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Gundersen Lutheran Health System: Performance Improvement Through Partnership

Sarah Klein and Douglas McCarthy
Issues Research, Inc.

ABSTRACT: Gundersen Lutheran Health System is a physician-led, not-for-profit integrated delivery system serving more than 550,000 people in Wisconsin, Iowa, and Minnesota. Gundersen Lutheran has increased efficiency, improved patient care, and achieved the high performance associated with large urban institutions by: 1) using clinical and financial outcomes to set benchmarks and targets for improvement, to increase transparency, and to drive improvement among physicians; 2) investing in primary care and disease management programs; and 3) hiring engineers to improve operations. It offers leadership training programs that encourage cross-training and partnership within the institution and uses external collaborations to improve community health and extend its models of care and service to outlying communities. Gundersen Lutheran's physician compact outlines the organization's expectations of physicians and ensures that its medical staff remains committed to the organization's mission: to distinguish itself in patient care, education, research, and community health.

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For more information about this study, please contact:

Douglas McCarthy, M.B.A.
Issues Research, Inc.
dmccarthy@issuesresearch.com

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OVERVIEW

In August 2008, the Commonwealth Fund Commission on a High Performance Health System released a report, *Organizing the U.S. Health Care Delivery System for High Performance*, which examined problems engendered by fragmentation in the health care system and offered policy recommendations to stimulate greater organization for high performance.[1] In formulating its recommendations, the Commission identified six attributes of an ideal health care delivery system (Exhibit 1).

Gundersen Lutheran Health System is one of a number of integrated delivery systems across the United States that The Commonwealth Fund is examining to illustrate these attributes in real-world settings. It is also one of a handful of such systems that may contribute to the higher performance of the state of Wisconsin

Exhibit 1. Six Attributes of an Ideal Health Care Delivery System

- ***Information Continuity*** Patients' clinically relevant information is available to all providers at the point of care and to patients through electronic health record (EHR) systems.
- ***Care Coordination and Transitions*** Patient care is coordinated among multiple providers, and transitions across care settings are actively managed.
- ***System Accountability*** There is clear accountability for the total care of patients. (We have grouped this attribute with care coordination, since one supports the other.)
- ***Peer Review and Teamwork for High-Value Care*** Providers (including nurses and other members of care teams) both within and across settings have accountability to each other, review each other's work, and collaborate to reliably deliver high-quality, high-value care.
- ***Continuous Innovation*** The system is continuously innovating and learning in order to improve the quality, value, and patients' experiences of health care delivery.
- ***Easy Access to Appropriate Care*** Patients have easy access to appropriate care and information at all hours, there are multiple points of entry to the system, and providers are culturally competent and responsive to patients' needs.

as a whole as measured by The Commonwealth Fund's State Scorecard on Health System Performance. Exhibit 2 summarizes findings for Gundersen Lutheran. Information was gathered from the organization's leaders and from a review of supporting documents.[2] The case-study sites included in this series exhibited the six attributes in different ways and to varying degrees. All offered ideas and lessons that may be helpful to other organizations seeking to improve their capabilities for achieving higher levels of performance.[3]

ORGANIZATIONAL BACKGROUND

Gundersen Lutheran Health System is a physician-led, not-for-profit integrated delivery system serving an area with more than 550,000 people in a tristate region that includes parts of western Wisconsin, northeastern Iowa, and southeastern Minnesota. It has a market share of 59 percent of the inpatient cases in its primary market, which is LaCrosse County, and annual net revenue of $732 million. The population it serves, which is both urban and rural, is healthier, less transient, and more educated—but older and poorer—than the national median.

The health system was created through the 1995 merger of Gundersen Clinic and LaCrosse Lutheran Hospital, which operated next to each other for decades and shared a common medical record, heating plant, and security service. They merged operations shortly after the Rochester, Minnesota–based Mayo Clinic bought a competing hospital and clinic, now known as Franciscan Skemp. Gundersen Lutheran employs more than 6,600 people, including 453 physicians who practice at a multispecialty clinic on the main campus in LaCrosse or at one of 48 clinics in surrounding communities. Together, these clinics provide a combination of medical, podiatry, behavioral health, eye, dental, and sports medicine services throughout the region. About 42 percent of these physicians provide primary care; the average panel size of each physician practice is 2,200 patients.

The hub of the system is a 325-bed teaching hospital, which serves as the western clinical campus for the University of Wisconsin Medical School and the University of Wisconsin–Madison School of Nursing. While the hospital has an open medical staff, only 3 percent of credentialed physicians are non–Gundersen Lutheran employees. Annual patient volume exceeds 15,000 inpatient admissions and 1.3 million clinic visits. A level II trauma center treats 24,000 patients per year. The system also includes

Exhibit 2. Case-Study Highlights

Overview: A physician-led, not-for-profit integrated health system serving an area with more than 550,000 people in a tristate region that includes parts of western Wisconsin, northeastern Iowa, and southeastern Minnesota through a 325-bed teaching hospital and 48 clinics that provide a combination of medical, podiatry, behavioral health, eye, dental, and sports medicine services in 24 communities. The health system employs 453 physicians, 42 percent of whom provide primary care. Gundersen Lutheran Health Plan offers employer-group, Medicare Advantage, and Medicaid program coverage, as well as third-party administrative services, to roughly 73,000 members. The health system's annual patient volume exceeds 15,000 inpatient discharges and 1.3 million clinic visits.

Attribute	Examples from Gundersen Lutheran Health System
Information Continuity	A custom-developed electronic health record (EHR) enables physicians at 63 outpatient sites to share patient records and laboratory results, refill prescriptions, maintain registries of patients with chronic conditions, and identify patients due for tests and immunizations. The hospital-based EHR system integrates medical records, laboratory results, imaging, and shared protocols. Clinicians in off-site urgent-care clinics have access to both inpatient and outpatient information. A patient Web portal is used by nearly 13,000 patients for health information, appointment requests, medication and allergy information, and e-mail with clinicians.
Care Coordination and Transitions; System Accountability*	A care coordination program ensures that patients who suffer from complex conditions, lack social support, and/or have difficulty coping with their medical conditions are assigned to registered nurses and social workers, who help them navigate the system. The program saved insurers $5,100 per patient in the first 12 months, by reducing hospitalizations and emergency department visits. Increased attention to patient preferences at the end of life reduced costs, as did smoother coordination between hospital, hospice, and home health care services. Standardizing the protocol for heart attack patients within a 150-mile radius reduced the "door-to-balloon" time (time it takes for a heart attack patient to receive angioplasty) from the sending community to Gundersen Lutheran to no more than 90 minutes 93 percent of the time. A MedLink program enables non–Gundersen Lutheran physicians to consult system specialists about diagnoses and medication via a toll-free number. Breast cancer patients are assigned a nurse navigator who coordinates appointments and communicates the care plan. Interdisciplinary teams are used to select the best treatment plans for patients whose complex cardiac diseases may be treated medically or surgically.
Peer Review and Teamwork for High-Value Care	Bringing physicians and administrators together in partnerships to plan, budget, and evaluate departmental performance creates a cascade of communication about organizational strategies and helps to ensure higher performance. A leadership training program, which includes cross-training and mentoring, helps to identify talented staff and equip them with management skills. A department chair college provides physician leaders with training on getting desired results. A physician compact ensures that medical staff practice evidence-based medicine, embrace innovation, and are respectful of other staff.
Continuous Innovation	Piloting the use of nursing teams (composed of an advanced practice nurse, a nurse educator and a quality improvement nurse) aims to increase consistency in infection control, patient safety, and similar areas of concern. Engineers identify and fix systemic problems in energy use, billing, and logistics. Employee health programs provide models for broader community health improvement.
Easy Access to Appropriate Care	Acute-care clinics offer same-day or next-day appointments with midlevel clinicians in internal medicine. Walk-in clinics, linked via EHR, provide immediate care in convenient locations. Telemedicine kiosks placed in rural communities enable less-mobile patients to communicate with Gundersen Lutheran nurses about chronic conditions.

* System accountability is grouped with care coordination and transitions, since these attributes are closely related.

a hospice, five pharmacies, an ambulance service, and a health plan.

Gundersen Lutheran Health Plan, created in 1995, provides employer-group, Medicare Advantage, and BadgerCare Plus (Wisconsin's Medicaid program) coverage, as well as third-party administrative services, to roughly 73,000 members. Approximately 20 percent of Gundersen Lutheran's patients are covered by the health plan. In addition, the plan serves patients using non–Gundersen Lutheran facilities through contracts with 24 local hospitals and 545 community physicians.

Gundersen Lutheran's mission today is substantially similar to that of Gundersen Clinic, which was founded in 1891 by Adolf Gundersen, M.D., a Norwegian surgeon, to provide high-quality, compassionate medicine to families in the area. The institution strives to provide high-quality, efficient care while improving community health and lowering costs. Its five-year strategic plan focuses on increasing patient access to care; demonstrating superior quality, safety, and service as perceived by patients; lowering the cost of care each year; developing a workforce that is engaged, inclusive, and responsive to changes in health care; and achieving programmatic growth that supports its overall mission (Appendix A).

Gundersen Lutheran supports a culture of collaboration—both internally and externally—through its leadership in the Wisconsin Collaborative for Healthcare Quality (WCHQ), a voluntary group of organizations working to improve the quality and cost-effectiveness of health care in the state; through its community programs, which address local public health challenges such as obesity and binge drinking; and through clinical partnerships that extend models of care developed at Gundersen Lutheran to other regional facilities.

In 2008, Gundersen Lutheran provided $7.5 million in charity care through its hospital and clinics.

INFORMATION CONTINUITY

Since 1998, Gundersen Lutheran has invested more than $100 million in hardware, software, and training for its electronic health record (EHR) system, which includes an internally developed outpatient platform. Known as the Clinical Workstation, the outpatient EHR enables physicians at outlying sites to view patient records and lab results, write prescriptions, and create and maintain registries of patients with chronic conditions. The system also indicates which patients are due for immunizations and recommended tests including mammograms, cholesterol screenings, and colonoscopies. Digital radiology images are available through a picture archiving and communication system that links 34 sites in the region.

> "We developed a culture where the medical and administrative people are not warring factions. For the most part they're looked at as partners."
>
> *Jeffrey E. Thompson*

The hospital's EHR is a third-party software platform from Epic System Corp. known as the Clinical Practice Module. It integrates medical records, laboratory results, imaging, and systemwide protocols for treating specific conditions; it also enables computerized physician order entry and provides clinical decision support, drug dosing information, and medication alerts. To be credentialed, physicians must know how to use the EHR. When the outpatient Clinical Workstation reaches the end of its lifespan in a few years, it will be replaced by a comparable Epic product and integrated with the hospital EHR. At present, the two systems share information related to patients' medication history, allergies, and discharge summaries.

Physicians and midlevel professionals working in local nursing homes and regional hospitals that are not owned by Gundersen Lutheran have read-only access to Gundersen's EHR. It enables them to view inpatient and outpatient records as well as laboratory and radiology results for Gundersen Lutheran patients who seek care in their facilities.

The health system's online patient portal, MyCare, enables patients to send secure e-mail to providers, see when preventive care exams are due, access medication and allergy lists, review laboratory results and letters from providers, and request appointments. It had 12,905 registered users as of April 2009. Seventy-

four percent of users are female and nearly 23 percent of all users are age 60 or older.

In all, information technology accounts for 9 percent to 10 percent of Gundersen Lutheran's net capital budget and 4 percent of its operating budget.

CARE COORDINATION

One of the keys to Gundersen Lutheran's strategy for improving quality of care and lowering its cost is the optimal use of medical resources for patients with complex conditions and minimal social support. Through a care coordination program, the health system identifies patients who are frequently hospitalized—or who make frequent visits to the emergency care or urgent-care clinics, lack strong support at home, or simply have difficulty coping with the complexity of their health care needs—and assigns them to one of 28 registered nurses and social workers who are trained to help them navigate the health care system.

The care coordinators, who often have years of health care experience in cardiology, pulmonary care, and behavioral health, help patients understand their illnesses, as well as physician instructions and medication needs. If necessary, they accompany patients to medical appointments or follow up when appointments are missed. "Our goal is to keep them out of the hospital," says Lois Tucker, R.N., a care coordinator. "We really help reinforce how they need to manage their disease." As a result, many patients come to recognize warning signs of worsening symptoms and will then contact either the care coordinator or their physician.

To improve communication among multiple providers, the coordinators also arrange care conferences in both inpatient and outpatient settings. Such conferences, which unite care coordinators with inpatient and outpatient providers by phone or in person, are useful in helping hospitalists determine the baseline status of patients who are newly hospitalized and gravely ill. The conferences also help outpatient providers understand the care plan developed by the hospitalists. Such communication is especially important at transition points between the hospital and a nursing home or between the hospital and home.

The care coordination program, which was piloted in 2001 and implemented in 2003, has demonstrated significant cost savings. Charges per patient after 12 months in the program have fallen on average by $7,300 (generating net savings of $5,100 after accounting for program costs of $2,200 per patient), as patients are hospitalized less and begin using clinics rather than the emergency department for care. The hospital uses the program for its health plan members as well as for the fee-for-service population, though doing so reduces its hospital revenue. "This is living up to [the] mission of improving the health of the community," says Jeffrey E. Thompson, M.D., Gundersen Lutheran's CEO.

Improving Care at the End of Life. Gundersen Lutheran has also increased coordination of care at the end of life—a time at which medical expenses rise—by implementing a comprehensive system for understanding, documenting, and honoring patient values and goals for care at the end of life in all health care settings. The documentation begins with the creation of advance directives that spell out what actions should be taken in the event that a patient is incapacitated or is no longer able to make decisions. Advance directives are embedded in the system's electronic medical records and are made available to all providers in all care settings. Discussions are held and reviewed periodically during many types of patient encounters to make sure that plans remain current.

A strong partnership with other local providers and community groups promotes advance care planning among community members before they become terminally ill. "We developed a communitywide approach to educating seniors about advance directives. Churches got involved, volunteers got involved. We involved other health care institutions," Thompson says.

A training program developed in partnership with a competing local health system, Franciscan Skemp Healthcare (a division of Mayo Health System), and other community groups helps promote a consistent approach to advance care planning among social workers, chaplains, and other volunteers who carry out community education. The program, known as

Respecting Choices, also is being used in other communities, states, countries, and health care settings to provide education, improve decision-making, and ensure that care at the end of life is consistent with patient preferences.[4]

Partnership with other hospitals and community groups is essential to ensuring that conversations with patients about treatment preferences at the end of life—and the documentation of them—are consistent across settings and sites of care, says Bernard J. Hammes, Ph.D., Gundersen Lutheran's director of medical humanities. Without such assurances, providers are tempted to dismiss documentation of treatment preferences from competitors because they are uncertain of the methods used to collect the information. "To have a truly successful outcome for the patient, there needs to be a standard of care, and a standard process, and a means for people to share the documentation," Hammes says.

A published study[5] of the program reported the following results for 540 patients who died in La Crosse County, Wisconsin, during 1995 and 1996 and received care in the last six months of life at health care organizations within the county:

- Eighty-five percent of the patients had an advance directive, whereas a systematic review of other improvement research has found that, on average, interventions result in only 46 percent of patients having completed directives.[6]
- Eighty-one percent of the patients (95% of those with directives) had their end-of-life preferences documented in the medical record, which helped promote awareness and use by physicians. In contrast, other studies have found that fewer than half of patients had such documentation in their records and that, when such documents did exist, their physicians were unaware of them.[7]
- Decisions at or near the end of life were "generally consistent with preferences stated in the advance directives," with some exceptions. Research in other settings has found that advance directives were often not followed in decision-making or that physicians misjudged their patients' treatment preferences.[8]

An internal study among these patients found that those with advance directives used $2,000 less in physician and hospital services in the last six months of life.

A more recent study involving 400 deaths of residents of La Crosse County at all health care institutions over seven months in 2007 and 2008 found that 96 percent had either a written advance directive or a Physician Order for Life-Sustaining Treatment (POLST), a standardized medical order that reflects patient choices about key medical treatments often used at the end of life.

In 2005, the health system began offering palliative care services to patients with end-stage disease, which reduced the rate of readmission by nearly two-thirds and lowered hospital-billed costs per patient by approximately $3,500 in the first 15 months of the program. Hospice and palliative providers have access to inpatient and outpatient medical records via the EHR, helping to ensure that patients who have serious and eventually fatal chronic conditions obtain seamless medical care across multiple settings, including home and hospital.

Owing in part to these programs and the low rate of reimbursement for Medicare beneficiaries in this region of the country, the cost of inpatient care at Gundersen Lutheran in the last two years of life was $18,359, or 29 percent lower than the national average of $25,860. The number of hospital days in the last two years of life was 13.5, nearly 43 percent lower than the national average of 23.6, according to data from the *Dartmouth Atlas of Health Care* on chronically ill Medicare beneficiaries who died between 2001 and 2005.

Enhancing Regional Coordination. Gundersen Lutheran also partners with competitors to ensure that patients in outlying areas benefit from the protocols it develops to standardize care across its system. Through the Priority One Heart Attack Program, 13 area emergency departments follow a Gundersen

Lutheran–developed protocol for treating patients who have had heart attacks. If a patient in a rural hospital needs cardiac catheterization, the treating physician can mobilize a team of specialists at Gundersen Lutheran to prepare for the patient and arrange for air transport with a single phone call. With this system, the "door-to-balloon" time from the sending community—defined as the time elapsed from the patient's arrival at the local facility to the inflation of an angioplasty balloon to open a blocked coronary artery at Gundersen Lutheran—is under 90 minutes 93 percent of the time and averages 60 minutes, even though some communities are as far as 150 miles away. By using this approach, Gundersen Lutheran has raised the ante on this indicator, as most hospitals in the U.S. do not include transport time in the calculation of time to treatment.

Gundersen Lutheran also makes its specialists available to consult with physicians, physician assistants, and advanced practice nurses via a toll-free number, through a service known as MedLink. In 2008, more than 14,500 calls were routed through an operator to specialists who were available to help confirm diagnoses and give information on medication.

Using Interdisciplinary Teams to Coordinate and Improve Care. Gundersen Lutheran creates interdisciplinary teams to speed treatment for life-threatening and complex conditions, to improve outcomes, and to help resolve differences when disagreements arise over the best course of action.

The Norma J. Vinger Center for Breast Care combines medical and support staff from clinical breast radiology, pathology, surgery, medical oncology, radiation oncology, and plastic surgery to develop and implement a treatment plan for women with breast cancer. The coordinated effort shortens the time between discovery and treatment to nine days, compared with a national average of 22 days, in part by combining as many as nine appointments—including those with oncologists, surgeons, and geneticists—on a single day. A nurse navigator helps coordinate those appointments and answers questions about the treatment plan. "From the patients' perspective, we are satisfying their needs in offering services and a treatment plan in a short period of time," says Jeffrey Landercasper, M.D., codirector of the breast cancer center.

The center employs subspecialized breast care radiologists, who tend to have more experience detecting very small tumors. It also encourages regular screening through letters to patients and publicity campaigns. As a result, the average invasive tumor is 12.04mm when discovered, 24 percent smaller than the national average of 15.9mm. Through early detection, screening by subspecialists, and the use of needle biopsies (as opposed to surgical biopsies), Gundersen Lutheran estimates that its cost of treating breast cancer is 35 percent lower than that of institutions using more traditional methods.

The health system also uses interdisciplinary teams to develop protocols for high-risk conditions. For example, a team of internists, hematologists, pharmacists, nurses, cardiologists, anesthesiologists, nurse practitioners, and representatives of information systems developed new guidelines for the way hospital patients are treated with anticoagulant (blood thinning) medication. Since revision of the guidelines in January 2009 to improve patient safety and increase the partnership between inpatient and outpatient providers after patients are discharged, the health system has noted increased attainment of treatment goals at all locations.

Another interdisciplinary team, made up of an interventional radiologist, a cardiologist, a vascular surgeon, a neurosurgeon, and a neurologist, meets weekly to pool its collective knowledge to determine whether patients with atherosclerosis (narrowing of the blood vessels) are appropriate candidates for procedures such as angioplasty or carotid endarterectomy or should be medically managed. This approach may help improve outcomes and reduce complications by matching patients to appropriate treatments and ensures that patients "are being treated with what we would consider a best-practice model," one derived from the best models of different specialties, says Sig Gundersen III, M.D., one of three medical vice presidents at the health

system. For carotid disease, for example, the group uses a protocol that was developed based on a literature review of the indications for each treatment option.

PEER REVIEW AND TEAMWORK FOR HIGH-VALUE CARE

Gundersen Lutheran invests heavily in systems and tools to identify leadership potential and programs that enhance such talent. Using assessments such as the Hogan Potential Report and the Myers-Briggs Type Indicator, and performance appraisals by senior leaders, the health system identifies employees with high potential and provides development to prepare them for more complex roles in the organization. One example is the use of cross-functional assignments that give high-potential employees more exposure to other parts of the business. The cross-training helps to reduce silos that develop when employees work in a single area for years on end. To ensure their success, the health system supports these employees with mentors and classes on leadership skills. New managers receive a three-day orientation, in addition to monthly educational sessions throughout their first year.

For physicians who demonstrate leadership potential, the organization has created a physician learning community that helps them understand the strategic and business side of health care. The group meets monthly with the organization's leaders to discuss institutional challenges and engage in problem-solving. The community also provides an opportunity to learn and practice leadership skills. The 20 physician leaders in the learning community were assigned the task of writing the health system's physician compact, which spells out the expectations of physicians and the organization's obligations to them. They were also charged with convincing the medical staff of the compact's merits and discussing how it would be integrated into everyday practice. The existence of the learning community signals that the health system leaders "understand that the future of health care relies on the vibrancy and preparation of its younger physician members," says Stephen Shapiro, M.D., chair of the department of surgery.

For new department chairs, the health system provides education in leadership skills (including how to reinforce behaviors that lead to desired results) and in performance improvement techniques. Department chairs also attend a two-session course each year that addresses one or more of the key strategies in Gundersen Lutheran's five-year strategic plan. Kathleen Klock, the organization's senior vice president, says that the programs have the effect of transforming elected department chairs from "free-roaming range hens" into "U.N. simultaneous translators capable of communicating the individual department's needs to the administration and communicating the organization's current state and strategy back to the department."

Department chairs and frontline leaders also have access to finance, human resources, and quality coaches who can step in and help on particular projects. For instance, specialists with expertise in process-improvement techniques helped the general internal medicine department analyze its scheduling system. That analysis led to creation of a same-day medicine clinic, staffed by associates and supervised by a physician. (See "Continuous Innovation and Organizational Learning" for more details.)

Building Partnerships. Gundersen Lutheran uses partnerships wherever possible to improve population health, organizational efficiency, and quality of care. It starts with a staffing model that pairs every clinician who has management responsibilities with an administrative partner, creating a synthesis, not just a handoff, of responsibilities. "We developed a culture where the medical and administrative people are not warring factions. For the most part they're looked at as partners," Thompson says.

The medical-administrative dyads are intended to ensure that key strategies are fully communicated and implemented throughout the organization. The partnerships are also critical to identifying and overcoming obstacles. As an example, each of the health system's three medical vice presidents is paired with an administrative vice president. Together, they work

to set budgets, monitor financial goals, and handle human resources issues related to physician and associate staff. Those pairs, who typically meet twice weekly, meet in turn with pairs of department chairs and their administrative partners to discuss whether quality, service, and cost targets have been met. The dyads create a cascade of communication, ensuring consistency and clarity for the key strategies of the organization. The partnerships also provide a means by which information can be quickly relayed from frontline staff to leadership.

The partnerships focus their conversations around performance data, enabling the teams to evaluate not only their own performance, but also that of providers and departments under their management. "It is the diligence and the rigor that you have to use to meet these sorts of targets," says Deb Rislow, R.N., M.B.A., administrative vice president and chief information officer.

Strategic Plan, Culture, and Compact. The binding agent in Gundersen Lutheran's culture is the physician compact, which spells out the expectations of medical staff and the institution's corresponding commitment to them. According to the compact (Appendix B), physicians are expected to:

- practice evidence-based medicine
- encourage patient understanding and access
- be respectful of all staff
- embrace innovation that improves patient care, service, and organizational efficiency.

In turn, the organization commits to its medical staff to recruit and retain outstanding staff, support career development, and acknowledge and reward superior performance that enhances patient care and improves the health system. The health system also agrees to communicate all organizational priorities, business decisions, and strategic plans, and to provide opportunities for constructive dialogue about those goals. "It comes as close as anything to defining the track for success within the organization," says Julio Bird, M.D., chief medical officer.

The health system makes clear that it will terminate any staff member who doesn't abide by the compact. "We fire more people for behavior issues than quality issues," Thompson says, referring to those who do not live up to the patient-oriented expectations of the compact.

The institution also puts leadership skill on a par with clinical skill, as it believes both are essential to achieving consistent, high-quality care. While it does not reward seniority, employees tend to remain there for decades. Teaching also plays an important role in creating a culture of excellence. "It instills excellence way beyond the organization that does not have those programs. You cannot fake it to a student or a resident," says Marilu Bintz, M.D., M.B.A., a medical vice president. "Everyone in this organization is obligated to teach. You can't say, 'No, thanks.'"

Compensation and Performance Feedback. Gundersen Lutheran does not use an incentive-based compensation system. Instead, salaries are set to be competitive in the market (using McGladrey & Pullen benchmarking data). Physicians are evaluated for productivity and citizenship; the latter is defined by adherence to the physician compact. They are also evaluated on measures of patient satisfaction, disease management, and patient access, which are recorded in the health system's dashboard. The measurement feedback is critical to improvement. "Eighty-five percent of the doctors in the country think they're well above average. And it's not because they're arrogant; it's because they don't have any data to prove them otherwise," Thompson says.

To address this, Gundersen Lutheran uses data on clinical and financial outcomes to set goals for physicians to aspire to. Department chairs and administrators are also evaluated on such measures, which may include disease management targets and patient satisfaction measures, as well as measures of financial efficiency. "There is a strong commitment to be as transparent as possible," Rislow says.

Gundersen Lutheran considers transparency, which drives competition internally and externally,

critical to improvement. Membership in WCHQ enables Gundersen Lutheran to compare its performance with that of other local institutions, including the Marshfield Clinic and the Mayo Health System's Wisconsin affiliates, and set goals for improvement.

The health system provides clinical leaders with protected time to carry out administrative duties. For instance, the medical director of a clinic may use 20 percent to 30 percent of his or her hours for administrative responsibilities. Relative value units, or RVUs, are assigned for that time.

Fact-Based Peer Review: System Learning. The hospital's peer review committee is composed of physicians and administrators who volunteer to meet twice monthly to review mortalities and morbidities using the Greeley Company model, which emphasizes improvement over punishment, and to reach a consensus about whether a death was preventable and/or whether there are opportunities to improve care. If the committee needs additional information from a physician, those inquiries are handled in writing. "It takes the emotions out and puts the facts in," Bintz says.

Individual physicians can also notify the peer review committee or the health system's executive committee of their concerns. "If we see anything that reflects a trend or violation of safety protocol, we will review the case and have meetings with the department and department members. We preface it by saying this is not about pointing fingers, it is about looking at some outcomes and how we could have prevented them on the basis of paying attention to process," Bird says.

Systemic issues are referred to a quality committee that addresses clinical practices and disseminates lessons across the organization through educational conferences, an executive committee newsletter, and residency training. For example, the organization developed standards for treating the acute phase of stroke to address inconsistent management of blood pressure. Because the recommendations in the literature were also inconsistent, the health system put together an interdisciplinary panel of neurologists, neurosurgeons, critical care specialists, and hospitalists to determine a standard, which is now taught to residents.

The health system convenes safety huddles when an adverse event or near miss occurs, or when staff members notice that a safety issue has occurred more than once. A huddle may also be called if an adverse event occurs at another health care facility, to ensure that the same event does not occur at Gundersen Lutheran. By the end of 2008, the health system had held 148 safety huddles involving 83 staff and 73 departments, and had made more than 50 changes to protocol as a result. For example, Gundersen Lutheran convened a safety huddle within 30 minutes of a medication error that occurred while the hospital was implementing its computerized physician order entry system. With nurses, pharmacists, and information technology specialists assembled, the group quickly determined that the new system required a new method of detecting prescribing and dispensing errors. Instead of having charge nurses handle this responsibility, as they had with the paper-based system, the bedside nurses would do so. A training module was developed that day and all bedside nurses had completed it within a month.

CONTINUOUS INNOVATION AND ORGANIZATIONAL LEARNING

Gundersen Lutheran encourages its clinical and administrative staff to pilot methods of improving organizational efficiency and population health. At present, the health system is testing the use of nursing teams, which include an advanced practice nurse, a nurse educator, and a quality improvement nurse, on clinical units. Together they handle indirect nursing roles once assigned to nurses on the unit, such as infection control, patient safety, and pressure ulcer monitoring. The teams are designed to free those unit nurses to spend more time at the bedside. The advanced practice nurses also intervene as needed in complex cases to review care plans and support nurses caring for those patients.

The program is designed to increase consistency in the functions the teams provide and ensure that quality and educational initiatives are fully implemented.

It already has reduced indirect nursing hours, without adding full-time equivalents, and has simplified scheduling. The teams were used to educate patients and unit nurses about patient falls. As a result, those units experienced a 29 percent reduction in inpatient falls (from 57 during the first six months of 2007 to 42 during the same period in 2008) and a 36 percent reduction in falls with injury (from 25 during the first six months of 2007 to 16 during the same period in 2008). The health system expects the program to increase staff satisfaction as well.

In April 2009, the hospital began reviewing seven-day readmissions of medical and surgical patients to determine whether those readmissions are preventable, using a committee of three hospitalists who determine whether the readmission is related to the previous hospitalization and, if so, whether it is a result of poor discharge planning or a lack of follow-up care. If the committee observes a pattern for a particular diagnosis or an issue with follow-up care, it may develop a care protocol to address the problem.

Ten readmission-related cases evaluated by mid-May 2009 involved patients with serious chronic conditions such as congestive heart failure and chronic obstructive pulmonary disease, a pattern consistent with overall readmissions at the hospital, says Mary Frances Barthel, M.D., the hospitalist director. None of the readmissions involved poor discharge planning or a failure to follow up, and only one was deemed possibly avoidable. "I was surprised by the number of patients who were truly documented to be as stable as they could ever be on discharge and then are unexpectedly readmitted within a really short period of time," she says. Those results may change when the committee expands its review to readmission within 30 days, she says.

Using System Engineering Techniques to Improve Efficiency. In recent years, the health system has hired a number of engineers, including Jerry Arndt, senior vice president of business services, and Jeff Rich, executive director of major projects and efficiency improvement, whose role it is to increase the efficiency of operations. They have applied process-improvement techniques—including Six Sigma and "lean" production techniques—to operational challenges (see box).

For example, the engineers and other process-improvement specialists studied workflow patterns of nurses and certified nursing assistants to make adjustments to the stocking of supplies. By putting supply servers in patient rooms, changing the timing of linen delivery, and equipping nurses and certified nursing assistants (CNAs) with handheld phones, they reduced the amount of time that nurses spend walking from 47 to 27 minutes per day, and reduced CNAs' walking time from 86 to 51 minutes per day.

In another project, a Pareto chart, used in quality control, showed which medications were most likely to be used in the operating room without being billed to patients. Once those drugs were identified, the team used software and single-slot drawers in the medication dispensing machine to ensure that they were properly billed, realizing $160,000 per year in additional revenue.

Energy Conservation. The engineers are also working on an ambitious plan to make the health system energy-neutral by 2014, meaning it will use no more energy from fossil fuels than it creates from clean energy (Exhibit 3). To do so, the health system must reduce the demand for energy in its existing facilities by 30 percent, reduce the need for energy use in new construction by 50 percent, and offset its remaining needs with renewable energy.

The health system expects to reduce its current energy use by 30 percent by retrofitting chillers and boilers, using high-efficiency light bulbs, and caulking windows, among other projects. An energy audit has identified a number of low- and no-cost ways of reducing energy use, such as removing the build-up of calcium carbonate in the tubing of clinic chillers, which are used to cool campus buildings. The calcium carbonate, which comes from the hard water supply, impedes heat transfer, increasing the amount of work the chiller motors must do. The addition of an acid feed—at a cost of slightly more than $2,000—has

Six Sigma	Six Sigma is a business improvement methodology that was first implemented by Motorola Inc. in 1986 to increase performance and decrease process variation in its manufacturing division. The method for eliminating defects in products or service has evolved over the last two decades and is now employed in many fields. Each project is carried out through a defined sequence of steps, designed to identify process weaknesses and potential improvements.
Lean	The phrase "lean production" was coined in the late 1980s by John Krafcik of the Massachusetts Institute of Technology and is derived from the Toyota Production System and manufacturing principles that have been in use for decades. Supported by a congruent organizational culture, lean is a management strategy for organizing and managing various operations through the identification of the value-added and non-value-added steps in any process or value stream. Lean eliminates waste by requiring less time, money, material, and labor while generating higher quality through the standardization of processes. The essence of lean is doing more with less. The lean model defines the value of a service or product in terms of the needs and satisfaction of customers or stakeholders. One example of a lean effort in health care is the standardization of processes associated with an evidence-based "bundle" of steps for ventilator care, reducing the rate of ventilator-acquired infections.

saved Gundersen Lutheran more than $20,000 annually. Gundersen Lutheran is aiming for a 50 percent reduction in energy use in new construction by using high-efficiency heating, ventilation, and cooling systems and low-flow plumbing fixtures, among other measures.

The health system expects to generate 3 million kilowatt-hours per year—the equivalent of 8 percent of the electricity used at its LaCrosse and Onalaska campuses annually—through a partnership with a local brewery. The health system is installing an engine at the brewery site that will convert the waste the plant discharges into electricity, which, in turn, will be sold back to the local utility. The health system is also exploring the use of wind turbines and hydrokinetics, which would create energy using the nearby river, among other projects.

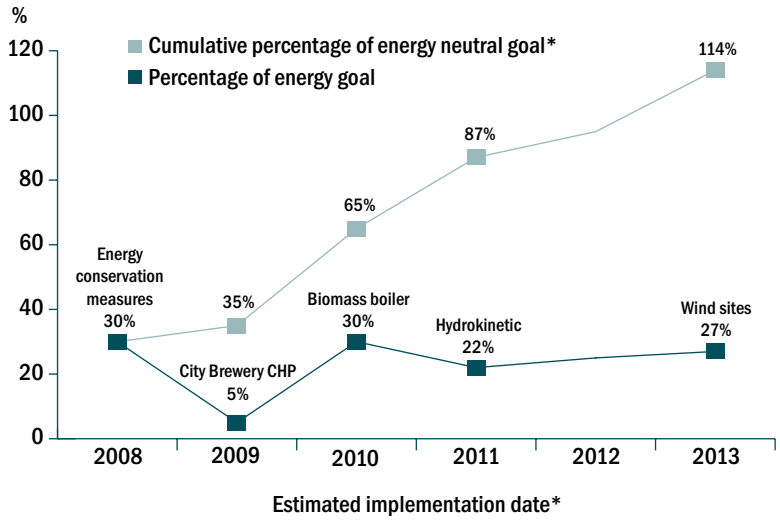
By the end of 2008, Gundersen Lutheran had reduced its electricity use by 4 million kilowatt-hours and its natural gas use by 16.5 million cubic feet, resulting in annualized savings of $409,000. By the end of 2009, it will have offset its energy use by 25 percent, saving the institution $1.25 million on expenses of $5 million. To reach the energy neutrality goal by 2014, Gundersen Lutheran may spend between $20 million and $30 million, but it expects to recover that investment through lower energy bills within five to eight years, Rich says.

In 2008, the health system recycled 29 percent of the solid waste material it produced, such as paper and cardboard, even though it is technically exempt from local recycling laws. (See http://www.commonwealthfund.org/Content/Newsletters/Quality-Matters/2009/May-June-2009/Case-Study.aspx for additional details about the health system's energy program.)

Investing in Community and Workplace Health Improvement. Gundersen Lutheran employs a number of methods to monitor population health and develop strategies for overcoming problems it identifies. A staff epidemiologist collects and analyzes data on the health challenges of residents in 20 counties, enabling staff to compare these counties to one another and to national benchmarks.

Those data, in turn, help to inform the community and workplace wellness programs that Gundersen Lutheran promotes to local employers, many of whom are encouraged to assess employee health using a

Exhibit 3. Gundersen Lutheran Health System: Becoming Energy Neutral



*100% means the institution is self-sufficient in its energy use; i.e., it uses no more energy from fossil fuels than it produces from renewable energy sources.
Source: Gundersen Lutheran Health System, 2009.

health risk assessment (HRA) tool that Gundersen Lutheran offers its own employees. As an incentive to take the HRA and act upon its findings, Gundersen Lutheran offers as much as $360 each year to its employees who either are or become current on preventive care, have a body mass index of less than 30 or agree to enter a weight management program, and avoid smoking or enter a smoking cessation program.

To help demonstrate the value of such programs to local employers, Gundersen Lutheran has developed a dashboard that demonstrates improvement in compliance with preventive care, smoking cessation, and weight management, among other topics. A similar analysis of data from a local work site where Gundersen Lutheran conducts health promotion activities found that the average blood pressure has decreased since 2003 and fewer employees are hypertensive or pre-hypertensive.

Obesity has been a more intractable problem in the workplace and in the community. To address it, Gundersen Lutheran dietitians have created 500-calorie meal plans for local restaurants, including McDonald's. The meal-planning service, which is free, is also used by local supermarkets, colleges, and vending companies, who mark the low-calorie meals and products with a "500 Club" seal.

To reduce workplace injuries, the health system installed 13 bed lifts, which enable providers to transfer patients via ceiling lifts, at a cost of $1.7 million. The lifts, installed in 2005, led to a 48 percent decrease in workers' compensation claims, as those claims dropped from $1.1 million in 2005 to $575,000 the following year. The number of lost or restricted staff days fell by 84 percent from 4,561 in 2004 to 709 in 2007.

EASY ACCESS TO CARE

As a result of process-improvement time studies, Gundersen Lutheran identified the need to develop a same-day clinic in general internal medicine. The clinic offers patients same-day or next-day access to an associate (a midlevel practitioner such as a physician assistant or nurse practitioner, supported by a family practice physician), when their primary care physician is not immediately available. Physicians found this method preferable to instituting an advance access model, which would require them to leave open spaces in their schedule that, they feared, might go unfilled. The clinic also helps to address the shortage of primary care physicians in rural areas.

The health system also operates ExpressCare clinics in two retail locations, which enable patients to receive diagnosis and treatment for common ailments

within 15 minutes. The clinics, which charge a flat rate of $40 per visit, rely on nurse practitioners and physician assistants. Those clinics have access to the electronic medical record (both inpatient and outpatient) and can document the visit for the patient's primary care provider.

To reach patients who may be less mobile, Gundersen Lutheran is testing the use of a community-based telemonitoring kiosk, which allows health system providers to monitor and manage the chronic conditions of patients in rural settings. Patients can use the kiosks on a daily basis to test and submit blood pressure and weight, among other readings. They can use the video equipment to talk to nurses who, at appointed hours, consult with the patients and review records. The phone line is encrypted to protect the privacy of the patients. The system, made by Honeywell, will be placed in five locations, including a senior center and a pharmacy. Its $25,000 cost was partially subsidized by a USDA grant, but the service is not currently reimbursed by private insurance or Medicare because it is provided by registered nurses rather than advanced practice nurses.

RECOGNITION OF PERFORMANCE

In addition to the results of specific interventions described above, Gundersen Lutheran has achieved notable results on selected externally reported performance indicators and has received recognition for its performance on several national benchmarking or award programs (Exhibit 4).

With regard to efficiency, the *Dartmouth Atlas of Health Care*, which examined care in the last two years of life for Medicare patients with chronic illness, produced data indicating that patients who received the majority of their care from Gundersen Lutheran from 2001 to 2005 had lower Medicare spending per person (29%), with fewer hospital days (43%) and fewer physician visits (41%), compared with the national average.

The identification of areas of excellence does not mean that Gundersen Lutheran has achieved perfection, however. Like other organizations featured in the case studies, Gundersen Lutheran has room for improvement in several areas of care. For example, it ranked in the top quartile on only four of 16 performance measures among medical groups in Wisconsin

Exhibit 4. Selected Externally Reported Results and Recognition

Inpatient Care Quality[9] (CMS Hospital Compare Jan.–Dec. 2007)	*Clinical quality*: Gundersen Lutheran Medical Center ranked in the top decile of U.S. hospitals evaluated on heart attack treatment (8 measures), heart failure treatment (4 measures), surgical care improvement (5 measures), and a composite of those 3 clinical topics plus pneumonia (24 measures). *Patient experience*: Gundersen Lutheran Medical Center ranked in the top decile of U.S. hospitals reporting an overall patient rating of care (Hospital Consumer Assessment of Healthcare Providers and Systems, or HCAHPS).
Ambulatory Care Quality (NCQA Quality Compass 2008)	*Clinical quality* (31 measures): Gundersen Lutheran Health Plan ranked in the top quartile of commercial health plans nationally or regionally on 20 measures, and in the top decile on 13 of those measures. *Patient experience* (10 measures): Gundersen Lutheran Health Plan ranked in the top decile of commercial health plans nationally or regionally on 4 measures.
National Recognition and Ratings	*Verispan Top 100 Integrated Health Networks* (2004–2009). *Thomson/Reuters 100 Top Hospitals*: National Benchmarks for Success (1997, 2007, 2008); Cardiovascular Benchmarks for Success (1999, 2003, 2005, 2007, 2008); Performance Improvement Leaders (2005). *Press Ganey:* Summit Award (2006). *HealthGrades*: Distinguished Hospitals for Clinical Excellence (2008, 2009).

Note: CMS = Centers for Medicare and Medicaid Services; NCQA = National Committee for Quality Assurance (Quality Compass 2008 represents the 2007 measurement year.)

participating in the Wisconsin Collaborative for Healthcare Quality.

Gundersen Lutheran's track record of improvement suggests that the organization will address such issues and continue to innovate so as to achieve higher performance over time. It is now building an infrastructure for consistency in practice in the areas of chronic disease and preventive care with the development of a clinical documentation work sheet used in all primary care clinics for every patient; a preventive-care flow sheet in the EHR that provides a series of alerts and reminders indicating when patients are due for preventive care tests; and a robust chronic disease registry that alerts providers when their patients are out of compliance with various guidelines. Gundersen Lutheran is also using an automated system to telephone patients who have missed annual exams or chronic disease–related visits.

Despite its success in many facets of integration, Gundersen Lutheran is still striving to find a solution to a problem many hospitals experience: how to ease the experience of patients as they transition from the care of an outpatient physician to a hospitalist and back again. "We haven't got that knocked and I don't know how to bridge that," said Klock, the senior vice president.

INSIGHTS AND LESSONS LEARNED

Gundersen Lutheran's leaders attribute the organization's high performance to several factors: 1) the clarity of the organization's mission, vision, and values, which are made explicit and reinforced through its publicly available strategic plan; 2) its careful hiring and training of staff to support its focus on patient care, education, research, and community health combined with the use of a physician compact to ensure that focus; 3) the use of partnerships to increase communication and collaboration, both internally and externally; and 4) its widespread use of transparent performance measures.

Exemplifying the mission-driven, rather than finance-driven, nature of the organization is its philosophy of using strict salary and performance feedback rather than financial incentives to compensate physicians, its application of care coordination programs to all patients and not just those insured by its own health plan, and its commitment to recycling even though it is exempt from any legal requirements in that regard. "Our mission is to improve the health of the community," Thompson says. "Our belief is that the mission of the organization supersedes quarterly financials." Indeed, the health system has created care models—including use of telemedicine kiosks in rural communities as a proof of concept—before reimbursement for such services has been made available.

The organization has also invested heavily in creating systems and processes to formalize organizational development, including leadership programs that help managers communicate the goals of the organization to staff and, in turn, to communicate the concerns of staff to the executive team. "Leadership development leads to organizational commitment, and it preserves the original goals of the organization," Bintz says.

The use of data on clinical and financial outcomes to drive change in behavior is also a key part of Gundersen Lutheran's strategy. Such information enables Gundersen Lutheran to evaluate its performance in comparison with other local health care institutions, drive improvement in its employees, and encourage collaborations to strive higher. It also helps shape Gundersen Lutheran's outreach programs in the community by identifying areas of need.

Finding a balance has been critical to achieving all of these aims. The organization does not attempt to be all things to all people. "We're not doing burns. We don't do transplants," Thompson says. "We're trying to say, of the things we do, we plan to do them as well as anyone and we will prove that we're doing as well as anyone."

Because the organization is mission-driven, it must also strike a balance between the entrepreneurial and the organizational tendencies of its medical staff. "The ideal environment is one that allows you to exploit both," Bird says. Gundersen Lutheran does so by directing the competitive energy of its medical staff toward community care and the integrated delivery

system. It also takes risks on starting new programs, including one for gastric bypass and another for movement disorders.

Physicians who are interested only in making money are not encouraged to stay, nor are those who don't make sufficient effort. Still, maintaining motivation is a constant challenge. "One of the possible consequences of having celebrated a series of success stories is that there is a tendency to coast on quality—to say we have proven already what we are worth," Bird says. But the loss of that competitive hunger is what hurts organizations, he believes. "It's part of our job to very constructively set that tone in the organization so that people are not just sitting back and relaxing."

Striking a balance between leadership and teamwork is also critical, Thompson says. Programs don't thrive unless leaders provide direction on quality and efficiency. Yet they must not dominate the process or create ill will, or the program will suffer. The physician-administrative dyads help to ensure such a balance. At the same time, they create a cascade of communication, ensuring that corporate strategy is fully communicated and executed. "I will not implement a system without having a strong assigned medical partner," Rislow says.

Institutions that take this approach cannot merely pay lip service to the idea of physician partnership, Thompson says. "The medical staff is not just another aggravation that you huddle with. The medical staff is an integral part of strategic planning, of governance. You've got to give them a share of the direction of the place."

At the same time, it is important to welcome outsiders, such as engineers, whose insights can improve quality and efficiency, and to extend the concept of partnership with competitors and community groups, if partnering helps to improve population health.

When prioritizing its goals, Gundersen Lutheran's executive team identifies whether a program will have a synergistic effect on outcomes. For instance, an outpatient program designed to increase the rate at which patients received pneumococcal vaccinations improved those rates for the hospitalized patients as well.[10] Such synergies may be useful in decreasing the burden physicians feel when faced with multiple reporting requirements. It also illustrates the value of an integrated delivery system through which initiatives cross multiple care settings. Having inpatient and outpatient services, a hospice, and a health plan has sparked innovations, such as the care coordination

Exhibit 5. Gundersen Lutheran Health System: Comparison of Annual Percentage Growth in Health Care Fees/Costs

Year	Gundersen Lutheran Fees	Consumer Price Index: Hospital and Related Services (CPI)	Difference Between Gundersen Lutheran and CPI
2000	7.3	5.9	1.4
2001	9.5	6.6	2.9
2002	9.3	8.7	0.6
2003	6.6	7.3	–0.7
2004	5.8	5.9	–0.1
2005	5.5	5.3	0.2
2006	5.3	6.4	–1.1
2007	4.9	6.6	–1.7
2008	4.6	7.0	–2.4

Note: CPI is the hospital and related services component of the Consumer Price Index, United States city average for All Urban Consumers (not seasonally adjusted).
CPI data are from the US Department of Labor, Bureau of Labor Statistics, http://data.bls.gov/PDQ/outside.jsp?survey=cu, downloaded on June 8, 2009.
Source: Gundersen Lutheran Health System.

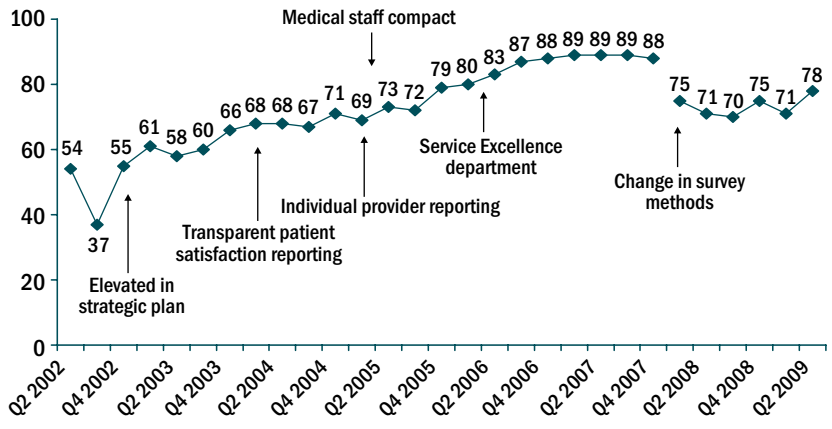
programs that serve patients in capitated and fee-for-service insurance programs.

Because of these strategies, Gundersen Lutheran has been able to reduce increases in its hospital and clinic fees in every year since 2001 (Exhibit 5). "The organization has made a commitment to reduce the cost of care to the patients we serve," says Daryl E. Applebury, chief financial officer. To do so, Gundersen Lutheran sets an across-the-board fee increase for inpatient and outpatient care during its annual budget process. The goal is to ensure an increase lower than the previous year, while still keeping operating margins between 3 percent and 4 percent. As a result of this approach, Gundersen Lutheran's fee increases have trailed the growth rate in medical inflation in five of the past six years.

Despite the success Gundersen Lutheran has had in improving outcomes and efficiency, its leaders caution that improvement is incremental and accomplishing it requires a steady focus, as the health system's effort to increase patient satisfaction numbers demonstrates. It took nearly five years—and at least five very different initiatives—to increase patient satisfaction figures from a low in the 20th percentile in 2002 to the 90th percentile in 2007. (The rates dropped in 2008, in part because the methodology for surveyed patients changed; see Exhibit 6.) Gundersen Lutheran not only made these goals part of its strategic plan, it had to supply data to individual providers and make patient satisfaction part of the individual evaluation. It also had to develop a department to train staff on service excellence, Thompson says.

In summary, this case study illustrates that the size of an organization need not be a limiting factor in performance improvement. By forming partnerships among its own staff as well as with other providers and community groups, a health system can advance performance in particular areas of health care, such as end-of-life care, and thereby dramatically influence outcomes and cost. Doing so requires clarity of purpose and a willingness to define ambitious targets, monitor and measure performance, and engage with physicians and staff to achieve desired results.

Exhibit 6. Gundersen Lutheran Health System
Overall Medical Practice: Patient Satisfaction



Note: Data represent a composite of approximately 30 measures from the Press Ganey patient satisfaction survey. The survey methodology changed in 2008 and better represents Clinic patient demographics, including more younger patients (who tend to have higher expectations) in the survey sample. Data for Q2 2009 are preliminary.
Source: Gundersen Lutheran Health System.

For a complete list of case studies in this series, along with an introduction and description of methods, see *Organizing for Higher Performance: Case Studies of Organized Health Care Delivery Systems—Series Overview, Findings, and Methods,* available at www.commonwealthfund.org.

NOTES

1 T. Shih, K. Davis, S. Schoenbaum, A. Gauthier, R. Nuzum, and D. McCarthy, *Organizing the U.S. Health Care Delivery System for High Performance* (New York: The Commonwealth Fund Commission on a High Performance Health System, Aug. 2008).

2 Information on Gundersen Lutheran Health System was gathered during a site visit in February 2009, which included presentations and interviews with the individuals named in the Acknowledgments; from a presentation by Jeffrey E. Thompson, M.D., at the Institute for Healthcare Improvement's 20th Annual National Forum on Quality Improvement in Health Care, in Nashville, Tenn., Dec. 2008, and from information from the organization's Web site (www.gundluth.org) as well as from other sources noted below.

3 A summary of findings from all case studies in the series can be found in D. McCarthy and K. Mueller, *Organizing for Higher Performance: Case Studies of Organized Delivery Systems—Series Overview, Findings, and Methods* (New York: The Commonwealth Fund, July 2009).

4 See www.respectingchoices.org.

5 B. J. Hammes and B. L. Rooney, "Death and End-of-Life Planning in One Midwestern Community," *Archives of Internal Medicine*, Feb. 23, 1998 158(4):383–90.

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7 Several comparison studies are summarized in B. L. Kass-Bartelmes, R. Hughes, and M. K. Rutherford, "Advance Care Planning: Preferences for Care at the End of Life," *Research in Action* Issue #12 (Rockville, Md.: Agency for Healthcare Research and Quality, 2003).

8 J. Teno, J. Lynn, N. Wenger et al., "Advance Directives for Seriously Ill Hospitalized Patients: Effectiveness with the Patient Self-Determination Act and the SUPPORT Intervention," *Journal of the American Geriatrics Society*, April 1997 45(4): 500–07; K. H. Coppola, P. H. Ditto, J. H. Danks et al., "Accuracy of Primary Care and Hospital-Based Physicians' Predictions of Elderly Outpatients' Treatment Preferences with and Without Advance Directives," *Archives of Internal Medicine*, Feb. 12, 2001 161(3):431–40.

9 Rankings for CMS Hospital Compare clinical topics (heart attack, heart failure, and pneumonia treatment and surgical care improvement) include hospitals that reported on all measures and recorded at least 30 patients in each topic. Only results in the top quartile are noted. The HCAHPS overall rating of care means a patient rating of 9 or 10 on a 10-point scale.

10 Because of the program, the percentage of patients over the age of 65 receiving the vaccine during outpatient visits increased from 77 percent in 2006 to 90 percent in April 2009. Because many hospital patients use Gundersen Lutheran clinics on a regular basis, the percentage of hospitalized patients with pneumonia who had received the vaccine increased from 81 percent in 2006 to 97 percent in April 2009.

Gundersen Lutheran® Strategic Plan 2009-2014

Mission: We distinguish ourselves through excellence in patient care, education, research and through improved health in the communities we serve.

Vision: We will be a Health System of excellence, nationally recognized for improving the health and well-being of our patients and their communities

Values:

Integrity	Perform with honesty, responsibility and transparency.
Excellence	Achieve excellence in all aspects of delivering healthcare.
Respect	Treat patients, families, and coworkers with dignity.
Innovation	Embrace change and new ideas.
Compassion	Provide compassionate care to patients and families.

Key Strategy 1:
Demonstrate superior Quality and Safety through the eyes of the patients and the caregivers

Targets:

- Be nationally recognized by patients, employers and communities for delivering superior value
- Achieve and sustain all quality measures at the 95th percentile or have zero defects and 100% reliability
- Have no preventable: deaths, infections, pain, suffering, waiting, or waste
- Be the preferred community-based academic health center for medical and nursing education in the upper Midwest
- Demonstrate a commitment to patient-centered and evidence-based medicine through all of our education and research programs

Key Strategy 2:
Demonstrate superior Service through the eyes of the patients and our colleagues

Targets:

- Be a recognized leader in providing patient and family-centered care
- Achieve and sustain the 95th percentile in all Service measures
- Ensure that all patients get the care they need when they want it
- Collaborate to measurably improve the health of our communities
- Be a leader in the healthcare industry in environmental sustainability
- Be a national leader in the effective and efficient use of technology to support quality, value, and growth

Key Strategy 3:
Become a Great Place to Work through the eyes of our employees

Targets:

- Develop an engaged workforce that is inclusive, embraces change, and is prepared to respond to future healthcare demands
- Develop leaders with the skills needed to transform healthcare
- Establish Gundersen Lutheran as a destination place for the most talented
- Be a leader in the health and safety of our employees

Key Strategy 4:
Demonstrate lower Cost of Care through the eyes of our patients and their employers

Targets:

- Reduce our cost per episode of care each year striving to achieve breakeven on non-governmental business at 150% of our Medicare payment
- Engage our staff in improving efficiency and reducing waste (e.g., rework, unused inventory, excess waiting, duplication of effort, or unnecessary handling or travel)
- Actively partner to reduce the cost of healthcare for our community through increased focus on prevention, wellness, and coordinated care
- Maintain or exceed our current A+ bond rating

Key Strategy 5:
Achieve Programmatic Growth that supports our mission

Targets:

- Evaluate, enhance, and implement new or existing services and programs
- Identify and evaluate opportunities that increase our penetration in existing and emerging markets
- Improve our regional referral process
- Increase patient access to care
- Steadily increase our market share
- Actively partner with community members to improve the quality of life and further the economic strength of our region

Appendix B. Gundersen Lutheran Medical Staff Compact

MEDICAL STAFF COMPACT

Gundersen Lutheran®

GUNDERSEN LUTHERAN'S RESPONSIBILITIES

ACHIEVE EXCELLENCE

- Recruit and retain outstanding physicians and staff
- Support career development and enhance professional satisfaction
- Acknowledge and reward superior performance that enhances patient care and improves Gundersen Lutheran Health System
- Create opportunities to participate in quality improvement, research, and improvements in community health

COMMUNICATION

- Communicate information regarding organizational priorities, business decisions, and strategic plans
- Provide opportunities for constructive dialogue, clarity of goals, and regular evaluation

EDUCATE

- Support and facilitate teaching and learning opportunities
- Provide the tools necessary to continually improve medical practice

REWARD

- Provide competitive compensation consistent with market values and organizational goals of quality, service, and efficiency
- Maintain clear organizational responsibility and integrity to those it serves

CHANGE

- Manage the inevitable rapid changes in healthcare so that staff have an opportunity for participation, for clarity of goals, and continuous modification of the process as well as the outcomes

MEDICAL STAFF'S RESPONSIBILITIES

FOCUS ON SUPERIOR PATIENT CARE

- Practice evidence-based, high-quality medicine
- Encourage increased patient understanding, involvement in care, and treatment decisions
- Achieve and maintain optimal patient access
- Insist on departmental focus on superior patient service
- Work in collaboration with other physicians, support staff and management across the system in both service and patient care improvements
- Demonstrate the highest levels of integrity and professional conduct
- Participate in or support education and research

TREAT ALL PEOPLE WITH RESPECT

- Listen and communicate both clinical and non-clinical information in a clear, respectful, and timely manner
- Provide and accept feedback in a respectful manner from all staff and outside contacts

TAKE OWNERSHIP

- Provide leadership to improve outcomes quality and service quality
- Work to ensure personal, departmental, and organizational compliance with all legal and educational requirements
- Steadily improve the efficiency and economic aspects of your practice

CHANGE

- Embrace innovation to continuously improve patient care, service and organizational efficiency

About the Authors

Sarah Klein has written about health care for more than 10 years, as a reporter for publications including *Crain's Chicago Business* and *American Medical News.* She serves as a contributing writer to *Quality Matters*, a newsletter published by The Commonwealth Fund. She received a B.A. in Asian Studies from Washington University in St. Louis.

Douglas McCarthy, M.B.A., president of Issues Research, Inc., in Durango, Colorado, is senior research adviser to The Commonwealth Fund. He supports the Commonwealth Fund Commission on a High Performance Health System's scorecard project, conducts case studies on high-performing health care organizations, and is a contributing editor to the bimonthly newsletter *Quality Matters*. He has more than 20 years of experience working and consulting for government, corporate, academic, and philanthropic organizations in research, policy, and operational roles, and has authored or coauthored reports and peer-reviewed articles on a range of health care–related topics. Mr. McCarthy received his bachelor's degree with honors from Yale College and a master's degree in health care management from the University of Connecticut. During 1996–1997, he was a public policy fellow at the Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota.

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This study was based on publicly available information and self-reported data provided by the case study institution(s). The Commonwealth Fund is not an accreditor of health care organizations or systems, and the inclusion of an institution in the Fund's case studies series is not an endorsement by the Fund for receipt of health care from the institution.

The aim of Commonwealth Fund–sponsored case studies of this type is to identify institutions that have achieved results indicating high performance in a particular area of interest, have undertaken innovations designed to reach higher performance, or exemplify attributes that can foster high performance. The studies are intended to enable other institutions to draw lessons from the studied institutions' experience that will be helpful in their own efforts to become high performers. It is important to note, however, that even the best-performing organizations may fall short in some areas; doing well in one dimension of quality does not necessarily mean that the same level of quality will be achieved in other dimensions. Similarly, performance may vary from one year to the next. Thus, it is critical to adopt systematic approaches for improving quality and preventing harm to patients and staff.