

Using kaizen toward a culture of continuous improvement humanizes the healthcare workforce for better outcomes

BY MARK GRABAN

"I FEEL LIKE A ROBOT."

It was sad to hear that lament from autoworkers when I started my career in the mid-1990s. The company had not yet embraced the lean management principles of Toyota, so workers rightfully complained, "We were hired for our backs and our arms, not our brains." I came to believe that the biggest cause of our performance gaps, in both quality and productivity, came from management not respecting workers and not trying to engage them in any sort of improvement efforts.

After transitioning to healthcare in 2005, it was even more discouraging to hear similar comments from highly educated professionals. Medical technologists in hospital laboratories said they "felt like robots" because their equipment was so automated that they no longer felt like scientists. And their leaders weren't engaging them in any process improvement work that might be creative and experimental. One nurse was frustrated at being called a "troublemaker" in her annual review because she tried to point out problems that slowed the flow of patients through her department. She was actively discouraged from working on any improvement efforts because "that wasn't her job."

Just as in the auto industry, one of the biggest problems holding back healthcare systems is a lack of respect for workers, evidenced in part by the lack of staff engagement and continuous improvement in the U.S. and similar countries.

Walking the walk?

Many healthcare organizations talk about the importance of a culture of continuous improvement. But is this culture an aspirational goal or a reality? Your local hospital's website might include flowery statements about how it strives for excellence, encourages input from all stakeholders and continually improves in everything it does.

But do hospitals actually listen to their employees' and physicians' ideas, engaging everybody to make improvement happen? Perhaps you can test this by visiting your local hospital and asking staff members in the cafeteria or coffee shop if they work in a culture of continuous improvement. You might get a shrug or a cynical eye roll as a response.

My experience, in visiting and working with dozens of hospitals across North America and a few countries in Europe, leads me to conclude that most healthcare organizations do not have this culture in place, and many aren't working at it. The claims of continuous improvement often aren't being backed up with meaningful action from leaders. This means healthcare professionals are frustrated, and the bottom line of the organization suffers. Patients are dissatisfied (or even worse, physically harmed) as the result of bad processes and broken systems that fester over time.

The good news is that some healthcare organizations are work-

ing hard to create a culture of continuous improvement. It is possible in healthcare. You don't change an organization's culture by printing some posters, updating the website and wishing it so. Creating a culture of continuous improvement is hard work that requires sustained, consistent effort. But it's certainly worth doing.

Kaizen in healthcare – a 20-year story

In 2012, the highly respected Institute of Medicine wrote a major report about the unnecessarily high cost of U.S. healthcare. The institute documented how 30 percent of spending is waste, waste that includes inefficiently delivered care and unnecessary treatment. The report's recommendations for solving this quality and cost crisis included having "leadership committed to a culture of teamwork, collaboration and adaptability in support of continuous learning as a core aim." In addition, according to the report's authors, "In a learning healthcare system, complex care operations and processes are constantly refined through ongoing team training and skill building, systems analysis and information development, and creation of feedback loops for continuous learning and system improvement."

The institute recommended lean as one of the key methods that healthcare organizations use to make those goals a reality. A major core of the lean approach is kaizen, a Japanese word that means "good change," usually used in the context of ongoing, incremental continuous improvement. The word kaizen and its principles were introduced to the Western world by Masaaki Imai in his seminal book *Kaizen*, published in 1986.

Prominent healthcare quality leaders quickly discovered that kaizen was not just a methodology for factories. In 1989, Dr. Donald M. Berwick, the founder of the Institute for Healthcare Improvement, published an article in the *New England Journal of Medicine* titled "Continuous Improvement as an Ideal in Health Care." Berwick wrote that continuous improvement "holds some badly needed answers for American healthcare." Berwick defined kaizen as "the continuous search for opportunities for all processes to get better" and emphasized that kaizen principles, as a scientific approach to problem-solving, are actually "familiar themes in medical instruction and history."

Today, there are some great examples of healthcare organizations that have embraced kaizen as part of their culture. ThedaCare, a health system in Wisconsin that is renowned for its 10 years of lean improvement efforts, has incorporated what it calls "continuous daily improvement" (CDI) on top of its weeklong "rapid improvement event" (RIE) projects. ThedaCare officials say they have implemented more than 10,000 CDI-style improvements in 2011 and more than 20,000 in 2012. This is part of their daily lean management system practices, solving many more problems than could be addressed in the handful of RIEs they conduct each week.

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Franciscan St. Francis Health System, a three-hospital system in Indianapolis, has implemented approximately 4,000 "quick and easy kaizen" improvements in each of the last three years and about 20,000 in the first seven years of the system's lean Six Sigma projects and formal kaizen events.

Additionally, high-profile organizations like Virginia Mason Medical Center and the University of Michigan Health System have incorporated an "everyday lean ideas" program into their broader lean programs and management systems.

What is kaizen?

Kaizen can be defined as a set of principles and specific practices for continuous improvement. At a high level, kaizen is a process that, ideally, engages everybody in identifying problems or opportunities for improvement and then involves them in identifying, testing and evaluating improvements in a scientific and iterative way. Kaizen is rigorous without being bureaucratic. At Franciscan, officials use the term "kaizeneer" as a fun label for anybody who is participating in the kaizen process. As Imai says, "Kaizen is for everyone."

Kaizen is built upon improvement guru W. Edwards Deming's cycle of PDSA or plan, do, study and adjust (sometimes called PDCA or plan, do, check, act). In a kaizen PDSA cycle, employees, co-workers and managers:

- Plan: Identify a problem or opportunity, understand the current situation and causes of the problem and brainstorm various actions that can be taken.
- Do: Perform a small test of change aimed at making a quantitative or qualitative improvement in a system.
- Study: Honestly evaluate the effectiveness of the action and see if it created any unanticipated results or any side effects.
- Adjust: Based on the evaluation, one can choose to adopt the change or adjust it in some way. Or the change might be abandoned altogether, with kaizen participants going back to the plan stage to try again without shame.

Dr. Gregory Jacobson, an emergency medicine physician, initiated a formal kaizen program at Vanderbilt University Medical Center in 2005 after reading Imai's book. After the hospital's success in engaging residents and physicians in kaizen, he published "Kaizen: A Method of Process Improvement in the Emergency Department" in the journal *Academic Emergency Medicine*. Jacobson and his co-authors summarized the following key kaizen principles:

- Continually improve.
- No idea is too small.

BETTER THAN BOXES

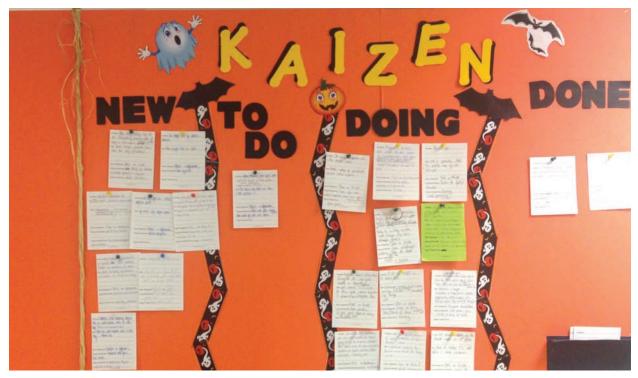
Figure 1. Kaizen systems are much better than suggestion boxes at driving true improvements.

Suggestion have system	Vaizan austam
Suggestion box system	Kaizen system
Closed, locked, opaque	A bulletin board or website that's visible, transparent, open to all
Batch process with monthly or quarterly review, long delay before ideas are even discussed	Daily or weekly discussion of ideas, often implementation within a day or two
Suggestion box slips focus only on the idea	Kaizen card starts with a problem statement and an idea
Often anonymous, prevents follow-up	Names are encouraged so leaders and team members can collaborate
Managers judge ideas, accepting or rejecting them as written	Leaders collaborate and work toward finding something that solves the problem
2 percent of suggestions get implemented	90 percent of ideas get implemented
Burden of implementation falls on the manager	Implementation workload is spread and shared within the team
Workers are promised a percentage of cost savings, which leads to people only focusing on cost and fighting over the size or ownership of the bonus	Employees are encouraged to improve safety, quality, patient experience or reduce staff frustration, which are not always easy to put into financial terms; rewards are small and focus on recognition

- Identify, report and solve individual problems.
- Focus change on common sense, low-cost and low-risk improvements, not major innovations.
- Collect, verify and analyze data to enact change.
- Problems in the process are a major source of quality defects.
- Decreasing variability in the process is vital to improving quality.
- Identify and decrease non-value-added steps.
- Every interaction is between a customer and a supplier.
- Empower the worker to enact change.
- All ideas are addressed and responded to in some way.
- Decrease waste.
- Address the workplace with good housekeeping discipline.

One other key point about kaizen is that leaders can't just ask employees to look for cost savings. Experience has shown that healthcare professionals don't get very excited about saving money as a primary goal. They do, however, get very excited about reducing the risk of harm to patients, improving the patient and family experience, and reducing frustrations and irritations that continually appear in their workdays.

The good news is using kaizen to focus on the types of improvements that engage people will yield cost savings (and sometimes increased revenue) as an end result.



A visible kaizen board lets everybody in the organization know about identified problems and resulting solutions, encouraging staff members to add comments and participate.

Many kaizen ideas naturally bubble up based on the problems front-line staff members see on a daily basis. But leaders also can ask employees for ideas that tie to a hospital's balanced scorecard or "true north" goals and objectives.

Better than a suggestion box

Suggestion boxes have been around for more than a hundred years, but kaizen is a very different process. Hospital employees often describe the boxes as "the place we put our gum wrappers" or "the place where good ideas go to die." Suggestion boxes are opened by managers rarely or infrequently, and one hospital actually lost the key to its box.

Think about how demoralizing it would be to have your leaders ask for your ideas and squander most of them by not taking action and not allowing you to implement them. In a kaizen process, ownership of ideas is kept at a local level as much as possible, in the hands of the people who understand the problem and are most motivated to fix it. In kaizen systems, at Toyota and at Franciscan, nearly 90 percent of ideas get implemented, even if it wasn't the original idea submitted. In a kaizen process, leaders can't just reject ideas. They have an obligation to collaborate and work together with their employees to solve problems.

Taking down the suggestion can be an important first step in a kaizen approach, with leaders being open, honest and humble about what didn't work in the past. Figure 1 is a list of comparisons between suggestion boxes and kaizen methods.

In a kaizen process, using either a bulletin board, as shown in the photograph above, or a Web-based software platform makes the identified problems and resulting ideas transparent to everybody in the organization. A highly visible kaizen board results in staff and physicians stopping to read what's on the board, leading them to write comments on the cards or volunteer to participate in evaluating the kaizen ideas. In Web-based kaizen systems, staff members get timely email notifications of both new ideas and those that have been implemented. This allows people to post electronic comments that are visible to all.

Some organizations have, unfortunately, tried to digitize the suggestion box process, creating an internal website that mimics a physical box in every way. At one academic medical center, every employee suggestion that was entered into a website was immediately routed to the CEO and the executive committee. A process like this is doomed to fail for many reasons, just like the federal government's recent electronic suggestion box system, where all ideas flowed to the highest levels of the executive branch. Only 67 out of 86,000 employee ideas were implemented in the federal system, discouraging many people who thought their valid ideas were not selected.

Coaching leaders is necessary

Kaizen might seem simple in theory, but leaders often have a lot of questions and require a bit of coaching to get started most effectively. One can read books about lean and kaizen, but the real

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learning comes from getting involved and taking action. Many managers are overly cautious about not wanting to start a kaizen process because it's unfamiliar and uncomfortable. But the only way to get better at kaizen is to get started.

Employees generally appreciate the well-intended early efforts of their leaders, even if there are stumbles and mistakes made along the way. Effective leaders own up to those mistakes, get better, move forward and share their lessons learned with employees and other leaders.

For example, one emergency department director spent almost an entire day rounding on his unit — clearing his schedule of meetings so he could be in the gemba (a Japanese term meaning the actual workplace) to explain kaizen, to solicit ideas and to collaborate with the people who worked there. In his enthusiasm to talk with people, he approached nurses and asked, with a smile, "Are you busy?" Nurses and other staff quickly answered yes and kept walking.

After seeing this a few times, I asked the director why he thought staff responded this way. After all, we knew that people wanted to participate in improving patient care and their workplace.

He thought for a minute and then grinned, saying, "Ah, the hospital has created a culture where people are afraid to admit they aren't busy because they might get sent home early. We need to change that." He had identified a kaizen opportunity that only he and other leaders could work on over time.

The director started taking a revised course of action, asking "Hi, can you take a few minutes to talk?" Some staff members said they couldn't because they were too busy, but most employees responded better to the less threatening question.

Given that opportunity to talk, the director was able to explain the new kaizen process, asking employees if they had come across any barriers or interruptions to their work and if that sparked any ideas for improvement. The director made a point to follow up with the other staff members when they weren't in the middle of something, as he wanted to reinforce the expectation that kaizen is not just something for a few specialists to work on; it is a process for everybody.

Making time

The bottleneck in a kaizen process is rarely a lack of ideas from staff. The biggest challenges involve time — freeing time for managers, staff and physicians to identify and implement improvement ideas. Note that this is a problem to be addressed, and you should take action instead of letting a lack of time become an excuse.

While kaizen should be an ongoing process that is incorporated into daily and weekly routines in a department, it can be quite helpful to schedule a focused "kaizen kickoff" period. In this one- to three-day period, leaders, like the emergency depart-

ment director mentioned earlier, clear out their schedules so they can be visible and interact a lot with their employees. Sometimes, the time of one to three key staff members gets scheduled specifically for the purpose of generating ideas and soliciting them from colleagues, while starting the good habit of implementing small improvements very quickly.

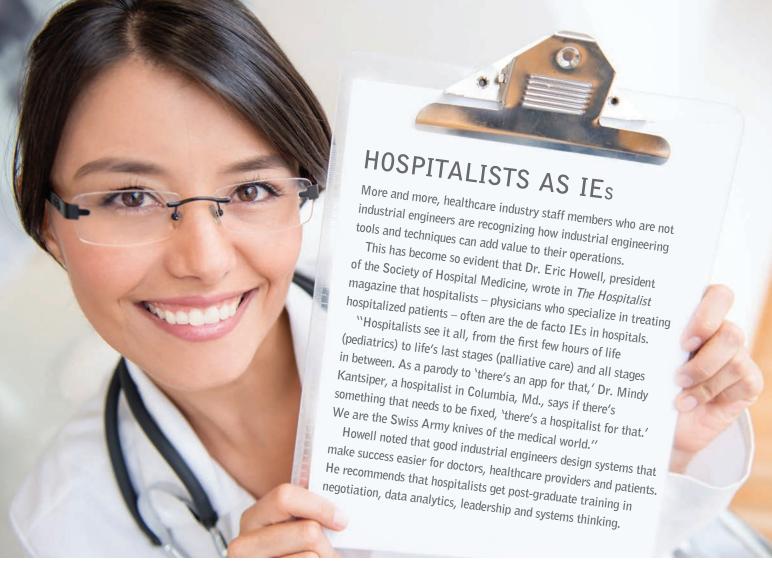
In the first day or two of kaizen, a department usually generates between 12 and 25 things to improve, both large and small. Leaders start developing the new habit of acknowledging each new idea within a day or two, talking with the person who identified the problem or idea in a collaborative way. Small ideas, such as changing the wording on a sign that always confuses patients or removing unneeded supplies from an IV start tray, should be implemented as quickly as possible. When staff see that it's OK to point out problems and that their ideas turn into meaningful improvements, they get positive reinforcement that encourages additional kaizen participation.

Staff members can implement many kaizens as time becomes available in a shift. Larger kaizens might require leaders to schedule staff time, even if it's a few hours on a day when people normally might not be working. Some managers, like at Toyota, will approve overtime for staff to work on improvements that will result in productivity improvements on an ongoing basis.

As the kaizen culture starts to take off, managers must dedicate a small amount of time, approximately 30 minutes, each day on activities such as:

- Reviewing new ideas on the kaizen board or in the electronic system
- Discussing problems and possible improvements with staff members
- Prioritizing kaizens based on patient, staff and organizational needs
- Helping staff members, as necessary, by doing things they cannot do, such as contacting materials management or escalating certain kaizens to senior leadership
- Helping staff evaluate kaizens and determine their impact
- Recognizing staff members for kaizens that have been implemented
- Helping document and share kaizen improvements

In a successful kaizen process, managers and employees work together to make improvement happen. Employees don't just dump their ideas upward to managers; staff members are expected to participate in the actual implementation and evaluation. Likewise, managers don't just delegate improvement work to their staff; they must participate and be involved as coaches, facilitators and servant leaders.



Never stop improving

It might seem obvious, but continuous improvement needs to be continuous, an ongoing effort that becomes part of the daily culture. Leaders at all levels must ask employees and other leaders for kaizen improvements each day. Leaders need to encourage employees to speak up about problems instead of feeling pressured into covering them up. Asking employees for improvements should be part of daily conversations in the workplace, meetings and team huddles.

In my experience, hospital employees sometimes are understandably cynical about past improvement programs, including suggestion boxes. When introduced to the kaizen process, staff members frequently ask questions like, "How do we know our managers won't get bored with this after a few months?" Unfortunately, some leaders do get bored with kaizen after a few months, either because their attention has moved to another new initiative or because they have declared victory too early on the culture change front.

Creating a culture of continuous improvement is not done with the snap of one's fingers, nor is it a simple two-day or two-month program. Franciscan St. Francis Health System has sustained its kaizen approach with seven years of leadership from the CEO on down. They have implemented more than 20,000 kaizens, yet there's no end in sight to the number of improvements that can be made to benefit patients and families, staff and physicians, and the health system itself in meaningful and measurable ways. Every organization, including yours, has to start somewhere – and there's no better day than today to get started. \sim

Mark Graban is an independent healthcare consultant and speaker for Constancy Inc. as well as chief improvement officer for the software company KaiNexus. He previously worked for ValuMetric Services, was a senior fellow with the Lean Enterprise Institute and was director of communication and technology for the Healthcare Value Network. The lean black belt also has worked in the automotive (General Motors), PC (Dell) and industrial products (Honeywell) industries. He wrote Lean Hospitals: Improving Quality, Patient Safety and Employee Engagement and co-authored Healthcare Kaizen: Engaging Front-Line Staff in Sustainable Continuous Improvements. Both have won Shingo Research Awards. Graban has a B.S. in industrial engineering from Northwestern University, an M.S. in mechanical engineering, and an MBA from the MIT Sloan Leaders for Global Operations Program.