

A Lean Approach: How the Healthcare Workforce Can Take the Lead in Reducing Hospital Complexity

by Kevin Kelleher

As Peter Drucker once stated, “The hospital is altogether the most complex human organization ever devised.” There is little doubt that hospital working environments today present an extremely challenging and stressful experience for members of the healthcare workforce. But our experience at BMGI indicates that hospitals using Lean methods can address and simplify their operations, reducing this complexity and stress. Best of all, the changes Lean leads to will not involve adding staff or building new facilities. Instead, the transformed hospital will find that by letting internal cross-department teams examine how they routinely do things, they themselves will determine what things to change and, even more importantly, what things to stop doing altogether. The result will be a safer, more efficient and more effective healthcare delivery system for the care and treatment of patients.

A core principle of Lean is the relentless elimination of waste. Waste by definition is anything (space, equipment, tasks) that adds time or cost but is of no value to anyone. The cross-department teams assess hospital processes, map the value stream, and improve the flow of items (e.g., patients, lab samples, test results, orders, etc.). Lean is based on the belief that hospital staff members, working as a team, are the best ones to determine what to change and how.

The first step is for everyone on the hospital staff to identify and eliminate waste in their own work areas. Waste elimination is ultimately an attitude and drives to continually discontinue tasks that have no value or to discard unneeded items. Starting with the most basic of examples, one floor in a hospital we are working with spent time preparing and faxing a patient discharge list to Medical Records every evening. During a Lean effort, discussions revealed Medical Records did not actually use the fax and the practice of sending faxes stopped on the spot. Another hospital worked on cleaning a storage room by throwing out items they didn’t need, including expired supplies. The room was later used to store large medical equipment (e.g., wheelchairs, patient lifts) that had been haphazardly left in the hallways.

The second step requires the team to draw a diagram or map of its core process(es) from beginning to end, documenting the flow of the patient and the records corresponding to that patient. Team members from every department involved in the process share what they do, how they do it, and why. What becomes immediately apparent is that not one department or person knows the entire system from beginning to end (usually quite a surprise to most). Many team members will openly express their unawareness of what happens in other departments, and they will develop a new appreciation for why they should. They also add how they now see what they need to do differently to help staff in other departments eliminate unnecessary rework.

With this shared understanding of how the overall cross-departmental system works today, combined with an understanding of the level it needs to perform, numerous

opportunities for making things easier for everyone become quite evident to the entire team. Though difficult, the effort to map and discuss the process as a team must not be shortchanged. For example, one team working on a discharge process revealed handoffs between six to eight personnel. The team also surfaced that the nursing staff completes 10 to 14 different documents for each discharge. The team made several changes to the handoffs between departments and reduced the number of documents being completed over the next few months.

The third phase of Lean methodology requires the team to exam the flow of things that need to flow. They constantly look for situations where patients are delayed or the lab specimens stop moving in large batches. Flow thinking instills a perspective that the item flowing needs to move from one step to the next with little delay, waiting or rework. BMGI recently facilitated an Emergency Department (ED) team having difficulty with a high percentage of patients leaving the ED before being seen or treated by a physician. The team members immediately noticed empty treatment rooms and other rooms with patient's waiting to be discharged. The team successfully completed a trial with a designated discharge nurse whose main role was to discharge patients from the ED within 15 minutes of physician disposition. In addition, since the treatment room was now empty, the same nurse pulled patients from the waiting room to the empty treatment room to initiate assessment. The impact was dramatic in terms of significantly reducing wait times, as well as the length of stay for patients being treated and released. And the percentage of people leaving unseen dropped from 9 to 3 percent.

In summary, hospital staff does indeed work in a complex and stressful environment. But, it has been our experience that the hospital staff itself can play a fundamental role in reducing the complexity and stress in the clinical environment. In every instance where leadership provides the opportunity for cross-department teams to use the Lean methodology, the end result is not only a less complex and stressful environment, but also a shared understanding of what they can do to improve the delivery of healthcare for the patient's benefit and their own.

Kevin Kelleher is a highly effective advisor to senior executives, directors and managers as they plan and implement strategic process improvements. With a focus in healthcare, he's trained and mentored hundreds of executives and practitioners in team dynamics, Lean and Six Sigma. In addition to his agile facilitation skills, Kevin leverages his background in applied statistics to help others use data to solve problems.

For healthcare organizations, Kevin identifies high-priority projects via value stream assessments. He is a lead instructor for Lean in healthcare, and a lead facilitator for Lean events in a variety of clinical environments.

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