

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. Each action, however, signals recognition in the field that the time to act is now.

Focusing on Wellness

Rockingham Memorial Hospital in Harrisonburg, Virginia created Toward No Tobacco (TNT) a two-week evidence-based tobacco prevention class for all seventh-graders in the state's two largest agricultural counties, as well as all Harrisonburg public schools. A follow-up, two-day workshop is provided for all eighth-graders. TNT also participates in five large community events and conducts community-wide assessments. More than 2,400 seventh-graders participate in the two-week program taught by hospital staff. In 1998, 34 percent of eighth-graders reported using tobacco monthly; by 2010, that number was down to 19 percent. In 1998, the average age of onset for using tobacco was 12 years; by 2010, it had increased to 13 years.

In response to growing needs of the older adult population – from battling depression and prescription drug addictions to decreasing falls and the incidence of chronic disease – Chilton Memorial Hospital in Pompton Plains, NJ developed New Vitality, a free health and wellness program for adults age 50 and over. Working with numerous collaborative partners, almost 40,000 individuals participate in the program, receiving a quarterly newsletter that lists available classes, groups, lectures and workshops. The hospital is responsible for the day-to-day operations including coordination with current participants and community partners.

Better Coordinating Care

After a community needs assessment identified the lack of access to health care as a priority, **Carroll Hospital Center** in Westminster, MD and the Carroll County Board of Health partnered to work collaboratively and improve the health of residents. The Partnership for a Healthier Community grew and became a not-for-profit organization devoted to community health improvement. A direct result was Access Carroll, a clinic that provides free health care to uninsured, low-income county residents who meet certain eligibility requirements. In addition to primary medical care, medication assistance, laboratory testing, imaging studies and patient education, Access Carroll provides specialty care and comprehensive services for patients with chronic conditions. In 2009, Access Carroll provided more than

\$500,000 of pharmaceutical assistance, 84 specialty providers volunteered \$280,000 of free care, and there were more than 7,200 patient visits.

Located in rural Idaho and owned by the citizens of Elmore County, Elmore Medical Center created the Center for Community Health (the Center) to reduce duplication of services and connect local residents with available resources for their health and wellness needs. The Elmore Medical Center provides a dedicated staff person in addition to the medical center CEO to work on behalf of the Center and coordinate with community organization representatives, who make up the Center's advisory board. The coordination of care extends beyond the clinical to address broader community health challenges. The Center measures attendance and consistently demonstrates strong turnout among area citizens as well as medical center staff. It has become known as the place to call for information about community, health and wellness resources and events.

John H. Stroger Jr. Hospital of Cook County (Stroger Hospital) and **Mount Sinai Hospital** in Chicago are primary partners in The Chicago Hospital to Housing Program (CHHP) which was formed in 2002 to address a common and unfortunate situation: homelessness. Homeless people are discharged from hospitals and end up back on the streets without the regular medical care they need. Hospital-based, full-time, case managers determine which patients are a good fit to be involved in the program. Case managers refer patients to the appropriate next level of care – generally social workers employed by the various community partners - and provide intensive case management to ensure that patients' follow-up needs are met. Physicians also can refer patients to a CHHP case manager. CHHP closely aligns with the hospitals' mission to improve the health of the community while treating patients with greater respect and dignity.

Speeding Adoption of IT

Hospitals began to use health IT systems to improve care even before the new Medicare and Medicaid EHR incentive programs were established. The following examples highlight the progress being made by the field....

Citizens Memorial Healthcare (CMH) is a small, rural health care system in Missouri. In an effort to streamline care delivery, CMH decided to implement a system-wide Electronic Health Record (EHR) in 2000. By 2005 all facilities in the system were using computerized provider order entry (CPOE), which allows medical practitioners to communicate treatment orders electronically and across settings, and the hospital had ceased maintaining paper charts. Employees were heavily involved in the selection of the EHR system and its functions. Since implementation, CMH has moved on to increasingly sophisticated systems such as a patient portal and home health tele-management.

Norwalk Hospital located in Norwalk, CT was an early developer and user of health information technology. In recent years, its patchwork of unrelated, home-grown systems was becoming outdated. Encouraged by a group of its physicians that were interested in harnessing IT to improve care and safety, Norwalk began building the foundation for a more robust and integrated IT system. They took time creating and rolling out a closed-loop system that includes CPOE, medication barcoding with pharmacy robot and an EHR. They did not overhaul the entire medication administration process, instead they examined the current process and added IT solutions to already established process that would improve patient care. Reported medication errors have dropped from 13.1 per 1,000 patient days in early 2006 to 2.2 per 1,000 patient days in early 2009 and 99.9 percent of orders are placed electronically.

Intermountain Healthcare based in Salt Lake City, Utah has a national reputation for quality improvement efforts, which are supported by a sophisticated electronic medical record system. For example, the health system was able to use its IT system to identify a growing trend of women and their doctors choosing to induce labor early. The data captured through this system showed that far more babies delivered at 37 or 38 weeks gestational age were admitted to the neonatal intensive care unit than those delivered later. Based on this data, concluded that hitting the magic 39-week mark seemed to significantly cut the chances of a baby being sent to the NICU.

In 1999, approximately 28 percent of all inductions at Intermountain's hospitals occurred before 39 weeks. Today, that percentage is near two percent. And with the significant drop in early elective inductions, Intermountain has also seen a 60-minute drop in the average length of labor in electively induced patients, with fewer cesarean sections (about 21 percent compared to the national average of 33 percent) and other medical complications associated with deliveries. The guidelines benefit new babies and their moms.

Vanderbilt University Medical Center in Nashville, TN was an early adopter of computerized provider order entry, building its own system to attack the biggest contributor to medication errors: illegible or incorrectly written prescriptions. After a number of years working with that

system, Vanderbilt officials decided it was time to focus on the next biggest contributor to errors-medication administration errors-by implementing a bar coding system. Officials are measuring success by usage, and report that 92 percent of medications administered are scanned into the system. The Vanderbilt team seeks ways to pull information from the system to improve the quality of care. They are responsive and engaged with their nurses, enabling them to keep scan rates above 90 percent. In some units every single medication is being scanned by nursing staff, and that compares with typical bar code usage rates of below 80 percent.

Reducing Administrative Costs

Hospital leaders strive to run high-performance health care organizations that deliver the best quality care to their patients. Beyond the mission of providing quality care, hospitals also must comply with government regulators', payers' and other stakeholders' ever-growing administrative requirements. Such activities are increas-ingly diverting precious resources away from patient care and contributing to making health care less affordable. Administrative costs stem from functions that are necessary to operate a health care organization but that are not directly associated with the "hands on" delivery of patient care. Some activities are purely administrative, such as those for claims processing, billing, data reporting, and complying with regula-tions at the national, state and local levels. Other administrative work is linked to patient care, such as admissions and discharge processes, clinical record keeping, utilization review and quality improvement programs. While these administrative functions are essential to providing high quality care, when they become redundant or excessive admin-istrative tasks impose undue burden on health care organizations. Streamlining or reducing administrative requirements offers a prime opportunity to lower health care spending without sacrificing the quality of patient care.

Focus on Performance Improvement

Memorial Hermann Memorial City Medical Center has worked to improve its readmission rates. The organization credits its success in decreasing inappropriate readmissions to having a clear leadership vision that is communicated to all clinical staff and backed up by the commitment of needed resources. It also provided extensive training to all staff members. The low-admission rates are related to better communication of patients' changing needs. One-minute rounds allow nurses to communicate with each other every day about each patient. Bedside nurse discuss the care plan with case managers participating and contributing background information such as when the patient was previously admitted. As a result, Memorial City's readmission rates for AMI and pneumonia are among the top 3 percent in the country.

Source: Commonwealth Fund, http://www.commonwealthfund.org/~/media/Files/Publications/Case%20Study/2011/Feb/1470_Lashbrook_Memorial_Hermann_readmission_case_study_web_version.pdf, Accessed March 1, 2011

Princeton Baptist Medical Center in Birmingham, Ala., targeted improving its hand hygiene compliance rates in efforts to prevent hospital-acquired infections. The organization piloted a program in which 51 employees on a post-surgical unit utilized RFID tags to track their hand hygiene compliance. Personal RFID tags were worn by workers and measured whether or not the worker engaged in hand hygiene and whether they used soap or alcohol. The control unit next to the dispenser recognizes the worker, the time spent and whether soap or sanitizer was used. The tags didn't change workflow patterns and the hospital made a point to give employees feedback and other messages that engaged them so as not to damage morale. At the sevenmonth mark of the pilot, it was estimated that infection rates dropped 22 percent when compared to the same months the previous year. The cost studies indicate that with 2,652 patient admissions, the organization experienced a decrease of 159 patient days and reduced net losses by \$133,386. Source: HIMSS, http://himss.org/storiesofsuccess/docs/2011 submit/08 Stories%20of%20Success PrincetonBaptistMedicalCenter Resubmit.pdf, Accessed March 1, 2011

Evanston Northwestern Healthcare in, now part of Northshore University HealthSystem targeted reducing MRSA rates by using the Institute for Healthcare Improvement's five components to MRSA control. IHI's components consist of focusing on hand hygiene, decontamination of environment and equipment, active surveillance, contact precautions and device bundling. Through the use of real-time surveillance compliance and education of staff and patients, the initiative found success. MRSA blood-stream infections were reduced by 80 percent. Additionally, the organization calculated that patients with a MRSA infection had medical expenses in excess of \$23, 783 and that by eliminating 50 of these infections, the organization realized a cost savings of \$1,200,000, making the program cost neutral after expenses were factored.

Franklin Square Hospital Center in Baltimore wanted to reduce the number of injuries or deaths from patient falls. Between 2007 and 2008, the hospital experienced 0.22 patient falls per 100 patient days. In 2009, the team introduced a color-coded system alerting staff of patients at high risk for a fall. The new system featured yellow ID bracelets and socks for all patients at risk for falling. After implementation, the patient falls rate decreased to a low of 0.13 falls per 100 days. Overall, patient falls with injury decreased from 12 in 2004 to 2 in 2009.

Source: Maryland Patient Safety Organization, http://www.marylandpatientsafety.org/html/education/solutions-031910/documents/processRedesign/Enhancement_of_the_Patient_Falls_Program.pdf, Accessed March 1, 2011

St. Alexius Medical Center, Hoffman Estates, Ill., wanted to improve awareness, improve outcomes and decrease costs among its sepsis population. As a Premier member, St. Alexius joined QUEST: High Performing Hospitals, a performance improvement collaborative where members have to define measurable goals that save lives, reduce costs,

deliver reliable and effective care and improve patient safety and the patient experience. St. Alexius Medical Center was recognized as one of the 2010 Quest High Performers for its improvements in sepsis care. The hospital's key focus areas included reducing mortality rate, using standardized evidence-based care, reducing length of stay and decreasing waste related to diagnostic testing. Since the implementation of standardized evidence-based care, six-hour bundle compliance rates increased from 12 percent in January to 61 percent in May of 2010 and sepsis mortality rate decreased from 38 percent in January to 17 percent in May.

Source: Premier, http://www.premierinc.com/quality-safety/tools-services/quest/downloads/2010TopPerformers_%20FINAL.pdf, Accessed March 1, 2011

St. Elizabeth Health Center, Youngstown, Ohio, focused on improving patient safety and outcomes in its intensive care unit. The team established an ICU collaborative model were an intensivist oversees management of ICU patients. The intensivist and ICU nurse coordinator lead daily rounds that include the patient's family members. Nurses provide perspectives to ensure patient outcome and individualized care plans. The team uses a daily-goals worksheet, developed by Johns Hopkins Hospital. To date, the hospital has experienced a length-of-stay decrease from 7.09 to 3.53. decreased average ventilator days from 5.68 to 4.58. decreased incidents of ventilator-associated pneumonia from 5 cases to 2 cases, decreased blood-stream infections from 8 cases to 2 cases, decreased morality rates to 24 percent from 31 percent and increased use of palliative care consults to 420. The hospital estimates its saves \$29,175 per day by decreasing its length of stay, \$1,360 per day on ventilator, in addition to saving \$40,000 per VAP and between \$7,000 and \$30,000 per BSI.

Source: Ohio Patient Safety Institute, http://www.ohiopatientsafety.org/ Best%20Practice/St.%20Elizabeth%20Health%20Center.pdf, Accessed March 1, 2011

The University of Texas MD Anderson Cancer Center in Houston was given a quality award by the Texas Hospital Association for its efforts in eliminating ventilator-associated pneumonia rates in its intensive care unit. In 2002, VAP rates were 34.2 cases per 1,000 ventilator days, double the national average for trauma ICUs. The ICU medical director and his team implemented several multidisciplinary strategies to reduce the rate. By 2009 that rate had dropped to zero, and it has stayed at zero for the past year. Not only does the strategy save lives, it saves money. Studies show that 25 percent of all VAP patients die and having no VAP incidents represents dozens of lives saved. The drop in VAP rates also saves an enormous amount of money and helps patients recover more quickly and leave the hospital sooner. freeing up critically needed hospital beds. The average cost of treating a VAP infection is about \$57,000. With at least six cases per month, MD Anderson's cost for treating VAPs in 2002 was more than \$4.1 million per year.

Source: Texas Hospital Association, http://www.tha.org/ HealthCareProviders/AboutTHA/PressRoom/TheUniversityofTexa09DA. asp, Accessed March 1, 2011

3 March 2011