Community Health Care System Improves Critical Communications with Vocera

Columbia County Health System serves a rural population of 5,800 in southeast Washington state. Key facilities include Dayton General Hospital, a 25-bed critical access hospital, two certified rural health care clinics, and Booker Rest Home, a 49-bed skilled nursing facility.

Like rural providers across the country, Columbia County Health System faces chronic challenges as overburdened state and federal programs trim reimbursements and other financial support. Yet critical access hospitals like Dayton General must meet the same standards of care quality, safety and accountability as urban facilities with more accommodating budgets. They must do more with less, finding creative ways to increase efficiency and improve outcomes.

Improving Safety with Hands-Free Communications

Despite limited resources, Columbia County Health System needed to identify and address any persistent safety risks that could lead to staff injuries incurred during patient transfers and repositioning. Focused staff rounding revealed that minimum staffing levels, especially on night shifts, and insufficient communication among care team members might put staff at risk for injuries. Certified nursing assistants often could not summon the needed help to perform two-person transfers, despite shouting for assistance. The facility had previously tried various communication aids such as walkie-talkies and Internet Protocol phones. All proved unsatisfactory due to inadequate security, difficulty of use or limited staff adoption.

“If the communication tool is not easy to use and becomes a burden, staff will put it down and walk away,” says Shane McGuire, chief operations officer at Columbia County Health System.

After researching options, the Vocera Communication® System went to the top of the team’s short list due to its wearable, voice-controlled convenience and configurable call routing capabilities. Other differentiating features of the enterprise-class system include the ability to leverage the existing wireless network and phone system. Final selection hinged on two considerations: how to fund the investment, and how to implement the solution with limited information technology resources.

A collaborative partnership with Vocera and a grant from Washington State Hospital Association helped resolve these challenges. Vocera Professional Services technicians helped configure the system’s intelligent call routing and train all clinicians and staff at Dayton General Hospital and Booker Rest Home during a one-week implementation.

Connecting Emergency Services Faster, More Efficiently

The team at Dayton General Hospital also created all-hands broadcast calls for code situations and assigned a direct dial-in for calls from external emergency services. The Vocera system enables real-time conversations among geographically dispersed care team members and first responders. Incoming calls from local emergency medical services teams are connected faster and more efficiently, ensuring that critical messages reach the right person at the right time, even during periods of high traffic.

Key Benefits

- Geographically dispersed care team members and first responders can now have real-time, hands-free conversations.
- Incoming calls from EMS teams are connected faster and more efficiently.
- Three communication-related HCAHPS metrics have improved.

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“Now the EMS crews can call in and instantly reach someone in the emergency department,” McGuire says. “All they have to do is simply say ‘emergency department,’ and the Vocera system routes the call. The right staff member is waiting when the ambulance or helicopter arrives, and they are prepared with the patient’s vital stats in real time.”

In addition, the Vocera system supports outbound calls from the emergency department to emergency medical flight crews, allowing team members to communicate patient statistics and vital information without leaving the bedside.

“The Vocera communication solution has been crucial in preventing emergency events from getting out of control,” explains Dayton General Hospital emergency physician Mary Celeste Klingner. “During a recent shift, my nurse and I had to transfer a pediatric patient for surgical management of intra-abdominal injuries and also manage an elderly patient with chest pain. We used the Vocera system to communicate with other departments and our on-call staff, and to arrange simultaneous helicopter transfers without interrupting our ongoing patient care. We were able to manage both patients in a timely and lifesaving manner.”

**Elevating Patient Care, Coordination and Satisfaction**

Communication and collaboration among the in-house care team has also improved. Staff members providing direct patient care no longer need to stop what they are doing, leave the patient bedside or shout down the hallway to ask for assistance. In long-term care at Booker Rest Home, the Vocera system has also greatly reduced nighttime noise levels.

“Overall communication has improved tremendously,” reports Stephanie Carpenter, chief nursing officer at Columbia County Health System. “Call light response times are going down. Patient fall rates are down. We’ve reduced wait times for transfers and improved patient care across the board.”

In addition, although the Vocera Communication System was active for only two months during the most recent Hospital Consumer Assessment of Healthcare Providers and Systems survey period, Dayton General Hospital reported significant improvements in three communications-related metrics from July 2014 to June 2015 (See figures).

Although HCAHPS survey results are dependent on multiple variables and improvements cannot be attributed to a single solution or process, it is clear that within a short period of time, the Vocera Communication System has made a notable impact.

“One of the most successful things we have done this year is to implement the Vocera system,” says McGuire. “It has already played a key role in improving staff satisfaction and patient safety because we can get resources mobilized much quicker.”

**Expanding the Vocera Communication System**

Looking forward, McGuire and the Columbia County Health System team hope to expand upon their communication efficiencies. “We look forward to a long-term partnership with Vocera and continuing to enhance communication both within our walls and beyond, to improve patient care and safety in our community,” says McGuire.

Because Vocera delivers a comprehensive, enterprise-class approach to communication, Columbia County Health System can easily layer on new capabilities to support long-term plans, including secure text messaging, alarm management and clinical data sharing designed to empower care providers instantly, on their device of choice.