



MALCOLM BALDRIGE NATIONAL QUALITY AWARD

# R<sub>x</sub> for Excellence

**M**any in the quality profession firmly believe that if only the medical community would adopt quality's philosophy, tools and techniques, major challenges in the healthcare sector would disappear.

The most significant of those challenges was revealed in a report by the Institute of Medicine in 2000 that said up to 100,000 deaths per year in the United States were caused by medical errors.<sup>1</sup> Add to that such pressures as rapidly escalating costs, declining reimbursements from Medicare and private insurers, a growing uninsured population and severe shortages of some medical professionals, particularly registered nurses (RNs), and you have the makings of a potential crisis.

One healthcare system with facilities in four Midwestern states, about 23,000 employees and 5,000 physician partners recently has been showing the world that quality, more specifically a focus on continuous improvement, can help the ailing healthcare sector. President Bush recently named that system, SSM Health Care (SSMHC) as the first ever healthcare winner of the Malcolm Baldrige National Quality Award.

Some of SSMHC's measurable results, as revealed in its award application and subsequent presentation at the National Institute of Standards and Technology's Quest for Excellence Conference this month, show exceptional promise for the entire sector.

## In 50 Words Or Less

- **Becoming healthcare's first winner of the Malcolm Baldrige National Quality Award won't end SSM Health Care's continuous improvement journey.**
- **The Baldrige criteria transformed the entire system's culture into one of teamwork, continuous learning, innovation, breakthrough performance and systems thinking.**
- **Business success allows expansion of a mission of charity.**

## Background

SSMHC's roots go back about 130 years when four Roman Catholic nuns migrated to the United States from Germany. They arrived in St. Louis in 1872 during the middle of a smallpox epidemic. Wasting no time, they were already nursing patients a day later.

Today SSMHC is sponsored by the Franciscan Sisters of Mary and operates as a private, not-for-profit system. It owns, manages or is affiliated with 21 hospitals in Illinois, Missouri, Oklahoma and Wisconsin. While the core business is hospitals, other services include physician practices and skilled nursing (long-term), home and hospice care. Its facilities include three specialty hospitals: rehabilitation, pediatrics and orthopedics.

## Continuous Improvement

Sister Mary Jean Ryan became president and CEO of SSMHC in 1986. "Her efforts and passion were the real impetus for all the improvements that

by **Susan E. Daniels, associate editor**

have followed,” explains Paula Friedman, corporate vice president—systems improvement.<sup>2</sup> By 1990, SSMHC had become one of the first health-care organizations in the country to implement continuous quality improvement (CQI) throughout its entire system.

In fact, SSMHC has a dedicated quality resource center headed by Eunice Halverson. The center helps entities of the corporation oversee improvement, accreditation and clinical teams.

A five-year implementation plan called for introduction of CQI in four phases:

1. Quality improvement teams.
2. Policy and planning.
3. Quality in daily work life.
4. Quality as integral to SSMHC.

After about four or five years, however, the effort seemed to have plateaued. Small, incremental advancements had taken place throughout the corporation’s entities, but a way to make more significant systemwide improvements was needed.

While working on self-assessments, SSMHC participated in some Institute for Healthcare Improvement breakthrough series collaboratives. At that



**TLC:** SSMHC’s mission goes far beyond the winning of awards.

time, visits with Baldrige manufacturing winners convinced Sister Ryan and other staff the Baldrige criteria were the best route. The second leg of SSMHC’s quality journey thus began in 1995.

SSMHC facilities started receiving state quality awards while waiting for the time when healthcare organizations would become eligible for the

## SSMHC Officer at AQC Event

Bill Schoenard, executive vice president/COO of SSMHC, will be the keynoter at a special health-care event planned for the Annual Quality Congress (ASQ) in Kansas City, MO, May 19-21. The lun-

cheon program on May 21 will also include an overview and dialogue about healthcare quality and ASQ’s healthcare strategy.

Schoenard’s address will be on SSMHC’s quality journey, how it

has enhanced the organization’s mission and what it has meant to employees. Anyone interested in more information about the event should e-mail [mstocklein@asq.org](mailto:mstocklein@asq.org).

Baldrige. The application process and feedback received from the state awards helped them analyze their work and generated excitement in new ways.

Seven systemwide teams were established to compare the Baldrige criteria with what SSMHC was already doing. This led to a single mission statement for the entire system, a cohesive leadership plan for executives across the system, stronger strategic and financial planning processes, a new sharing conference, and an improved CQI model and educational programs that allow teams to make changes more quickly.

An application for the Baldrige was submitted in 1999, and Sister Ryan visited SSMHC entities in

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four states in 1999 to update staffs and prepare them for possible site visits from state quality award or Baldrige examiners. Soon many sites received state quality award site visits, and the system became the first healthcare organization in the country to receive a Baldrige site visit.<sup>3</sup>

Things were looking up. SSMHC won the Missouri Quality Award and got excellent Baldrige feedback, which was used to keep the CQI process moving ahead. Sister Ryan announced the organization would definitely apply for a Baldrige again. There was another Baldrige site visit in 2001, but still no award.

With CQI in mind, no one even considered giving up. In 2002, perseverance paid off with the Baldrige Award. From a business standpoint, the

effort has been worthwhile. Despite very competitive conditions, SSMHC says it is currently increasing market share in all its major markets.

Looking at the seven Baldrige criteria categories highlights how some of SSMHC's efforts resulted in measurable and meaningful results.<sup>4</sup>

## **1. Leadership**

While SSMHC's quest for excellence started at the very top with Sister Ryan, about 190 regional and system executives, entity presidents and administrative council members, physicians and corporate vice presidents make up SSMHC's leadership system.

Every executive leader in the SSMHC system is responsible for ensuring the mission and values are communicated and deployed. In fact, there is a corporate vice president of mission awareness, and system management requires each entity to have a mission awareness team of a cross section of employees.

In 1999, nearly 3,000 SSMHC employees and physicians participated in focus groups. Out of those meetings came a concise, memorable mission statement and core values, which now drive the organization.

A group made up of 31 system, network and entity senior leaders meets three times a year to set the organization's short- and long-term strategic directions and performance expectations. System management translates these directions and deploys organizational values and expectations to all employees through a systemwide tool called Passport.

Every employee receives a Passport, which starts with the mission and values and continues down to the characteristics of exceptional healthcare services identified in the entity/network strategic, financial and HR plans, and finally to entity, departmental and personal goals and measures.

Some of the other methods leadership uses to foster CQI at SSMHC are:

- Two annual systemwide events to share best practices internally.
- Complaint management software.
- A systemwide performance management process to assess performance as it relates to short- and long-term goals.
- Operations performance indicator reports, which include quality reports.



**Customers:** Both the tiny baby in the incubator and the physician in this photo are customers to SSMHC.

- A systemwide leadership development process.

Public responsibility and citizenship are mandates for leadership at SSMHC. So, an SSM Policy Institute was established in 1998 to anticipate and address public concerns. Among the results are work with local task forces and agencies to coordinate disaster planning, a bioterrorism task force following Sept. 11, 2001, and a hot link with the Centers for Disease Control and Prevention website on the SSMHC intranet and physician portal.

## 2. Strategic Planning

Experience taught SSMHC that three years provide the optimal time to implement, fully deploy and realize the results of its strategic initiatives across the vast organization.

The process starts every December, when the

vision statement is reviewed. In January, corporate planning, finance and HR evaluate the strategic, financial and HR planning process. February brings an assessment of key challenges, a review of comparative data and a setting of systemwide goals for the next three years by senior leaders.

And so it goes, cascading the whole way down to individual goals to support departmental goals on Passports. Table 1 (p. 46) demonstrates key performance indicators that track progress in achieving short- and long-term goals and comparisons with benchmarks.

## 3. Focus on Patients, Other Customers and Markets

During SSMHC's strategic, financial and HR planning process, which is applied at system, network and entity levels, environmental scanning is

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conducted every three years to identify potential customers, customers of competitors and future markets. There are annual update assessments for validation.

Through one environmental scan, planners at an SSMHC hospital, St. Anthony Hospital in Oklahoma City, learned its market's demand for cardiology procedures had increased dramatically, a cardiology physician group was breaking up and a competitor might open a heart hospital.

With that knowledge, St. Anthony Hospital recruited a staff of cardiologists and developed a heart hospital within the existing facility. The local business newspaper named St. Anthony its Innovator of the Year for utilizing existing resources.

One challenge for hospitals is the essential role

of physicians, many of whom are not employees of the hospital, in meeting key customer requirements of patients and improving clinical outcomes. SSMHC develops partnership and loyalty with physicians through a process that includes relationship building strategies.

Part of SSMHC's complaint management process is to collect data on physician expectations for network and entity relationships. For example, medical staff is asked how SSMHC's products and services compare to those of competitors, while nonstaff physicians are asked about trends in physician practices relative to their relationships with competitors.

A robust set of listening and learning tools determines, defines and differentiates the requirements, expectations and preferences of former, current and potential customers. The data collected are used in the annual strategic, financial and HR planning process.

In 2001 and 2002, the corporate planning staff performed correlation analysis of key system level indicators to further define which ones strongly correlate (positively or negatively) with inpatient loyalty and satisfaction. This clarified the cause and effect relationship between system strategies and business performance.

SSMHC has found most listening and learning tools add the greatest value when used and managed at the local level. The corporate planning staff has several means of evaluating a systemwide patient satisfaction survey:

- Review questions for relevancy and validity.
- Research literature and the Web.
- Monitor regulatory guidance.
- Study Baldrige and state quality award feedback.
- Formally (annual) and informally (ongoing) analyze input from entity patient satisfaction

**TABLE 1** Key Performance Indicators, Short- and Long-Term Goals and Benchmarks

|   | Short-term goals<br>2002 | Long-term goals<br>2004 | Benchmark    |
|---|--------------------------|-------------------------|--------------|
| Consolidated operating margin (hospitals included)      | 2.5%                     | 3.3%                    | 3-4%         |
| Unrestricted days cash                                  | 220 days                 | 235 days                | 190-220 days |
| Acute admissions  | 145,200                  | 155,800                 | N/A          |
| Patient revenue/<br>adjust patient days                 | \$1,399                  | \$1,486                 | \$1,805      |
| Operating expense/<br>adjust patient days               | \$1,434                  | \$1,506                 | \$1,508      |
| 31-day unplanned<br>readmission rate                    | 3.49%                    | 2.63%                   | 2.42%        |
| Inpatient loyalty index                                 | 53.1%                    | 60.1%                   | 52.3%        |
| Employee satisfaction<br>indicator                      | 73%                      | 75%                     | 74%          |
| Physician satisfaction<br>indicator                     | 79.9%                    | 81.9%                   | 93%          |
| Nursing home<br>operating margin                        | -2.29%                   | 4.29%                   | <3%          |
| Nursing home prevalence of<br>daily physical restraints | 0                        | 0                       | 5%           |
| Home care operating margin                              | 7.1%                     | 8.4%                    | 15%          |
| Home care patient<br>loyalty index                      | 64%                      | 71%                     | 52.7%        |
| Net revenue per physician                               | \$32,971                 | \$36,593                | \$32,971     |
| Physician direct operating<br>expense                   | 67.30%                   | 61.55%                  | 58.64%       |



coordinators and other staff with responsibility for functional areas.

#### 4. Information and Analysis

SSMHC gathers and integrates data for performance measurement through an information system based on common platforms systematically deployed across the organization.

Monthly electronic performance indicator reports with data on 49 indicators from the departmental to system level are published and distributed to leadership. Numerous other performance indicator reports containing varying numbers of indicators are reviewed at other levels. Figure 1 shows an example of a performance indicator rollup.

The SSM Information Center has implemented a technical infrastructure that allows its physician partners to access data and information from any location at any time from multiple electronic devices.

A department for compliance administration and security ensures information and data confidentiality. The information center uses the Catholic Healthcare Audit Network to perform audits of information systems and processes for integrity, reliability, accuracy, timeliness, security and confidentiality. Uninterrupted power supply systems and the information center's own power generator ensure availability of hardware and software.

#### 5. Staff Focus

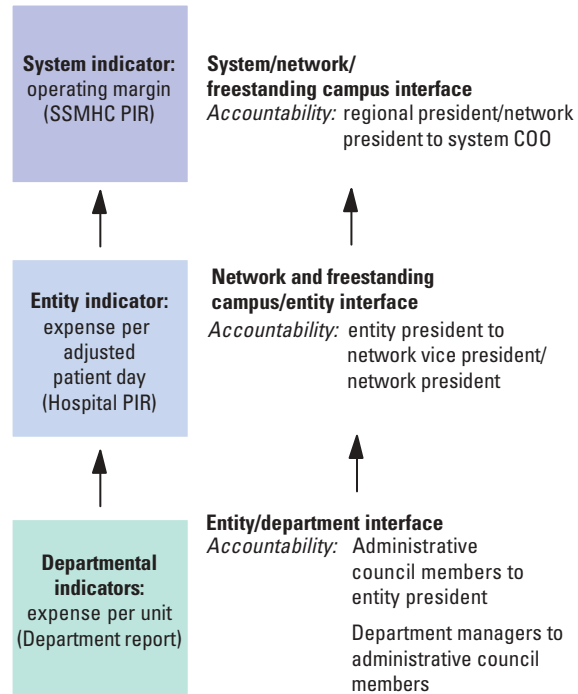
Staffing is an ongoing challenge at most hospitals because of the nationwide shortage of health-care workers. Of particular concern is the nation's almost critical dearth of RNs, particularly those willing to work in hospitals.

SSMHC is implementing an accountability based professional practice model at all entities to foster empowerment and give nurses and other employees greater decision making authority. This builds on CQI and SSMHC's commitment to place decision making and accountability at the level where work is performed.

SSMHC has further addressed the industry's dangerous nursing shortage by bringing together nurse and HR executives to develop innovative recruitment and retention strategies.

System management is taking the following actions based on the recommendations of five sys-

**FIGURE 1** Performance Indicator Rollup (PIR)



temwide nursing recruitment and retention teams:

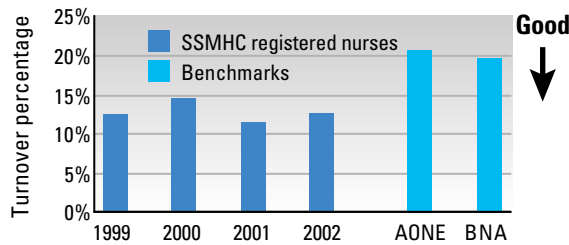
1. Implementation of nursing shared accountability models at entities.
2. Improvement of nursing education and orientation programs within the system.
3. Improvement of nurses' access to technology.
4. Development of programs to foster collaborative relationships between nurses and physicians.
5. Availability of a variety of benefits such as improved tuition reimbursement and bonuses for employees who recruit a peer.

At orientations, all new staff members quickly learn CQI is integral to SSMHC. But the cornerstone for SSMHC's focus on staff well-being and satisfaction is the understanding that they are directly correlated to patient and physician satisfaction.

Significantly, SSMHC has maintained lower reported RN turnover rates than benchmark comparisons and has shown steady decline in turnover in the last three years (see Figure 2, p. 48). While

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**FIGURE 2** Systemwide Registered Nurse Turnover



systemwide RN turnover was slightly higher in 2002 than in 2001, this has been attributed to the conversion of St. Michael Hospital in Oklahoma City into a department of St. Anthony Hospital.

Thanks to this and other comprehensive HR efforts, the American Hospital Association recognized SSMHC as an “exemplary employer” in 2002,<sup>5</sup> and the *St. Louis Business Journal* named SSMHC St. Louis one of two nonprofit employers of choice in the area.<sup>6</sup>

## 6. Process Management

SSMHC teams design healthcare services and their related delivery processes using a CQI model

**TABLE 2** Key Healthcare Delivery Processes

| Process                                    | Key requirements                                 | Key measures   |
|--|--|--|
| <b>Admit</b>                               |  |  |
| Admitting and registration                 | Timeliness                                       | <ul style="list-style-type: none"> <li>Time to admit patients to the setting of care</li> <li>Timeliness in admitting and registration rate on patient satisfaction survey questions</li> </ul>  |
| <b>Assess</b>                              |  |  |
| Patient assessment                         | Timeliness                                       | <ul style="list-style-type: none"> <li>Percentage of histories and physicals charted within 24 hours and prior to surgery</li> <li>Pain assessed at appropriate intervals, per hospital policy</li> </ul>  |
| Clinical laboratory and radiology services | Accuracy and timeliness                          | <ul style="list-style-type: none"> <li>Quality control results/repeat rates</li> <li>Turnaround time</li> <li>Response rate on medical staff satisfaction survey</li> </ul>  |
| <b>Care delivery/treatment</b>             |  |  |
| Provision of clinical care                 | Nurse responsiveness                             | <ul style="list-style-type: none"> <li>Response rate on patient satisfaction and medical staff survey questions</li> </ul>   |
|  | Pain management                                  | <ul style="list-style-type: none"> <li>Wait time for pain medications</li> </ul>   |
|  | Successful clinical outcomes                     | <ul style="list-style-type: none"> <li>Percentage congestive heart failure patients received medication instructions and weighing</li> <li>Percentage ischemic heart patients discharged on proven therapies</li> <li>Unplanned readmits and returns to emergency room or operating room</li> <li>Mortality</li> </ul> |
| Pharmacy/ medication use                   | Accuracy   | <ul style="list-style-type: none"> <li>Use of dangerous abbreviations in medication orders</li> <li>Medication error rate or adverse drug events resulting from medication errors</li> </ul>   |
| Surgical services/ anesthesia              | Professional skill, competence and communication | <ul style="list-style-type: none"> <li>Clear documentation of informed surgical and anesthesia consent</li> <li>Perioperative mortality</li> <li>Surgical site infection rates</li> </ul>  |
| <b>Discharge</b>                           |  |  |
| Case management                            | Appropriate utilization                          | <ul style="list-style-type: none"> <li>Average length of stay</li> <li>Payment denials</li> <li>Unplanned readmits</li> </ul>  |
| Discharge from setting of care             | Assistance and clear directions                  | <ul style="list-style-type: none"> <li>Discharge instructions documented and provided to patient</li> <li>Response rate on patient satisfaction survey</li> </ul>  |



process design approach that incorporates the plan-do-check-act cycle. Table 2 shows the four key delivery processes, their related principal performance requirements and key measures.

The process design focus is on error and problem prevention because SSMHC believes, as do most in the quality in medicine movement, that medical errors primarily occur not because of people but because of breakdowns in processes. Some examples of existing patient safety prevention based processes or mechanisms are:

- A computerized pharmacy process that flags duplicate medication therapies, medication allergies, drug interactions and high risk drug alerts.
- A medication distribution system interfaced with the medication administration record to prevent nurses from giving incorrect drugs.
- A checking system to flag widely varying lab results.
- Laboratory and radiology quality control testing.
- Individualized patient assessments for falls and implementation of fall prevention practices.

Physician partnering and supply chain management are among the business processes considered most important to growth and achievement of SSMHC strategies.

## 7. Organizational Performance Results

SSMHC's Baldrige application includes many charts that demonstrate results of all the key measures of healthcare service processes noted in Table 2. In many cases, SSMHC is operating at or above national or other benchmarks.

In areas where SSMHC is "only" above average but below the benchmark, teams are working to identify best practices by standardizing data collection and are assisting entities in implementing improvements.

But a hospital, even a not-for-profit one, needs good financial and market results to keep operating. SSMHC believes its commitment to CQI is the reason it is one of only a small number of healthcare systems across the United States able to report substantial financial improvement.

SSMHC is rated in the top category by two

major national credit rating agencies—a rating given to less than 2% of U.S. hospitals. In the last four years, the system has been able to increase capital investment in its institutions, facilities and services.

Between 1999 and 2001, SSMHC has shown that improvements lead to higher volume, decreased physician practice losses, enhanced reimbursements and increased operational efficiencies. The result: a \$56 million improvement in operating margins that enables the system to pursue continued investment and growth opportunities.

This is good news indeed—in more ways than imaginable. SSMHC's goal is to provide charity care at a minimum of 25% of the prior year's operating margin, before charity care deductions. This means higher operating margins put SSMHC in an increasingly better position to adhere to its mission and values and to care for anyone who comes to its hospitals, regardless of ability to pay.

### REFERENCES AND NOTES

1. *To Err Is Human: Building a Safer Health System* can be read at <http://books.nap.edu/catalog/9728.html>.
2. Sister Mary Jean Ryan co-authored *CQI and the Renovation of an American Health Care System*, with William P. Thompson, SSMHC senior vice president-strategic development. ASQ Quality Press published the book in 1997.
3. Complete information on the Malcolm Baldrige National Quality Award, its criteria and the SSMHC Baldrige application can be accessed at [www.quality.nist.gov](http://www.quality.nist.gov).
4. Sister Mary Jean Ryan, "Momentum To Improve Patient Care Grows," *Quality Progress*, April 2000, p. 130.
5. American Hospital Association Commission on Workforce for Hospitals and Health Systems, *In Our Hands: How Hospital Leaders Can Build a Thriving Workforce*. A copy can be ordered at 800-242-2626.
6. "Best Places To Work," *St. Louis Business Journal*, May 3, 2002.

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