

## S.F. General following 'Toyota Way' to efficiency

By **Victoria Colliver** Updated 8:02 pm, Thursday, October 10, 2013



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Dr. Ron Labuguen (right), an S.F. General Hospital continuous-improvement team leader, records observations.

At **San Francisco General Hospital**, clinicians, executives and other staff members are peppering their conversations with Japanese words like *kaizen*, which means continuous improvement, and *muda*, for waste.

The dialogue is not part of a language program, but rather an effort to infuse Japanese automaker **Toyota's** management philosophy and practices into the way the hospital delivers medicine to its patients. "The Toyota Way," as it is called, is the company's systematic approach to producing cars and trucks efficiently, with the primary goal of pleasing the customer.

"A lot of people think, 'What does making cars have to do with taking care of patients?'" said **Iman Nazeeri-Simmons**, the hospital's chief quality officer.

A lot, as it turns out.

San Francisco General is among a growing number of hospitals in the U.S. taking Toyota's management principles to heart. Behind the effort is a need to compete as greater scrutiny is being placed on costs and hospital reimbursements are shrinking.

## Health law's impact

For public hospitals like San Francisco General, which is also the city's designated trauma center, the federal Affordable Care Act may further tighten financial constraints as the government reduces payments earmarked for some uninsured patients.

As these patients become insured, they will also have greater options in the hospital they choose to go to. And their choice may not be their nearest safety-net hospital. That realization is putting these hospitals, including S.F. General, in the unusual position of having to attract and retain "paying customers" to survive.

"They're going to have to make themselves more attractive if they're going to compete for those patients who no longer have to go there because they have to," said Dr. **Mark Smith**, chief executive officer of the **California HealthCare Foundation**, an Oakland philanthropy that has invested more than \$2 million over the past five years to help hospitals adopt Toyota's techniques.

The foundation's grants have gone to a number of county health systems - San Francisco, San Mateo, Alameda, Contra Costa, Los Angeles - to help them re-engineer how they operate. That could mean everything from how supplies are organized to how many steps a nurse should take to reach essential equipment in the operating room.

San Mateo Medical Center's chief executive officer, Dr. **Susan Ehrlich**, described Toyota's method as "really focused on the small things. It's making a million small changes and making sure everyone is doing those changes and sticking to them over time."

## Critical analysis

To make the system work, a team of employees is assigned to analyze a particular area targeted for improvement. The group immerses itself in what is typically a weeklong, hands-on session, called a *kaizen*, and emerges with a plan to make specific, often seemingly small changes designed to have a big impact on costs or the patient's experience.

Hospital administrators, doctors and nurses or any other staff members could find themselves sitting in a waiting room for hours with a patient or cleaning floors with the housekeeping staff or watching a specific medical procedure. Suggestions can become approved practice without the usual bureaucracy.

For example, at San Francisco General, a recent *kaizen* focused on the number of minutes it takes from the moment a patient is wheeled into the operating room to when the first incision is made. A team spent a week trying to come up with ways to whittle 10 minutes off the hospital's average "wheels in" to incision time of 40 minutes.

Ten minutes may not sound like a lot, but those minutes can add up in wasted time and cost when a staff of nurses and doctors has to wait for a piece of equipment or a patient to be ready for them. Those delays also keep a patient in the operating room longer than necessary, reducing the number of procedures that could be performed on other patients.

## Working on change

Officials at San Francisco General, which started adopting Toyota's methods in earnest a little more than a year ago, admitted that it's tough to get everyone on board and that change is often met with some resistance.

"You generate these small wins - especially if they're visible - and that's what changes people's attitudes real quickly," said Dr. Ron Labuguen, medical director of San Francisco General's **Urgent Care Center**, the first department to receive the Toyota Way treatment.

The hospital's Urgent Care Center has already seen results. In July 2012, the average wait - from arrival to discharge - was 4 to 6 hours. After going through the new process, the average wait time is 2.5 hours.

During the improvement session in urgent care, team members noticed that every time a patient needed a basic X-ray, they had to leave the center, walk across the street to a different building and then navigate a maze of hallways to the radiology department. A patient who couldn't make the 15-minute walk had to wait for a wheelchair escort, which could take hours at the busy hospital.

They suggested a logical fix: create an on-site X-ray room. "Having the X-ray here has revolutionized the patient experience," said **Ricardo Ballin**, nurse manager in urgent care.

## Toyota's techniques

The move toward applying Toyota's techniques in hospitals started around 2000 when executives at Seattle's **Virginia Mason Medical Center** became interested in seeing how they could improve the hospital's quality, safety and patient satisfaction. They looked at Toyota because several other industries and companies, including Boeing, were using the carmaker's established methods.

At first, the idea was resisted, executives leading the charge said.

"When Boeing heard about Toyota, they said that's fine for a car manufacturer, but we make airplanes," said **Mike Rona**, Virginia Mason's former president who now runs his own consulting businesses for hospitals converting to the system. "Our people, when they heard about Boeing, said that's fine for Boeing, but we have processes that take care of people."

Rona said it doesn't really matter what any particular company or industry does or produces. "Every organization has processes to make whatever they make," he said, adding those processes can always be improved.

Today, numerous hospitals around the nation, including many private hospitals in the Bay Area, are using Toyota's techniques in some of their practices.

## San Mateo example

At San Mateo Medical Center, which is well on its way to full adoption, administrators have trained 100 staff members to teach the system to their colleagues, involved 300 employees in 52-week *kaizens* and made significant changes in nine departments.

In one improvement session, hospital staff members looked at operating room cancellations. They analyzed the reasons for those cancellations - ranging from surgical scheduling conflicts to patients not having their pre-op preparation done in time -

and recommended changes that reduced cancellations by 17 percent. That saved the hospital more than \$200,000 between October 2012 and July 2013, CEO Ehrlich said.

Another session targeted the infusion center, where patients receive chemotherapy and other life-saving treatments. The group focused on reducing time lost getting insurance authorization for these very expensive drugs. Ehrlich said reducing *muda*, or waste, in that process saved the hospital \$300,000 from February to August of this year.

Believers in Toyota's method say the key to making the system more than just another management fad is to standardize the new processes so that everyone does them the same way and works to sustain the changes.

San Francisco General's quality officer, Nazeeri-Simmons, admits that can be a challenge in a seemingly chaotic atmosphere of a major trauma center. But, she said, at least 80 percent of the work done at the hospital every day is predictable or routine. That's where the changes can be made.

"You just can't act like everything we do is brand new, every day," Nazeeri-Simmons said. "When you stabilize the 80 percent, that gives you flexibility for the chaos."

## Glossary

Toyota's production system, which focuses on reducing waste and inefficiencies while making customers happier, has been increasingly adopted by hospitals trying to improve medical quality and increase patient satisfaction. Here are some of the system's frequently used Japanese terms, many of which do not have a direct English translation:

**Gemba:** the place where work is performed

**Hansei:** a period of critical self reflection

**Heijunka:** a level production schedule that provides balance and smooths day-to-day variation

**Jidoka:** using both human intelligence and technology to stop a process at the first sign of a potential problem

**Kaizen:** continuous improvement

**Kanban:** a visual card or signal used to trigger the fulfillment of need, such as restocking supplies

**Muda:** anything that consumes resources but provides no value

**Poke-yoke:** a mistake-proofing device that prevents errors

Source: Rona Consulting Group

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