



Center of

EXCELLENCE

**in Surgical
Safety**

Prevention of RSI

PROGRAM MANUAL

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OVERVIEW OF THE PROGRAM

A retained surgical item (RSI) is a rare but serious preventable error that can result in patient harm. Surgical sponges are the most common unintended retained items. Instruments, suture needles and guidewires can also be unintentionally retained. Most RSIs are reported in the abdomen and pelvis, but nearly any area of the body can harbor a retained item such as the thorax, vagina, and other natural orifices. Retained radiopaque sponges have also been found in the spine, head, neck, and extremities. Unintended retention of items can result in patient death, patient injury (e.g., intestinal obstruction, fistula development, perforation, fractures), thrombosis, embolization, arrhythmia, re-operation, increased length of stay, and emotional harm.

AORN's mission is to promote safety and optimal outcomes for patients undergoing operative and other invasive procedures. AORN collaborates with professional and regulatory organizations, industry leaders, and other healthcare partners who support the mission. Inspired by our mission and in collaboration with our healthcare partners, AORN has developed the AORN Center of Excellence in Surgical Safety: Prevention of RSI program.

The AORN Center of Excellence in Surgical Safety: Prevention of RSI program recognizes a facility's commitment to ongoing education, quality, training, and analysis of any cases of an unintended retained surgical item and near misses with the goal of eliminating unintended retained surgical items. The program is a comprehensive, multidisciplinary, team-based approach to protect patients during operative and other invasive procedures by accounting for surgical items (i.e., radiopaque soft goods, sharps, miscellaneous items, and instruments), preventing retention of device fragments, reconciling count discrepancies, and using adjunct technologies to supplement manual count procedures.

Components of the program include:

- **Pre-Test:** Evaluating the perioperative team's current knowledge of the incidence of RSIs, the most common items retained, and the types of procedures where RSIs occur
- **Education Modules:** Providing short, online modules, scenario-based immersive technology, and simulations
- **Post-Test:** Following completion of the education evaluates the perioperative team members' knowledge level of incidence of RSIs, the most common items retained, how to reconcile an incorrect count, and the types of procedures where RSIs most frequently occur
- **Gap Analysis Form:** Measuring the number of RSIs over the last five years, the number of near misses over the last five years, and the types of equipment available (e.g., pocketed sponge bag systems, adjunct technology)

If the data from the gap analysis indicate that the required equipment for counting soft goods is not available, the facility would conduct product evaluations and purchase the required items.

- **Compliance Audit Form:** Conducting weekly observational audits of counting process compliance conducted for three months
- **Final Submission:** Applying for recognition following completion of the pre-test, education modules, post-test, and compliance audit form.

The gap analysis tool, competencies, and policy and procedure manual are not required components for recognition consideration.



The AORN Center of Excellence in Surgical Safety: Prevention of RSI recognition is a three-year designation. The facility receives a plaque, recognition at the AORN Global Surgical Conference & Expo and a listing on the AORN Center of Excellence in Surgical Safety: Prevention of RSI webpage that recognizes the facility for prioritizing patient safety. The facility may use the AORN Center of Excellence in Surgical Safety: Prevention of RSI program logo in their promotional and recruiting materials.

Benefits of the Program

A retained surgical item is considered a “never event” by the Agency for Healthcare Research and Quality (AHRQ), and a sentinel event by The Joint Commission. Completing the program and gaining recognition as an AORN Center of Excellence in Surgical Safety: Prevention of RSI will:

- Aid in reducing or eliminating this never event through increased education and awareness
- Increase understanding of the processes to eliminate this never event
- Decrease costs associated with retained surgical items
- Demonstrate your facility’s commitment to a culture of safety
- Foster a collaborative work environment among all perioperative team members
- Gains community and national recognition as a Center of Excellence in Surgical Safety

Program Objectives

- Ensure the safety of all surgical patients by eliminating unintentional retained surgical items.
- Provide education for perioperative team members on the risks of unintentional retained surgical items and implementation methods for counting surgical items.
- Increase compliance with the counting process for all surgical and other invasive procedures.

Steps to Recognition

Step 1: Meet the Prerequisites

Step 2: Identify the Facility Coordinator & Implementation Team

Step 3: Develop an Action Plan for Implementation of the RSI Prevention Program

Step 4: Perform the Gap Analysis

Step 5: Assign Education

Step 6: Audit and Monitor Compliance

Step 7: Apply for Recognition

Step 8: Re-certify

STEP 1

Meet the Prerequisites

1. Commit to eliminating unplanned retained surgical items.
 - Why is it important? (See Benefits of the Program, page 4)
2. Secure leadership support from the C-suite (i.e., Senior Executive) and Directors of Perioperative Services, Surgery, and Anesthesia. Use Benefits of the Program as talking points.
 - promote universal compliance with policies and procedures for prevention of unintentionally retained surgical items
 - provide resources for interventions
 - » personnel (e.g., coordinator, implementation team members)
 - » time (e.g., meetings)
 - » financial (e.g., purchase of adjunct technology)
 - help the team navigate organizational bureaucracy

STEP 2

Identifying the Facility Coordinator & Implementation Team

The individuals who comprise the team are responsible for starting and sustaining the initiative to eliminate unintentionally retained surgical items. Their engagement and belief that unintentionally retained surgical items can be eliminated will greatly contribute to its positive results.

ROLES & RESPONSIBILITIES OF THE TEAM MEMBERS

Facility Coordinator

Potential candidates are the Perioperative Educator, Perioperative Clinical Nurse Specialist, Safety Officer. Use assistant coordinators if there are multiple OR suites and departments participating in the program.

The facility coordinator:

- Manages the day-to day activities, testing, departments, gap analysis, etc.
- Identifies team members/champions
 - » Creates an understanding of the champion role
 - Listens to concerns
 - Develops a plan to address concerns
- Communicates program's objectives and goals
 - » Creates a vehicle for communication for the project team and the perioperative team (e.g., intranet/email blasts, posters, meetings)
 - » Develops a plan for communications for the project team and the perioperative team (e.g., weekly updates)
- Encourages team involvement
- Obtains team feedback
- Manages documentation of the AORN Center of Excellence in Surgical Safety: Prevention of RSI program
- Educates personnel about the AORN Center of Excellence in Surgical Safety: Prevention of RSI program
- Promotes psychological safety of the team
 - » Invites input from all team members
 - » Encourages team members to contribute
 - » Promotes active listening and learning from each other

Champions

Potential candidates are multidisciplinary team members from surgical subspecialties (e.g., OB/GYN, Urology, ENT, General Surgery, Orthopedics), Anesthesia Professionals (e.g., Anesthesiologists, CRNAs), OR Nurses, Surgical Technologists, First Assistants, and C-Suite Level Leader. *Include additional departments where surgical counts are required (e.g., Labor & Delivery, Interventional Radiology, Dermatology). Involve representatives from key departments (e.g., Materials Management, Risk Management, Patient Safety) in the implementation, development, and promotion of the program.*

The Champion:

- Serves as a role model for the AORN Center of Excellence in Surgical Safety: Prevention of RSI program
- Meets with the project team
- Communicates with physician groups as needed
- Assists with implementation of AORN Center of Excellence in Surgical Safety: Prevention of RSI program interventions

TEAM MEMBER CHARACTERISTICS

- Dedicated to the goals of eliminating unintentionally retained surgical items using the AORN Center of Excellence in Surgical Safety: Prevention of RSI program
- Willing to promote the initiative
- Positive outlook
- Willing to provide quality information and feedback
- Focused on the broader view of patient and workplace safety

FACILITY COORDINATOR CHARACTERISTICS

- Has all the characteristics above, plus:
 - » Strong leadership skills
 - » Skilled at conflict management
 - » Attention to detail
 - » Enthusiastic about the AORN Center of Excellence in Surgical Safety: Prevention of RSI program
 - » Determined and persistent when roadblocks occur
 - » Respected by others

CHAMPION CHARACTERISTICS

- Has all the characteristics above, plus:
 - » Understands benefits of Center of Excellence in Surgical Safety: Prevention of RSI program
 - » Knows nuances of facility and team culture
 - » Can comfortably advocate across perioperative team, physicians, leadership, C-suite
 - » Collaborates with others to achieve change management, while sensitive to culture

STEP 3

Develop an Action Plan for Implementation of the RSI Prevention Program

Develop Action Plan

1. Hold a Kickoff Meeting
 - Review the goals of the program
 - Review team members' roles and responsibilities
 - Review time commitments
 - Who will be affected and how?
 - » What resources will be needed? (Use the Gap Analysis tool)
 - What are the possible barriers and how can they be overcome?
 - How will you measure progress and success? (Use test results and the Compliance Monitoring tool)
 - How will you share the plan and with whom?
2. Plan for Implementation of the Prevention of RSI Initiative
 - Develop a timeline
 - » Inform the perioperative team about the benefits of the initiative, objectives, timeline, and program components
 - » Short overview during staff and section meetings
 - » Intranet/Emails
 - » Letters
 - » Unit-based posters
 - » Newsletters
 - » Bulletin boards
 - Introduce education activities
 - » Online modules
 - » Scenario-based immersive technology
 - Simulations
 - Face-to-face presentation
 - Develop policy and procedures (Use the P & P template)
 - Conduct a product evaluation if additional equipment or supplies are needed (use the Product Evaluation tool)
 - Hold in-service education on new equipment and supplies

STEP 4

Perform a Gap Analysis

The gap analysis evaluates the number of RSIs and near misses at your facility in the past five years, reviews the root cause analyses, assesses the usage of current equipment (e.g., count bags, adjunctive technology).

- Use the Gap Analysis tool
- Results of the gap analysis determine the need for additional equipment (e.g., count bags, adjunct technology).
 - » Contact your adjunct technology and count bag vendor's account manager or sales professional if products are needed
 - » Use the Product Evaluation form
 - » Follow your facility product evaluation processes
 - » Purchase additional equipment as needed

STEP 5

Assign Interprofessional Education

All perioperative team members (e.g., Surgeons, Anesthesiologists, CRNAs, RNs, Surgical Technologists, First Assistants) should complete the pre-test, education modules, and post-test.

- How to determine which team members must complete the interprofessional education.
 - » All perioperative team members that are employees of the facility
 - » At a minimum 90%-95% of the top participants in surgical procedures (e.g., Surgeons, Anesthesiologists, CRNAs, RNs, Surgical Technologists, First Assistants)

PRE-TEST

- Assesses general knowledge of the incidence of retained surgical items, what type of items are retained, locations of retained items, risk factors, and contributing factors.

EDUCATION MODULES

- The interprofessional education is for all perioperative team members.
 - » Online education modules
 - ♦ Modules can be completed all at once or one or two at a time
 - » Scenario-based immersive technology
 - » Simulations
- Facility coordinators will be able to track the progress of perioperative team members as they complete the educational components.

POST-TEST

- The post-tests following the modules evaluates the perioperative team's knowledge of accounting for surgical items (i.e., radiopaque soft goods, sharps and miscellaneous items, instruments), preventing retention of device fragments, reconciling count discrepancies, and using adjunct technologies to supplement manual count procedures after completion of the online modules.
- 90% of team members must have a passing grade of 80% to be considered for the Center of Excellence in Surgical Safety: Prevention of RSI national recognition.

STEP 6

Audit and Monitor Compliance

- The Facility Coordinator or designated individual(s) will conduct an audit monitoring surgical procedures to determine compliance with the facility's prevention for retained surgical items policy whenever a surgical count is indicated by:
 - » direct observation,
 - » using the Compliance Audit Tool,
 - » and monitoring weekly for 3 months.
- After three months of monitoring, the compliance audit results can be submitted for the AORN Center of Excellence in Surgical Safety: Prevention of RSI program recognition

STEP 7

Apply for Recognition

After completing the AORN Center of Excellence in Surgical Safety: Prevention of RSI program's educational components, submit compliance audit results of three months. Final recognition is based on your facility's completion of education modules, education performance, compliance with the prevention for retained surgical items policy, and completion of simulations and/or immersive technology.

Recognition Criteria

1. Education Completion
 - 90-100% of staff enrolled in the program must complete the education component.
2. Post-test Score
 - A minimum of 90% of staff enrolled must have an 80% or higher score on the post-test.
3. Compliance Audit Form Completion
 - 90-100% compliance rate by week 12.
4. Adjunct Technology Devices
 - 1 RSI adjunct technology device per OR (or per procedure room).

STEP 8

Reapply for Recognition

- The facility may re-apply for recognition after three years by signing the program's recertification attestation. The recertification attestation states the facility remains compliant with AORN's guidelines for the prevention of unintentionally retained surgical items in all surgical or invasive procedures where unintentionally retained surgical items could occur.
- If your facility cannot meet the compliance criteria, restart the process with the pre-test, gap analysis, education modules, compliance monitoring, and post-test.

TIPS FOR IMPLEMENTATION/ INCREASING COMPLIANCE

Increase understanding of the risks and consequences of an unplanned retained surgical item to patients, perioperative team members, and the facility through the education program

- a. Knowledge
- b. Awareness

Gain support of the C-suite level and Directors of Perioperative Services, Surgery, and Anesthesia

- a. Universal compliance with the prevention for unplanned retained surgical items policy and procedures
- b. Financial Support—purchase of additional equipment and supplies

Share statistics/trends of incidents of an unplanned retained surgical item and near misses

- a. Incident reports and root cause analyses
- b. Their own team members' experiences

Recruit champions

- a. Cheerleaders for the campaign to eliminate retained surgical items
- b. Highly regarded team members at all levels (e.g., Surgeons, Anesthesiologists, Surgical Technologists, RNs, CRNAs, First Assistants)
- c. Personnel able to discuss the consequences of a retained surgical item
- d. Educators to review the benefits of the program at department meetings

Use administrative controls

- a. Development of a P & P (See Policy and Procedure template)
- b. Evaluate competency (See Competency template)

Start the program after the gap analysis and purchase of equipment (e.g., count bags, adjunct technology) if needed

Conduct a product evaluation—work with the Materials Management Department to find vendors that are in the preferred purchasing contract (See Product Evaluation tool)

- a. Adjunct technology
- b. Count bags

Include patient risk factors for an unplanned retained surgical item in the preoperative briefing

- a. High BMI
- b. Multiple procedures
- c. Procedure duration
- d. Blood loss

Celebrate incremental progress

- a. Food
- b. Gift cards
- c. Time off

Create a Book of Evidence

- a. Assemble a “Book of Evidence” that contains journal articles, surveys, etc., about the incidence, causes, risks, and solutions for prevention of an unplanned retained surgical item
- b. Make your facility’s Book of Evidence available to all perioperative team members

Use reminder posters

RESOURCES

- Program website
- AORN *Guidelines for Perioperative Practice*
- RSI Guideline *Essentials*
- Business case template to justify use and/or purchase of adjunct technology