

## **Factory Efficiency in Health Care**

*St. Charles adopts lean practices in effort to streamline operations and improve care*

By Betsy Q. Cliff / The Bulletin

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Until last summer, a room in the central processing department at St. Charles Redmond looked like a “cluttered garage,” said operating room manager Julie Nave.

Nurses enter the room often to pick up surgical supplies and other necessities, which had been moved in when the hospital's new tower opened in 2006. No one had organized it since.

There was equipment that was no longer used, things belonging to doctors who had long since left, and piles and piles of stuff that needed cataloging.

Nurses had to move carts out of the way to get what they needed.

It cost the nurses valuable time and it cost the hospital money. Since the inventory was not well controlled, supplies often expired and had to be donated or thrown away.

Then, trained staff from St. Charles Health System spent a week cleaning and organizing it. A system was put in place to notify the materials management department when a supply ran out.

Excess equipment was taken out of the room. The carts were removed. Things were labeled.

It cut down on the time staff needed to spend in that room, said Nave, leaving them more time to spend with patients. In addition, they also brought more supplies directly into the operating room, eliminating the need for nurses to leave in the middle of an operation.

Procedures are much more efficient, said Nave, and in some cases that has shortened the time patients spend under the knife. “That's a huge benefit.”

The organization of the central processing room at St. Charles Redmond is part of a larger effort by the entire St. Charles Health System, which also operates hospitals in Bend and Prineville.

Taking methods developed by companies in other industries, most notably Toyota Motor Corp., the hospital system is striving to create efficiency in the way it does business. It's looking for ways to reduce waste, improve quality, ease staff frustrations and, ultimately, make things better for patients. The methods, known as lean practices, have long been used in other industries, but hospitals have only recently caught on.

“In terms of reliability, the health care industry is so much behind others,” said Joan Wellman, a Seattle-based consultant who helps health care entities incorporate lean practices. Some companies in other industries, she said, “have so few process and quality problems that they measure (errors) in parts per million. In health care we measure in parts per hundred. Quality problems are much more frequent.”

As a way to address quality problems, many health care organizations are now looking at lean practices. In a recent survey, Wellman said, about half of the country's hospitals had at least some type of lean effort.

The draw is the opportunity to improve quality while simultaneously reducing cost. Lean aims to get rid of things that make a job more complex, such as extra steps in a process or excess paperwork. Cutting waste both drives down expenses and often results in better outcomes for patients.

Lean practices are established by examining specific areas or functions of the organization. For instance, the hospital examined how to reduce the time it takes to get lab results back or cut wait times in emergency rooms. By tackling these areas, the organization can run more smoothly and serve patients better.

“In a lean system,” said Wellman, “you are constantly focused on the patient, making value for the patient.”

### **Employees are experts**

A primary tenet of lean practices, and a key aim of St. Charles, is to empower employees to change

things for the better. The idea is that the people actually doing the work - not managers or executives - are in the best position to improve how it's done.

One of the first lean projects at St. Charles Bend involved the emergency department.

The doors leading from the ER to the main hospital at St. Charles Bend had to be opened manually, which made it difficult for nurses to wheel patients through them. Often, said Vikki Hickmann, a registered nurse in the ER, she would be holding the doors with her hip, while awkwardly grabbing the bottom of the gurney to get a patient through them.

Seeing the opportunity to improve the situation, Hickmann and others spearheaded the installation of a button to open the doors automatically. Now, they can stay near the patient's head, talking to them or monitoring vital signs.

"The ones at the bedside really know what they need to take care of patients well," said Hickmann.

Another project, in the intensive care unit at St. Charles Bend, involved cleaning out a room that could have been used for patients but was instead being used for storage.

The very day they finished cleaning it out, the unit was full. Had the new room not been available, that patient would likely have been transferred to Portland or elsewhere in the Willamette Valley, said JoAnn Miller-Watts, who focuses on implementing lean practices throughout the health system.

This kind of project is exactly the kind of win-win that lean practices aim for. Patients clearly benefit by staying close to home, and the hospital benefits by keeping the revenue.

In addition, it reduces the cost of that patient's care overall - by avoiding the transfer to another institution - and could improve the patient's medical outcome by delivering treatment faster than if they had to go to another hospital.

Changes are typically "little but big," said Katie Williams, who also specializes in implementing lean practices at St. Charles. She said projects she implements are often the low-hanging fruit of inefficiency, but that no one has had a chance to tackle them.

Staff are often so busy caring for patients, they don't have the time to step back, ask how things are working and potentially change them. "You only have windows of 15 to 20 minutes," said Hickmann. "You can't be taking care of patients while you're trying to improve a process. It's too disjointed."

Resistance

Not everyone at St. Charles is enamored of the new approach.

A group of employees at St. Charles Bend filed a petition in November seeking to join a chapter of a union that represents health care workers. (A vote on the union took place Wednesday, but results were not in by presstime.)

Among the grievances listed by those pushing for the union: corporate efficiency.

"I have worked at St. Charles for 25 years and have seen it change from a warm, friendly place that felt like a family to a place that feels less like a hospital and more like a corporation," wrote Kathy Korne, a phlebotomist, on a website explaining the effort, [www.wearestcharles.org](http://www.wearestcharles.org),

Ken Daniels, an employee who works in central processing spoke of his dislike for recent changes during union negotiations. "The last three to five years have been a huge change," he said. "It's gone corporate."

To be sure, these employees were not speaking specifically of the lean approach. But the lean initiative has been one of the central pillars of the health system's efforts to incorporate business principles into the management of its hospitals.

St. Charles has also begun using other management techniques borrowed from corporate America and has employed cost-cutting measures more familiar at large companies than nonprofit hospitals, including laying off staff to outsource certain functions and cutting pay for employees.

Buy-in is a challenge among some employees, acknowledge St. Charles staff who work on lean practices.

"Lean is not easy," said Cory Hammond, who specializes in lean practices at St. Charles. "You are asking people to change the way they behave. You're asking them to change the way they work."

Many organizations have trouble convincing people that the lean initiative is a worthwhile effort, said Graben. One challenge, he said is “convincing people that they need to change, that they need to improve.”

Graben said that once employees see good results, that their work is made easier or that they have more time to spend with patients, they often come around. In that way, he said, using techniques from corporate America can, paradoxically, make the hospital a more caring place to be. By helping fix the problems that vex those who tend to patients, he said, “it can be more of a caring environment. ... (Lean) can equip them to do a better job with the clinical aspects of care.”

Will it last?

Whether or not St. Charles can convince those on the front lines of patient care that the lean approach is worthwhile will almost surely determine whether the effort succeeds.

With just 13 projects under their belt, “we're infantile in this process,” said Miller-Watts.

Being able to keep focused on the approach and maintain the improvements will be a challenge, she acknowledged. “Sustainability is the hardest piece.”

Both Miller-Watts and Hammond left their posts at the hospital to concentrate full time on facilitating lean projects. Others work part time on the projects. The organization is currently in the process of recruiting more employees to become lean facilitators and run more projects.

Even with the best case scenario, it will take years for the health system to change behavior enough that lean principles dominate the way the hospital runs.

“Anyone can do a lean project,” said Wellman, “but whether you can transform your organization using these principles is the question.”

Wellman said it often takes at least a decade for an organization to really transform itself. “Those that have been at it for 10 years are really good, 20 years are incredible. And Toyota is like watching a ballet.”