

## *The Value of Physician Leaders*

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**A** recent headline reported “four wrong site surgeries in 40 days.” This is the stuff of administrator nightmares.

The root cause of this unfortunate series of errors was likely weak, ineffective, or absent physician leadership that resulted in poor compliance with the surgical checklists and site marking. This example shows just how difficult it can be to manage clinical variation and adherence to national guidelines, as well as to change physician practice patterns.

Achieving compliance is difficult because physicians will listen only to respected physician colleagues on matters of clinical medicine. As administrators, we have tried, with only modest success. Nursing leaders also have tried, also with modest success. Healthcare organizations need well-trained physician leaders who can inspire, convince, and influence their colleagues to change the way they practice medicine. It is the only way to dramatically improve clinical care and patient outcomes.

### **WHY FOCUS ON PHYSICIANS AND PHYSICIAN LEADERS?**

According to The Advisory Board, physicians affect more than 80% of patient outcomes because of the decisions they make and the orders they write—what is commonly known as the power of the pen or, today, the power of the keyboard. What we commonly call physician practice patterns, and especially the variation in practice patterns among physicians, will create the very outcomes that patients experience and that directly affect an organization’s profitability.

### **WHAT IS AT STAKE?**

Here are some recent statistics:

- According to David Classen, MD, associate professor of medicine at the University of Utah School of Medicine, “New studies suggest that inpatient safety problems may result in the death of over 400,000 patients a year and may result in more than 6 million injuries per year.” Medical errors have become the third leading cause of death in the United States (the first is cardiovascular disease, followed by cancer).
- According to The Leapfrog Group (2016), approximately 40% of hospitals recently received a Hospital Safety Score of C, D, or F—and this despite the fact that the Institute of Medicine report, *To Err Is Human*, was published in 1999, 17 years ago.

- Approximately 500,000 patients experience a surgical site infection (SSI), which makes them five times more likely to be readmitted to the hospital and twice as likely to die. However, 40% to 60% of SSIs are preventable. In 1985, the cost of treating one SSI ranged from \$2,734 to \$26,019 (Perencevich et al., 2003).
- About 5% to 6% of hospitalized patients acquire an infection, resulting in 88,000 deaths each year, or one death every 6 minutes (Kirkland, Briggs, Trivette, Wilkinson & Sexton, 1999; National Academies of Sciences, Engineering, and Medicine, 2006).

Let's look at one type of outcome: complications. A complication is a "secondary disease, an accident, or a negative reaction occurring during the course of an illness and usually aggravating the illness" (American Heritage Dictionary, 2015). Examples include respiratory failure following surgery, acute renal failure following surgery or a radiographic procedure requiring intravenous contrast agents, ventilator-acquired pneumonia, a central line infection, wound infections such as SSIs, and wound dehiscence. Some providers believe that complications are just a fact of life in clinical care. However, many organizations have pushed complication rates to all-time lows.

Here are some facts about complications:

- Complications are expensive. On average, one complication adds \$8,000 to \$10,000 to the cost of a hospitalization, but the cost of some common complications can be much higher (Fuller, McCullough, Bao, & Averill, 2009).
- Too many complications can ruin a hospital's ratings. For example, a one-star rating on Healthgrades places a hospital in the bottom 10% to 15% of U.S. hospitals.
- Complications are dangerous and can lead to increased mortality. As stated earlier, an SSI doubles the risk of mortality in surgical procedures.
- Complications increase the length of stay (LOS) because they require additional treatment, which takes time (a median of up to 2 weeks).
- Complications add to patients' pain and suffering.
- Many complications, perhaps 50% or more, are preventable in the average hospital.
- Complications must occur rarely for a hospital to maintain its profitability under bundled payment and diagnosis-related group reimbursement.
- Complications must be actively managed to ensure a hospital's complication rates are low.

### **PHYSICIAN LEADERS ARE A BIG PART OF THE SOLUTION**

Hospital leaders need to ask themselves several questions. Who is managing the hospital's complication rates? What are the most common complications in the organization? Which complications are the most costly in a given year? What has been the run rate for the top 10 complications? Are they trending up or down?

CEOs and other C-suite leaders must know the answers to these questions. Though they may assume that complications are actively managed in their organizations, in the majority of U.S. hospitals, this is not the case. If this responsibility has not been assigned to a C-suite leader, the organization is missing a huge opportunity—an opportunity that may be worth millions of dollars. In addition, if hospital leaders have delegated oversight of quality to medical staff and effective physician leaders are not in place, the odds are almost 100% that complications are not being actively managed.

When I walk into an organization for the first time, I know that hundreds of complications can be eliminated. At an average cost of \$8,000 to \$10,000 each, the cost of hundreds of complications can add up quickly (Figure 1). Hiring part-time physician leaders is a cost-effective way to capture this potential cost savings.

For example, an opportunity cost analysis for colon resection is shown in Figure 2. We calculated the additional cost resulting from the seven complications shown. A total of \$3,054,000 in additional costs were attributable to these complications. The cost of a quarter-time medical director (a surgeon at \$150 per hour) is \$76,000 annually. If the medical director leads efforts to decrease the complication rates and associated costs by a reasonable 10%—or about \$300,000—the return on investment is more than adequate. In my experience, most teams can eliminate more than 10% of complications.

**FIGURE 1**  
Average Costs of Common Complications

• Decubitus Ulcer	\$28,272
• Postoperative Deep Wound Infection	\$27,814
• Clostridium Difficile Colitis	\$25,401
• Sepsis	\$23,451
• Reopen Surgical Site	\$19,442
• Venous Thrombosis	\$15,976
• Pulmonary Embolism	\$16,331
• UTI	\$ 9,637

Richard Fuller, Elizabeth McCullough, Mona Bao, Richard Averill, Estimating the Costs of Potentially Preventable Hospital Acquired Complications, *Health Care Finance Review*, Summer, 2009, 30:17-32

**FIGURE 2**  
**Opportunity Cost Analysis for Colon Resection**

Opportunity Analysis—Just Seven Complications		
<ul style="list-style-type: none"> <li>• Colon Surgery</li> <li>• Seven Preventable Complications</li> <li>• Quarter-time medical director</li> <li>• One of three projects</li> <li>• Annual ROI of physician</li> </ul>	DVT	\$180,000
	ARF	\$820,000
	Abcess	\$75,000
	Internal Obstruction	\$545,000
	Accidental Operative Laceration	\$203,000
	Respiratory Failure	\$971,000
	Wound Infection	\$260,000
<b>TOTAL</b>	<b>\$3,054,000</b>	

A small group of physician leaders can remove millions of dollars in unnecessary costs.

By managing complication rates, hospitals also will have fewer readmissions, shorter LOSs, better mortality rates, lower costs of care, and improved profitability. In other words, by managing just this one group of outcomes—complications—healthcare leaders improve all of the other outcomes.

**POOR OUTCOMES ARE COSTING HOSPITALS MILLIONS**

In a second example, the efforts of one part-time medical director in a healthcare organization in Michigan resulted in an 18% reduction in hematoma rates, a 44% decrease in coronary perforation rates, a 35% decrease in readmission rates, and a 23% decrease in LOS. In aggregate, savings were approximately \$1.3 million (Byrnes & Fifer, 2010). Hospital leaders viewed the decrease in LOS and readmission rates as a positive outcome because of the need to create virtual capacity. Reducing these rates is also needed under bundled payment scenarios and many value-based contracts.

If medical directors, such as those in the above examples, are placed in every specialty or service line, the savings will be substantial. Using these strategies in my previous organization resulted in annualized savings in excess of \$25 million after 5 years.

Frontline physicians and their practice patterns are the two major factors in patient outcomes—in this case, complications. We know that the best way to influence physician practice patterns is through peer-to-peer dialogue, a process often led by a well-respected physician leader.

Here is my formula for eliminating preventable complications:

- Hire part-time physician leaders for each service line and major specialty. Pair these leaders with an administrative or a nursing counterpart (i.e., in a dyad leadership model).

- Train these physician leaders in the practical aspects of clinical quality improvement, not in the theory of clinical quality improvement.
- Supply them with actionable data: dashboards for high-volume medical conditions and surgical procedures. This information will need to be physician-level data that can be trended over 24 months.
- Assign three dashboards to each physician leader and agree on goals for reducing complications over the next 12 months.
- Assign talented quality improvement experts and data analysts to support the physician leaders.
- If your organization is large, consider hiring a chief quality officer to train, mentor, and coach physician leaders, as well as to manage the portfolio of improvement projects. Similar to an investment portfolio, it is expected to generate a healthy return. A portfolio of well-executed continuous quality improvement (CQI) projects will do just that.

These are just some of the ways physician leaders create value in today's health-care environment. Frankly, organizations cannot afford not to have a contingent of well-trained, effective physician leaders managing a portfolio of CQI projects. Each physician leader is worth millions.

#### NOTE

Portions of this column have been adapted from *The Quality Playbook: A Step-by-Step Guide for Healthcare Leaders*, by John Byrnes, MD (Second River Healthcare, 2015).d

#### REFERENCES

- American Heritage Dictionary of the English Language. (2015). Boston, MA: Houghton Mifflin Harcourt Publishing.
- Byrnes, J., & Fifer, J. (2010, March/April). Process and structure for quality and cost improvement. *Physician Executive Journal of Medical Management*, 38–43.
- Fuller, R., McCullough, E., Bao, M., & Averill, R. (2009). Estimating the costs of potentially preventable hospital acquired complications. *Health Care Finance Review*, 30(4), 17–32.
- Kirkland, K. B., Briggs, J. P., Trivette, S. L., Wilkinson, W. E., & Sexton, D. J. (1999). The impact of surgical-site infections in the 1990s: Attributable mortality, excess length of hospitalization, and extra costs. *Infection Control & Hospital Epidemiology*, 20(11), 725–730.
- Leapfrog Group. Hospital Safety Score. (2016, April 25). Retrieved from <http://www.hospitalsafety.org/about-us/newsroom/display/442022>
- National Academies of Sciences, Engineering, and Medicine. (2006, July 20). Medication errors injure 1.5 million people and cost billions of dollars annually: Report offers comprehensive strategies for reducing drug-related mistakes. Retrieved from <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=11623>
- Perencevich, E. N., Sands, K. E., Cosgrove, S. E., Guadagnoli, E., Meara E., & Platt, R. (2003). Health and economic impact of surgical site infections diagnosed after hospital discharge. *Emerging Infectious Diseases*, 9(2), 196–203.