AHRQ Safety Program for Ambulatory Surgery

PREVENT
HAIs
Healthcare-
Associated
Infections

Creating a Culture of Safety in the Ambulatory Surgery Environment: Implementation Guide

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Contents

Overview

Purpose of This Guide

This guide and the appended tools were developed as part of an Agency for Healthcare Research and Quality (AHRQ) quality improvement collaborative for the ambulatory surgery environment, the AHRQ Safety Program for Ambulatory Surgery. The guide and tools are designed to outline the critical program elements for implementing this quality improvement initiative in your ambulatory surgery center (ASC).

Background

AHRQ, as part of the U.S. Department of Health & Human Services National Action Plan to Prevent Health Care-Associated Infections, funded a multi-cohort educational improvement collaborative for the ambulatory surgery environment, titled the AHRQ Safety Program for Ambulatory Surgery. The Health Research & Educational Trust, in partnership with the American Hospital Association, was the prime contractor of this AHRQ contract over a 4-year period. The objectives of this contract were focused on the successful implementation of a checklist-centered quality improvement intervention within all 50 States and Puerto Rico. The program was the first of its kind to focus on the national implementation of a quality improvement intervention within the ambulatory surgery setting. The overall program goal was to reduce infections and enhance patient safety in ASCs through use of the surgical safety checklist. Anticipated benefits for ASCs participating in the program included—

- Reduction in surgical site infections (SSIs) and other surgical complications
- Improved patient safety culture
- Improved ASC patient experience of care
- Improved provider and staff satisfaction

How To Use This Guide

This guide is divided into five sections, highlighting the main program elements. We recommend that your plan be inclusive of all five elements to achieve successful implementation. This guide details practical examples, tools, and resources to allow you to integrate these elements in your action plan.

- The Comprehensive Unit-based Safety Program (CUSP)
- Measurement
- Implementing the Surgical Safety Checklist
- Infection Prevention
- Planning for Sustainability

Program Elements

The Comprehensive Unit-based Safety Program (CUSP)

CUSP is a culture change model that has been successfully applied to improve the way physicians, nurses, and other clinical team members work together. Training tools created for clinicians by clinicians, such as the CUSP Toolkit[1], build capacity to address safety issues by combining clinical best practices and the science of safety. CUSP can help ASCs move from a culture in which a punitive response to error prevails to a culture of safety—a learning environment in which errors are treated as an opportunity to learn about root causes and prevent future errors and risks of harm.

The Toolkit To Improve Safety in Ambulatory Surgery Centers was developed for the ASC environment, and its modules highlight specific CUSP themes and their applicability to ASC surgical settings. In the toolkit, there are 3 sections, Implementation, Sustainability, and Resources. Training and tools in these sections highlight the following themes: (1) Communication and Teamwork in the Surgical Environment, (2) Coaching Clinical Teams, (3) Patient and Family Engagement in the Surgical Environment, and (4) Sustainability.

Measurement

The collection and reporting of data is the cornerstone of any quality improvement initiative. Data allow you to see where you are (benchmark) and assist in guiding you to where you want to be (zero SSIs and reduction in other complications). Along this journey, we emphasize the importance of measurement and encourage you to communicate your progress in a clear and logical fashion.

This guide recommends collecting the Centers for Medicare & Medicaid Services[2] quality care measures and using the AHRQ Ambulatory Surgery Center Survey on Patient Safety Culture (ASC SOPS), which can be used to track changes in patient safety culture over time and evaluate the impact of patient safety interventions. Results of this survey can be used as a way for ASCs to identify opportunities for improvement in your patient safety culture.

Surgical Safety Checklist

The surgical safety checklist is an invaluable tool for optimizing patient safety culture through the use of teamwork and communication strategies, providing standardization across patient care, and decreasing the likelihood of complications or SSIs.[3] Every aspect of the checklist and the work involved in

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[1] CUSP Toolkit. June 2015. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/professionals/education/curriculum-tools/cusptoolkit/index.html.
[2] ASC Quality Reporting. August 2012. Centers for Medicare & Medicaid Services, Baltimore, MD. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/ASC-Quality-Reporting/.
[3] Haynes AB et al. A surgical safety checklist to reduce morbidity and mortality in a global population. N Engl J Med. 2009 Jan 29;360(5):491-9. Epub 2009 Jan 14.

implementation is intended to create discussion and make connections between people. When used properly, the checklist helps to create an atmosphere in which people can speak up, input is solicited, and information is shared. By following the recommended process for checklist implementation, you will learn principles that can be applied to other quality improvement projects. You will also gain insight into your colleagues and culture and uncover other opportunities for improvement that can help you shape and prioritize future improvements. This guide will outline the four phases of checklist implementation: Prepare, Own, Expand, and Continually Expand.

Infection Prevention

We believe the overall culture of the ASC can greatly influence the behavior of the individual health care workers on the team. Enhancing patient safety culture improves teamwork and communication, which in turn promotes adherence to evidence-based practice that could prevent infection. Professionals working in your ASC should be routinely trained and competent in infection prevention standards and regulatory requirements to ensure optimal patient safety.

Planning for Sustainability

Start thinking early on about how your team can make quality improvement initiatives and patient safety processes part of your routine, day-to-day work. The Institute for Healthcare Improvement (IHI) describes four steps for sustaining improvements in your ambulatory surgical safety environment later in this guide. In the Sustainability section of the Toolkit, there are further training and tools, as well as modules describing Management Practices for Sustainability.

The Comprehensive Unit-based Safety Program (CUSP)

CUSP[4] is a culture change model that has been successfully applied to improve the way physicians, nurses, and other clinical team members work together. CUSP is associated with improvements in patient safety, clinical outcomes, and safety culture. The CUSP model draws on the wisdom of frontline providers who have practical knowledge about safety risks to their patients. It emphasizes the importance of a diverse team, focuses on the input of direct care providers, discusses the importance of a common goal, identifies issues that the team can successfully solve, and integrates these elements as part of the team's routine work. CUSP helps ASCs move from a culture in which a punitive response to error prevails to a culture of safety—a learning environment in which errors are treated as an opportunity to learn about root causes and prevent future errors and risks of harm.

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[4] Comprehensive Unit-based Safety Program (CUSP). August 2015. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/professionals/quality-patient-safety/cusp/index.html.

The CUSP Toolkit

The CUSP Toolkit is available on the AHRQ Web site and includes training tools to make care safer by improving the foundation of how physicians, nurses, and other clinical team members work together. It builds the capacity to address safety issues by combining clinical best practices and the science of safety. Created for clinicians by clinicians, the CUSP Toolkit is modular and modifiable to meet your individual surgery center needs.

Ambulatory Surgery Center Implementation Training and Tools

The Ambulatory Surgery Center Implementation Training and Tools section highlights specific CUSP themes and their applicability to ambulatory surgical settings. In this section, the slide sets, videos, and tools highlight the following themes: (1) Communication and Teamwork in the Surgical Environment, (2) Coaching Clinical Teams, and (3) Patient and Family Engagement in the Surgical Environment. These modules are meant to augment the CUSP Toolkit while offering additional strategies specific to the ambulatory surgical environment.

Each module includes presentation slides, facilitator notes, and a Material Use Guide to give ASCs examples of how they can use the information in educating their team based on their facility needs. The goal of the ASC Implementation Training and Tools section is to assist ASCs with training their teams on the following topic areas:

Communication and Teamwork in the Surgical Environment

This module helps an organization improve teamwork and communication specifically in the ambulatory surgery setting. It provides an overview of the challenges with communication and teamwork in this setting and discusses methods to improve teamwork and communication.

This module has several objectives:

- Describe challenges with teamwork and communication in the surgical environment
- Use structured briefings to improve communication and teamwork
- Use debriefings and ongoing quality improvement
- Demonstrate how the checklist can improve teamwork and communication
- Learn how to use structured language to voice concerns
- Design a quality improvement initiative using closed-loop communication

Coaching Clinical Teams

This module discusses how to coach clinical teams to improve their performance. This is not about coaching technical skills in a clinical setting but instead coaching how to better function as a team.

This module has several objectives:

- Understand how clinical teams are currently trained in the health care setting and how coaching can help
- Describe coaching in the clinical environment
- Outline benefits of coaching in the health care setting
- Identify the characteristics of a good coach
- Demonstrate the steps a coach should follow when giving feedback to a team
- Describe how an observation tool can improve a coach's performance

Patient and Family Engagement in the Surgical Environment

This module focuses on patient and family engagement within the ambulatory surgery center environment. It begins by giving background information for patient and family engagement and then offers reasons for why an ASC should support engagement within its facilities. It provides patient and family expectations for care, as well as barriers, facilitators, and motivators to engagement from the patient, family, and provider perspective.

This module has several objectives:

- Define patient and family engagement, including core principles, barriers, and facilitators
- Explain the importance of engaging patients and family members in the care of the surgical patient in an ASC
- Determine the level of patient and family engagement at your own facility
- Distinguish between different methods of engaging patients and family members in the health care and safety of the surgical patient
- Apply the methods learned to scenarios in the ASC setting

Measurement

The collection and reporting of data is an effective means of first engaging staff and physicians in SSI and other surgical complications prevention programs, providing feedback to teams on how they are doing, and sustaining improvement. The first goal of measurement is to determine the efficacy of each intervention. The later goal of measurement is to monitor outcome trends to recognize when thresholds of concern are reached that require intervention. For example, if your facility's SSI rate suddenly spikes, an investigation of causes is required when thresholds have been passed. This investigation will include increased process measurement looking for causes for increased infections. When the causes of increased SSIs are identified, your team will need to work with frontline staff to identify workable solutions to prevent those causes. By continued assessment of process measures and outcome measures, the effectiveness of the solutions employed can be evaluated.

The Centers for Medicare & Medicaid Services outlines 12 measures in the Ambulatory Surgical Center Quality Reporting (ASCQR) Program, a pay-for-reporting, quality data program. Under this program, ASCs report quality of care data for standardized measures to receive the full annual update to their ASC annual payment rate.[5] Collecting and analyzing these measures allows your facility to use data to find opportunities for improvement in patient care.

Safety Culture Survey

The ASC SOPS can be used to track changes in patient safety culture over time and evaluate the impact of patient safety interventions. The survey should be administered at intervals of no less than 1 year. The survey is anonymous, with no individual staff identifiers. Using the survey results to identify opportunities for improvement allows a team to make specific action plans to address where staff perceptions indicate patient safety culture is not optimal. Administering the survey at least twice allows teams to measure effectiveness of their interventions to improve dimensions of the ASC's safety culture.

Tools

Ambulatory Surgery Center Survey on Patient Safety Culture – English
http://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/patientsafetyculture/asc/resources/ascsurvey.pdf

This survey is designed specifically for ASC staff and asks for their opinions about the culture of patient safety in their facility.

Ambulatory Surgery Center Survey on Patient Safety Culture – Spanish
http://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/patientsafetyculture/asc/resources/ascsurvey_sp.pdf

Ambulatory Surgery Center Survey on Patient Safety Culture: Composites and Items – English
http://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/patientsafetyculture/asc/resources/ascitems.pdf

In this document, the items in the ASC SOPS are grouped together according to the safety culture composites they measure.

Ambulatory Surgery Center Survey on Patient Safety Culture: Composites and Items – Spanish
http://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/patientsafetyculture/asc/resources/ascitems_sptrans.pdf

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[5] ASC Quality Reporting. August 2012. Centers for Medicare & Medicaid Services, Baltimore, MD.
https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/ASC-Quality-Reporting/.

Ambulatory Surgery Center Survey on Patient Safety Culture: User's Guide

http://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/patientsafetyculture/asc/userguide/ascguide.pdf

The User's Guide includes information on getting started, selecting a sample, determining data collection methods, establishing data collection protocols, conducting a Web-based survey, preparing and analyzing data, and producing reports.

Improving Patient Safety in Ambulatory Surgery Centers: A Resource List for Users of the AHRQ Ambulatory Surgery Center Survey on Patient Safety Culture

http://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/patientsafetyculture/asc/resources/asc-resource_list.pdf

This document contains references to Web sites that provide practical resources ASCs can use to implement changes to improve patient safety culture and patient safety.

Implementing the Surgical Safety Checklist

Phase 1: Prepare

The activities in the Prepare phase lay the foundation for the work you are about to undertake. As with any other significant project, well-organized planning and careful consideration of your goals are essential for success. This phase is about understanding what the checklist tool is and how it works, examining what is going on currently in your facility, and committing to the work that will be required to make the checklist effective in your facility.

Assess Your Culture Using the Safety Culture Survey

A facility's culture is usually assessed with a culture survey that asks target audiences to respond to a set of questions about how they feel about various aspects of their work and work environment. The survey may be a paper questionnaire or a Web-based electronic form. We recommend using the ASC SOPS and supplemental materials as discussed earlier in this guide.

Culture surveys are commonly used in hospitals and other medical environments to measure workplace conditions and employee attitudes. Many surveys used to measure culture more broadly in hospitals are not customized enough to inform checklist implementation efforts in the operating/procedure room, and therefore the ASC SOPS is recommended. It is important that your culture survey captures responses from a representative sample of surgical team members. In some facilities, physician response rates can be quite low. If you do not get responses from a majority of the physicians working in your operating/procedure rooms, leveraging the results for the checklist implementation will be more difficult.

General Guidelines for Administering the Survey

- Collect survey answers anonymously so people are comfortable providing feedback without fear of repercussions.
- Responses should be collected over a fixed period of time; 2 weeks is optimal.
- Provide a brief cover letter outlining a framework for why participation is important and how you will use the data to drive improvement.
- When providing the survey in person, offer to wait while people complete the survey.

General Advice for Sharing Culture Survey Results

- Review the survey results at staff meetings and governing board meetings. Pass out hard copies prior to the meeting so staff have a chance to digest the results.
- Identify areas for improvement and discuss them with staff. Use these sample questions to help guide that discussion:
  - What does an ideal culture look like?
  - In what areas can we improve?
  - What does "better" look like?
  - How can we prioritize the areas in which we want to improve? – How many areas will we choose to focus on? – Which specific areas are most important to us right now?
  - Where will we share these results?
  - Which questions do we want to share, and with which audiences?
  - Which way is the best way to present the results for each audience?
  - Can we identify specific results that we want to highlight in our one-on-one conversations with physicians and staff? – What will resonate with nurses (e.g., comfort in speaking up)? – What will resonate with surgeons (e.g., how people see them as leaders)?
- Discuss what you are doing well and where you would like to see improvement.
- Have one-on-one conversations to share results with key players (administrator, medical director, manager, charge nurse, quality improvement nurse).
- Share the results on a bulletin board. Highlight the areas you are prioritizing for change.

Recruit Your Implementation Team

The implementation team is a multidisciplinary group of people responsible for planning and executing the checklist initiative. Each member of the team will share responsibility for successful implementation and use of the surgical safety checklist in your facility. The team should include representatives from each role on the surgical team. If possible, the team should include an administrator or representative from your quality improvement program. Team members need to be enthusiastic, respected, and committed. Use one-on-one conversations to recruit people for your team (Appendix A). Consider using *Your First Checklist Meeting Guide* (Appendix B) as a sample agenda for your first meeting. Once your team is in place, meet regularly every 2 weeks, even if certain members are unable to attend. Meetings may be less frequent after the initial planning and once the checklist has been expanded in operating/procedure rooms.

Engaging Physicians

It is important to find a physician and an anesthesia professional who can participate on the team and will champion the checklist work with their peers. Try to find physicians who already emulate some of the desired behavior in the operating/procedure room (e.g., may already be sharing an operative plan or leading a debrief). When initiating the checklist conversation with your physician, use the *Addressing Physician Concerns* tool (Appendix C). The active participation of a physician champion is a key indicator for implementation success. The support of "formal" leadership is necessary, but those leaders are often not the ones who should guide this effort directly because their availability is limited, and their formal position may influence the interactions of the team.

Phase 2: Own

Ideas for change that come from outside an organization are often treated as suspect (not relevant, unproven, too cumbersome, not "for us," etc.)—which makes those ideas easy to ignore or dismiss. Because health care facilities are subject to so many mandates from accrediting bodies, government regulators, and payers, fatigue or even outright hostility to outside ideas can be a real barrier to improvement. In the Own phase, you address this tendency by making sure your checklist initiative is driven from within your facility and by your teams, and supported by your leadership. Work with members of your team to customize the checklist to fit the needs of your patients and facility (Appendix D, Appendix E, and Appendix F).

Observe, Modify, and Test

Some facilities feel pressure to put the checklist into their operating/procedure rooms immediately, but rushing the process invites serious risks. If you ask surgical teams to use the checklist in an operating/procedure room before they are ready, you can undermine the teams' confidence in the checklist as an effective communication and safety tool and can undermine their confidence in your implementation team. We recommend that you test your checklist in a simulation prior to implementing it throughout your facility. This gives your team an opportunity to practice it, reflect on what went well and what needs to change, and make modifications to the checklist if needed (Appendix G, Appendix H, and Appendix I).

Plan for Expansion

Have conversations, publicize the changes you are planning to make, and engage all team members. Start training team members on how to use the checklist (Appendix G), and work with team members to perform a tabletop simulation of checklist use before bringing it into the operating or procedure room (Appendix H). Next, start monitoring checklist use. Performing observations can often reveal weaknesses in checklist performance that might otherwise go unnoticed. The *Checklist Observation Tool* (Appendix I) allows you to collect information regarding the processes performed in the operating room or procedure room in order to improve surgical outcomes.

Phase 3: Expand

The Expand phase encompasses steps for actually putting your checklist into use in operating/procedure rooms throughout your facility. When done well, expansion is a slowly building process that is carefully managed so that each member of every surgical team is properly trained, each team receives supportive coaching, and feedback from team members is incorporated. This is when the preparation and planning you have done in earlier steps pays off.

Watch and Coach

Coaching is part of a learning progression that begins with a one-on-one conversation and continues with hands-on training. It is a vital part of every successful implementation because it helps lead individuals and teams to better performance and helps sustain effective checklist use over time. In this step, your goal is to coach all teams at least once shortly after they begin using the checklist in real cases and to coach them multiple times whenever possible. Coaching starts with an observation of a team in the operating/procedure room. The coach/observer pays close attention to what is going on: watching the team and how they perform the items on the checklist and listening to their conversations and questions (Appendix J).

Phase 4: Continually Expand

At this point, your team has put a great deal of effort into telling people about the checklist, raising its profile, talking to people individually, and training and coaching them on proper checklist use. Throughout the implementation period, the checklist has received a great deal of attention. You now face a different challenge: how to sustain the work and improve it over time. As you turn to the next problem to be addressed in the operating/procedure room, whether it's redosing of antibiotics or updating the skin prep to the latest protocol, your attention shifts, and the checklist work might start to slide a bit. This step encompasses the variety of tasks that need to continue in your facility so that, over time, people feel that using the checklist effectively "is just the way that we do the work here."

Over time, your team will continue to—

- Identify areas for improvement that additional training can address
- Talk with people individually about checklist use, and thank them for their checklist use and efforts to improve surgical safety
- Watch and coach (randomly, across the full range of surgical practices in your facility)
- Collect and share stories about checklist successes
- Engage, train, and coach new physicians and staff
- Administer an annual culture survey to surgical team members
- Periodically evaluate and update the checklist content to reflect any changing needs
- Periodically bring new people onto your implementation team to add energy and fresh perspectives

Tools

Appendix A. Facility Spreadsheet for One-on-One Conversations

One-on-one conversations are used to engage surgical team members in enhancing their use of the surgical safety checklist or can be used in a quality improvement effort to engage physicians and staff. This example spreadsheet can be used when having one-on-one conversations with everyone who works in your facility. The spreadsheet can help track who needs to receive a one-on-one conversation and which member of the implementation team is responsible for talking about each problem.

Appendix B. Your First Checklist Meeting Guide

This is a sample agenda with topics you should consider discussing when your implementation team meets for the first time to discuss the checklist project.

Appendix C. Addressing Physician Concerns With the Checklist

It is important to have one-on-one conversations with physicians about implementing the checklist in your facility. This document contains common concerns you may hear from physicians about the checklist and some examples of responses you can use to address these concerns.

Appendix D. Ambulatory Surgery Center Checklist Template

This checklist template is based on the World Health Organization (WHO) Surgical Safety Checklist and has been modified for use in ambulatory surgery centers. It is recommended that you use this template and modify it to fit with the workflow in your facility.

Appendix E. Endoscopy Checklist Template

This checklist template is intended to be used in endoscopy centers. We recommend you use this template and modify it to fit with the workflow in your facility.

Appendix F. WHO Checklist Goals Document

When making modifications to your checklist, review this document with your checklist implementation team to ensure that your checklist meets the goals of the original WHO Surgical Safety Checklist.

Appendix G. Training Team Members on How To Use the Checklist

This sheet is helpful to read before expanding checklist use in your facility. It covers necessary things to consider when teaching staff how to use the checklist as well as unique ways to train team members.

Appendix H. Tabletop Simulation Videos

Tabletop simulations are used to do dry "run-throughs" before adopting full implementation of procedures.

> Video, Part 1: https://youtu.be/V_nU8WxCH2w
> Video, Part 2: https://youtu.be/FY1ZgmC4oJU

Appendix I. Checklist Observation Tool

Monitoring checklist use is an extremely important part of this project. Performing observations can often reveal weaknesses in checklist performance that may otherwise go unnoticed. This tool allows you to collect information regarding the processes performed in the operating room or procedure room to improve surgical outcomes.

Appendix J. Coaching Tool Instructions and Observation Tool With Coaching Section

This tool can help you observe teams in your operating/procedure rooms and coach them on what they did well or what they can improve. It is similar to the observation tool, with the difference being that you will now be asked to make some notes and coach teams based on what you watched in the operating/procedure room using the three-part question.

Appendix K. Quality Improvement Study Framework

These documents were created to assist the completion of a quality improvement study for the purposes of an accreditation survey. The quality improvement framework document includes an example of implementing one component of the surgical safety checklist, but can be used for any quality improvement project.

- Material Use Guide
- Study Elements
- Debrief Example (slides, facilitator notes & audio)
- Blank Template

Infection Prevention

Healthcare-associated infection prevention in the ASC environment should be a multifaceted program covering all of the evidence-based strategies that have been shown to reduce the risks of SSIs and other complications. Observations done in the surgical environment to assess compliance with these technical strategies have demonstrated that one single cause for an SSI is rarely the case; rather, there may be multiple breaches in optimal surgical patient care practices. The teamwork culture of the operating room can greatly influence the behavior of the individual health care workers on the team. Optimizing patient safety culture improves staff teamwork and communication, which in turn promotes adherence to evidence-based practices that prevent SSI, especially when modeled by the surgeon and other leaders on the team. Infection prevention practices and guidelines are updated regularly and are specific to your facility needs. Competency among your ASC staff is critical, and resources have been provided below to help you identify infection prevention best practices.

- Surgical Care Improvement Project Measures (inpatient setting)
- Healthcare Infection Control and Practices Advisory Committee and Centers for Disease Control and Prevention Guidelines for Safe Ambulatory Care

- [Joint Commission Standards](#)
- [Association of periOperative Registered Nurses (AORN) Guidelines for Perioperative Practice](#)
- [Infectious Diseases Society of America Practice Guidelines](#)
- [Association for Professionals in Infection Control and Epidemiology Guide to the Elimination of Orthopedic Surgical Site Infections (in collaboration with AORN)](#)

Tools

[Appendix L. Infection Prevention Infographic](#)

This infographic describes infection control practices important to the ASC setting.

[Appendix M. Endoscopy Infographic](#)

This infographic describes steps to prevent infection in endoscopic procedures.

[Appendix N. Part I—A Clear View on Endoscope Processing: Transporting, Leak Testing, Cleaning](#)

In April, 2015, the American National Standards Institute and the Association for the Advancement of Medical Instrumentation jointly released new standards of scope processing. This video discusses the new guidelines related to transporting, leak testing and cleaning.

[Appendix O. Part 2—A Clear View on Flexible Endoscope Processing: Disinfection/Sterilization Record Keeping](#)

In April, 2015, the American National Standards Institute and the Association for the Advancement of Medical Instrumentation jointly released new standards of scope processing. This video discusses the new guidelines related to disinfection/sterilization and the importance of record keeping.

[Appendix P. Evaluating and Selecting Hand Hygiene Products](#)

Hand hygiene products are only effective if staff use them. This presentation reviews criteria for evaluating and selecting the right products for your facility.

Planning for Sustainability

The best time to begin thinking about sustaining project gains is at the beginning of your project implementation. Start thinking early on about how your team can make your patient safety processes part of your routine, day-to-day work. For example, include evidence-based best practices for prevention of SSIs and other surgical complications in the policies and procedures related to the care of patients. Consider the types of resources that will be needed for long-term maintenance of your improvement efforts, and start to identify who will be accountable for sustaining the work and how they might incorporate the work into existing processes. Embedding competency testing into new hire orientation and annual skills updates for existing staff are examples of ways to ensure patient safety

interventions become part of standard work. Identifying physician or nursing champions for your project to prevent SSIs and other surgical complications will also aid in sustaining improvement over time. See the section below on sustainability from IHI on planning for sustaining improvements.

IHI: Sustaining Improvements in Ambulatory Surgical Safety

The current thinking around sustainability of quality and safety improvement initiatives emphasizes the following four steps to improving sustainability in your ASC: selecting changes that have achieved performance thresholds that should be sustained, predicting their "stickiness," developing the infrastructure for sustainability, and making changes to support systems that will improve your likelihood of sustaining the gains.

Step One: Determine Change Has Achieved Acceptable Levels of Capability and Reliability

The desired changes are those that have reached adequate levels of capability and reliability. Capability means that the change is producing the desired impact on patients or populations, and reliability means that the change is consistently producing this level of impact. If a change has not succeeded in reaching the levels of performance that you hope for your system, focusing on sustainability will result in sustaining subpar performance. Conversely, when you have succeeded in optimizing your system through a series of tests to adapt the changes, and these are reliably being performed, a focus on sustainability will be important. This first step will identify the changes that are ready to be sustained.

Step Two: Develop and Use a Sustainability Prediction Tool to Understand Nature of Change and Context

Once the changes for sustaining are identified, work to apply a sustainability prediction tool. Predicting sustainability yields quantifiable, actionable information on the likelihood that a change will stick in the system. Identify opportunities to improve its "stickiness" or to improve the receptivity of the context. The NHS Sustainability Model is the most widely known and used sustainability prediction tool.[6] This tool captures the essence of the key attributes of both the change and its context. Your team can use the tool and the information it yields to strengthen areas of weakness in the change or context that are diagnosed through this process. This tool is really meant as a way of beginning an important dialogue among the teams at the surgery center about the likelihood of sustainability.

Step Three: Develop Infrastructure for Sustainability

Sustainability is the province of leaders at all levels in an organization. Developing the infrastructure for sustainability requires developing standard work for leaders, particularly those leading frontline service

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[6] For additional information, see, e.g., National Health Service Institute for Innovation and Improvement. "Sustainability: Ensuring continuity in improvement." [Guide.] http://www.institute.nhs.uk/sustainability_model/general/welcome_to_sustainability.html.

delivery units, such as a nurse manager or charge nurse. Effective standard work for leaders includes the following six elements:

1. Standardization. Processes to define and disseminate standard work—what to do and how to do it. Having well-defined daily, weekly, monthly, quarterly, and annual tasks related to the particular change at hand is important. An ASC manager should have a clear sense of these tasks, regardless of how they are outlined (in a daily checklist, a huddle board, huddle agenda, etc.).

2. Accountability. Processes to review execution of standard work. The organization should have systems to monitor whether staff are implementing standard work. For example, routine observation of surgery timeouts and of other standard practices like huddles can help ensure accountability. Accountability is crucial to maintaining process control, identifying training needs, or uncovering processes that do not work well. Managers can use this information as the basis for improvement of the work unit; evaluation of individual staff performance for promotion or separation is secondary.

3. Visual Management. Your organization should have systems that provide information to regulate current period performance in a visual way with an attendant daily communication system to ensure that all key staff are aware of mission critical issues and can take appropriate action. Most often, clinical units track such information using visual metric boards, displayed publicly or semi-publicly, that show key indicators which in turn align with system-wide strategic goals. These visual metric boards are usually accompanied by some form of daily communication process, often in the form of a daily huddle with all team members, to ensure everyone understands the mission of the unit and the key points of vulnerability to heighten awareness and sensitivity of all staff.

4. Methods for Problem-Solving. Methods for problems solvable at the front line and skill in improvement methods. Supervisors and frontline staff should have methods available to solve problems as they arise. For example, they can use versions of root cause analysis and Plan-Do-Study-Act cycles to solve problems.[7] A3 is also a popular Lean tool for this driver.[8] Frontline supervisors and staff should be skilled in these tools and methods, with experts available to provide support as necessary. Without skill in problem-solving methods, other tools to support sustainability like visual boards do not have optimal impact.

5. Channels for Escalation. Frontline staff identify and escalate issues that require management intervention to resolve, either directly or through commission of a formal improvement project. Not all problems are readily solvable at the front line. A well-functioning management system includes clear protocols to distinguish problems that should be

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[7] See, e.g., JP Womack et al. Going Lean in Health Care. Institute for Healthcare Improvement [White paper]. 2005.

[8] See, e.g., Shook J. "Toyota's Secret: The A3 Report." MIT Sloan Management Review. 2009. http://sloanreview.mit.edu/article/toyotas-secret-the-a3-report/.

escalated to higher tiers, and those that might require dedicated improvement initiatives, and also protocols that clarify the appropriate time line for resolving problems that arise at the front line.

6. Integration of Standard Work. Goals and standard work are integrated across organizational levels. Frontline leader standard work must be well integrated with frontline clinical standard work. Sustainability practices like huddles and visual boards must also be nested and well integrated up and down the leadership chain within an organization to be continuously reinforced and supported.

Step Four: Change Relevant Support Systems

To sustain, some changes will require changes to human resources including workforce composition or role definition (job descriptions), information systems (how they are used, what data and reports are produced, review procedures, etc.), and potentially to long-term financing. During the steps described above, these changes will hopefully become evident and can be built into the sustainability plan and approach.

More Sustainability Resources

Sustainability Module

The Sustainability module helps an organization maintain and sustain a process that has worked well at a unit level. This module begins by defining sustainability and its importance in quality improvement, linking sustainability and spread, and discussing barriers and solutions to sustainability. The module goes through the steps of developing, implementing, and measuring a sustainability plan.

This module has several objectives:

- Define sustainability and understand the importance of maintaining positive change
- Understand the link between sustainability and spread
- Learn how to create and implement a plan for sustainability, including identifying barriers to sustainability, developing solutions, and creating a sustainability plan
- Establish a sustainability measurement plan to track progress in holding the gains from a successful improvement project
- Learn from examples of sustainability success across multiple settings

Management Practices for Sustainability

Through research in multiple health care organizations in the United States and Canada, IHI found that a coherent, interlocking management system was crucial to sustaining standardized practices and promoting a culture of improvement. As part of the AHRQ Safety Program for Ambulatory Surgery, IHI developed a series of online modules as well as accompanying "component kits" to help you introduce these management practices in your center through small tests of change.

Conclusion

Implementation of the culture of safety elements described above improves teamwork and communication within your ASC team, promotes a culture of speaking up and nonpunitive response, improves infection prevention practices, and reduces SSIs and other complications that affect patient safety. We hope you can access the tools and resources included in this Implementation Guide as a reference as you work to improve the culture of safety in your facility. We encourage you to modify the information to best fit your team's needs and sustain the gains within your facility.

Thank you for your focus on patient safety and quality improvement in your ASC.

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