

Increasing patient safety

Jay Cyr discusses the benefits of using a hospital wireless alarm system.

EHM. How has your facility implemented the LifeSync System?

Jay Cyr. After having some issues dealing with standard reusable ECG lead wires, a combination of alarms issues and other clinical concerns, we identified the LifeSync Wireless ECG System as a potential clinical solution. We conducted a study of the system that demonstrated we could have improved outcomes, so we rolled the product out to our cardiac medical telemetry unit, cath lab, cardiac ICU and telemetry floors. Being able to use the LifeSync System throughout the continuum of care was a big factor in our decision.

EHM. How has the LifeSync System helped to increase patient safety?

JC. A lot of times with standard leads, the leads dislodge or come off, which can lead to nurses becoming desensitized to some of these audible alarms that are constantly going off. We had some clinical events that could have resulted in patient harm, but fortunately didn't, but had we not taken steps to alleviate the problem by implementing the LifeSync System, we felt that it would have resulted in some patient harm in the future. With the LifeSync System, we have seen at least a 50 percent reduction in lead off alarms, improving patient safety.

EHM. How has the LifeSync System helped to improve patient outcomes?

JC. We know that false alarms and lead off alarms have reduced dramatically. The nurses feel confident that the ECG tracing they are receiving is more accurate using the LifeSync System and they have confidence the LeadWear is on the patient where it's supposed to be. That plays into staff satisfaction but even more importantly into patient satisfaction. Nurses aren't coming in the middle of night waking patients up to replace leads and electrodes all the time.



Jay Cyr is Vice President of the Heart & Vascular Center of Excellence at University of Massachusetts Memorial Health Care, and has spent his entire 28 year nursing career in the cardiovascular service area. Jay writes and speaks nationally on issues including Acute Coronary Syndrome and other issues in cardiovascular care.

EHM. How does the LifeSync System help to increase nurse productivity?

JC. Our nurses have become more effective with the LifeSync System. The LifeSync System allows us to put the LeadWear on the patient one time and it remains with the patient for the duration of their stay. So instead of multiple sets of leads and electrodes, it's just one set of LeadWear and electrodes. We saw improvement in productivity and patient comfort. Productivity improvements came from not having to run to the room and exchange things often, because with LeadWear the electrodes stay on securely and for a longer period of time. And for patient comfort, imagine patients having multiple electrodes and lead wires put on

and removed multiple times – just the skin irritation and all the effects that come from that alone were discomforting.

EHM. How has the LifeSync System aided in your early ambulation efforts with cardiac patients?

JC. Cardiac patients, once the procedure is completed, are encouraged to ambulate. From a nursing perspective, we have definitely seen improvements. When the patients get up initially they can be a little unsteady even just moving around the bed. LeadWear and electrodes are more secure than standard leads and electrodes. With standard lead wires, patients had lead wires dangling all over the place, which could present a safety issue. With LifeSync System, the potential of tripping over dangling wires is gone.

EHM. How has the use of LifeSync's disposable ECG LeadWear contributed to reductions in your HAI concerns?

JC. Infection control is a factor in patient safety, liability, public reporting and regulatory issues. The LifeSync Wireless ECG System with its disposable LeadWear has helped us to reduce and maintain a reduction in infection for these most critically ill patients; in particular, the cardiac surgery patients in the ICU.

EHM. With improvements in patient safety and nursing productivity, has the LifeSync Wireless ECG System paid for itself in your facility?

JC. From a productivity perspective, with the way nurses are being paid these days, it doesn't take much to improve their productivity to help offset any minor increase in product cost. From an infection control perspective, and considering the cost of just one or two infections, as well as the potential for payers not to reimburse for any nosocomial infections – LifeSync is a cost saver. In the long run the return on investment has been several-fold since its introduction. ■