HOSPITALS TAKING ACTION

Government, businesses, insurance companies and many others must act to help make health care more affordable. But, knowing that they are on the frontlines of care where change will ultimately manifest itself, hospital leaders across the country are not waiting for others to act. Many are tackling the affordability issue already, seeking change that makes sense for them and the communities they serve. Some of these efforts are sweeping; some are more targeted. But all of them signal recognition in the field that the time to act is now.

FOCUS ON WELLNESS

SPECTRUM HEALTH in Grand Rapids, Michigan, implemented the Nutrition Options for Wellness (NOW) program to help low-income patients with any of seven diseases make healthier food choices. In the process, patients learn more about their illnesses and develop strategies for better controlling them. The linchpin of the program is a network of 10 area food banks, where patients go after receiving a "food prescription" from a clinical dietitian. NOW participants consistently rate the program as effective, and there has been a 26 percent decrease in emergency visits, a 44 percent decline in hospitalizations and a 41 percent drop in office visits among participants who have completed the program. In addition, Spectrum has developed a guide to help other communities establish a similar program.

SOURCE: Nutrition makes the grade: nutrition options for wellness program. Spectrum Health, Grand Rapids, MI, in Rollins G: The 2007 NOVA awards. H&HN, July 7, 2007. http://www.hhnmag.com/hhnmag_app/jsp/articledisplay.jsp?dcrpath=HHNMAG/Article/data/07JUL2007/0707HHN_FEA_NOVA&domain=HHNMAG#spectrum

BETTER COORDINATED CARE

In Columbia, South Carolina, **PALMETTO HEALTH** and a community coalition of 23 organizations developed Richland Care, a coordinated health care delivery system for the county's low-income, uninsured residents. The program provides participants with a medical home and access to prescription drugs, specialty services, case management for hypertension and diabetes, a 24-hour nurse call line and other health education activities. During its first 34 months of operation, there was a 55 percent reduction in emergency department usage and a 70 percent decrease in hospitalizations among Richland Care patients, compared with the prior two years. Those trends have continued, and during the 2004-2005 fiscal year, net savings were estimated to be nearly $2.9 million.

SOURCE: Creating a coordinated care system: Richland Care, Palmetto Health (Columbia, SC), in: Rollins G: The 2007 NOVA awards. H&HN, July 7, 2007. http://www.hhnmag.com/hhnmag_app/jsp/articledisplay.jsp?dcrpath =HHNMAG/Article/data/07JUL2007/0707HHN_FEA_NOVA&domain=HHNMAG#palmetto

The treatment of congestive heart failure (CHF) can be complex and costly; almost $30 billion is spent each year on CHF treatment. America's hospitals are finding ways to help patients better manage their care.

- **CLEVELAND REGIONAL MEDICAL CENTER** in Shelby, North Carolina, sends case managers to CHF patients' homes to assist with the transition from hospital to home and provide customized home health monitoring and education. This program helped reduce the hospital's readmission rate from 25 percent to below 10 percent.

- In New Jersey, **VIRTUA HEALTH**, a non-profit, multi-hospital system, used the Six Sigma performance improvement methodology to reduce the length of stay for CHF patients, which was more than two days longer than the Medicare benchmark (6.5 days versus the 4.2 day benchmark). In analyzing the problem, Virtua found a great deal of variation during the latter part of the hospital stay and in the discharge process, as well as in patient and family expectations about the length of stay. Using Six Sigma, the staff redesigned the care process and created a new patient and family brochure educating them about the usual course of care for CHF patients. The results: a reduction in length of stay to four days and annual savings of $116,000 in staff and room costs.

- **BILLINGS CLINIC** in Billings, Montana, an integrated health system that includes a hospital, multi-specialty physician group practice and several clinics across a four-state region, recently instituted a more comprehensive program for managing CHF and other chronic conditions. The program uses an interactive voice response technology that allows patients to call in their weight and other information on a daily basis. A computer program analyzes the data and identifies those patients for whom a clinical intervention is required. Case managers call these patients to follow up, which may require an adjustment in their medication, or schedule an appointment with their cardiologist. Between January 2006 and July 2007, the program achieved a 59 percent reduction in hospitalization of CHF patients, resulting in cost savings of more than $3 million.

SOURCE: "Good Heart Failure Follows Patients Home." Institute for Healthcare Improvement Web site (http://www.ihi.org/IHI/Topics/ChronicConditions/AllConditions/ImprovementStories/GoodHeartFailureCareFollowsPatientsHome.htm)

SOURCE: Virtua Health Web site (http://www.virtua.org/page.cfm?id=pressroom_showstory&pressID=911)

SOURCE: Work, Mitch. "Getting to the Heart of CHF Management: One Montana Provider Finds the Key." Patient Safety & Quality Healthcare, January/February 2008.

Speed Adoption of IT

At **MAIMONIDES MEDICAL CENTER** in Brooklyn, New York, all of the medical staff order medication and lab tests, check lab results and track their patient's treatment using the hospital's computerized medical records system. This system provides medical staff leadership with a real-time view of what is happening within their clinical area. The computerized system has made for dramatic improvements in the pharmacy service, cutting the average turnaround time for administering inpatient drugs by almost 66 percent, as well as reducing prescription errors.

NORTH MISSISSIPPI HEALTH SERVICES (NMHS) in Tupelo used its advanced information systems to launch its Care-based Cost Management program, which allows managers to examine clinical data to identify opportunities for reducing duplication and inefficiencies. Since 1999, this initiative saved $11.1 million on the health system's 20 most costly diagnosis-related groups. For example, NMHS used the program to redesign care processes for deep vein thrombosis patients, saving about 15 lives and $750,000 annually. And, the hospital's initiative to reduce healthcare-acquired urinary tract infections is expected to save $1.5 million—$2 million annually on a $200,000 investment.

Reduce Administrative Costs

The reporting of quality information and the introduction of pay-for-performance programs have increased the focus on quality improvement and, the data suggests, led to real performance improvement. But these efforts also have increased the data collection and reporting burden for hospitals because the many stakeholders—insurers, business groups, accrediting bodies,

state and federal agencies—have each instituted their own unique program. Each program has different measures requiring hospitals to develop different tracking and reporting systems for each one. **THE HOSPITAL QUALITY ALLIANCE**, a public-private collaboration between hospitals, the Centers for Medicare & Medicaid Services and other stakeholders, is working to streamline these efforts by developing a single set of quality measures that would be reported by all hospitals and accepted by all purchasing, oversight and accrediting entities. Standardization of these efforts will dramatically reduce the administrative costs associated with these efforts.

Improve Performance

The **MICHIGAN HEALTH & HOSPITAL ASSOCIATION** created the Keystone Center for Patient Safety & Quality in 2003 to improve patient safety and quality and lower costs by putting research into practice. The Keystone intensive care unit (ICU) project implemented proven approaches to increase patient safety, eliminate two types of healthcare-acquired infections and reduce death rates. The results: across the 120 participating ICUs, this program saved an estimated 1,729 lives, reduced hospital days by 127,000 and saved $237 million.

SOURCE: Michigan Hospital Association Keystone for Patient Safety & Quality. http://www.mha.org/mha_app/keystone/icu_overview.jsp. Accessed March 5, 2008.

By implementing lean processes, **AVERA MCKENNAN HOSPITAL AND UNIVERSITY HEALTH CENTER**, in Sioux Falls, South Dakota, improved patient care and achieved cost savings. The hospital incorporated lean principles in the construction of its recently opened emergency department, saving $1.25 million in construction costs. Laboratory turnaround time has been reduced by 44 percent while accuracy has increased to 99.975 percent. And in surgery, end-of-shift suite

inventory of supplies has been eliminated, saving $182,000 in inventory costs as well as 600 hours of nursing time.

SOURCE: "Leading the Way with LEAN." Avera McKennan white paper (http://www.averamckennan.org/pdf/amck/LEAN%20white%20paper.pdf).

Since 2005, **ST. AGNES HOSPITAL** in Baltimore has been implementing lean manufacturing techniques, saving $600,000 in cash and an additional $5 million in "soft" costs by reducing patient wait times and other inefficiencies. For example, the time needed for an inpatient CT scan was reduced by more than half, from 96 minutes to 45 minutes. Door-to-treatment time for heart attack patients in need of angioplasty was reduced as well.

SOURCE: Robert Wood Johnson Foundation Web site (http://www.rwjf.org/programareas/features/digest.jsp?pid=1142&id=4205)

In 2002, **LEHIGH VALLEY HOSPITAL AND HEALTH NETWORK** (LVHHN), a large community health system in eastern Pennsylvania, was experiencing a squeeze on its capacity to admit and care for patients in its hospitals. Rather than adding new buildings, the organization chose to meet an expected 4 percent increase in admissions growth for the next five years by increasing capacity and throughput in its existing system. During the following two years, LVHHN implemented more than a dozen interdisciplinary improvement projects that allowed the organization to handle admissions growth of 6.1 percent in 2003 and 5.5 percent in 2004. Furthermore, the system successfully managed emergency department visit growth of 23.5 percent from 2003 to 2007. A cost-benefit analysis measured a $1.5 million cost-benefit from the project, plus additional savings from implementing the capacity projects without using external consultants.

SOURCE: MacKenzie, Richard, et al. "Growing Organizational Capacity Through a Systems Approach: One Health Network's Experience." *The Joint Commission Journal on Quality and Patient Safety*, vol. 34, no. 2, February 2008, pp. 63-73.

In response to a rise in ventilator-associated pneumonia (VAP) in the trauma intensive care unit, **READING HOSPITAL AND MEDICAL CENTER** in West Reading, Pennsylvania, joined the VHA Transformation of the ICU Program, a quality improvement collaborative that targeted VAP reduction. As part of this effort, the hospital instituted a trauma VAP intervention initiative in 2006 that included several improvement activities, such as a modification of ventilator and spinal precaution protocols, implementation of effective oral hygiene strategies, visual reminders at the bedside, and orientation and continuing education programs for trauma and critical care providers. This initiative led to reduction in the VAP rate from 23.3 in June 2005 to zero in September 2006, and the hospital sustained this performance through October 2007. Reading also saw a marked decrease in the number of ventilator days, from 195 per month in 2006 to 105 per month in 2007. The cost savings from these efforts is estimated to be almost $500,000.

SOURCE: Hospital & Healthsystem Association of Pennsylvania Web site (http://www.haponline.org/downloads/2008_AA_Patient_Safety_The_Reading_Hospital_and_Medical_Center.pdf)

During the past four years, **NORTH CAROLINA BAPTIST HOSPITAL** in Winston-Salem has been using the Six Sigma methodology to reduce waste and variation in care while achieving cost savings. The hospital saved $200,000 by improving cardiac ultrasound and stress testing processes. In addition, Baptist reduced the number of staff hours for each abdominal ultrasound procedure by 10 percent, saving another $200,000. Six Sigma also was behind the hospital's successful effort to improve heart attack care by reducing the mean time for moving heart attack patients from the emergency department to the cardiac catheterization lab by 41 minutes.

SOURCE: Chavers, Mikel. "Chopping the Errors." The Business Journal of the Greater Triad Area, Friday, July 6, 2007.

American Hospital Association