

# Recommended Practices for Prevention of Retained Surgical Items

The following Recommended Practices for Prevention of Retained Surgical Items were developed by the AORN Recommended Practices Committee and have been approved by the AORN Board of Directors. They were presented as proposed recommendations for comments by members and others. They are effective July 15, 2010. These recommended practices are intended as achievable recommendations representing what is believed to be an optimal level of practice. Policies and procedures will reflect variations in practice settings and/or clinical situations that determine the degree to which the recommended practices can be implemented. AORN recognizes the various settings in which perioperative nurses practice. These recommended practices are intended as guidelines adaptable to various practice settings. These practice settings include traditional operating rooms (ORs), ambulatory surgery centers, physicians' offices, cardiac catheterization laboratories, endoscopy suites, radiology departments, and all other areas where surgery and other invasive procedures may be performed.

## Purpose

These recommended practices (formerly titled "Recommended practices for sponge, sharp, and instrument counts") provide guidance to perioperative registered nurses (RNs) in preventing retained surgical items (RSIs) in patients undergoing surgical and other invasive procedures. Avoiding injuries from the care that is intended to help patients was identified by the Institute of Medicine as one of six goals to achieve a better health care system.<sup>1</sup> Counts for soft goods (eg, radiopaque sponges, radiopaque towels); sharps; and instruments are performed to account for all items used on the surgical field and to lessen the potential for injury to the patient as a result of an RSI. Health care organizations are responsible for employing standardized, transparent, verifiable, reliable practices to account for all surgical items used during a procedure to lessen the potential for patient harm as a result of retention. There is a potential for inaccurate counts with both current variable manual counting practices and the use of adjunct technology.<sup>2-7</sup> Therefore, behavioral change and an understanding of risk reduction strategies unique to each setting should be employed when adopting system(s) to account for all surgical items. A reliable system to account for all surgical items includes, but is not limited to, complete and accurate counting, radiological confirmation, and the use of adjunct technology, to promote optimal perioperative patient outcomes.

Current law does not prescribe what methodologies should be used, who should use them, or even that they need to be used. It does, however, require that surgical items not intended to remain in the patient be removed.

The doctrine of *res ipsa loquitur* (ie, "the thing speaks for itself") is most applicable in RSI incidents. Therefore, the time and effort in legal tort cases is spent assigning blame or fault for the act because it is not always necessary to prove negligence. The "captain of the ship" doctrine is no longer assumed to be true, and members of the entire surgical team can be held liable in litigation for RSIs.<sup>8-10</sup>

Retained surgical items are considered a preventable occurrence. Many states require public reporting when these events occur. Federal and state agencies, accrediting bodies, third-party payers, and professional associations consider an RSI a sentinel event or "never event." Health care organizations and providers will not be reimbursed for additional care provided as a result of "never events."<sup>8,11-15</sup>

The incidence of RSIs is well-documented in the literature dating as early as the 1800s.<sup>2,3,5-7,16-18</sup> There is immense variability, however, in the occurrence rates and identified risks. In a study of retained foreign items, 52% were radiopaque sponges and 43% were instruments.<sup>7</sup> The RSIs in this study were associated with multiple major procedures being performed at the same time. Another study reported count discrepancies in 29 procedures (ie, 45% for radiopaque sponges, 34% for instruments, 21% for needles).<sup>3</sup> The study suggests that emergency procedures and unexpected changes in procedures correlated to an increased risk of RSIs. Closed claim studies conducted between 1985 and 2001 demonstrated that roughly 69% of reported cases of RSIs involved radiopaque sponges.<sup>2</sup>

Although the majority of retained radiopaque sponges are found in the abdomen and pelvis, there are reports in the literature discussing retained radiopaque sponges in the vagina, thorax, spinal canal, face, brain, and extremities.<sup>2,6,8</sup> The risk exists for RSIs even in the smallest of incisions.<sup>3</sup> A general strategy for preventing RSIs is to account for all items opened or used in a procedure at the end of the procedure because the potential risk for retention cannot always be predicted.

Common strategies in the literature that have been used to mitigate the incidence of RSIs include development of standardized procedures combined with manual counting; enhanced communication; multidisciplinary teamwork; radiological verification; and use of adjuncts (eg, count bags, technology to supplement manual sponge count procedures). Health care organizations are responsible for drafting policies and procedures applicable to their practice setting. It is imperative to value teamwork and hold all perioperative personnel accountable for the adoption, implementation, and review of their designated procedures and practices.

