ThedaCare's Culture of Continuous Daily Improvements

Candor and collaboration are two keys to creating and sustaining profound change.

Lea A.P. Tonkin and Michael Bremer

s your organizational culture an accelerator or a barrier to improvement? Have your associates and your extended network of stakeholders learned to nurture daily progress, or are you stuck in the "program of the month" mode? You're not alone in the struggle for lasting culture change. As in manufacturing, healthcare organizations are learning how to create and sustain a systems approach to continuous improvement (CI). They too are finding opportunities for improvements in everyday non-repetitive activities. Healthcare leaders have learned that CI requires a culture of shared understanding, awareness, and

accountability. And, just as in manufacturing, a true CI culture requires the following:

- Employees who are empowered to make needed changes on a timely basis
- Leadership that makes decisions based on facts
- More transparency about work process challenges
- Day-by-day improvements throughout the organization.

The Need for Candor

Cultural transformation does not come easy, despite everyone's best intentions. This challenge tries the commitment and resources in many organizations, from manufacturing to healthcare providers. "After several years of hard work at continuous improvement, we feel like we've just graduated from kindergarten," said Dean Gruner, MD, president and CEO of ThedaCare, Appleton, WI. The organization encompasses several hospitals in addition to clinics, laboratory, and other services in

In Brief

Profound cultural change does not come easy in healthcare, as in the manufacturing arena. This article focuses on ThedaCare, an Appleton, WI-based healthcare organization that continues to redesign patient care. This level of collaborative care evolves in continuous daily improvement activities on its lean journey.

northeast Wisconsin. For more than 15 years, ThedaCare associates have deepened their shared understanding about improvement concepts, a culture of change, and employee engagement. For more than five years, they have used lean to create a collaborative culture that builds leadership at all levels in the organization, and to increase their focus on customer satisfaction.

"The core of our cultural change is that we are creating an environment where people can be candid (with respect) about the need for change," Gruner said. "We have a lot of respect but not enough candor. People need to speak up, and feel that it is safe to be honest. Instead of being in the blame game and asking who screwed up, we need to ask what process failed and why." Employee engagement and a sense of making a difference each day motivate many staff members here. ThedaCare also has a gainsharing plan, helping to underscore the importance of teamwork and sharing information. Gruner concedes that not everyone buys into collaboration and shared accountability. What sells some clinical¹ personnel on CI is seeing the impact of patient-focused, evidence-based change.

Among process examples reported by improvement teams at a weekly report-out session attended by senior leadership:

- A triage nurse explained how one improvement team eliminated barriers between clinical and non-clinical staff to enable "warm transfers." This means that, thanks to newly-created standard work, a patient calling in will be directly connected with an appropriate staff member, cutting the time required to complete the transfer. Now the triage center has two incoming call cells for time-sensitive calls and a third cell for non-time-sensitive calls, walk-ins, forms processing, etc.
- ThedaCare imaging personnel struggled with limited capacity when not enough radiology technicians were available to meet demand. Patients were frequently rescheduled when a center "went dark." After mapping and defining their process, the radiology technicians split

- one process into two processes one for patients who are sick and the other for those who need diagnostics for long-term conditions. The change simplified scheduling, dramatically reducing the need for rescheduling and overtime.
- A project team completed several rapid experiments to streamline its process in ThedaCare's simulation radiation oncology area, creating a load-leveling system that reduces variation in simulation scheduling, improves the quality of results, and boosts the number of patients who can come in for an evaluation and simulation on the same day. The team is working on added improvements such as data sharing, using 6S, value stream mapping, and other tools.

Continuous Daily Improvements Make the Difference

Nowadays improvement activities or RIEs (rapid improvement events) are underway throughout ThedaCare, and there's widespread thirst for even more evidence-based change, according to John Poole, senior vice president for the ThedaCare Improvement System.

It wasn't always this way. "For several years, we were harvesting the low-hanging fruit, doing kaizen events and RIEs that took obvious waste out of value streams," said Poole. "It felt gut-wrenching at the time, but in hindsight, it was the easy 20 percent of needed change. We hadn't yet created a culture of continuous daily improvements. We didn't have good development plans for those who would manage and supervise in the new environment, and we didn't know what the new environment would look like. We had the mechanics down but we did not have a sustainable, reliable system. Now the whole human side of lean is unfolding before us."

He's talking about the dynamics of people learning how to make collaborative, incremental improvements part of everyday work life throughout ThedaCare. "We created a CI cycle by those performing and supervising the work. We learned to devel-



Figure 1. A Rapid Improvement Event to create a better approach to "rounding," the process during which each specialist checks on the patient each day, resulted in a completely new collaborative approach. Now the hospitalist, registered nurse, and pharmacist visit the patient bedside at the same time. Before each specialist visited the patient separately and alone, creating multiple handoffs and opportunities for delaying care.

op standard processes using value stream mapping and other tools, to work to standard, and then to improve the standard. It is what we call the ThedaCare Improvement System, or continuous daily improvement," Poole said. "It is the hard work in the lean world: culture change, day by day."

While patients and other "customers" experience this transformation as more timely and effective care, ThedaCare staff tracks its improvement progress to visually manage the never-ending changes. Charts posted in a central "opportunity tracking center" for each process center (such as medical or surgical) track the progress of current improvement projects (eliminating errors in lab work, balancing clinic capacity and demand, etc.) as well as metrics for safety, quality, people development, delivery (on time and accessible — available for work), cost, and productivity. Project status

and results information is also available on an intranet system.

Staff (process owners) is trained to look (using the basics of lean) for themes or patterns and any process abnormalities over time, and to develop hypotheses and countermeasures to improve performance, then to quickly take needed remedial action. "What's exciting is that we have successful pockets of model cells and improvement projects. We invite improvement teams to share their results in our weekly report-outs, creating more enthusiasm for change," Poole said. "Using the basics of lean, they can take action to quickly remedy problems."

Among many opportunities for bringing cultural change to a higher level: creating a more effective human development value stream. Although hands-on learning is effective in sharpening improvement

skills, Poole sees the need to develop a systems approach for managing the quality of recruiting, training, and developing people from the CEO level to all other levels. "This will bring us to a less directed, more organic improvement culture," he said.

Senior management already "goes to the gemba" every Thursday, taking this "go and see" opportunity to freshen their knowledge of improvement activities in the works. They've learned to use the Socratic method of encouraging information-sharing and gathering evidence about challenges and problem solving, rather than jumping in with solutions. The promise of involvement in meaningful change and a no-layoffs policy demonstrate the culture and encourage employee retention. "We don't guarantee that people's work will not change, however," Poole said. Some changes would be welcome in most any organization. Focusing on the lean tools — process mapping, affinity diagrams, Pareto charts, etc. shines the improvement spotlight on everyday activities. "For example, we stepped back and recognized that non-value-added (NVA) time was spent on many e-mails," Poole said. Now some staff members have reduced the number of e-mails they create and limit them to ten lines or less.

Team-Based Problem-Solving

Patients may not see laboratory staff at work, but they benefit from timely, accurate work by ThedaCare lab employees. High-performance manufacturing organizations similarly rely on effective administrative and support activities to help create topnotch customer service. Daily teambased improvement activities help laboratory staff eliminate errors and wait times, and other NVA problems, said Bill Boyd, who manages two full-service laboratories running 24/7 supporting large medical facilities and an active outreach program. "We've always worked on improvement activities, and used mapping and other basic tools to decrease defects," he said. "But where we're at now is daily continuous improvement. Supervisors and teams review key metrics using standardized



Figure 2. Dr. Carrie Blanc, family physician, ThedaCare Physicians Kimberly, recording the patient visit end time for the total cycle time of her patient's office visit on the exam room door. This is routine tracking at ThedaCare Physicians Kimberly.

tracking, then use lean tools every day to learn how to make needed process changes. The biggest impact is engagement of our teams; the 'stick rate' of changes is improving as teams look daily at quality, safety, cost, and productivity, for example. It's inspiring to watch the teams at work."

Boyd recalled that when lean tools were first introduced in the labs, some team members looked at the new approach as a temporary add-on to their workload. "Now many of our staff embrace the changes and look forward to engagement into the improvement work," he said. "Everyone on the teams has a part in improvement work, so they own the improvements in quality and other areas." Order entry accuracy, specimen processing cycle time, specimen testing cycle time, and improved quality of specimens received (which requires working with other departments) are among areas receiving teambased problem-solving attention. Now the lab is working to improve supervisor and team leads' effectiveness using A4 problem solving. The A4 is a single sheet of paper — 8.5 x 11 inches — modeled after an A3 and guides front line staff in problem solving. The concept is to use the "least waste way" and the simplest tool in problem solving. "We are finding that for simple problems,

A4 works, and for more complex issues, we need A3 thinking," said Dean Gruner.

"We are also resetting team leads, modeled after the Toyota Production System (TPS)," said Boyd. "We've pulled ideas and information from others about what is the right structure of our labs and how to cover work. Cell-level performance tracking is being implemented and is being rolled into one central performance tracking per site; team leads are partners with supervisors. It's nice to give data to our people on how we're doing compared to the past, in turnaround times and other metrics. We're also continuing to work with physicians and others on lean improvements and letting them know how it benefits them."

Boyd's biggest challenge is continuing to develop lab teams and communicating effectively with 180-185 staff on a daily basis. "An ideal supervisor needs to listen to their team and be open to ambiguity," he said. "You've got to take concepts and tools in the real world and make a connection, teaching to help others work differently and supporting them in what they are doing.

"I'm really proud of where the team is at in understanding the need for change and in making progress," Boyd said. "Lab error rates have decreased from 2800 defects per million to 660 defects per million. The turnaround time for a basic metabolic panel test, for example, was an average 27 minutes; now it averages 18-19 minutes." The team also averaged between 8.5 and ten percent productivity gains a year for the past three years.

Profound Cultural Change

"If you really get what the ThedaCare Improvement System is about, it transcends everything you do," said Roger Gerard, chief learning officer. "It is a humbling journey (our version of TPS), as teams of people come together to get things done and to take waste out of the processes. We are brought to our knees every day about what we're learning. For example, we are learning that the kinds of processes we invented over past years cause nurses to be some-

where other at the patient's side. Some of our recent changes should have been common sense years ago.

"In our profound cultural change, we are organizing ourselves around new ways of doing things and the new way we see ourselves," Gerard continued. "It is not an easy transformation. We are designing what we call the perfect patient experience. In the doctor's office, that may mean getting in to see the doctor today and not waiting on the phone to get scheduled. The majority of our staff is highly-trained professionals — doctors wanting to practice medicine, medical technologists wanting to run lab tests, nurses who want to practice nursing, and others. Working together in a team in the best interest of the patient is foreign, however. Getting people to line up their bows and arrows in the same direction with standard procedures and shared, predictable expectations is not easy with so many professionals who have had years of training in specialized areas."

Selling the need for change is viewed with suspicion by some staff members. But when nurses, technicians, and others begin to create changes that take the waste out of their own processes, they start to see bottlenecks and workarounds that clog their workday and learn how to make needed changes. Gerard noted that nurses in one unit had eliminated a nursing station. All of the nurses in the unit can now be reached by phone, and nurses are typically within six steps of every patient room. They also devised a system for replenishing linens and other supplies from outside each patient room, so that nurses no longer spend time searching for necessary items. "Spaghetti diagrams are telling," Gerard said. "Our collaborative care model is fascinating, brings good results for the patients, and results in better customer feedback; we are planning to bring it to two more units in the next year."

"Learning to see" training (a one-day program) initially paved the way for people's expectations about improvement. "We realized that we needed more understanding of practical application for lean concepts," Gerard said. "We began seeing more

change with the RIEs. Although some people thought we were throwing the organization into chaos, and we saw significant ratings decreases in our employee opinion surveys, our investment in training and participation in highly-interactive improvement events have created a common language for many associates. We haven't hit critical mass yet. It takes participation in three or four RIEs before a significant shift in understanding and satisfaction."

Progress in safety performance, reduced wait times, and other areas continues. "Within our safety arena, some sentinel events happened in the surgical area. A containment process — changing the way these teams work and putting a monitor in the room — was not received well by some surgeons, but it moves cultural change faster than anything else," said Gerard. "The surgeons are scientists, and they got it. Plan/Do/Check/Act (PDCA) is foundational."

Gaining buy-in traction is critical. "We made a mistake early in our improvement journey," Gerard said. "We didn't go into clinical; we went into front office first. In our zeal, we said, 'Let's kick the tires on this so we don't waste the time of the doctors.' We would have been better served to include them at the beginning. Many improvements in healthcare are built around new tools and pharmacological breakthroughs. But the need for change is mind-boggling, and the real breakthroughs are in how we treat patients, and if we treat them with efficacy and respect. As we have learned more about the value of encouraging change through training and doing, we have simultaneously learned more about the need to improve our human development value stream."

The challenge of attracting, developing, and retaining effective lean leaders is a familiar one for manufacturing's senior leadership. This need is shared by leadership in other fields as well. As ThedaCare unrolls its leader standard work, for example, they will take about 150 managers and retrain them in new ways. "We've planted the lean seeds, and now we are learning how to grow future lean leaders," Gerard said.



Figure 3. A physician doing time observation of a triage nurse taking calls from patients who want more information about their symptoms or are wondering if they should come in and be seen by a provider the same day because of their symptoms. Participation of the physician in the data collection is a significant contribution to improvement activities, reflecting a strong commitment. Dr. Kelli Heindel and triage nurse Kris Klinzing are pictured.

Learning How to Connect the Dots

"This level of collaborative care is revolutionary. We've built this culture using what we've learned in our lean journey," said John Toussaint, MD, former president and CEO of ThedaCare and now chairman of the ThedaCare Center for Healthcare Value, Appleton, WI. He currently focuses on developing more effective models for purchasing and delivering healthcare in America.

"We've been working on a complete redesign of patient care — the perfect patient experience, with 100 percent reliability. Getting all of the professionals to come together on these changes is complicated, and can still be a struggle. Usually someone wants to be in control. When you think of medicine as a team sport and that we're all going to be in it together, you are changing from a traditional hierarchical structure to a new environment where the RN or another staff member becomes the

new process owner. It requires a huge effort on the part of leaders and trainers to change the culture," Toussiant said. "There is so much skepticism and pushback every day that you need leadership focus on change and improvement every minute."

All of ThedaCare's 5500 employees in 45 locations have been trained how to recognize the need for improvement and do something about it, thanks to internal and external training resources. Yet Toussaint is impatient for more progress and buy-in. "There is a map for transformation," he said. "We have had breakthrough improvements, but we are just starting to learn how to connect the dots — to understand how leadership, training, daily problem-solving, gemba walks, report-outs, etc. relate to each other. Our biggest mistake was not enough training on day-to-day changes and change processes. We still need more physician buy-in, although we have had remarkable results with some physician champions."

Despite performance gains, metrics posted on publicly-accessible websites see the website, Wisconsin Collaborative for Healthcare Quality at www.wchq.org, and some decline in the total cost of care, Toussaint commented, "We have an incredibly dysfunctional healthcare environment — a broken system in which many people receive poor care with higher cost. There should be rewards for delivering the best value to the customer. Right now there is no differentiation for the better performers. We also need to continue improving our competitiveness. Anyone who thinks otherwise has their head in the sand." This perspective can be compared to manufacturing's struggle for high performance in an uneven playing field. The quest for continuous, organization-wide cultural change and improvement has never been more critical.

Editor's Note: The assistance of Barbara Coniff in gathering photos for this article is appreciated.

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Footnote

 "Clinical" is any process involving delivery of direct patient care, such as hospital stays, outpatient procedures, home care visits, physical therapy, skilled nursing care, etc. "Non-clinical" examples include accounts receivable, health plan contracting, supply chain, and other activities.

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