

## **Definitions related to Prevention and Reduction of the Occurrence of Wrong Site Surgery**

The definitions provided below can be used by perioperative personnel in developing policies and procedures for their health care organization.

### **Failure Mode and Effect Analysis (FMEA)**

An FMEA is a systematic, proactive method for teams to evaluate processes for possible failures and the failures from occurring by preventing them by correcting the process proactively. FMEA includes process steps (what could go wrong? why would a failure happen? what is a consequence of each failure?). The FMEA is useful to evaluate a new process before implementation and assess the effect of a change to an existing process.<sup>1</sup>

### **Healthcare Failure Mode and Effect Analysis (HFMEA<sup>SM</sup>)**

A model developed by the Department of Veterans Affairs National Center for Patient Safety to help teams conduct a proactive risk assessment. This web-based tool includes five steps in the process: define the topic, assemble the team, graphically describe the process, conduct the analysis, and identify actions and outcome measures.<sup>2</sup>

### **Near Miss**

An event that could have resulted in an accident, injury, or illness, but did not occur due to chance, skillful management, or a timely intervention. These events described as “near miss,” if they occur, could cause serious, adverse outcomes.<sup>3</sup>

### **Proactive Risk Assessment**

A method of analysis of hazards using prospective techniques to identify high-risk processes in an environment.<sup>4</sup> There are several types of proactive risks assessment methods (eg, healthcare failure mode effect analysis (HFMEA), failure mode effect analysis (FMEA), Event Tree Analysis (ETA), and hazard identification.<sup>2,4</sup> HFMEA and FMEA are common methods used by healthcare facilities to obtain information related to patient safety. ETA and hazard identification are commonly used by engineers in the aerospace, nuclear energy, and chemistry industries.<sup>4</sup>

### **Radio Frequency Identification (RFID)**

Radio-frequency identification (RFID) is a wireless system of tags and readers. The reader is a device that emits radio waves and receive signals back from the RFID tag. Tags use radio waves to communicate their identity and other information to nearby readers. RFID systems use radio waves at several different frequencies to transfer data. RFID technology is used in healthcare for surgical sponge detection, inventory control, equipment tracking, out-of-bed detection and fall detection, personnel tracking, confirming patients receive the correct medications and medical devices, preventing the distribution of counterfeit drugs and medical devices, monitoring patients, and providing data for electronic medical records systems.<sup>3,5</sup>

### **Root Cause Analysis**

A retrospective approach or method for health care organizations to follow when conducting a critical investigation of adverse events.<sup>3</sup>

### **Sentinel Event**

“An unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof. Serious injury specifically includes loss of limb or function. The phrase, "or the risk thereof"

includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome. Such events are called "sentinel" because they signal the need for immediate investigation and response."<sup>6</sup>

### Triggers

The use of clues to identify an adverse event.<sup>7</sup>

"Triggers use surveillance algorithms ("triggers") derived from clinical logic to flag medical records."<sup>8,p 45</sup>

### References

1. Failure Modes and Effects Analysis (FMEA) Tool. The Institute for Healthcare Improvement. <http://www.ihf.org/knowledge/Pages/Tools/FailureModesandEffectsAnalysisTool.aspx> Updated November 1, 2011. Accessed October 15, 2013.
2. Healthcare Failure Mode and Effect Analysis (HFMEA<sup>SM</sup>). The Department of Veterans Affairs <http://www.patientsafety.va.gov/professionals/onthejob/hfmea.asp>. Accessed February 3, 2014.
3. Recommended practices for prevention of retained surgical items. In: *Perioperative Standards and Recommended Practices*. Denver, CO: AORN, Inc; 2014:333-349.
4. Coles G, Fuller B, Nordquist K, Weissenberger S, Anderson L, DuBois B. Three kinds of proactive risk analyses for health care. *Jt Comm J Qual Patient Saf*. 2010;36(8):365-375.
5. Radiation-Emitting Products: Radio frequency identification (RFID) description., US Food and Drug Administration. <http://www.fda.gov/Radiation-EmittingProducts/RadiationSafety/ElectromagneticCompatibilityEMC/ucm116647.htm>. Accessed February 3, 2014.
6. Sentinel event. The Joint Commission. [http://www.jointcommission.org/sentinel\\_event.aspx](http://www.jointcommission.org/sentinel_event.aspx). <http://www.ihf.org/knowledge/Pages/Tools/IHIGlobalTriggerToolforMeasuringAEs.aspx>. Updated 2013. Accessed October 3, 2013.
7. Rosen AK, Itani KM, Cevasco M, et al. Validating the patient safety indicators in the veterans health administration: do they accurately identify true safety events? *Med Care*. 2012;50(1):74-85.