Going Lean, Part 1: Creating Value in the Ophthalmology Practice

It is widely acknowledged that the U.S. health care system is facing significant challenges. Foremost among these are concerns about the value of the health care that's delivered to patients, where value can be thought of as the quality-cost ratio.

Why policy makers are focusing on value. The share of the U.S. gross domestic product that is devoted to health care has increased from 7% in 1970 to 17.5% today, a figure that considerably exceeds the percentage in other industrialized nations.[1] Yet most population health outcomes suggest that the U.S. health care system is not making the best use of the considerable resources devoted to it. In response, legislators and regulators have been ratcheting up the focus on value. The meaningful use program, for example, incentivized the adoption of electronic health records so that value can be measured more easily. And though the rules haven't yet been finalized for the new Quality Payment Program, it is clear that CMS will be further shifting the emphasis away from fee-for-service toward value-based payment. (See aao.org/medicare for the latest information on this new program, which will include 2 payment systems: the Merit-Based Incentive Payment System and alternative payment models.)

Physicians need to take the lead on value. The complexity of these regulatory programs, along with downward pressure on reimbursement, has led to frustration on the part of many physicians as they try to address the challenges of today's health care environment. Ophthalmologists need strategies for improving value in their practices, and the "going lean" approach has been proven to work in health care.

What Is Lean?

We're becoming more accustomed to hearing about "doing more with less." Yet if I were to ask you to see more patients with less staff, you might sneer as you asked, "And just exactly how am I to do that?"

Take the lean approach. The lean health care approach involves 1) identifying what it is that the patient values, 2) reviewing the processes that are used to provide that value and breaking each process down into its constituent steps (this is known as value stream mapping), 3) reviewing each step to look for waste, and 4) eliminating that waste.

No more *muda*. The Japanese, who developed the concepts of lean management in the manufacturing sector in the 20th century, have a word for waste: *muda* (pronounced "moo-dah"). Say the word a few times, and you'll appreciate the unpleasant taste as it rolls off your tongue. That's the point! The essence of lean is eliminating muda. Nobody wants to pay for waste—not patients, insurers, employers, or ophthalmology practices.

Origins of lean. The ideas of lean management have been around for some time, as evidenced by the quote from Ben Franklin (see below). However, it was 1913 when the ideas were first put into practice on a wide scale. This is when Henry Ford, in Highlands Park, Mich., revolutionized the mass production of the Model T via a process that he called "flow production." Kiichiro Toyoda, Taiichi Ohno, and others at Toyota expanded on Mr. Ford's ideas before and after World War II. They created the Toyota Production System, which is the modern model of lean thinking in the manufacturing sector.[2] The concepts have been co-opted successfully by a number of health care systems and are directly applicable to the challenges faced by today's ophthalmology practices.

Ben Franklin wrote: "He that idly loses 5 s. [shillings] worth of time, loses 5 s. & might as prudently throw 5 s. in the river." —*Poor Richard's Almanack, 1737*

The Value Stream

In evaluating practice efficiency, focus on what the patient values. This might be a product (e.g., glasses) or a service (e.g., cataract surgery) that allows the patient to drive or read, or that otherwise empowers him or her to live a fuller life (hence the Academy's

BY **ROBERT E. WIGGINS MD, MHA,** ACADEMY SENIOR SECRETARY FOR OPHTHALMIC PRACTICE.

tagline, "Protecting Sight. Empowering Lives.").

Understand the value stream. Your practice encompasses multiple processes that link together to provide patients with the products and services that they value. Many of these processes occur outside the domain of the ophthalmologist's encounter with the patient. For example, the processes involved in a patient's clinic visit include:

- Scheduling an appointment
- Checking in
- Being evaluated by a technician
- Seeing the ophthalmologist
- Undergoing any number of ancillary services depending on the problem
- Billing
- Scheduling a follow-up appointment

Each of these processes consists of different steps. The steps within these various processes, along with the way those processes are linked in order to provide value to the patient, are collectively known as the value stream. *Lean* is concerned with all of these processes and the continuous flow from one to the next.

Identify Waste

Once the processes (and steps within them) that provide value have been identified, it is time to eliminate waste from them. It is by eliminating waste that lean helps the bottom line.

Use "downtime" to spot 8 types of waste. First, it is necessary to recognize (and commit to memory, with the aid of the DOWNTIME mnemonic) the 8 types of waste.

1. Defects—this can include defective work that has to be redone (for example, rechecking a patient not seeing well with glasses).

2. Overproduction—for example, overbooking for no-shows.

3. Waiting—this can be a problem for patients, physicians, and staff members (for example, when a physician has to wait for the technician to complete a workup).

4. Nonused employee talent—not letting staff work to their full potential. For example, if technicians aren't given a role in doing the refraction, that task will be performed by more highly qualified individuals. This could be undermining your technicians' job satisfaction, and you are also failing to free up time for others to use their unique skill sets.

5. Transportation—this can involve moving people, objects, or information (for example, using paper to post charges rather than doing it electronically).

6. Inventory—for example, overstocking or losing track of intravitreal drugs.

7. Motion—wasted motion, such as searching for missing trial lenses.

8. Excess (over-) processing—for example, repeating measurements that an orthoptist has taken.

You'll be surprised by how much waste you find. Currently in your practice, many instances of waste are probably going unnoticed, even though you look directly at them every day. But once you learn to recognize the 8 types of waste, you will start to see waste everywhere—especially if you are obsessive-compulsive, as I am.

What Can You Do Now?

Work *on* your practice, not just *in* it. Step back for a moment and look at workflow in your office. Although the delivery of ophthalmic care is organized around people (the ophthalmologists and staff), the lean perspective is that most problems encountered in practices relate to faulty processes.

Take the patient's perspective. While looking at your workflow, you may notice something interesting. Focus on your patients and the processes they encounter, and consider which processes provide patients with a direct benefit. You'll find they are receiving such care only a minority of the time; while the staff may be busy running around (e.g., looking for equipment or entering data), the patients often spend most of their time waiting.

Start with the low-hanging fruit. You don't have to improve everything in your practice all at once. Use benchmarking to determine where you're performing poorly compared with other practices. You can then focus on those processes that will have the greatest impact on improving your practice operations: Are your staffing costs out of line, are you seeing fewer patients than your colleagues, or is your billing operation inefficient? You can access these kinds of benchmarks by participating in the AAO/AAOE Academetrics program (aao.org/benchmarking). This includes a financial benchmarking survey that takes place each spring and an ongoing salary survey.

Start small. Test your ideas in a small way: on 1 patient, on 1 staff member, in 1 clinic, or 1 morning. After you see promising results, test the ideas on a larger population, and if they are successful, deploy those changes throughout the organization.

Make it a team effort. Involve your staff in how the practice can be more efficient by decreasing waste and adding value for your patients.

Hopefully, the lean concept has piqued your interest, and you've already begun thinking about how you can apply these ideas to your practice. The bottom line is that the lean approach to health care provides you with some powerful tools. Use them to improve operations in your practice and reap the long-term dividends.

1 www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical.html. Accessed Aug. 26, 2016.
2 www.lean.org. Accessed Aug. 26, 2016.

AAO 2016
In conjunction with APAO
INNOVATE

MORE AT THE MEETING

Mastering the Art of Lean Ophthalmic Practice (Spe07). In this 4-hour workshop, you will learn how to create your own value stream maps. This will provide you with a powerful tool for analyzing your practice's current processes. The event's instructor—Aneesh Suneja, MBA—will help you discover ways to improve practice flow and enhance the patient's experience. *When: Saturday, Oct. 15, 12:30-4:30 p.m. Where: Room S502ab. Access: Separate registration required.*

To register, visit aao.org/programsearch.