Definitions related to Prevention and Reduction of the Occurrence of Retained Surgical Items (RSI)

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 to identify possible failures and to prevent failures from occurring by correcting the process proactively. An 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.¹

Gossypiboma

Surgical sponges or towels that are retained in the patient’s body unintentionally after an operative or other invasive procedure. Synonym: textiloma²

Healthcare Failure Mode and Effect Analysis (HFMEA℠)

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.³

**Near Miss**
An event that could have resulted in an accident, injury, or illness, but did not occur because of chance, skillful management, or a timely intervention. If these near-miss events occur, they could cause serious, adverse outcomes.²

**Proactive Risk Assessment**
A method of hazard analysis using prospective techniques to identify high-risk processes in an environment.⁴ 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], hazard identification).³,⁴ Health care facilities commonly use HFMEA and FMEA to obtain information related to patient safety. Engineers in the aerospace, nuclear energy, and chemistry industries commonly use ETA and hazard identification.⁴

**Radio-Frequency Identification (RFID)**
Radio-frequency identification 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. An RFID system uses radio waves at several different frequencies to transfer data. Health care organizations use RFID-technology for surgical sponge detection, inventory control, equipment tracking, out-of-bed and fall detection, personnel tracking, confirming patients receive the correct medications and
medical devices, preventing the distribution of counterfeit medications and medical devices, monitoring patients, and providing data for electronic medical records systems.\textsuperscript{2,5}

**Retained Surgical Items (RSI)**

Retained surgical items are described as any item (eg, sponge, needle, instrument) unintentionally left behind in a patient’s body in the process of performing a surgical procedure.

**Root Cause Analysis**

A retrospective approach or method for health care organizations to follow when conducting a critical investigation of adverse events.\textsuperscript{2}

**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.”\textsuperscript{6}

**Triggers**

The use of clues to identify an adverse event.\textsuperscript{7} “Triggers use surveillance algorithms (‘‘triggers’’) derived from clinical logic to flag medical records.”\textsuperscript{8(p45)}

**References**
1. Failure Mode and Effects Analysis Tool. The Institute for Healthcare Improvement.  

2. Recommended practices for prevention of retained surgical items. In: Perioperative  

3. Healthcare Failure Mode and Effect Analysis (HFMEA\textsuperscript{SM}). The Department of Veterans Affairs National Center for Patient Safety.  


7. IHI global trigger tool for measuring adverse events. Institute for Healthcare Improvement.  