Emergency Department Information Systems

Solving rural America’s healthcare challenges

Bunkie General Hospital deploys a stand-alone EMR in its emergency department and achieves significant financial and clinical gains.

By Linda Deville

R ural hospital emergency departments (EDs) face a number of major social, economic and cultural challenges among their patients, creating disparities in healthcare not seen as frequently in their urban counterparts. With a higher percentage of self-employed and unemployed residents, rural EDs are less likely to have patients with healthcare or prescription drug coverage. Overall, rural EDs care for a more at-risk population due to lower incomes, educational shortcomings and longer travel distance to physicians for treatment or preventative care. Rural EDs must also struggle internally with shortages of qualified workers and fewer capital resources that would enable them to implement advanced healthcare IT solutions such as EMR software and IT infrastructure.

As the “front door” to their healthcare communities, rural EDs provide strong insight into the organization’s clinical performance and are a particularly vital component of the hospital’s financial well-being. While many issues that stand in the way of success aren’t easily solved, recent government initiatives to spur regional growth may just provide the spark that small-town hospitals require to ease the discrepancies in healthcare delivery that often exist between rural and urban America.

Confronting the country’s lingering economic woes, the federal government recently emphasized the need for new capital, job training and additional investments in rural communities. Hospital EDs in these areas stand to benefit from the Department of Health and Human Services (HHS) and the United States Department of Agriculture (USDA) loans. These financial accommodations are being made available to help more than 1,300 critical access hospitals recruit additional staff and purchase software and hardware to implement healthcare IT solutions.

Bunkie General Hospital sees success in an EMR

Bunkie General Hospital is just the type of facility that has benefited from such initiatives. Located in Bunkie, La., a town of just more than 4,000 residents, the 32-bed hospital is a shining example of how a little financial assistance can incite significant improvements in revenue and clinical quality. These efforts have helped Bunkie General Hospital achieve a multimillion dollar annual windfall and be nationally recognized in U.S. News & World Report, where it received the gold and silver award for management of patients with heart failure. The road to achieving these as well as other major successes, however, was not an easy one.

The EMR software has placed Bunkie General squarely on the path to achieving meaningful use with a number of compliant functionalities, including an up-to-date problem list, active medication lists, quality measure reporting and medication reconciliation.

For many years, volume in the ED was highly inconsistent and patient and staff satisfaction levels were subpar. In spite of the organization’s enhanced focus on meeting regulatory compliance guidelines, the ED could not capture all of the charges, meaning that revenue was consistently left on the table.

Not only did this prevent the hospital from investing in enabling technologies, the ED was losing quality physicians who left the organization in search of a bigger paycheck. In order to achieve quality improvements; enhance patient, employee and physician satisfaction levels; and increase its financial strength, Bunkie General’s administrators knew that the ED needed to significantly reduce its dependence on paper and employ IT tools that would assist its clinicians in capturing the data needed to impact clinical and financial quality. Understandably, Bunkie General was concerned about being able to make such an important investment.

The answer came in the form of a grant from the Agency for Healthcare Research and Quality (AHRQ), established to assess the impact that healthcare IT would have on the revenue cycle, clinical quality improvement, staff and patient satisfaction of rural Louisiana hospitals. With the grant in hand, Bunkie General’s leadership team purchased an EMR solution that...
could make an immediate impact on clinical quality, but also one capable of producing consistent financial improvements over the long term with substantial analytics and reporting features. They also wanted a highly user-friendly technology to ensure quick uptake and ongoing support of clinicians.

Specifically, the ED expected an EMR to facilitate documented improvements in patient volume, left without being seen (LWBS) rates, admissions percentage, coding levels, and Centers for Medicare and Medicaid Services (CMS) core measures (particularly those related to infection control and disease management). After a thorough review of systems that met these criteria, Bunkie General selected and implemented CMR, an emergency department information system (EDIS), based on the product’s solid industry reputation and the fact that the user-friendly software easily integrates with other hospital-wide enterprise information systems. A best-of-breed technology designed for EDs of all sizes, the EMR presents a traditional chart layout to ensure that busy staff can easily and quickly access and input critical patient data.

Knowing it had one shot to gain clinician buy-in, Bunkie General placed a high priority on end-user training and clinician workflow. By investing significant time and resources into these activities, leadership could make certain the EMR would improve efficiencies and not interfere with patient care. Bunkie General involved ancillary departments that interact with the ED in the training process to harmonize the patient experience throughout their continuum of care.

Soon after implementing its new EMR system, Bunkie General’s ED began to recognize significant operational and clinical benefits, including a decrease in patient turnaround time from approximately 160 minutes to near 100 minutes, a more than 35 percent reduction. The ED also was able to improve its hospital admission percentage from 6.2 percent to 14 percent, an average increase of 52 patients per month. These results, combined with higher across-the-board coding levels, led to a nearly $2 million annual windfall for Bunkie General.

The EMR software has placed Bunkie General squarely on the path to achieving meaningful use with a number of compliant functionalities, including an up-to-date problem list, active medication lists, quality measure reporting and medication reconciliation. The solution also enables the ED to provide its patients with electronic copies of records, including discharge instructions and a care record summary. The forms eliminate the problem of illegible physician orders and instructions, thereby increasing patient safety.

The EMR has allowed Bunkie General to better accommodate ED-specific patients and expedite care for time-sensitive illnesses. ED staff is afforded a charting tool designed for their unique workflow, leading to improved care coordination and communications efficiency among physicians and nurses. The ED software facilitates more data collection as well, which has improved chart audit results and enabled fully electronic patient transfers. And with more thorough and accurate physician orders, medical records department staff have reported significant increases in efficiency since they rarely need to chase down a physician or nurse with questions about a chart.

The automated patient record enables the ED to capture data more easily, which is then distributed in a report format that provides a glimpse into the department’s performance, including patient volume and satisfaction levels. With this information, hospital leaders can identify exactly where improvements are being achieved and what areas are still lagging. Bunkie General has learned from its new decision-support data that patient-care costs have declined and personnel have become more efficient, which has translated into higher levels of patient, clinician and employee satisfaction levels.

Prior to implementing its EMR, Bunkie General could not pay for full-time physicians, leaving many of its 17 part-time ED doctors to practice in other hospital departments. With greater financial stability, the ED now includes a core group of four well-compensated physicians. And with a revised hospitalist program, two local physicians who share one week on call and provide care to unassigned patients are able to help ease the burden during spikes in ED patient volume.

An eye on the future

Bunkie General provides telemedicine as part of the Louisiana Rural Health Information Exchange, which links patients to specialty physicians with the Louisiana State University (LSU) Health Sciences Center in Shreveport. For its efforts, the hospital was recognized by U.S. News & World Report magazine with the Silver and Gold Award for its exceptional care to patients suffering with heart failure. More recently, the hospital was listed as one of HealthGrades’ top Louisiana institutions in the management of chronic obstructive pulmonary disease (COPD) and pneumonia.

Realizing near-term operational improvements with its EMR, Bunkie General is now determining how it will use the EMR to assess and reassess its core measures, provide ongoing education for its staff and utilize additional data to ensure ongoing clinical and financial improvements. The ED is also looking to integrate the software with its telemedicine capabilities to facilitate bedside registration and drive quicker clinician response to time-sensitive illnesses.

None of these activities would have been possible without an ongoing belief that rural hospitals continue to play a vital role in the nation’s healthcare system. The operational barriers that these institutions face are indeed daunting. But with the right financial incentives; a core group of administrators, clinicians and staff dedicated to improving the health of rural populations; and technologies that help increase caregiver efficiency and heighten patient satisfaction, small communities will see their rural facilities thrive for years to come.