The simple truth of health system reform is this: Hospitals will have to do more with less. Medicare’s value-based purchasing, accountable care organizations and bundled payments, and similar programs by private insurers almost certainly will reduce overall health services payments. Exactly how much is far from certain. However, many hospital leaders and management experts expect overall revenues from all sources to fall to Medicare levels or less.

The problem is that most hospitals lose money on Medicare — lots of it. On average, hospitals would have to cut direct costs per case by about 14 percent to maintain current contribution margins if all payers reimbursed at current Medicare rates, according to analysis of 2010 data by Sg2. Joan Moss, R.N., senior vice president at Sg2, says most of the hospitals with which she works are planning for cuts in the 15 to 20 percent range. Lani Berman, senior director of analytics and gainsharing for health alliance VHA, says she’s seen hospitals preparing for 30 percent.

But cutting costs is only half the impact. Bundled payments, capitation and accountable care organizations also put hospitals at risk for the cost and quality of care outside their walls. Hospitals will need to focus on cost per episode and more broadly on the cost per capita and the cost across the continuum for the entire population.

Moss advises approaching cost reduction in four phases. First, reduce variation by standardizing protocols, purchasing and service location at the DRG level. Second, eliminate unnecessary care, which includes reducing provider errors, preventable readmissions, avoidable conditions and unnecessary diagnostic tests. Third, restructure costs to use the lowest cost setting and provider possible for each service. Sg2 estimates these three steps may save hospitals about 10 to 15 percent.

The fourth phase is adopting a system of care strategy. This includes strategies such as medical homes and disease management that will reduce the overall need for hospital services. It involves redesigning care to focus on the disease level, engage physicians and other clinic partners inside and outside the hospital, and continuously measure and improve performance, Moss says. “When you are looking at 15 to 20 percent, you can’t get there any other way.”

Achieving the higher levels of quality, efficiency and coordination government and payers demand will require overhauling nearly every aspect of hospital operations, from clinical services to staffing, pharmacy, supply chain management, and construction and plant operations. In many cases, it also will require partnering with other providers, merging and repurposing facilities or even eliminating some facilities, organizations or services. These newly aligned entities also will have to be managed more consistently to ensure that best practices are adopted systemwide.

Implications for Trustees
Hospital trustees will play a crucial role in these transformations. As community representatives, they will be involved in reassessing and refocusing the organizational mission, and evaluating potential mergers and partnerships. Trustees also will play a key role in gathering resources for investments in staff training, new technology and information infrastructure, and purchasing existing clinical and other system assets.

The following sections examine some of the operational and structural changes required in several areas to improve care while reducing costs. These include clinical efficiency, staffing, pharmacy, supply chain and energy. The role of trustees in each also is described.

**Clinical Efficiency**
In its 2011 report “The Healthcare Imperative,” the Institute of Medicine estimates that of $2.5 trillion spent on health care in the United States in 2009, $765 billion — 30 percent — was wasted. Of that, $390 billion, or nearly 16 percent of total expenditures, was directly related to clinical
efficiency, including $210 billion in unnecessary or ineffective services, $130 billion in inefficiently delivered services and $55 billion in missed prevention opportunities. Other estimates put the clinical waste figure as high as 30 percent.

Clearly, there is much to be gained by improving clinical efficiency. But more important than a 15 to 20 percent cost reduction, improving clinical efficiency will improve patients’ lives and limit injuries they experience from unnecessary, duplicate, ineffective or poorly delivered services.

For hospitals, the tasks are eliminating mistakes, rework, unnecessary readmissions and other inefficiencies by using the right staff, the right processes and the right tools in every case. It means knowing how individual service lines affect overall operations, setting specific targets, collecting and analyzing data to measure progress in real time, forecasting future trends accurately, and being nimble enough to make adjustments in a timely fashion.

An in-depth study by the Commonwealth Fund and Health Management Associates of 13 hospitals out of 1,300 identified by the Leapfrog Group as achieving top quality scores while keeping costs low provides insight into how this can be done.

First, all of these high-performing hospitals focused their efforts on improving the patient experience and patient care rather than cutting costs. They improved and streamlined inpatient care processes, removed roadblocks to patient flow and implemented aggressive disease management. The resulting reductions in care delays, avoidable readmissions and other waste also reduced costs. Improved efficiency also increases return on system assets by increasing patient throughput, effectively adding capacity without expanding facilities.

Common strategies employed by these hospitals included:
- **Actively engaging front-line staff in performance improvement.** Recognize staff for their contributions, and evaluate managers in part on their performance improvement activities.
- **Formal training in quality improvement and monitoring** for both clinical and nonclinical staff, emphasizing data-driven analysis. These successful hospitals developed benchmarks and dashboards that included both care process and cost measures, and used them constantly to guide work.
- **Interdisciplinary meetings,** including team meetings and huddles before surgery to identify issues and plan for potential roadblocks to discharge.
- **Standardizing and simplifying processes.** Unnecessary steps and supplies are eliminated; necessary equipment is accessible and maintained in an orderly fashion.
- **Using a common electronic medical record.**
- **Using hospitalists and intensivists.** Because hospitalists are always on-site, they can determine if a patient is ready for discharge more readily than off-site physicians, thus improving throughput. They can spend more time educating patients, especially at discharge, to avoid unnecessary readmissions. Intensivists can play similar roles in the surgical arena.

In addition, the following strategies have been used widely to improve clinical efficiency:
- **Service-line management.** A clear understanding of how individual service lines connect with the organization as a whole is essential. Coordination is key when a service line is delivered at multiple sites in a health care network.
- **Strategic staff deployment.** Making sure the right number and type of staff are on hand at any given time and evaluate managers in part on their performance improvement activities.

requires hospitals to understand patient-flow patterns. Some hospitals have encouraged different units to lend staff to each other when there are unexpected surges in demand. Elective procedures can be scheduled to make the most efficient use of staff.

**Physician partners.** Shared savings programs encourage physicians to participate in efforts to improve efficiency and cut costs. Physician support for care coordination and protocol development is essential.

At a system level, clinical efficiency can be improved through restructuring. Reassessing facilities and their functions in light of new protocols allows services to be consolidated and redeployed in the least expensive settings. Integrating inpatient and outpatient services improves care and reduces readmissions through such strategies as case management and creation of medical homes to coordinate care.

**Implications for Trustees**

Governance support and guidance are essential to maintain a focus on community needs as systems re-evaluate strategies and realign services. Trustees may be asked to consider mergers and partnerships that increase efficiency. Board support also is essential for building the necessary information technology and medical records infrastructure.

**STAFFING COSTS**

Wages and benefits make up nearly two-thirds of hospital operating budgets, according to American Hospital Association data. Staffing is also a major cost driver, accounting for about 35 percent of hospital spending growth.

Many opportunities exist to reduce
staff costs without sacrificing service or clinical quality. But much of the improvement opportunity comes down to better matching the number of employees and their skill mix to the tasks at hand. For example, ensuring that clinicians are practicing at their highest level of training will improve quality of care and reduce overall costs.

Many high-performing hospitals also use flexible staffing, cross-training team members on different units so they can help each other as utilization patterns shift from day to day.

Hospitals also should look at total rewards, including wages and benefits. Focus on benefits that have the highest impact on employee behavior and enhance employee engagement. A comprehensive review of benefits may identify outdated and unnecessary offerings, including those put in place during times of intense workforce shortages.

The shift to pay for performance and value-based purchasing should be reflected in new rewards systems; employees should be rewarded for the quality of services performed, rather than quantity.

Hospitals can take six steps to reduce staffing costs.

1. Analyze staffing costs. To optimize staffing levels, hospitals must ensure that the right employee is working in the right place at the right time. By automating the workforce planning process, organizations can identify anomalies in staffing patterns and make more informed staffing decisions.

2. Set expectations. Hospital leaders should meet with medical staff leaders and department heads to set expectations on the number of full-time employees by skill mix allowed per acuity level. Organizations may find that certain departments are staffing at levels above national benchmarks.

3. Develop staff competence and redeploy to achieve organizational goals. Ensure that staff have the proper skills to do the job and cross-train to provide flexibility.

4. Revamp total rewards. Total rewards programs should support the organization’s strategic objectives, achieve the optimal workforce composition and behaviors, and provide opportunities to build skills and develop leaders.

5. Track and contain additional labor expenses. Create pay codes to track accurately such additional labor expenses as standard overtime pay or on-call bonuses.

6. Focus on wellness. Provide incentives to employees to improve their health. Wellness programs can curtail increases in health insurance premiums, reduce sick time and enhance employee engagement.

Implications for Trustees

Ensuring that staff cost-containment does not reduce quality or service is a governance function. Support efforts to develop staff skills and review clinical and patient satisfaction indicators to ensure that staff programs are on track.

PHARMACY

Drugs and dispensing are another major hospital cost, making up 10 to 20 percent of operating budgets. With drug costs already at 80 percent of pharmacy costs and increasing 3 to 5 percent annually, expenses are rising fast.

Standardizing formularies, buying in bulk and compounding individual doses, and tracking drugs to reduce drug errors that cost more than $8,000 on average can cut costs 20 percent while improving care. But the latest cost driver is drug shortages.

The shortage has wide-ranging effects. A July 2011 AHA survey found that 82 percent of hospitals delayed patient treatment because of the shortage and more than half of respondents couldn’t provide patients with the recommended treatment. More than 70 percent of hospitals implemented policies rationing drug use, the survey found.

The financial impact is also huge. Ninety-two percent of hospitals in the AHA survey said drug costs had increased. Beyond having to purchase more expensive alternatives, exorbitant prices are being charged on the so-called gray market. Some reports have shown markups as high as 650 percent for certain drugs. There are indirect costs as well. Because pharmacists, nurses, technicians and others spend a growing amount of time managing issues related to the shortage, the estimated labor cost is upward of $216 million, according to the American Society of Health-System Pharmacists.

While it may not be possible to completely offset a 650 percent increase, there are several steps hospitals can take to control shortage-related as well as normal pharmacy costs. Key strategies include tightening formulary management, more effective drug utilization and administration, automation and staffing models that rely on technicians, and allowing pharmacists to round on patient floors.

Pharmacy automation not only can create greater efficiencies, and thus save money, but it also can help hospitals achieve the so-called five rights of medication administration: right patient, right drug, right dose, right time, right route. According to the Healthcare Information and Management Systems Society, elements of pharmacy automation include: auto-identification; inventory management; unit-dose packaging; bar-code/labeling; IV compounding, bag/syringe filling and infusion robots; pharmacy robotic dispensing systems; decentralized automated dispensing cabinets; and bar-code medication administration.

Implications for Trustees

Ensuring that pharmacy issues do not reduce care quality or patient safety is a board-level responsibility. Monitor pharmacy cost and quality performance, including adverse drug events and care disruptions resulting from drug shortages. Support financing for technology that reduces errors, and support integrating pharmacy practice into other clinical disciplines.
**SUPPLY CHAIN**

Medical and other supplies can make up as much as 30 to 40 percent of hospital operating budgets, and are growing fast. In fact, the Association for Healthcare Resource & Materials Management projects that supply costs could exceed labor costs by 2020.

Hospital managers are realizing that supply chain issues are assuming strategic importance. Beyond the considerable expense, an effective supply chain can improve staff morale and improve clinical outcomes and safety. As a result, hospitals are elevating supply chain responsibility to the C-suite.

Standardizing commodities, maximizing use of contracts with group purchasing organizations and inventory management can turn up significant savings. In many cases, organizations will find they are not using the relationships with their vendors to the fullest extent. Better data systems to track supply use are critical to achieve supply chain control.

But the biggest gains may be in standardizing clinical supplies. This requires collaboration not only across clinical and management disciplines within facilities, but also across facilities. Standardizing clinical protocols for some of the most expensive items, including implanted devices and surgical supplies, requires extensive physician cooperation. It is truly an enterprise-wide effort. Below are eight strategies for improving supply chain performance.

1. **Build relationships.** Supply chain executives must garner support from all areas of the hospital to truly impact supply chain spending.

2. **Align with physicians.** Organizations need to engage physicians proactively in supply chain management. Placing physicians in leadership positions on value-analysis committees can help to achieve significant buy-in from the medical staff. Physicians also can be involved in contract negotiations, formulary development and technology assessment.

3. **Practice evidence-based medicine.** Eliminating variations in care through the adoption of evidence-based medicine not only improves outcomes, it also reduces expenses. Reducing readmissions and preventing infections, among other things, optimize reimbursement and place less pressure on the supply chain.

4. **Focus on clinical integration.** The supply chain should be integrated with the care delivery process. A high-performing supply chain delivers the right product, at the right time, in the right quantity, at the right cost, resulting in improved outcomes and greater efficiency.

5. **Automate the supply chain.** The need for automation in the supply chain is clear. Lack of automation can lead to overstock and overspending on supplies. Materials management information systems provide real-time information on pricing, product availability, contract compliance and usage. Automation also enhances supply chain accuracy and expedites the billing process.

6. **Adopt standards.** The adoption of supply chain standards such as GS1 can enhance efficiency, patient safety and regulatory compliance.

7. **Enhance value analysis.** The value-analysis process helps hospitals determine whether they are getting the right product at the right prices. Value-analysis teams provide nurses, physicians and others a say in product utilization and performance.

8. ** Think Lean.** Process improvement methodologies, such as Lean and Six Sigma, can identify inefficiencies within the supply chain and streamline processes.

**Implications for Trustees**

Establishing supply chain management as a C-suite-level responsibility may require governance support. Supporting clinical integration of supply chain planning and management is also crucial. And as with other cost-cutting moves, ensuring that quality and patient safety are improved through rigorous oversight is a board responsibility.

---

**ENERGY**

While energy represents a relatively small proportion of hospital costs, its cost is growing, and it is one of the easier costs to contain. A lot of it is simply turning out the lights, which accounts for nearly half of hospital energy costs.

But as with any organizational behavior change, raising energy use awareness requires planning. Steps include committing to energy efficiency at the senior management level; engaging facilities management; conducting an energy audit; developing an energy management team, including top IT and purchasing managers; retrofitting inefficient lighting; and engaging staff in contributing energy-reducing ideas. The Environmental Protection Agency’s Energy Star for Healthcare program suggests 10 steps to improve energy efficiency.

1. **Measure and track energy performance.**
2. **Ensure that all equipment is functioning as specified and designed.**
3. **Retrofit inefficient lighting.**
4. **Adjust thermostats for seasonal changes and occupancy.**
5. **Install variable frequency drives and energy-efficient motors.**
6. **Balance air and water systems.**
7. **Educate staff and patients about how their behaviors affect energy use.**
8. **Integrate efficiency goals into the design of new properties.**
9. **Work with the energy service provider to manage and improve energy performance.**
10. **Explore capital investments such as high-efficiency HVAC systems.**

These steps can improve the working environment as well as the hospital’s community image.

**Implications for Trustees**

Energy efficiency is a community concern. Governance support for these investments is helpful.

Howard Larkin is a contributing editor for Hospitals & Health Networks magazine.