Process engineering models adapted to health care settings

SHS takes a fresh look at forms, admit/discharge procedures and more

To people in the business and manufacturing sectors of the economy, the study of processes is a given. Managers and employees regularly consider the practice of process engineering, which involves identifying the PDSA cycle (plan, do, check, act); they’re mindful of Lean Toyota Production System principles and techniques; and they probably use at least one Japanese word during strategy meetings. Gobhi—a broadly meaning “the real place”—and referring to managers actually being present to observe a process first hand.

Until very recently, though, the language and practice of process engineering has been largely absent in the health care sector. But now, Samartan is bridging that gap.

Last summer, Samaritan Health Services hired Brenda Buckman, an industrial engineering graduate of Oregon State University, to be Samaritan’s first process engineer. As part of the SHS Center for Health Research and Quality, she is exploring processes at Good Samaritan Regional Medical Center—from the completion of admission forms to the prepping of blood samples—to see if there are more efficient, higher quality ways of doing things.

“I’m enlisting tools to get to the root cause of any process problems, Buckman said. “Ideally, you want the correct way to do an activity to be much easier and more intuitive than the wrong way. It should be really difficult to accidently do something the wrong way.”

To that end, Buckman is putting together teams of SHS employees to systematically create improvements in their particular settings. Staff involved with admission forms, for example, will look at ways of eliminating duplication of effort and information. Employees involved in discharging patients from the hospital will study the dozens of events that must occur before a patient can go out the door.

“Let’s say we’re looking at discharge procedures,” Buckman said. “First, you would need to fully understand the process from start to finish and then use tools, such as the PDSA cycle, to plan what we could do to improve the process. Perhaps we want to shorten the length of the discharge process. We’ll develop incremental aims and measures; and with each small change, we’ll go back and check progress to see if the new processes are really better.”

Buckman also is making SHS employees aware of Toyota’s “lean” principles to eliminate waste, or eliminate workarounds and problems they face in the prepping of blood samples, for example. The electronic medical record system correctly and as quickly as possible. Efficient transfer from paper to computer will help ensure, for example, that if a patient wants a meal via room service, the kitchen staff quickly will be able to view that patient’s dietary orders on the computer. Or, if a medication order has changed, the person dispensing meds will be notified immediately.

“In the end, I hope to help hospital personnel reduce or eliminate workarounds and problems they face during the day,” Buckman continued. “That would allow medical staff to spend more time doing the job they love—giving excellent patient care.”

Registered nurses, Vicki Major, left, and Marilyn Parmcke check medical equipment at Samaritan Pacific Communities Hospital in Newport.