said Chen. “Our goal was to reduce waste intelligently. We worked toward this end by identifying and implementing value-creating activities.”

But before he could start, the new Organization Transformation office had a few hurdles to overcome.

Lee Health had 10 years of transformation starts and stops under three different leaders. During this decade of attempts, a mindset opposed to change – especially change that involved lean principles – developed among the staff.

“People detested the thought of lean, so we had to win them back,” said Chen. “So with the leadership team on board, I recruited a new team – people who could coach and serve as change agents – not engineers who walked around telling others what was wrong. I created a team that could engage with people.”

Evan Lewis, a senior lean transformation specialist on Chen’s team, said it was important for his group to redefine the meaning of lean transformation at the organization. “To make significant change, employees had to commit to transforming both themselves and the organization,” he said. “Once we internalized this concept, we were better able to teach it.”

Chen also had to rebrand the lean organization. To do so, he introduced lean as a world-class management system for quality and productivity, and recruited, hired and developed people from within Lee Health to work on the team. These steps resulted in a lean program that went viral at the organization.

With a background in operations at General Electric and an understanding of the Toyota production system, Chen drew upon his expertise and the best tools from both management systems, and applied them at Lee Health. He established a framework using lean tools for process improvement as well as strategy deployment.

Chen based his initial lean blueprint on four principles:

- 1) Lean management is a process** used by the senior management team to deploy strategy. All senior managers underwent training to understand how to effectively determine strategy using lean principles.
- 2) Leaders must help communicate.** Chen engaged with the human resources team to cascade the new strategy to operational groups at every level of the organization. Managers engaged with front-line staff so ideas would flow from the bottom up as well as top down. Chen provided the needed tools and training to all managers at the organization. “Job instruction training and skills-based training for managers served as an important step in our success,” he said.
- 3) Use of report-outs to celebrate victories.** A monthly lean process improvement report out kept everyone in tune with progress as well as perceived problems. Teams working on value stream or rapid deployment changes witnessed improvements as they happened and celebrated these early wins. “This created social and cultural momentum in our organization,” said Chen. “A new level of passion to the work we do evolved – becoming, for the first time, the lifeblood of our improvement journey.”
- 4) Deploy a common framework.** These frameworks, implemented throughout each department, helped staff identify and solve problems. For example, using the lean problem solving method Plan, Do, Check, Act (PDCA), employees were able to more effectively identify, talk about, learn and share improvement principles.

“With these principles in place, we developed corporate critical mass,” says Chen. “Lean methods allowed us to create socio-cultural relationships – bonds now exist between our administrators, the nursing and medical staff, and ancillary staff that didn’t exist before.”

Key Learnings Along the Way (or Getting Others to Buy in to Lean)

Lee Health invested in lean healthcare transformation thinking and education by purchasing and inviting everyone on the leadership team to first read “Management on the Mend,” written by Dr. John Toussaint. This book explained the process and helped create a common understanding of lean principles with Lee Health’s leaders.

Chen offered the following tips to help organizations and their leaders on a lean transformation journey: Get the support of key leaders.

“Our initiative remains successful because of collaborative efforts from our finance, human resource, information technology, and lean office,” said Chen. “Our CFO leads monthly report outs and the finance department does rolling forecasts using lean principles. Having their support and involvement was key to our success.”

In addition, Lee Health’s chief human resource officer and HR staff served the Organization Transformation team as advocates. HR professionals helped create SMART goals tied to the organization’s lean strategy. In addition, they play an important role in bringing others along on the journey, training individuals about lean concepts.”

Chen also partnered with the organization’s IT leader to create a business intelligence (BI) function. “We made investments in BI software and evolved the skills of this team so we could put data and analytics to work for Lee Health,” he said. The BI function reports to Chen, but provides vital information that improves decision making among the organization’s leaders.

Lastly, in order to create a proper level of physician engagement, Chen involved a senior level physician who has the title of vice president of clinical transformation. “She became an extension of our team as a lean specialist who conveys these principles to her physician peers,” said Chen. “Now other doctors are starting to ask to learn about process improvement and change management.”

Getting Meaningful Results

As Lee Health traveled through its lean healthcare transformation, the organization began seeing many results – especially results that benefited Lee Health patients.

For example, the team created a new “Door-to-Needle” lean initiative to ensure

What Is Lean?

VP of Organization Transformation Roger Chen views his role as that of “coach” to the senior management team and as a leader who ensures collaboration efforts happen across the organization. Following a site visit to ThedaCare, a model lean healthcare delivery organization in Appleton, Wisconsin, Chen observed the following, which he shared with his leadership team:

“Lean is a quality and productivity phenomena; however, it must be developed by those who are native to the environment where it is to be applied.”

ischemic stroke patients who arrive at the hospital are treated with tPA medication as soon as possible. The benefits of tPA for patients with acute ischemic stroke are time-dependent, and guidelines recommend a door-to-needle time of 60 minutes or less. Lee Health set a goal to treat these patients within 20 minutes (an improvement of more than 50%) from the time of diagnosis. Decreasing the door-to-needle time allowed Lee Health to improve a patient safety measure and enhance patient quality of life.

“This was a system decision based on understanding the problem and identifying a solution,” said Lewis. “Lean thinking and principles helped to facilitate the process and problem solve. And a wide array of staff was involved in the decision making – from system level executives to nurses and lab technicians to frontline staff. It was a full circle process.”

What’s Next?

With four years of lean practice now complete, Chen and his team look to the horizon to determine what lean can do for Lee Health’s future.

According to Lewis, the organization is at an entirely different altitude than when it began its lean journey. “Teaching lean systems requires ideal behaviors that are principle based. There is a great deal of foundational understanding that leads up to this critical point.”

To maintain and further its progress, Chen and Lewis will work with physician leaders and leadership development on a healthcare leadership quality academy based on lean management principles. The academy will help further educate and train employees at every level so they continue to practice and keep lean principles at the forefront of all they do.

In addition, Chen said the team must examine how it collaborates and facilitates change as new quality and efficiency goals are created. What’s more, as healthcare regulations change, Lee Health will begin to redesign its care delivery methods – an effort that must be physician-led, with support from the Organization Transformation team.

“When we started four years ago, I provided a blueprint and worked with others in the organization to implement the plan,” said Chen. “Now it is time to create a new blueprint that shows how lean principles can be used to help us evolve to the next level. With lean, or without lean, change is going to happen. Does anyone in the organization not want to continuously improve and help people?”