

Case Study

Oklahoma Heart Hospital

Manage Alarms & Communication To Enhance Patient Flow

About OHH

Oklahoma Heart Hospital (OHH) is one of the finest tertiary cardiovascular care facilities in the United States. A combination of expert patient care, teaching and advanced research protocols demonstrates the staff's dedication to providing the absolute best patient care. The combination of expertise, the latest technology and a full spectrum of services create the highest quality comprehensive heart care.

OHH cardiologists represent a distinguished team of physicians, including invasive cardiologists, noninvasive imaging specialists, electrophysiologists and heart failure and preventive health specialists.

As part of their current expansion and long-term growth plans, OHH wanted to upgrade their communication system from their existing closed-loop system with limited filtering and acknowledgment capability. In addition, staff were requesting a more efficient way to coordinate communication and patient care responses.

Before Connexall[®]

Before Connexall when the patient monitor reached a specified threshold, the nurses responsible for that patient would be alerted on an alphanumeric pager with a text message and low quality waveform.

While this allowed nurses to remain mobile, it created two issues. First, every alarm was sent to the nurse, regardless of whether or not it was critical; and with the low quality of the waveform image, the nurse would have to go to the patient's bedside to determine the severity of the alarm. Second, each

alarm would notify multiple nurses who had no way of knowing whether or not another nurse was responding.

The Connexall Solution

After exploring multiple options, OHH chose Connexall to integrate into their system. Connexall was introduced to the staff at OHH by Dräger, a manufacturer of vital signs monitors. Dräger was a key player in the installation and integration process of Connexall into OHH's existing technologies.

"We needed a solution that could monitor waveforms as well as vital signs and were looking for something to incorporate all the systems we already had in place."

– Peggy Tipton RV, BSN
Chief Operating Officer, Chief Nursing Officer
Oklahoma Heart Institute

Using the outdated notification system, the alarm recipient was unable to confirm the patient's status information. Further, no patient vital signs could be sent to nurses, which was a hindrance to overall patient care.

As part of the Connexall solution, nurses at OHH are now equipped with BlackBerry devices, which receive all their notifications. Connexall provides a platform for information to be transmitted quickly and efficiently. With the BlackBerry's high-resolution display, patient waveform displays from monitors can be captured and this information can be clearly

displayed, giving clinicians the information they need to make the right decisions. Whenever a patient monitor reaches a certain threshold, each nurse assigned to that patient receives not only the waveform, but also a text message and the patient's vital signs. On its own, the new level of detail with each notification was a significant improvement over OHH's old system. Connexall also allows for alarm filtering based on the categories of alarms assigned by the patient monitor. As a result, nuisance alarms have been significantly reduced, and the vast majority of alarms that nurses receive are now critical, allowing them to respond to emergency situations more effectively and efficiently.

Finally, clinicians can acknowledge that they are responding to an alarm directly on their BlackBerry, and once they do, the alarm will stop on all other recipient's devices. This means that multiple nurses are no longer responding to each alarm, allowing them to more effectively tend to their patients.



Connexall Results Summary

- Clear waveform display on BlackBerry devices means that clinicians have information to make appropriate decisions en route to the patient.
- Filtering of nuisance alarms allows nurses to do their jobs more effectively and efficiently.
- Ability to acknowledge or escalate alarms creates more effective workflows.
- Patient Monitor alarms can be sent to BlackBerry devices and computers at nursing stations, giving nurses access to alarm information wherever they are.
- Comprehensive tracking and reporting allows management to review response times and adjust workflows accordingly.

"We get the alarms faster on our BlackBerrys than we ever did with the old notification system, which is a great thing. Connexall is an excellent system for any hospital."

– Peggy Tipton RV, BSN
Chief Operating Officer, Chief Nursing Officer
Oklahoma Heart Institute