

Death by Kaizen Event

We always hope for the easy fix: the one simple change that will erase a problem in a stroke. But few things in life work this way.

—Atul Gawande

REAL HEALTHCARE REFORM cannot be legislated. Legislation will not guarantee high-quality care, will not prevent medical errors, and will not promote a more efficient and effective care delivery system. Chronic problems in the healthcare system are plaguing US hospitals, and the finger of blame is pointing in every direction. Hospital administrators, government officials, insurance providers, pharmaceutical companies, and even doctors and nurses have been blamed for the problems associated with healthcare. The blame does not lie with an organization or an individual, however, but with the complex and outdated care delivery system that has been allowed to persist. Every day in every hospital, this system becomes even more complex and more outdated. Therefore, real healthcare reform can come only from within each individual hospital.

There are no silver bullets for chronic problems. It is our nature to want to believe that they exist, but they do not. Still, the peddling of panaceas for almost any problem imaginable has become a lucrative business. We are bombarded every day by television commercials, print advertisements, and billboards

soliciting sales of quick fixes for almost all of life's problems. Diet plans promise that you will shed pounds while continuing to eat whatever you desire. Exercise equipment manufacturers promise six-pack abs and hard bodies with minimum effort. Advertisers sell videos promising to have you playing the guitar or speaking a foreign language in just two weeks. Some financial coaches promise to make you wealthy almost overnight. We know that these claims are marketing tactics, yet we allow ourselves to be convinced again and again that the next new product will be different and will deliver the promised results. Almost every home in America has exercise equipment, how-to videos, or self-help books sitting around collecting dust.

All these advertised solutions are designed to solve difficult problems, but they are not quick fixes; they are presented in a way that makes you think that they are. Many of these marketing claims are true, but only if the plan or product is applied correctly and given sufficient time to produce the desired results. You will lose weight while eating what you want if you eat smaller portions and do not snack between meals. Exercise equipment will tone your body, but only if you do the exercises correctly and consistently and eat a proper diet. You might even become a millionaire overnight if the conditions are just right and you follow the prescribed steps meticulously. The resolution of chronic problems requires discipline, tenacity, precise execution, and hard work.

Healthcare is experiencing difficult times as a result of chronic problems. Reimbursements are declining, the costs of supplies and pharmaceuticals are rising, inpatient facilities are losing revenue to outpatient centers, healthcare workers are commanding high salaries as a result of the healthcare labor shortage, and the cost of malpractice insurance is steep. In addition, there are quality issues resulting from adverse medical events, inefficiencies, system breakdowns, medication errors, and ineffective standards. Hospital leaders are overwhelmed, staff are overworked, and doctors

are overburdened; they all want and need relief, and they want it quickly.

Lean can provide this relief, but contrary to what many organizational leaders have been led to believe, Lean is not a quick fix, is not easy, cannot be delegated, cannot be purchased, cannot be done piecemeal, and cannot be consultant driven. To generate the desired outcome, Lean must be implemented correctly and consistently and be given sufficient time. Everyone in the organization must commit to becoming Lean. It requires strategically directed action, creation of a Lean organizational culture, and redesign of the organization's care delivery system. In short, Lean is serious business.

The obvious question at this juncture is: Why would an overwhelmed, overworked, and overburdened hospital want to engage a methodology that requires even more from them? The answer is simple: There are no quick fixes for the problems hospitals face, and purposeful effort is the only way to make things better. If hospitals do not take the action necessary to improve healthcare, it will most assuredly get worse, and hospital leadership cannot afford to let that happen.

We are a results-driven society. We want results, and we want them now. Quick results are the pervasive goal in our multitasking, hyperactive existence. Computers deliver information in nanoseconds, we eat fast food, and we take fast-acting pain relievers. Our careers are on the fast track, we drive fast cars in the fast lane, and we make split-second decisions. We look for shortcuts and tend to skip vital steps in an effort to experience benefits sooner.

This inherent desire for quick results drives organizational leaders to attempt to "purchase" Lean and forgo the critical steps necessary for successful Lean implementation. Leaders dive in headfirst and immediately experience the benefits associated with Lean by conducting as many *kaizen* events (i.e., kaizen blitz or rapid improvement events) as they can in the shortest time frame, with little regard for the prerequisites. These expensive campaigns of kaizen events inevitably culminate by imposing changes on

staff members. The improvements prompted by each event are impressive, but they are often short lived. Many Lean concepts are counterintuitive, and unless staff understand and internalize Lean principles, they will abandon these imposed improvements and revert to their old work habits. Consequently, performance returns to its previous level. If Lean could be purchased and quickly and easily achieved, every organization would be Lean, just as we would all be wealthy, talented people with rock-hard bodies. Lean is not a silver bullet, an easy fix, or a magic potion. Creating a Lean organization entails hard work, but if Lean is implemented correctly, the return on investment will exceed leaders' expectations.

By skipping the critical steps necessary for success, organizations fail to lay a solid foundation on which to build a Lean enterprise. Instead, they create an illusion of success. Consider the classic Lean implementation practice of conducting a series of kaizen events. First, the senior administrators select the events. The following categories are the most common selection criteria:

- The greatest problem area
- Low-hanging fruit (problems that can be solved with minimum effort)
- Areas in which the staff would be most open to change
- The area that will yield the most return on investment

Unknowingly, the organization is already off to a poor start. Such initiatives have no strategic basis, nor do they build on previous successes. Instead, they target superficial issues that are the symptoms of a much bigger problem. In medicine, addressing symptoms and ignoring the cause of those symptoms will result in irreparable damage and/or death. Likewise, with Lean, addressing symptoms rather than causes will result in irreparable damage to the organization and/or death of the Lean initiative.

When manufacturing companies began implementing Lean, the accepted method was to conduct a series of kaizen events to address problem areas. Pre-event training typically comprised a

one- to two-hour session in which participants built airplanes out of Lego blocks and spent the majority of the remaining time learning to use Lean worksheets. This training provided only a rudimentary introduction to Lean and did little to advance participants' understanding of Lean principles. Next the organization would engage a consultant or in-house facilitator to facilitate the kaizen events. Upon completion of the event, managers, supervisors, and workers were left to sustain the improvements and close out any open items on their own. Without the facilitator's guidance and lacking an in-depth understanding of Lean principles, these individuals struggled to maintain the proposed improvements and in many cases resisted the changes. They became bogged down in their attempts to apply Lean tools, and departments' disagreements over assignment of responsibilities provoked turf wars. Staff became discouraged, more urgent matters took priority, and departments slowly reverted to the methods they understood and were comfortable using. Eventually, department performance returned to its previous level.

Consequently, the kaizen event became a new category of waste in the minds of staff members. They considered the time, effort, and resources dedicated to a weeklong initiative an even greater waste than the waste associated with the targeted problem. Adding to this lack of acceptance was senior level management's determination to implement more and more kaizen events. This persistence induced only higher levels of resistance, lower morale, and a negative attitude toward the Lean methodology.

Ultimately, Lean became something to avoid rather than embrace. As a result of the kaizen blitz implementation strategy, many more manufacturing organizations failed than succeeded in their Lean efforts. In November 2007, *Industry Week* released the results of its Industry Week/Manufacturing Performance Institute (IW/MPI) Census of Manufacturers. The IW/MPI report showed that 70 percent of the manufacturing companies surveyed were currently employing Lean manufacturing as an improvement methodology but that less than a quarter (24 percent) of those

companies reported achieving significant results from their Lean implementation; a mere 2 percent indicated that they achieved their objective of becoming a Lean organization. The remaining 74 percent were achieving less than significant results not because Lean is not an effective improvement methodology but because they were not implementing it properly.

THE NUMMI EXPERIMENT

In 1984 General Motors entered into a joint venture with Toyota. Together they reopened one of General Motors' manufacturing plants in Fremont, California. The joint venture was called New United Motor Manufacturing Incorporated, better known as NUMMI. General Motors' motivation to enter the venture was to learn about Lean manufacturing from Toyota. Toyota's incentive was to test whether its manufacturing methods would be accepted in a Western culture.

The United Auto Workers Union had identified the workers at the former Fremont plant as the "worst workforce in the automobile industry in the United States" (National Public Radio 2010). Excessive absenteeism, drinking on the job, sexual relations at the plant, and petty acts of sabotage were common occurrences. Shutdown of the production line was considered taboo, and defects were permitted to continue along the assembly line, to be fixed later. Many of these same workers were rehired when the NUMMI plant reopened in 1984.

Toyota executives did not implement Lean by conducting a series of kaizen events and force-feeding the methodology to this workforce. Instead they educated the workers in Lean principles to promote a thorough understanding of the concepts. These workers then put Lean to work on the production floor. Almost immediately, the quality of both Toyota and General Motors automobiles built at the NUMMI plant rivaled the quality of those built at Toyota plants in Japan. Following its successes at NUMMI,

Toyota went on to build Toyota Motor Manufacturing Kentucky (TMMK) in Georgetown, Kentucky, the first wholly owned manufacturing facility in the United States. TMMK produces approximately 500,000 quality vehicles every year.

General Motors, however, attempted to implement Lean tools at its other factories in the United States without first training the workforce in Lean principles and failed to generate the results achieved at the NUMMI plant. In 2009 General Motors requested and received a \$50 billion government bailout to emerge from bankruptcy. Learning about Lean tools from Toyota, the developers of the Toyota Production System, was not enough to ensure General Motors' success. Use of Lean tools alone, no matter how well management understands them or how often they are implemented, does not guarantee success. Success with Lean requires cultural change and a system focus. Healthcare cannot afford to make the same mistakes that General Motors and so many other manufacturing companies have made. There are no quick fixes, and organizations will not achieve results faster by skipping steps. To be successful, hospital leaders must roll up their sleeves and do what is necessary to create a true Lean enterprise.

THE FIRST REALIZATION REGARDING LEAN

Too many organizations view Lean as a set of tools used to improve processes by eliminating wasteful process steps and creating flow, but Lean is much more than a set of tools. The tools merely facilitate the implementation; they are a means to an end and are secondary to Lean principles. If the organization applying the tools does not understand and practice Lean principles, the successes resulting from kaizen events will be superficial and short lived.

Everyone in the organization needs to understand basic Lean concepts; this knowledge is not reserved for senior or middle management. The ultimate goal is to establish a Lean culture—a culture in which all staff members are constantly on the lookout

for opportunities to identify and correct inconsistencies in their processes, establish systems that enable timely and accurate execution of their duties, and recognize and eliminate constraints to the delivery of patient care.

In organizations that do not have a Lean culture, improvements proposed in kaizen events will fail to take hold. In a Lean culture, improvements occur daily or even hourly. Although they may seem minor and insubstantial, these improvements are significant and, even more important, sustainable, and staff experience the benefits of Lean firsthand.

THE SECOND REALIZATION REGARDING LEAN

Lean is not a firefighting methodology. Kaizen events are often scheduled to address problem areas. However, kaizen events should be identified and scheduled with the goal of creating flow through the entire process, which in Lean terminology is referred to as the *value stream*. The value stream often crosses departmental boundaries and may comprise six or more departments. Organizations commonly need to conduct several kaizen events to establish flow through the entire process defined by the desired (future) state of the value stream.

Unless the value stream's support functions, such as diagnostic imaging, laboratory services, and transport, are involved in kaizen events, the benefits will be unsustainable. Support functions are commonly identified as constraints to flow, and changes are made, or steps are added, to their processes with little or no input from them. By revising their processes, the kaizen team is “throwing waste over the wall”—i.e., shifting responsibility for wasteful process steps from one department to another. This transfer of responsibility clearly does not constitute an improvement. Constraints to flow must be resolved, not merely reassigned. For example, if the emergency department (ED) feels that it wastes too much time transporting patients to the diagnostic imaging (DI) department,

it might assign the transport responsibility to DI staff. DI then has to add transport to its staff members' responsibilities. By shifting the transport responsibility from the ED to DI, the ED has thrown waste over the wall. Therefore, support functions must understand and take an active role in working toward the desired state of the value stream.

Lean is a system, and as such it requires systems thinking. The organization must identify the value stream, including all support functions; define the outcome it is seeking to achieve; create a plan detailing how it will achieve that desired state; assign accountability for plan outcomes to all departments; and finally, execute the plan. When Lean is approached in this manner, each kaizen event builds on the successes of the previous event, thereby creating flow through the entire process.

THE KEY TO SUCCESS

Lean has the potential to transform healthcare, but like most things worth having, it comes with a price. This price has both a monetary and a nonmonetary component. The monetary component is the actual dollars spent to implement the Lean methodology. Because Lean focuses on simple and inexpensive improvement methods as opposed to innovative change, this cost is minimal. The nonmonetary component is the time and resources devoted to Lean implementation and the risk that the methodology will not deliver the expected benefits.

The objective, therefore, is to minimize this risk and maximize the likelihood of success through proper implementation, commitment, action, and support. Do not skip steps; identify and take immediate action to resolve problems and eliminate waste; and support the provision of necessary resources. As the expected benefits are realized, the monetary and nonmonetary costs of Lean implementation will diminish. Hospitals will generate less waste, have fewer problems, and commit fewer errors. Employee morale

will improve, costs will decrease, and revenue will increase. Staff will be able to devote more time and resources to other value-adding activities, such as technological advancement. Most important, hospitals will deliver better patient care.

It is recommended that an organization retain a consultant for guidance through the implementation process. However, be leery of consulting firms that expound on the savings and process improvements they have generated for their clients. In an organization that has failed to first create a Lean culture and internalize the concept of systems thinking, the gains such firms describe are seldom realized; rather, they are describing the savings the organization might have experienced had it sustained the consultant's imposed changes. Furthermore, for consulting firms to take credit for these savings and improvements is inappropriate. The consultant's job is to educate the staff and guide the organization through the implementation process, not to impose change. Imposed change will not transform a hospital into a Lean enterprise; the change must come from within the organization. Bottom-up implementation is essential to sustained improvement.

In summary, there are two components to successful Lean implementation. The first is creation of a Lean culture. The second is elimination of departmental boundaries and flow through the care delivery system. Everyone in the organization must understand that the hospital is a system, and that for a system to function properly, all of its parts must work together.

Many organizations struggle with the dilemma of which to create first: a Lean culture or a system. They are struggling needlessly; the culture and the system are intertwined and are implemented together. The following chapters will guide you through a model for successful Lean implementation.



SUMMARY: Death by Kaizen Event

- Lean is not a quick fix, is not easy, cannot be delegated, cannot be purchased, cannot be done piecemeal, and cannot be consultant driven.
- By skipping the critical steps necessary for success, organizations fail to lay a solid foundation on which to build their Lean enterprise.
- The ultimate goal is to establish a Lean culture, in which all staff members are constantly on the lookout for opportunities to identify and correct inconsistencies in their processes, establish systems that enable timely and accurate execution of their duties, and recognize and eliminate constraints to the delivery of patient care.
- Lean is a system, and as such it requires systems thinking. Organizations must identify the value stream, including all support functions; define the outcome they are seeking to achieve; create a plan detailing how they will achieve that desired state; assign accountability for plan outcomes to all departments; and finally, execute the plan.