ECRI Institute PSO
Share Learn Protect™

PSO Monthly Brief

February 2013

ECRI Institute's 2013 Top 10 Health Technology Hazards: PSOs Help You Identify and Mitigate the Risks

Each year, ECRI Institute releases its list of the top 10 health technology hazards—risks that we believe are worthy of your attention throughout the year, based on our examination of the evidence. This year, the list includes alarm safety, surgical fires, and smartphone-related distraction, as well as several others.

Three other hazards on the list are specifically related to events that the ECRI Institute PSO has seen with increasing frequency. These include medication administration errors during infusion pump use, integration failures among health information technology and equipment, and inadequate reprocessing of endoscopic and surgical devices (stay tuned for the next PSO Monthly Brief).

Medication errors, noted by ECRI Institute PSO to be one of the most common errors in a healthcare setting, can occur during any phase of the medication administration process. Specifically focused on as a 2013 hazard, however, is the risk of administration error during use of an infusion pump. For example, pumps may be subject to programming error or connection error; these risks can be reduced with the proper use of a "smart" pump. However, the next step in infusion safety requires a commitment to technological integration. If infusion pumps are successfully and thoroughly integrated with the organization's electronic ordering, administration, and documentation systems, the likelihood of error will be greatly reduced.

Smart pumps are not the only technology that would benefit from complete integration into organization health information technology systems, however. Theoretically, interfaces among medical equipment and health information technology would allow for automated documentation, real-time clinical decision-making support, data aggregation, and remote monitoring. However, in practice, systems often do not function as intended when linked together. ECRI Institute PSO has seen events in which data was not transferred from one system to another, or when large portions of it were overwritten. The risk in such situations is that caregivers have no information or incomplete information on which to base their clinical decisions.

A third item on ECRI Institute's Top 10 list that has been seen often by ECRI Institute PSO (and indeed, it remains on the list partly because of the frequency with which ECRI Institute PSO has seen such events) is inadequate reprocessing of endoscopic devices and surgical instruments; the equipment is not adequately cleaned before sterilization, resulting in debris remaining in or on it. Reprocessing shortcomings lead to contamination at least and life-threatening infection at worst. ECRI Institute recommends that all facilities broadly assess existing or implement more stringent reprocessing initiatives as part of their patient safety protocols.

All of us here at ECRI Institute PSO hope that you will review the 2013 Top 10 Health Technology Hazards, and that will you use this list to improve the safety of patients in your own organization. To see how ECRI Institute PSO can assist you in this analysis, call us at (610) 825-6000, extension 5558, or e-mail us at pso@ecri.org.

ECRI Institute PSO
Share Learn Protect™

How Can We Help You?

Whether you have questions about the final rule or want to learn more about ECRI Institute PSO and/or support for other PSOs, we would be happy to hear from you. Please contact ECRI Institute at pso@ecri.org or call (610) 825-6000, ext. 5558.