

# Lean Healthcare

Donna Weinstock\*

**A**s healthcare organizations look for new and improved ways to reduce costs and still offer quality healthcare, many are turning to the Toyota Production System of doing business. Rather than focusing on cutting personnel and assets, “lean healthcare” looks to improve patient satisfaction through improved actions and processes.

**Key words:** Lean healthcare; Toyota Production System (TPS); reduce costs; increase efficiency; eliminate waste; exceptional healthcare quality; patient satisfaction; inventory control.

How can a car company help your practice? The Toyota Production System (TPS) was designed by Sakishi Toyoda, the founder of Toyota; his son Kiichiro Toyoda; and the Vice President of Production, Taiichi Ohno. In creating TPS, they studied the work of W. Edwards Deming and Henry Ford. They looked at what worked and what didn't work in business, setting a goal to have the exact quantity, with the highest quality, when the customer wanted it. The customer is the next process in line. Anticipating and meeting this person's needs are of primary importance.

## ***Does it add value to the customer?***

“TPS requires its followers to ask some basic questions about their work,” states Charles Lukey, a consultant for Washington Manufacturing Services in Mukilteo, WA ([www.wamfg.org](http://www.wamfg.org)). Lukey has been working with TPS principles for 12 years and has consulted to a variety of businesses ranging from electronic manufacturing to aerospace to healthcare. “The first question is: ‘Does it add value to the customer?’ Not every step of every process adds value to the customer.”

According to Lukey, another TPS concept that can be applied to the healthcare arena is the elimination of waste. The seven wastes that are identified in production are Waiting, Defects, Motion, Inventory, Overproduction, Transportation, and Processing.

- 1. Waiting or wasting time.** Practices should be in place to ensure that there is no wasted time for either employees or patients. The goal is for patients to spend little or no time in the reception area. The patient flow in the office should be efficient and organized. One of the key concepts of TPS is adding value. Is the behavior you're engaged in adding value to the product or service? Is it something the customer is willing to pay for? Does your action change the fit, form, or function of the product or service? In the strictest sense, if you are not adding value for the customer, you are creating waste.
- 2. Defects.** Any defects should be reworked or repaired on a timely basis. A common defect in a healthcare environment is incomplete, missing, or incorrect information. Equipment maintenance should be timely. Having contracts in place for equipment and routine inspections can help eliminate equipment breakdowns.
- 3. Unnecessary or excess motion.** Any unnecessary motion should be eliminated. Movement should add value. Whether its personnel actions, flow of patients from one area to the next, or the movement of the chart, it should be orderly and increase the function of the office.
- 4. Unnecessary inventory.** Not only should you not make more than you need of a product, but the item should be restocked when used. There is no need to keep extra inventory around. Determine how much of an item you use during a set time period and how much extra you need, then keep only that amount on hand.
- 5. Production.** There is no need to produce more than you need. Produce what you need when you need it. An example of this would be preparing more surgical supplies than are required by the physician. Determine what the

\*Office Management Solution, 490 Banyan Drive, Northbrook, IL 60062; phone: 847-205-9797; fax: 847-714-9797; e-mail: [donna@officemanagementsolution.com](mailto:donna@officemanagementsolution.com).  
Copyright © 2008 by Greenbranch Publishing LLC.

physician wants, then prepare the area. Don't try to anticipate customers' needs—find out what they really want.

6. **Needless transporting.** Materials and stock should not be moved until they are needed. This ensures there is no waste in material transporting. This holds true for patients in the office. Consider where the patient is and where he or she needs to be, then figure out how to make that happen in the timeliest manner possible.
7. **Inappropriate processing.** Processes have to add value, especially from the patients' perspective. Removing inefficiencies and simplifying processes will make more time for patient care.

"A physician practice could benefit from understanding the TPS concept of 'flow,'" continues Lukey. "A good example of flow occurred recently with one of my healthcare clients, Yakima Valley Memorial Hospital. During morning rounds, physicians would leave charts on the Unit Secretary's desk. The Unit Secretary would read the chart and enter the orders. A fine process, but orders come in two varieties, Stat and Routine.

"If the Unit Secretary was at the desk when the physician approached with the chart in hand, the status of the order could be quickly communicated: 'This is stat.' The Unit Secretary would then enter the order while the other, presumably routine orders, stayed on the countertop waiting their turn.

"But what if the Unit Secretary was not at the desk?" asks Lukey. "Should the physician put the chart on top of the pile? Should the physician wait? Should he inform a nurse?"

"Yakima Valley Memorial Hospital addressed this problem with two rolls of electrical tape, one red and one green. The tape was used to make two squares on the countertop, one marked 'Stat,' the other marked 'Routine.' Whether the Unit Secretary is at the desk or not, the physician places the chart on the appropriate square, and the status of the chart is clear. When the Unit Secretary returns, they know this chart in the 'Stat' square must be entered next," says Lukey.

***When transitioning to "lean healthcare," the patient should always come first.***

Lukey believes that TPS can be applied to any business, with some practices working better in some environments. For example, "lean" practices are particularly successful in outpatient clinics and labs. The repetitive nature of the work lends itself nicely to TPS.

When transitioning to "lean healthcare," the patient should always come first. The product is the office visit, testing, and other needs of the patient. The objective is to provide quality care in a prompt timeframe and yet be flexible enough to keep up with the changing healthcare environment. Understanding what your patients value will help define the changes needed.

"Healthcare is in its early adaptor phase," explains Lukey. "Progressive hospitals and clinics are getting the message and training their people in TPS basics. Most manufacturers have adopted key Lean principles to their daily routines. We know this because they are still in business. Manufacturers who remain 'old school' in their practices are fading from the scene. In the future, healthcare providers will be Lean or they won't be around."

As a practice moves toward lean, the long-term outlook is more important than the short-term; even if that means that it costs the practice money at first. The healthcare staff needs to adopt a plan to turn the Toyota principles into an environment that encourages exceptional healthcare quality at a reasonable cost.

Transferring a practice to lean is not easy. It requires teamwork, dedication, and commitment, but the payoff is a more efficiently run practice with high emphasis on the patients' well being.

***The goals of a practice are to decrease patient wait times; speed up room turnover; and increase charting accuracy, inventory control, and revenue.***

The process of becoming a lean practice starts from the top down. The leaders of your practice, including physicians, must buy into the lean philosophy. They must be educated and trained about the principles and techniques to transform the practice. It's up to the leaders to execute the changes in the practice; therefore, effective leadership is essential. From there, it's a matter of educating personnel on TPS basics. There are classes and books, and every state in the union has a Manufacturing Extension Partnership (MEP) that can direct them to resources.

It is possible to include patients in the process by asking them what is important and what they value. Patient surveys allow patients to share their thoughts. Their relationship with the practice begins with their initial telephone call and continues throughout the visit and into the follow-up. Which areas do they feel need to be addressed? How do the patients feel value would be added?

Spending time observing your practice or acting as a patient helps you to see the practice from your patients' viewpoint. What do they see?

You may want to address the following: Does the practice

- Value the patients' time?
- Have effective means of communication?
- Have minimal wait times?
- Offer appropriate follow-up?
- Meet the patients' physical and emotional needs?
- Coordinate ongoing care?
- Exceed the patients' expectations?
- Offer adequate face-to-face time?

There are so many simple changes that can be made in an office that can make an immediate difference. For example, laboratory results should be on the chart before the patient's visit. That prevents the physician from having to leave the patient to get the results when the physician should be having face-to-face time with the patient.

Standing orders should be written for the same procedures or same diagnosis. Whether in a hospital or office setting, there is no need to rewrite an order for each patient with the same situation. Additional orders should be written when there is a unique or complicated situation.

Having a policy for quickly and efficiently "turning over a room" will ensure the prompt flow of patients.

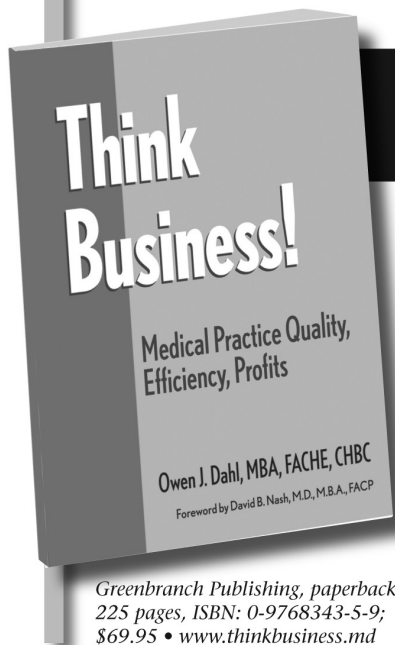
Even as it achieves lean, a practice must continue to look for ways to improve. Lean is a never-ending process. With government regulations and insurance requirements

continually changing, your practice must continue to modify what it does to adapt and keep its value. Continually audit the model you develop, and offer seminars and workshops to keep staff updated and current on processes.

The goals of a practice are to decrease patient wait times; speed up room turnover; and increase charting accuracy, inventory control, and revenue. Employees should have input; they may offer time- and money-saving ideas. Keeping the lines of communication open is important to the overall success of the program. The benefit is more time with patients, which in turns means increased patient satisfaction and increased revenue.

Lean healthcare does not look to eliminate staff or compromise quality or inventory. The goal is to do more for the patient with fewer resources by trimming the nonessentials. With the right leadership, this can be accomplished. ■

**From Nationally-Renowned business expert, Owen Dahl, a new playbook for your medical practice.**



Greenbranch Publishing, paperback,  
225 pages, ISBN: 0-9768343-5-9;  
\$69.95 • [www.thinkbusiness.md](http://www.thinkbusiness.md)

## **Think Business!** **Medical Practice Quality, Efficiency, Profits**

*"If you own, run or have anything to do with a medical practice, you must read this book."*

No longer can the business of the medical practice be based on the intuition of the physician or office manager. Owen Dahl decodes business theories and applies them to today's medical practice. He takes you far beyond marketing, human resources, finances and patient-orientated service and will revolutionize how you think about:

- ❖ Financial fundamentals — how to keep tabs on the practice
- ❖ Employees as assets: How to recruit and retain them
- ❖ How to differentiate your practice from your competition
- ❖ Setting the stage for pay-for-performance and quality of care
- ❖ Motivate employees to build great teams; it's not only about money
- ❖ Smart strategies to focus your practice as a business

*"...this book is an easy-to-read mini-MBA curriculum...Dahl has done a great basic service by providing administrators and doctors with a easy-to-read repository, for all of the current business school information necessary for us to compete in the 21st century." — David Nash, MD, MBA*

**Start taking your practice to the next level. [www.thinkbusiness.md](http://www.thinkbusiness.md) or (800) 933-3711**

  
**GREENBRANCH  
PUBLISHING**

### **5 Easy Ways to Order**

**CALL:** (800) 933-3711  
**FAX:** (410) 329-1510  
**EMAIL:** [ncollins@greenbranch.com](mailto:ncollins@greenbranch.com)

**WEB SITE:** [www.mpmnetwork.com](http://www.mpmnetwork.com)  
**MAIL:** Greenbranch Publishing  
PO Box 208, Phoenix, MD 21131

**Order  
Today!**

**(800) 933-3711 • [www.thinkbusiness.md](http://www.thinkbusiness.md)**