Getting the staff’s buy-in for Lean

When Pam Murphy, RN, director of surgical services at 144-bed Piedmont Newnan Hospital in Newnan, Georgia, first heard a Lean presentation, she says, “It made sense, because we are so process driven. The whole focus is, ‘What is touching the patient, and what is value added?’”

Piedmont Newnan’s ORs were the pilot site for a Lean project for the Piedmont Healthcare system. The hospital has 8 ORs on 2 campuses. Piedmont was aided by Georgia Tech’s Enterprise Innovation Institute in Atlanta.

Developed by Toyota, Lean in health care brings clinicians and other staff together to improve processes that waste time and resources.

Involving the staff

Murphy knew the staff’s participation would be critical. She also knew they would have a concern: Does Lean mean doing more with less? Would people lose their jobs?

Backed by the administration, Murphy assured them no one would lose their jobs because of Lean.

Another concern—with staffing tight, how do you get staff off to participate in a project? How might that affect productivity numbers?

Again, Murphy had top-level support. A Lean account was set up for charging employees’ time so managers wouldn’t be penalized for lower productivity.

“That was a key decision by the executive team,” says Jenn Lingenfelter, project manager for Georgia Tech’s Health Care Performance Group, who worked with Piedmont Newnan.

Getting started

Since the Lean project started in December 2007, the ORs have conducted two 5-day Lean rapid process improvement (RPI) projects (also called kaizen events), one on case carts and the other on turnover time.

The hospital wanted to start with turnover time, but Lingenfelter urged the team to step back and take a wider view of the surgical process. In doing so, they realized one issue affecting turnover time was that case carts weren’t available and supplied correctly, which meant rework before cases.

Murphy recognized that if she and the staff could improve the case cart process, they would attract buy-in from other staff and physicians and build momentum for other projects.

These are the steps they took.

Training for staff

In Lean, improvement initiatives bubble up from the front lines, so the staff
is critical to Lean. Lingenfelter began by introducing managers and an initial group of staff to Lean. By the end of her involvement, 90% to 100% of the OR staff had basic Lean training.

Selecting a team

For the case cart RPI, a cross-functional team of front-line OR staff was selected, including nurses, surgical technologists (STs), and central service (CS) personnel. Murphy had planned for coverage 6 weeks ahead by arranging for per diem staff and having other staff report earlier in the day.

‘Going to the gemba’

After an introduction to Lean, the RPI team went to the OR and CS departments to observe the case cart process. In Lean, this is called “going to the gemba”—going to where the actual work is done. Getting the team out of their daily routine helps them to spot activities that waste time and energy.

The team split up to observe the instrument flow in the CS department, case-cart picking, and the opening of case carts and setup in the OR. They gathered baseline data by timing how long it took to pick a case and assemble a case cart. The observers helped pique interest of the rest of the staff.

“The team would say, ‘This is what we’re looking at. What do you think?’ That helped to spread the excitement,’” Murphy notes.

Mapping the process

After the observations, the team met in a conference room to map out the process on the wall. They noted which steps were value added and which involved waste.

Themes emerged:
• The preference lists were in reasonable shape but needed tweaking. The lists are computerized but didn’t include locations where supplies were stored.
• There was not a formal way of picking a case.
• The staff didn’t trust one another to pull cases accurately because everyone did it in a different way.
• Items were not placed in standardized locations on the case carts.
• In the OR, many items were opened “just in case” instead of held in reserve, as indicated on the preference list. That caused a lot of waste.

Whirlwind of improvements

The team divided into smaller teams to tackle each issue.

“We prioritized ideas and focused on those we could do that week. It was like a whirlwind,” Lingenfelter says.

One focus was a standardized case-picking method.

“In manufacturing, a distribution center is arranged so you go down Aisle 1 and pick items, then you go to Aisle 2, and so forth. With the case carts, staff were zig-zagging and backtracking,” she says.

The team worked with the IT department to develop a systematic pick path.

The preference lists were standardized to mirror the layout of the supply room so the person pulling a case would always start in the same location. Another breakthrough was to eliminate pulling all of the cases the day before. That had caused some case carts to be incomplete, meaning rework to look for supplies before a case and “stealing” from case carts already pulled.

Instead, the team decided that the only cases pulled the day before would be the first cases of the day. That reduced the space needed for case carts and elim-
inated incomplete case carts. The staff’s biggest concern was that case carts would not be ready, but Murphy says that has not been an issue.

**A standard arrangement**

The team also developed a standard arrangement of items on the cart so items needed first are on the top shelf and so forth. Other changes were:
- entering supply locations on the preference cards
- labeling shelves and bins in the automated supply cabinets
- cautioning staff not to pull cases from memory but to use the preference cards—even if they had been there for 20 years.

**Updating preference cards**

The team also fine-tuned the process for updating preference cards:
- The person picking the case prints out the preference card and highlights any missing items, such as an instrument set still in CS.
- The preference card goes with the case cart to the OR.
- In the OR, the OR staff write any missing items on the preference card.
- After the case, the preference card is taken to a designated location. The cards are tallied for missing items to determine an accuracy rate.
- Preference cards needing changes are transferred to another box where one person does the updates, typically within 2 or 3 days.

**An ‘aha moment’**

The RPI’s biggest win and greatest savings came from an “aha moment” during the observations.

“We found people had gotten into the habit of opening everything for a case,” Murphy says, even items labeled on the preference card as “do not open unless needed.”

In an easy fix, a “do not open” bin was added to the case carts. All such supplies for a case are placed in the bin when a case is picked. After the case, the bin with any unopened supplies goes back to CS with the case cart, and the supplies are restocked.

The savings—$118,000 over a year.

After the RPI, the overall case cart accuracy rate rose from 50% to 98% accuracy to 100% accuracy in November and December 2008, Murphy says.

**Keeping up the momentum**

Lean is meant to be a cultural change, not a short-term project. How do you keep it going?

“You have to continue to monitor and measure. Otherwise, the staff loses sight of where they are.” Murphy says. She reports the preference card accuracy rate to the staff regularly.

The spirit of Lean needs to become part of everyone’s thinking, Murphy notes. Many of the staff have been involved in Lean projects.

“The only reason we succeeded was because of the staff,” Murphy says. “The staff were the ones who came up with the ideas.”

If a process slips, they will say, “Wait a minute. That’s not part of our Lean process.”

When performance drops off, the staff who were on the RPI teams “will sit back down and look at what’s going on. They’re the ones who own it and drive it,” Murphy says.

Success can be infectious.
“This project was so much fun,” Lingenfelter says. “You feel like you’ve made a difference. You see a difference not only in the bottom line but in the culture.”

—Pat Patterson

Learn more at an all-day Lean seminar with Murphy and Lingenfelter at the Managing Today’s OR Suite Conference Oct 7 to 9 in Las Vegas.