

# Safe Surgery Checklist

---

Implementation Guide

# Acknowledgments

This manual is based on the experiences of thousands of organizations and people who have been willing to work with us and share their experiences with the Safe Surgery Checklist since 2006. We would like to give a special thanks to our partners in South Carolina for opening their doors to our team and sharing their successes, solutions, and challenges with Safe Surgery Checklist implementation. This guide would not have been possible without the dedication and expertise of the many people who led this initiative in South Carolina hospitals, ambulatory surgery centers, and the South Carolina Hospital Association.

**Project leads:** William Berry and Lizzie Edmondson.

**Writing:** Chris Barnes, William Berry, Lizzie Edmondson, and Ashley Kay Childers, with contributions by Julie Yamamoto, Denise Pantelis, and Mark Berens; copy editing by Pm Weizenbaum.

**Strategy and design:** Emphatic Communications was instrumental in helping us design and create a user-friendly system of content and materials.

**Ariadne Labs team:** Atul Gawande, Dante Conley, Jeff Durney, Alex Haynes, Lisa Hirschorn, Lyen Huang, Katie Jahreis, James Sachetta, and Sara Singer.

**South Carolina team:** Thornton Kirby, Lorri Gibbons, Rick Foster, Ashley Kay Childers, Hardy Childers, Sonya Dawkins, Aunyika Moonan, Michael Rose, and Rosemary Thompson.

**Additional contributors:** Patch Dellinger, Teresa DeVore, Tammie Epps, Beth Morgan, Eric Murdock, CPT Keyona Nelson, David Oliver, and Nancy Vivien.

**Funding provided by:** The Branta Foundation.

**How to cite this document:** Safe Surgery Checklist Implementation Guide. Boston MA: Ariadne Labs; 2015. Available on [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).

Individuals may photocopy these materials for educational, not-for-profit uses, provided that the content is not altered in any way and that proper attribution is given to Ariadne Labs as the source of the content. These materials may not be reproduced for commercial, for-profit use in any form or by means, or republished under any circumstances, without the written permission of Ariadne Labs.

# Contents

---

<b>Preface</b>	<b>i</b>
About this guide	i
About you	i
<u>A system of materials designed to help you succeed</u>	ii
Quick-reference guides	iii
Fact sheets	iv
Safe Surgery Checklist templates	v
Action guides	vi
Observation tools	vii
Culture surveys	viii
Implementation Lead Project Spreadsheet	ix
<b>1 The Safe Surgery Checklist</b>	<b>1</b>
<i>Instructions for the team lead</i>	2
Introduction	3
What is the checklist?	4
Why should we do this work?	5
What are the benefits of using the Safe Surgery Checklist?	6
“We don’t need a checklist; we already do all this...”	8
The checklist can help good facilities be even better	9
<u>The evolution of the Safe Surgery Checklist</u>	10
<u>The anatomy of the Safe Surgery Checklist</u>	14
How the checklist is organized	14
<u>Proper use of the Safe Surgery Checklist</u>	21
Best practices	21
How long does it take to perform the checklist?	22
<u>Evidence</u>	23
Studies demonstrate benefits of checklist use	23
Effective implementation is vital to your success	27

## Contents

---

<b>2</b>	<b>A framework for checklist implementation</b>	<b>29</b>
	Introduction	31
	<u>Understanding Safe Surgery Checklist implementation</u>	32
	An overview of the process	32
	The phases of implementation	32
	Building skills intentionally	34
	<u>The essential steps of checklist implementation</u>	35
	Recruit a Team	35
	Understand the Work	36
	Assess Your Environment	37
	Decide: Are We Ready?	38
	Customize and Test	39
	Plan Your Expansion	40
	Have 1-on-1 Conversations	41
	Promote the Checklist	42
	Train and Spread	43
	Watch and Coach	44
	Continually Improve	45
	<u>Tips for managing the project</u>	46
	Where should you start?	46
	Get (and keep) leadership involved	46
	Use the Implementation Lead Project Spreadsheet	48
<b>3</b>	<b>Building a checklist implementation team</b>	<b>49</b>
	<i>Instructions for the team lead</i>	50
	Introduction	51
	What is the implementation team and what does it do?	51
	Who should be on our implementation team?	52
	How to recruit people	52
	Finding physician champions	54

## Contents

---

<b>4</b>	<b>Assessing your surgical culture and environment</b>	<b>57</b>
	<i>Instructions for the team lead</i>	58
	Introduction	59
	<u>Observing current practices</u>	59
	Principles of observation in the operating/procedure room	59
	Planning observations	60
	Training observers	61
	<u>Assessing your culture</u>	63
	Benefits of assessing your culture	63
	About the Safe Surgery Checklist Culture Survey	64
	Our culture survey explores five key areas	67
	What if your facility already has a culture survey?	68
	How to administer the survey	69
	Analyzing and interpreting survey data	73
	Presenting your results	74
	Conducting periodic follow-up culture surveys	75
	Action Guide: Assessment observer's guide	76
<b>5</b>	<b>Deciding: Are we ready?</b>	<b>77</b>
	<i>Instructions for the team lead</i>	78
	Introduction	79
	Is your facility ready to do the checklist work?	79
	Consider focusing your efforts on one part of the checklist	81
	Make a decision, then document and share your plan	82
<b>6</b>	<b>Checklist design and display</b>	<b>83</b>
	<i>Instructions for the team lead</i>	84
	Introduction	85
	Guiding principles	85
	Checklist display options	85
	Other display considerations	91
	Design tips: Making your checklist easy to use	93
	Action Guide: Font target for checking checklist poster readability	97

## Contents

---

<b>7</b>	<b>Customizing the checklist</b>	<b>99</b>
	<i>Instructions for the team lead</i>	100
	Introduction	101
	Principles of checklist customization	102
	Customizing your checklist	103
	Creating one checklist versus multiple checklists	108
	Test your changes in a tabletop simulation	110
	Action Guide: How to make improvements to your existing surgical checklist	112
	Action Guide: How to customize the Safe Surgery Checklist for your facility	113
	Action Guide: Checklist for customizing the Safe Surgery Checklist	114
<hr/>		
<b>8</b>	<b>Testing your checklist in the operating/procedure room</b>	<b>115</b>
	<i>Instructions for the team lead</i>	116
	Introduction	117
	Principles of checklist testing	117
	Testing your surgical safety checklist in real cases	118
	Action Guide: Observer's guide for checklist testing	122

## Contents

---

<b>9</b>	<b>Creating a plan for checklist expansion</b>	<b>123</b>
	<i>Instructions for the team lead</i>	124
	Introduction	125
	Understand the work ahead	126
	What does a checklist expansion plan look like?	126
	<u>Expansion planning: Strategy and logistics</u>	127
	A strategy for success	127
	Plan how you will spread checklist use in your facility	127
	Plan what your key messages will be	128
	Plan how you will approach debriefing	129
	Plan how you will print and display your checklist	129
	Plan how you will manage 1-on-1 conversations	130
	Plan how you will promote the checklist	130
	Plan how you will manage checklist training	132
	Plan how you will manage checklist coaching	132
	Plan how you will collect and manage feedback	133
	<u>Creating a checklist demonstration video</u>	135
	Tips for creating your video	135
	Tips for using your video	136
<b>10</b>	<b>The 1-on-1 conversation</b>	<b>137</b>
	<i>Instructions for the team lead</i>	138
	Introduction	139
	Principles behind the 1-on-1 conversation	140
	How to have an effective 1-on-1 conversation	143
	Rationale and ideas for key points of a 1-on-1 conversation	144
	Tips for managing your 1-on-1 conversations	148
	How to handle common questions and objections	149
	Action Guide: Guide to the Safe Surgery Checklist 1-on-1 conversation	154

## Contents

---

<b>11</b>	<b>Promoting the checklist</b>	<b>155</b>
	<i>Instructions for the team lead</i>	156
	Introduction	157
	General principles for promoting the checklist	158
	Promote the Safe Surgery Checklist at meetings	158
	Use your checklist demonstration video	160
	Advertise your checklist effort	160
	Educate and engage patients and their families	163
<hr/>		
<b>12</b>	<b>Teaching the checklist</b>	<b>165</b>
	<i>Instructions for the team lead</i>	166
	Introduction	167
	Training options	168
	The seven steps of Safe Surgery Checklist training	171
	Have trainees practice the checklist with a script	173
	Considerations for training larger groups	175
	Action Guide: Safe Surgery Checklist trainers' guide	178



## Contents

---

<b>13</b>	<b>Coaching the checklist</b>	<b>179</b>
	<i>Instructions for the team lead</i>	180
	Introduction	181
	<u>About coaching</u>	182
	What do we mean by “coaching the checklist”?	182
	The importance of coaching	182
	<u>How to coach the checklist</u>	183
	Six principles for coaching in a surgical environment	183
	Observe the surgical team	183
	Give structured feedback using the 3-part question	186
	Before you offer feedback...	187
	<u>Creating and managing a coaching program</u>	189
	Choose your coaches	189
	Train your coaches	189
	Plan and schedule coaching sessions	190
	Keep track of what you learn	192
	Action Guide: Coaches’ guide to giving feedback	194
<b>14</b>	<b>The Debriefing: How to make it count</b>	<b>195</b>
	<i>Instructions for the team lead</i>	196
	Introduction	197
	How debriefing works	197
	<u>How to make your debriefing effective</u>	198
	Find a trigger	198
	Build a system	199
<b>15</b>	<b>Continually improve</b>	<b>205</b>
	<i>Instructions for the team lead</i>	206
	Introduction	207
	Actions that support continued improvement	207
	Build upon your success	211

## Contents

---

### **A Rationale and origin of items on the Safe Surgery Checklist** **A-i**

<i>Instructions for the team lead</i>	A-ii
Introduction	A1
<u>Master list of Safe Surgery Checklist items</u>	A3
Before Induction of Anesthesia	A3
Before Skin Incision	A7
Before Patient Leaves Room	A12

---

### **B Addressing questions and objections** **B-i**

<i>Instructions for the team lead</i>	B-ii
---------------------------------------	------

---

### **C Techniques for coaches** **C-i**

<i>Instructions for the team lead</i>	C-ii
Introduction	C1
Principles of being an effective checklist coach	C2
How to give feedback using the 3-part question	C5
Before you offer feedback...	C7
Preparing for and managing your coaching sessions	C8
Action Guide: Coaches' guide to giving feedback	C10

---

### **D Fact sheets** **D-i**

<i>Instructions for the team lead</i>	D-ii
Overview of checklist implementation	D1
Implementation team roles and responsibilities	D2
Checklist demonstration video	D3

---

### **E Checklist templates** **E-i**

<i>Instructions for the team lead</i>	E-ii
---------------------------------------	------

---

### **F Other tools and materials** **F-i**

<i>Instructions for the team lead</i>	F-ii
---------------------------------------	------

# Preface

## About this guide

Ariadne Labs has developed a framework for Safe Surgery Checklist implementation based on lessons learned in over 4,000 facilities globally.

We created this implementation guide to describe that framework, identify best practices, highlight considerations for how individual facilities might apply the framework, and share practical examples from other facilities.

Using this guide can help you avoid common problems and achieve better success when implementing or improving your facility's use of the Safe Surgery Checklist.

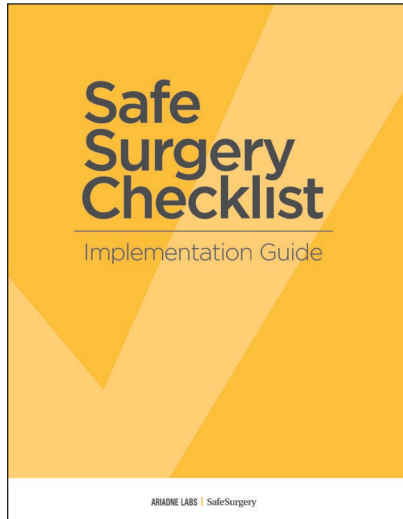
## About you

We wrote this guide for use by people in hospitals and ambulatory surgery centers who are interested in using the Safe Surgery Checklist to improve surgical patient safety.

There are usually one or two people in each facility who lead the checklist effort, supported by the help of an implementation team. This guide is for the implementation lead and implementation team members.

In Chapter 1: *The Safe Surgery Checklist*, we summarize the growing body of evidence that checklists make a positive difference, but this guide will not try to persuade you of the value of checklists. For information on the value and efficacy of surgical safety checklists, visit [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).

# A system of materials designed to help you succeed

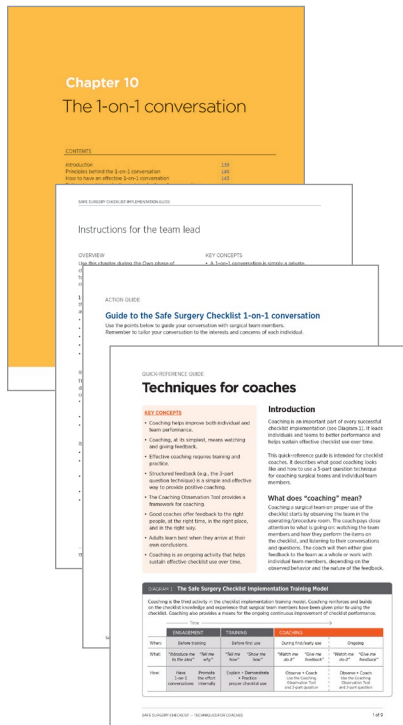


## The Safe Surgery Checklist Implementation Guide

The *Safe Surgery Checklist Implementation Guide* (this document) is just one of the resources we have developed to help facilities successfully implement the checklist (see Diagram 1 on page x).

This preface includes a brief description of resources available within and in addition to the implementation guide. Each of these materials is described in greater detail in the related chapter content.

For more information or to download materials, visit [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).



## In this guide, each chapter includes:

- a title page with contents listing.
- an instruction page for the implementation lead that describes the purpose of the chapter, related content in the implementation guide, and suggested resources.
- the chapter content, presenting key considerations and best practices for a topic.
- action guides related to the topic, at the end of each chapter (when appropriate).

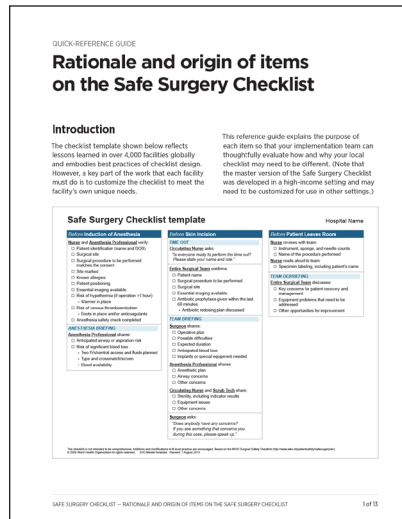
## Appendices to this guide include:

- stand-alone quick-reference guides and fact sheets.
- sample checklist templates.
- other tools such as observation guides, culture surveys, and practice scripts

# Quick-reference guides

Each of these short documents focuses on a key topic for a special purpose or audience. The quick-reference guides are included in this guide as appendices, along with brief instructions for the implementation lead, and are also available as separate PDFs.

## Rationale and origin of items on the Safe Surgery Checklist



Available in Appendix A

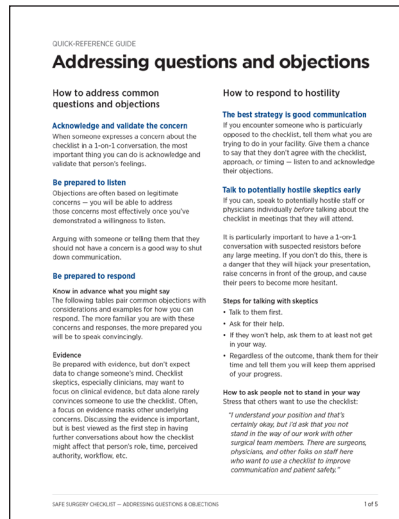
### TOPIC

Explains the purpose of each item on the Safe Surgery Checklist and describes why it is included on the checklist.

### AUDIENCE/USE

Give a copy to each member of your implementation team, and refer to it as you customize the Safe Surgery Checklist for your facility or while you consider changes to your existing surgical safety checklist.

## Addressing questions and objections



Available in Appendix B

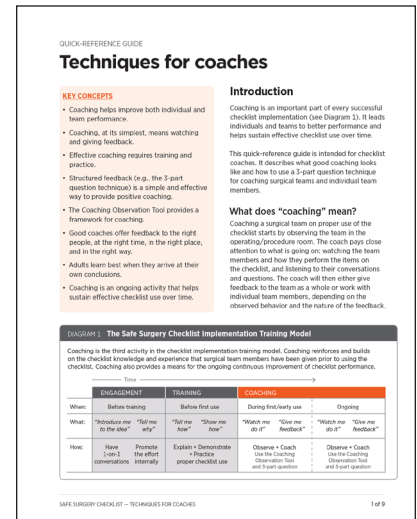
### TOPIC

Offers guidance for answering common questions about the checklist and for responding in a constructive way to objections about checklist use.

### AUDIENCE/USE

Give copies to the people who will lead 1-on-1 conversations with surgical team members.

## Techniques for coaches



Available in Appendix C

### TOPIC

Presents instructions and tips for coaching checklist use in the operating/procedure room.

### AUDIENCE/USE

Give copies to the people who will coach checklist use in your facility.

# Fact sheets

These single-page reference sheets present a condensed overview of a key topic.

## Overview of checklist implementation

**ARNDT LABS | SafeSurgery**

FACT SHEET

### Overview of checklist implementation

The framework below reflects lessons learned in over 4,000 facilities globally. It will help you avoid common pitfalls and prepare your organization to successfully harness the power of the Safe Surgery Checklist to improve teamwork and communication.

**The Safe Surgery framework puts your checklist initiative on a path to success.**

PHASE	IMPLEMENTATION STEPS	IMPACT	How long does it take?
PRIME	1. Assess if Team	██████████	The amount of time needed to implement the checklist will vary greatly depending on the size, culture, and resources of each facility.
	2. Understand the Work	██████████	
	3. Assess Your Environment	██████████	
	4. Decide Are We Ready?	██████████	
OWN	5. Customize the List	██████████	The implementation process can take as little as four weeks in small facilities, or as long as three years in larger or more challenging organizations.
	6. Plan Your Expansion	██████████	
	7. Have 1-on-1 Conversations	██████████	
	8. Promote the Checklist	██████████	
SUSTAIN	9. Train and Support	██████████	Most facilities will fall somewhere in the middle.
	10. Watch and Coach	██████████	
IMPROVE	11. Continually Improve	██████████	

**Eleven essential steps guide your team.** Each step prepares your team to be successful in the work that follows.

1. Assess if Team	2. Understand the Work	3. Assess Your Environment	4. Decide Are We Ready?	5. Customize the List
Build a multidisciplinary team to plan and execute your implementation, and establish roles, expectations, and process.	Engage your team with a common understanding of the list and evidence supporting Safe Surgery Checklist use and implementation.	Assess the culture and practices in your operating and procedure rooms to identify your facility's specific opportunities for and impediments to improvement.	Based on culture and process assessments, align your facility's resources. Consult with hospital leadership and correct their commitment.	Customize your checklist to address facility-specific issues, test and make your checklist until it is ready for use.
6. Plan Your Expansion	7. Have 1-on-1 Conversations	8. Promote the Checklist	9. Train and Support	10. Watch and Coach
Create a plan for how you will handle 1-on-1 conversations, practice, training, coaching, and change of mind checks. Monitor specific tasks and create a timeline.	Engage the plan you created for having 1-on-1 conversations with all operating and procedure room team members.	Engage the plan you created for promoting the checklist in your facility. Showcase your efforts and programs.	Develop the plan you created for training surgical team members and coaching checklist use. Collect feedback and troubleshoot problems as they arise.	Customize your watch how the checklist is actually used. Use coaching to enhance checklist use and team communication.
11. Continually Improve	Never stop thinking. Make periodic reviews that enhance use and help teams adapt to changing conditions. Use the checklist as a strategy for continuous quality improvement.			

For more information, refer to the Safe Surgery Implementation Guide or visit <http://www.safesurgery.org/links/links.htm>

©2018 Arndt Labs. All Rights Reserved.

Available in Appendix D

### TOPIC

Summarizes a step-by-step process for implementation of the Safe Surgery Checklist.

### AUDIENCE/USE

Use when introducing the idea of the checklist to potential implementation team members, when working with facility leadership, and when helping others to understand the scope or steps of your project.

## Implementation team roles and responsibilities

**ARNDT LABS | SafeSurgery**

FACT SHEET

### Implementation team roles and responsibilities

Your active participation and enthusiasm can help improve our care of surgical patients.

**Help improve surgical care by joining the Surgical Safety Checklist team**

The implementation of the Surgical Safety Checklist is a quality improvement initiative designed to enhance communication and teamwork in surgery. The successful integration of the checklist into surgical workflow and practice is directly influenced by the commitment and effort of the implementation team. That's why we need leaders like you.

**As a team member, you will contribute by:**

- providing insight into workflow and processes.
- providing clinical expertise.
- learning about checklist-related evidence.
- helping customize and test the checklist.
- modeling your checklist practice.
- having 1-on-1 conversations with peers.
- teaching others how to use the checklist.
- coaching checklist use in the operating room.
- presenting information to hospital leadership.
- providing feedback to other team members and leadership about the implementation effort.
- attending team meetings (as many as possible).

**Who is on the team?**

Every role in the operating room needs a voice — we hope to include at least one representative of each of these roles:

- administrator and/or quality improvement officer
- anesthesiologist and/or CRNA
- circulating nurse
- scrub technician
- surgeon
- others (orthotomists, pre-op and post-op nurses, anesthesia technicians, physician assistants, biomedical engineers)

**How does the team work?**

- One person — the team lead — is responsible for meeting logistics and team communication.
- The team meets regularly to work through the essential steps of the checklist implementation process.
- After the initial planning and expansion of the checklist, meetings may become less frequent.

**What is the time commitment and how long does the implementation effort last?**

The time commitment will depend on our facility's unique needs and culture. We will do our best to make the best use of your time.

For more information, refer to the Safe Surgery Implementation Guide or visit <http://www.safesurgery.org/links/links.htm>

©2018 Arndt Labs. All Rights Reserved.

Available in Appendix D

### TOPICS

- What is the implementation team?
- How can I contribute?

### AUDIENCE/USE

Use when recruiting people to join your implementation team.

## Checklist demonstration video

**ARNDT LABS | SafeSurgery**

FACT SHEET

### Checklist demonstration video

Creating a video can be a fun and educational experience for your teams — and you do not need professional equipment or a lot of money.

**Why is video important?**



Video is a powerful tool for showing people how to use (or not use) the checklist. Saving a team from your hospital using a checklist makes the effort tangible.

**A VIDEO HELPS:**

- generate buy-in.
- reduce the effort internally.
- supplement your training.

**YOU CAN SHOW:**

- how your customized version of the checklist works.
- proper use of the checklist as a communication tool.
- how the checklist will be deployed in your facility.
- how not to use the checklist (this is fun for teams to create).

**SEE EXAMPLES:**

- demonstration videos from facilities around the world, available at <http://www.safesurgery.org/videos.html>

**How to CREATE your video**

**Recruit people to participate**

- Draw from your implementation team and consider physicians, staff, administrators, and stakeholders who can be important advocates.

**Find a convenient location**

- Use an empty operating room, a simulator, or a conference room.

**Use existing camera and supplies**

- Use a portable video camera or smartphone. Specialized equipment is not required, but if your hospital has an OR department they may be able to help film.
- Bring your facility's checklist.
- Bring scrubs, gloves, equipment, etc., to simulate the OR environment.

**Never use a real patient**

- Have a person stretch out on the table and pretend to be your patient, or simply cover some pillows with a sheet.

**Plan a block of time**

- Practice hellos; you may need to record the simulation more than once to get the result you want.

**How to USE your video**

**Publicize your effort internally**

- Directly: Show it in department and staff meetings; share it during 1-on-1 conversations with surgical team members.
- Indirectly: Use it as a screencast on computers or run as a continuous loop in physician and staff lounges.

**Supplement (but never replace) 1-on-1 conversations and training**

- Video cannot replace talking to every person about the checklist, and should never be used as a substitute for hands-on training.

Consider sharing your video on YouTube or with Arndt Labs ([info@safesurgery.org](mailto:info@safesurgery.org)) so that others can learn from your facility.

©2018 Arndt Labs. All Rights Reserved.

Available in Appendix D

### TOPICS

- Why is it important to create a video?
- How can we create a video?
- How can we use our video?

### AUDIENCE/USE

Use when planning your effort, asking your media department for help, and when recruiting people to participate in the video.

# Safe Surgery Checklist templates

Five Safe Surgery Checklist templates – one master version and four variations – are available for your use. Each template is a user-modifiable Microsoft Word document.

## Master version

**Safe Surgery Checklist template** Hospital Name

<p><b>Before Induction of Anesthesia</b></p> <p><b>Nurse and Anesthesia Professional verify:</b></p> <ul style="list-style-type: none"> <li>□ Patient identification (name and DOB)</li> <li>□ Surgical site</li> <li>□ Surgical procedure to be performed matches the consent</li> <li>□ Site marked</li> <li>□ Known allergies</li> <li>□ Patient positioning</li> <li>□ Essential imaging available</li> <li>□ Risk of hypothermia (if operation &gt;1 hour)                             <ul style="list-style-type: none"> <li>• Warmer in place</li> </ul> </li> <li>□ Risk of venous thromboembolism                             <ul style="list-style-type: none"> <li>• Boots in place and/or anticoagulants</li> </ul> </li> <li>□ Anesthesia safety check completed</li> </ul> <p><b>ANESTHESIA BRIEFING</b></p> <p><b>Anesthesia Professional shares:</b></p> <ul style="list-style-type: none"> <li>□ Anticipated airway or aspiration risk</li> <li>□ Risk of significant blood loss                             <ul style="list-style-type: none"> <li>• Two IVs/central access and fluids planned</li> <li>• Type and crossmatch/screen</li> <li>• Blood availability</li> </ul> </li> </ul>	<p><b>Before Skin Incision</b></p> <p><b>TIME OUT</b></p> <p><b>Circulating Nurse asks:</b></p> <p>"Is everyone ready to perform the time out?"</p> <p>Please state your name and role."</p> <p><b>Entire Surgical Team confirms:</b></p> <ul style="list-style-type: none"> <li>□ Patient name</li> <li>□ Surgical procedure to be performed</li> <li>□ Surgical site</li> <li>□ Essential imaging available</li> <li>□ Antibiotic prophylaxis given within the last 60 minutes                             <ul style="list-style-type: none"> <li>• Antibiotic redosing plan discussed</li> </ul> </li> </ul> <p><b>TEAM BRIEFING</b></p> <p><b>Surgeon shares:</b></p> <ul style="list-style-type: none"> <li>□ Operative plan</li> <li>□ Possible difficulties</li> <li>□ Expected duration</li> <li>□ Anticipated blood loss</li> <li>□ Implants or special equipment needed</li> </ul> <p><b>Anesthesia Professional shares:</b></p> <ul style="list-style-type: none"> <li>□ Anesthetic plan</li> <li>□ Airway concerns</li> <li>□ Other concerns</li> </ul> <p><b>Circulating Nurse and Scrub Tech share:</b></p> <ul style="list-style-type: none"> <li>□ Sterility, including indicator results</li> <li>□ Equipment issues</li> <li>□ Other concerns</li> </ul> <p><b>Surgeon asks:</b></p> <p>"Does anybody have any concerns? If you see something that concerns you during this case, please speak up."</p>	<p><b>Before Patient Leaves Room</b></p> <p><b>Nurse reviews with team:</b></p> <ul style="list-style-type: none"> <li>□ Instrument, sponge, and needle counts</li> <li>□ Name of the procedure performed</li> </ul> <p><b>Nurse reads aloud to team:</b></p> <ul style="list-style-type: none"> <li>□ Specimen labeling, including patient's name</li> </ul> <p><b>TEAM DEBRIEFING</b></p> <p><b>Entire Surgical Team discusses:</b></p> <ul style="list-style-type: none"> <li>□ Key concerns for patient recovery and management</li> <li>□ Equipment problems that need to be addressed</li> <li>□ Other opportunities for improvement</li> </ul>
---	---	---

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Based on the WHO Surgical Safety Checklist (http://www.who.int/patientsafety/safesurgery). © 2008 World Health Organization. All rights reserved. SSC Master template. Revised 7 August 2015.

Available in Appendix E

## Team already knows each other

**Safe Surgery Checklist template** Hospital Name

<p><b>Before Induction of Anesthesia</b></p> <p><b>Nurse and Anesthesia Professional verify:</b></p> <ul style="list-style-type: none"> <li>□ Patient identification (name and DOB)</li> <li>□ Surgical site</li> <li>□ Surgical procedure to be performed matches the consent</li> <li>□ Site marked</li> <li>□ Known allergies</li> <li>□ Patient positioning</li> <li>□ Essential imaging available</li> <li>□ Risk of hypothermia (if operation &gt;1 hour)                             <ul style="list-style-type: none"> <li>• Warmer in place</li> </ul> </li> <li>□ Risk of venous thromboembolism                             <ul style="list-style-type: none"> <li>• Boots in place and/or anticoagulants</li> </ul> </li> <li>□ Anesthesia safety check completed</li> </ul> <p><b>ANESTHESIA BRIEFING</b></p> <p><b>Anesthesia Professional shares:</b></p> <ul style="list-style-type: none"> <li>□ Anticipated airway or aspiration risk</li> <li>□ Risk of significant blood loss                             <ul style="list-style-type: none"> <li>• Two IVs/central access and fluids planned</li> <li>• Type and crossmatch/screen</li> <li>• Blood availability</li> </ul> </li> </ul>	<p><b>Before Skin Incision</b></p> <p><b>TIME OUT</b></p> <p><b>Circulating Nurse asks:</b></p> <p>"Is everyone ready to perform the time out?"</p> <p>Please state your name and role."</p> <p><b>Entire Surgical Team confirms:</b></p> <ul style="list-style-type: none"> <li>□ Patient name</li> <li>□ Surgical procedure to be performed</li> <li>□ Surgical site</li> <li>□ Essential imaging available</li> <li>□ Antibiotic prophylaxis given within the last 60 minutes                             <ul style="list-style-type: none"> <li>• Antibiotic redosing plan discussed</li> </ul> </li> </ul> <p><b>TEAM BRIEFING</b></p> <p><b>Surgeon shares:</b></p> <ul style="list-style-type: none"> <li>□ Operative plan and possible difficulties</li> <li>□ Expected duration</li> <li>□ Anticipated blood loss</li> <li>□ Implants or special equipment needed</li> </ul> <p><b>Anesthesia Professional shares:</b></p> <ul style="list-style-type: none"> <li>□ Anesthetic plan</li> <li>□ Airway concerns</li> <li>□ Other concerns</li> </ul> <p><b>Circulating Nurse and Scrub Tech share:</b></p> <ul style="list-style-type: none"> <li>□ Sterility, including indicator results</li> <li>□ Equipment issues</li> <li>□ Other concerns</li> </ul> <p><b>Surgeon asks each team member by name:</b></p> <p>"_____ are you ready to proceed?"</p> <p><b>Surgeon states:</b></p> <p>"If you see something that concerns you during this case, please speak up."</p>	<p><b>Before Patient Leaves Room</b></p> <p><b>Nurse reviews with team:</b></p> <ul style="list-style-type: none"> <li>□ Instrument, sponge, and needle counts</li> <li>□ Name of the procedure performed</li> </ul> <p><b>Nurse reads aloud to team:</b></p> <ul style="list-style-type: none"> <li>□ Specimen labeling, including patient's name</li> </ul> <p><b>TEAM DEBRIEFING</b></p> <p><b>Entire Surgical Team discusses:</b></p> <ul style="list-style-type: none"> <li>□ Key concerns for patient recovery and management</li> <li>□ Equipment problems that need to be addressed</li> <li>□ Other opportunities for improvement</li> </ul>
---	--	---

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Based on the WHO Surgical Safety Checklist (http://www.who.int/patientsafety/safesurgery). © 2008 World Health Organization. All rights reserved. SSC Team already knows each other. Revised 7 August 2015.

Available in Appendix E

## Team briefing before induction

**Safe Surgery Checklist template** Hospital Name

<p><b>Before Induction of Anesthesia</b></p> <p><b>INTRODUCTIONS</b></p> <p><b>Everyone in the room</b> introduces themselves to the patient:</p> <ul style="list-style-type: none"> <li>□ State your name and role</li> </ul> <p><b>TEAM BRIEFING</b></p> <p><b>Entire Surgical Team verifies:</b></p> <ul style="list-style-type: none"> <li>□ Patient identification (name and DOB)</li> <li>□ Surgical site</li> <li>□ Surgical procedure to be performed matches the consent</li> <li>□ Site marked</li> <li>□ Known allergies</li> <li>□ Patient positioning</li> <li>□ Risk of hypothermia (if operation &gt;1 hour)                             <ul style="list-style-type: none"> <li>• Warmer in place</li> </ul> </li> <li>□ Risk of venous thromboembolism                             <ul style="list-style-type: none"> <li>• Boots in place and/or anticoagulants</li> </ul> </li> </ul> <p><b>Surgeon shares:</b></p> <ul style="list-style-type: none"> <li>□ Operative plan</li> <li>□ Possible difficulties</li> <li>□ Expected duration</li> <li>□ Risk of significant blood loss                             <ul style="list-style-type: none"> <li>• Two IVs/central access and fluids planned</li> <li>• Type and crossmatch/screen</li> <li>• Blood availability</li> </ul> </li> <li>□ Implants or special equipment needed</li> </ul> <p><b>Anesthesia Professional shares:</b></p> <ul style="list-style-type: none"> <li>□ Anesthesia safety check completed</li> <li>□ Anesthetic plan</li> <li>□ Airway concerns</li> <li>□ Other concerns</li> </ul> <p><b>Circulating Nurse and Scrub Tech share:</b></p> <ul style="list-style-type: none"> <li>□ Sterility, including indicator results</li> <li>□ Essential imaging available</li> <li>□ Equipment issues</li> <li>□ Other concerns</li> </ul>	<p><b>Before Skin Incision</b></p> <p><b>TIME OUT</b></p> <p><b>Circulating Nurse asks:</b></p> <p>"Is everyone ready to perform the time out?"</p> <p>Please state your name and role."</p> <p><b>Entire Surgical Team confirms:</b></p> <ul style="list-style-type: none"> <li>□ Patient name</li> <li>□ Surgical procedure to be performed</li> <li>□ Surgical site</li> <li>□ Essential imaging available</li> <li>□ Antibiotic prophylaxis given within the last 60 minutes                             <ul style="list-style-type: none"> <li>• Antibiotic redosing plan discussed</li> </ul> </li> </ul> <p><b>Surgeon asks:</b></p> <p>"Does anybody have any concerns? If you see something that concerns you during this case, please speak up."</p>	<p><b>Before Patient Leaves Room</b></p> <p><b>Nurse reviews with team:</b></p> <ul style="list-style-type: none"> <li>□ Instrument, sponge, and needle counts</li> <li>□ Name of the procedure performed</li> </ul> <p><b>Nurse reads aloud to team:</b></p> <ul style="list-style-type: none"> <li>□ Specimen labeling, including patient's name</li> </ul> <p><b>TEAM DEBRIEFING</b></p> <p><b>Entire Surgical Team discusses:</b></p> <ul style="list-style-type: none"> <li>□ Key concerns for patient recovery and management</li> <li>□ Equipment problems that need to be addressed</li> <li>□ Other opportunities for improvement</li> </ul>
---	--	---

This version of the Safe Surgery Checklist template is intended for facilities in which the entire surgical team is present before induction. It is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Based on the WHO Surgical Safety Checklist (http://www.who.int/patientsafety/safesurgery). © 2008 World Health Organization. All rights reserved. SSC Team briefing before induction. Revised 7 August 2015 (211212).

Available in Appendix E

## Two-page versions (for hospitals and ASCs)

**Safe Surgery Checklist template** Hospital Name

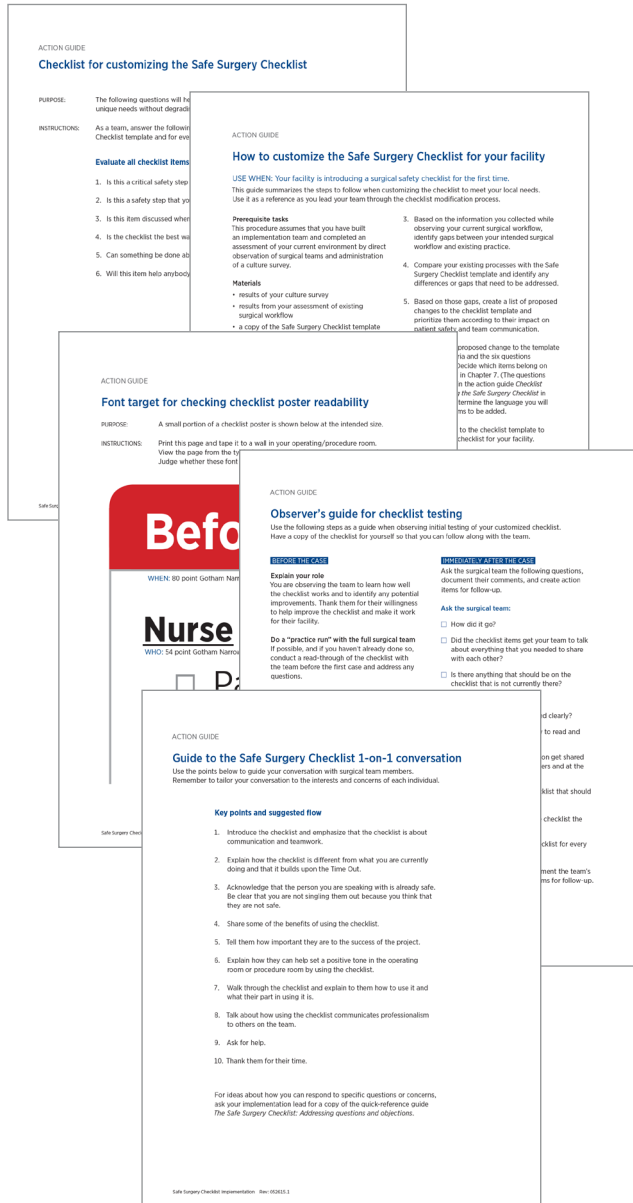
<p><b>Before Skin Incision</b></p> <p><b>TIME OUT</b></p> <p><b>Circulating Nurse asks:</b></p> <p>"Is everyone ready to perform the time out?"</p> <p>Please state your name and role."</p> <p><b>Entire Surgical Team confirms:</b></p> <ul style="list-style-type: none"> <li>□ Patient name</li> <li>□ Surgical procedure to be performed</li> <li>□ Surgical site</li> <li>□ Essential imaging available</li> <li>□ Antibiotic prophylaxis given within the last 60 minutes                             <ul style="list-style-type: none"> <li>• Antibiotic redosing</li> </ul> </li> </ul> <p><b>TEAM BRIEFING</b></p> <p><b>Surgeon shares:</b></p> <ul style="list-style-type: none"> <li>□ Operative plan</li> <li>□ Possible difficulties</li> <li>□ Expected duration</li> <li>□ Anticipated blood loss</li> <li>□ Implants or special equipment needed</li> </ul> <p><b>Anesthesia Professional shares:</b></p> <ul style="list-style-type: none"> <li>□ Anesthetic plan</li> <li>□ Airway concerns</li> <li>□ Other concerns</li> </ul> <p><b>Circulating Nurse and Scrub Tech share:</b></p> <ul style="list-style-type: none"> <li>□ Sterility, including indicator results</li> <li>□ Equipment issues</li> <li>□ Other concerns</li> </ul> <p><b>Surgeon asks:</b></p> <p>"Does anybody have any concerns? If you see something that concerns you during this case, please speak up."</p>	<p><b>Ambulatory Safe Surgery Checklist template</b> <span style="float: right;">Hospital Name</span></p> <p><b>Before Induction of Anesthesia</b></p> <p><b>Nurse and Anesthesia Professional verify with the Patient:</b></p> <ul style="list-style-type: none"> <li>□ Patient identification (name and DOB)</li> <li>□ Surgical site</li> <li>□ Surgical procedure to be performed matches the consent</li> <li>□ Site marked</li> <li>□ Known allergies</li> <li>□ Patient positioning</li> <li>□ Patient weight</li> </ul> <p><b>Nurse and Anesthesia Professional verify:</b></p> <ul style="list-style-type: none"> <li>□ Implants available in the OR</li> <li>□ Correct size and type</li> <li>□ Essential imaging available</li> <li>□ Risk of hypothermia (if operation &gt;1 hour)                             <ul style="list-style-type: none"> <li>• Warmer in place</li> </ul> </li> <li>□ Risk of venous thromboembolism                             <ul style="list-style-type: none"> <li>• Boots in place and/or anticoagulants</li> </ul> </li> <li>□ Anesthesia safety check completed</li> </ul> <p><b>Nurse and Anesthesia Professional share:</b></p> <ul style="list-style-type: none"> <li>□ Anticipated airway or aspiration risk</li> <li>□ Changes in patient's cardiac history</li> <li>□ Changes in patient's respiratory history</li> </ul>
--	--

This version of the Safe Surgery Checklist template is intended for ambulatory surgery centers. It is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Based on the WHO Surgical Safety Checklist (http://www.who.int/patientsafety/safesurgery). © 2008 World Health Organization. All rights reserved. SSC Two-page 1 August 2015.

Available in Appendix E

# Action guides

Action guides are one-page job aids that support specific tasks that are performed by the implementation lead, implementation team, observers, checklist coaches, and others.



Each action guide is included at the back of the implementation guide chapter that describes its use, and is available as a separate PDF.

- Assessment observer's guide
- Font target for checking checklist poster readability
- Checklist for customizing the Safe Surgery Checklist
- How to make improvements to your existing surgical checklist
- How to customize the Safe Surgery Checklist for your facility
- Observer's guide for checklist testing
- Guide to the Safe Surgery Checklist 1-on-1 conversation
- Safe Surgery Checklist trainers' guide
- Coaches' guide to giving feedback



## Observation tools

Two tools are available to help you collect information through direct observation in the operating/procedure room. One is designed for use during an initial assessment, and one is designed to help your team collect and provide feedback while coaching use of the checklist.

### Assessment Observation Tool

ASSESSMENT OBSERVATION TOOL — page 1 of 3 DATE \_\_\_\_\_  
(mm/td/yyyy)

**Before Induction of Anesthesia**

**Step 1: Checklist discussion items**  
*Using the Safe Surgery Checklist image below, listen to the team's conversation and mark each item that the team discusses.*

**Before Induction of Anesthesia**

**Nurse and Anesthesia Professional verify:**

- Patient identification (name and DOB)
- Surgical site
- Surgical procedure to be performed matches the consent
- Site marked
- Known allergies
- Patient positioning
- Essential imaging available
- Risk of hypothermia (if operation >1 hour)
  - Warmer in place
- Risk of venous thromboembolism
  - Boots and/or anticoagulants in place
- Anesthesia safety check completed

**ANESTHESIA BRIEFING**

**Anesthesia Professional shares:**

- Anticipated airway or aspiration risk
- Risk of significant blood loss
  - Two IV/oriental access and fluids planned
  - Type and crossmatch/screen
  - Blood availability

**Step 2: Quality of discussion**  
*After the discussion, answer the following questions:*

- a. Did the circulating nurse discuss all items when at least one other care provider was present?  
 Yes  No
- b. Was the patient actively engaged in this discussion?  
 Yes  No  N/A
- c. Did every team member that was present say something?  
 Yes  No
- d. Were all of the checklist items done from memory?  
 Yes  No  N/A (don't use a checklist)
- e. Could the team have had a better discussion?  
 Yes  No

If yes, please explain:

**Step 3: Notes**  
*Record any additional comments or observations in the space below:*

Revised 05/2015

Available in Appendix F

#### DESCRIPTION

A structured framework for observing the current practices of surgical teams in the operating/procedure room.

#### AUDIENCE

Observers

### Coaching Observation Tool

COACHING OBSERVATION TOOL — page 1 of 3 DATE \_\_\_\_\_  
(mm/td/yyyy)

**Before Induction of Anesthesia**

Use this form along with a copy of your facility's checklist to record your observations, notes, and feedback for the surgical team.

**Step 1: Checklist discussion items**  
*On a copy of your facility's Safe Surgery Checklist, mark each item that the team discusses.*

- Use the space below to take notes about your observations.

**Step 2: Quality of discussion**  
*After the discussion, please mark how well the checklist was used:*

- a. Did the circulating nurse discuss all items when at least one other care provider was present?  
 Yes  Some, not all  No
- b. Was the patient actively engaged in this discussion?  
 Yes  Somewhat  No  N/A
- c. Were the checklist items done from memory?  
 Yes  Some, not all  None
- d. Did every team member that was present say something?  
 Yes  Some, not all  No one
- e. Could the team have performed this section of the checklist better?  
 Yes  No

**Step 3: What feedback can you give the team?**  
*Reflect on what you saw the team do well or what they could have done better during the cases using the 3-part question:*

YOUR OBSERVATION	YOUR OPINION	YOUR QUESTION

Revised 05/2015

Available in Appendix F

#### DESCRIPTION

A structured framework for observing and coaching checklist use in the operating/procedure room.

#### AUDIENCE

Coaches

# Culture surveys

The Safe Surgery Checklist culture surveys are designed specifically to collect information about the perceptions and feelings of people in the surgical environment. They are used before and after checklist implementation.

## Pre survey (no existing checklist)

**Safe Surgery Checklist Pre Culture Survey**  
 This survey asks you to think about the operating rooms in which you work most often and the teams that you work with in the operating room (OR)/procedure room. Many of the questions refer to your team. By team we mean everyone working in the OR/procedure room with you during operations/procedures. Think about your average experience when taking the survey. This survey should take no more than 5 minutes to complete.

A. What is your primary professional role?  
 Surgeon       Surgical nurse       Perfusionist  
 Anesthesiologist       Physician assistant       Intern/Resident/Fellow  
 CRNA       Surgical tech       Other: \_\_\_\_\_

B. How many years have you worked in this role (at any facility)?  
 <1       1-5       6-10       >10

How much do you agree or disagree with the following statements?  
**In the ORs/Procedure Rooms where I work...**

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Everyone participates in efforts to improve patient safety.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Team members are open to changes that improve patient safety even if it means slowing down.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Pressure to move quickly from case to case gets in the way of patient safety.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Physicians are present and actively participating in patient care prior to skin incision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Team discussions (e.g., briefings or debriefings) are common.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. It is difficult to speak up when I perceive problems with patient care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Physicians maintain a positive tone throughout operations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. All team members work together as a well-coordinated team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. For complex cases, briefings include planning for potential problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Team members share key information as it becomes available.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Physicians are only open to suggestions from other physicians.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Team members communicate with me in a respectful manner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I am treated as a highly valued member of the team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. It is difficult to discuss medical mistakes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. The entire team discusses key concerns for patient recovery and management before the patient leaves the room.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I would feel safe being treated here as a patient.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you have any other comments, please use the space below and the back of the survey to elaborate:

The Survey for facilities without a checklist      Version: April 23, 2015

Available in Appendix F

### DESCRIPTION

Validated survey instruments designed to collect information relevant to the use and implementation of a surgical safety checklist.

### AUDIENCE/USE

Administer to all surgical team members in your facility.

## Pre survey (existing checklist)/ Post survey for all facilities

**Safe Surgery Checklist Culture Survey**  
 This survey asks you to think about the operating rooms in which you work most often and the teams that you work with in the operating room (OR)/procedure room. Many of the questions refer to your team. By team we mean everyone working in the OR/procedure room with you during operations/procedures. Think about your average experience when taking the survey. This survey should take no more than 5 minutes to complete.

A. What is your primary professional role?  
 Surgeon       Surgical nurse       Perfusionist  
 Anesthesiologist       Physician assistant       Intern/Resident/Fellow  
 CRNA       Surgical tech       Other: \_\_\_\_\_

B. How many years have you worked in this role (at any facility)?  
 <1       1-5       6-10       >10

How much do you agree or disagree with the following statements?  
**In the ORs/Procedure Rooms where I work...**

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Everyone participates in efforts to improve patient safety.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Team members are open to changes that improve patient safety even if it means slowing down.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Pressure to move quickly from case to case gets in the way of patient safety.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Physicians are present and actively participating in patient care prior to skin incision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Team discussions (e.g., briefings or debriefings) are common.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. It is difficult to speak up when I perceive problems with patient care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. The entire team stops at all 3 critical points during the procedure to read the safe surgery checklist (before induction of anesthesia, before skin incision, and before the patient leaves the room).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Physicians maintain a positive tone throughout operations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. All team members work together as a well-coordinated team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. For complex cases, briefings include planning for potential problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Team members share key information as it becomes available.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Physicians are only open to suggestions from other physicians.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Team members communicate with me in a respectful manner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I am treated as a highly valued member of the team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. It is difficult to discuss medical mistakes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. The entire team discusses key concerns for patient recovery and management before the patient leaves the room.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Using the safe surgery checklist helps my cases run more smoothly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I was given a strong explanation for why it is important to use the safe surgery checklist.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. The training I received about how to use the safe surgery checklist allowed me to use it effectively during surgical procedures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. If I were having an operation, I would want a safe surgery checklist to be used.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I would feel safe being treated here as a patient.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. In the ORs/Procedure Rooms where I work, problems or complications have been averted by the safe surgery checklist.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If problems or complications have been averted by the safe surgery checklist or if you have any other comments, please use the space below and the back of the survey to elaborate:

The Survey for facilities with a checklist/Post Survey for all facilities      Version: April 23, 2015

Available in Appendix F

## Implementation Lead Project Spreadsheet

A Microsoft Excel workbook is available to help you plan and track various implementation tasks.

The screenshot shows a Microsoft Excel spreadsheet with the following structure:

- Header Row 1:** "Use this spreadsheet to track your progress engaging and training each surgical team member" (left) and "Culture Survey" (right).
- Section Header:** "Surgical Personnel Tracking Worksheet" (yellow background).
- Column Headers:**
  - First Name
  - Last Name
  - Role
  - Service / Dept
  - Here How Often?
  - E-mail
  - Level of Interest (estimate resistance)
  - Sent
  - Date Complete
  - Survey Method (Paper, Electronic)
  - Next
- Worksheet Tabs:** INSTRUCTIONS, 1 Implementation team, 2 Surgical Personnel (selected), 3 Assessment Observation, 4 Coaching (less detailed), 5 Coaching (m).

### DESCRIPTION

Microsoft Excel workbook that contains a collection of simple spreadsheets for key tasks related to checklist implementation.

### AUDIENCE/USE

The implementation lead can use this tool to plan and track:

- implementation team members and contact information.
- comprehensive list of surgical personnel.
- administration of the culture survey.
- initial assessment observations in the operating/procedure room.
- 1-on-1 conversations with surgical team members.
- training of surgical team members in how to use the checklist.
- when surgical team members first use the checklist.
- coaching of surgical team members in the operating/procedure room.

## DIAGRAM 1 List of Safe Surgery Checklist implementation materials

The Safe Surgery Checklist Implementation Program includes the following materials. To download individual components, or to check for updates and additional resources, visit [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).

### **Implementation Guide** (this document)

- *Safe Surgery Checklist Implementation Guide*

### **Action guides** (included in appropriate chapters)

- *Assessment observer's guide*
- *Font target for checking checklist poster readability*
- *Checklist for customizing the Safe Surgery Checklist*
- *How to make improvements to your existing surgical checklist*
- *How to customize the Safe Surgery Checklist for your facility*
- *Observer's guide for checklist testing*
- *Guide to the Safe Surgery Checklist 1-on-1 conversation*
- *Safe Surgery Checklist trainers' guide*
- *Coaches' guide to giving feedback*

### **Quick-reference guides** (included as appendices in this guide)

- *Rationale and origin of items on the Safe Surgery Checklist* (Appendix A)
- *Addressing questions and objections* (Appendix B)
- *Techniques for coaches* (Appendix C)

### **Fact sheets** (included in Appendix D of this guide)

- *Implementation team roles and responsibilities*
- *Checklist demonstration video*
- *Overview of checklist implementation*

### **Observation tools** (included in Appendix F)

- Assessment Observation Tool
- Coaching Observation Tool

### **Culture surveys** (included in Appendix F)

- Safe Surgery Checklist Culture Survey: Pre survey (no existing checklist)
- Safe Surgery Checklist Culture Survey: Pre survey (existing checklist)/Post survey for all facilities

### **Culture survey analysis guide** (available at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org))

- Analyzing your culture survey results

### **Checklist templates** (samples are included in Appendix E of this guide; modifiable templates are available at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org))

- *Safe Surgery Checklist — Master version*
- *Safe Surgery Checklist — Briefing before induction version*
- *Safe Surgery Checklist — Team already knows each other version*
- *Safe Surgery Checklist — Two-page version*
- *Ambulatory Safe Surgery Checklist — Two-page version*

### **Checklist practice script template**

(a sample is included in Appendix F of this guide; a modifiable script template is available at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org))

- Safe Surgery Checklist Practice Scripts

### **Presentation templates** (available at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org))

- customizable PowerPoint templates for promoting the checklist in meetings

### **Project management tool** (available at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org))

- Implementation Lead Project Spreadsheet

# Chapter 1

## The Safe Surgery Checklist

### CONTENTS

---

<i>Introduction</i>	3
<b>The evolution of the Safe Surgery Checklist</b>	10
<b>The anatomy of the Safe Surgery Checklist</b>	14
How the checklist is organized	14
<b>Proper use of the Safe Surgery Checklist</b>	21
Best practices	21
How long does it take to perform the checklist?	22
<b>Evidence</b>	23
Studies demonstrate benefits of checklist use	23
Effective implementation is vital to your success	27

# Instructions for the team lead

## OVERVIEW

Use this chapter to help prepare your implementation team with a common understanding of what the Safe Surgery Checklist is, the history and evidence supporting the checklist, and how to use the checklist properly in the surgical environment.

This chapter will be helpful when working on these implementation process steps:

- Step 2: Understand the Work

You may also find it helpful during these steps:

- Step 5: Customize and Test
- Step 7: Have 1-on-1 Conversations

## RELATED CONTENT

- Chapter 6: *Checklist design and display*
- Appendix A: *Rationale and origin of items on the Safe Surgery Checklist*

## RESOURCES AND MATERIALS

- Appendix E: *Checklist templates* (five versions of the Safe Surgery Checklist are available in Appendix E and can also be downloaded from [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org))
- World Health Organization website: <http://www.who.int/patientsafety/safesurgery/checklist/en/>

## KEY CONCEPTS

- The Safe Surgery Checklist is a quality improvement initiative designed to deliver safer surgical care by enhancing communication and teamwork.
- Using the checklist is a way of strengthening the culture of safety in your organization.
- Evidence shows that the checklist can have a positive impact on patient outcomes.
- The Safe Surgery Checklist is based on the WHO Surgical Safety Checklist but has been refined by the experiences and insights of surgical teams in facilities like yours.
- Checklist items have been selected by experts and vetted by testing and real-world use in many locations over many years.
- The checklist doesn't work if it is not used.

## Introduction

This chapter provides an introduction to the Safe Surgery Checklist and how it can be used to improve the safety of surgical patients in facilities around the globe. It covers:

- what the checklist is and why it matters.
- the development and evolution of the checklist.
- the organization of the checklist.
- how to use the checklist properly in the operating/procedure room.
- empirical evidence.

Understanding this information will help prepare you and your implementation team to:

- educate surgical team members about the checklist and how to use it most effectively.
- brief executives and clinical leaders about the checklist.
- modify your checklist and get the most out of it.
- address questions that may arise from surgical team members during implementation.

DIAGRAM 1.1 The Safe Surgery Checklist

*The content and structure of the Safe Surgery Checklist reflects lessons learned in over 4,000 facilities globally. The checklist is available in an editable format so that your implementation team can customize it to meet the specific needs of your facility.*

### Safe Surgery Checklist template

Hospital Name

Before Induction of Anesthesia	Before Skin Incision	Before Patient Leaves Room
<p><b>Nurse</b> and <b>Anesthesia Professional</b> verify:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient identification (name and DOB)</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Surgical procedure to be performed matches the consent</li> <li><input type="checkbox"/> Site marked</li> <li><input type="checkbox"/> Known allergies</li> <li><input type="checkbox"/> Patient positioning</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Risk of hypothermia (if operation &gt;1 hour)               <ul style="list-style-type: none"> <li>• Warmer in place</li> </ul> </li> <li><input type="checkbox"/> Risk of venous thromboembolism               <ul style="list-style-type: none"> <li>• Boots in place and/or anticoagulants</li> </ul> </li> <li><input type="checkbox"/> Anesthesia safety check completed</li> </ul> <p style="background-color: #e1f5fe; margin-top: 10px;"><b>ANESTHESIA BRIEFING</b></p> <p><b>Anesthesia Professional</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anticipated airway or aspiration risk</li> <li><input type="checkbox"/> Risk of significant blood loss               <ul style="list-style-type: none"> <li>• Two IVs/central access and fluids planned</li> <li>• Type and crossmatch/screen</li> <li>• Blood availability</li> </ul> </li> </ul>	<p style="background-color: #e1f5fe; margin-top: 10px;"><b>TIME OUT</b></p> <p><b>Circulating Nurse</b> asks:</p> <p><i>"Is everyone ready to perform the time out? Please state your name and role."</i></p> <p><b>Entire Surgical Team</b> confirms:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient name</li> <li><input type="checkbox"/> Surgical procedure to be performed</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Antibiotic prophylaxis given within the last 60 minutes               <ul style="list-style-type: none"> <li>• Antibiotic redosing plan discussed</li> </ul> </li> </ul> <p style="background-color: #e1f5fe; margin-top: 10px;"><b>TEAM BRIEFING</b></p> <p><b>Surgeon</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Operative plan</li> <li><input type="checkbox"/> Possible difficulties</li> <li><input type="checkbox"/> Expected duration</li> <li><input type="checkbox"/> Anticipated blood loss</li> <li><input type="checkbox"/> Implants or special equipment needed</li> </ul> <p><b>Anesthesia Professional</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anesthetic plan</li> <li><input type="checkbox"/> Airway concerns</li> <li><input type="checkbox"/> Other concerns</li> </ul> <p><b>Circulating Nurse</b> and <b>Scrub Tech</b> share:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sterility, including indicator results</li> <li><input type="checkbox"/> Equipment issues</li> <li><input type="checkbox"/> Other concerns</li> </ul> <p><b>Surgeon</b> asks:</p> <p><i>"Does anybody have any concerns? If you see something that concerns you during this case, please speak up."</i></p>	<p><b>Nurse</b> reviews with team:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Instrument, sponge, and needle counts</li> <li><input type="checkbox"/> Name of the procedure performed</li> </ul> <p><b>Nurse</b> reads aloud to team:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Specimen labeling, including patient's name</li> </ul> <p style="background-color: #e1f5fe; margin-top: 10px;"><b>TEAM DEBRIEFING</b></p> <p><b>Entire Surgical Team</b> discusses:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Key concerns for patient recovery and management</li> <li><input type="checkbox"/> Equipment problems that need to be addressed</li> <li><input type="checkbox"/> Other opportunities for improvement</li> </ul>

*This version of the checklist was created for a high-income setting and may need to be altered for other settings.*

## What is the checklist?

The Safe Surgery Checklist is a quality improvement initiative designed to deliver safer patient care by enhancing communication and teamwork in the operating/procedure room.

When used properly, the Safe Surgery Checklist helps to create an atmosphere in which people can speak up, input is solicited, and information is shared.

### The checklist is...

- **a structured process:** It creates a framework for discussing plans, addressing concerns, and confirming critical information at key points in surgical workflow.
- **performed as a team:** It encourages people to move out of individual work silos by asking everyone to pause and discuss information together as a team.
- **a trigger for discussing critical safety steps:** Short prompts help ensure that the surgical team discusses and performs those safety steps that are most likely to be missed and have the most potential to affect patient outcomes.

### The checklist is not...

- **an algorithm for training:** It doesn't teach how to perform the work of the operating/procedure room team. Your colleagues already know how to do their jobs.
- **just a piece of paper:** It is not a bureaucratic form that you have to "check off" to satisfy a mandate — it is designed for experts by experts and has been shown to provide meaningful improvements in teamwork and care.

### The checklist works by...

- prompting a team discussion of risks, operative plan, and concerns.
- giving all team members a voice.
- helping to level the operating/procedure room hierarchy.
- prompting team discussion about how the safety of the next case can be improved.

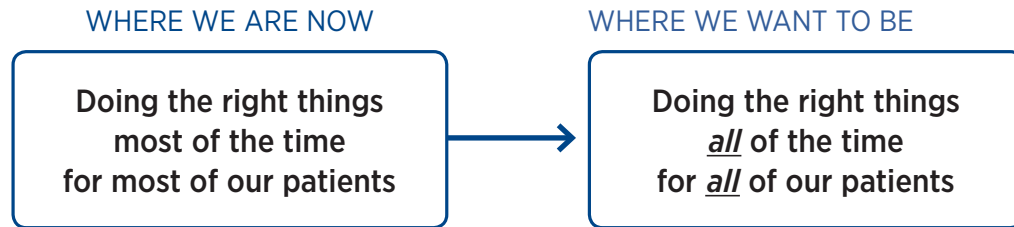


## Why should we do this work?

### The goal is simple: Better care for patients

You already provide excellent care. You are already safe — but you can be even safer.

We will never be perfect, but our mission as healthcare practitioners is to move as far toward zero harm as we can, and to never stop trying to do better.



Because of the complexity of surgery and the pressures and constraints of the facilities in which we practice, it is extremely difficult to make the transition to doing the right thing for all patients all of the time without a clear strategy for improvement and concrete steps to follow.

### The Safe Surgery Checklist connects better communication to better care

The Safe Surgery Checklist, and the work you do in your facility to implement the checklist, provides a simple framework to help you move forward on your journey toward zero harm.



## What are the benefits of using the Safe Surgery Checklist?

### Improves patient safety

A well-designed and properly used surgical safety checklist delivers these key safety benefits:

- helps us do what we know needs to be done for every patient every time
- ensures that we have the necessary information to take excellent care of the patient
- gives every member on the care team a voice
- builds stronger and safer teams
- makes patients feel safe and involved in their care

### Supports other quality improvement efforts in your facility

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 will uncover other opportunities for improvement that can help you shape and prioritize future improvements.

### Facilitates systemic change

The checklist provides these additional benefits to your teams and facility:

- engages physicians in quality improvement
- gets people out of their silos
- improves efficiency
- improves culture in unexpected ways
- provides a process for continuous quality improvement

### Engages physicians in quality improvement

Much of the work that's been done in the United States to improve the safety of hospital patients has been carried on the backs of nurses. They have done an incredible job across the country to

make in-hospital care safer than it was 10 years ago, but continued improvement cannot be done by the nurses alone.

The checklist is a way for surgeons and anesthesiologists to actively improve patient care every day in their operating/procedure rooms. It also encourages them to participate in a quality improvement initiative for the organization.

*“The checklist is important because it incorporates critical communication and teamwork tools that have been found to have value in the operating room, such as the briefings by anesthesia professionals and the surgeon, and the debriefing for quality improvement. Also interesting and exciting to me is the opportunity for the surgeon to be a leader by actively participating in the checklist.”*

— Orthopedic surgeon from a US hospital

### Gets people out of their silos

Every aspect of the checklist and the work involved in implementation is intended to create discussion and make connections between people.

- The checklist briefing and debriefing sections facilitate conversations between physicians and other members of the surgical team.
- Building a multidisciplinary implementation team connects surgical team members with facility leadership and administrators to focus on quality improvements in the operating/procedure room.
- Collaboration between physicians and facility leaders on safety in the surgical environment builds a foundation for future efforts.

In many facilities, once team members are freed from their silos, they recognize the benefits of working with other roles and are eager to continue working together to tackle other issues.

## Improves efficiency

Although some practitioners express a concern that using the checklist will take too much time, evidence suggests that experienced teams can actually save time during surgery. In part, this is due to prompts on the checklist that help ensure that equipment and supplies are in place and ready when needed, thereby eliminating costly delays that can occur in the middle of a procedure.

## Improves culture in unexpected ways

The sheer process of implementing the checklist often changes surgical culture in profound and unexpected ways.

*“Implementation of the Safe Surgery Checklist has facilitated a culture change in our operating room. The sense of empowerment has increased staff engagement, improved process efficiency, and kept patient safety at the forefront.”*

— Beth Morgan, Staff Educator, Surgery, Palmetto Health Baptist

## Provides a process for continuous quality improvement

The Safe Surgery Checklist includes a set of debriefing prompts that provides a valuable opportunity for teams to identify equipment problems and other issues that can help improve the outcome or efficiency of the next case.

Facilities that create a system to track, learn from, and remedy issues raised during the debriefing are creating a system for continual improvement that has real benefits for the facility, its teams, and the patient.

## Supports a culture of safety

Several high-risk industries have built a safety culture around the use of checklists, but perhaps the best-known is aviation.

*“Healthcare is a second career for me. I worked as an airline pilot for 10 years before moving into this industry. I was inspired by the writings of Dr. Gawande and others, and I developed a strong desire to apply the safety and teamwork principles that the aviation industry has perfected to address safety issues in healthcare delivery.*

*It’s difficult to find an industry that’s embraced the use of standardized tools like checklists — and recognized the importance of teamwork in high-risk situations — more than aviation. A simple tool like a checklist can not only serve as a means of making sure things get done, but it can also enhance communication and teamwork.*

*The reason this is important is that, more often than not, it’s communication issues that result in harm to patients. The same is true in the cockpit. Several high-profile accidents over the years were not caused by mechanical failures or weather or anything else: They were caused by the failure of the crew to act as a team and to communicate effectively in a challenging situation.*

*The problem in many of those cases is simple: reluctance of crew members to speak up when necessary to prevent harm. While these two industries are very different, they face some of the same challenges that relatively simple interventions can help alleviate.”*

— Jeff Durney, Quality Improvement Advisor, Safe Surgery Program, Ariadne Labs

## “We don’t need a checklist; we already do all this...”

### Some facilities feel the checklist is the same as the Time Out

Because they already do the Time Out, some facilities feel that the checklist is redundant or that they already do the checklist. The Safe Surgery Checklist does cover all elements of the Time Out, but the Time Out does not include all elements of the Safe Surgery Checklist.

The Time Out gives surgical teams a framework in which to stop and verify a few items before beginning a surgery or procedure. The Safe Surgery Checklist builds upon that by adding a focus on communication and incorporating briefing and debriefing discussions.

### Some facilities already use some version of the checklist

The simple presence of a surgical safety checklist in the operating/procedure room is not enough to drive change and not enough to meaningfully affect outcomes.

### The checklist only works if you use it well

The checklist is not just a poster that you can print and put in your operating/procedure room. It is about team function and communication.

If the checklist becomes a rote task of ticking boxes that the circulating nurse does while sitting in the corner, it will not facilitate communication between team members and will not have the positive effect that it can have when used as a team-building instrument.

## Signs that your existing checklist may not be delivering the benefits you want

### Your checklist has become an exercise in “ticking the box”

When checking the boxes becomes the point, checklist use will look like this:

- minimal engagement with others
- used by individuals but not by the team as a whole
- critical information is not communicated

When the checklist is used in this way, team members are not taking advantage of opportunities to discuss information and double-check important safety measures.

### Team members memorize the checklist items

People can certainly memorize a checklist, but studies show that when performing tasks from memory, people do omit critical steps without realizing it. When checklist steps are performed from memory, the checklist can’t function as a critical stop point that ensures all steps are done for all patients all of the time.

### Success is measured by checklist compliance, rather than by the quality of checklist use

The way that facilities measure compliance does not usually reflect actual use of the checklist or the quality of checklist use. By focusing on compliance, rather than on the quality of interaction between team members, a facility misses an important opportunity to help teams learn how to improve.

## The checklist can help good facilities be even better

The impact of the checklist is more than you might expect from a series of process checks and conversation prompts—the checklist performs as though it transforms the culture of teamwork and communication in the operating/procedure room.

This applies not only to facilities in which potential surgical safety improvements are easily identified, but also to facilities in which the potential gains might not be as apparent.

### We see positive effects of the checklist in already high-performing facilities

When we initially tested the checklist, we performed a trial in eight hospitals throughout the world and looked at the data from each site individually.

The following data is from a hospital in the developed world that we call “Site C.”

Measure	Baseline 524 cases	Checklist 598 cases	P value
Antibiotics given 0–60 minutes before surgery, except in dirty cases (%)	98.1	96.9	*
Adherence to all six safety indicators	94.1	94.2	*
Surgical site infection (%)	4.0	<b>2.0</b>	<0.05
Death	1.0	<b>0.0</b>	<0.05
Any complication (%)	11.0	<b>7.0</b>	<0.05

\* Difference not statistically significant

Before the checklist was introduced, Site C already performed at a very high level: All of their process measures were in the high 90s (percent compliance).

After the checklist was introduced, some process measures (e.g., administering antibiotics within 60 minutes) remained unchanged, but surgical site infections, death, and complications all dropped dramatically.

The checklist works in ways that we don’t fully understand and cannot easily quantify, but we believe that the improved outcomes we see in facilities that implement and perform the checklist well are the result of an improvement in teamwork and communication.

# The evolution of the Safe Surgery Checklist

The Safe Surgery Checklist is the result of many years' work with experts and clinicians in widely varying facilities around the world.

- The checklist has been used by thousands of clinicians and refined based on their input.
- There is a clear purpose and rationale for each item on the checklist.
- Items reflect established standards of care or recommendations from accrediting bodies (e.g., The Joint Commission).
- These checklists have been used to improve safety for tens of millions of patients.

The idea of using a checklist in medicine dates back many years, but the first attempt to use a checklist to address surgical safety in a systemic way began in 2006. Since then, many versions of a surgical checklist have been developed and tested and refined. This section highlights key milestones that led to the version of the Safe Surgery Checklist we use today.

## Why is the checklist history important?

Physicians and staff at your facility are likely to be familiar with the original World Health Organization (WHO) checklist and may ask how and why the Safe Surgery Checklist is different. Learning how the original checklist came about, and how it has been refined and improved over time, will help your team address those questions.

It is important to recognize that hundreds of changes have been carefully considered, discussed, tested, changed, and studied in facilities around the world since the original surgical checklist was created — yet the checklist is not static: It continues to evolve as it is adapted and refined to fit the unique needs of new facilities, specialties, and circumstances.

## The original challenge: Making surgery safer for everyone, everywhere

In 2006, the WHO launched their second Global Patient Safety Challenge, the “Safe Surgery Saves Lives” campaign. The goal was broad: to improve the quality of surgery for everyone, everywhere.

The WHO asked our team to partner with them to address that challenge. Research indicated that the problems that surgical teams were having in operating rooms weren't unique to one environment; they were similar across countries, across levels of resources, and across environments from outpatient to inpatient settings.

## The idea for a checklist came from a multidisciplinary group of experts

### Contributions by hundreds of experts

To better understand the challenge and possible solutions, the team brought together a large group of international experts representing a range of perspectives: surgery and anesthesia, nursing, obstetrics and gynecology, infection control, hospital management, biomedical engineering, and other professions that touch the perioperative environment.

The idea of a checklist for critical safety items came out of those meetings, and working groups in key areas such as anesthesia, infection control, and communication/teamwork proposed lists of essential practices for safe surgery.

## Guiding principles for the checklist

In 2007, we established a set of guiding principles, and began to distill lengthy lists of essential practices into a checklist that would:

- be simple.
- be widely applicable.
- be measurable.
- address serious and avoidable surgical complications.
- have no negative impact on care and zero harm to patients.

In 2008, after many design and content iterations, the WHO released the first edition of the checklist. In early 2009, a second version was published, the widely used 19-item WHO Surgical Safety Checklist: a set of simple, practical, and affordable changes that can be executed in any operating room, anywhere.

The image shows a screenshot of the WHO Surgical Safety Checklist form. It is divided into three main sections corresponding to different stages of surgery:

- Before induction of anaesthesia** (with at least nurse and anaesthetist):
  - Has the patient confirmed his/her identity, site, procedure, and consent?
    - Yes
    - No
  - Is the site marked?
    - Yes
    - Not applicable
  - Is the anaesthesia machine and medication checked completely?
    - Yes
    - No
  - Is the pulse oximeter on the patient and functioning?
    - Yes
    - No
  - Does the patient have a:
    - Known allergy?
      - No
      - Yes
    - Difficult airway or aspiration risk?
      - No
      - Yes, and equipment/assistance available
    - Risk of >500ml blood loss (7ml/kg in children)?
      - No
      - Yes, and two IV/central access and fluids planned
- Before skin incision** (with nurse, anaesthetist and surgeon):
  - Confirm all team members have introduced themselves by name and role.
    - Yes
    - No
  - Confirm the patient's name, procedure, and where the incision will be made.
    - Yes
    - No
  - Has antibiotic prophylaxis been given within the last 60 minutes?
    - Yes
    - Not applicable
  - Anticipated Critical Events:
    - To Surgeon:
      - What are the critical or non-routine steps?
      - How long will the case take?
      - What is the anticipated blood loss?
    - To Anaesthetist:
      - Are there any patient-specific concerns?
    - To Nursing Team:
      - Has timely (including indicator results) been confirmed?
      - Are there equipment issues or any concerns?
  - Is essential imaging displayed?
    - Yes
    - Not applicable
- Before patient leaves operating room** (with nurse, anaesthetist and surgeon):
  - Nurse Verbally Confirms:
    - The name of the procedure
    - Completion of instrument, sponge and needle counts
    - Specimen labelling (read specimen labels aloud, including patient name)
    - Whether there are any equipment problems to be addressed
  - To Surgeon, Anaesthetist and Nurse:
    - What are the key concerns for recovery and management of this patient?

At the bottom of the form, it states: "This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged." and includes the WHO logo and the year 2009.

Reproduced with permission of the World Health Organization

*The second version of the WHO Surgical Safety Checklist was released in 2009.*

## An international pilot study shows that a surgical checklist can improve patient outcomes

The first study of the checklist in use was published in the *New England Journal of Medicine* in January of 2009. Since then, the checklist has been tested in a variety of environments, and has been shown, both in the United States and elsewhere, to improve patient safety and clinical outcomes, resulting in fewer complications and reduced mortality. (For a summary of key studies, see “Evidence” on page 23.)

Through the process of developing, implementing, and studying the WHO Surgical Safety Checklist, we learned that:

- patient safety issues revolve not just around process measures but also around team function.
- the checklist helps surgical team members share information and communicate in a way that improves patient safety.

## Tailoring the checklist for use in US hospitals

The WHO checklist was designed to be used in any facility, globally. In 2009, the Institute for Healthcare Improvement (IHI) asked us to create a version of the checklist intended specifically for use by hospitals in the United States. Our revision incorporated measures from the Surgical Care Improvement Project (SCIP) and removed items that were already standard practice (e.g., oximetry). These changes helped streamline the checklist and align process checks with existing efforts that many hospitals had adopted to reduce surgical complications.

## Learning to implement the checklist across an entire state

In 2010, we launched the Safe Surgery 2015 program, a national effort to bring the WHO Surgical Safety Checklist to all hospitals in the United States within five years, beginning with the state of South Carolina. In part, this was a response to learning how often the checklist was being misused in operating rooms. In the absence of strong implementation support, many facilities had turned the checklist into an exercise of checking boxes instead of making full use of it as a communication and teamwork tool.

## Making communication an explicit focus

As a first step, we worked closely with the South Carolina Hospital Association (SCHA) and teams from various hospitals across the state to better understand the needs in South Carolina. Those discussions, and lessons learned from the original checklist, led us to revise the WHO checklist in two key ways to better focus attention on communication among surgical team members:

- addition of briefing and debriefing sections
- addition of the surgeon’s safety statement

The South Carolina Checklist Template adds explicit briefing and debriefing sections and the surgeon safety statement (shown in yellow).

## Developing implementation best practices

The two goals of the Safe Surgery program are to foster meaningful use of the checklist in every operating room across the state of South Carolina and to learn lessons that can be applied to operating/procedure rooms across the United States. In the process, we have developed a model for effective checklist implementation across a large number of hospitals. This guide is a direct result of that work.

## Addressing the unique needs of ambulatory surgery centers and cardiac surgery

Originally, we tried to make the checklist as universal as possible, but when we started to implement the checklist in facilities, we learned that it didn’t work as well for certain types of cases, particularly short, straightforward ambulatory surgery cases (e.g., cataract) and very complex surgeries (e.g., cardiac).

The Cardiac Surgery Checklist posters address the specialized checks and roles required for the checklist to work well in complex cardiac surgery.

This checklist spans two posters in order to accommodate the extra pause points that are required.



## Making the Safe Surgery Checklist easier to use

Safe Surgery Checklist template		Hospital Name
<p><b>Before Induction of Anesthesia</b></p> <p><b>Nurse and Anesthesia Professional verify:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient identification (name and DOB)</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Surgical procedure to be performed matches the consent</li> <li><input type="checkbox"/> Site marked</li> <li><input type="checkbox"/> Known allergies</li> <li><input type="checkbox"/> Patient positioning</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Risk of hypothermia (if operation &gt; 1 hour)               <ul style="list-style-type: none"> <li>• Warmer in place</li> </ul> </li> <li><input type="checkbox"/> Risk of venous thromboembolism               <ul style="list-style-type: none"> <li>• Bolus in place and/or anticoagulants</li> </ul> </li> <li><input type="checkbox"/> Anesthesia safety check completed</li> </ul> <p><b>ANESTHESIA BRIEFING</b></p> <p><b>Anesthesia Professional shares:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anticipated airway or aspiration risk</li> <li><input type="checkbox"/> Risk of significant blood loss               <ul style="list-style-type: none"> <li>• Two IVs/central access and fluids planned</li> <li>• Type and crossmatch/screen</li> <li>• Blood availability</li> </ul> </li> </ul>	<p><b>Before Skin Incision</b></p> <p><b>TIME OUT</b></p> <p><b>Circulating Nurse asks:</b></p> <ul style="list-style-type: none"> <li>• "Is everyone ready to perform the time out?"</li> <li>• "Please state your name and role."</li> </ul> <p><b>Entire Surgical Team confirms:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient name</li> <li><input type="checkbox"/> Surgical procedure to be performed</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Antibiotic prophylaxis given within the last 60 minutes               <ul style="list-style-type: none"> <li>• Antibiotic redosing plan discussed</li> </ul> </li> </ul> <p><b>TEAM BRIEFING</b></p> <p><b>Surgeon shares:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Operative plan</li> <li><input type="checkbox"/> Possible difficulties</li> <li><input type="checkbox"/> Expected duration</li> <li><input type="checkbox"/> Anticipated blood loss</li> <li><input type="checkbox"/> Implants or special equipment needed</li> </ul> <p><b>Anesthesia Professional shares:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anesthetic plan</li> <li><input type="checkbox"/> Airway concerns</li> <li><input type="checkbox"/> Other concerns</li> </ul> <p><b>Circulating Nurse and Scrub Tech share:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sterility, including indicator results</li> <li><input type="checkbox"/> Equipment issues</li> <li><input type="checkbox"/> Other concerns</li> </ul> <p><b>Surgeon asks:</b></p> <ul style="list-style-type: none"> <li>• "Does anybody have any concerns?"</li> <li>• "If you see something that concerns you during this case, please speak up."</li> </ul>	<p><b>Before Patient Leaves Room</b></p> <p><b>Nurse reviews with team:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Instrument, sponge, and needle counts</li> <li><input type="checkbox"/> Name of the procedure performed</li> </ul> <p><b>Nurse reads aloud to team:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Specimen labeling, including patient's name</li> </ul> <p><b>TEAM DEBRIEFING</b></p> <p><b>Entire Surgical Team discusses:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Key concerns for patient recovery and management</li> <li><input type="checkbox"/> Equipment problems that need to be addressed</li> <li><input type="checkbox"/> Other opportunities for improvement</li> </ul>

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Based on the WHO Surgical Safety Checklist (<http://www.who.int/patientsafety/safesurgery/>)  
© 2010 World Health Organization. All rights reserved. © 2014 Case template. Revised: August 2015.

The April 2015 version of the Safe Surgery Checklist reflects ongoing learning and incorporates design changes that make the template easier for facilities to modify.

There is no one right way to create or display a checklist, but the current Safe Surgery Checklist reflects improvements made through many iterations of design and testing and the experiences of facilities like yours.

- Order and language changes have been made based on feedback about surgical workflow.
- Formatting changes improve usability and make local checklist modification easier.

# The anatomy of the Safe Surgery Checklist

Your facility will customize the checklist to suit your workflow and individual needs. Before you begin that process, it is important that you have a detailed understanding of the content on the Safe Surgery Checklist.

This section begins with a look at the organization of Safe Surgery Checklist content and continues with a description of each section of the checklist.

The description and examples in this section refer to the master version of the Safe Surgery Checklist because it works for the majority of cases and facilities. However, we recognize that each facility is unique in culture and workflow, so we have developed four other checklist templates to help address specific needs. Those templates have nearly identical content but reflect minor changes to wording and sequence (see Appendix E: *Checklist templates*).

For a detailed description of each item on the master checklist, refer to the quick-reference guide *Rationale and origin of items on the Safe Surgery Checklist* (available in Appendix A).

For more information about:

- checklist design, see Chapter 6: *Checklist design and display*.
- customizing the checklist for your facility, see Chapter 7: *Customizing the checklist*.

## How the checklist is organized

### Sections reflect natural pauses in workflow

The Safe Surgery Checklist is divided into three sections, each displayed in a single column, that correspond to specific times during the surgery:

- before the induction of anesthesia
- before skin incision
- before the patient leaves the room

The timing of each section was selected to mirror natural pauses in surgical workflow and build upon the Time Out and other existing practices. Within each section the checklist prompts discussion about a set of items that are best addressed at that point in time.

### Labels give clear, unambiguous direction

Labeling helps explicitly tell users who does what, when, where, and how.

### Items flow top to bottom, left to right

Checklist content is organized to match the natural flow of reading in the English language.

### Related items are grouped

Subsections within each column help users identify groups of related items.

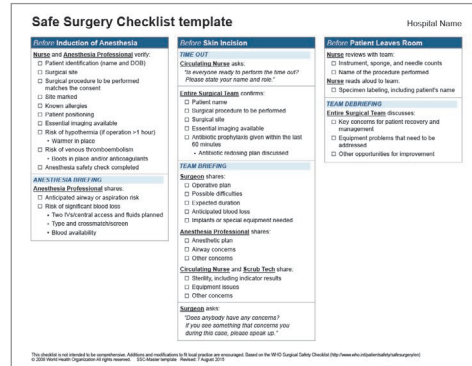
### Content fits on a single side of paper

Keeping all content on a single page eliminates the risk that some items will be missed because a page is missing or was not flipped to the other side.

DIAGRAM 1.2 Key features of the checklist

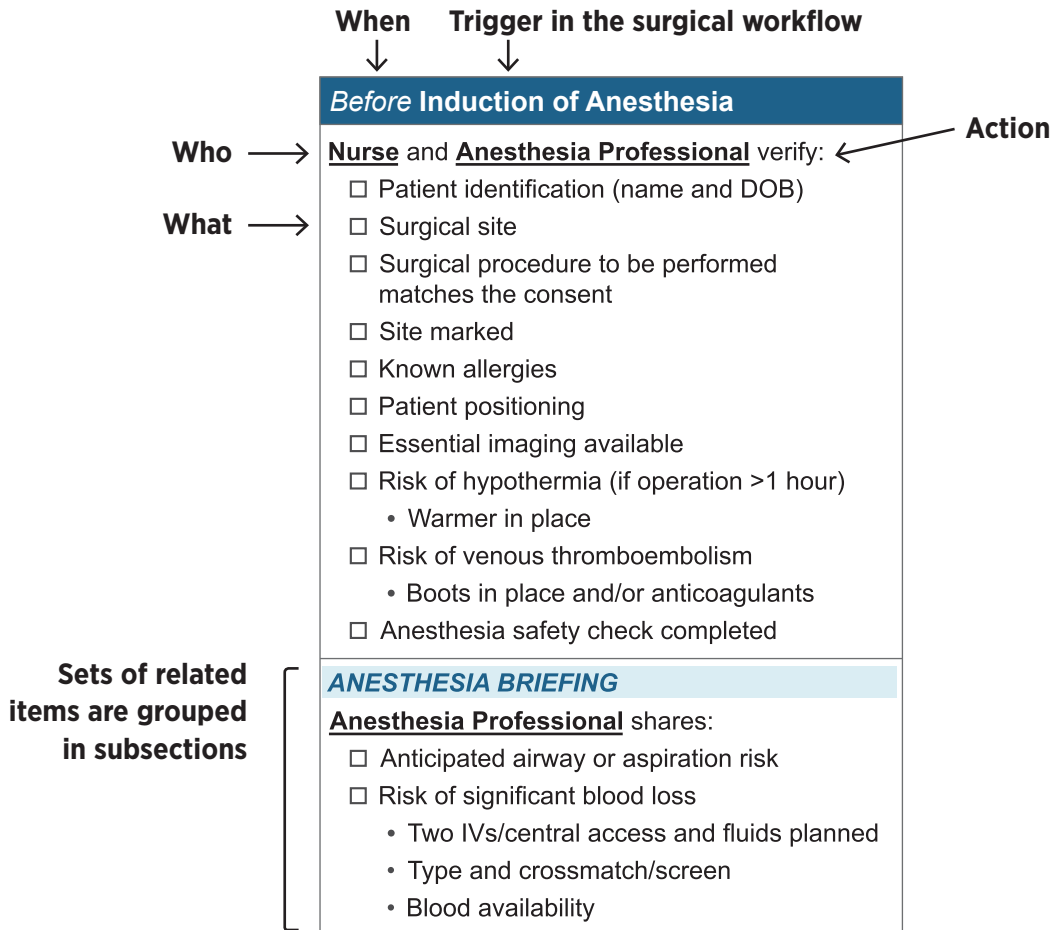
### Three sections reflect natural pauses in workflow

- before the induction of anesthesia
- before skin incision
- before the patient leaves the room



### Concise, clear, and explicit labels tell users...

which items are to be checked or discussed, by whom, and at which point in time.



## SECTION 1

## Before Induction of Anesthesia

**Before Induction of Anesthesia****Nurse** and **Anesthesia Professional** verify:

- Patient identification (name and DOB)
- Surgical site
- Surgical procedure to be performed matches the consent
- Site marked
- Known allergies
- Patient positioning
- Essential imaging available
- Risk of hypothermia (if operation >1 hour)
  - Warmer in place
- Risk of venous thromboembolism
  - Boots in place and/or anticoagulants
- Anesthesia safety check completed

**ANESTHESIA BRIEFING****Anesthesia Professional** shares:

- Anticipated airway or aspiration risk
- Risk of significant blood loss
  - Two IVs/central access and fluids planned
  - Type and crossmatch/screen
  - Blood availability

*Process checks*     *Conversation prompts*

**Overview**

The items in this section provide critical safety checks and help ensure that all team members are on the same page as they prepare to begin the operation. All of these items are designed to be read aloud from a physical copy of a checklist at a time when team members are present and have stopped all activity.

**Objectives**

- Ensure that, at a minimum, the anesthesia professional and nurse discuss necessary information with the patient and talk to each other about the patient's history and needs.
- Confirm that implants and imaging are available if necessary.

**When are the items discussed?**

The team reviews these items prior to induction of anesthesia.

**Where is this section performed?**

There are two options for performing this part of the checklist.

*Option 1: In the operating/procedure room (recommended)*

Using this section in the operating/procedure room provides an opportunity to review key steps out loud together as a team and with the patient. Many of these checks are already done in preoperative holding by individuals, but they are usually done in silos and not done in unison as a team. Although some items are redundant with pre-op checks, the redundancy can help prevent errors.

This approach works for facilities in which:

- workflow prohibits the nurse and anesthesia professional from doing their preoperative checks simultaneously in pre-op holding.
- team members sometimes change between preop/holding and the operating/procedure room, so that the nurse or anesthesia professional who sees the patient preoperatively may not be the same person present for induction.

*Option 2: In the pre-op/holding area*

In this approach, the anesthesia professional and circulating nurse must be in the pre-op area *at the same time* so that they can review the checklist with the patient as a team. One

disadvantage of this approach is that it prohibits the scrub tech from participating in the discussion.

Note that a separate template (*Safe Surgery Checklist – Two-page version*) is available for facilities that want to use this approach. In that version, the Before Induction of Anesthesia steps are moved to a separate page.

### **Who participates?**

At a minimum, the anesthesia professional, circulating nurse, and patient (when possible) participate in this section. If this section is performed in the operating/procedure room, the scrub nurse/technician must be included. If other members of the team are present at this time (e.g., the surgeon or others), then those team members should also be included in the first phase of the checklist.

### **Implementation challenges**

The biggest challenge facilities face with this section is having the discussion occur consistently with the necessary people. Whether you perform the steps in the pre-op/holding area or in the operating/procedure room, it is important that:

- items are discussed as a team.
- discussion occurs in every case.
- checks are not performed individually in silos.
- the scrub tech is involved (when possible).

Another common challenge relates to running the checklist with the patient so that the patient feels like part of the process. Some surgical team members may be reluctant to talk about certain items in front of an awake patient (e.g., blood loss, bad airway, or aspiration risk).

## SECTION 2

## Before Skin Incision

Before Skin Incision
<b>TIME OUT</b>
<p><b>Circulating Nurse</b> asks:</p> <p><i>“Is everyone ready to perform the time out? Please state your name and role.”</i></p>
<p><b>Entire Surgical Team</b> confirms:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient name</li> <li><input type="checkbox"/> Surgical procedure to be performed</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Antibiotic prophylaxis given within the last 60 minutes           <ul style="list-style-type: none"> <li>• Antibiotic redosing plan discussed</li> </ul> </li> </ul>
<b>TEAM BRIEFING</b>
<p><b>Surgeon</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Operative plan</li> <li><input type="checkbox"/> Possible difficulties</li> <li><input type="checkbox"/> Expected duration</li> <li><input type="checkbox"/> Anticipated blood loss</li> <li><input type="checkbox"/> Implants or special equipment needed</li> </ul>
<p><b>Anesthesia Professional</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anesthetic plan</li> <li><input type="checkbox"/> Airway concerns</li> <li><input type="checkbox"/> Other concerns</li> </ul>
<p><b>Circulating Nurse</b> and <b>Scrub Tech</b> share:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sterility, including indicator results</li> <li><input type="checkbox"/> Equipment issues</li> <li><input type="checkbox"/> Other concerns</li> </ul>
<p><b>Surgeon</b> asks:</p> <p><i>“Does anybody have any concerns? If you see something that concerns you during this case, please speak up.”</i></p>

Process checks     Conversation prompts

**Overview**

This section incorporates and goes beyond the Time Out by adding a set of briefing prompts that help foster teamwork and communication among the individuals on the surgical team.

A briefing is a concise discussion of relevant information that promotes clear and effective communication. It provides a platform for common understanding and gives people permission to be frank and honest.

**Objectives**

- Build on the Time Out with a discussion that ensures that the entire team is on the same page about the patient.
- When applicable, confirm that antibiotics are completely infused.
- Provide an opportunity to ask questions and to voice concerns.
- Optimize team efficiency and preparedness.
- Set a positive tone for the case.

**Where is this section performed?**

This part of the checklist is performed in the operating/procedure room.

**When are the items discussed?**

There are two options for performing the team briefing items in this section.

*Option 1: Prior to skin incision*

This option works best in most facilities because surgeons are often not present before induction of anesthesia.

*Option 2: Briefing occurs prior to induction, and the Time Out is conducted prior to skin incision*

If your surgeons are *always* present at the time of induction (100% of surgeons, 100% of the time), it is possible to conduct the briefing items before the patient is induced, so that you have more time to address any issues or concerns.

If you wish to conduct the team briefing before induction, refer to the *Safe Surgery Checklist – Briefing before induction* template.

**Who participates?**

All surgical team members performing or assisting with the procedure should participate. Anyone else who is in the operating/procedure room should at least introduce themselves and state their role.

**Implementation challenges**

The most common challenges facilities face with this section include:

- getting the entire team to come to a hard stop to have this discussion.
- getting the surgeon to actively participate in the discussion.
- having every team member contribute to the briefing.

These problem sometimes arises when:

- a nurse is given (or takes) responsibility for leading the checklist and the other surgical team members fail to contribute information to the checklist discussion.
- facilities work really hard to get surgeons to contribute, but once the surgeons consistently participate, other team members sometimes begin to contribute less.

## SECTION 3

**Before Patient Leaves Room****Before Patient Leaves Room****Nurse** reviews with team:

- Instrument, sponge, and needle counts
- Name of the procedure performed

**Nurse** reads aloud to team:

- Specimen labeling, including patient's name

**TEAM DEBRIEFING****Entire Surgical Team** discusses:

- Key concerns for patient recovery and management
- Equipment problems that need to be addressed
- Other opportunities for improvement

*Process checks*     *Conversation prompts*

**Overview**

This section begins with process checks for sponge/needle counts and proper specimen labeling.

Next, a debriefing discussion gives the team an opportunity to discuss postoperative care plans and take note of equipment or other issues that can be addressed to help improve future cases. Like briefings, debriefings are a strategy to improve patient safety and mitigate adverse events by improving communication. When used well, debriefing can help improve physician buy-in and be used for continuous quality improvement.

**Objectives**

- Confirm important information and talk as a team about the patient.
- Identify opportunities to fix equipment and/or to make things more efficient.
- Improve transition of care and information transfer.

**Where is this section performed?**

This part of the checklist is performed in the operating/procedure room.

**When are the items discussed?**

The team reviews these items before the patient leaves the room. Some facilities use a different trigger, such as: before the primary surgeon removes her or his gloves, after the counts are complete, or before the surgeon leaves the room.

**Who participates?**

All surgical team members performing or assisting with the procedure should participate.

**Implementation challenges**

Figuring out how to consistently and effectively trigger the debriefing when the surgeon is still in the room is a common challenge with this section. This can be especially true in teaching facilities or when there are multiple surgeons involved (i.e., when multiple procedures are being performed). Some facilities address this by naming this section “Before Surgeon Leaves Room.”



# Proper use of the Safe Surgery Checklist

## Best practices

Several basic practices define how surgical teams should use the Safe Surgery Checklist. Although these practices are key for getting the most out of your checklist, they sometimes conflict with common habits of surgical teams.

It's important to teach proper use to all surgical team members before they use the checklist in a case and to reinforce these practices with your surgical teams during coaching.

### Every item is discussed for every patient, every time

- Follow the checklist and discuss each item, every time, even if to acknowledge that an item is “not applicable for this case.”

### All necessary team members are present

- Operating/procedure rooms are busy places, and sometimes team members come and go from the room. Each portion of the checklist should be run when all necessary members of the surgical team are present.

### Each portion of the checklist is run when everyone is ready to have the discussion

- Each discussion should happen at a time when all team members are ready to participate in the discussion. When possible, all members of the surgical team should come to a hard stop. By doing so, each person can give their full attention to the safety steps and communication that should occur. If this is not possible (as when the anesthesia provider is providing critical patient care before induction), everyone who can stop should stop.

### Everyone speaks and is engaged in communication

- Everyone should be engaged in the conversation, with each member of the surgical team actively participating in discussion of items at some point in the checklist. At a minimum, all people present in the operating/procedure room should introduce themselves during the “before skin incision” pause.

### The checklist is read aloud from a visual reference (not from memory)

- Checklists are valuable specifically because memories are imperfect, even in experienced and expert professionals. Each member of the surgical team should read their portion aloud from a physical copy of the checklist. Reading from a physical copy ensures that memory is not used and that every item is discussed for every patient.

### When possible and appropriate, include the patient in the discussion

- It is appropriate to perform the “before induction” section of the checklist together with the patient if the patient is not too sleepy and is fully able to respond.

## How long does it take to perform the checklist?

This is a common question, and it often reflects a concern that taking extra time is a burden in an environment where the pressures of scheduling and room turnover can be intense.

### Each part of the checklist takes less than two minutes in straightforward cases

The amount of time it takes will vary somewhat depending on the team and on any modifications you have made to create your facility's checklist. Typically, once teams are familiar with using the checklist, the time it takes to "run" the checklist decreases.

Using the checklist is a strategy for reducing the potential for harm to patients. There is no doubt that scrubbing in takes time, yet no one questions the time spent doing that because of the importance of sterility for patient safety.

### The checklist should take as little time as possible while remaining effective

We used to tell facilities: "The checklist should not take longer to do than the procedure." We used that advice to encourage facilities to keep the checklist short and focused and to address concerns, primarily from physicians, about how long the checklist might take.

The fact is, some procedures are very brief. In those cases, doing the checklist will take longer than the procedure — but so do other common practices that keep the patient safe from harm. One example is when ENT physicians put in ear tubes. It takes longer for the patient (particularly a child) to receive an anesthetic, be positioned for the procedure, and then have the anesthetic terminated than it takes to slip the PE tubes into the ear drum. So, is a checklist necessary in such short procedures?

### Let's think about what pilots do.

When they fly an airplane from San Francisco across the bay to Oakland, pilots run through the same checklist that they use before they fly across the country to New York City. They do that because takeoff and landing are the two most dangerous parts of flying the airplane. Unfortunately, even for a simple operation like the insertion of ear tubes, some of the greatest risk to the patient is during the induction of anesthesia and while waking the patient up. We need to respect that danger, and stop to have short discussions to protect that patient's safety.

### Think of surgery as a takeoff and a landing.

Pilots guard the safety of their passengers by using a checklist every single time, no matter the flight duration. We need to do no less for our patients.

### Overall, the checklist can save time

When fully implemented, the checklist will often save time by helping to ensure that:

- equipment and supplies are adequately prepped for each case.
- teams are well-prepared for potential complications.
- equipment or instrument issues are addressed before they affect a future case.

## Evidence

### Studies demonstrate benefits of checklist use

Since the release of the World Health Organization (WHO) Surgical Safety Checklist in 2008, numerous articles have been published demonstrating the benefits of using the checklist in operating rooms. The next few pages summarize some of that evidence, beginning with the original landmark study published in the *New England Journal of Medicine* in January 2009.

#### The international pilot study

##### “A surgical safety checklist to reduce morbidity and mortality in a global population”

**New England Journal of Medicine**  
(January 2009)

Haynes AB, Weiser TG, Berry WR, Lipsitz SR, Breizat A-HS, Dellinger EP, Herbosa T, Joseph S, Kibatala PL, Lapitan MCM, Merry AF, Moorthy K, Reznick RK, Taylor B, Gawande AA for the Safe Surgery Saves Lives Study Group: A surgical safety checklist to reduce morbidity and mortality in a global population. *N Engl J Med* 2009, 360:491–499. Available from: <http://www.nejm.org/doi/full/10.1056/NEJMs0810119>.

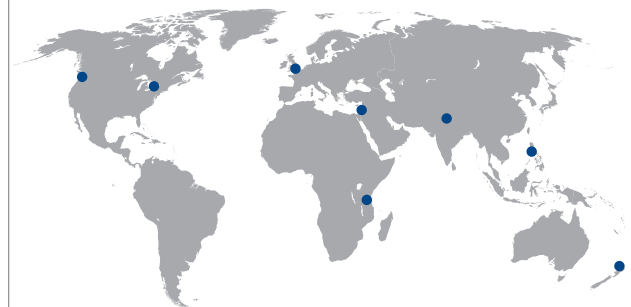
#### Overview

Eight facilities in eight cities, representing a variety of economic circumstances and diverse populations of patients, implemented the 19-item WHO Safe Surgery Checklist.

#### Summary of results

- Comparison of pre-checklist (baseline) and post-checklist results showed that the checklist was associated with reduction in patient deaths and complications (see table at right).
- The results from the developed and developing settings mirrored each other, with slight differences in degree.

#### Eight international sites



#### Four in developed countries

- Auckland, New Zealand
- London, UK
- Seattle, USA
- Toronto, Canada

#### Four in developing countries

- Amman, Jordan
- Ifakara, Tanzania
- Manila, Philippines
- New Delhi, India

#### Summary of combined results (all sites)

Measure	Baseline	Checklist	P value
	3733 cases	3955 cases	
Death (%)	1.5	0.8	0.003
Any complication (%)	11.0	7.0	<0.001
Surgical site infection (%)	6.2	3.4	<0.001
Unplanned reoperation (%)	2.4	1.8	0.047

## “Association between implementation of a medical team training program and surgical mortality”

**Journal of American Medical Association**<sup>1</sup>

(October 2010)

**Archives of Surgery**<sup>2</sup>

(October 2011)

1 Neily J, Mills PD, Young-Xu Y, Carney BT, West P, Berger DH, et al. Association between implementation of a medical team training program and surgical mortality. *JAMA* [Internet]. 2010 Oct 20 [cited 2015 Mar 13];304(15):1693–700. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/20959579>.

2 Young-Xu Y, Neily J, Mills PD, Carney BT, West P, Berger DH, et al. Association between implementation of a medical team training program and surgical mortality. *Arch Surg* [Internet]. 2011 Oct 20 [cited 2015 Jan 16];146(12). Available from: <http://linkinghub.elsevier.com/retrieve/pii/S0090367110000388>.

### Overview

The Veterans Health Administration (VHA) implemented a program in 74 VA hospitals that included team training for operating room personnel and use of a customized surgical safety checklist.

### Summary of results

- Hospitals that implemented the program experienced an 18% decline in annual rate of mortality.<sup>1</sup>
- The control group of hospitals experienced a 7% decline in annual rate of mortality.<sup>1</sup>
- One year later, hospitals that participated in the program experienced a risk-adjusted morbidity reduction of 17% vs 6% morbidity reduction in the control group.<sup>2</sup>

## “Effect of a comprehensive surgical safety system on patient outcomes”

**New England Journal of Medicine**

(November 2010)

de Vries EN, Prins HA, Crolla RMPH, den Outer AJ, van Andel G, van Helden SH, et al. Effect of a comprehensive surgical safety system on patient outcomes. *N Engl J Med* [Internet]. 2010 Nov 11 [cited 2015 Mar 11];363(20):1928–37. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/21067384>.

### Overview

A comprehensive checklist was developed for use throughout the entire perioperative process (preoperative, operative, recovery or intensive care, and postoperative), and the checklist was then implemented in six Dutch hospitals (two academic centers and four teaching hospitals).

### Summary of results

- The in-hospital mortality rate decreased from 1.5% to 0.8%.
- Postoperative complication rates decreased from 15.4% to 10.6%.
- Outcomes did not change in the control hospitals.

## “Effects of the introduction of the WHO ‘Surgical Safety Checklist’ on in-hospital mortality”

### Annals of Surgery

(January 2012)

van Aarnhem EE, van Wolfswinkel L, Regli LP, Buhre WF, Kappen TH, van Klei WA, et al. Effects of the Introduction of the WHO “Surgical Safety Checklist” on In-Hospital Mortality. *Ann Surg* [Internet]. 2012 Jan [cited 2013 Dec 2];255(1):44–9. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/22123159>.

### Overview

A tertiary medical center in the Netherlands implemented a customized version of the WHO Surgical Safety Checklist.

### Summary of results

- Crude mortality decreased from 3.13% to 2.85%.
- Teams that used the checklist in its entirety had a more significant decrease in mortality than teams that partially completed the checklist.

## “Thirty-day outcomes support implementation of a surgical safety checklist”

### Journal of the American College of Surgeons

(December 2012)

Ross-Richardson CB, Ellner SJ, Lukianoff AE, Bernstein BA, Sanzari LJ, Bliss LA, et al. Thirty-Day Outcomes Support Implementation of a Surgical Safety Checklist. *J Am Coll Surg* [Internet]. American College of Surgeons; 2012 Dec [cited 2013 Nov 29];215(6):766–76. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/22951032>.

### Overview

A 600-bed tertiary US hospital implemented a customized version of the WHO Surgical Safety Checklist together with a team-based training program.

- All teams were exposed to the team-based training program; some also implemented the WHO Surgical Safety Checklist.
- The authors used data from the American College of Surgeons National Surgical Quality Improvement Program to compare outcomes before and after checklist implementation.

### Summary of results

- Teams that did not use the checklist saw a 30-day morbidity decrease from 23.6% to 15.9%.
- Teams that used the checklist saw a 30-day morbidity decrease from 23.6% to 8.2%.

## “Effect of the World Health Organization Checklist on patient outcomes”

### Annals of Surgery

(May 2014)

Haugen AS, Søfteland E, Almeland SK, Sevdalis N, Vonen B, Eide GE, et al. Effect of the World Health Organization Checklist on Patient Outcomes: A Stepped Wedge Cluster Randomized Controlled Trial. *Ann Surg* [Internet]. 2014 May 13 [cited 2014 Jun 16];00(00):1–8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24824415>.

### Overview

A customized version of the WHO Surgical Safety Checklist was implemented in two hospitals.

### Summary of results

- Complication rates decreased from 19.9% to 11.5%.
- In-hospital mortality decreased significantly from 1.9% to 0.2% in one of the two hospitals.

## “Surgical Checklist Implementation Project: The impact of variable checklist compliance on risk-adjusted clinical outcomes after national implementation: A longitudinal study”

### Annals of Surgery

(March 2015)

Mayer EK, Sevdalis N, Rout S, Caris J, Russ S, Mansell J, et al. Surgical Checklist Implementation Project: The Impact of Variable WHO Checklist Compliance on Risk-adjusted Clinical Outcomes After National Implementation: A Longitudinal Study. [Internet]. 2015 Mar 13 [cited 2015 Apr 1];00(00):1–6. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25775063>.

### Overview

Data were collected from 6714 surgical admissions from March 2010 through June 2011 at five academic and community hospitals that implemented the checklist as part of the January 2009 National Patient Safety Agency (NPSA) implementation program in England and Wales.

### Summary of results

- Significant variability in checklist usage was found.
- Checklist implementation was associated with reduced case-mix-adjusted complications after surgery (16.9% vs 11.2%).
- Decline in postoperative complications was most significant when all three components of the checklist were completed.
- Checklist completion did not affect mortality reduction.

## Effective implementation is vital to your success

Studies that question the ability of checklists to improve outcomes illustrate why effective implementation is vital to your success

### “Introduction of surgical safety checklists in Ontario, Canada”

#### New England Journal of Medicine

(March 2014)

Urbach DR, Govindarajan A, Saskin R, Wilton AS, Baxter NN. Introduction of surgical safety checklists in Ontario, Canada. *N Engl J Med* [Internet]. 2014 Mar 13 [cited 2015 Jan 11];370(11):1029–38. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24620866>.

#### Overview

A province-wide mandate was given to implement the use of checklists in operating rooms beginning July 2010.

- The study period was three months pre-checklist, three months post-checklist implementation.
- The authors used administrative data to measure outcomes.

#### Summary of results

- No statistical differences emerged in a set of complications and mortality.
- The conclusion was that the checklist didn't change patient outcomes.

#### Another perspective

- Researchers did not measure *how* the checklist was used in the hospitals. If you don't use the checklist, it can't work.
- A well-used checklist changes process and culture in a facility; changing culture takes longer than three months.

#### Related references and responses

- Leape, Lucian L. 2014. The Checklist Conundrum. *New England Journal of Medicine* 370(11): 1063–64. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24620871> (2014 March 20).
- Muniak AM, Cochrane DD, van Dijk M, Hamilton A, Schwarz SKW, O'Connor P, et al. What would I want for my surgery? *Healthc Q* [Internet]. 2014;17(4):7–9. Available from: <http://www.longwoods.com/content/24124>.

### “Evaluation of the effectiveness of a surgical checklist in Medicare patients”

#### Medical Care

(January 2015)

Reames BN, Scally CP, Thumma JR, Dimick JB. Evaluation of the Effectiveness of a Surgical Checklist in Medicare Patients. *Med Care* [Internet]. 2015 Jan [cited 2015 Mar 13];53(1):87–94. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/2546416>.

#### Overview

Over a period of two years, 95 Michigan hospitals implemented the Keystone Surgery program. The hospitals:

- used the Comprehensive Unit-based Safety Program (CUSP).
- encouraged hospitals to use the checklist during briefings and debriefings.
- used a checklist that included six CMS Surgical Care Improvement Program (SCIP) measures:
  - appropriate prophylactic antibiotic selection
  - antibiotic timing
  - antibiotic discontinuation
  - appropriate hair removal
  - maintenance of perioperative normothermia
  - glucose control

#### Summary of results

- Medicare data sets were used to assess outcomes where Michigan hospitals were compared to hospitals nationally.
- There was no association with improved outcomes.
- The conclusion was that the checklist (SCIP measures) didn't change patient outcome.

#### Another perspective

- The “checklist” used in the study is very different from the Safe Surgery Checklist.
- There was no measurement of checklist use or of the quality of checklist implementation.





# Chapter 2

## A framework for checklist implementation

### CONTENTS

---

<i>Introduction</i>	31
<b>Understanding Safe Surgery Checklist implementation</b>	32
An overview of the process	32
The phases of implementation	32
Building skills intentionally	34
<b>The essential steps of checklist implementation</b>	35
<b>Tips for managing the project</b>	46
Where should you start?	46
Get (and keep) leadership involved	46
Use the Implementation Lead Project Spreadsheet	48

# Instructions for the team lead

## OVERVIEW

This chapter describes a framework for implementing the Safe Surgery Checklist.

Use this chapter to help you understand the implementation process as a whole and to provide context as you plan and execute the work required for each individual step.

Refer back to this chapter throughout your implementation effort to help you stay on track and avoid common pitfalls.

## RELATED CONTENT

- Chapter 1: *The Safe Surgery Checklist*

## RESOURCES AND MATERIALS

- Fact sheet: *Overview of checklist implementation*
- Implementation Lead Project Spreadsheet

## KEY CONCEPTS

- Implementation is a journey, not an event.
- Behavior change is difficult work that requires planning, patience, and flexibility.
- The implementation framework reflects lessons learned in over 4,000 facilities globally.
- The framework organizes implementation “best practices” into a process of 11 sequential steps.
- The steps incorporate a progression of activities that helps people build new skills.
- The duration and timing of the steps depend on your facility’s size, resources, and culture.
- In most facilities, some steps will overlap.
- Following this process will help you anticipate and manage common barriers to success.
- The process steps are the same for facilities that already have a surgical safety checklist.

## Introduction

Ariadne Labs has developed a framework for Safe Surgery Checklist implementation based on lessons learned in over 4,000 facilities globally.

Many facilities adopted the World Health Organization (WHO) checklist on their own and found their own ways to put the checklist into use in their operating/procedure rooms. When we took a look at facilities that said they had successfully implemented the checklist, we saw that some facilities were not using it as well as they could, and discovered that many facilities faced the same kinds of challenges. We also learned what the most successful facilities did, and did not do, to implement the checklist.

This chapter describes a framework of best practices designed to help your facility avoid common problems and maximize your successes. It also presents considerations for how you apply the framework in your facility.

### People new to the checklist often say: “We already do this”

It’s not uncommon to hear from facilities, from surgeons, or from anesthesia professionals when they first look over the Safe Surgery Checklist: *“We’re already doing all of this.”*

Yet if you visit the operating/procedure rooms in many facilities, you will see the checklist treated like a piece of paper: Someone is dutifully checking off items on the list but the team is not having conversations or sharing information. That behavior will not deliver the key benefits of the checklist work and may give a false sense of safety.

“Doing the checklist” is really about creating an atmosphere where people can speak up, where input is solicited, and where information is shared. The process and practices described in these materials are designed to help you work intentionally toward that goal.

### Checklist implementation is a journey, not an event

We use the word “implementation” to refer to a span of activities, from the initial idea to consider a surgical checklist for your facility, through the process of integrating the checklist into your operating/procedure rooms, and continuing with ongoing coaching and long-term adaptation.

#### The length of the journey varies

- How long the project takes will depend on your facility’s size, culture, and the amount of time your team can dedicate.
- Every facility needs to work at its own pace.

#### The process requires attention and dedication

This work is not just about following a checklist — it is about changing the culture of your facility.

- The work can be challenging.
- Change doesn’t come quickly.
- Patience and dedication are essential.

#### What does success look like?

Consider your checklist implementation efforts a success when you have been able to change how your teams think about teamwork and communication, and improve how they work together to ensure each patient’s safety in the operating/procedure room.

The ultimate expression of success is that your surgical teams defend use of the checklist as instinctively and with as much passion as they defend the sterility of the surgical field.

As with sterility, the checklist work is never really “done” — it always requires diligent attention — but it can become a deeply rooted activity that is “just how we do things here.”

# Understanding Safe Surgery Checklist implementation

## An overview of the process

Each implementation step is designed to help your team be successful in the work that follows. Ideally, each step can be completed in sequence, but some overlap and variability is normal when addressing the unique culture and needs within your facility.

PHASES	ELEVEN ESSENTIAL STEPS	TIMELINE ▶
PREPARE	1. Recruit a Team	■
	2. Understand the Work	■
	3. Assess Your Environment	■
	4. Decide: Are We Ready?	■
OWN	5. Customize and Test	■
	6. Plan Your Expansion	■
	7. Have 1-on-1 Conversations	■
	8. Promote the Checklist	■
EXPAND	9. Train and Spread	■
	10. Watch and Coach	■ ONGOING
IMPROVE	11. Continually Improve	■ ONGOING

How long does it take?

*The amount of time needed to implement the checklist varies greatly depending on the size, culture, and resources of each facility.*

*The implementation process can take as little as four weeks in small facilities, or as long as three years in larger or more challenging organizations.*

*Most facilities fall somewhere in between.*

## The phases of implementation

The phases provide a high-level context for the checklist implementation activities and describe a logical progression that applies to a range of quality improvement initiatives.

In practice, it is not necessary to keep the phases in mind while doing the work, and there may be overlap between one phase and the next. But understanding the progression will give you and your team a context for planning and resourcing your checklist implementation effort.

### It starts with a spark

There is one additional phase that we do not address in these implementation materials: the initial spark. In the spark phase, the idea of using the checklist arises and gains momentum.

Sometimes the spark comes from an individual champion who has been convinced of the benefits of the checklist approach by colleagues in another facility or from the literature. Sometimes the spark is a reaction to an event, either unintended harm to a patient or a close call.

The framework we describe, and the materials we have developed for implementation, assume that you have already embraced the idea of bringing a checklist into your operating/procedure rooms and are seeking guidance about how to do that effectively.

## 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.

## 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 healthcare 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 that your checklist initiative is driven from within your facility and by your teams, and supported by your leadership.

- You make the checklist your own by customizing the content for your patients, surgical teams, and workflow.
- You tailor the scope and speed of your checklist implementation to fit your facility’s context: size, culture, work environment, people, goals, and resources.
- Most importantly, you ask people individually for their help and commitment in 1-on-1 conversations. This personal interaction helps people “own” their role in using the checklist to make surgery safer.

## 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.

## PHASE 4: Improve

The Improve phase is a sustained period of learning and engagement: The work never stops, and the implementation team continues to play an important role.

This phase includes activities that build upon the processes you’ve put into place, and that keep attention focused on how the checklist drives safer surgery.

- You need to continue watching and coaching to keep checklist performance at a high level throughout your facility.
- You will update the checklist periodically to reflect current best practices and lessons learned.
- You can re-energize your checklist effort by focusing on specific parts of the checklist. For instance, many facilities find it valuable to give the debriefing portion of the checklist specific attention and focus, and put systems into place for tracking and resolving issues so that the checklist debriefing supports continuous improvement in the operating/procedure room.

## Building skills intentionally

A key element of the framework for implementing the Safe Surgery Checklist is this simple, powerful, and well-documented model of learning a new skill:

- Introduce the skill.
- Tell me why it's valuable.
- Tell me how to do it.
- Show me how to do it.
- Watch me do it.
- Give me feedback.

Some variation of this progression is how we are taught many things in life, from riding a bicycle to learning how to drive to performing surgery.

## The implementation training model

Once your facility has done the initial project work and finished customizing and testing your checklist (Steps 1 through 5), you must teach surgical team members the skill of using the checklist effectively. Implementation Steps 7 through 11 reflect that skill-building model (see Diagram 2.1).

The word “training” carries a lot of baggage in healthcare and means different things to different people. In the context of checklist implementation, training simply describes this basic arc of learning: Surgical team members are introduced to the checklist, are shown how to use it, are given a chance to practice it, and then receive feedback and support to improve their performance.

DIAGRAM 2.1 The Safe Surgery Checklist Implementation Training Model

Using the checklist is a skill. Teaching people this skill follows an intentional progression:

- **Engage** surgical team members in the work by introducing the checklist in 1-on-1 conversations; support conversations with promotion to build awareness and highlight key messages.
- **Train** team members by explaining, demonstrating, and helping team members practice.
- **Coach** team members to support their performance and help them continually improve.

TIME →

	ENGAGEMENT		TRAINING		COACHING			
When:	Before training		Before first use		During first/early use		Ongoing	
What:	<i>“Introduce me to the idea”</i>	<i>“Tell me why”</i>	<i>“Tell me how”</i>	<i>“Show me how”</i>	<i>“Watch me do it”</i>	<i>“Give me feedback”</i>	<i>“Watch me do it”</i>	<i>“Give me feedback”</i>
How:	Have 1-on-1 conversations	Promote the effort internally	Explain + Demonstrate + Practice proper checklist use		Observe + Coach Use the Coaching Observation Tool and 3-part question		Observe + Coach Use the Coaching Observation Tool and 3-part question	
Step:	Step 7 and Step 8		Step 9		Step 10		Step 11	
Refer to:	Chapters 10 and 11		Chapter 12		Chapter 13			

# The essential steps of checklist implementation

**PREPARE****STEP 1****Recruit a Team****Objectives**

Build a multidisciplinary team responsible for planning and executing your checklist implementation effort. Establish roles, expectations, and process.

The implementation team is a multidisciplinary group of people responsible for planning and executing the Safe Surgery Checklist initiative. Each member of the team shares equal responsibility for successful implementation and use of the checklist in your facility. One person, the implementation lead, usually takes responsibility for recruiting the team and managing project logistics.

In this step, the implementation lead recruits people to be on the team, and the team begins initial meetings to get organized for the work ahead. It is especially important to find a surgeon and an anesthesia professional who can participate on the team and will champion the checklist work with their peers. The active participation of physician champions is a key indicator for successful implementation.

**What you will do in this step**

- Recruit at least one representative from each role in the operating/procedure room and at least one administrative representative to be members of your implementation team.
- Set up a meeting schedule and team logistics.

**Guidance and materials**

- Chapter 3: *Building a checklist implementation team*
- Fact sheet: *Implementation team roles and responsibilities*

**PREPARE****STEP 2****Understand the Work****Objectives**

Equip your team with a common understanding of the history and evidence supporting Safe Surgery Checklist use and the recommended process for implementation.

In this step, your implementation team learns about the Safe Surgery Checklist, how it evolved, how it works, what the benefits are, and what effective implementation strategies and activities look like. It is important to review and discuss this information as a group to put everyone on equal footing and foster an environment of collaboration.

**What your team will do in this step**

- Review the content in Chapter 1: *The Safe Surgery Checklist*.
- Review other sources of information (*The Checklist Manifesto*, journal articles, etc.).
- Set up a meeting schedule and team logistics.

**Guidance and materials**

- Chapter 1: *The Safe Surgery Checklist*
- Fact sheet: *Overview of checklist implementation*
- Safe Surgery Checklist Practice Scripts



**PREPARE****STEP 3****Assess Your Environment****Objectives**

Assess the culture and current practices in your operating/procedure rooms to identify your institution's specific opportunities for improvement.

Checklist implementation is like any journey: You can't plan a path forward until you know where you are. By assessing how things are currently done at your facility, how people feel about their work, and what people think about safety and teamwork, you will be able to gather the information you need to move in the right direction.

**What your team will do in this step**

- Watch a variety of surgical teams at work in a variety of cases, and use the Assessment Observation Tool to document current practices and team dynamics.
- Decide how and when you will administer the Safe Surgery Checklist Culture Survey and over what period of time.
- Create a list of all surgical team members who will be touched by the checklist.
- Administer the survey to surgical team members.
- Analyze the survey responses and direct observations, and summarize your findings.

**Guidance and materials**

- Chapter 4: *Assessing your surgical culture and environment*
- Assessment Observation Tool
- Safe Surgery Checklist Culture Survey: Pre survey (no existing checklist)
- Safe Surgery Checklist Culture Survey: Pre survey (existing checklist)/ Post survey for all facilities
- Implementation Lead Project Spreadsheet

**PREPARE****STEP 4****Decide: Are We Ready?****Objectives**

Based on the results of your culture survey and observations of surgical teams, gauge your institution's readiness. Present findings and recommendations to your facility's leadership, and confirm their commitment.

Before moving forward, it is important to pause, reflect on the data you have collected, and determine whether your facility is ready to commit to the work of implementing the checklist in your operating/procedure rooms.

There are two important things to keep in mind:

- Implementing the Safe Surgery Checklist is challenging work because you are asking surgical teams to change their behavior and learn new habits.
- An aborted or failed attempt at introducing the Safe Surgery Checklist can have lasting negative effects that make future success more difficult.

**What your team will do in this step**

- Review the results of your Step 3 assessment against six key factors for success (see "Six key factors suggest a foundation for success" in Chapter 5).
- Decide whether and how to proceed.
- Document and present your plan to leadership, and ask them to commit to your plan.

**Guidance and materials**

- Chapter 5: *Deciding: Are we ready?*

## OWN

## STEP 5

# Customize and Test

### Objectives

Customize your checklist to address institution-specific issues. Test and revise your checklist until you have a stable version for expansion.

The Safe Surgery Checklist template reflects years of vetting, testing, and lessons learned from actual use. Nevertheless, one of the key tasks of your implementation team is to modify the checklist together as a team to ensure that it meets your facility's particular needs.

### What your team will do in this step

- Review best practices for checklist design and display.
- Review the rationale for each item on the Safe Surgery Checklist.
- Evaluate each item on the Safe Surgery Checklist (and on your existing checklist) against six criteria.
- Modify the checklist to meet your local needs.
- Test your checklist (first in tabletop simulation, then in a single case, then in a single day).
- Revise and retest until you have a stable checklist (i.e., it is ready to use in your operating/procedure rooms).

### Guidance and materials

- Chapter 6: *Checklist design and display*
- Chapter 7: *Customizing the checklist*
- Chapter 8: *Testing your checklist in the operating/procedure room*
- Quick-reference guide: *Rationale and origin of items on the Safe Surgery Checklist* (available in Appendix A)
- Action guide: *How to customize the Safe Surgery Checklist for your facility*
- Action guide: *How to make improvements to your existing surgical checklist*
- Action guide: *Checklist for customizing the Safe Surgery Checklist*
- Video of tabletop simulation (see “Tabletop Simulation,” available on the SafeSurgery2015 YouTube channel)
- Safe Surgery Checklist — Master version

## OWN

## STEP 6

## Plan Your Expansion

### Objectives

Create a plan for how you will handle 1-on-1 conversations, training, coaching, and display of your checklist. Outline specific tasks and a schedule. Create materials to promote your effort and print your checklist.

It's time now to pause and create a plan that describes in detail *what* your team will do, *how*, and *when*, to expand checklist use in your facility.

Expansion is the process of actually putting your checklist into use. It is best to start small and build slowly, using 1-on-1 conversations, hands-on training, and supportive coaching to ensure that your surgical teams are successful.

### What your team will do in this step

- Review the implementation guide content on 1-on-1 conversations, promotion, training, and coaching so that you understand what is required for those activities.
- Building upon the list of all surgical personnel you created in Step 3, plan how you will manage the logistics of ensuring that each surgical team member gets a 1-on-1 conversation, training, and coaching.
- Identify one to three key messages you will use to highlight why the checklist is important for your facility.
- Determine how you will produce the checklist, and ensure that it is available when needed in each operating/procedure room.
- Create a list of meetings at which your implementation team can introduce the checklist and set people's expectations about next steps.
- Create a checklist demonstration video.

### Guidance and materials

- Chapter 9: *Creating a plan for checklist expansion*
- Chapter 14: *The Debriefing: How to make it count*

OWN

## STEP 7

**Have 1-on-1 Conversations****Objectives**

Execute the plan you created for staging 1-on-1 conversations with all operating/procedure room team members.

In this step, you harness the power of a personal conversation to connect people with the idea and purpose of the checklist and directly ask for their help. Your team will reach every person whose role is touched by the checklist (i.e., anyone who works in the operating/procedure room) with a 1-on-1 conversation before that person uses the checklist.

**What your team will do in this step**

- Have a private, face-to-face conversation with every surgical team member before they are asked to use the checklist – *there is no substitute for this conversation.*
- Ask each person for their help.

**Guidance and materials**

- Chapter 10: *The 1-on-1 conversation*
- Action guide: *Guide to the Safe Surgery Checklist 1-on-1 conversation*
- Quick-reference guide: *Rationale and origin of items on the Safe Surgery Checklist* (available in Appendix A)

OWN

## STEP 8

**Promote the Checklist****Objectives**

Execute the plan you created for promoting the Safe Surgery Checklist in your facility. Use internal publicity to showcase your efforts and progress.

In this step, you promote the checklist initiative in your facility to create broader awareness of the work, spark curiosity, and reinforce the idea of a shared mission to improve surgical patient safety.

Internal publicity can take many forms. Be creative.

Promoting the checklist and your progress and success stories are activities that may peak through Step 7 and Step 8, but they continue over the long term.

**What your team will do in this step**

- Promote your checklist initiative widely throughout your facility.
- Collect and share stories of how the checklist has made a positive difference.
- Spotlight teams that have been trained and are now using the checklist effectively in their operating/procedure rooms.

**Guidance and materials**

- Chapter 11: *Promoting the checklist*

**EXPAND**

## STEP 9

**Train and Spread****Objectives**

Execute the plans you created for staging the training and expansion of checklist use. Collect feedback, adjust your plan as needed, and troubleshoot problems as they arise.

Once surgical team members have been introduced to the idea and benefits of your checklist in a 1-on-1 conversation, they need to be trained to properly use the checklist before they are asked to use it in a case with a patient.

The goal of checklist training is to provide an explanation and demonstration of how the checklist should be used, followed by an opportunity for surgical team members to practice using the checklist away from the operating/procedure room.

There will often be some overlap among steps 7 through 10.

**What your team will do in this step**

- Follow your plan for gradually spreading checklist use.
- Train all surgical team members in how to properly use the Safe Surgery Checklist before they use it in a case.
- Have an implementation team member present when surgical teams first use the checklist in a case.
- Prepare surgical team members to train their colleagues (as needed).
- Solicit and respond to feedback from teams.
- Continue to promote the checklist.

**Guidance and materials**

- Chapter 12: *Teaching the checklist*
- Action guide: *Safe Surgery Checklist trainers' guide*
- Safe Surgery Checklist Practice Scripts

**EXPAND****STEP 10****Watch and Coach****Objectives**

Continue to watch how the checklist is actually used in your operating/procedure rooms. Provide coaching to support and enhance checklist use and team communication.

Coaching is the third part of a learning progression that begins with a 1-on-1 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. Coaches provide structured feedback using the 3-part question technique.

**What your team will do in this step**

- Identify and train coaches.
- Observe each surgical team, and coach the teams on how to optimize their use of the checklist.
- Coach individuals in follow-up 1-on-1 conversations as needed.
- Continue to promote the checklist (especially “catches” and positive stories).

**Guidance and materials**

- Chapter 13: *Coaching the checklist*
- Quick-reference guide: *Techniques for coaches* (available in Appendix D)
- Coaching Observation Tool
- Action guide: *Coaches’ guide to giving feedback*



**IMPROVE****STEP 11**  
**Continually Improve****Objectives**

Never stop looking. Make periodic revisions that enhance use and help teams adapt to changing conditions. Use the debriefing as a strategy for continuous quality improvement.

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 lots of attention.

You now face a different challenge: how to sustain the work and improve it over time. As soon as we turn our eyes toward the next problem to be addressed in the operating/procedure room, whether it's re-dosing of antibiotics or updating the skin prep to the latest protocol or something else, our attention shifts and the checklist work starts 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."

**What your team will continue to do over time**

- Identify areas for improvement that additional training can address.
- Continue to talk with people individually about checklist use, and thank them for their checklist use and efforts to improve surgical safety.
- Continue to 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.

**Guidance and materials**

- Chapter 15: *Continually improve*
- Coaching Observation Tool
- Action guide: *Coaches' guide to giving feedback*

## Tips for managing the project

### Where should you start?

Your facility probably fits one of the following descriptions. “Our facility...

- is interested in possibly using the Safe Surgery Checklist and wants to learn more.”
- plans to introduce the Safe Surgery Checklist but has not yet begun the work.”
- has started working on a checklist, but is still working through the effort.”
- has a surgical checklist in place, but it is either not well liked or not well used.”
- has a surgical checklist in place that is at least somewhat successful, but we want to make improvements or changes.”

### Follow the recommended sequence of steps

The best practices for checklist implementation and the recommended sequence of steps apply to *all* of the scenarios above.

However, the amount of work and time each step requires, and how you apply the best practices in your facility, will vary according to your specific context and needs.

In our experience, even facilities that have already implemented their checklist will benefit from evaluating their effort in a step-wise progression (see Diagram 2.2 on page 47).

### What if we've already done the work described in a step?

Use the implementation guide content to help you evaluate your existing work and look for any gaps. Review the suggested focus in Diagram 2.2.

### Get (and keep) leadership involved

The interest, attention, and public support of executive leaders (CEO, CMO, etc.) lets everyone know that the checklist is a priority for the organization, and those leaders can be very helpful in setting a positive tone culturally.

The help and support of surgical, nursing, and anesthesia leadership is equally important, especially if you need their leverage when dealing with individuals (particularly physicians) who are reluctant or are not cooperative.

### Gain commitment for resources

Leaders in your facility hold the key to resources, and their interest helps convey the importance of the work to others.

Much of the checklist work requires time from the implementation team lead and team members. When executive and department leaders do not actively support the checklist effort, it can be difficult to make progress and sustain gains because organizational priorities will shift, pulling away your time and attention and that of your team members.

Financial and other resources will also be needed during the checklist work (e.g., printing the checklist poster, mounting posters in operating/procedure rooms, creating a demonstration video, modifying the EMR). Establishing the support of key executives can make it easier to obtain funds and to gain cooperation from other internal departments.

**DIAGRAM 2.2 Using the framework to improve your existing checklist**

The implementation framework is also useful for facilities that already use a surgical safety checklist. The sequence of steps remains the same, but the focus may be slightly different, as shown below.

STEP	FOCUS FOR FACILITIES ALREADY USING A SURGICAL CHECKLIST
1. Recruit a Team	Always start by checking that you have the right mix of enthusiastic people on your implementation team. Adding or changing members can help give your effort a boost.
2. Understand the Work	As a team, compare the recommended implementation process with the process you have followed so far, and look for gaps.
3. Assess Your Environment	Look at how your existing checklist is actually being used, to highlight opportunities for improvement. Conduct the Safe Surgery Culture Survey.
4. Decide: Are We Ready?	As a team, and with the input of facility leadership, decide whether you have the resources and support you need to recommit to your checklist effort.
5. Customize and Test	Compare your organization's checklist to the Safe Surgery Checklist template. Evaluate your checklist design. Make changes if needed, and always test new versions before putting them into use.
6. Plan Your Expansion	Based on a review of your situation and these best practices, plan specific actions you will take to close any gaps or to make changes.
7. Have 1-on-1 Conversations	Have 1-on-1 conversations with each surgical team member before launching the updated version of your checklist. Even if you had these previously, talk to everyone again and let them know about the project and which aspects of checklist use your facility is aiming to improve. There is no substitute for this step, and it is never too late to connect with people personally.
8. Promote the Checklist	Promote your new checklist effort widely. Advertise what this project is about, and how it is different from what your teams were previously doing. Focus on positive stories or the improvements you will be making.
9. Train and Spread	The key to training is practice. Create opportunities for surgical team members to practice using your new checklist.
10. Watch and Coach	Coaching is absolutely critical for helping people learn how to properly use the checklist and for maintaining high-quality use over time. If you do not have an ongoing program for coaching your checklist, create a plan and process now.
11. Continually Improve	

## Key moments for the involvement of facility leadership

### At project launch

Have a senior leader within your organization give a high-profile endorsement of the Safe Surgery Checklist project to publicly launch your effort. This helps communicate to people throughout your facility that surgical patient safety is a high priority, and that the checklist project is a strategic choice backed by the executive team.

Ask department or service leaders to voice their support as well. Their endorsement may be more likely to directly influence the behavior of surgical team members.

### While engaging surgical team members

If, after having several 1-on-1 conversations with a surgical team member, that person still does not want to participate, ask the head of that person's department or service to have a conversation with them. The department head may be able to uncover and address hidden objections that are unrelated to the checklist. The department head may also decide to apply managerial pressure.

### During coaching

Once your effort is in the coaching phase, you may encounter a surgical team member who refuses to use the checklist at all, or who chooses not to perform the checklist properly. Ask the head of that person's department or service to have a conversation with them. The department head will be able to learn more about their lack of cooperation. They may also decide to set clear expectations about how the checklist will be used in your facility.

### NOTE

Compelling people to use the checklist should not be the primary method for spreading checklist use, but it can be useful when you have one or two holdouts. The success of this approach is highly dependent on your facility's culture and the personalities involved, and should be considered on a case-by-case basis.

### While working to continually improve

Ask executive and service leaders to continue to periodically share checklist progress with their department or the facility as a whole.

By demonstrating continued interest and support, leadership can reinforce the idea that even when other priorities and urgent needs must be addressed, the organization is serious about improving surgical communication and teamwork, and that the checklist remains a highly valued long-term strategy for ensuring patient safety.

## Use the Implementation Lead Project Spreadsheet

The Implementation Lead Project Spreadsheet is an Excel workbook file that can help you plan and track various tasks related to checklist implementation. This spreadsheet (available for download at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org)) can be modified by your organization to meet your needs.

Even if you prefer to use your own spreadsheet, project management software, or other tools, we suggest that you review the items listed in the Implementation Lead Project Spreadsheet. That will help you understand the types of activities and information that successful facilities track.

# Chapter 3

## Building a checklist implementation team

### CONTENTS

---

<i>Introduction</i>	51
What is the implementation team and what does it do?	51
Who should be on our implementation team?	52
How to recruit people	52
Finding physician champions	54

# Instructions for the team lead

## OVERVIEW

Use this chapter to learn about the role of the implementation team and how to recruit people who represent various roles on surgical teams in your facility.

This chapter supports the Prepare phase of checklist implementation and will be helpful when working on:

- Step 1: Recruit a Team

## RESOURCES AND MATERIALS

- Fact sheet: *Implementation team roles and responsibilities*
- Fact sheet: *Overview of checklist implementation*

## KEY CONCEPTS

- The implementation team is a multidisciplinary group of people responsible for planning and executing the checklist initiative.
- 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 (QI) program.
- Team members need to be enthusiastic, respected, and committed.
- Use 1-on-1 conversations to recruit people for your team.
- Finding physician champions is important but may be challenging.

## Introduction

This guide outlines how to create an effective implementation team for your surgical safety checklist. The recommendations are based on lessons learned in over 4,000 facilities globally and can help you avoid common pitfalls and prepare for success. However, what your team looks like and how you work together should be based on the size of your facility and your unique needs.

## What is the implementation team and what does it do?

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.

Everyone on the team can contribute by:

- providing insight into workflow and processes.
- providing clinical expertise.
- learning about checklist-related evidence.
- helping customize and test the checklist.
- modeling good checklist practice.
- having 1-on-1 conversations with peers.
- teaching others how to use the checklist.
- coaching checklist use in the operating room.
- presenting information to hospital leadership.
- providing feedback to other team members and leadership about the implementation effort.
- attending team meetings (as many as possible).

## What does the implementation team lead do?

As the implementation team lead, you will have responsibility for managing the team and the checklist implementation process. Your team can decide how to best work together, but the team lead will typically:

- recruit implementation team members.
- schedule and run team meetings.
- gather, review, and distribute information about the checklist and the implementation process.
- administer the culture survey.
- report progress to your facility's leadership.
- serve as the point of contact for the project.

## How often should our team meet?

Meet regularly every two weeks, or at least once per month.

- Meeting less than once per month makes it challenging to keep your momentum going.
- Meetings may be less frequent after initial planning and once checklist use has been expanded into operating/procedure rooms.

Sometimes we hear of groups that meet once every six weeks because that's the only time they can all get together. However, from what we've seen, the work just can't happen at that pace—there is too much delay and too little action.

## Set a schedule and keep it—even if some members cannot attend

- Physician champions don't have to be part of every meeting.
- It is better to meet with part of the group than not to meet at all.
- Try to keep the project moving forward, and reach out to the people who couldn't attend to brief them on your progress.

## How long will we need the team?

Once established, the team should be in place for the long term: just like defending the sterile field, this work should never stop.

- Team members may change over time, either due to staff changes or to bring fresh energy and new ideas.
- Most of the work comes in the first few months when your team customizes and tests the checklist and reaches out to engage your colleagues in the project.
- Ongoing work includes watching how the checklist is used, coaching individuals and surgical teams, periodically reassessing culture, and adapting the checklist to changing conditions.

## Who should be on our implementation team?

The size of your team will vary depending on the size of your facility, but will usually include at least five or six people.

Follow these principles when building your team:

- Every role that is touched by the checklist should have at least one representative.
- The administration should be represented to offer a perspective from outside the surgical team.
- Enthusiasm for the work is essential.

### At a minimum, try to include these five roles

- administrator and/or quality improvement officer
- anesthesiologist and/or CRNA
- circulating nurse
- scrub technician
- surgeon

*Tip for the administrator role:* Try to include someone who has influence over how people spend their time and how resources are allocated.

### Consider other roles

Depending on your facility and procedures, you may want to include representatives for these roles:

- perfusionist
- data collector
- anesthesia technicians
- pre-op and post-op nurses
- physician assistants
- biomedical engineers

This is not a comprehensive list, but invites you to consider other roles that may be appropriate in your facility.

### Add roles when you need their input

You may want to include additional people on team at different specific times during the project.

For example, one hospital wanted its IT team involved when it was thinking about how to capture information from the checklist.

## How to recruit people

The success of checklist implementation is deeply influenced by the commitment and effort of the implementation team, so it is important to find the people who:

- are enthusiastic.
- are well-respected by their peers and others.
- are interested in efforts to improve patient safety.
- believe communication and teamwork can be improved.



## Prepare before you ask

### 1. Identify one or more people in each role who fit the criteria for prospective team members.

### 2. Schedule time to have a 1-on-1 conversation.

Scheduling a conversation helps to ensure that you have enough time to make your case. It also demonstrates that:

- you respect their time.
- the content of your meeting is important.

### 3. Organize materials to share with the prospective team member.

Sharing documents with the prospective team member can help shape your conversation and make the effort seem more tangible.

Some implementation leads may refer to the documents during the conversation; others may prefer to leave them with the prospective team member after the conversation.

Materials that you should consider taking to a recruiting conversation:

- a copy of the Safe Surgery Checklist template
- the fact sheet *Implementation team roles and responsibilities*

## Tips for 1-on-1 conversation with prospective members

A 1-on-1 conversation is a powerful way to engage another person and ask for help.

### Suggested flow for a conversation

1. Explain what the checklist is and why your facility is doing this work.
2. Explain how the work is different from what your facility is already doing.
3. Tell the prospective members that you are approaching them because they are leaders who are respected by their peers.
4. Explain where you are in the process (building a team).
5. Tell them how they can contribute to the team.
6. Ask for their help.

### EXAMPLE

*“We are working on a project to improve the use of our checklist.*

*We want to make it a communication and teamwork tool, so our center can be even better.*

*We can get more out of our checklist. Doing the checklist well is about creating an atmosphere where people can speak up, input is solicited, and information is shared.*

*You are a leader, and we need your leadership to move this project forward.*

*We want a representative from every role to be on the team and you would be our [name of role] champion.*

*I will run the meetings with your input.*

*The bulk of the work will come in the first few months when we are customizing and testing the checklist and engaging colleagues in its use.*

*This work will take time and it is a journey; how long it takes will depend on the size of our center and how much time we can dedicate to this as a team.*

*Thank you for taking the time to talk to me.”*

## Responding to doubts or objections

Remember: Everyone on the team should be enthusiastic. Some people may express doubts about the time commitment, or the readiness of the culture, etc. Listen to the prospective members' concerns.

Objections are different. Despite your best planning, if you ask people to help and they question the value of the checklist work or are cynical about the potential for change, they are probably not a good fit for the team. Respectfully thank them for their time and tell them you will keep them apprised of your progress.

*You might say: "Thanks for taking the time to talk to me. I'm going to try it with some other people and then I'll come back to you for your feedback."*

## Finding physician champions

You will need to find a surgeon and an anesthesia professional who can participate on the team and will champion the checklist work with their peers. The active participation of a physician champion is a key indicator for implementation success.

Considerations:

- Ask the nurses (they will know):
  - Which doctors have good communication in their operating/procedure rooms?
  - Which doctors do you enjoy working with?
- Pick surgeons and anesthesia professionals who are respected and who will be supportive.
- 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.

You might also look for other qualities:

- physicians who already emulate some of the desired behavior in operating room (e.g., may already do something like sharing an operative plan or leading a debrief)
- physicians who have participated in a team training course
- physicians who have had near misses and want to make sure that it doesn't happen again

## Don't try to "fix" people

Be wary of recruiting resistant people to your team in an attempt to convince them that the checklist work has value.

Some facilities make a strategic choice to include resistant surgeons on their team, hoping for an advantage if they win those folks over. This is a high-risk approach that can undermine your team and limit your success; for that reason we recommend against it.

## What if you struggle to find people who will agree to help?

Not everyone you ask will be available. Finding a physician to participate can be a challenge in some facilities because of time constraints, existing commitments to administrative or academic roles, or concern about extra non-funded responsibilities.

## Considerations for moving forward without a surgeon or an anesthesia professional

Keep moving forward in building the rest of your team. Move as far as you can with the implementation process, but continue looking for a clinician who will contribute.

**Tasks you can work on while looking for physician champions**

- Build the rest of your team.
- Meet to review background information about the checklist.
- Conduct a culture assessment.
- Assess current checklist use or surgical workflow.

**Tasks for which physicians are essential**

- modification of the checklist
- testing the checklist
- 1-on-1 conversations with peers

Moving forward with the work may help. Administering the culture survey and observing teams in the operating/procedure room can help you identify potential physician champions.



# Chapter 4

## Assessing your surgical culture and environment

### CONTENTS

---

<i>Introduction</i>	59
<b>Observing current practices</b>	59
Principles of observation in the operating/procedure room	59
Planning observations	60
Training observers	61
<b>Assessing your culture</b>	63
Benefits of assessing your culture	63
About the Safe Surgery Checklist Culture Survey	64
Our culture survey explores five key areas	67
What if your facility already has a culture survey?	68
How to administer the survey	69
Analyzing and interpreting survey data	73
Presenting your results	74
Conducting periodic follow-up culture surveys	75

# Instructions for the team lead

## OVERVIEW

Use this chapter to guide and inform how you collect information about current practices and gain insight into your surgical culture.

This chapter supports the Prepare phase of checklist implementation and will be helpful when working on:

- Step 3: Assess Your Environment
- Step 10: Watch and Coach

## RELATED CONTENT

- Chapter 15: *Continually improve*

## RESOURCES AND MATERIALS

- Assessment Observation Tool
- Action guide: *Assessment observer's guide*
- Safe Surgery Checklist Culture Survey: Pre survey (no existing checklist)
- Safe Surgery Checklist Culture Survey: Pre survey (existing checklist)/Post survey for all facilities
- Implementation Lead Project Spreadsheet

## KEY CONCEPTS

- Assessment is a cornerstone of successful checklist implementation.
- Direct observation of surgical teams helps you understand what is actually going on in operating/procedure rooms.
- If you already use a surgical safety checklist, watching how surgical teams use that checklist in actual practice will help you optimize your efforts.
- A culture assessment (also called a culture survey) gives you insight into how people in various roles in your operating/procedure rooms feel about teamwork, communication, and patient safety.
- The perspective of physicians is often different from the perspective of other surgical team members.
- Understanding your culture can significantly influence how you implement a surgical safety checklist.
- A culture assessment gives you a baseline for measuring progress and can provide insight into unknown strengths or weaknesses.

## Introduction

Checklist implementation is a journey. As with any journey, you can't plan a path forward until you understand where you are now.

By assessing how things are currently done at your facility, how people feel about their work, and what people think about safety and teamwork, you will be able to create a strategy that is specific to your facility for moving forward with the checklist.

There are two complementary techniques for understanding your current environment: direct observation and culture assessment.

Observation alone may not be helpful, because people tend to change their behavior when they know they are being watched. Likewise, a culture survey alone risks overlooking workflow issues, or how teams interact. Pairing observation with a culture assessment will give you a good sense of what is actually going on in your operating/procedure rooms.

## Observing current practices

Direct observation in the operating/procedure room is the best way to understand how your surgical teams currently interact and the processes they use. If your facility is already using a safety checklist, observation will tell you how teams use and interact with that checklist.

The goal of observation is to learn *what* the team does, *when*, and *how*, so that your implementation team understands what your surgical teams do well in terms of communication and teamwork, and can identify opportunities for improvement. Observation is for learning — the purpose is not to identify and punish people who are not compliant.

## Principles of observation in the operating/procedure room

### Patient care is always the primary concern

The operating/procedure room is a unique clinical environment with inherent stresses and risks. Observers must pay attention to the clinical circumstances of a case and shape their actions appropriately. Observation should never affect the ability of team members to focus on patient care or do their work.

#### *IMPORTANT*

*If the observer sees something that would help the team prevent harm to the patient, he or she should speak up to prevent the harm.*

### Observers should be impartial

Ideally, the observer should not be part of the clinical team being observed. Individuals who are not part of the case are likely to be (or be perceived as) less biased. The role of the observer is simply to gather information; it is not about finding fault.

### Observers are there to help

Watching surgical teams at work helps the implementation team better understand the needs of the surgical teams in various parts of their facility. Observation also helps identify opportunities for improvement and potential barriers in the physical and cultural environment.

## Planning observations

This section describes considerations for managing the logistics of observation. It is important to coordinate these efforts with your culture assessment.

The Implementation Lead Project Spreadsheet can be used for scheduling and to capture notes about assessment observations (see Diagram 4.1 on page 60).

### Choose appropriate observers

Try to choose an observer who is not part of the clinical team being observed. Such an observer is less likely to be (or be perceived as) biased. The observer needs to understand the clinical environment — a person who has never set foot in an operating room would not make a good observer.

Consider recruiting an observer from:

- individuals who work in other areas of your facility.
- nurse educators, nurse managers, or quality improvement officers.

If your facility does not have the staff or resources to have observers that are not on the clinical team, ask a circulating nurse on the case to complete the Assessment Observation Tool.

### Watch a wide range of teams and surgeries

When assessing your environment, you want to watch as many surgical teams as you can, across a broad cross-section of surgeries and procedures.

The best approach is to observe:

- a variety of teams.
- on different days.
- at different times of the day.
- on different surgical services.

### Keep watching until you are not learning anything new

There is no specific number of cases that should be observed. Continue observations until you are confident that you understand the existing surgical practices and how your existing checklist is used throughout your facility.

DIAGRAM 4.1 **Use the Implementation Lead Project Spreadsheet to plan observations**

The Implementation Lead Project Spreadsheet can help you track:

- the services you plan to observe in order to get a representative sample.
- the dates of each planned (or actual) assessment observation.
- the names of the individuals who will conduct each assessment observation.

Assessment Observations			
Date Observed	Service / Dept	Name of Observer	Comments / Notes

The Implementation Lead Project Spreadsheet is available for download at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).



## Have observers use the Assessment Observation Tool

The Assessment Observation Tool (available in Appendix F: *Other tools and materials*) was created to help evaluate specific aspects of surgical workflow that relate to the checklist work (see Diagram 4.2 on page 62). (Note that the Assessment Observation Tool is different from the Coaching Observation Tool used for coaching later in the implementation process.)

It will help your observers:

- standardize observations.
- organize observation tasks.
- focus attention on specific behaviors.
- record information.

The tool comprises three separate pages that correspond to three key moments in the surgical workflow:

- before induction of anesthesia
- before skin incision
- before the patient leaves the room

Note, however, that the Assessment Observation Tool can be used to watch a team at all three of these moments in the surgical workflow, or at just one or two of the moments.

## Track and document information

Scheduling and tracking observations are important management tasks for the implementation lead. You may find it helpful to record notes from observations on the Implementation Lead Project Spreadsheet, either as the observations occur or as notes compiled on a regular basis (e.g., twice per week).

Compiling and reviewing your findings as a team are critical parts of translating your observations into learning that can help improve patient safety.

## Training observers

All observers should be briefed on how to use the Assessment Observation Tool and how to properly introduce themselves to prepare the surgical team for observation.

### Prepare observers

Review the Assessment Observation Tool with all observers to be sure they understand what to look for and to answer any questions they have about their role.

### Emphasize to observers that their observation is for learning

Before observing the team, it is important for the observer to explain that he or she is observing the team to learn, and that the ultimate goal is to improve patient safety throughout the facility.

Observing a case while holding a clipboard or piece of paper can have a negative connotation, leading some members of the team to feel that the observer is an auditor.

Instruct your observers to put people at ease by telling the team before or at the beginning of the case that the page they have is:

- an observation tool to help stay organized.
- only for internal use.

### Have observers take notes during or after a case

The observation tool can be filled out during the case or immediately after, to record what specifically happened during the case.

Observers should consider several points:

- Writing during the case may help some people remember, but writing can be a distraction from watching and listening.

## DIAGRAM 4.2 The Assessment Observation Tool

ASSESSMENT OBSERVATION TOOL — page 1 of 3

**Before Induction of Anesthesia**DATE \_\_\_\_\_  
(mm/dd/yyyy)**Step 1: Checklist discussion items**

Using the Safe Surgery Checklist image below, listen to the team's conversation and mark each item that the team discusses.

**Before Induction of Anesthesia**

Nurse and Anesthesia Professional verify:

- Patient identification (name and DOB)
- Surgical site
- Surgical procedure to be performed matches the consent
- Site marked
- Known allergies
- Patient positioning
- Essential imaging available
- Risk of hypothermia (if operation >1 hour)
  - Warmer in place
- Risk of venous thromboembolism
  - Boots and/or anticoagulants in place
- Anesthesia safety check completed

**ANESTHESIA BRIEFING**

Anesthesia Professional shares:

- Anticipated airway or aspiration risk
- Risk of significant blood loss
  - Two IVs/central access and fluids planned
  - Type and crossmatch/screen
  - Blood availability

**Step 2: Quality of discussion**

After the discussion, answer the following questions:

- a. Did the circulating nurse discuss all items when at least one other care provider was present?
  - Yes  No
- b. Was the patient actively engaged in this discussion?
  - Yes  No  N/A
- c. Did every team member that was present say something?
  - Yes  No
- d. Were all of the checklist items done from memory?
  - Yes  No  N/A (don't use a checklist)
- e. Could the team have had a better discussion?
  - Yes  No

If yes, please explain:

**Step 3: Notes**

Record any additional comments or observations in the space below:

The Assessment Observation Tool is composed of three separate pages that correspond to three key moments in the surgical workflow:

- before the induction of anesthesia
- before skin incision
- before the patient leaves the operating/procedure room

Each page prompts the observer to collect information about discussion items (left column) and answer questions about the quality of discussion (right column).

Even if your facility is not currently using a surgical safety checklist, you should use the Assessment Observation Tool so that the implementation team can discuss how your current practices differ from those recommended on the Safe Surgery Checklist.

Additional notes can be written at the bottom of each page.

The Assessment Observation Tool is available for download at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org) and in Appendix F: *Other tools and materials*.

PAGE 1

ASSESSMENT OBSERVATION TOOL — page 2 of 3

**Before Skin Incision**

DATE \_\_\_\_\_  
(mm/dd/yyyy)

**Step 1: Checklist discussion items**

Using the Safe Surgery Checklist image below, listen to the team's conversation and mark each item that the team discusses.

**Before Skin Incision**

**TIME OUT**

Circulating Nurse asks:

"Is everyone ready to proceed? Please state your name."

**Entire Surgical Team confirms:**

- Patient name
- Surgical procedure to be performed
- Surgical site
- Essential imaging available
- Antibiotic prophylaxis 90 minutes
  - Antibiotic redosing

**TEAM BRIEFING**

Surgeon shares:

- Operative plan
- Possible difficulties
- Expected duration
- Anticipated blood loss
- Implants or special equipment

Anesthesia Professional:

- Anesthetic plan
- Airway concerns
- Other concerns

Circulating Nurse and Scrub Nurse:

- Sterility, including instrument counts
- Equipment issues
- Other concerns

Surgeon asks:

"Does anybody have any questions? If you see something that I missed, please speak up."

Revised 02/2015

ASSESSMENT OBSERVATION TOOL — page 3 of 3

**Before Patient Leaves Room**

DATE \_\_\_\_\_  
(mm/dd/yyyy)

**Step 1: Checklist discussion items**

Using the Safe Surgery Checklist image below, listen to the team's conversation and mark each item that the team discusses.

**Before Patient Leaves Room**

Nurse reviews with team:

- Instrument, sponge, and needle counts
- Name of the procedure performed
- Specimen labeling, including patient's name

Nurse reads aloud to team:

- Specimen labeling, including patient's name

**TEAM DEBRIEFING**

Entire Surgical Team discusses:

- Key concerns for patient recovery and management
- Equipment problems that need to be addressed
- Other opportunities for improvement

**Step 2: Quality of discussion**

After the discussion, answer the following questions:

- a. Did someone in the room ensure everyone was ready to perform the debriefing before starting the discussion?
  - Yes  No
- b. If there was a specimen still in the room, did a team member read aloud the label on the specimen container?
  - Yes  No  N/A
- c. Was every team member paying attention to the discussion?
  - Yes  No
- d. Was the surgeon/proceduralist in the room for this discussion?
  - Yes  No
- e. Were all of the checklist items done from memory?
  - Yes  No  N/A (don't use a checklist)
- f. Could the team have had a better discussion?
  - Yes  No

If yes, please explain:

**Step 3: Notes**

Record any additional comments or observations in the space below:

Revised 02/2015

PAGE 2

PAGE 3

- The attitude of the team should be taken into account. If the team seems uncomfortable even after an assurance that the observation is about learning, it may be best to write notes after the case.
- Personal identifiers (names) should not be recorded on the observation tool. Respecting team members' confidentiality will help build trust for coaching and for the implementation effort as a whole.

## Assessing your culture

### What does “culture” mean?

Simply put, culture refers to the unwritten rules that guide our behavior when no one is around. Your facility's culture is determined by the things you do and how you do them, and is often defined as “just the way we do things around here.”

When we think about a “culture of safety,” we mean something very simple:

- The first promise you make to patients in your facility is that you will keep them safe.
- Day in and day out, everyone who works in your facility understands that the highest priority is patient safety.

## Benefits of assessing your culture

### Motivating and directing your work

Surgical personnel often think they don't need to do the checklist and that they already do all of the items listed on it. They are convinced that the problems documented all over the United States, in inpatient and outpatient facilities alike, don't go on in their facility.

A culture assessment can help you learn about how surgical team members perceive issues that affect safety in your operating/procedure rooms. It can also tell you how much the perceptions of physicians differ from those of other members of the surgical team, an important element in improving communication and teamwork.

### Showing that you value people's input

Conducting an assessment conveys an important message to surgical team members and operating room staff. It says:

- You are important to us.
- We care about what you think.
- We want to make things better.

Conducting the culture assessment and discussing the findings can also provide opportunities to engage people one on one in conversation about the work.

### Measuring progress

Your initial culture assessment serves as a baseline measurement. Doing periodic assessments will enable you to see how your culture changes over time and measure your progress in improving surgical culture. Reassess your culture after you have finished a big push with your checklist project, or consider administering the culture survey annually.

### Uncovering surprises

People are often surprised at what the assessment discloses. The findings often challenge people's beliefs and assumptions about how their teams operate. The culture assessment can also bring to light an area of concern that is hidden or a weakness that needs attention but was not obvious before.

## About the Safe Surgery Checklist 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.

### Crafted specifically for the operating/procedure room environment

Culture surveys are commonly used in hospitals and other medical environments to measure workplace conditions and employee attitudes. We find that many of the surveys used to measure culture more broadly in hospitals are not customized enough to inform checklist implementation efforts in the operating/procedure room.

The Safe Surgery Checklist Culture Survey was developed specifically to measure your facility's readiness for change and the quality of communication, teamwork, and safety practices in your surgical environment. It is derived from a survey instrument developed and tested with thousands of clinicians across the state of South Carolina.

There are two versions of the survey (available in Appendix F: *Other tools and materials*):

- *Safe Surgery Checklist Culture Survey: Pre survey (no existing checklist)* is designed to be used by facilities that do not currently use a surgical safety checklist (see Diagram 4.3 on page 65).
- *Safe Surgery Checklist Culture Survey: Pre survey (existing checklist)/Post survey for all facilities* adds several questions about checklist use and is intended for facilities that are using an existing checklist or that plan to administer a post-implementation culture survey (see Diagram 4.4 on page 66).

### Validated approach

To date we have completed the following steps toward validating the survey:

- developed a theoretical model identifying key elements of culture believed to be associated with the Safe Surgery Checklist and safe surgical performance
- reviewed other culture survey instruments and adapted or developed items to address elements of the theoretical model
- conducted cognitive testing and sought feedback to ensure that items were both clear and comprehensive (covered all key topics)
- assessed item properties and reliability of underlying constructs
- evaluated discriminate validity — tested that items within constructs were more like each other than like items in other constructs
- compared survey results to results from other surveys that were used as part of the program (leader assessments and observations of teamwork and checklist use) and demonstrated correlations
- assessed the change in each measure and demonstrated that items could detect change due to the intervention
- found that items on the survey are useful to the end user (i.e., when we show users survey results, they use the results to motivate and direct further efforts)

### Additional information

Additional details regarding the development and testing of this instrument can be found in "Surgical Team Member Assessment of the Safety of Surgery Practice in 38 South Carolina Hospitals" by Singer SJ, Jiang W, Huang LC, Gibbons L, Kiang MV, Edmondson L, et al. (Med Care Res Rev [Internet]. 2015; Available from: <http://mcr.sagepub.com/cgi/doi/10.1177/1077558715577479>.)

**DIAGRAM 4.3 Culture Survey: Pre survey (no existing checklist)**

**Safe Surgery Checklist Pre Culture Survey**

This survey asks you to think about the operating rooms in which you work most often and the teams that you work with in the operating room (OR)/procedure room. Many of the questions refer to your team. By team we mean everyone working in the OR/procedure room with you during operations/procedures. Think about your average experience when taking the survey. This survey should take no more than 5 minutes to complete.

A. What is your primary professional role?

- <sup>01</sup> Surgeon
- <sup>02</sup> Anesthesiologist
- <sup>03</sup> CRNA
- <sup>04</sup> Surgical nurse
- <sup>05</sup> Physician assistant
- <sup>06</sup> Surgical tech
- <sup>07</sup> Perfusionist
- <sup>08</sup> Intern/Resident/Fellow
- <sup>09</sup> Other: \_\_\_\_\_

B. How many years have you worked in this role (at any facility)?

- <sup>01</sup> <1
- <sup>02</sup> 1-5
- <sup>03</sup> 6-10
- <sup>04</sup> >10

How much do you agree or disagree with the following statements? In the ORs/Procedure Rooms where I work...	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Everyone participates in efforts to improve patient safety. . . . .	1	2	3	4	5	6	7
2. Team members are open to changes that improve patient safety even if it means slowing down. . . . .	1	2	3	4	5	6	7
3. Pressure to move quickly from case to case gets in the way of patient safety. . . . .	1	2	3	4	5	6	7
4. Physicians are present and actively participating in patient care prior to skin incision. . . . .	1	2	3	4	5	6	7
5. Team discussions (e.g., briefings or debriefings) are common. . . . .	1	2	3	4	5	6	7
6. It is difficult to speak up when I perceive problems with patient care. . . . .	1	2	3	4	5	6	7
7. Physicians maintain a positive tone throughout operations. . . . .	1	2	3	4	5	6	7
8. All team members work together as a well-coordinated team. . . . .	1	2	3	4	5	6	7
9. For complex cases, briefings include planning for potential problems. . . . .	1	2	3	4	5	6	7
10. Team members share key information as it becomes available. . . . .	1	2	3	4	5	6	7
11. Physicians are only open to suggestions from other physicians. . . . .	1	2	3	4	5	6	7
12. Team members communicate with me in a respectful manner. . . . .	1	2	3	4	5	6	7
13. I am treated as a highly valued member of the team. . . . .	1	2	3	4	5	6	7
14. It is difficult to discuss medical mistakes. . . . .	1	2	3	4	5	6	7
15. The entire team discusses key concerns for patient recovery and management before the patient leaves the room. . . . .	1	2	3	4	5	6	7

How much do you agree or disagree with the following statement?	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
16. I would feel safe being treated here as a patient. . . . .	1	2	3	4	5	6	7

If you have any other comments, please use the space below and the back of the survey to elaborate:

**DIAGRAM 4.4 Culture Survey: Pre survey (existing checklist)/Post survey for all facilities**

**Safe Surgery Checklist Culture Survey**

This survey asks you to think about the operating rooms in which you work most often and the teams that you work with in the operating room (OR)/procedure room. Many of the questions refer to your team. By team we mean everyone working in the OR/procedure room with you during operations/procedures. Think about your average experience when taking the survey. This survey should take no more than 5 minutes to complete.

**A. What is your primary professional role?**

- <sup>01</sup> Surgeon
- <sup>02</sup> Anesthesiologist
- <sup>03</sup> CRNA
- <sup>04</sup> Surgical nurse
- <sup>05</sup> Physician assistant
- <sup>06</sup> Surgical tech
- <sup>07</sup> Perfusionist
- <sup>08</sup> Intern/Resident/Fellow
- <sup>99</sup> Other: \_\_\_\_\_

**B. How many years have you worked in this role (at any facility)?**

- <sup>01</sup> <1
- <sup>02</sup> 1-5
- <sup>03</sup> 6-10
- <sup>04</sup> >10

*How much do you agree or disagree with the following statements?  
In the ORs/Procedure Rooms where I work...*

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Everyone participates in efforts to improve patient safety. . . . .	1	2	3	4	5	6	7
2. Team members are open to changes that improve patient safety even if it means slowing down. . . . .	1	2	3	4	5	6	7
3. Pressure to move quickly from case to case gets in the way of patient safety. . . . .	1	2	3	4	5	6	7
4. Physicians are present and actively participating in patient care prior to skin incision. . . . .	1	2	3	4	5	6	7
5. Team discussions (e.g., briefings or debriefings) are common . . . . .	1	2	3	4	5	6	7
6. It is difficult to speak up when I perceive problems with patient care. . . . .	1	2	3	4	5	6	7
7. The entire team stops at all 3 critical points during the procedure to read the safe surgery checklist (before induction of anesthesia, before skin incision, and before the patient leaves the room) . . . . .	1	2	3	4	5	6	7
8. Physicians maintain a positive tone throughout operations. . . . .	1	2	3	4	5	6	7
9. All team members work together as a well-coordinated team. . . . .	1	2	3	4	5	6	7
10. For complex cases, briefings include planning for potential problems. . . . .	1	2	3	4	5	6	7
11. Team members share key information as it becomes available. . . . .	1	2	3	4	5	6	7
12. Physicians are only open to suggestions from other physicians . . . . .	1	2	3	4	5	6	7
13. Team members communicate with me in a respectful manner. . . . .	1	2	3	4	5	6	7
14. I am treated as a highly valued member of the team. . . . .	1	2	3	4	5	6	7
15. It is difficult to discuss medical mistakes . . . . .	1	2	3	4	5	6	7
16. The entire team discusses key concerns for patient recovery and management before the patient leaves the room . . . . .	1	2	3	4	5	6	7
17. Using the safe surgery checklist helps my cases run more smoothly . . . . .	1	2	3	4	5	6	7

*How much do you agree or disagree with the following statements?*

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
18. I was given a strong explanation for why it is important to use the safe surgery checklist . . . . .	1	2	3	4	5	6	7
19. The training I received about how to use the safe surgery checklist allowed me to use it effectively during surgical procedures. . . . .	1	2	3	4	5	6	7
20. If I were having an operation, I would want a safe surgery checklist to be used . . . . .	1	2	3	4	5	6	7
21. I would feel safe being treated here as a patient. . . . .	1	2	3	4	5	6	7

22. In the ORs/Procedure Rooms where I work, problems or complications have been averted by the safe surgery checklist. <sup>01</sup> Yes <sup>00</sup> No

*If problems or complications have been averted by the safe surgery checklist or if you have any other comments, please use the space below and the back of the survey to elaborate:*

## Our culture survey explores five key areas

Each item on the Safe Surgery Checklist Culture Survey has been designed to gather information about perceptions of surgical team members in one of five key areas. The items appear in random order on the survey to help optimize the response rate.

In the section below, each item is listed within the key area it illuminates. The numbering of the items reflects the order of each question on the *Safe Surgery Checklist Culture Survey – Pre survey (existing checklist)/Post survey for all facilities*. Six items (marked with an asterisk) are specific to use of an existing checklist and do not appear on the *Safe Surgery Checklist Culture Survey – Pre survey (no existing checklist)*.

### Organizational readiness

What has your facility's experience been when implementing other interventions in the operating room, and how well have the surgical team disciplines worked together to support these implementation efforts?

1. *Everyone participates in efforts to improve patient safety.*
2. *Team members are open to changes that improve patient safety, even if it means slowing down.*

### Elements of teamwork

#### Communication

How is information shared among members of the surgical team?

5. *Team discussions (e.g., briefings or debriefings) are common.*
11. *Team members share key information as it becomes available.*

#### Coordination

How well does everyone work together as a surgical team?

9. *All team members work together as a well-coordinated team.*

#### Respect

Do people feel valued and respected as members of the surgical team?

12. *Physicians are only open to suggestions from other physicians.*
13. *Team members communicate with me in a respectful manner.*
14. *I am treated as a highly valued member of the team.*

#### Clinical leadership

How well do physicians exhibit leadership in the operating room?

8. *Physicians maintain a positive tone throughout operations.*
4. *Physicians are present and actively participating in patient care prior to skin incision.*

#### Assertiveness

How difficult is it to speak up and discuss mistakes in the operating rooms?

6. *It is difficult to speak up when I perceive problems with patient care.*
15. *It is difficult to discuss medical mistakes.*

## Safe Surgery Checklist performance

How well do we perform elements of the Safe Surgery Checklist?

- 7.\* *The entire team stops at all 3 critical points during the procedure to read the surgical safety checklist (before induction of anesthesia, before skin incision, and before the patient leaves the room).*
- 10. *For complex cases, briefings include planning for potential problems.*
- 16. *The entire team discusses key concerns for patient recovery and management before the patient leaves the room.*

## Impact of using the Safe Surgery Checklist

How can/does the checklist impact care in your facility?

- 3. *Pressure to move quickly from case to case gets in the way of patient safety.*
- 17.\* *Using the Safe Surgery Checklist helps my cases run more smoothly.*
- 20.\* *If I were having an operation, I would want a Safe Surgery Checklist to be used.*
- 21. *I would feel safe being treated here as a patient.*
- 22.\* *In the ORs where I work, problems or complications have been averted by the Safe Surgery Checklist.*

## Safe Surgery Checklist implementation process

How do surgical team members feel about the information and training they received about how to use the checklist?

- 18.\* *I was given a strong explanation for why it is important to use the Safe Surgery Checklist.*
- 19.\* *The training I received about how to use the Safe Surgery Checklist allowed me to use it effectively during surgical procedures.*

## What if your facility already has a culture survey?

Some facilities have administered a culture survey in the past, and some may do one periodically.

If your existing culture survey was not specifically customized or created for the operating room environment, we *strongly encourage you to use the Safe Surgery Checklist Culture Survey.*

## Before you consider using an existing culture survey...

### Be sure that the results are current

If your existing culture survey is more than six months old, consider conducting a new one so that your results reflect the current perceptions of your surgical teams.

### Evaluate whether your existing results reflect input from a cross-section of roles

You want to be sure that your culture survey has captured responses from a representative sample of surgical team members.

In some facilities, physician response rates are quite low. If you did not get responses from a majority of the physicians working in your operating/procedure rooms, it will be more difficult to leverage the results for the checklist implementation.

A low physician response rate indicates that you should conduct a new culture survey for the checklist work.



## How to administer the survey

### General guidelines

Getting useful data from your culture survey depends on the methods you use to gather information.

#### Responses should be anonymous

Survey answers should be collected anonymously so that people are comfortable providing feedback without fear of repercussions.

#### Responses should be collected over a fixed period of time

- Two weeks is optimal.
- Allow four weeks at most, but preferably less.

#### A cover letter gives the audience context

Creating a brief cover letter for your survey gives you the opportunity to tell people about the checklist work and why the survey is important (see Diagram 4.5 on page 70).

The cover letter should address common questions that survey respondents may have:

- What is this survey about?
- Why should I take the time to do this?
- How long will it take?
- When is it due?
- Who can I contact if I have questions or want more information about the survey?

The letter can be addressed from the implementation lead, but you may want to emphasize the importance of the initiative by having your letter addressed from the CEO or other well-recognized leader in your facility. You can also create different versions of the cover letter for people in different roles; e.g., the chief of surgery for physicians, the head of nursing for nurses, etc.

### Create a plan and stay organized

Using the Implementation Lead Project Spreadsheet, create a list of all surgical team members who will be touched by the checklist. Note how you plan to administer the culture survey to each person. (See “Choose how you will deliver the survey and collect responses” on page 71 for information about methods for administering the survey.)

### Decide who will get the survey

Ideally, you want to solicit the input of everyone who works in your operating/procedure rooms:

- anesthesiologists and/or CRNAs
- circulating nurses
- scrub techs
- surgeons
- perfusionists
- anesthesia techs
- pre-op and post-op nurses
- other personnel

#### Considerations for people who are in your operating/procedure rooms infrequently

People who work in your facility infrequently may not have enough consistent experience to contribute meaningfully to your assessment.

- Include practitioners who are in your facility at least two times per month.
- Do not include practitioners who are in your facility only a few times per year or who are credentialed but do not perform surgeries in your operating/procedure rooms.

#### Considerations for large facilities

In facilities with large numbers of surgical staff, work schedules may be more complicated, and it can be challenging to figure out who should get the survey and who will be available within the response period.

#### DIAGRAM 4.5 A cover letter gives your target audience a context for the survey

**A**

Dear Colleague:

As part of \_\_\_\_\_'s commitment to offering the safest possible surgical care, we are launching an initiative to measurably reduce surgical infections, major complications, and mortality through effective implementation of a surgical safety checklist.

As part of that effort, we are conducting a "surgical safety culture" survey.

Your response will help us understand surgical team members' perspectives on patient safety in our operating rooms.

- The survey should take **no more than 5 minutes** to complete.
- Your decision to participate is **completely voluntary**, and refusal to participate will not affect your job in any way. You may skip any questions that you do not feel you can answer.
- Your response is **completely anonymous**.
- When completing the survey, **think about your average experience** in the operating rooms in which you most often work.

For additional information about the surgical safety checklist project or the culture survey, please contact [insert contact info].

Your response matters! Please complete the survey today. Thank you for your participation.

Sincerely,

[NAME AND TITLE OF SIGNATORY(IES)]

Example A illustrates a traditional cover letter prepared for use with a paper version of the culture survey.

It should be printed on facility or departmental letterhead.

**B**

Dear Colleague:

As part of [Hospital Name's] commitment to offering the safest possible surgical care, we are launching an initiative to improve surgical patient safety and outcomes through use of a surgical safety checklist.

Your response to this "surgical safety culture survey" will help us understand the perspective of different surgical team members in our operating rooms.

- The questionnaire takes **about 5 minutes**.
- Your participation is **completely voluntary**.
- Your responses are **completely anonymous**.

Your response matters — please complete the survey today. Thank you for your participation.

For information about the checklist project or the culture survey, please contact [insert contact info].

— CEO Name

Example B illustrates an introduction to an electronic version of the survey.

Specific instructions (e.g., "When answering this question, think about your average experience.") can be included as an additional introductory screen or can accompany the actual questions.

One solution to this problem is to give the survey to all operating/procedure room personnel who are scheduled to work within a set time period (e.g., two weeks). This approach will give you a representative snapshot of surgical culture.

## Choose how you will deliver the survey and collect responses

Whether you use a paper or electronic survey, or some combination of the two, will depend on the size of your facility and other factors.

Each method has advantages and disadvantages, and each will require the attention and time of the implementation team. Consider the size, complexity, and culture of your facility, think about the resources you have, and choose the method that you think will maximize the number of responses you receive with a practical amount of logistical work.

### Paper survey

#### Advantages

- creates opportunities for one-on-one interaction

#### Disadvantages

- more labor intensive and takes more time
- more difficult to administer in large facilities

#### TIPS

##### Take advantage of existing meetings

Make a list of all meetings regularly held at your facility that involve your target audiences (e.g., surgical nursing department meeting). Distribute the survey at these meetings. This will help you reach people when they are already gathered.

##### Protect the anonymity of respondents

To ensure privacy, you can collect surveys anonymously by putting collection boxes at the door. You can also give each person an unlabeled envelope along with the survey and have one of your implementation team members collect the envelopes at the end of the meeting.

##### Offer to wait while people complete the survey

Whenever possible, ask people to complete the survey while you wait, or before they leave the room. If necessary, you can station someone in the staff lounge to hand out surveys, and place a box there for the completed surveys. But asking

DIAGRAM 4.6 Use the Implementation Lead Project Spreadsheet to plan your survey

First, create a list of all surgical personnel whose work will be touched by the checklist.

Surgical Personnel Tracking Worksheet						Level of interest
First Name	Last Name	Role	Service / Dept	Here How Often?	E-mail	(estimate resistance)

Then, note how you will deliver the survey to each person and the date by which they will receive it. If possible, note whether each person has returned a completed survey. Record notes or comments as needed.

Culture Survey			
Date		Survey Method	Notes
Sent	Complete	(Paper, Electronic)	

The Implementation Lead Project Spreadsheet is available for download at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).

people to complete the survey and return it later does not typically work well and may significantly affect your response rate.

### **Catch people between cases**

Some facilities find it effective to have surgical team members complete the survey between cases. In this scenario, the implementation lead can give the survey to a surgeon, for instance, and wait while the surgeon completes it. The lead can then put the completed survey into an unmarked envelope to ensure anonymity.

## **Electronic/online survey**

### ***Advantages***

- can potentially reach a larger number of people with less effort
- helps automate data collection, reporting, and analysis
- can target those who have not responded with reminders

### ***Disadvantages***

- process is less personal
- response rate may be lower
- email addresses need to be compiled for all target users
- difficult for some clinical operating/procedure room personnel to access their email and take a survey

### **TIPS**

- Send reminder emails every couple of days.
- Make an announcement in existing meetings to explain why you are conducting a survey and to remind people to contribute their perspective.

## **Use a hybrid approach**

Sometimes it is helpful to administer the survey to some individuals electronically while administering the culture survey in paper form to others. For example, in some facilities it is difficult

to get physicians to respond via email. You may get a higher response rate by passing out paper surveys to physicians between cases or during regularly scheduled meetings while administering the survey electronically to other disciplines.

A hybrid approach can also work well when some intended participants (i.e., specific disciplines) don't have easy access to email at work. For instance, it may be difficult for nonphysicians to access online surveys due to their clinical schedules or the inability to check email during work hours.

A hybrid approach should not be used to get the feedback of just one or two individuals. It works best when it is executed in a systematic way that targets specific disciplines based on their needs. Discuss the pros and cons of each approach with your implementation team, and decide which method will work best for each discipline.

## **Tips for improving physician response rates**

### ***Schedule an appointment at the surgeon's office.***

Try to schedule a 15-minute office appointment on each surgeon's calendar and send a staff person to hand-deliver the survey to every surgeon. The staff person can then wait for each surgeon to complete the survey and keep the completed surveys anonymous by placing them in unmarked envelopes.

### ***Mail paper surveys to each surgeon's office***

Another option is to mail surveys to each surgeon's office along with a pre-addressed stamped envelope. This approach is less time intensive, but is less likely to produce a high response rate and may require follow-up or coordination with the surgeon's office staff to ensure that it is completed in a timely manner.

## Analyzing and interpreting survey data

General recommendations on survey analysis are shown below. For detailed information on scoring the survey, analyzing your data, and presenting your results, the publication *Reference Guide: Analyzing Your Culture Survey Data* is available upon request from Ariadne Labs.

### Calculate a response rate

In order to determine whether your sample size is valid overall, you should calculate the response rate for your culture survey. Calculate the rate within key surgical team roles, as well. The response rate is the number of people who returned the survey, divided by the number of people who were asked to complete it.

### Look at percentages *and* actual numbers

In smaller facilities, the responses of one or two people can make a big difference in percentages. As a best practice, always review and report the actual number of people represented by a percentage. For instance: "6 of 20 people (30%)..."

### Look at the data in multiple ways

You can gain a deeper understanding of your culture and the perception of safety in your operating/procedure rooms by looking at the results for each survey item in four different ways:

1. as a whole/aggregate
2. by physician versus nonphysician
3. by professional role
4. over time, if applicable

This approach will also help your implementation team consider how to share results with various people in your facility. You may want to present the results differently to different audiences, depending on the message you want to emphasize.

#### Aggregate

Look at all responses for each survey item.

#### Physicians vs. nonphysicians

Physicians and nonphysicians tend to view culture, safety, and teamwork very differently. Physicians tend to have a more positive view of teamwork and communication; they also tend to not feel the same pressure to move quickly as do other team members in the operating/procedure room. If you have fewer than five respondents in any category (including physicians or nonphysicians), it is not recommended that these results be shared outside of the implementation team, to ensure anonymity.

#### By role

Viewing by role provides a more robust breakdown of perceptions. Each role has a unique perspective when it comes to communication, teamwork, safety, and the use of the checklist. In many respects, surgeons tend to rate teamwork more highly than do other personnel in the operating room. Seeing this difference can help you target your efforts and one-on-one conversations.

#### IMPORTANT

Avoid breaking out data from small groups. To maintain the anonymity of the surgical team members, don't report results for groups or categories that include fewer than five people. In smaller facilities, you will still want to analyze the data for differences between physicians and nonphysicians, but you would not want to report those findings.

## Review and discuss your results at an implementation team meeting

### Walk through survey results as a team

- Review the survey questions.
- Share the results.

### General questions your team should discuss

- Are you surprised by any of the results?  
If so, which results?
- What are we doing well?
- 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 1-on-1 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)?

### Set a time frame for your next culture survey

After your review of the survey results, decide when you will repeat the survey. An annual survey usually works best. Asking people to complete a culture survey more frequently than once per year may lead to survey fatigue and may not allow enough time for change to become apparent.

## What if your survey results are good?

If your culture survey reveals positive results, that's a good thing. It means you have elements in place that contribute to a safe environment for patients. However, it is also important to recognize that even with good results, our work in operating rooms can always be better. If there is even one person who doesn't feel able to speak up or doesn't feel safe, there is still work to do.

## Presenting your results

Once you have analyzed and reviewed your data as an implementation team, think about how and when you will share the results. People who have been asked to complete the survey will certainly want to see the results, but sharing your findings about surgical culture with a wider audience gives you an opportunity to talk about how the Safe Surgery Checklist can help improve patient safety.

### Who gets the results?

- department heads
- hospital committees
- people in operating/procedure rooms
- executives or others in leadership roles

### Create a plan to share results

You can share the results of your culture survey in a variety of ways:

- at staff and physician meetings
- in 1-on-1 conversations
- on bulletin boards
- in staff lounges
- at board or leadership meetings
- in a newsletter

### Flow for presenting results

When presenting your survey results, talk about:

- what your results are.
- what the gap is, if any, between where you are and where you want to be on key measures. If your organization isn't at 100%, there is still room for improvement.
- how the checklist can help strengthen your culture over time.

### Highlight positive findings

Be sure to talk about one or two elements of your culture about which people can feel proud.

## Conducting periodic follow-up culture surveys

It is important to conduct a post-implementation survey after the checklist has been in use, so that you can learn about changes that have occurred in your operating/procedure rooms. Compare results and evaluate cultural shifts as you progress toward improved communication.

### Benefits of a follow-up survey

We recommend that you administer the culture survey on an annual basis. Ongoing periodic assessment allows you to:

- continue to track your progress.
- gather information about changes in your operating/procedure room culture.
- identify other quality improvement projects.

### Cautions and limitations

#### Be thoughtful about interpreting results

When interpreting survey results from different points in time, it is important to use caution.

When a survey is taken at different points in time, apparent changes in the results may reflect a difference in the environment or culture, but may result from different individuals responding to the

survey. In other words, the actual respondents may be different individuals, even when the target population receiving the survey is the same (i.e., your operating/procedure room team members).

#### Other notable limitations

Culture takes time to change, and an organization may not see dramatic changes immediately. Some organizations may actually see aspects of their culture get worse before changing for the better.

#### If your results get worse, that doesn't necessarily mean that you had a poor implementation.

Some hospitals that have had very robust implementations actually saw that nonphysicians became more negative when they administered the follow-up culture survey. When asked about that trend, investigators were told that the staff felt that the checklist helped in many ways, but the implementation and focus on improving communication and teamwork also made them realize that certain behavior shouldn't be tolerated and was in fact negative, when they thought that it was the norm prior to the implementation effort. The survey should highlight areas for you to continue to work on.

It is important to continually monitor the culture in your operating rooms. A third administration of the survey may show improvement after an initial decline.

## Assessment observer's guide

You will be observing teams at work in the surgical environment and gathering information about how the surgical team performs certain safety-related checks and discussions.

The information you collect will be used to help customize the Safe Surgery Checklist for your facility.

### The Assessment Observation Tool

**Is a simple form that will help you:**

- standardize observations.
- organize observation tasks.
- focus attention on specific behaviors.
- record information during or after the case.

**Each page is used at a specific time:**

- Page 1: before induction of anesthesia
- Page 2: before skin incision
- Page 3: before patient leaves room

**Be thoughtful about when to take notes**

The observation tool can be filled out during the case or immediately after, to help you remember what specifically happened during the case.

Writing during the case may help you remember details, but can be a distraction from watching and listening.

Watching a case while holding a piece of paper can have a negative connotation, leading some people to feel as if you are conducting an audit. If the team still seems uncomfortable after your explanation that the observation tool is just to help you, it may be best to write notes after the case.

## Using the observation tool in a case

**Patient care is always the primary concern**

Your observation should not interfere with the ability of the surgical team to focus on patient care or do their work. However, *if you see something that might harm the patient, you should speak up to prevent the harm.*

### BEFORE THE CASE

- Introduce yourself and your role.
- Explain that your observation is for learning.
  - The page you have is just to help you stay organized.
  - You are observing to learn.
  - The ultimate goal is to improve patient safety.

### DURING THE CASE

- Follow the instructions on the observation tool, and use it to guide your observations as you watch and listen to the surgical team.
- Consider taking notes about what you see.
  - Be sensitive to the attitude of the team.
  - Names or other personal identifiers should never be written on the observation tool.

### IMMEDIATELY AFTER THE CASE

- Thank the team for letting you observe.
- Record any additional notes or observations.
- Check the form to be certain that no information is written on the observation tool that could personally identify members of the team.
- Return the completed observation tool to the appropriate person.



# Chapter 5

## Deciding: Are we ready?

### CONTENTS

---

<i>Introduction</i>	79
Is your facility ready to do the checklist work?	79
Consider focusing your efforts on one part of the checklist	81
Make a decision, then document and share your plan	82

# Instructions for the team lead

## OVERVIEW

This chapter is intended to help your team evaluate whether the cultural conditions in your facility provide a fertile environment for the checklist work.

Once you have compiled the results of your culture assessment, use the information in this chapter to help your team decide whether your facility is ready and prepared to move forward with implementing the Safe Surgery Checklist.

This chapter supports the Prepare phase of checklist implementation and will be helpful when working on:

- Step 4: Decide: Are We Ready?

## RELATED CONTENT

- Chapter 2: *A framework for checklist implementation*
- Chapter 4: *Assessing your surgical culture and environment*

## RESOURCES AND MATERIALS

- Your culture survey results

## KEY CONCEPTS

- Cultural and organizational readiness are significant factors for successful checklist implementation.
- An aborted or failed attempt at introducing the Safe Surgery Checklist can have lasting negative effects that make future success more difficult, so it is important to understand the scope of potential challenges in your facility.
- Six key indicators can be used to help evaluate your facility's readiness.
- Moving forward with a portion of the work can be an effective strategy for preparing your facility to fully implement the checklist in the future.
- Commit to a path, and then document and share your plan with leadership.

## Introduction

In Step 3 of checklist implementation, Assess Your Environment, you administered the Safe Surgery Checklist Culture Survey and analyzed your survey results. You also observed existing surgical practices and workflow in operating/procedure rooms throughout your facility.

Before moving forward, it is important to pause, reflect on the data you have collected, and determine whether your facility is ready to take on the work of implementing the checklist in your operating/procedure rooms.

There are two important things to keep in mind:

- Implementing the Safe Surgery Checklist is challenging work, because you are asking surgical teams to change their behavior and learn new habits.
- An aborted or failed attempt at introducing the Safe Surgery Checklist can have lasting negative effects that make future success more difficult.

This chapter will help you assess how prepared your facility is to meet the challenge and what scope of work your team will commit to as you move forward.

## Is your facility ready to do the checklist work?

There are six key factors to consider, as you reflect on the information you have collected and the resources available to you.

Review the results of your culture survey and assessment observations in light of these factors. Then, consider how the conditions in your facility will shape the specific challenges you may face.

## Six key factors suggest a foundation for success

Each of the following factors has been shown to have an impact on how easy or difficult checklist implementation will be, and each can contribute to or inhibit your success, but none of the factors should be considered as predictive of success or failure.

It's the people on the ground in a facility who matter most — an implementation team that is dedicated and persistent can change conditions as the work unfolds to overcome organizational barriers.

### FACTOR 1

#### Success administering the culture survey

The culture survey itself is a good test of your facility's readiness to undertake checklist implementation. If the culture survey was a struggle, you are less likely to be successful with checklist implementation. It is a positive sign if your implementation team was able to organize the culture survey efficiently and effectively, and if your surgical teams embraced the opportunity to provide input.

#### Look at physician response rates

To be considered successful, you should have received a survey response from approximately half of the physicians that work in the operating/procedure room. You can feel more confident that you understand the physicians' perspective when you have heard from a majority.

A low physician response rate may indicate a deeper issue (an underlying cultural or organizational problem) that cannot be easily addressed during checklist implementation.

**FACTOR 2****Prior successes with quality improvement in the surgical environment**

You are primed for success if your facility has fully implemented quality improvement projects in the surgical environment in the past. By “fully implement,” we mean that you have been able to identify an opportunity for improvement, launch an intervention, implement the change, and sustain progress.

Success with that kind of project shows that your facility includes people who have the necessary background, knowledge, and experience in the surgical environment and can bring together a multidisciplinary team.

Success with quality improvement projects in other parts of your organization doesn’t necessarily translate to projects in the operating/procedure room.

**FACTOR 3****A strong implementation lead**

Having an implementation lead who really believes in and is dedicated to the project is a strong indicator of success. Your facility is on the right track if you find someone who:

- has time to handle project logistics and manage the implementation team.
- has good relationships with surgical staff and physicians.
- is creative, persistent, and optimistic.

**Understands the surgical environment**

It’s also important for the implementation lead to understand the realities of working in the operating room. Most successful implementation leads work in the surgical environment somewhat routinely. A person without a surgical background can still do a good job, but it will probably be necessary to partner with a strong clinical partner in order to be effective with the surgical teams.

**FACTOR 4****Ability to recruit physician champions to the implementation team**

Experience shows that having a physician champion is a strong indicator of success. Some facilities struggle to find a physician who is willing to participate on the implementation team and advocate for the checklist with her or his colleagues. Facilities that struggle to find a champion are likely to have a more difficult time with physician engagement, and this may also indicate a deeper cultural issue that is affecting physician participation.

**FACTOR 5****Strong organizational support**

Facility leaders hold the key to resources, and their interest helps convey the importance of the work to others in the facility. When executive and department leaders do not actively support the checklist effort, it can be difficult to make progress and sustain gains, because priorities will shift and pull away your time and attention.

**CEO, CMO, hospital leadership**

The interest, attention, and public support of executive leaders lets everyone know that the checklist is a priority for the organization. This support can be very helpful in setting a positive tone culturally.

**Department/service line leadership**

You will need the help of surgical, nursing, and anesthesia leadership when engaging surgical team members. You may also need their leverage when dealing with individuals who are reluctant or uncooperative.

**Resources**

While much of the checklist work involves time, other resources are needed for things like printing the checklist poster, mounting the poster in the operating/procedure room, or creating a

demonstration video. Without executive support, it can be difficult to obtain funds or cooperation from other internal resources.

#### **FACTOR 6**

#### **Your facility has a robust Time Out process**

Review the observations of surgical teams, and consider how well teams at your facility do the Time Out. Look for these positive signs:

- Physicians are leaders or active participants in the Time Out.
- Everyone on the team comes to a hard stop.

#### **EXAMPLE**

In many facilities, nurses lead the Time Out and physicians simply agree. This is passive compliance.

In other facilities, physicians are more actively involved, either leading the Time Out or contributing information during the Time Out process. The checklist specifically builds upon the Time Out, so when physicians are already engaged in this way, the transition to checklist use is often easier.

#### **Difficulty with the Time Out**

When a facility has a difficult time implementing the Time Out or continues to struggle with active engagement of all of the surgical team members, you may have a more difficult time implementing the Safe Surgery Checklist. If they are not engaged in the Time Out process, or are annoyed by the process, you may need to do extra work to repair the underlying issues before implementing the checklist.

## **Consider focusing your efforts on one part of the checklist**

If you decide that your facility does not have the resources, time, or cultural conditions that will allow you to implement the checklist in its entirety, consider a smaller-scale project. Moving forward with a portion of the checklist can still be a step toward improved patient safety, and it can help create momentum for other changes in the future.

Some facilities are well prepared to implement the checklist, but once implementation is underway the effort is stalled by competing priorities or changing conditions. The following approaches are always an option if you experience unanticipated obstacles.

### **How to focus on one part of the checklist**

We have seen a number of facilities that decide to focus on just a few checklist items, or just one or two sections of the checklist. Other facilities decide to roll the checklist out in only a few services and embrace the idea that implementation will take a longer period of time.

It usually makes sense to put the entire checklist in the operating/procedure room, even when you only intended to focus intently on part of it. That way, you make the whole checklist familiar, and once your coaching efforts have been successful in getting teams to do one part well, those good practices can be easily carried over into the rest of the checklist.

## Continue to follow all the steps of checklist implementation

Even if you decide to work on one part of the checklist, it is important to complete all of the implementation steps and to follow the best practices described in this guide.

### EXAMPLES

#### Focus on the first two sections of the checklist: “Before Induction of Anesthesia” and “Before Skin Incision”

The debriefing in the “Before Patient Leaves Room” section can be one of the most challenging pieces of the checklist to implement. In part, this is because the trigger for doing the checklist is less clear, and in some facilities the attending surgeon leaves the room while a resident closes. One approach is to focus first on implementing an effective checklist process for the first two sections of the checklist, and then later expand your focus to work on the debriefing.

#### Focus on the “Before Skin Incision” items and briefing

Focusing on this section builds upon the pause your teams already do for the Time Out. Adding the briefing portion to that Time Out can create substantial value by improving communication. Once people are comfortable with that portion, you can begin to add other elements and move toward using the whole checklist.

#### Focus on the surgeon’s safety statement

If your teams struggle with doing the whole briefing discussion in the “Before Skin Incision” section, focus on getting them to do just the surgeon’s safety statement. Once they are comfortable with that part, you can build on that and introduce more of the checklist items.

## Make a decision, then document and share your plan

### Ready or not?

By comparing the six factors against the results of your assessment and taking stock of your resources, you will be able to commit to a course of action.

Your team should meet and discuss your findings and any concerns with facility leadership, and commit to one of the following paths:

- We are prepared to move forward as planned.
- We will build a better foundation for the work before trying to implement the checklist.
- We have some foundational issues to address, but we will move forward anyway, with a focus on one part of the checklist first.

# Chapter 6

## Checklist design and display

### CONTENTS

---

<i>Introduction</i>	85
Guiding principles	85
Checklist display options	85
Other display considerations	91
Design tips: Making your checklist easy to use	93

# Instructions for the team lead

## OVERVIEW

Use this chapter when planning how to design and display the checklist at your facility. Effective design and display ensure that the checklist is easy to read and use, and will increase the likelihood that it is used correctly.

This chapter supports the Own phase of checklist implementation and will be helpful when working on:

- Step 5: Customize and Test
- Step 6: Plan Your Expansion
- Step 9: Train and Spread

## RELATED CONTENT

- Chapter 4: *Assessing your surgical culture and environment*
- Chapter 7: *Customizing the checklist*
- Appendix E: *Checklist templates*

## RESOURCES AND MATERIALS

- Action guide: *Font target for checking checklist poster readability*
- Safe Surgery Checklist templates

## KEY CONCEPTS

- There are multiple ways of displaying the checklist: on paper for handheld use, as a poster, or displayed on operating/procedure room monitors.
- Regardless of how the checklist is displayed, it needs to be readable by all surgical team members.
- Effective design will help ensure that your checklist is easy to use.
- Keep in mind that your checklist may need to be updated periodically, so the cost of production and mounting should be considered.



## Introduction

This chapter discusses options for displaying your checklist, describes principles that underly effective checklist design, and offers specific design tips for making your checklist easy to use.

### About checklist design and display

Design and display are two main factors, along with the wording of your content, that determine whether your checklist will be easy to read and use in the operating/procedure room.

- **Checklist design** refers to the organization and format of checklist content and includes the typeface, font style, point size, color, and other visual elements.
- **Checklist display** refers to how you will make the checklist available to people: whether it is a on a piece of paper, a poster, or a screen.

## Guiding principles

### The checklist belongs to everyone

No one person in the operating/procedure room “owns” the checklist. Make your checklist visible, readable, and usable for everyone on the team.

### Keep it simple

Above all, your checklist must be clear and easy to use. Avoid the temptation to make your checklist look sophisticated or create an expensive permanent mounting.

### Location matters

Display your checklist in a location that is convenient for everyone.

### Fit your facility

Every facility has a unique layout and physical constraints. In many facilities, wall space may be limited, and it may vary considerably from one operating/procedure room to another. Be sure that the design of your checklist will work well in every room in which it will be used.

### Test before you invest

Make sure that what you plan for the design and display of your checklist will actually work in your facility before you spend money to produce it.

## Checklist display options

There are several common ways to display the Safe Surgery Checklist (see Diagram 6.1 on page 86 and Diagram 6.2 on page 92). Most often, the checklist is displayed as a poster or is printed on a letter-size (8.5×11 inch) piece of paper. Some facilities have incorporated their checklist into an electronic system, and many facilities put multiple copies of their checklists in their operating/procedure rooms to ensure access.

This section will help you understand key considerations for each option and understand the advantages and disadvantages of each so that you can decide what will work best in your facility.

### TIP

During the small-scale testing phase, using a handheld paper version of the checklist will help you stay flexible and reduce costs. Once the checklist is finalized, you can display it in whatever way is most effective for your facility.

DIAGRAM 6.1 Common ways to display the Safe Surgery Checklist

## HANDHELD



## POSTER



## ELECTRONIC



## HOW IT'S USED

Each surgical team member has access to a physical copy of the checklist from which they can read the steps for their role. The circulator may hold a copy for the surgeon to read.

Large posters of the checklist are mounted within the operating/procedure room so that they are easily readable by all team members.

The checklist is displayed on one or more screen(s) in the operating/procedure room.

## ADVANTAGES

- easy to create and revise
- inexpensive to print
- reinforces importance of this safety effort
- relatively easy to produce
- can leverage existing screen space
- eliminates concerns about sterility
- can facilitate tracking and data capture

## CONSIDERATIONS

- must have multiple copies
- must address ways to maintain sterility
- may require substantial wall space in operating/procedure room
- can be expensive, depending on production and mounting options
- if changes are made to your checklist, new posters will need to be produced
- building and modifying the checklist may require coordination with IT department or vendor
- if prompts and flow are not well designed, may undermine intent of checklist

## Handheld checklist

A handheld checklist is a good choice for many facilities. Usually printed on a single side of one piece of paper, this option means the checklist can easily be held by surgical team members or mounted close to team members on equipment or stands. The Safe Surgery Checklist templates are all designed for handheld use.

### Advantages

- easy to create and modify
- inexpensive to print
- flexible

### Considerations

#### The checklist must be accessible to everyone

All team members who need to read the checklist must have a physical copy in front of them.

When a handheld version of the checklist is used, multiple copies of the checklist are typically made available in the operating/procedure room so that each person has easy access to a hard copy. An alternative is to have the circulating nurse hold the checklist in front of each team member when he or she needs to read their items.

#### Sterility must not be compromised

The surgeon, technicians, and assistants (residents or PAs) are usually scrubbed in before using the checklist, so it is important to find a way for them to read the paper checklist while maintaining sterility.

Possible approaches:

- Have someone hold the checklist for the surgeon(s) and technicians.
- Mount a copy on equipment.
- Hang a copy from an IV pole.
- Produce a sterilizable copy of the checklist that can be placed on or near the surgical field.

#### A handheld checklist works best when it fits on one side of one page

Checklists work best when they fit on a single page. Using more than one page introduces the potential for confusion and errors.

If the content of your checklist will not fit on a single page (at a font size that is easily readable), evaluate whether you have too much content on the checklist. If your checklist content simply won't fit on a single page and you must use multiple pages, you can limit potential confusion and prevent users from starting the wrong page at the wrong time by:

- labeling every page so that it is clearly part of a set (e.g., “page 2 of 3”).
- using prominent labels for each section.
- putting each section of the checklist on its own page.

### EXAMPLE

The Cardiac Surgery Checklist template we developed needed two additional pause points to accommodate complex cardiac surgery. Therefore, the content could not fit on one page. The handheld version of that checklist spans multiple pages and is labeled and formatted to limit the potential for confusion:

**PART 1 of 4**  
**CARDIAC SURGERY CHECKLIST**

**Before Anesthesia**

**Nurse and Anesthesia Professional verify:**

- Patient identification (name and DOB)
- Surgical procedure matches consent
- Site marked
- Known allergies
- History and physical in p
- Anesthesia safety check

**Anesthesia Professional s**

- Anticipated airway of as
- Appropriate blood p
- Intravenous access/mo
- Lung isolation

**Team confirms:**

- Warming blanket, if indi
- Patient positioning
- R2 pads on and hooked
- C-arm needed

**PART 2 of 4**  
**CARDIAC SURGERY CHECKLIST**

**Before Patient leaves room**

**Nurse reviews with team:**

- Medication, sponge, needle counts
- Read back specimen labels including patient's name
- Patient's armband on/accurate

**Entire Surgical Team discusses:**

- Name of the procedure performed
- Equipment problems to be addressed
- How concerns for patient recovery and management
- All anticoagulation needed
- Post-pump antibiotics given/compatible
- Medication/insulin
- If difficult airway/information transmitted to ICU

**Surgeon asks:**

"What can be done to make the next case safer or more efficient?"

Generic Hospital System Name  
This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Version 0008 (2015-02-23)

## Decisions to make with your team

- Where will the supply of checklists be kept?
- Who will be responsible for stocking checklists in each operating/procedure room?
- Will you record any information on your checklist, and if so, what will you do with the checklist after surgery?

## Checklist poster

In many facilities, the Safe Surgery Checklist is displayed as a poster in the operating/procedure room. The checklist poster is usually mounted on a wall, but it is also possible to mount the poster on a stand or a large piece of equipment.

## Advantages

- A poster makes the checklist visible to everyone on the surgical team at the same time.
- Having a large Safe Surgery Checklist poster in every operating/procedure room reinforces the idea that patient safety is the number one concern in your facility.
- Posters can be relatively easy and cost effective to produce.

## Considerations

### Larger is better

One common mistake we see in many facilities is that the checklist poster is too small. Always make your checklist poster large enough so that the smallest text can be easily read by all surgical team members from where they would ordinarily stand in the room. (For guidance about text size, refer to the action guide *Font target for checking checklist poster readability* on page 97.)

### Using more than one poster

You may consider separating your checklist content onto multiple posters or displaying more than one copy of the same poster in different locations.

If you do so, remember that each poster must be easily readable by each surgical team member from where they would typically stand. If you separate the checklist onto multiple posters, consider how the individual posters can be labeled and where they can be mounted in your operating/procedure rooms so that the right part of the checklist can be easily identified when needed.

Here are several examples of how other facilities have explored the use of multiple posters.

### EXAMPLE 1

One facility conducted the first section of the checklist (“Before Induction of Anesthesia”) in a separate location from the main operating/procedure room. They chose to create one poster that included the items through induction and display it in the pre-op location. They created a second poster for display in the operating/procedure room that included the “Before Skin Incision” and “Before Patient Leaves Room” sections.

### EXAMPLE 2

One facility had an operating/procedure room in which the orientation of the operating table and the position of the team members in the room were similar for all cases. They wanted to encourage the surgeon to use the checklist, so they posted a second copy of the checklist on the wall opposite where the surgeon stood. With this approach, the surgeon did not need to turn around but could simply glance up to read the checklist.

### EXAMPLE 3

One facility wanted to reinforce the importance of the debriefing, so they reproduced a small version of this section of their checklist poster and posted it on the inside of the operating room door. This approach reminded surgeons to do the debriefing before they left the room. Because all of the debriefing elements were included, surgeons could turn around and start the discussion directly from the door.

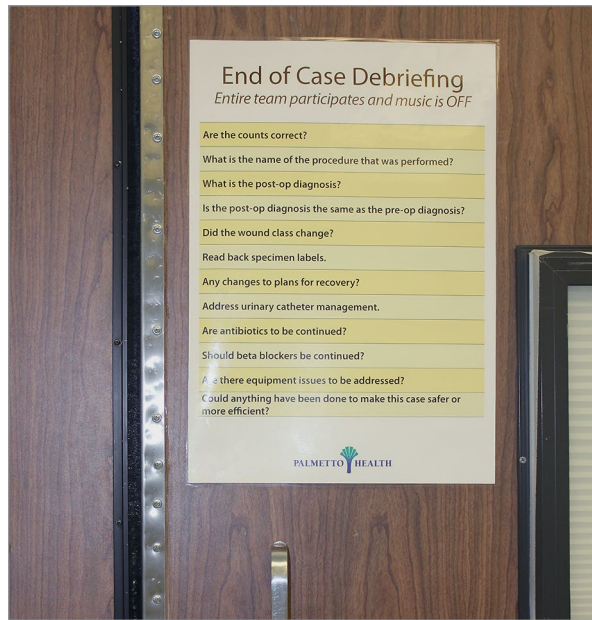


Image courtesy of Palmetto Health

### Decisions to make with your team

- Do you prefer the checklist to be one large poster, or should each section of the checklist be its own poster?
- Will one size work for all of your operating/procedure rooms?
- Where will you mount or attach the checklist poster?
- How will you attach the poster?
- Will you need to write on your checklist poster? (If so, consider laminating the poster, or mounting Plexiglas or clear plastic over the poster.)
- Do you want to have handheld versions of the checklist available to supplement the poster?

### Electronic display

Some facilities prefer to display their checklist on screens in the operating/procedure room. This can be accomplished by showing a digital version of the checklist (e.g., a PDF file). Some facilities choose to incorporate the checklist into their electronic medical record (EMR).

### Considerations for any digital display

**Someone will always have to read the checklist out loud from the screen**

- The actual performance of the checklist itself must be verbal, and must be a discussion among team members.

**Text on the monitors must be large enough to for everyone to read**

- Display the checklist on large monitors.
- Display the checklist on multiple monitors around the room when possible.

Readability should never be compromised: If your operating/procedure rooms have only one monitor or don't have large-enough monitors, consider using a handheld or poster checklist.

### Display the checklist as a PDF on monitors

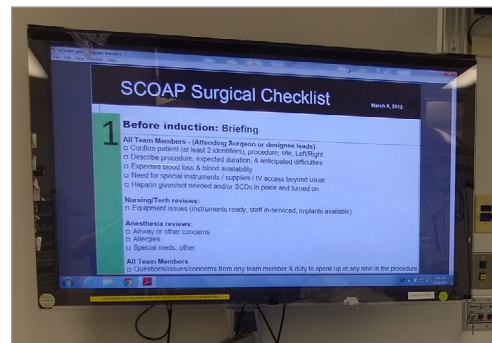


Image courtesy of University of Washington Medical Center (UWMC)

### Advantages

- less expensive than producing a poster
- easy and inexpensive to modify
- can display just the portion of the checklist that the team needs to follow at any given time

## Integration of the checklist into an EMR as the sole method of display

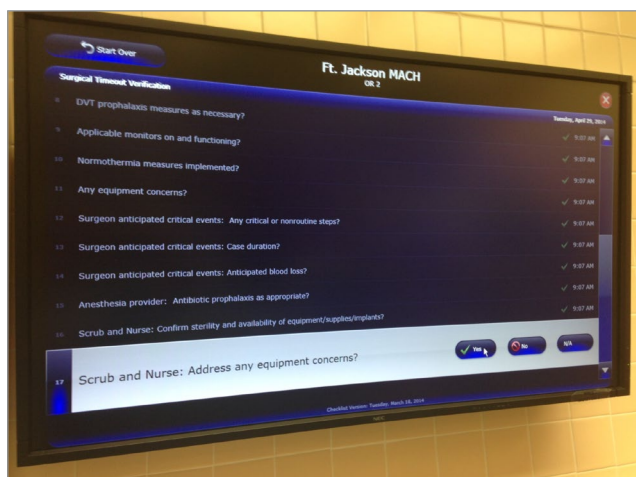


Image courtesy of Fort Jackson Moncrief Army Community Hospital

### Advantage

- can facilitate tracking, documentation, and data capture

### Considerations

Periodically compare checklist data collected from the EMR with data collected through observation, to verify that the information captured reflects what is actually going on in the operating/procedure room.

### Cautions

#### The checklist should never just be performed by nurses alone

One potential disadvantage to building the checklist into an EMR is that, in many facilities, EMR entry is typically a nursing task.

Facilities sometimes incorporate items from the checklist into the nursing documentation and rely on this as the only way of triggering checklist use in the operating room. Doing so puts the focus on documentation, rather than discussion, and will undermine the benefits of the checklist.

### Checking the boxes

*A checked box is not the same as a discussion, nor is it the same as a task that has been accomplished.* If you incorporate the checklist into your EMR and the circulating nurse simply sits in front of a computer screen in silence checking boxes, the only thing you will have accomplished is to create proof that the boxes got checked.

For example, a number of facilities have reported that their checklist could actually be checked off in the EMR before the patient is brought into the room. Or, it could be filled out for documentation purposes two hours after the procedure. These scenarios would undermine the purpose of the checklist and the goal of patient safety.

### Carefully evaluate recommendations of vendors

Some EMR vendors may offer an “off-the-shelf” version of a surgical safety checklist that has been designed to work with their EMR. We recommend against this approach if it eliminates an opportunity to get input from an interdisciplinary team and does not allow your facility to fully evaluate and customize checklist content for your unique needs and workflow.

### Decisions to make with your team

- How will the checklist be read aloud?
- Is it possible to display the checklist for everyone to see? (E.g., display the checklist on several monitors around the room.)
- How will you ensure that all surgical team members are engaged in discussing the checklist items?
- How will you prevent the checklist from becoming a nursing task focused on simply checking boxes?
- How can you prevent the checklist from being marked as “completed,” either before or after the procedure, when some of the checklist items have not been performed?

## Other display considerations

### Lamination or framing

You might want to consider laminating your checklist to protect it. If so, consider the following points:

#### Pros

- A laminated poster is more durable.
- The checklist will be easy to wipe down.
- You can use wipe-off markers (on some kinds of laminate).

#### Cons

- Glossy lamination can cause glare (matte lamination reduces glare somewhat).
- Lamination adds expense.

### Glare

The bright lighting in operating/procedure rooms can cause glare, particularly from laminated posters or posters that have been mounted behind Plexiglas or plastic. Glare makes it difficult to see a poster that would otherwise be readable. You cannot completely eliminate glare, but you can limit the potential by testing the placement of your poster and choosing materials that are less reflective.

## Creative ways to solve display challenges

*One facility saw an opportunity to build on an existing practice and decided to include a copy of the checklist in the patient's chart above the consent form.*

*The surgeons routinely read the consent form during the Time Out. In the new approach, the circulating nurse holds the chart in front of the surgeons, who read their portion of the checklist and verify the consent at the same time.*

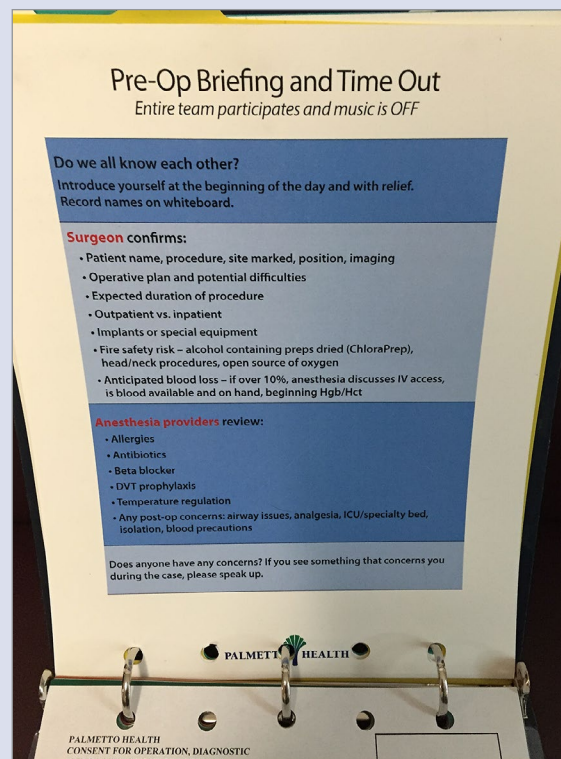


Image courtesy of Palmetto Health





## Design tips: Making your checklist easy to use

Using these simple design techniques will help make your checklist easy to read and navigate. (See Diagram 6.3 on page 96.)

### Use a large font

Use a sans serif font that is large enough for most people to comfortably read at the intended viewing distance in typical lighting conditions.

### Handheld use (letter-size page)

The following sizes are suggested minimums:

- 10 to 13 point for text and small headings
- 13 to 16 point for medium-sized headings
- 18 to 24 point for large headings

#### EXAMPLE

20-point title

14-point heading

- 11-point checklist item

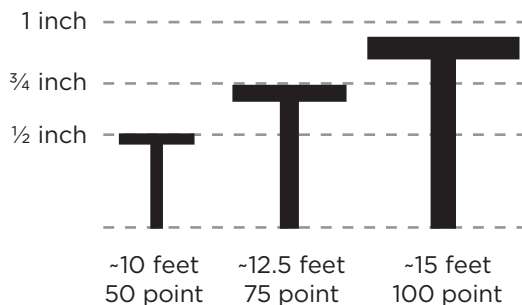
### Poster

The following sizes are suggested minimums:

- ½-inch tall (~50 point Arial) for text
- ¾-inch tall (~75 point Arial) for headings

#### EXAMPLE

Height of capital letter and comfortable reading distance



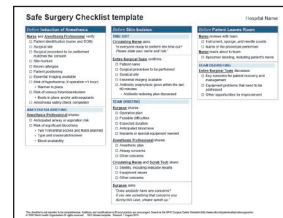
## Check poster font sizes in your operating/procedure rooms

We have created a tool that you can use to check whether the fonts you plan to use on a checklist poster are large enough to easily read. Simply print the action guide *Font target for checking checklist poster readability* on page 97, and tape it to the intended location in your operating/procedure room. View the page from the typical positions of the various surgical team members. Judge whether these font sizes are large enough to be read easily in your facility.

## If using a poster, make it large

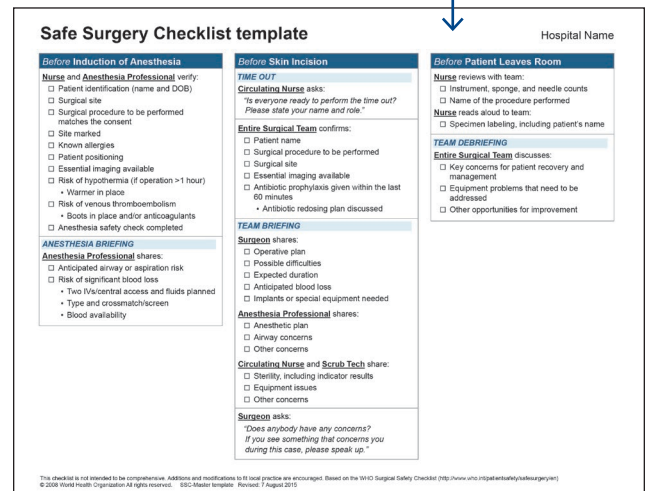
To be readable in a typical operating room, a letter-size checklist using 10.5 pt Arial type needs to be enlarged 500%. If you were to simply produce the handheld version of the Safe Surgery Checklist template for use as a poster, you would need to enlarge it 500% *at a minimum*.

#### EXAMPLE



8½×11 inch page

Enlarged 500% for minimum readability



56×44 inch poster

## Keep formatting simple

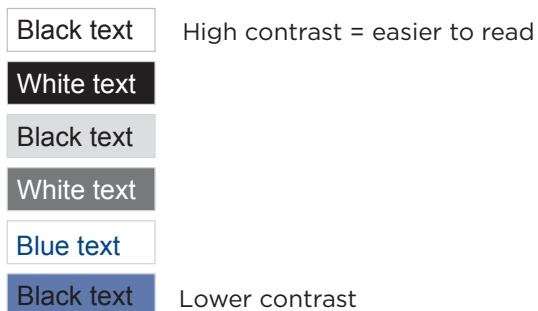
- Use sentence case: Capitalize only the first letter in a sentence or phrase.
- Avoid ALL CAPS or SMALL CAPS: Words written in capital letters are more difficult to read because the top and bottom edges are uniform, eliminating some of the visual clues we use to help recognize letters.

## Don't try to emphasize "really important" items with formatting

- Every item on your checklist should be important: Highlighting one or two creates a distraction and sends the wrong message.
- Formatting can't guarantee that an item won't be missed; address concerns about items being overlooked through training and coaching.

## Maximize contrast

The difference between text and the background on which it is printed is called contrast.



- Black text on a white background has the most contrast and is easiest to read.
- White text on a black background is also high contrast, but is tiring to read.
- Colored text and text on a colored background have less contrast and are more difficult to see.

- Shading behind text is not usually necessary. Although shading can create a more aesthetically pleasing checklist or help distinguish sections of content, that choice comes at a cost in readability. If you put shading behind text, be sure to test your checklist for readability in the lowest lighting conditions in your operating/procedure rooms.

## Use white space

The most effective way to make different "chunks" of content visually distinct and easy to navigate is to leave white space (i.e., empty space) around each one. Examples include:

- space above titles or headings
- space between columns
- indentation (space at the beginning of a line helps a reader see nested content within sections)

### EXAMPLE

No space between items or groups of items:

#### Surgeon shares:

- Operative plan and possible difficulties
- Expected duration
- Anticipated blood loss

#### Anesthesia Professional shares:

- Anesthetic plan
- Airway concerns
- Other concerns

Spacing makes items easier to read and helps identify groups of items at a glance:

#### Surgeon shares:

- Operative plan and possible difficulties
- Expected duration
- Anticipated blood loss

#### Anesthesia Professional shares:

- Anesthetic plan
- Airway concerns
- Other concerns

## Minimize the use of boxes, lines, and other graphics

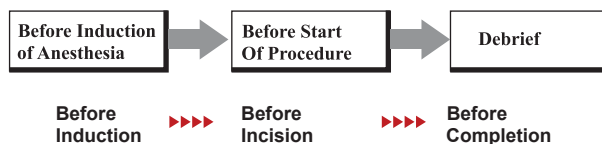
Graphic elements such as boxes and arrows can be used to group or emphasize text, but they can easily be distracting. Sometimes, graphics are added to checklists out of fear that users won't follow the checklist correctly, but a better approach is a simple design and focused content (and training before first use).

- Arrows are not needed to tell readers how to navigate content on a page; readers normally read from top to bottom and from left to right.
- If you must add lines or boxes, consider using thin gray lines so that graphic elements don't appear to be more important than the text.
- Add boxes or lines only when absolutely necessary for clarity and ease of use.
- Avoid adding supplemental graphics like stop signs to indicate a stop.

Here are a few examples of graphics that are unnecessary for users to properly navigate and use a checklist.

### EXAMPLES

#### Arrows between steps and shadowed boxes



#### Stop signs and exclamation points

- Like a real stop sign, this graphic does not ensure that people will actually stop.
- All text on your checklist should be treated as equally important; exclamation points suggest certain words or actions are more important.



**Site marked!!**

## Use color sparingly, with purpose and consistency

Design your checklist so that it is easy to read in black and white. Colors capture attention and can easily become a distraction if not used purposefully. In addition, people with color blindness may not see colors the way you intend.

Color can help viewers:

- distinguish one checklist from another.
- find content that is intended for different roles.
- identify different points in time (e.g., before anesthesia, after closing).

### Use each color with rigid consistency

Once a color has been assigned one meaning (e.g., green is used to indicate information is intended for anesthesia professionals), it should not be used in any other context.

## Use consistent language and formatting

Inconsistency is distracting and can be confusing. Consistency in both language and format makes information more clear and prevents readers from interpreting information incorrectly. The best practice is to:

- format each type of information in just one way.
- use parallel constructions.

### EXAMPLES

- If the name of each role is bold and underlined ("**Surgeon** shares"), don't use the bold and underlined format for other types of text.
- If the description of one role is followed by an action word (e.g., anesthesia professional *confirms*), all roles should have similar action verbs (e.g., "shares," "says," "discusses").

DIAGRAM 6.3 How design tips can be applied to an existing checklist

BEFORE

Time Out
<p><b>Entire Surgical Team:</b></p> <p><input type="checkbox"/> Is everybody ready to perform the time out? Please state your name and role.</p> <p><input type="checkbox"/> Patient      <input type="checkbox"/> Essential imaging</p> <p><input type="checkbox"/> Procedure    <input type="checkbox"/> Blood born path</p>
<p><input type="checkbox"/> <b>Has antibiotic prophylaxis been given within the last 60 minutes? -Plan for redosing discussed</b></p>
Briefing
<p><b>Surgeon shares:</b></p> <p><input type="checkbox"/> Operative plan</p> <p><input type="checkbox"/> Possible difficulties</p> <p><input type="checkbox"/> Expected duration</p> <p><input type="checkbox"/> Implants or special equipment</p>
<p><b>Anesthesia Provider shares:</b></p> <p><input type="checkbox"/> Anesthetic plan</p> <p><input type="checkbox"/> Other concerns</p>
<p><b>Circulating Nurse and Scrub Tech share:</b></p> <p><input type="checkbox"/> Sterility, including indicator results</p> <p><input type="checkbox"/> Any equipment issues and other concerns</p>
<p><b>Perfusion Team shares:</b></p> <p><input type="checkbox"/> Anticoagulation strategy</p> <p><input type="checkbox"/> Temperature management</p> <p><input type="checkbox"/> Cannulation strategy</p> <p><input type="checkbox"/> Cardioplegia strategy</p> <p><input type="checkbox"/> Other concerns</p>
<p><input type="checkbox"/> <b>Surgeon says: "Does anyone have any concerns? If you concerns you during the case, please speak up"</b></p>

The size and style of the checklist bullet is too prominent

A simpler character identifies each line with less distraction

AFTER

**Before Incision**

TIME OUT

**Circulating Nurse** asks:  
*"Is everyone ready for the time out? Please state your name and role."*

**Entire Surgical Team** confirms:

- Patient identification
- Procedure matches consent
- Essential imaging available
- Bloodborne pathogen
- Antibiotic prophylaxis given within last 60 minutes?
- Antibiotic redosing plan discussed?

TEAM BRIEFING

**Surgeon** shares:

- Operative plan
- Possible difficulties
- Expected duration
- Implants or special equipment

**Anesthesia Professional** shares:

- Anesthetic plan
- Other concerns

**Nursing Team** shares:

- Sterility, including indicator results
- Any equipment issues
- Other concerns

**Perfusion Team** shares:

- Anticoagulation strategy
- Temperature management
- Cannulation strategy
- Cardioplegia strategy
- Other concerns

**Surgeon** says:  
*"Does anyone have any concerns? If you have concerns during the case, please speak up."*

WHEN is most prominent

WHO is next most prominent – role has its own unique formatting (bold underlined)

Action verbs specify WHAT the role does

"White space" above headings visually groups content, making navigation easier

SAY THIS... Unique formatting: italic is used only for language that is to be read aloud

Key design changes in the "after" version:

- sans serif font
- white space between groups of checklist items
- indented checklist items
- smaller, simple bullets consistently spaced
- language to be spoken verbatim has a unique style
- checklist items flow top to bottom in sequence
- all checklist items share the same type style, indicating they are equally important

ACTION GUIDE

## Font target for checking checklist poster readability

PURPOSE: A small portion of a checklist poster is shown below at the intended size.

INSTRUCTIONS: Print this page and tape it to a wall in your operating/procedure room.  
View the page from the typical positions of various surgical team members.  
Judge whether these font sizes are large enough to be read easily in your facility.

# Before Anest

WHEN: 80 point Gotham Narrow Bold

## Nurse and Anesthe

WHO: 54 point Gotham Narrow Bold

Patient identif

WHAT: 54 point Gotham Narrow Book

Surgical proce

Site marked



# Chapter 7

## Customizing the checklist

### CONTENTS

---

<i>Introduction</i>	101
Principles of checklist customization	102
Customizing your checklist	103
Creating one checklist versus multiple checklists	108
Test your changes in a tabletop simulation	110

# Instructions for the team lead

## OVERVIEW

This chapter describes the rationale and steps for customizing the Safe Surgery Checklist template for your facility and answers common questions about the process.

This chapter supports the Own phase of checklist implementation and will be helpful in:

- Step 5: Customize and Test
- Step 11: Continually Improve

*Before you customize your checklist:*

- build an implementation team.
- assess your environment.

For guidance, see Chapter 3: *Building a checklist implementation team* and Chapter 4: *Assessing your surgical culture and environment*.

## RELATED CONTENT

- Chapter 1: *The Safe Surgery Checklist*
- Chapter 6: *Checklist design and display*
- Chapter 8: *Testing your checklist in the operating/procedure room*
- Appendix A: *Rationale and origin of items on the Safe Surgery Checklist*
- Appendix E: *Checklist templates*

## RESOURCES AND MATERIALS

- Action guide: *How to make improvements to your existing surgical checklist*
- Action guide: *How to customize the Safe Surgery Checklist for your facility*
- Action guide: *Checklist for customizing the Safe Surgery Checklist*

## KEY CONCEPTS

- Customizing the Safe Surgery Checklist is an essential step that should not be skipped.
- Customizing the checklist creates a sense of ownership, improves buy-in, and addresses facility-specific needs.
- At a minimum, the checklist should be “localized” to add your facility’s name and local information.
- Make the checklist simple and easy to read.
- Always keep the conversation prompts.
- Carefully evaluate each item on the checklist template, items you may potentially add, and items you may consider removing.
- Use language that people understand and use in your facility and that is easy to say out loud.
- Carefully evaluate whether specialty checklists are needed at your facility.
- Tabletop simulation is an essential step that identifies potential problems and barriers before use with a patient.
- Always test changes to your checklist away from patients before using the new version in a case.



## Introduction

One of the key tasks of the implementation team is to modify the checklist together as a team. The Safe Surgery Checklist templates discussed in this chapter reflect years of vetting, testing, and lessons learned from actual use. Nevertheless, your implementation team will need to customize the checklist to ensure that it reflects your culture and the workflow of your surgical teams.

### IMPORTANT

Before customizing your checklist, be sure that your team has reviewed Chapter 1: *The Safe Surgery Checklist* and Appendix A: *Rationale and origin of items on the Safe Surgery Checklist* so that you understand:

- what the Safe Surgery Checklist can and cannot do.
- how to use the Safe Surgery Checklist.
- why each item is on the Safe Surgery Checklist.

### About the Safe Surgery Checklist templates

Each Safe Surgery Checklist template has been carefully designed and tested and is available for you to use as a model. There is one master version plus four alternate versions (reflecting minor variations) from which to choose:

- *Safe Surgery Checklist – Master version*
- *Safe Surgery Checklist – Team briefing before induction*
- *Safe Surgery Checklist – Team already knows each other*
- *Safe Surgery Checklist – Two-page version*
- *Ambulatory Safe Surgery Checklist – Two-page version*

Examples are shown in Appendix E: *Checklist templates* and can be downloaded from [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).

If you are already using a checklist in your operating/procedure rooms, you can decide whether you want to start fresh or use this chapter and the master template to help evaluate how you can improve your existing checklist.

## Why make changes?

### Address local needs

It is your workflow and culture that the checklist needs to reflect. There are many reasons why your checklist should differ from that of other facilities, including:

- The language on the checklist needs to reflect the way people talk at your facility.
- You have a unique process that your checklist needs to follow.
- Your checklist needs to look a certain way to match other materials from your facility.
- The physical layout of your facility or of your operating/procedure rooms is unique.

### Engage your implementation team and improve surgical team buy-in

Customizing the checklist brings people together from all relevant disciplines, including anesthesia professionals, nurses, surgeons, technicians, perfusionists, and others who work in your operating/procedure rooms. Customization fosters teamwork and allows people in every role to feel that their input is recognized and addressed.

### Create a sense of ownership

Surgical teams may be reluctant to embrace a checklist that is imposed from outside. Customizing the checklist gives you the opportunity to ensure that your checklist reflects and supports the workflow, language, and culture at your facility. Even though it sounds simple, just adding your facility's name lets everyone know that the Safe Surgery Checklist is intended to serve your surgical teams and patients.

## Principles of checklist customization

The Safe Surgery Checklist includes two kinds of items that help make every surgical patient safer:

- **Process checks** remind team members to verify, perform, and discuss critical safety steps.
- **Conversation prompts** remind team members to share and discuss critical information about the patient, risks, and surgical plans so that they are prepared to work together more effectively as a unit (see Diagram 7.1).

### Respect the goals of the checklist

Regardless of the changes you consider, there are two main points to always keep in mind. Be sure that your changes do not undermine the goals of the checklist:

- to serve as a reminder for the team to perform and verbally confirm critical safety steps for every patient, every time
- to improve communication, teamwork, and the culture in your facility

### Never remove conversation prompts

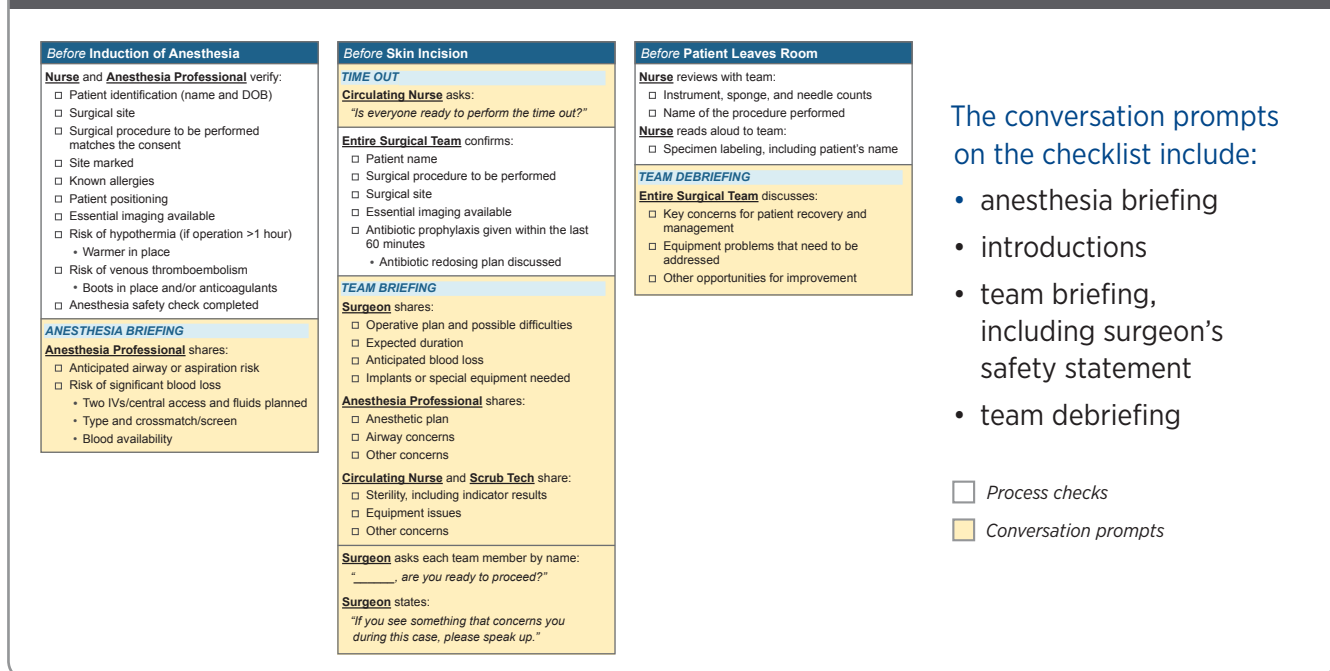
The conversation prompts on the checklist have had a tremendous impact on improving surgical care and positively changing the way in which surgical team members interact with one another and the patient. They should not be removed, because they trigger conversation about events in the operating/procedure room that might not otherwise be discussed as a team.

### Effective communication among team members is essential for patient safety

*“As a cardiac and thoracic surgeon, performing surgery that’s exceptionally complicated, where the patients are often very sick – it takes a team and it takes leadership to do that kind of complicated surgery. I saw too many times when things didn’t go as they should have because of breakdowns in communication between team members, with information that should have been shared and wasn’t shared.”*

— An anonymous surgeon talking to his peers about why the conversation prompts are so valuable

DIAGRAM 7.1 Safe Surgery Checklist conversation prompts



### Keep the three-pause framework

Each section of the checklist template matches a pause in surgical workflow — before the induction of anesthesia, before the skin incision or start of the procedure, and before the patient leaves the room. For a straightforward case, each of these sections should take about one minute for team members to discuss.

### Use as few items as possible to meet your goal

Many facilities struggle with the temptation to put too many items on their checklist. Use Step 3, “Decide which items belong on your checklist” on page 105 to guide you through the process of evaluating potential additions.

### Use language that is comfortable to say

Use clear, unambiguous language that feels “right” to say out loud. When items are written in language that is not comfortable to say, they are less likely to be read aloud to the team. The failure to read items aloud is one of the most common problems that undermines the successful use of the checklist.

### Always add the name of your facility

Clearly identify the checklist as your own by adding your facility’s name. You can consider putting your logo on the checklist as well, but be sure that it does not overshadow the actual checklist content.

### Keep the design simple and easy to read

Think of the checklist as a PowerPoint deck. If you are designing a presentation to give to someone, you don’t list every word that you are going to say. The checklist is similar: The items on the checklist are prompts for discussion and don’t need to include every word.

## Customizing your checklist

Creating a checklist that will work well in your operating/procedure rooms involves the following steps:

- Decide where you want to perform checklist items that should be discussed before the induction of anesthesia.
- Decide when to do the briefing.
- Evaluate which items should be included on your checklist.
- Choose the right wording for each item.

The steps are presented in a recommended order, but feel free to address each decision in an order that makes sense for your implementation team.

#### TIP

Procedures for customizing your checklist are summarized in single-page action guides for easy reference.

- If you already have a surgical checklist, use the action guide *How to make improvements to your existing surgical checklist* on page 112.
- If you are introducing a new checklist, use the action guide *How to customize the Safe Surgery Checklist for your facility* on page 113.

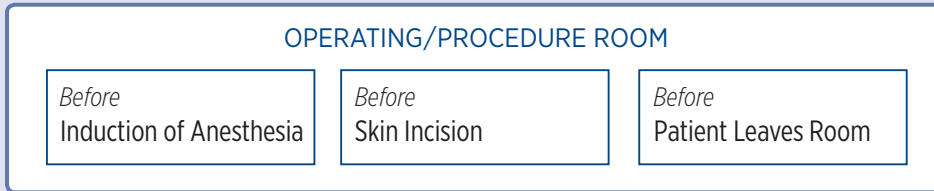
#### STEP 1

### Decide where to conduct the “Before Induction” checks

A majority of facilities choose to run the “Before Induction of Anesthesia” portion of the Safe Surgery Checklist in the operating/procedure room. In this approach, the checklist is used only in the operating/procedure room and does not change any of the existing routines you have in your preoperative area. When the patient arrives in the operating/procedure room, the checklist is run and discussion held between the anesthesia professional, circulating nurse, and scrub tech.

## DIAGRAM 7.2 Where will you complete the “Before Induction of Anesthesia” portion

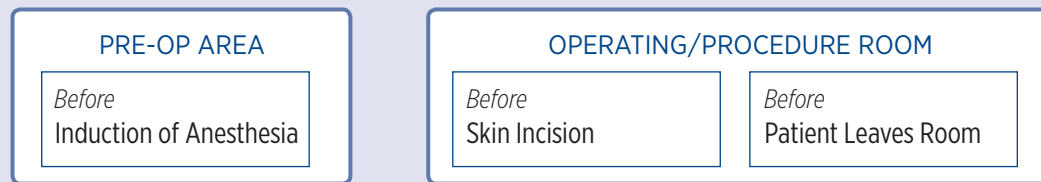
### Scenario 1: One location, one checklist



In this approach, the Safe Surgery Checklist is used only in the operating/procedure room. The checklist does not preclude or change any of the existing routines you have in your preoperative area. When the patient arrives in the operating/procedure room, the checklist is run and discussion held between the anesthesia professional, circulating nurse, and scrub tech.

### Scenario 2: Two locations, checklist divided into two portions

One part in prep/pre-op holding area + two parts in operating room



**Safe Surgery Checklist template** Hospital Name

---

**Before Induction of Anesthesia**

*Nurses and Anesthesia Professionals verify:*

- Patient identification (name and ID#)
- Surgical site
- Surgical procedure to be performed matches the consent
- Site marked
- Known allergies
- Patient positioning
- Essential imaging available
- Risk of hypothermia (if operation > 1 hour)
  - Warmers in place
- Risk of venous thromboembolism
  - Boots in place and/or anticoagulants
- Anesthesia safety check completed

**ANESTHESIA BRIEFING:**

*Anesthesia Professional shares:*

- Anticipated strategy of aspiration risk
- Risk of significant blood loss
  - Type and crossmatch/screen
  - Blood availability

This version of the Safe Surgery Checklist template is intended for facilities in which the Before Induction steps are performed in the operating area and the Before Skin Incision and Before Patient Leaves Room sections are performed in the operating/procedure room. This template is not intended to be comprehensive. Additions and modifications to local practices are encouraged. Based on the WHO Surgical Safety Checklist (http://www.who.int/surgicalchecklist). © 2008 World Health Organization. All rights reserved. SSC-09p1.1 Revised 7 August 2010

**Safe Surgery Checklist template** Hospital Name

---

**Before Skin Incision**

*TIME OUT*

*Circulating Nurse asks:*

"Is everyone ready to perform the time out?"

*Please state your name and role."*

*Entire Surgical Team confirms:*

- Patient name
- Surgical procedure to be performed
- Surgical site
- Essential imaging available
- Antibiotic prophylaxis given within the last 60 minutes
  - Antibiotic redosing plan discussed

**TEAM BRIEFING:**

*Surgeon shares:*

- Operative plan
- Possible difficulties
- Expected duration
- Anticipated blood loss
- Implants or special equipment needed

*Anesthesia Professional shares:*

- Anesthetic plan
- Airway concerns
- Other concerns

*Circulating Nurse and Scrub Tech share:*

- Sterility, including indicator results
- Equipment issues
- Other concerns

**Surgeon asks:**

"Does anybody have any concerns?"

"If you see something that concerns you during this case, please speak up."

This version of the Safe Surgery Checklist template is intended for facilities in which the Before Induction steps are performed in the operating area and the Before Skin Incision and Before Patient Leaves Room sections are performed in the operating/procedure room. This template is not intended to be comprehensive. Additions and modifications to local practices are encouraged. Based on the WHO Surgical Safety Checklist (http://www.who.int/surgicalchecklist). © 2008 World Health Organization. All rights reserved. SSC-09p2.1 Revised 7 August 2010

The *Safe Surgery Checklist — Two-page version* template is available for facilities to use in this scenario.

This approach should be used only when the anesthesia professional and circulator are able to go to the pre-op area to review the checklist with the patient at the same time.

Some facilities prefer to conduct the “Before Induction of Anesthesia” portion of the checklist in the preoperative area. In this approach, the anesthesia professional and circulating nurse must be in the pre-op area at the same time so that they can review the checklist with the patient as a team. One disadvantage of this approach is that it prohibits the scrub tech from participating in the discussion.

If you wish to conduct the “Before Induction of Anesthesia” checks in your pre-op area, you may wish to consider using the *Safe Surgery Checklist – Two-page version* template (see Diagram 7.2 on page 104).

## STEP 2

### Decide when you want to conduct the team briefing

The WHO Surgical Safety Checklist placed the team briefing in the “Before Skin Incision” portion in recognition of the fact that a majority of surgeons are not present before the induction of anesthesia. The master version of the Safe Surgery Checklist template follows this structure, and this is the approach that works for most facilities.

If your surgeons are *always* present at the time of induction (100% of surgeons, 100% of the time), you may want to conduct the briefing before the patient is induced so that you have more time to address any issues or concerns. Do not try to use this approach to the checklist as a way to get surgeons to be in the operating/procedure room at induction.

If you wish to conduct the team briefing before induction, refer to the template *Safe Surgery Checklist – Briefing before induction version* in Appendix E: *Checklist templates*.

## STEP 3

### Decide which items belong on your checklist

It may be tempting to create an exhaustive checklist that matches your surgical workflow, but including too many items will reduce the overall usability of the checklist.

#### Evaluate each item on your checklist with six questions

Starting with your existing checklist or with the Safe Surgery Checklist template you have chosen, use these questions to help your implementation team carefully evaluate each existing item, proposed new items, and items you will consider removing. The goal of this process is to address your facility’s unique needs without degrading the checklist.

The action guide *Checklist for customizing the Safe Surgery Checklist* on page 114 lists the questions on a single page for easy reference during team meetings.

#### QUESTION 1

#### Is this a critical safety step at risk of being missed?

If you already have a highly reliable system in place that ensures that an item on the checklist is done 100% of the time at your facility, you should consider removing that item.

#### EXAMPLES

- pulse oximetry — *does not* belong
- antibiotic prophylaxis — *does* belong
- check of patient medications — *may* belong

When updating the WHO checklist for use in South Carolina, we removed the item for checking whether pulse oximetry was in place. In South Carolina (and throughout the United States), we know pulse oximetry is always done, so that item was not needed on the checklist.

It is important to keep antibiotic prophylaxis on the checklist. Some facilities initially want to remove this item because their documentation shows that antibiotics are given nearly 100% of the time. However, documentation rates don't always align with what actually occurs in the operating/procedure room. Additionally, confirming this step in the operating room helps to ensure that the antibiotics are fully infused before the start of the procedure.

A medication check may make sense in some circumstances. Eye surgery can have serious consequences when performed on patients who are taking certain kinds of drugs. If the team is unaware that the patient has taken one of those drugs, the risk is high. If you work in an eye center, this is the sort of item you might consider adding to your checklist if you don't already have a process that captures and communicates the information to the team 100% of the time.

#### QUESTION 2

##### **Is this a safety step that you might not notice if it is not done?**

Here is where the checklist can be the most powerful. Some tasks in an operating/procedure room are easily verified at a glance, while others must be verified through discussion or documentation. If a task can be easily missed, consider whether it should be on your checklist.

#### EXAMPLES

- iodine/tinted prep — *does not* belong on a checklist
- antibiotic prophylaxis — *does* belong on a checklist

If you are using an iodine-based or tinted prep on a patient, you can look at the skin and tell that the prep is on. In contrast, there is no way for the team to know whether an antibiotic was given unless the question is asked. If you can visually confirm that a safety step is done, you may not need to include that item on the checklist.

#### QUESTION 3

##### **Is this item discussed when all relevant team members are present?**

All relevant team members should be present during discussion of each checklist item so that the potential for missed information or miscommunication is minimized. For instance, the “Before Induction of Anesthesia” portion of the checklist should include, at a minimum, the anesthesia professional and the circulating nurse. It's a good practice for the scrub tech to also be present when possible, but it is not required.

#### EXAMPLES

- introductions
- operative/procedure plan
- equipment and implant needs
- expected blood loss
- other opportunities for improvement

#### NOTE

The timing of some checklist items reflects the fact that the surgeon may not be in the room at the beginning of the case. Also, in teaching hospitals, the attending surgeon may leave the operating room before closing. Certain items require the surgeon's input and can be completed only when the surgeon is present and ready.

If the whole team is present during the entire case (i.e., the surgeon is always in the room prior to induction), your checklist might better reflect how your teams work if you move the briefing discussion from “Before Skin Incision” to the “Before Induction of Anesthesia” section.

#### QUESTION 4

##### **Is a checklist item the best way to address the problem or need?**

You may find that you need an additional safety check at your facility, but before you add an item to your checklist, consider whether the checklist

is the best way to address it. The more items you add, the harder your checklist will be to use.

### EXAMPLES

- glycemic control
- fire risk assessment
- checking pressure points

If you want to use your checklist to focus attention on glycemic control, for instance, you can include a prompt for a glycemic control protocol that is defined and described elsewhere. The checklist should not describe each step of the protocol, but should simply trigger the protocol or a confirmation that the protocol has been performed. The same logic applies to the risk of fire. Some facilities incorporate a full fire risk assessment in their checklist, but it is a better use of space to just prompt your fire assessment protocol.

If a new item will meet a need in your facility that is not already addressed (e.g., checking pressure points), include only a brief prompt, and place it in an appropriate spot on the checklist.

### QUESTION 5

#### Can something be done about it?

This question is useful when thinking about the timing or sequence of items: Does the item prompt a check for something that can actually be addressed when the item is read aloud from the checklist?

### EXAMPLES

- hypothermia — does belong on a checklist, but needs to be at the right time
- hair removal — does not belong on a checklist

When a procedure might take longer than an hour, patients sometimes have a warmer put on them to prevent hypothermia. The Safe Surgery Checklist template includes an item about hypothermia in the first column (“Before

Induction of Anesthesia”). It would not make sense to prompt a check for warming equipment after the patient is covered with drapes, because if the warmer had not yet been applied the surgical team would have to take the drapes down to put the warmer on.

Hair removal does not belong on the checklist because the surgical site should have been properly prepared before the checklist is started.

### QUESTION 6

#### Will this item help anybody else on the team?

This question is especially important when you are thinking about removing an item from the checklist template. Use this question to shift the frame of reference.

Instead of thinking “*Will it help me, the circulating nurse?*” or “*Will it help me, the surgeon?*” challenge the group to consider: “*Could this item possibly help somebody else in the operating room?*”

Always remember that the ultimate goal of the checklist is to improve communication. For instance, it may not help the surgeon to verbalize the operative plan, but it probably will help the surgical technician, the scrub nurse, the circulating nurse, and the anesthesia professional to have extra information about the surgeon’s plan.

**STEP 4****Choose the right language**

The words you put on your checklist matter. They will affect whether the checklist is easy to read and easy to follow, and whether it feels like part of your facility's culture.

**Make it easy to say**

The act of reading the checklist out loud is critical to its success, so it is important to find language that feels right to say.

**Use short phrases as triggers**

The checklist is intended to trigger a verbal discussion among team members. In most cases, you won't have space to include all the words that people might say. Instead, use a short phrase to serve as a trigger. For instance, when giving a PowerPoint presentation, you wouldn't put every word you will say on a slide. Instead, you put short bulleted phrases that remind you what to say.

**Use simple, straightforward prompts**

One checklist included an item that reads: "What are the critical or nonroutine steps of the procedure?" But this language confused the team. If the language doesn't sound or feel right, change it so that it makes sense to your team. For example, you might instead say "What's the plan for the surgery?"

**Choose words that fit the space**

The words you choose must fit within the space available, in a font that is easy to read by all team members from where they are normally standing in the operating/procedure room.

**Use language that people understand and use in your facility**

People in different facilities might use different words to refer to the same thing. Facilities in different regions also might have different ways of saying the same thing. It's important that your checklist reflects the way your surgical teams talk.

Refer to Diagram 7.3 on page 109 for examples of how language can be changed while respecting the spirit of the checklist item.

**Creating one checklist versus multiple checklists****Start with one checklist**

It's best to start with just the Safe Surgery Checklist because it is specifically designed to be applicable for the majority of cases in most facilities. Once facilities are successful in implementing the main checklist, they sometimes then apply that learning to put checklists in place in isolated, specialized procedural areas such as endoscopy.

**Consider creating specialty checklists only in specific limited circumstances**

We have identified several instances in which the main Safe Surgery Checklist does not work as well:

- very short procedures (e.g., ophthalmology)
- cardiac surgery

For those types of surgery, creating a modified version of the Safe Surgery Checklist to address specialized needs makes sense. (See Appendix E: *Checklist templates* for cardiac surgery and ambulatory surgery templates.)

**Specialty checklists work best when isolated, with dedicated spaces and teams**

Our experience is that specialized checklists are most likely to be successful when *all* of these conditions are true:

- They are used *only* in operating/procedure rooms that are located in a separate part of the facility.
- The types of cases done in those rooms are the same every day.
- Only one checklist is used (i.e., multiple checklists should not be used in the same room).



## DIAGRAM 7.3 Examples of alternate wording for checklist items

**BLOOD LOSS**

**Anesthesia Professional** shares:

- Anticipated airway or aspiration risk
- Risk of significant blood loss
  - Two IVs/central access and fluids planned
  - Type and crossmatch/screen
  - Blood availability

**Other ways to word this item:**

- Are blood products required and available?
- What is the EBL?
- Blood (or crossmatch) available if needed
- Is there a need for blood products?
- Blood availability confirmed
- EBL/blood plan

**SURGEON SAFETY STATEMENT**

**Surgeon** asks:

*“Does anybody have any concerns?  
If you see something that concerns you  
during this case, please speak up.”*

**Other language the surgeon can use:**

- “If anyone on the team sees something that the team should know about, please speak up.”
- “If anyone on the team sees something that the team should know about, please speak up anytime during the procedure.”
- “If you see, suspect, or feel that patient care is compromised, will you speak up?”
- “Remember that all are free to voice any concerns at any time throughout the procedure.”
- “Does anyone have concerns? If you think there is a problem, please speak up.”

**INTRODUCTIONS**

**Circulating Nurse** asks:

*“Is everyone ready to perform the time out?  
Please state your name and role.”*

**Some facilities have the circulator say:**

- “We will start by introducing ourselves by name and role.”
- “Are there any unfamiliar staff in the room? Let’s all introduce ourselves by name and role.”

**Some facilities use a different kind of prompt if all team members are present prior to induction:**

- Team introductions to patient, including name and role

**Some facilities have the surgeon address each person by name:**

When facilities have static surgical teams and everyone on the team knows each other well, introductions can feel awkward. Some facilities instead have the surgeon “check” each member by addressing them individually by name.

**Circulating Nurse** asks:

*“Is everyone ready to perform the time out?  
Please state your name and role.”*

*In static teams, introductions can be moved from the Time Out section to the surgeon’s portion of the Briefing section if the surgeon addresses each person by name and then continues with the safety statement.*

**Surgeon** asks each team member by name:

*“\_\_\_\_\_, are you ready to proceed?”*

**Surgeon** states:

*“If you see something that concerns you  
during this case, please speak up.”*

### EXAMPLE

The *Safe Surgery Checklist – Master version* is built around three sections that mirror key pause points in surgical workflow. Cardiac surgery has additional pause points, so the general version of the checklist does not reflect the workflow of cardiac teams. Because cardiac surgery is often performed in dedicated suites by specialized surgical teams, it makes sense to create a checklist specifically for cardiac surgery. (See the Cardiac Surgery Checklist we developed as an example.)

### Avoid making checklists for specific procedures

There are special considerations or tasks for many different procedures. In an ideal world, you might want to have a unique checklist for each type of patient and procedure. Unfortunately, the technology is not yet available in most facilities that can reliably and efficiently make this possible.

Your surgeons may ask for a version of the checklist that reflects a specialized procedure they perform. Assure them that the briefing portion of the checklist allows surgeons to speak to specialty or procedural steps when they discuss the operative plan with the surgical team.

### EXAMPLE

We ran a project to create five neurosurgery-specific checklists for different procedures (e.g., insertion of a VP shunt). The checklists were to be used in neurosurgical suites and would address procedure-specific tasks that had been identified as critical for patient safety. What we learned is that the checklists were difficult to implement and caused confusion within the teams that had helped develop and design them. Ultimately, the facility that tested these checklists reverted back to using the single general Safe Surgery Checklist.

### In summary: Considerations for using more than one checklist

Remember that all of your checklists should be tested, beginning with a tabletop simulation and followed with small-scale testing, *before* being

put into wider practice. If you decide to use multiple checklists, they should have the same look and feel and contain similar teamwork and communication prompts.

### Advantages

- You can streamline checklists for short surgeries by removing items that are never encountered (e.g., blood loss for cataract surgeries), which can help address objections from surgeons who routinely perform those surgeries.
- You can add critical items for more complex surgeries like cardiac surgery.

### Disadvantages

- Using multiple checklists in the same operating/procedure room is potentially confusing and cumbersome.
- Extra processes are required to ensure that the right patient gets the right checklist every time.
- Adding extra checklists means additional work to customize and test each version thoroughly.

## Test your changes in a tabletop simulation

Tabletop simulation is a read-through that takes place away from patients but mimics how the checklist will be used in surgery. The point is to test your written checklist in a verbal way so that you can identify awkward wording or flow and make necessary revisions before you use the checklist with a patient. You may need to repeat tabletop simulation several times.

### *Tabletop simulation is important because it:*

- keeps the initial investment small.
- familiarizes the team with the checklist.
- efficiently reveals problems.
- prevents the initial testing from having any impact on actual patient care.

## Preparation

- Schedule time in a conference room, an empty operating/procedure room, or other space where you have a comfortable amount of room and enough privacy to concentrate on the work.
- Include your implementation team and any other people who have been actively involved in proposing and discussing changes to the checklist.
- Prepare printed copies of the checklist for every participant. Consider bringing a few extra for taking notes or marking changes.

## Conducting the tabletop simulation

1. Explain the purpose of the exercise to the participants.
2. Assign each person a surgical role, at least one person for every role described on the checklist. If possible, team members should play their usual roles.
3. Optional: Assign one person the role of patient. (This can be a good role for the administrative member of your implementation team.) If you don't have enough people, one person can play the role of the patient and also play his or her clinical role.
4. Assign one team member to document issues, awkward wording, etc.
5. Give all team members a copy of the checklist that they will read; invite them to write notes or comments on the page.
6. Make up a patient name and the kind of case you are going to do.
7. As in the beginning of an actual surgery, have the team follow the checklist, reading each item aloud and interacting as they would in an actual case.

8. Stop and discuss concerns if an issue comes up during the tabletop simulation (or you may choose to talk about it at the end of the simulation).
9. When the case is “done,” talk with the team. Ask everyone what worked and what didn't and why. Take notes.

As a team, discuss the simulation and answer these questions:

- How did it go?
  - Did the checklist items get the team to talk about what they needed to?
  - Are all of the critical steps adequately prompted by an item on the checklist?
  - Is there redundancy?
  - Are the checklist items worded clearly?
  - Are the items addressed at the appropriate times?
10. If you have time, make revisions and try it again while your team is assembled.

Discuss refinements or changes; be sure that all issues you documented during the exercise are addressed.

## How to make improvements to your existing surgical checklist

**USE WHEN:** Your facility currently uses a safety checklist in the operating/procedure room.

This guide summarizes the steps to follow when revising or refining your surgical safety checklist. Use it as a reference as you lead your team through the checklist modification process.

### Prerequisite tasks

This procedure assumes that you have built an implementation team and completed an assessment of your current environment by direct observation of surgical teams and administration of a culture survey.

### Materials

- results of your culture survey
- results from your assessment of existing checklist use
- results from your assessment of existing surgical workflow
- a copy of your existing surgical safety checklist
- a copy of the Safe Surgery Checklist template
- a copy of the quick-reference guide *Rationale and origin of items on the Safe Surgery Checklist*
- a copy of the action guide *Checklist for customizing the Safe Surgery Checklist*

### Working with your implementation team, use the following process:

1. Review the results of your culture survey to identify gaps in teamwork and communications. Be sure to look at two key indicators:
  - the ability of people on your surgical teams to speak up and voice concerns
  - team members' perceptions of how the checklist is used
2. As a team, review the rationale for each item on the Safe Surgery Checklist template (refer to the quick-reference guide *Rationale and origin of items on the Safe Surgery Checklist*). Understanding why those items are included in the template can help you evaluate the items on your existing checklist.
3. Review the information you collected while observing your current surgical workflow and watching how teams use your existing checklist. Identify gaps between your intended surgical workflow and existing practice.
4. Compare your existing processes with your existing checklist items and the recommended items on the Safe Surgery Checklist template. Identify any gaps or opportunities.
5. Create a list of proposed changes to your checklist that might address the gaps, and prioritize the potential changes according to their impact on patient safety and team communication.
6. Evaluate each proposed change using the criteria and the six questions described in “Decide which items belong on your checklist” in Chapter 7. (The questions are also listed in the action guide *Checklist for customizing the Safe Surgery Checklist* in Chapter 7.) Determine the language you will use for any items to be added.
7. Make changes to your checklist.
8. Conduct a tabletop simulation to test your work.
9. Continue to make changes and conduct tabletop simulations as needed until you are ready to test the checklist in a real case. (See Chapter 8: *Testing your checklist in the operating/procedure room.*)

## How to customize the Safe Surgery Checklist for your facility

**USE WHEN:** Your facility is introducing a surgical safety checklist for the first time.

This guide summarizes the steps to follow when customizing the checklist to meet your local needs. Use it as a reference as you lead your team through the checklist modification process.

### Prerequisite tasks

This procedure assumes that you have built an implementation team and completed an assessment of your current environment by direct observation of surgical teams and administration of a culture survey.

### Materials

- results of your culture survey
- results from your assessment of existing surgical workflow
- a copy of the Safe Surgery Checklist template
- a copy of the quick-reference guide *Rationale and origin of items on the Safe Surgery Checklist*
- a copy of the action guide *Checklist for customizing the Safe Surgery Checklist*

### Working with your implementation team, use the following process:

1. Review the results of your culture survey to identify gaps in teamwork and communications. Be sure to look at two key indicators:
  - the ability of people on your surgical teams to speak up and voice concerns
  - people's perceptions of how the checklist is used
2. As a team, review the rationale for each item on the Safe Surgery Checklist template (refer to the quick-reference guide *Rationale and origin of items on the Safe Surgery Checklist*). It is critical to understand why each item on the checklist has been included, before you evaluate potential changes.
3. Based on the information you collected while observing your current surgical workflow, identify gaps between your intended surgical workflow and existing practice.
4. Compare your existing processes with the Safe Surgery Checklist template and identify any differences or gaps that need to be addressed.
5. Based on those gaps, create a list of proposed changes to the checklist template and prioritize them according to their impact on patient safety and team communication.
6. Evaluate each proposed change to the template using the criteria and the six questions described in "Decide which items belong on your checklist" in Chapter 7. (The questions are also listed in the action guide *Checklist for customizing the Safe Surgery Checklist* in Chapter 7.) Determine the language you will use for any items to be added.
7. Make changes to the checklist template to create a draft checklist for your facility.
8. Conduct a tabletop simulation to test your work.
9. Continue to make changes and conduct tabletop simulations as needed until you are ready to test the checklist in a real case. (See Chapter 8: *Testing your checklist in the operating/procedure room.*)

## Checklist for customizing the Safe Surgery Checklist

**PURPOSE:** The following questions will help you evaluate checklist items and address unique needs without degrading the checklist.

**INSTRUCTIONS:** As a team, answer the following questions for each item on the Safe Surgery Checklist template and for every proposed addition or deletion.

### **Evaluate all checklist items with these six questions:**

1. Is this a critical safety step at risk of being missed?
2. Is this a safety step that you might not notice if it is not done?
3. Is this item discussed when all relevant team members are present?
4. Is the checklist the best way to address the need?
5. Can something be done about it?
6. Will this item help anybody else on the team?

# Chapter 8

## Testing your checklist in the operating/procedure room

### CONTENTS

---

<i>Introduction</i>	117
Principles of checklist testing	117
Testing your surgical safety checklist in real cases	118

# Instructions for the team lead

## OVERVIEW

This chapter describes critical considerations and a recommended sequence for testing your checklist in actual cases with patients.

This chapter supports the Own phase of checklist implementation and will be helpful when working on:

- Step 5: Customize and Test
- Step 10: Watch and Coach

### *Before you test your checklist:*

Always conduct a tabletop simulation before testing your checklist in the operating/procedure room with a patient (see “Test your changes in a tabletop simulation” in Chapter 7).

## RELATED CONTENT

- Chapter 6: *Checklist design and display*
- Chapter 7: *Customizing the checklist*

## RESOURCES AND MATERIALS

- Action guide: *Observer’s guide for checklist testing*

## KEY CONCEPTS

- Always conduct a tabletop simulation (a mock run-through conducted away from patients) before you ask surgical teams to use your checklist in a case with a patient.
- The goal is a stable checklist, not a perfect or permanent one.
- Testing starts small, with a supportive team and a paper checklist, and builds slowly to minimize risk (this is known as small-scale testing).
- Surgical teams should be trained on how to properly use the checklist before they are asked to test it in a case with a patient.
- Quickly resolve issues that come up during testing, and keep testers in the loop about how their concerns are being addressed.
- Testing and revising should continue until you have a checklist that works for teams in your operating/procedure rooms.
- If you later modify the checklist or create a specialty version of the checklist, always repeat tabletop simulation and small-scale testing.



## Introduction

The Safe Surgery Checklist is a proven tool for improving communication and safety, but it must still be tested in your facility.

### ***IMPORTANT***

*In no circumstances should you use the checklist in an operating/procedure room with a patient without having tested your checklist first in a tabletop simulation (a mock run-through conducted away from patients). For more information, refer to “Test your changes in a tabletop simulation” in Chapter 7.*

### **Testing the checklist before rolling it out will help you:**

- avoid big and costly mistakes.
- learn what works and what doesn't.
- identify changes that will make the checklist work better with your teams in your facility.

The goal is a stable checklist, not a perfect or permanent one. Your checklist is stable after multiple teams have used it in real cases and no new issues are identified.

## Principles of checklist testing

### **Start small, build slowly**

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 it is ready, you can undermine the team's confidence in the checklist as an effective communication and safety tool, and can undermine their confidence in your implementation team.

### **Use paper**

The first time you test the checklist with a patient, it's best to use paper rather than a poster as it is cheaper and gives you more flexibility (see Diagram 8.2 on page 120). You can make changes to it easily or even take notes on it. Make multiple copies available in the operating/procedure room so that every member of the team has easy access to it.

### **Test with enthusiastic and supportive teams**

The surgical team that tests the checklist should be made up of people who are enthusiastic and willing to help. You want people who are willing to be your partners in the work. Avoid testing with people who are skeptical or who may not cooperate.

### **Teach team members how to use the checklist before they use it with a patient**

Always teach the team members how to use the checklist before asking them to use it with a patient. Show them the checklist before the case, and talk them through it. If possible, do a dry run of the checklist with the entire team before the case.

### **Have an implementation team member observe the case**

It's important to have a member of the implementation team in the room to collect feedback about any modifications that need to be made during testing. This person may also be able to address questions the team raises while using the checklist.

### **Pick the right cases and schedule extra time**

When choosing a team and case for testing the checklist, try to schedule the test on a day when the team has time to talk with you after the case about how the testing went and how the checklist could be improved. Also, test the checklist in a case that is not unusually complicated or stressful.

## Testing your surgical safety checklist in real cases

The process of testing starts small and builds slowly through three sequential steps. *If testing disrupts care in any way, stop using the checklist during that case.*

**Step 1:** Have one team use the checklist one time in an actual case; then make any necessary changes.

**Step 2:** Have one team use the checklist for one day in all their cases; then make any necessary changes.

**Step 3:** Repeat this process multiple times with the same team, or different teams, to make sure that your checklist works.

### Step 1: One team, one time

Ideally, you want to do your first test with the team that made the checklist. If you can't do that, you should at least make sure that everyone on the testing team is enthusiastic and willing to help (especially the surgeon).

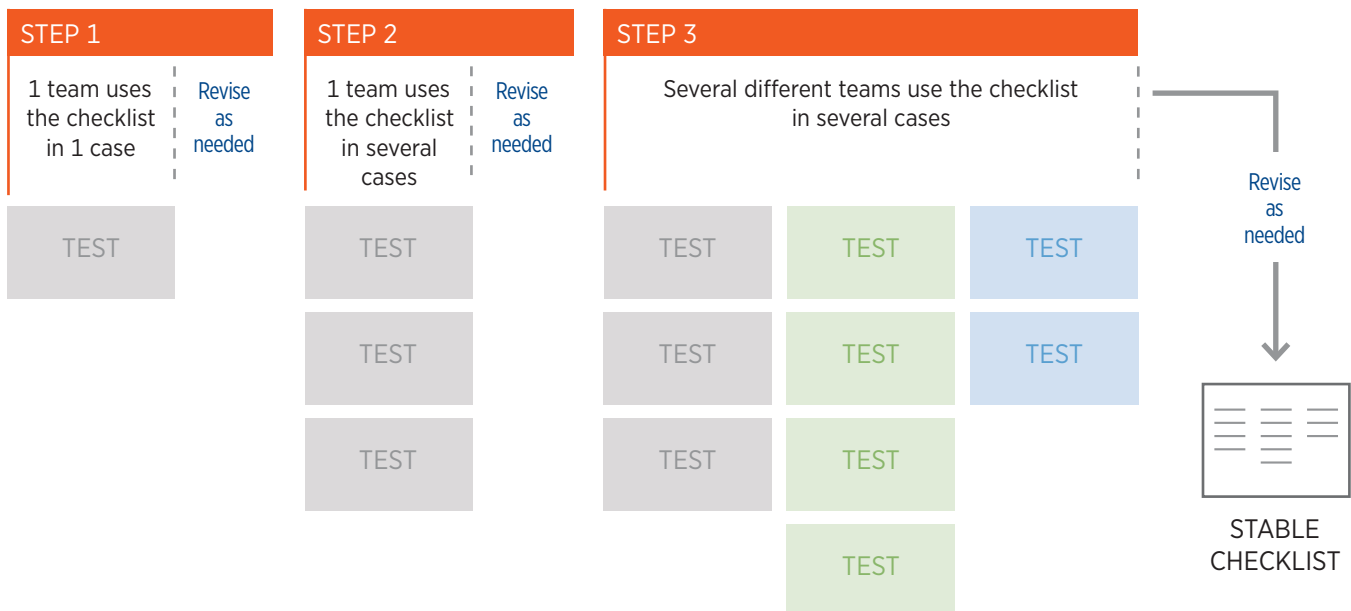
A good way to recruit the testing team is to have a 1-on-1 conversation with each potential team member (see Chapter 10: *The 1-on-1 conversation*).

### Preparation

Teach surgical team members how to use the checklist before they need to use it in the test case with a patient. This can be done in advance or immediately before the case.

DIAGRAM 8.1 Checklist testing starts small and builds slowly

The idea of small-scale testing is to maximize opportunities to learn while minimizing risk. The diagram below outlines a progression for checklist testing that will allow you to learn, make adjustments, and move toward a stable checklist that is ready for use in your facility.



(See Chapter 12: *Teaching the checklist* for recommendations and options for teaching proper checklist use.)

### **Schedule the test with the testing surgical team:**

- Pick a routine straightforward case.
- Plan extra time before the case for training (if advance training was not possible).
- Plan extra time after the case to discuss the experience with the team and capture feedback.

Ask a member of your implementation team to be in the operating/procedure room during the test to observe and record issues or feedback. Give them a copy of the action guide *Observer's guide for checklist testing* on page 122.

### **Just before the test**

The implementation team member (or the person who will observe and collect feedback) should introduce him- or herself and thank the surgical team members for helping with a work in progress.

The observer should make sure that every team member has access to a checklist. This can be done by putting the checklist on an IV pole or having the circulator hold the checklist in front of individuals during their designated portions of the checklist.

Whenever possible, the observer should conduct a practice read-through of the checklist with all participants before the surgery.

### **During the test**

The observer from your implementation team should watch how the team uses the checklist and take notes about what works and what does not.

### **Watch and listen:**

- Are participants reading the checklist aloud from a paper copy?

- Do all team members introduce themselves and read their portion of the checklist?
- Are voiced concerns being acknowledged and discussed?
- Are the boxes being checked without verification of the task they describe?

If the surgical team has questions or problems with the checklist, the observer can answer or guide the team.

### **Immediately after the test**

The observer should have a quick debriefing session with the surgical team to solicit feedback.

### **Questions for observers to ask the team**

1. How did it go?
2. Did the checklist items get your team to talk about everything that you needed to share with each other?
3. Is there anything that should be on the checklist that is not currently there?
4. Is there redundancy?
5. Are the checklist items worded clearly?
6. Were the checklist items easy to read and follow?
7. Did the appropriate information get shared with the surgical team and at the “right” times?

The observer should thank the team, document the team’s comments, and create action items for follow-up.

### **Next steps**

The implementation team should meet to review feedback, make changes as necessary, and schedule the next phase of testing.

### ***IMPORTANT***

*Whenever you make changes, always conduct a tabletop simulation again with the new version of your checklist.*

DIAGRAM 8.2 **Testing tip****Use a handheld checklist for initial testing in the operating or procedure room.**

Refer to Chapter 6: *Checklist design and display* for detailed information about ways to display the Safe Surgery Checklist.

**Things to consider**

- Make sure that all team members have a copy of the checklist available to them.
- The checklist should be accessible to everyone in the room from their normal positions.
- Other team members can hold copies for the surgeon and scrub technician, if necessary.

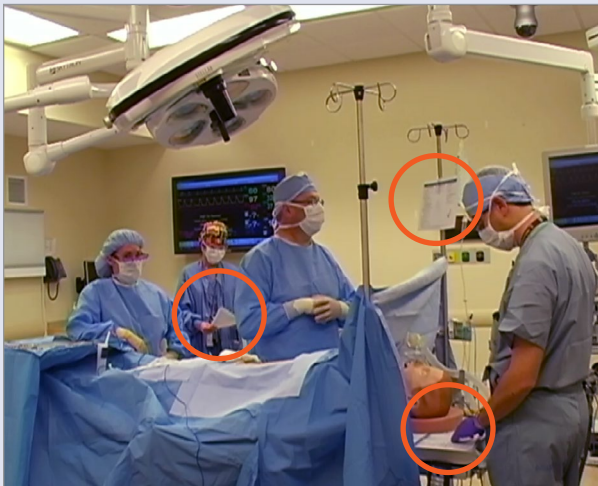


Image courtesy Ariadne Labs

The team shown above is testing a handheld version of the checklist in a simulator. One copy of the checklist is taped onto a pole where the surgeon can read it.

**Step 2: One team, one day**

The next step is to test your checklist with one team in all of its cases for one day.

**Find a surgical team for the full-day test**

The most important factor for success is that everyone on the testing team is enthusiastic and willing to help. You can use your initial testing team or a different team, but always make sure the members of the team are open to helping a work in progress.

**Preparation**

Teach surgical team members the use of the checklist in advance, or plan to train each person before surgery on the day of the case. (See Chapter 12: *Teaching the checklist* for recommendations and options for teaching proper checklist use.)

**Schedule a day for testing with your surgical team**

- Try to pick a surgical team that consists of mostly the same people throughout the day.
- Pick a day when the surgical team has a lighter case load.
- Pick a day when the surgical team has routine, straightforward cases.
- If advance training was not possible, plan extra time before the first case for training.
- Plan extra time at the end of the day to discuss the experience with the team and capture the feedback.
- If team members change due to a shift change or other reason, be sure to get the feedback of the team members who had to leave.

Ask a member of your implementation team to be in the operating/procedure room during the test to observe and record issues that arise. Give them a copy of the action guide *Observer's guide for checklist testing* on page 122.

### Before the first test case of the day

The implementation team member (or the person who will observe and collect feedback) should introduce themselves and thank the surgical team members for helping with a work in progress.

The observer should make sure that every team member has access to a checklist. The checklist should be readable for everyone in the room from their normal positions. A team member can hold a copy for the surgeon or scrub technician, if needed.

Whenever possible, the observer should conduct a practice read-through of the checklist with all participants before the surgery.

### During the day's test cases

The observer should watch how the team uses the checklist and take notes about what works and what does not. If the observer can't watch every case, he or she should watch at least the first case of the day.

If the team has questions or problems with the checklist, the observer can answer or guide the team.

### At the end of the testing day

Meet with the testing team to get feedback on their experience.

#### Questions for observers to ask the team

1. How did it go?
2. Did the checklist items get your team to talk about everything that you needed to share with each other?
3. Is there anything that should be on the checklist that is not currently there?
4. Is there redundancy?
5. Are the checklist items worded clearly?
6. Were the checklist items easy to read and follow?

7. Did the appropriate information get shared with the surgical team and at the "right" times?
8. How did it feel to use the checklist for every case?

Be sure to thank the team, document the team's comments, and create action items for follow-up.

### Next steps

After the test, the implementation team should address concerns and make improvements.

- Review feedback and make changes as necessary.
- Discuss and decide whether further testing is needed.

## Step 3: Repeat as needed

Small-scale testing may be repeated multiple times with the same team or with different teams to make sure that your checklist works.

Be flexible and anticipate the need to adapt and modify – and remember to test with a tabletop simulation after every substantive change.

### Consider a second opinion

After you've tested the checklist with one team in one surgical area, you may want to test the checklist with another team in a different surgical area to see how it works there.

### How do you know you are finished?

Keep testing until your team is confident that the checklist works reasonably well in the operating/procedure rooms where you will implement the checklist.

## Observer's guide for checklist testing

Use the following steps as a guide when observing initial testing of your customized checklist. Have a copy of the checklist for yourself so that you can follow along with the team.

### BEFORE THE CASE

#### Explain your role

You are observing the team to learn how well the checklist works and to identify any potential improvements. Thank them for their willingness to help improve the checklist and make it work for their facility.

#### Do a “practice run” with the full surgical team

If possible, and if you haven't already done so, conduct a read-through of the checklist with the team before the first case and address any questions.

#### Make sure that every team member has access to a checklist

The checklist should be accessible to everyone in the room from their normal positions. Other team members can hold copies for the surgeon and scrub technician, if necessary.

### DURING THE TEST

If the surgical team has questions or problems with the checklist, answer their questions or guide the team.

#### Ask *yourself* these questions as you watch the surgical team use the checklist:

- Are participants reading the checklist aloud from a paper copy?
- Do all team members introduce themselves and read their portion of the checklist?
- Are voiced concerns being acknowledged and discussed?
- Is each item being verified before the team moves on to the next checklist task?

### IMMEDIATELY AFTER THE CASE

Ask the surgical team the following questions, document their comments, and create action items for follow-up.

#### Ask the surgical team:

- How did it go?
- Did the checklist items get your team to talk about everything that you needed to share with each other?
- Is there anything that should be on the checklist that is not currently there?
- Is there redundancy?
- Are the checklist items worded clearly?
- Were the checklist items easy to read and follow?
- Did the appropriate information get shared with the surgical team members and at the “right” times?
- Is there anything on this checklist that should be removed?

If the surgical team has used the checklist the entire day, ask:

- How did it feel to use the checklist for every case?

Be sure to thank the team, document the team's comments, and create action items for follow-up.

# Chapter 9

## Creating a plan for checklist expansion

### CONTENTS

---

<i>Introduction</i>	125
Understand the work ahead	126
What does a checklist expansion plan look like?	126
<b>Expansion planning: Strategy and logistics</b>	127
A strategy for success	127
Plan how you will spread checklist use in your facility	127
Plan what your key messages will be	128
Plan how you will approach debriefing	129
Plan how you will print and display your checklist	129
Plan how you will manage 1-on-1 conversations	130
Plan how you will promote the checklist	130
Plan how you will manage checklist training	132
Plan how you will manage checklist coaching	132
Plan how you will collect and manage feedback	133
<b>Creating a checklist demonstration video</b>	135
Tips for creating your video	135
Tips for using your video	136

# Instructions for the team lead

## OVERVIEW

This chapter will help you guide your team through the critical planning activities that must be addressed before putting your checklist into broad use.

This chapter also describes the benefits of a checklist demonstration video, tips for creating the video, and where you can find examples from other facilities.

This chapter supports the Own phase of checklist implementation and will be helpful when working on:

- Step 6: Plan Your Expansion

## RELATED CONTENT

- Chapter 2: *A framework for checklist implementation*
- Chapter 10: *The 1-on-1 conversation*
- Chapter 11: *Promoting the checklist*
- Chapter 12: *Teaching the checklist*
- Chapter 13: *Coaching the checklist*

## RESOURCES AND MATERIALS

- Implementation Lead Project Spreadsheet
- Fact sheet: *Checklist demonstration video*
- Safe Surgery Checklist Practice Scripts

## KEY CONCEPTS

- Expansion refers to a slow, intentional process of putting your final checklist into use in operating/procedure rooms throughout your facility.
- Five critical elements of expansion require advance planning.
- Thoughtful planning will directly affect your ability to be successful.
- Lack of adequate planning is the most common reason that checklist implementations fail.
- Thinking about how you can stay flexible during expansion will help your plans be more successful.
- Creating a checklist demonstration video is a useful tool for publicizing your effort, training teams, and engaging people in the work.



## Introduction

You have built a team, assessed your environment, customized the checklist, tested your version in actual cases, and now have a checklist that is ready for wider use.

Now it's time for your implementation team to do some critical preparation for the next steps in implementation.

This chapter will help you:

- create a plan for checklist expansion that maximizes your facility's potential for success.
- create a checklist demonstration video to show how your facility's checklist should be used.

### What is checklist expansion?

We have learned through the experience of thousands of facilities that the most successful approach to spreading checklist use is what we call checklist expansion.

We use the word “expansion” to mean the process of putting the checklist into use in operating/procedure rooms in a thoughtful sequence, building on personal connections formed through 1-on-1 conversations, hands-on training, and supportive coaching.

***“A good plan cannot ensure success, but it is your best defense against failure.”***

*“This is one of those times in life where the first shot is the best shot. Things don't always go as we anticipate, but the better prepared we are, and the more we can try to anticipate and avoid big problems, the smoother it's likely to go.*

*I can't emphasize enough how important it is to think about expansion carefully, and to plan carefully before you do it.”*

— Dr. William Berry, Ariadne Labs

### Expansion planning requires a real pause

Unless your team has the bandwidth to work on planning while customizing the checklist, these preparatory activities will require that you pause and make a plan to move forward. Don't be tempted to rush the process because it is challenging or because you want to have an immediate impact in the operating/procedure room.

### Planning may take longer than you think

Be patient and flexible. It may take your team several weeks to prepare for checklist expansion.

### Keep facility leadership informed

Your facility's leadership may be eager to put the checklist into broad use. Some leaders may be tempted to push the effort ahead prematurely. Your best defense against this is to ensure that your leadership team is educated about the planning process and how your work is moving forward. Keep your leadership team informed about:

- what you are doing and why.
- your deadlines and progress.
- any changes or challenges.

## Understand the work ahead

To plan effectively, your implementation team must first be familiar with the work required in each of the implementation steps that support checklist expansion.

### Before you plan, review the next steps in checklist implementation

Before you begin to plan your checklist expansion, ask each member of the implementation team to review the following chapters in the implementation guide so that they are familiar with the relevant activities and considerations:

- Chapter 10: *The 1-on-1 conversation*
- Chapter 11: *Promoting the checklist*
- Chapter 12: *Teaching the checklist*
- Chapter 13: *Coaching the checklist*
- Chapter 14: *The Debriefing: How to make it count*
- Chapter 15: *Continually improve*

As a team, review and discuss the recommended practices and activities. Then, use the content in this chapter to help you plan how you will expand checklist use.

## What does a checklist expansion plan look like?

### Characteristics of a good plan

To best prepare for success, your plan should:

- describe *what* your team will do, *how*, and *when*.
- be written down, so that you can refer to it later and share it with others.
- be practical.
- be flexible.

### Find a method that works for you

To jumpstart your planning efforts, we created a Microsoft Excel workbook called the Implementation Lead Project Spreadsheet that can help you track various tasks related to checklist implementation. (See “Implementation Lead Project Spreadsheet” on page ix in the preface of this guide and Diagram 9.1 on page 131.)

However, there are many different ways to create a plan. Some of the tools that implementation leads use include:

- Microsoft Word (or other word processing software).
- Microsoft Excel (or other spreadsheet software).
- project management software.
- whiteboards.
- paper and sticky notes.

Even if you prefer to use your own method, refer to the Implementation Lead Project Spreadsheet as an example of the details you should track.

## Expansion planning: Strategy and logistics

Your plan should describe the sequence of your checklist expansion and how you will reach and support each individual surgical team member. It should include:

- expansion strategy.
- key messages.
- a system for debriefing.
- printing and displaying the checklist.
- 1-on-1 conversations.
- checklist promotional activities.
- checklist training.
- checklist coaching.
- collecting and responding to feedback.

Many facilities follow the order of planning activities above; others find that some activities are best planned simultaneously.

### A strategy for success

The most successful strategy in facilities of every size and focus is to:

- start easy.
- start small.
- build slowly.

This approach allows your implementation team to gain experience, make adjustments (if needed), and build momentum and helpful word-of-mouth publicity.

It's tempting to put the checklist into place in all of your operating/procedure rooms at the same time. Do not succumb to this temptation.

Some facilities, once they have finished customization and testing, are eager to simply mandate use of the checklist on a particular day; e.g., “Everyone will be required to use the checklist beginning June 1.” This approach doesn't allow for you to learn along the way, whereas a gradual rollout of the checklist allows you to learn what works and what needs be changed. Remember to make your mistakes small, and fix them as they occur.

## Plan how you will spread checklist use in your facility

It is important to follow the strategy of starting easy and small and building slowly, but what does that mean in your facility?

### Start easy

Start with the teams or services that you know are most likely to be supportive. Surgical team members who support the idea of the checklist are more likely to give you early useful feedback, and they can draw upon their experience in using the checklist to talk about and champion the checklist project with their peers.

Ranking your surgical services by anticipated ease of introducing the checklist can help you identify where you might wish to start.

### EXAMPLE

Week	Service / Dept	Anticipated ease of checklist intro
	General Surgery	Easy
	Plastic Surgery	Easy
	Transplant Surgery	Easy
	Trauma Surgery	Moderate
	Urology	Moderate
	ENT	Difficult
	Cardio-thoracic Surgery	Difficult

## Start small

Depending on the size of your facility, you may choose to introduce checklist use in just one service, in a limited group of surgical suites or procedure rooms, or with specific teams.

Building on your ranking of anticipated ease, consider who you can start with that will give you early success and useful feedback.

## Build slowly

Give your earliest adopters time to use the checklist and then solicit their feedback. Once the checklist is being used by teams in actual cases, you may find that adjustments need to be made, and adjustments are easier to make early in the expansion process.

Your plan should also reflect decisions you made in Step 4: Decide: Are We Ready? about the scope of your project and where you will focus your efforts first (see Chapter 5: *Deciding: Are we ready?*). For instance, due to resource constraints or other priorities, some facilities may plan to use the checklist in only one service for a period of time.

Plan the order in which you hope to expand from team to team or service to service. Use the Implementation Lead Project Spreadsheet to record when teams will use the checklist for the first time (see Diagram 9.1 on page 131). Create a schedule or timeline with target dates, but be sure to communicate to your team, and to your facility's leadership, the importance of remaining flexible. It is better to shift your schedule than to build resentment because some surgical teams needed more hands-on work with your implementation team.

## Plan what your key messages will be

Refer to Chapter 1: *The Safe Surgery Checklist* to review the benefits of checklist use.

Getting people excited about and engaged in the checklist work is essential. Developing key messages can help your communication efforts be more effective.

A key message is simply an important idea that is stated in brief, consistent, straightforward language. This is similar to the idea of an “elevator speech,” a brief and focused way to pitch an idea in the time it takes to ride an elevator between floors.

Before having conversations with surgical team members or promoting the checklist, have your implementation team identify one to three key ideas you want to convey — and decide what language you will use to talk about them.

- Choose messages that highlight what is most important about the checklist work in your facility.
- Use language that reflects your local culture.

## EXAMPLES

*“The Safe Surgery Checklist is an important resource that helps ensure the best outcomes for people who entrust us with their care. It helps us not to miss a step, but more importantly builds teamwork because everyone in the room participates.”*

*“We’re excited about the Safe Surgery Checklist not only because it helps decrease the risk of error, but also because it can improve efficiency and increase physician and staff satisfaction.”*

## Plan how you will approach debriefing

Refer to Chapter 14: *The Debriefing: How to make it count* for details on the value of debriefing, why debriefing needs to be supported by a system, the tasks involved in a debriefing system, and considerations for using the debriefing to drive continuous improvement in the operating/procedure room.

Some facilities choose to circle back to this part of the work later. If possible, however, it is preferable to plan how you will respond to information that is raised in debriefings before surgical teams begin to use the checklist.

Before the checklist is put into use, decide whether your facility has the resources to build a system to manage debriefing. If so, follow the guidance and specific tasks outlined in “Build a system” on page 199 in Chapter 14.

## Plan how you will print and display your checklist

Refer to Chapter 6: *Checklist design and display* for a detailed description of options for producing and displaying your checklist.

### IMPORTANT

The organization, formatting, and readability of your checklist should have been validated in your testing; if not, test NOW! (See Chapter 8: *Testing your checklist in the operating/procedure room.*)

Regardless of how your checklist will be presented — handheld page, poster, or electronic display — it’s important to ensure that the checklist is ready when needed in the operating/procedure room.

## Planning considerations

The questions that follow can help your team consider and address logistical issues *before* producing your checklist, so that you can avoid potential problems, unnecessary headaches, and extra costs.

### All checklist types

- Who will be responsible for making sure that the checklist is available in the right space at the right time, everywhere it is needed?
- How and when will you produce the checklist?

### Handheld checklist

- How many copies need to be printed?
- Where will extra copies be stored?
- Who will be responsible for printing and restocking when the supply of copies gets low?
- How will you ensure that an adequate number of copies is always available in each operating/procedure room?

### Checklist poster

- How many checklist posters do you need?
- How will you produce the posters?
- How will you mount the posters in the operating/procedure rooms?
- Who will mount the posters?

### Electronic checklist

- Who will be responsible for creating the electronic version of your checklist?
- Who will the implementation team need to work with in the IT department?
- On which monitors will the checklist be displayed?
- How and when will the electronic checklist be tested to ensure that it is accessible and readable for all surgical team members?
- How will you ensure that copies of the checklist are available if a monitor is unavailable or is not working properly?

## Plan how you will manage 1-on-1 conversations

Refer to Chapter 10: *The 1-on-1 conversation* for detailed guidance on 1-on-1 conversations, why they are important, and how to conduct them.

Every surgical team member needs to receive a 1-on-1 conversation describing the benefits of the checklist and why your facility is implementing it.

In order to ensure that no surgical team members are missed, it is *critical* that you plan how and when you will have a 1-on-1 conversation with each surgical team member.

Starting with the list of all surgical personnel you created in Step 3: Assessing Your Environment (see Chapter 9: *Creating a plan for checklist expansion*), use the Implementation Lead Project Spreadsheet to plan and track 1-on-1 conversations (see Diagram 9.1 on page 131).

Based on your expansion strategy:

1. Identify *when* each individual will get a 1-on-1 conversation.
2. Estimate each individual's anticipated level of enthusiasm or resistance to the checklist.
3. If possible, identify each individual's interests or concerns, and note ways in which the 1-on-1 conversation can be tailored to best resonate with that person (e.g., talk about relevant studies with someone who is particularly interested in evidence-based medicine).
4. Decide who will lead the 1-on-1 conversation with each individual surgical team member.
5. Decide how you will track the outcome of a given conversation (i.e., the surgical team member's actual level of interest or resistance and whether that individual should get a follow-up conversation).
6. Prepare a schedule of 1-on-1 conversations.

## Plan how you will promote the checklist

Refer to Chapter 11: *Promoting the checklist* for detailed guidance on why promoting the checklist is important, ways to promote the checklist, and examples from other facilities.

Promotion should begin around the time you begin to have 1-on-1 conversations with surgical team members, so you need to have a plan in place well before you start having conversations.

In successful facilities, checklist promotion is a multifaceted effort that creates awareness throughout the organization. Use your key messages when promoting the checklist work—consistency and repetition will help your ideas get noticed and be remembered.

Work with your team to identify the various ways you will advertise the checklist effort in your facility, and assign an implementation team member for each component.

Identify meetings in which you can promote the checklist effort.

- Make a list of regularly scheduled meetings that are held in your facility: staff, department, or service meetings; grand rounds for physicians; committee meetings; etc.
- Identify who schedules and runs each of those meetings.
- Ask for time on the agendas of various meetings.
- Identify the implementation team members or physician champions who will talk about the checklist at the various meetings.

### DIAGRAM 9.1 Planning with the Implementation Lead Project Spreadsheet

The Implementation Lead Project Spreadsheet (available at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org)) provides a template that you can use to help plan and track your checklist expansion. Examples of each planning task included in the spreadsheet are shown below.

**Track all surgical personnel who will be touched by the checklist:** Use the list of all surgical personnel you created in Step 3: Assess Your Environment, and estimate each individual's anticipated level of enthusiasm or resistance to the checklist.

Surgical Personnel Tracking Worksheet						Level of interest
First Name	Last Name	Role	Service / Dept	Here How Often?	E-mail	(estimate resistance)

**Plan and track 1-on-1 conversation:** Decide who is a best fit to lead the conversation with each individual, and note ways in which each 1-on-1 conversation can be tailored to best resonate with that person. Track the outcome and any follow-up 1-on-1 conversations that may be required.

1-on-1 Conversations							
Who Will Lead the Conversation?	Tailor the Conversation by Focusing on the Individual's Concerns About...	CONVERSATION 1			Can Lead Conversations	CONVERSATION 2	
		Date		Outcome / Notes		Date	
		Planned	Complete			Planned	Complete

**Plan and track training for every person before they use the checklist:** When and how will each surgical team member receive training on proper checklist use?

Training: Teaching surgical team members how to use the checklist				
Date		Name of Trainer	Trained How?	Notes
Planned	Complete			

**Plan and track first use of the checklist:** When will each surgical team member first use the checklist, and which implementation team member will be present during the first use?

First use of the checklist in a case				
Date	Service	Team Member	Notes	

**Plan and track checklist coaching:** When will the surgical team receive checklist coaching? What is the outcome? Which individuals need follow-up individual coaching, and who will those coaches be?

Checklist Coaching			
Name of Coach	Service / Dept Coached	Date Coached	Comments / Notes

## Plan how you will manage checklist training

Refer to Chapter 12: *Teaching the checklist* for detailed guidance on why training and practice are important and what effective training includes.

Every surgical team member needs to receive training on how to use the checklist properly *before using the checklist in a case*.

Teaching each surgical team member to use the checklist includes an explanation of proper checklist use, a demonstration (when possible), and an opportunity for that surgical team member to practice. Training is not usually held in a classroom and does not require extensive resources, but you will need to plan ahead to ensure that no one is missed.

### Training the trainers

First, identify the people who will be your checklist trainers. Consider implementation team members, or surgical team leaders who were involved in testing your checklist. At a minimum, trainers should be enthusiastic about the checklist and understand how to use the checklist properly. Ideally, they should also have experience using the checklist in the operating/procedure room.

Decide when and how will you train your trainers. If you need to add or replace trainers during expansion, how will you ensure that new trainers are adequately prepared?

### Creating a training schedule

Based on the schedule you have established for checklist expansion and 1-on-1 conversations, use the Implementation Lead Project Spreadsheet (see Diagram 9.1 on page 131) to plan who will be trained, in what order, how, and by whom.

- When will each person be trained?
- Who will do the training?
- How will each person be trained?

## Plan how you will manage checklist coaching

Refer to Chapter 13: *Coaching the checklist* for detailed guidance on the role of coaching in checklist implementation, how to choose coaches, and what effective checklist coaching looks like.

All surgical team members need to receive coaching when they first use the checklist with a patient in the operating/procedure room, as well as ongoing periodic coaching.

Your expansion plan should address how you will manage the initial coaching you will provide to surgical team members. Later, revisit this work to help you plan for coaching in the long term.

### Identifying and training your coaches

Each person who will coach checklist use in the operating/procedure room should first be given some guidance about how to be an effective coach, how to use the observation tool, and how to use the 3-part question technique to provide structured feedback.

Coach training may be held as part of an implementation team meeting or in a separate meeting of potential coaches, or coaches may be briefed in a 1-on-1 conversation.

Your plan should describe:

- who your coaches will be.
- when and how will you train your coaches.
- who will be responsible for managing the checklist coaching program.



## Creating a coaching schedule

Based on the order of checklist use you determined earlier, identify:

- When each surgical team member will be coached. This should correspond to their first use of the checklist.
- Who will coach each surgical team?
- How will you collect observations and feedback from coaches after their coaching sessions?
- Who will coach individual surgical team members, if needed?

Use the Implementation Lead Project Spreadsheet (see Diagram 9.1 on page 131) to plan this.

## Plan how you will collect and manage feedback

### You can't fix what you don't know about

Collecting feedback while you do the implementation is critical. The last thing you want is for problems to occur while you think everything is going fine. During checklist expansion, you want to have your ear to the ground to hear even subtle evidence that things aren't quite right, for instance that some people are really unhappy, or that the checklist is still not right for the operative flow.

It's important to decide now how you will identify and address issues that may come up, because problems that are not addressed quickly tend to become bigger and worse. You will also want to understand how people are feeling about the change.

Set up a process for collecting and addressing feedback during checklist expansion. By making it easy to give feedback, you encourage people to be involved in the process of change.

Here are some considerations for “taking the temperature” of operating room teams — discovering how they feel about what they're doing and any problems that they've seen.

### Identify one person to be the point of contact for feedback

By identifying one person for this role, you make it easier for surgical teams to tell you when they have questions, concerns, or problems with the checklist or the implementation process.

- Pick someone on your team to be the point person for feedback.
- As surgical teams are being engaged and trained, let them know who that person is and how best to contact them.
- Explicitly invite surgical teams to share their thoughts, feelings, and experiences.

### What will you do with feedback that is not directly about the checklist?

When you invite people to tell you about problems, you are likely to hear about issues that are not specifically related to the checklist, such as equipment that doesn't work right and problems that seem to happen every single day. These kinds of issues may have existed for some time, but are being identified, in part, because of the checklist work that you're doing. We encourage facilities to also collect that kind of feedback, but only if you are also dedicated to trying to repair some of those problems or passing along the information to the responsible party.

## Ideas for collecting feedback

- How will you get information from people and teams? Daily? For how long?
- Will you collect paper copies of checklists or use a survey, or both?

### **Use your handheld checklist**

If you're using a handheld checklist, consider adding a space on the checklist (or the back of the checklist) for surgical team members to write questions or concerns that come up. Then have someone on the implementation team collect and review checklists daily (or as often as is practical) to make sure that problems and questions are quickly dealt with as they occur.

### **Use a survey to collect feedback**

Some facilities use a brief survey to collect input during the implementation process. You can create a survey on paper or use a digital survey tool like SurveyMonkey. Be sure to include an open text field where people can give you anonymous comments about how it's going; this can help you learn a tremendous amount about problems and perceptions in the operating/procedure room.

### **Give surgical team members a dedicated way to record feedback in the operating/procedure room**

One facility kept a sticky pad in the operating/procedure room so the circulating nurse could write down concerns or issues with the checklist as they arose in cases. After the case, the circulator would post the note on a whiteboard by the surgery front desk so that the people running the operating/procedure room desk could see the problem and work on addressing it.

## Ideas for responding to feedback

- How will you let people know that you heard their concerns?
- How will you communicate that you are working to resolve problems that are identified?

### **Assign one implementation team member to be responsible for responding to feedback**

Some facilities ask one individual on the implementation team to be responsible for responding to the feedback that is collected about the checklist. This approach can help ensure that feedback is consistently and effectively managed.

### **Use a bulletin board or whiteboard to share**

Some facilities use a large whiteboard to post each question that has been raised and each problem that has been identified by surgical teams during checklist expansion. Posting the feedback, and then noting how each problem or question is being addressed, is a great way to demonstrate that your team values the input of surgical team members and that the checklist work is important in your facility.

### **Respond as part of your promotional efforts**

You may receive a number of similar questions from different people or teams. Consider addressing common questions in a newsletter article or in meetings so that you can reach many people at once.

## Creating a checklist demonstration video

Now that you have finished customizing and testing your checklist, it's time to create a checklist demonstration video. We recommend working on your video while planning checklist expansion, so that it will be ready for use when you begin 1-on-1 conversations, training, and promotion.

### Why is video important?

Video is a powerful tool for showing people how to use your checklist. Seeing a team from your hospital using your checklist helps makes the effort tangible. Creating a video can also be a fun and educational experience for your team.



Image courtesy Palmetto Health

#### A checklist demonstration video helps:

- generate buy-in.
- publicize the effort internally.
- supplement your training.

#### Video allows you to show:

- how your checklist works.
- proper use of the checklist as a communication tool.
- how the checklist will be displayed in your facility.
- how *not* to use the checklist (this is often fun for teams to create).

## Tips for creating your video

### Recruit people to participate

You will need enough people to play the roles that are typical for your surgical teams.

- Draw from your implementation team.
- Consider asking other physicians, staff, administrators, or stakeholders who are enthusiastic about using the checklist.
- People who participate in making a video can be powerful early advocates for the checklist work, so consider asking people who are influential among their peers.

### Find a convenient location

When possible, try to record the simulation in an empty operating/procedure room. This will help make the video feel more realistic and can help surgical team members connect to the content. However, this is not a necessity — any empty, quiet space can work for recording.

Suitable locations can include:

- an empty operating/procedure room.
- a simulator.
- a conference room.

### Use existing equipment and supplies

It is not necessary to spend a lot of money to create an effective video. You do not need to hire a professional or rent specialized video equipment, for instance — it's okay to make do with what you already have.

### Filming the simulation

- Use a portable video camera or smartphone.
- If your hospital has an AV department, they may be able to help film the simulation.

### Supplies to prepare and bring

Bring scrubs, drapes, equipment, etc., to your recording session so that the simulation will include elements of the operating/procedure room environment.

You will also need to have copies of your facility's checklist displayed in the format that you intended to spread throughout your operating/procedure rooms.

- If using a handheld checklist, bring enough copies so that everyone can have their own copy for reference.
- If you will be using a poster in your operating/procedure rooms, use a checklist poster in your checklist demonstration video. Be sure to display it where it will be visible in the video and can also be seen and read by everyone doing the simulation.
- If using an electronic display, do a video test first to be sure that the image of the checklist is visible in your recording.

### Never use a real patient

Assign someone to play the role of patient, or create a mock-up. *Do not use a real patient.* Consider whether you want to include interaction with the patient when filming the initial section of the checklist. (When possible, including the patient in the “Before Induction of Anesthesia” section is desirable, but is dependent on the type of surgery, anesthesia, and other factors).

Ideas for a simulated patient:

- Have a person stretch out on the table and pretend to be your patient.
- Cover some pillows with a sheet.
- Use a training dummy.

### Use a script

Using a script helps participants feel more comfortable, and it allows you to consider in advance the specifics of the case you want to simulate.

For an example of a script that you can use as a model, refer to Safe Surgery Checklist Practice Scripts in Appendix F.

### Plan a block of time

Schedule a generous block of time in the room and with the people on your team.

- Many teams feel more comfortable and get better results when they take some time to practice.
- Be prepared to record the simulation more than once so that you get the result you want.

## Tips for using your video

### Supplement 1-on-1 conversations or training

Video helps bring the checklist to life, so it can be very effective as a supplement to conversations with individual surgical team members and training sessions with surgical teams.

#### IMPORTANT

*Video should never be used to replace 1-on-1 conversations or training.*

### Publicize your effort internally

#### Directly

Showing your checklist video to audiences directly allows you to present the video in the broader context of why the checklist is important in your facility, and what your implementation efforts will look like.

Consider sharing the video:

- in department or staff meetings.
- at board meetings or a meeting of your facility's executive leadership.

#### Indirectly

Your video can also help you explain and promote the checklist on its own.

- Use it as a screensaver on operating/procedure room computers.
- Run the video as a continuous loop in physician and staff lounges.

# Chapter 10

## The 1-on-1 conversation

### CONTENTS

---

<i>Introduction</i>	139
Principles behind the 1-on-1 conversation	140
How to have an effective 1-on-1 conversation	143
Rationale and ideas for key points of a 1-on-1 conversation	144
Tips for managing your 1-on-1 conversations	148
How to handle common questions and objections	149

# Instructions for the team lead

## OVERVIEW

Use this chapter during the Own phase of checklist implementation to guide how you plan to engage surgical team members with 1-on-1 conversations.

1-on-1 conversations are extremely useful throughout the implementation process, but they are specifically recommended in:

- Step 1: Recruit a Team
- Step 5: Customize and Test
- Step 6: Plan Your Expansion
- Step 7: Have 1-on-1 Conversations
- Step 8: Promote the Checklist

## RELATED CONTENT

The following implementation guide chapters discuss or reference the use of 1-on-1 conversations:

- Chapter 3: *Building a checklist implementation team*
- Chapter 11: *Promoting the checklist*
- Chapter 12: *Teaching the checklist*

## RESOURCES AND MATERIALS

- Implementation Lead Project Spreadsheet
- Quick Reference Guide: *Addressing questions and objections*
- Action guide: *Guide to the Safe Surgery Checklist 1-on-1 conversation*
- Physician webinar recordings
- Conversation recordings

## KEY CONCEPTS

- A 1-on-1 conversation is simply a private, face-to-face conversation between two people.
- A 1-on-1 conversation is the most effective tool you have for persuasion, engagement, education, and training.
- 1-on-1 conversations are used throughout the implementation process.
- A 1-on-1 conversation is most effective when you are prepared for the conversation with that individual.
- A member of the implementation team should have at least one 1-on-1 conversation with each person in the operating/procedure room before the team uses the checklist.
- You're likely to find a normal distribution of reactions to the checklist; focus on the movable middle.
- Use a spreadsheet to plan and track your conversations.

## Introduction

Some quality improvement efforts try to promote change by using email messages, meetings, or newsletters to tell people what the effort is and what they need to do. We find that quality improvement is more effective when you engage people more deeply, specifically by having private, face-to-face conversations with the people who will be affected. We call those conversations 1-on-1 conversations.

When we talk about “engagement,” we mean actually getting your colleagues interested and involved in the checklist work (see Diagram 10.1).

This chapter focuses on the foundation: the 1-on-1 conversation. For information about how you can spread the word and stimulate interest in the checklist with advertising and promotion, see Chapter 11: *Promoting the checklist*.

## Use 1-on-1 conversations throughout the implementation process

Having 1-on-1 conversations with people will help you:

- build your implementation team.
- find clinicians to test the checklist.
- prepare surgical teams to use the checklist.
- coach individual surgical team members in checklist use.
- engage leadership.

## Goals of the conversation

- Engage people with a personal interaction.
- Show that you value their input and concerns.
- Ask directly for their help.

DIAGRAM 10.1 **Safe Surgery Checklist Implementation Training Model**

Engagement — getting your colleagues interested and involved in the checklist work — is the first activity in the checklist implementation training model.

Having a 1-on-1 conversation with everyone who is touched by the checklist work is critical. This personal contact and tailored information establishes a foundation for all later interactions with surgical team members.

Time →

	ENGAGEMENT		TRAINING		COACHING		
When:	Before training		Before first use		During first/early use		Ongoing
What:	<i>“Introduce me to the idea”</i>	<i>“Tell me why”</i>	<i>“Tell me how”</i>	<i>“Show me” how</i>	<i>“Watch me do it”</i>	<i>“Give me feedback”</i>	<i>“Watch me do it”</i> <i>“Give me feedback”</i>
How:	Have 1-on-1 conversations	Promote the effort internally	Explain + Demonstrate + Practice proper checklist use		Observe + Coach Use the Coaching Observation Tool and 3-part question		Observe + Coach Use the Coaching Observation Tool and 3-part question
Refer to:	<i>This chapter</i>	Chapter 11	Chapter 12		Chapter 13		

## Dr. William Berry shares some thoughts about the importance of engaging physicians

*Over the past ten years of working to improve the quality of care in hospitals and ambulatory surgery centers, we've noticed that it has been the rare physician who is in the audience — we have mostly been talking to nurses.*

*That tells a bit of a story about how quality improvement efforts are done in healthcare, at least until now: QI has largely been carried on the backs of the nurses in ASCs and in hospitals. As a result of that, physicians have been distanced from the process and they sometimes feel like quality improvement is being done “to” them and not “with” them.*

*Surgeons in particular have had a lot of changes imposed upon them. Rarely have they been invited to the table to actually be part of what's being considered. The Joint Commission's Universal Protocol or Time Out is an example of a quality improvement program that people feel was done “to” everyone in the operating room rather than done “with” everyone.*

*As you try to engage surgeons and other physicians in this work, keep in mind that you really want them involved. It's important that they feel like they have a voice and are part of the effort.*

— Dr. William Berry, Ariadne Labs

## Why a conversation is so important

It's clear that checklist implementation requires a team effort, but one surprising lesson we learned from a site a few years ago is this: By *first* talking to each member of the surgical team individually, the implementation team faced little resistance and were able to get surgical team members more engaged in the checklist work.

Since then, we've come to understand that the 1-on-1 conversation is the single most powerful and effective tool the implementation team has for engaging people in the Safe Surgery Checklist because it:

- shows respect.
- allows you to tailor the message to each individual.
- helps you gauge the readiness or resistance of each person.
- can help identify enthusiastic supporters who can help champion the work.

Even though it's a great technique, some individuals will need more than one conversation. That's okay; by circling back to them you continue to build a relationship and demonstrate that you value their input.

## Principles behind the 1-on-1 conversation

One thing we've learned in working with so many facilities — and it's true around the world — is that your success in implementing the checklist work will depend on the relationships you have and the relationships you can build while doing the work.

### Everyone touched by the checklist should get at least one 1-on-1 conversation

Every person whose role is touched by the checklist should be engaged with a 1-on-1 conversation before they are asked to use the checklist.



The Safe Surgery Checklist affects a variety of roles, including:

- anesthesiologists
- CRNAs
- nurses
- proceduralists
- surgeons
- technicians
- anyone else who works in the operating/procedure room

You never want to have a situation where someone is asked to use the checklist without first knowing what it is, why is valuable, and how it should be used. Putting a checklist into the operating/procedure room without an initial conversation can alienate or anger people who might otherwise have been supportive, making it difficult to get them back on your side.

### **The person leading the conversation needs to be trusted and respected**

Whoever is initiating the conversation needs to be trusted and respected by the person they're targeting. Surgeons and other physicians are often a little bit easier to reach with a peer-to-peer conversation, but nurses can absolutely talk to doctors. There is no one formula to figure this out. You just need to look through a list of people who work in your facility and decide who has the best relationship with each target person.

### **Each conversation should be shaped to fit the individual**

Imagine two different people: one likely to be enthusiastic, the other likely to be resistant. The conversation you have with the enthusiastic person can be a bit different from the conversation you have with a person you think is going to be difficult. Think about how you can tailor each 1-on-1 conversation to suit the role, needs, interests, and temperament of the person you want to engage.

For instance, some people are interested in evidence, some may have recently witnessed near-miss events in the operating/procedure room, and some are keenly focused on team communication.

- Knowing something about the perspective of the person you will speak with can help you tailor your conversation around topics of interest to them.
- If you don't know the person you will be speaking with, ask colleagues or staff for insights. Usually the nurses know.

### **Some people need multiple conversations**

Be patient. You may need to have multiple conversations with some people before they are willing to help with the work.

### **Most people fall into the “movable middle”**

The distribution of surgical team members is a perfect bell curve: A few people really embrace the project, a few people at the other end of the spectrum are deeply hostile, and in the middle you have a huge chunk of people who can be influenced.

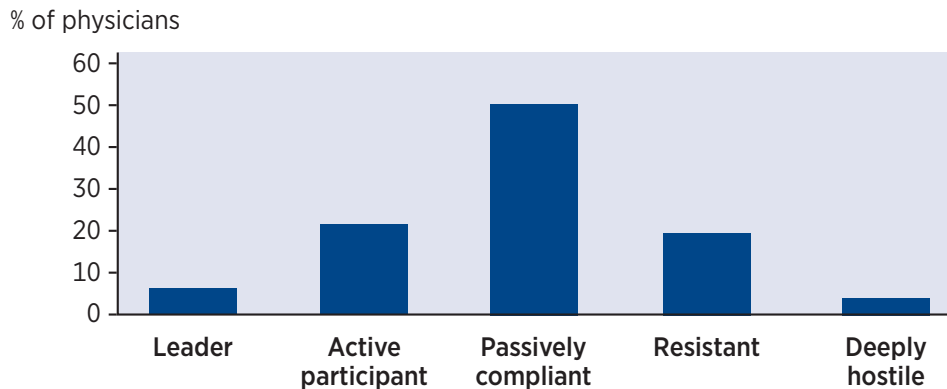
Typically, about one in twenty surgeons will have real enthusiasm for using the checklist to drive communication and safety improvements, but the 50% in the center of the curve are what we call “the movable middle” (see Diagram 10.2 on page 142).

They are the group most influenced by what others are doing, and the group most important to success in the long term. They are also the ones most likely to be moved by a 1-on-1 conversation. Once they use the checklist and work with the implementation team a while, some of the passive people will come to believe in it and support the work more actively.

## DIAGRAM 10.2 The challenge of physician engagement

This chart shows the response of physicians to a 1-on-1 conversation about the checklist. Although the data was collected in one facility, it represents well what we observe and what many facilities describe as the range of physician reactions to the checklist. The categories also mirror the reaction we see from people in other roles.

### Observed response types



### People tend to fall into five categories

<b>Leader</b>	A small group, about 5%, will be enthusiastic and eager about the checklist in their 1-on-1 conversation.
<b>Active participant</b>	About 20% of people will believe in the idea and will be willing to use the checklist right away.
<b>Passively compliant</b>	About 50% will go along with the effort, but they won't be the first ones to use the checklist.
<b>Resistant</b>	About 20% of people will react negatively to the work — they are resistant. They don't want to use the checklist, but this group can often be influenced effectively by the leaders on the front end of the curve.
<b>Deeply hostile</b>	A few people will hate the idea of the checklist, and they are usually not going to be convinced. (Sometimes these folks are hostile about any change, not just about the checklist).

One of your goals is to try to figure out how to get the passive compliant people in your facility—the “movable middle”—to get on board with the work you’re doing to improve safety. They tend to follow the crowd, so if there are a lot of people who speak out against the checklist, they may be influenced negatively. On the positive side, when you have a lot of people who are enthusiastically engaged in the project, they can be biased to support the checklist.

## How to have an effective 1-on-1 conversation

Based on feedback from a range of facilities, we’ve compiled a list of points that many people find to be effective in 1-on-1 conversations.

### Schedule the conversation

Some of these conversations can happen informally and be effective, but we recommend that you schedule these conversations. Scheduling a conversation helps to ensure that you have enough time to make your case. It also demonstrates that:

- you respect their time.
- the content of your meeting is important.

For doctors in particular, try to schedule times when they are not doing anything else so that you can have a five- or ten-minute conversation with them.

### Take a copy of the checklist

We recommend that you take a copy of the checklist. Highlight the items that that person will lead and areas in which you think that they should be sharing information or asking questions. This places the focus on their specific actions and makes it easier to do the checklist in a role play. It also shows that you have taken the time to prepare for their individual role.

## Make 10 key points

The following sequence of key points provides an effective structure and flow for most 1-on-1 conversations. (For a detailed discussion of each point, see “Rationale and ideas for key points of a 1-on-1 conversation” on page 144.)

1. Introduce the checklist and emphasize that the checklist is about communication and teamwork.
2. Explain how the checklist or your updated checklist is different from what you are currently doing and that it builds upon the Time Out.
3. Acknowledge that the person you are speaking with is already safe. Be clear that you are not singling that person out because you think that they are not safe.
4. Share some of the benefits of using the checklist.
5. Tell them how important they are to the success of the project.
6. Explain how they can help set a positive tone in the operating/procedure room by using the checklist.
7. Walk through the checklist and explain to them how to use it and what their part in using it is.
8. Talk about how using the checklist communicates professionalism to others on the team.
9. Ask for help.
10. Thank them for their time.

Remember to tailor your conversation to each individual. For ideas about how you can respond to specific questions or concerns, see “How to handle common questions and objections” on page 149.

## Rationale and ideas for key points of a 1-on-1 conversation

### POINT 1

#### The checklist is about communication and teamwork

Lead with the idea that the checklist is about communication and teamwork. Emphasize that it is more than a piece of paper, more than just checking processes; the checklist helps teams communicate better and work together more effectively overall.

Quote from surgeon as example of what this can sound like:

*“The checklist helps focus on who the patient is, what you’re doing, and why you’re doing it — which isn’t always clear to everybody involved. It also opens up avenues of communication so that, when something does come up that someone’s not sure about, they feel more comfortable asking about it.*

*Just by beginning those conversations, I find that it creates a different environment and allows a conversation about the care, where it’s okay to have discussions about the patient. It’s okay to have discussions about the prognosis, about things that really aren’t necessarily relevant to the actions at hand, but it opens up avenues of thought and communication that are more comprehensive about the patient. And that results in better patient care, certainly from a technical standpoint, but also from a human standpoint in just plain caring.”*

### POINT 2

#### The checklist is different from what you are currently doing

Explain how your new checklist (if you’re introducing it for the first time), or the new version of your checklist, is different from what is already being done. Talk about the benefits of the changes. Make sure that they clearly understand how, and why, what you want them to do is different from what they currently do.

Quote from surgeon about how their existing checklist could be done better:

*“We have a checklist, but it is currently running in the background like an antivirus program on your computer. A lot of people aren’t even aware that it’s going on, other than the circulating nurse in the operating room who’s checking the boxes. The part that’s missing in most people’s use of the checklist is that the checklist is designed to stimulate a conversation among the crew, a discussion. It’s designed to have people proactively share the information that they have with the entire crew. When the checklist is run from the background and someone is just checking the boxes, you don’t have that conversation.”*

**POINT 3****Acknowledge that the person you are speaking with is already safe**

It's important to acknowledge that everyone in your facility tries to be safe. You never want to imply in any way that what people are currently doing is unsafe.

Recognize and remember that everybody goes to work with the best intentions of doing what's right for their patients.

Be explicit that you understand that they are already really good, that you are building on what they're currently doing, and that the spirit of the effort is that even the best can be better.

**What you can say:**

*“Everyone in our facility tries to be safe and we want to build upon the systems that we already have in place.”*

**POINT 4****Share some of the benefits of using the checklist**

This is an opportunity to talk about some of the benefits that you think will be important to the person you are speaking with. You can also share some of the benefits that you think are particularly important for your facility or talk about the evidence supporting checklist use.

**Example benefits include:**

- Helps us do what we know needs to be done for every patient, every time
- Ensures that we have the necessary information to take the best possible care of the patient
- Gives every member on the care team a voice
- Builds stronger and safer teams
- Makes patients feel safe and involved in their care
- Provides a means for continuous quality improvement
- Improves efficiency

**Quote from surgeon:**

*“The checklist brings it back to the fact that the operating room isn't about me, it's about the patient. It's a way of making sure that everyone who's in the OR remains focused on that and allows information to flow freely, and for us to work as a team on behalf of that patient we're privileged to take care of that day. I think that having the checklist in our operating rooms has really helped to frame the operative care in that way. It's the way I've always thought about it, but people sometimes, in the day-to-day bustle of the work, lose sight of that perspective.”*

## POINT 5

**Tell them how important they are to the success of the project**

No one person on the surgical team owns the checklist, so every single person needs to view themselves as a coleader with responsibility for making it succeed—the reality is that the effort will not work without everyone taking a leading role.

**What you can say:**

*“You are a leader in our facility; we can’t do this without your help.”*

## POINT 6

**Talk about how the person you are speaking with can help set a positive tone**

Other people will naturally follow our patterns of communication. When we communicate more openly, that triggers other people to be more open in their communication with us. Although it is easy to forget in our day-to-day work, every person on the team helps to set the desired tone in the operating room. By being happier, more communicative, and more cooperative, your positive tone can rub off on other team members.

**What you can say:**

*“Other team members will follow your patterns of communication. You can help set the tone in the room.”*

## POINT 7

**Walk through the checklist, explain how to use it and what their part is**

Make sure that they understand what their role is. Walk through the checklist with them. Consider doing a practice run of the checklist while explaining what is expected of them for each item.

For example, the checklist says the surgeon should “explain the operative plan.” If you are speaking with a surgeon, give them an example and have them actually practice it.

**What you can say to a surgeon about communicating the operative plan:**

*“Most of the time, you can just give a quick sentence, ‘This is a routine cataract,’ ‘This is a routine hernia,’ ‘I don’t expect anything out of the ordinary’—something like that, just so the team understands what it is.”*

**Other ideas for surgeons:**

It’s sometimes helpful to point out to surgeons other ways they can contribute to improving communication through the checklist:

- Activate people by using their names.
- Use the safety statement, which sets a positive tone and has been shown to help everyone on the team feel safe voicing concerns.
- Tell the team what you are going to do by sharing the operative plan before you start.
- Stop to debrief at the end of the case.
- Thank your team.

**What one surgeon said about doing her part of the checklist:**

*“Proactively briefing and debriefing with my team makes everyone’s day easier, and it is so much appreciated. I’ve been amazed at the positive feedback that came from the simple act of sharing this type of information.”*

## POINT 8

**Talk about how using the checklist well communicates professionalism to others**

When you're starting to wind down a conversation, you want to point out the benefits the checklist can have for them. One idea that resonates with people is that the checklist gives everyone an opportunity to demonstrate their professionalism. We sometimes forget, when we are in the operating/procedure room, that if we roll our eyes during the Time Out or when someone asks a question, that sends a strong message to everyone in the room. No one goes into the operating room wanting to be unprofessional — we all take pride in our professionalism. It can be helpful to remind people of the subtle ways we convey our professionalism to others, either positively or negatively.

**What you can say:**

*“The checklist gives you an opportunity to make your plan clear, answer questions, and demonstrate openness and professionalism.”*

This quote is an example of what one surgeon found effective to say to other surgeons:

*“What I appreciate about the checklist is that it gives me a place to stand, where I can lead the team when I need to.”*

## POINT 9

**Ask for their help**

By asking people directly — “Will you help me with this project? Will you help us with this work?” — you tap into a fundamental reason most people go into healthcare: to help other people. Most people will say yes; few people are willing to say no when you ask them to help with something face to face. In fact, we've found that it's easier for people to say yes when you have a 1-on-1 environment with them, rather than asking them in front of their peers. If they don't want to help, ask them not to stand in your way.

**What you can say:**

*“Will you help us with this work?”*

## POINT 10

**Thank them for their time**

No matter how the conversation goes or ends, always thank them for their time.

## Tips for managing your 1-on-1 conversations

### Track your conversations as they happen

By recording the actual date and outcome of each conversation, you can minimize the chance that you will overlook someone.

### Schedule and track follow-up conversations

Some people need multiple conversations; plan and track each conversation and its outcome.

### Multiplying yourself: How to talk to a lot of people

In larger facilities it can be challenging for implementation team members to lead all of the individual conversations that need to happen. At the same time, it's not acceptable to miss anyone: *Every person needs a conversation*. One way to deal with this challenge is to ask people who are positive about the checklist in your early 1-on-1 conversations to help spread the word by taking responsibility for conducting some of the downstream 1-on-1 conversations. These are the people who fall in the “leader” category — whether they are surgeons, anesthesia professionals, or nurses — and they are usually eager to help.

If you decide to enlist others:

- Track each person's responses to their 1-on-1 conversations so that you can identify the people who would do a good job of introducing the checklist to others.
- Train people who respond enthusiastically your strategies for having effective 1-on-1 conversations.
- As your newly-trained conversation leaders schedule and have conversations, track their progress and the feedback they receive during their 1-on-1 conversations with others.

## Use a spreadsheet to plan and track 1-on-1 conversations

### RESOURCE

We created the Implementation Lead Project Spreadsheet, an Excel template that you can use to help plan and track tasks throughout implementation, including 1-on-1 conversations.

Use the spreadsheet to schedule and track:

- training for first use of the checklist.
- first use, and which implementation team member will attend each surgical team's first use of the checklist.
- follow-up observation, coaching, and notes.
- periodic observation and coaching.

For more information, see Chapter 9: *Creating a plan for checklist expansion*.

### List everyone who needs a conversation

Create a list of all operating/procedure room staff who will be touched by this program. Capture their name, role, service, email address, and other information that will help you manage the project.

### Rate each person by their anticipated resistance

In most facilities, the implementation team can name the individuals who are most likely to embrace the checklist and those who are most likely to be resistant. This is not an exact science, but rating your personnel helps you make strategic choices.

### Assign someone to lead each conversation

Assign a member of your implementation team to talk with each individual. Consider:

- Which team members have a good existing relationship with that individual?
- Who will have the best chance of connecting with and appealing to that individual?
- Which member(s) of the implementation team are best prepared to handle potentially resistant or hostile staff members?



## Set target dates and begin scheduling conversations

Each facility's plan for expansion is a bit different. The best practice is to know who you want to reach first, and why. Use your spreadsheet to record target dates and dates of scheduled conversations.

### TIP

Try to have as many 1-on-1 conversations as you can before you hold large meetings to promote the checklist. It is especially important to speak with anyone who you think will be resistant or disruptive to this work.

## How to handle common questions and objections

### Acknowledge and validate the concern

When someone expresses a concern about the checklist in a 1-on-1 conversation, the most important thing you can do is acknowledge and validate that person's feelings.

### Be prepared to listen

Common objections are often based on legitimate concerns—you will be able to address those concerns most effectively once you've demonstrated a willingness to listen.

Arguing with someone or telling them that they should not have a concern is a good way to shut down communication.

### Be prepared to respond to objections

The tables on the following pages pair common objections with considerations and examples for how you can respond.

## Responding to deep hostility

If you encounter someone who is particularly opposed to the checklist, tell them what you are trying to do across your facility. Give them a chance to say that they don't agree with the checklist, approach, or timing—listen to and acknowledge their objections.

### Ask them to not stand in your way

For instance, you might say:

*"I understand your position and that's absolutely fine, but we ask that you not stand in the way of our work with other surgical team members, because there are surgeons, physicians, and other folks on staff here who want to use a checklist to improve communication and patient safety."*

If you can, speak to potentially hostile staff or physicians individually *before* talking about the checklist in meetings where they will be present.

It is important to have a 1-on-1 conversation with suspected resisters before any large meeting. If you don't do this, there is a danger that they will hijack your presentation, raise concerns in front of the group, and cause their peers to become more hesitant.

- Talk to them first.
- Ask for their help.
- If they won't help, ask them to at least not get in your way.
- Regardless of the outcome, thank them for their time and tell them you will keep them apprised of your progress.

## Common objections

What you might hear...	How you might respond...
<p>I am already safe. I don't need to do it.</p>	<p>The goal here is to get past the implication that by asking them to use the checklist you are implying that they are not safe.</p> <p>People often think there is another person in the facility that could do better, and you can make the case that you want this person to be as safe as possible for the benefit of the patients.</p> <p><i>“Yes, you are already safe, but the rest of the team can benefit. We need it because we feel safer when you do this.”</i></p> <p><i>“Yes, you are safe. But is there anybody else here who doesn't have quite that same attitude toward safety that you do?” Then you can talk about a different surgeon or an event if you need to. “They won't do it unless you do it, so can you help me?”</i></p> <p><i>“You are safe, but we think that something like this tool can help make our entire center better.”</i></p>
<p>There isn't time to do this.</p>	<p>We find that when the checklist is used in a meaningful way and has become the habit of how people work, it takes less and less time. In fact, it can <i>save time</i> because teams are better prepared to work together.</p> <p><i>“Have you ever had the frustration of getting 20 minutes into a case and then having something not available that was necessary?”</i></p> <p>Point out that by doing briefings and sharing information proactively, the checklist can help prevent that type of delay — that waste of everyone's time and resources — and make the place run better.</p>
<p>I don't want to do it. I've never had to do this before and it makes me feel weird.</p>	<p>Doing something new feels weird for a while. Prepare people for this:</p> <p><i>“Yes, we know that changing how you communicate and interact may feel uncomfortable, but that feeling goes away with time.”</i></p> <p>People who initially felt weird doing the checklist start to feel weird <i>not</i> doing the checklist. We've heard people say that when they operate at another facility, they almost feel naked without doing the checklist once they've gotten used to it.</p>

## Common objections

What you might hear...	How you might respond...
<p>I need to stay focused, and the checklist is a distraction.</p>	<p>We hear from surgeons and anesthesia professionals that the checklist will interrupt their focus, particularly before skin incision for surgeons, and before induction for the anesthesia professional. This is a real issue, so be prepared to listen and acknowledge that. You can validate those concerns by saying, “Yes, we understand that, and this is how the checklist can actually help you.”</p> <p>Intense focus is clearly an important part of mentally preparing to perform an invasive procedure on a patient. The checklist is a way for everyone on the team to be focused, and to align everyone’s focus in the same direction. If each person is focused individually and everyone’s seeing a slightly different picture, it’s very hard to arrive at the same destination.</p> <p><i>“The checklist is one or two minutes of making sure that everyone’s focus is on the same plan and in the same direction, so that we can ensure the best outcome, in terms of both efficiency and safety for the patient.”</i></p>
<p>My team knows what I want without me asking.</p>	<p>Sometimes this might be true, but it’s helpful to talk about times when perhaps the team didn’t know, or wasn’t as prepared as they could have been. When things don’t go well or something bad happens, it will often turn out that someone on the team had information that may have helped prevent harm but that they didn’t have an opportunity to share that information with others. The checklist gives everyone an opportunity to share information with the team as a whole.</p> <p>Ask the person to reflect on things they can say to make the team even better prepared.</p> <p>Another approach is:</p> <p><i>“There are some studies that show that if you have a fixed OR team that you perform better, but there are also some suggestions that fixed teams may get complacent about things, that they start taking things for granted. And that’s not really what you’d consider to be a high-reliability approach. A high-reliability approach is to standardize things, and the checklist will help us do that throughout our facility.”</i></p>

## Common objections

What you might hear...	How you might respond...
<p>There is no evidence that the checklist works in my specific environment.</p>	<p>Always validate people's concerns.</p> <p>Don't suggest that there is evidence for a specific use or setting if there is not.</p> <p>When someone asks about the use of a checklist in a specific setting or for a specific surgery, acknowledge that there may not be as much direct evidence for those specific uses at this point in time.</p> <p>Point out that there is a growing body of evidence for complex operations like heart surgery or significant cancer surgeries that briefings and debriefings help and the use of checklists makes a difference in care. Even in surgeries that are short or where the risk of a procedure is significantly lower, the risk is still not zero and the potential exists to really harm patients.</p> <p><i>"Even if the checklist makes a difference for one in a thousand patients, or only one in ten thousand patients, isn't it still worth that little bit of an investment to help that patient not have something happen to them?"</i></p> <p><i>"Think about how many airline accidents are acceptable. It's zero, right? We want to be working toward zero harm in our facility, so if the checklist can lead us to better communication, better teamwork, briefings, and debriefings, we think that's worth trying."</i></p>

## Common objections

What you might hear...	How you might respond...
<p>Recent studies show that surgical safety checklists don't work.</p>	<p>This statement may refer to the two studies below. In both cases, checklist use was not actually measured and the quality of implementation was not assessed. Review the study summaries below and use the talking points to help you address this concern.</p> <div style="display: flex; justify-content: space-between;"> <div data-bbox="605 531 1049 1915" style="width: 48%;"> <p><b>NEJM</b>  <b>“Introduction of Surgical Safety Checklists in Ontario, Canada”</b>            Urbach DR, Govindarajan A, Saskin R, Wilton AS, and Baxter NN. Introduction of surgical safety checklists in Ontario, Canada. <i>The New England Journal of Medicine</i> 2014, 370(11), 1029–38. doi:10.1056/NEJMs1308261.</p> <p><b>Talking points</b></p> <ul style="list-style-type: none"> <li>• Researchers did not measure how the checklist was used in the hospitals. If you don't use the checklist, it can't work.</li> <li>• A well-used checklist changes process and culture. Changing culture takes longer than three months.</li> </ul> <p><b>SUMMARY</b></p> <ul style="list-style-type: none"> <li>• a province-wide mandate implementing checklists in the operating room put into place in beginning July 2010</li> <li>• study period was three months before checklist introduction and three months following checklist implementation</li> <li>• used administrative data to measure outcomes</li> </ul> <p><b>RESULTS</b></p> <ul style="list-style-type: none"> <li>• no statistical differences in a set of complications and mortality</li> <li>• concluded that the checklist didn't change patient outcomes</li> </ul> </div> <div data-bbox="1049 531 1489 1915" style="width: 48%;"> <p><b>Medical Care</b>  <b>“Evaluation of the Effectiveness of a Surgical Checklist in Medicare Patients”</b>            Reames BN, Scally CP, Thumma JR, Dimick JB. Evaluation of the Effectiveness of a Surgical Checklist in Medicare Patients. <i>Med Care</i> [Internet]. 2015 Jan [cited 2015 Mar 13];53(1):87–94. Available from: <a href="http://www.ncbi.nlm.nih.gov/pubmed/2546416">http://www.ncbi.nlm.nih.gov/pubmed/2546416</a>.</p> <p><b>Talking points</b></p> <ul style="list-style-type: none"> <li>• The “checklist” used in the Keystone Surgery program is very different from the Safe Surgery Checklist.</li> <li>• Researchers did not measure how the checklist was used or quality of implementation. If you don't use the checklist, it can't work.</li> </ul> <p><b>SUMMARY</b></p> <ul style="list-style-type: none"> <li>• 95 Michigan hospitals implemented Keystone over two years</li> <li>• Comprehensive Unit-based Safety Program (CUSP) encouraged hospitals to use the checklist during briefings and debriefings</li> <li>• used a surgical checklist that included six CMS Surgical Care Improvement (SCIP) measures</li> <li>• used Medicare data sets to assess outcomes; Michigan hospitals were compared to hospitals nationally</li> </ul> <p><b>RESULTS</b></p> <ul style="list-style-type: none"> <li>• found no association with improved outcomes</li> <li>• concluded that the checklist (SCIP measures) didn't change patient outcomes</li> </ul> </div> </div>

## Guide to the Safe Surgery Checklist 1-on-1 conversation

Use the points below to guide your conversation with surgical team members. Remember to tailor your conversation to the interests and concerns of each individual.

### Key points and suggested flow

1. Introduce the checklist and emphasize that the checklist is about communication and teamwork.
2. Explain how the checklist is different from what you are currently doing and that it builds upon the Time Out.
3. Acknowledge that the person you are speaking with is already safe. Be clear that you are not singling them out because you think that they are not safe.
4. Share some of the benefits of using the checklist.
5. Tell them how important they are to the success of the project.
6. Explain how they can help set a positive tone in the operating room or procedure room by using the checklist.
7. Walk through the checklist and explain to them how to use it and what their part in using it is.
8. Talk about how using the checklist communicates professionalism to others on the team.
9. Ask for help.
10. Thank them for their time.

For ideas about how you can respond to specific questions or concerns, ask your implementation lead for a copy of the quick-reference guide *The Safe Surgery Checklist: Addressing questions and objections*.

# Chapter 11

## Promoting the checklist

### CONTENTS

---

<i>Introduction</i>	157
General principles for promoting the checklist	158
Promote the Safe Surgery Checklist at meetings	158
Use your checklist demonstration video	160
Advertise your checklist effort	160
Educate and engage patients and their families	163

# Instructions for the team lead

## OVERVIEW

Use this chapter to guide how you use meetings and other internal advertising to engage staff and surgical teams in the checklist work.

This chapter supports the Own phase of checklist implementation and will be helpful when working on:

- Step 7: Have 1-on-1 Conversations
- Step 8: Promote the Checklist
- Step 10: Watch and Coach

## RELATED CONTENT

- Chapter 9: *Creating a plan for checklist expansion*
- Chapter 10: *The 1-on-1 conversation*

## RESOURCES AND MATERIALS

- Implementation Lead Project Spreadsheet
- Presentation templates (available for download from [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org))

## KEY CONCEPTS

- Promotion refers to advertising the checklist work internally in your facility.
- Promotion is a key strategy, along with the 1-on-1 conversation, for engaging surgical team members, staff, and leadership in the checklist work.
- Promotion can support and supplement — but never replace — the 1-on-1 conversation.
- Use multiple ways to get your message out.
- Take advantage of various existing meetings (e.g., regular staff/department meetings) to talk to groups of people about the checklist.
- Share any checklist demonstration videos you have created.
- Share “good catches.”



## Introduction

By promoting the Safe Surgery Checklist effort in your facility, you help create awareness of the work, spark curiosity, and build a sense of sharing and pride in your efforts to improve patient safety. Promotion, along with 1-on-1 conversations, helps build a foundation for subsequent training and coaching (see Diagram 11.1).

This chapter describes ways to “get the word out,” offers tips and considerations for how to talk to different audiences, and provides examples of what other facilities have done.

You may also want to consider ways to promote your use of the checklist with patients and their families. Consider working with your facility’s

media or public relations team to think about external publicity — they can help you consider the pros and cons and ways to reach the public.

### Nothing replaces a 1-on-1 conversation

Staff meetings, emails, posters, and bulletin boards... all are good ways of spreading the word, but when implementing a surgical safety checklist, we are asking people to change.

We’re asking people to change how they communicate with each other, to change the way they start an operation, to change the way that they prepare to transfer a patient from the operating/procedure room to the recovery area — so we always need to talk to them *person to person*, give them a chance to ask questions, and help them really understand the work.

DIAGRAM 11.1 **Safe Surgery Checklist Implementation Training Model**

Promoting the checklist helps raise awareness and communicate the value of the effort for your facility. It supplements, but can never replace, the primary activity of engagement: the 1-on-1 conversation. Promotion typically begins at the same time as 1-on-1 conversations and continues throughout implementation.

	ENGAGEMENT		TRAINING		COACHING	
When:	Before training		Before first use		During first/early use	Ongoing
What:	<i>“Introduce me to the idea”</i>	<i>“Tell me why”</i>	<i>“Tell me how”</i>	<i>“Show me” how</i>	<i>“Watch me do it”</i>	<i>“Give me feedback”</i>
How:	Have 1-on-1 conversations	Promote the effort internally	Explain + Demonstrate + Practice proper checklist use		Observe + Coach Use the Coaching Observation Tool and 3-part question	Observe + Coach Use the Coaching Observation Tool and 3-part question
Refer to:	Chapter 10	<i>This chapter</i>	Chapter 12		Chapter 13	

## General principles for promoting the checklist

### Use many ways to tell your story

Make an effort to ensure that people in your facility have many different ways of learning about the checklist effort (meetings, email, message boards, newsletters, etc.). This will help you reach everyone and means that many people will be exposed to your message on an ongoing basis, which can help raise their awareness and stimulate interest and discussion.

### Be consistent in describing the value this work will bring to your facility

Identify a few key reasons that the checklist matters in your facility, and repeat those same messages consistently in all your communications.

### Use photos and videos that show people in your facility using the checklist

Images of your surgical teams and your operating/procedure rooms can be effective in creating a sense of ownership among physicians and staff. Seeing pictures of local people involved in the work helps make your implementation effort more meaningful and persuasive and reinforces the idea that the initiative is being led locally and is customized for your facility.

## Promote the Safe Surgery Checklist at meetings

Meetings give the implementation team an opportunity to talk about the checklist work to many people at once. Most facilities try to leverage the variety of existing meetings already scheduled at regular times for different groups of people. You can also try holding separate informational meetings about the checklist effort. How you leverage meetings depends a great deal on the size of your facility: Think about what will work best for your teams and needs.

## Best practices to help you take advantage of existing meetings

Most successful facilities go on what they call a “media circuit” — they send implementation team members to as many meetings as possible (staff meetings, division meetings, etc.) to talk about the checklist and their implementation plan. This section provides guidance for how you can go about that.

### Use regularly scheduled meetings

- Make a list of the regularly scheduled meetings that are held in your facility, such as staff, department, or service meetings; grand rounds for physicians; and committee meetings.
- Find out who schedules/runs each of those meetings and try to get space on the agenda.
- Take as much time as they will give you (ask for at least 10–15 minutes; longer is useful).
- We recommend using the Implementation Lead Project Spreadsheet to track the meeting dates and assign the implementation team member(s) that will address each meeting.
- Be sure to have 1-on-1 conversations with suspected skeptics before you present to a meeting they will attend.

### Be organized in your presentation (use this outline as a guide)

Although you should tailor each meeting presentation to the specific group and the amount of time you will have, this generic outline offers a good starting point:

- Introduce yourself and your role on the implementation team.
- Start by sharing a story (see “Start each presentation with a story” on page 159).
- Give a general overview of the surgical safety checklist and the implementation process.
- Describe how using the checklist is different from the way things are done now.

- Share your plan for implementation.
- Talk about what you've done so far and what you're going to be doing (e.g., "We'll be coming around to speak with each of you individually in the next few weeks.>").
- Let them know (with at least a rough estimate) when will they begin using the checklist.
- Show them your checklist demonstration video. Or, consider doing a live practice session (role play) to show the group how the checklist works.
- Always finish by:
  - telling the group how important they are to the process.
  - asking the group for their help.
  - thanking them for their time.

### Consider including other messages that may resonate with your audience

Depending on the group you will be speaking with and the amount of time you have, you may want to include some of the benefits below. Also consider including evidence or talking about studies that show that the checklist improves outcomes. (For a summary of key evidence, see "Evidence" on page 23 in Chapter 1.)

The checklist will:

- give you each an opportunity to demonstrate leadership.
- help each of you give information to the team that will, in turn, make your own job easier.
- help us do what we know needs to be done for every patient every time.
- ensure that we have the necessary information to take the best care of the patient possible.
- give every member on the care team a voice.
- build stronger and safer teams.
- make patients feel safe and involved in their care.
- provide a means for continuous quality improvement.
- improve efficiency.

### Use one of the Surgical Safety Checklist presentation templates

Presentation templates (available for download at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org)) can help you share key ideas about the checklist in meetings. Each template is created for a specific purpose or audience (e.g., hospital leadership, physicians, other surgical team members). All of the templates are designed so that you can easily modify them to include your facility's information and your version of the checklist.

### Start each presentation with a story

Regardless of the size or kind of meeting, we recommend that you start your checklist presentation by sharing a story. Stories activate the audience and prime them to think about their own experiences.

### Use the story that is provided in the presentation template

Each presentation includes a story that you can use to open your presentation at a meeting.

### Use a story from your facility

Think of something that happened in your hospital — some event or story that can help illustrate the importance of the checklist work. Using a story from your facility can be a powerful way to tap into people's shared experience and sense of community.

### CAUTION

It's very important that you never share a story that can be traced to somebody in the audience. Decide in advance how you can change details, or what you can leave out, so that the story is not personal and cannot be identified with any individual or team. If you cannot make the story unrecognizably generic, *do not use it*.

### Ask people in the audience to help you

It's helpful to have a colleague who is in the audience share a story about something that they have seen that could have been helped by the checklist, better teamwork, or improved

communication. Always ask those people in advance if they are willing to share a story, and explain that the story should not be able to be traced to anyone else in the room.

## Use your checklist demonstration video

Checklist demonstration videos can be an effective tool for spreading the word about your checklist effort. (See “Creating a checklist demonstration video” on page 135 in Chapter 9 for information on why you should create a video, along with tips for how to do it.)



Image courtesy Palmetto Health Media Services

A video can help you promote the checklist in several ways:

### Directly

- Show it in department or staff meetings.
- Show it in executive briefings or a board meeting.
- Share it during 1-on-1 conversations.
- Share it when training teams to use the checklist for the first time.

### Indirectly

- Use it as a screensaver on operating/procedure room computers.
- Run it as a continuous loop in physician and staff lounges.

## Advertise your checklist effort

### Newsletters and other internal media

Considering working with your media department to include checklist-related stories in your facility newsletter, message boards, and/or other internal communications.

### Tips and considerations

- Identify one key message for the story.
- Include a way for people to follow up if they have questions or want more information.
- Consider including a call to action: what do you want the reader to do after seeing the story?
- Think about including personal stories (near misses, changes of heart, etc.).
- Include photos or video (e.g., try to show your checklist in your operating/procedure room with your team, to reinforce the idea that this is all about your facility and patients).

### Email blasts

Email is a good addition to your promotion efforts, but don't assume that email messages will have much impact.

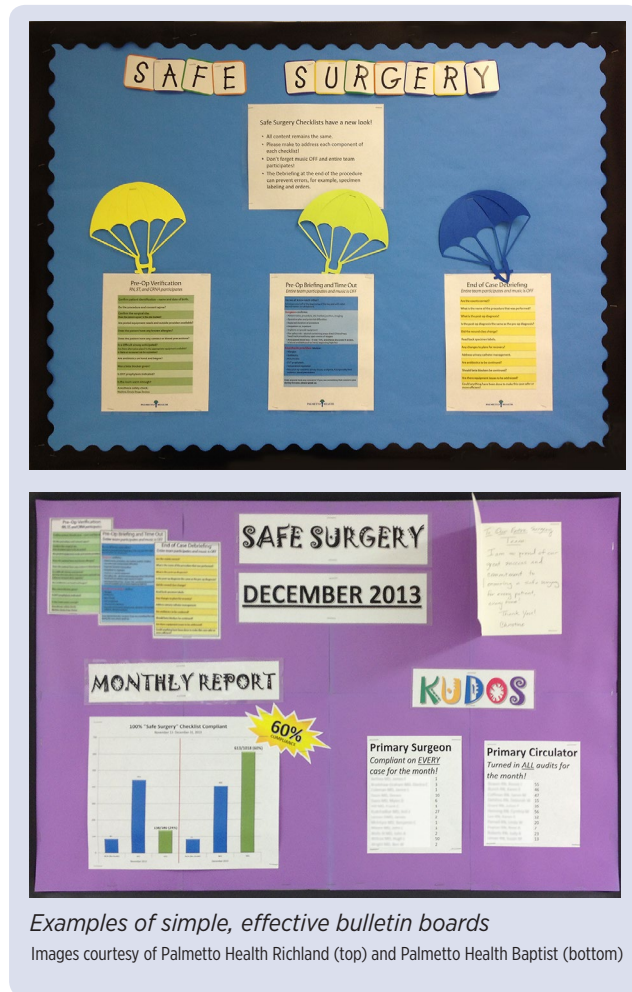
Because an email blast is easy, it is sometimes the default way facilities try to share information about their checklist effort. In reality, email messages are often discarded without being read or are skimmed rapidly. It's best to think of email as just one of many ways for you to reach people.

### Tips for email messages

- Keep your message short, focused, meaningful — just the highlights.
- Include a link to follow for additional information.
- Include a call to action — something the reader can do.
- Write a clear, concise, meaningful subject line.

## Posters and bulletin boards

Posters, whiteboards, bulletin boards, message screens, computer screen savers — all are great ways to create a visual presence for the checklist effort in your facility. Use the space to talk about your progress, celebrate newly trained teams, publicize catches, etc.



Examples of simple, effective bulletin boards  
Images courtesy of Palmetto Health Richland (top) and Palmetto Health Baptist (bottom)

Here are some considerations for maximizing their impact:

### Choose a prime location

Consider using a bulletin board or putting a poster in a location where it will be seen by surgical team members. Some ideas:

- in or outside break rooms
- in key hallways or in front of stations where people tend to congregate

### Keep it fresh

People notice when things change — and when they don't.

- Be creative and keep it current.
- Infrequently updated bulletin boards tell people that your effort has stalled or grown stale.

### Ideas for content

- photos of teams that have been trained and are using the checklist
- answers to common questions
- a copy of your checklist
- newsletter articles
- examples of promotional items (buttons, stickers, etc.) for team members
- websites or other resources where people can review evidence or learn more about checklists
- contact information for implementation team members or team lead
- stories about catches or personal examples of how the checklist helped someone

### Buttons

Consider having buttons made that team members can wear. Buttons are an effective and inexpensive way to connect a real person to the effort. They can also trigger questions from patients and staff.

### Ideas for button statements

- "I'm a Surgical Checklist Star"
- "I use the Safe Surgery Checklist"
- "Ask me about the Safe Surgery Checklist"

## ONE FACILITY'S STORY:

## A Culture of Safety bulletin board: How a simple board can be powerfully persuasive



*Everybody comes through our break room to go into the main facility. We put up a bulletin board there where everybody would see it, and that one bulletin board did more for our checklist than I ever expected.*

*Beneath a copy of the checklist we had pages with common reactions like: “Why do we need the checklist?” and “I already do that,” and “I’m safe already, I don’t need a checklist.” We wrote the statements in red, and wrote the answers in blue. This allowed us to give answers to people who had questions in mind but didn’t want to speak up.*

*On the right-hand side, we put little pieces of paper with the Safe Surgery website and the telephone number so that anybody could follow up and look into the research or see how checklists are progressing in different areas.*

*The bulletin board really did help — people mingled around it to look at the pictures and actually read it. It’s been fantastic.*

***It surprised us, but the photos we posted actually made people want to participate and use the checklist.***

*We initially posted 8×10 photos taken in different rooms showing people who had started using our checklist: surgeons, administrators, anesthesiologists, CRNAs, nurses, and techs. When more people started using the checklist, they all wanted their photos up there too. The 8×10s all had to come down and we now use 4×6s because there are so many more people using it.*

*We had one surgeon who was not on board with using the Safe Surgery Checklist: He thought he didn’t need it and said it would waste time and interfere with the whole procedure.*

*Once he started seeing others using it and saw their photos go up on the board, he asked, “Well, can I use the checklist?”*

*At first, he wanted to be a part of something that everybody else was starting to do. Then, he made some great suggestions that we used.*

*After that first spark of interest, I’d go back to him and say, “You know, we really like your input. Is there anything you can think of that we could consider or that you might want to work with us on?” and that opened a door to cooperation that had been closed before.*

*— anonymous implementation team lead*

## Educate and engage patients and their families

Before you decide to promote checklist use with patients and families, it is important that everyone in your facility uses the checklist and understands how to address patient questions.

In some facilities where promotion of the checklist is focused on patients, patients have asked their doctors and/or nurses about the checklist, only to discover the clinicians weren't able to talk knowledgeably about the checklist or said they didn't use it. Think carefully about how and when you prepare for patient-facing promotion.

Patients and families can be engaged in multiple ways at multiple times:

- phone screening/pre-op appointment
- waiting area
- pre-op (before the patient enters the operating/procedure room)
- in the operating/procedure room during the Time Out

### Why engage patients and families?

- makes them feel comfortable
- empowers them to be part of their care
- demonstrates a culture of safety

### Think about how and where to engage patients and families

#### Phone screen/scheduling

Educate the patient and family early about the checklist and what their role in the checklist will be.

#### EXAMPLE

*“Let me tell you something special about our facility.*

*We use a checklist to help give you the best care possible.*

*This means that before you have your procedure, you may be asked multiple times to tell us information or to review things that may seem obvious to you, like your name and date of birth.*

*We do this to make sure that you receive the best care possible.*

*Your role in this process is extremely important. We ask that you help by answering all of our questions, and we want you to ask us questions or speak up if you have any concerns.”*

#### Waiting area

- Some facilities have created a display with their checklist, or use posters that describe what the checklist is and why their facility uses it.



Image courtesy of AnMed Health, Medicus Surgery Center, LLC

*Teresa Devore, RN, BS, an infection control nurse and quality coordinator, shares an example of how checklist information can be displayed in a patient waiting area.*

**Preoperative area**

- Have the patient and family members actively participate (if possible) in the discussion of the “Before Induction of Anesthesia” section of the checklist.

**In the operating/procedure room**

- Have everyone introduce themselves by name and role to the patient.
- Try not to talk over the patient as if they were invisible.
- Remember: You never know what the patient will and will not remember after their procedure.

**Addressing concerns your teams may have about talking to patients and families about the checklist****Patients may lose confidence in the surgical team**

Patients who are unfamiliar with the processes associated with perioperative care may not understand or feel comfortable with basic information being repeated so frequently.

It is helpful to share what you are doing with the checklist and explain to the patient that reviewing the information protects their safety. When this conversation takes place, patients usually feel reassured.

**Patients may be unreliable due to medication**

- We don’t know what patients will and will not remember.
- Patients can participate in a limited fashion, but use your clinical judgment.

**Patients may become alarmed or stressed**

Some practitioners feel uncomfortable talking about the details of the case (e.g., estimated blood loss) in front of a patient. Remind surgical team members:

- It is the clinicians’ job to ensure that patients are aware of the realities of their procedure before they get into the operating/procedure room.
- The patient should not hear about any potential blood loss or other concerns for the first time in the operating/procedure room.
- The checklist doesn’t require the team to discuss anything that shouldn’t already have been discussed with the patient prior to the procedure.



# Chapter 12

## Teaching the checklist

### CONTENTS

---

<i>Introduction</i>	167
Training options	168
The seven steps of Safe Surgery Checklist training	171
Have trainees practice the checklist with a script	173
Considerations for training larger groups	175

# Instructions for the team lead

## OVERVIEW

This chapter describes how to train individuals and teams to use the checklist. Training takes place first when you begin testing in the operating/procedure room in the Own phase, and later in the Expand phase when you spread the use of the checklist.

Refer to this chapter when planning for checklist training and as a guide to “training the trainers” — preparing your team and other checklist champions to help teach proper checklist use.

In addition to the trainers described in this chapter, you will also need coaches to implement use of the checklist. For guidelines on selecting and training coaches, see “Choose your coaches” on page 189 and “Train your coaches” on page 189 in Chapter 13.

This chapter will be helpful when working on:

- Step 5: Customize and Test
- Step 9: Train and Spread

## RELATED CONTENT

- Chapter 9: *Creating a plan for checklist expansion*

## RESOURCES AND MATERIALS

- Your facility’s surgical safety checklist
- Copies of the checklist prepared for each role with highlighted text
- Safe Surgery Checklist Practice Script
- Implementation Lead Project Spreadsheet

## KEY CONCEPTS

- Training surgical team members in how to properly use the checklist is one part of a broad arc of learning that starts with a 1-on-1 conversation and continues with coaching.
- Training refers to the process of explaining proper checklist use, demonstrating checklist use, and giving surgical team members an opportunity to practice it.
- All surgical team members should have a chance to practice the checklist away from a patient before they use the checklist.
- There are multiple ways to train people, and not everyone in your facility needs to be trained in the same way.

## Introduction

The Safe Surgery Checklist implementation training model (Diagram 12.1) focuses on three key activities:

- **Engage** surgical team members in the work by introducing the checklist in a 1-on-1 conversation; promote your effort throughout your facility to build awareness.
- **Train** team members by explaining, demonstrating, and helping team members practice proper checklist use (this chapter).
- **Coach** team members to support and improve their performance.

Once surgical team members have been introduced to the idea and benefits of your checklist in a 1-on-1 conversation, they need to

be trained to properly use the checklist before they are asked to use it in a case with a patient. Then, once they begin using the checklist, they need coaching to support and improve their performance. Ideally, this three-step process is linear, with each step following closely on the previous one. In practice, however, your approach may vary, depending on scheduling and the availability of team members.

This chapter explains how to train surgical team members to use the checklist properly. It also describes possible teaching scenarios and provides tips and examples.

### IMPORTANT

It is extremely important to train each surgical team member in how to properly use the Safe Surgery Checklist *before they use it in a case*.

DIAGRAM 12.1 **Safe Surgery Checklist Implementation Training Model**

Training is the second activity in the checklist implementation training model. Training builds upon the foundation established through 1-on-1 conversations and your promotional efforts.

	Time →							
	ENGAGEMENT		TRAINING		COACHING			
When:	Before training		Before first use		During first/early use		Ongoing	
What:	<i>“Introduce me to the idea”</i>	<i>“Tell me why”</i>	<i>“Tell me how”</i>	<i>“Show me” how</i>	<i>“Watch me do it”</i>	<i>“Give me feedback”</i>	<i>“Watch me do it”</i>	<i>“Give me feedback”</i>
How:	Have 1-on-1 conversations	Promote the effort internally	Explain + Demonstrate + Practice proper checklist use		Observe + Coach Use the Coaching Observation Tool and 3-part question		Observe + Coach Use the Coaching Observation Tool and 3-part question	
Refer to:	Chapters 10 and 11		<i>This chapter</i>		Chapter 13			

## How people learn new skills

The training model builds on a simple, powerful, and well-documented progression for how people learn new skills:

- Introduce me to the skill.
- Tell me how to do it.
- Show me how to do it.
- Watch me try it.
- Give me feedback.

The bulk of this chapter focuses on the three middle steps of this progression: “Tell me,” “Show me,” and “Watch me try it.”

## Good teaching starts with preparation

Surgical team members need to believe they have received adequate training and support during their first use of the checklist. Inadequate preparation is likely to undermine your surgical team’s cooperation and their confidence in the overall effort.

If you have not already done so, refer to Chapter 9: *Creating a plan for checklist expansion* for detailed guidance on how to plan and coordinate the tasks required for putting your checklist into use.

## Plan early and stay organized

Whether you use your own system or decide to use the Implementation Lead Project Spreadsheet, be sure to:

- plan and document in advance who will be trained, when, by whom, and how the training will be accomplished.
- track when surgical team members are scheduled to first use the checklist.
- schedule a member of the implementation team to be present in the operating/procedure room the first time each team uses the checklist.

## Training options

There are several options to consider when planning and carrying out checklist training. Most facilities will use a combination of approaches to ensure that everyone receives training before first use of the checklist.

Not everyone in your facility needs to be trained in the same way or at the same time, but it is important to provide thorough and effective training to everyone.

## When will the training occur?

### In advance

Training several days in advance is best, and not more than two weeks before the first day of use would be a good ideal. This timing is not always possible, due to resource or scheduling limitations. Being trained in advance may make some surgical team members more comfortable, but the training should not be so far in advance that people cannot remember the key practices.

### Day of first use in surgery

If you train a team on the same day that they will be using the checklist, plan time for the team to do a practice run-through before the surgery.

## How will the training be delivered?

### Individually (one on one)

Working with individuals provides an opportunity to directly address each person’s questions and concerns.

- works well when training team members who are potentially reluctant
- may be time-consuming in larger facilities
- doesn’t lend itself to having the team practice together as a unit

## ***What training in health care often looks like...***

***The tendency in health care is to throw information at people and expect them to change.***

*Often, instead of meaningful training, healthcare providers and staff are:*

- *given a manual or procedure guide.*
- *given a presentation or lecture in a staff meeting.*
- *expected to instantly adopt a new behavior.*

***Suppose we taught teenagers to drive a car using this approach.***

*We'd give them:*

- *a driver's manual.*
- *a PowerPoint presentation.*
- *the car keys and the freeway.*

*We do give teenagers a driver's manual and expect them to learn the rules of the road, and we do make them attend a driver's education class. But that's not all.*

*How we actually teach them to drive is to give them:*

- *a driver's manual.*
- *information about the driving environment: city vs. rural, hazards, etc.*
- *an introduction to the car.*
- *lots of practice and driving with a "coach."*
- *practice driving alone.*

*Only when these steps are completed do we entrust our teens with the car keys, and we recognize that they will continue to learn and need support.*

***Successful training includes opportunities for practice.***

*As with teens and driving, success in learning proper use of the checklist requires a series of component steps. The members of the surgical team who are expected to use the checklist properly need an introduction to the rules, education about how it works, a demonstration of what to do, and plenty of practice.*

### To a surgical team

Training a surgical team as a unit can be more efficient and gives the trainer an opportunity to reinforce the message of teamwork.

- facilitates rehearsal of the checklist as a team
- might be difficult to find a time when everyone can train together as a team

### To a group

Training larger groups of people (e.g., a meeting of surgical nurses/techs, anesthesia professionals, or surgeons) will help you reach many people at once and can help identify people who can help train others.

- take advantage of regularly scheduled meetings
- can practice checklist use by breaking into smaller groups of five to six people to mimic the size of surgical teams
- well-suited for demonstrations of the checklist, either by having the implementation team model proper use or by showing a checklist demonstration video

## Who will conduct the training?

### Implementation team members

In most facilities, implementation team members are best prepared to teach surgical teams how to use the checklist properly. If your facility is large, you may need to supplement your implementation team with additional trainers.

### Other staff and physicians

Large facilities sometimes train groups of people who can then provide training to others. Surgical staff and physicians who have been trained and who use the checklist properly can also teach others how to do it.

People chosen to be trainers should:

- have experience using the checklist and understand the key practices for proper use.
- be enthusiastic about the checklist.
- be respected by their peers.

### EXAMPLES

- One facility trained their circulating nurses, and those nurses then taught proper use of the checklist to the surgical teams with whom they worked. If you use this approach, be sure that your 1-on-1 conversations and promotional efforts make clear that your checklist effort has the support of surgical leadership and executives and is about team communication. Otherwise, the risk is that your checklist effort will be viewed as a nursing-led initiative.
- Some facilities have surgeons train each other by having leaders in each department show their peers how to use the checklist by inviting them to watch a case.
- Another option is to have a surgeon, accompanied by an implementation team member, watch a surgical team use the checklist in a case; the implementation team can then review this case with the surgeon and address any questions.

## Where will the training occur?

### A convenient quiet space

As a rule, try to choose a location that is quiet and free of distraction. Some people are mildly uncomfortable with the idea of practicing the checklist. Choosing a location that offers some privacy can help put them at ease.

Common options include a meeting room or an empty operating/procedure room. If you will be training a team just before surgery and no rooms are available, you can also meet in a hallway or other convenient space.

## A simulator

If your facility has access to an operating/procedure room simulator, that can be a perfect place to train surgical teams. However, a simulator is not necessary for effective checklist training, so if scheduling or resource concerns limit your simulator time, don't let that negatively affect your implementation schedule.

## The seven steps of Safe Surgery Checklist training

Whether you are training an individual or a group, training team members a week in advance or just before surgery, teaching the checklist requires seven tasks:

1. Introduce yourself and set expectations.
2. Review the benefits of the checklist.
3. Explain the elements of proper checklist use and how the checklist is performed.
4. Show what proper use of the checklist looks like.
5. Give trainees an opportunity to practice.
6. Ask trainees how they feel about the checklist and answer any questions they may have.
7. Let them know they have support.

Although the seven training steps are universal, training a larger group presents slightly different opportunities and challenges (see “Considerations for training larger groups” on page 175). When training surgical teams, be sure that all, or nearly all, team members are present. Anyone not present should also be trained prior to using the checklist with a patient.

### 1. Introduce yourself and set expectations

Before you start, introduce yourself and share your role in the checklist implementation effort. Give the trainees a brief overview of the training steps and how long training usually takes.

Tell the trainees when they will first be using the checklist in the operating/procedure room (today, tomorrow, next week, etc.).

### 2. Review the benefits

It's a good practice to review the benefits of the checklist and explain *why this work is important* in your facility.

Give a paper copy of your checklist to each person. Highlight the portions that pertain to each role (e.g., circulating nurse, anesthesia professional, etc.) so that people can easily follow their part.

Let people know that this checklist has been customized and tested in your facility and that you are now ready for them to use it. Tell or show trainees where the checklist will be located in operating/procedure rooms.

Remind everyone how important each individual's contribution is for making the checklist work.

### EXAMPLES

- helps us do what we know needs to be done for every patient, every time
- ensures that we have the necessary information to take the best possible care of the patient
- gives every member on the care team a voice
- builds stronger and safer teams
- makes patients feel safe and involved in their care
- provides a means for continuous quality improvement
- improves efficiency

### 3. Explain how to use the checklist

Each surgical team member needs to understand the specific individual and team behaviors that will make the checklist effective. Describe the elements of proper checklist use and explain why each is important.

#### Elements of proper use:

- Every item is discussed for every patient, every time.
- All necessary team members are present.
- Each portion of the checklist is run when everyone is ready to have the discussion.
- Everyone speaks and is engaged in communication.
- The checklist is read aloud from a visual reference (not from memory).
- When possible and appropriate, include the patient in the discussion.

Although those practices are essential for getting the most out of the checklist, they sometimes conflict with common habits of surgical teams members. Remind trainees that each team member demonstrates leadership in the operating/procedure room when they take responsibility for doing the checklist well.

### 4. Show proper use of the checklist

People often find it difficult to imagine what using the checklist looks like in actual practice. By showing them an example, you provide a model to follow that can help them feel more comfortable.

#### Ways to show people proper checklist use:

- Demonstrate checklist use in a mock case (not with a patient).
- Show a checklist demonstration video.
- Watch an experienced team use the checklist in an actual case.

### 5. Provide an opportunity to practice

The purpose of this step is to let surgical team members experience what it feels like to actually use the checklist. Practicing the checklist can also help team members identify questions and stimulate discussion.

#### Ideas for practicing the checklist:

- Practice with the same kind of checklist (paper or poster) trainees will actually use.
- Acknowledge that use of the checklist may seem awkward at first but that it will become less so with time, and affirm that the checklist will be used in your facility.
- Have trainees read aloud one or more scripted scenarios of checklist use. Then have trainees rehearse the checklist in a pretend case without a script.

### 6. Invite feedback and answer questions

Always ask people to tell you how they felt about doing the checklist and give them an opportunity to ask questions. Acknowledge their feelings, and answer questions respectfully. Let them know how to follow up with you if questions occur to them at a later time.

### 7. Let them know they have support

Share your plan for coaching surgical teams:

- Someone from the implementation team will watch the trainees' first case with the checklist to provide guidance or answer questions.
- Surgical teams will receive coaching soon after beginning to use the checklist.
- Teams will have ongoing periodic coaching.



## Have trainees practice the checklist with a script

### A script is a valuable learning tool

When you ask someone to follow the checklist, you are asking them to do something new and to change their normal routines.

Giving surgical team members an opportunity to rehearse the checklist with a practice script:

- provides an opportunity for them to experience what it feels like to run the checklist.
- helps make people comfortable by enabling them to focus on the content and what their role should be when using the checklist.
- helps prompt questions and discussion.

### Scripted practice can be used throughout the implementation process

A practice script is helpful in a number of situations throughout the implementation process. Use a script to:

- give your implementation team experience with the checklist before you customize the checklist for your facility.
- do a tabletop simulation.
- practice with surgical teams during training.
- give a live demonstration of the checklist.
- make a checklist demonstration video.
- teach coaches.

### The Safe Surgery Checklist Practice Scripts

The Safe Surgery Checklist Practice Scripts (see Appendix F: *Other tools and materials*) provide scripted scenarios of surgical teams using the checklist in representative cases.

The script for Scenario One illustrates best practices for using the checklist in a case. *Always use this script when training surgical team members so that the participants gain experience using the checklist properly.*

The script for Scenario Two introduces omissions and problems in how the team follows the checklist. This script can be used in training or coaching sessions to facilitate discussion.

### Customize the script before you use it

The Safe Surgery Checklist Practice Scripts follow the items on the Safe Surgery Checklist master template, but the script you use in training should match the surgical safety checklist you will actually use.

Review and edit the script so that it reflects *your* checklist and facility:

- Change the language and sequence of checklist items as needed to match your checklist.
- Change the names or roles to match your checklist and teams.
- Change the patient and case details.
  - When using the script with a specialty group (e.g., orthopedic surgeons), change the case details to fit the types of surgeries they perform.

The script template is available upon request as a Word document, or you can create your own script.

### Practice the checklist at least twice

In most training situations, trainees will get more out of the experience if you give them multiple opportunities to practice the checklist.

A good approach is to have trainees practice first with a script. Then give trainees an opportunity to run the checklist without a script, using the type of checklist (paper or poster) that will actually be used in their operating/procedure room.

### How to introduce practice to trainees

The trainer should explain the practice exercise to trainees and let them know how it will work, how long it will take, and what will happen afterward.

- Explain that the goal of the exercise is to give trainees a chance to practice using the checklist.
- Tell trainees they will do one round of scripted practice, followed by one round of running the checklist on their own without a script.

The trainer will need to help trainees start the exercise and transition from one activity to another. The following example describes how a trainer might facilitate the practice.

### EXAMPLE

In this example, the trainer is meeting with a team about 20 minutes before their first case of the day. The team members have all received 1-on-1 conversations.

*“Hi guys, thanks for gathering a bit earlier than usual this morning. Today you’re going to be using the checklist in a case. But before that, we’re going to do two rounds of practice so that you can get a feel for the items and the sequence”*

The trainer gives each trainee a copy of the practice script.

*“The first time, we’re going to follow this script. You’ll each read the part for your own role. Then the second time, we’ll practice running the checklist without a script. Any questions? Great, let’s get started.”*

The trainer reads the top part of the practice script to set up the scenario.

*“Okay, go ahead [anesthesia professional].”*

When the team reaches the end of Part 1 on the practice script, the trainer reads the introduction to Part 2 and invites the team to continue.

When the team reaches the end of Part 2 on the practice script, the trainer reads the introduction to Part 3 and invites the team to continue.

When the team finishes the script, the trainer says:

*“So, how did that feel? [Pause for replies.] Do you guys have any questions before you run it on your own?”*

The team doesn’t have any questions, so the trainer passes out paper copies of the checklist. Each copy has been highlighted for a different role so that the surgical team members can easily see their own parts. (The trainer has the team using a paper checklist because they will be using a paper version in the operating room.)

*“Ready? So here’s our case. Our patient is Joseph Doe, a 35-year old male who’s coming to get a [\_\_\_\_\_] procedure.”*

The trainer sets up the case by telling the team the patient’s name, sex, age, site, and procedure. (Teams usually ad lib other details if needed.)

*“The patient was just brought into the room and you guys want to start getting ready for induction, but before you do that you’re going to run through the first part of the checklist.”*

The team does the first section of the checklist.

*“Good. Now you’re ready for the second part. The surgeon just finished scrubbing and walked into the room, so let’s move on to the rest of the case.”*

The team does the second section of the checklist.

*“Alright, now it’s the end of the case and you’re wrapping up and you’re ready for the debrief.”*

The team proceeds with the last section of the checklist. The trainer again asks if there are any questions, and reminds them that she will be in the room during the first case to answer questions or help if anything comes up.

## Considerations for training larger groups

Although the basic seven training steps are the same in principle, training a large group does present different opportunities from individual or team training and will usually require more preparation. Use these tips to help you take advantage of the opportunities and manage some of the challenges.

### Preparation

#### Have 1-on-1 conversations first

Try to reach as many people as you can with a 1-on-1 conversation before the meeting. This will help prepare a majority of your audience to focus on *how* to do the checklist, rather than what the checklist is and why they should do it.

#### If you think someone may cause problems, speak to them in advance

If you know that someone who will attend is likely to be strongly resistant or even hostile to the idea of the checklist, it is critical that you have a 1-on-1 conversation with them *before* the meeting. If they are still not open to using the checklist, respectfully ask them to not stand in your way. If you do not speak to the people who are likely to be most resistant, they may raise objections during the meetings and derail your training.

#### Ask for help

Be sure to have adequate help from the other implementation team members or other checklist champions during the training. Consider the size of the group, and plan to have an assistant for every five or six people. Brief them on your training plan and let them know how they can help.

#### Prepare your supplies

Be sure to have plenty of copies of any materials you plan to hand out (checklist, evidence handout, practice scripts, etc.).

## Suggested flow for group training

### Introduce yourself and set expectations

- Start with a brief introduction of yourself and the other implementation team members who will assist you in the training.
- Share a brief story. Stories activate the audience and prime them to think about their own experiences. *Never share a story that can be traced to somebody in the audience.* (For more information about starting a presentation with a story, see “Start each presentation with a story” on page 159 in Chapter 11.)

### Review the benefits of the checklist

Depending on how much time you have and how many 1-on-1 conversations you were able to have in advance, adjust how quickly you move through the following topics:

- Give a general overview of the Surgical Safety Checklist and the implementation process.
- Describe how using the checklist is different from the way things are done now.
- Share any results of your culture survey that suggest the need for improved communication.
- Highlight a few key benefits of the checklist for your facility.
- Be prepared to talk briefly about evidence that compelled your facility to adopt the checklist.

### Explain the elements of proper checklist use and how the checklist is performed

Briefly describe the practices that make checklist use effective, and talk about why each is important. You can review these items again after a demonstration of the checklist.

## Demonstrate how to use the checklist

Large meetings lend themselves to demonstrations of the checklist. The following ideas can work well:

- Have your implementation team demonstrate how to use the checklist.
- Have an experienced surgical team demonstrate the checklist. (It is important that they do the checklist correctly; have them read a scripted scenario if necessary.)
- Show your checklist demonstration video(s).

Always demonstrate the proper way to do the checklist. If time allows, consider a second demonstration in which a team takes common shortcuts and does not use the checklist correctly. You can ask the audience to identify what they notice or would do differently, or you can ask the audience to discuss the differences in small groups.

## Give trainees an opportunity to practice



### Break into small, facilitated groups

- Break the main group into smaller groups of five or six people (about the size of your average surgical team), and have them practice the checklist by following a scripted case.
- Have one experienced person in each small group who will facilitate the exercise and answer questions.

Assign someone to help each group, either someone from the implementation team or someone who has been trained and already uses the checklist well. These individuals can help walk each team through the exercise and can facilitate the discussion after each round of checklist practice.

If you are working with a group of people from a single discipline (e.g., nurses), some trainees in each group will need to play the part of other surgical team roles in the script. It's important that you give each person an opportunity to practice the checklist while playing their own actual role, so you may need to do multiple rounds of practice.

## Ask trainees how they feel about the checklist and answer any questions they may have.

You can either have each facilitator address questions in their small group, or you can refocus the entire group for questions and answers. Acknowledge people's concerns (if any), and address questions in a respectful way.

## Let them know they have support

Before you close the training session, remind the audience:

- how important they are to the process.
- when they will be using the checklist (at least a rough estimate).
- that an implementation team member will be present during their first case with the checklist.
- that everyone will receive coaching.
- that the goal is for the checklist to become a habit as ingrained in the culture as protecting the sterility of the surgical field.

Thank them for their time, and let them know whom to contact (and how) if they have questions or feedback for the implementation team.

## After the training

Try to schedule time with your implementation team and other assistants either immediately following the meeting or a short time later. Ask how they felt about the training, and discuss:

- What went well and what can be done better in the next training?
- Who in the training might be willing to help train other surgical members? (Think of people who are respected and enthusiastic, and have demonstrated that they understand how to use the checklist properly.)

## Safe Surgery Checklist trainers' guide

Use this page as a reminder of the steps that should be followed when training surgical team members in how to use the Safe Surgery Checklist.

### INSTRUCTIONS

Follow these seven steps when training people to use the checklist:

1. Introduce yourself and briefly describe the training steps.
2. Review the benefits of the checklist.
3. Explain the elements of proper checklist use and how the checklist is performed.
4. Show what proper use of the checklist looks like.
5. Give trainees an opportunity to practice.
6. Ask trainees how they feel about the checklist and answer any questions they may have.
7. Tell trainees about how and when they will be coached.

### KEY CONCEPTS

#### Benefits of the checklist

- Helps us do what we know needs to be done for every patient, every time.
- Ensures that we have the necessary information to take the best possible care of the patient.
- Gives every member on the care team a voice.
- Builds stronger and safer teams.
- Makes patients feel safe and involved in their care.
- Provides a means for continuous quality improvement.
- Improves efficiency.

#### Elements of proper checklist use

- Every item is discussed for every patient, every time.
- All necessary team members are present.
- Each portion of the checklist is run when everyone is ready to have the discussion.
- Everyone speaks and is engaged in communication.
- The checklist is read aloud from a visual reference (not from memory).
- When possible and appropriate, include the patient in the discussion.

# Chapter 13

## Coaching the checklist

### CONTENTS

---

<i>Introduction</i>	181
<b>About coaching</b>	182
What do we mean by “coaching the checklist”?	182
The importance of coaching	182
<b>How to coach the checklist</b>	183
Six principles for coaching in a surgical environment	183
Observe the surgical team	183
Give structured feedback using the 3-part question	186
Before you offer feedback...	187
<b>Creating and managing a coaching program</b>	189
Choose your coaches	189
Train your coaches	189
Plan and schedule coaching sessions	190
Keep track of what you learn	192

# Instructions for the team lead

## OVERVIEW

This chapter describes the role of coaching in checklist implementation, shares techniques and recommendations for effective coaching, and outlines considerations for planning and managing your checklist coaching efforts.

This chapter supports the Expand phase and the Improve phase of checklist implementation and will be helpful when working on:

- Step 10: Watch and Coach
- Step 11: Continually Improve

## RELATED CONTENT

Your coaches will benefit from having a resource of their own, so we have packaged the content on checklist coaching techniques from this chapter in Appendix D: *Techniques for coaches*. We recommend that you print that content and give it to each of your coaches.

- Appendix D: *Techniques for coaches*

## RESOURCES AND MATERIALS

- Coaching Observation Tool
- Implementation Lead Project Spreadsheet
- Video examples, available at <http://www.SafeSurgery2015.org>.

## KEY CONCEPTS

- The best way to know how the checklist is actually being used is to observe surgical teams in action in the operating/procedure room.
- “Coaching the checklist” means watching the team and giving feedback.
- Coaches should be selected carefully.
- Coaching is an ongoing activity that helps sustain and enhance checklist use over time.
- Coaching helps improve both individual and team performance.
- Good coaches offer feedback to the right people, at the right time, in the right place, and in the right way.
- Adults learn best when they arrive at their own conclusions.
- Effective coaching requires training and practice.
- The Coaching Observation Tool provides a framework for observation and coaching and can be modified to reflect the items on your checklist.
- Structured feedback (e.g., the 3-part question technique) is a simple and effective way to provide positive coaching.



## Introduction

Coaching is an integral part of expanding checklist use beyond your initial testing team (see Diagram 13.1). It leads individuals and teams to better performance and helps sustain effective checklist use. Coaching should continue after checklist implementation, to ensure that the quality of checklist use remains high and to support continuous improvement.

This chapter describes:

- what checklist coaching is and why it is important.
- how to successfully coach the checklist.
- how to plan and manage the logistics of coaching and prepare coaches to be effective.

### The role of the implementation lead

In most facilities, the implementation lead is responsible for building a checklist coaching

program. In larger facilities, the logistics of a coaching program tend to be more complicated, and in smaller facilities they can be quite simple.

In either case, the tasks are similar:

- recruiting people to coach
- providing coaches with basic training and opportunities to practice
- scheduling coaches: which surgical teams and cases will be coached by whom, and when
- gathering feedback from coaches
- creating and managing a system for ongoing coaching

The implementation lead is also usually a checklist coach. Even when the implementation lead will rely primarily on others to coach, she or he should coach the checklist often enough to keep those skills sharp and stay in touch with how it feels to be a coach in the operating/procedure room.

DIAGRAM 13.1 **Safe Surgery Checklist Implementation Training Model**

Coaching is the third activity in the checklist implementation training model. Coaching reinforces and builds on the checklist knowledge and experience that surgical team members have been given prior to using the checklist. Coaching also provides a means for the ongoing continuous improvement of checklist performance.

— TIME —————>

	ENGAGEMENT		TRAINING		COACHING			
When:	Before training		Before first use		During first/early use		Ongoing	
What:	<i>“Introduce me to the idea”</i>	<i>“Tell me why”</i>	<i>“Tell me how”</i>	<i>“Show me how”</i>	<i>“Watch me do it”</i>	<i>“Give me feedback”</i>	<i>“Watch me do it”</i>	<i>“Give me feedback”</i>
How:	Have 1-on-1 conversations	Promote the effort internally	Explain + Demonstrate + Practice proper checklist use		Observe + Coach Use the Coaching Observation Tool and 3-part question		Observe + Coach Use the Coaching Observation Tool and 3-part question	
Refer to:	Chapters 10 and 11		Chapter 12		<i>This chapter</i>			

## About coaching

### What do we mean by “coaching the checklist”?

Coaching a surgical team on proper use of the checklist starts by observing the team in the operating/procedure room. The coach pays close attention to what is going on: watching the team members perform the items on the checklist, and listening to their conversations and questions.

The coach will then either give feedback to the team as a whole or work with individual team members, depending on the observed behavior and the nature of the feedback.

The idea of “coaching” may bring to mind movie scenes in which angry coaches yell, jump up and down, and dress down their players. Perhaps you’ve even seen that behavior at a football game or other sporting event. But that is *not* what coaching is about — and it’s certainly not effective in the operating/procedure room.

#### Coaching is:

- listening and watching.
- asking questions.
- inviting the team members to reflect on their behavior.
- guiding the team to understand how to improve its performance.
- acknowledging the positive work people do.

#### Coaching is not:

- telling people what to do.
- criticizing people.
- instructing them in the moment about what to do.

## The importance of coaching

Coaching is one of the essential strategies for a successful checklist implementation. When done well, it can help your facility:

#### Deliver better patient care

- Teams that function well take better care of patients.

#### Improve morale

- High-performing teams feel better about what they do. Coaching the use of the checklist helps reinforce best practices that keep communication and teamwork at a high level.

#### Motivate change

- When focusing a team’s attention on an issue, if you let the team figure out opportunities for improvement, the team is more likely to work together to fix the problem. Team members will want to own the solution and will be inspired to change because they recognize the value of the change — not because you pointed it out to them.

#### Discover other opportunities

- Coaching can help identify safe practices and new opportunities for improvement that can be addressed in future efforts.

#### Support long-term success

- Ongoing coaching helps reinforce good habits and helps prevent individuals and teams from becoming lax about proper checklist use (e.g., always reading checklist items from a printed copy).
- The act of coaching shows that you care about what they do and are invested in their continued success.
- Coaching helps the implementation team stay in touch with actual checklist use and identify where additional help may be needed.

## How to coach the checklist

### Six principles for coaching in a surgical environment

The operating/procedure room is a unique clinical environment with inherent stresses and risks. The following principles apply whether the coach is working with an individual team member or the whole surgical team.

#### 1. Patient care is the highest priority

Coaching should never affect the ability of team members to focus on patient care or do their work, so coaches must pay close attention to the clinical circumstances of each case and act accordingly.

Coaches should wait until the team has finished providing patient care before offering feedback to the team.

#### IMPORTANT

*While observing the case, if coaches see something that may harm the patient, they should always speak up to prevent the harm.*

#### 2. Assume the best

Most people who work in healthcare do so because they want to help people; they are well meaning and try to deliver safe and effective care to patients. The people being coached in an operating/procedure room are knowledgeable adults and should be treated as though they are trying their best to help the patient. By approaching teams with this attitude, coaches are much more likely to get team members to listen to feedback.

#### 3. Acknowledge the positive

It's important to recognize surgical team members for the positive things they do, and acknowledge that they are all trying to learn and do their best for their patients.

#### 4. Let people reach their own conclusions

Adults learn best when they are allowed to reach their own conclusions. Effective coaches are able to get people to reflect on what has happened and guide them to identify — for themselves — problems and potential solutions for improving performance.

#### 5. Think before coaching

Good coaches offer feedback to the right people, at the right time, in the right place, and in the right way. Before giving feedback to a team, the coach should take a moment to reflect on the circumstances of the case, the team dynamics, and what they hope to accomplish. See “Before you offer feedback...” on page 187.

#### 6. Give structured feedback

Structured feedback allows you to present information in a neutral way that invites reflection. One effective technique for giving feedback is the 3-part question, which is based on a simple formula: observation + opinion + question. See “Give structured feedback using the 3-part question” on page 186.

### Observe the surgical team

The first step in coaching is to watch and listen as the surgical team performs its work in the operating/procedure room. The goal of observation is to learn what the team members do, as well as when and how they do it, so that the team can be supported in its efforts to improve patient safety.

#### The purpose of observation is to learn

Observation is not an audit — the purpose is not to gather data or identify people who are not compliant. Audits are common practice in health care, but often they have a negative or punitive connotation. We encourage coaches to emphasize observation rather than audit for this reason. A team's willingness to use the checklist or be coached can easily be undermined if the

team members feel they are being judged or criticized, especially by outsiders. It is important to practice any new skill, and coaching is the most effective and supportive way to promote learning and the practice of new behaviors.

## How to use the Safe Surgery Coaching Observation Tool

The Safe Surgery Coaching Observation Tool (see Diagram 13.2 on page 185) is a reference page for the coach that helps:

- focus attention on specific behaviors.
- standardize observations between coaches and between teams.
- organize observation and coaching tasks.
- record information, either during or after the case.

The Coaching Observation Tool can be used to watch a team perform the entire checklist or a particular portion of the checklist. (Note that the Coaching Observation Tool used for coaching is different from the Assessment Observation Tool used in Step 3: Assess Your Environment.)

### Explain that your observation is for learning

Using an observation tool during a case can have a negative connotation. Watching a case while holding a clipboard or piece of paper can lead some members of the team to feel that you are conducting an audit.

Put people at ease by telling the team in advance or at the beginning of the case that the form you will be filling out is an observation tool:

- to help you stay organized.
- to improve team performance.

### Take notes either during or after a case

The observation tool can be filled out during the case, or immediately after, to help you remember what specifically happened during the case.

Consider these points:

- Writing during the case may help some people remember, but writing can be a distraction from watching and listening.
- Take the attitude of the team into account. If the team seems uncomfortable with you using an observation tool, even after an assurance that the observation is about learning, it may be best to write notes after the case.

### Avoid personal identifiers

Do not write personal identifiers (e.g., names) on the observation tool. If you have comments about specific behavior, refer only to the role. By respecting confidentiality, you will help build trust for checklist coaching and for the implementation effort as a whole.

## DIAGRAM 13.2 The Safe Surgery Coaching Observation Tool

The Coaching Observation Tool was developed to help coaches focus on key elements of what surgical team members do and how they do it. Here is the first page of the three-page Coaching Observation Tool.

**Coaching Observation Tool**

COACHING OBSERVATION TOOL — page 1 of 3 DATE \_\_\_\_\_

**Before Induction of Anesthesia** (mm/dd/yyyy)

Use this form along with a copy of your facility's checklist to record your observations, notes, and feedback for the surgical team.

---

**Step 1: Checklist discussion Items**

- On a copy of your facility's Safe Surgery Checklist, mark each item that the team discusses.
- Use the space below to take notes about your observations.

**Step 2: Quality of discussion**

*After the discussion, please mark how well the checklist was used:*

a. Did the circulating nurse discuss all items when at least one other care provider was present?  
 Yes    Some, not all    No

b. Was the patient actively engaged in this discussion?  
 Yes    Somewhat    No    N/A

c. Were the checklist items done from memory?  
 Yes    Some, not all    None

d. Did every team member that was present say something?  
 Yes    Some, not all    No one

e. Could the team have performed this section of the checklist better?  
 Yes    No

**Step 3: What feedback can you give the team?**

*Reflect on what you saw the team do well or what they could have done better during the cases using the 3-part question:*

YOUR OBSERVATION	YOUR OPINION	YOUR QUESTION

Revised 052915

One page for each checklist section →

Coach records whether the team discusses each item that appears on your checklist →

Coach adds notes or comments as needed →

Coach records feedback in the form of a 3-part question →

Date ←

Coach records the quality of discussion and whether the team followed best practices for checklist use ←

### It is simple and easy to use

- There is a separate page for each section of the Safe Surgery Checklist.
- Each page has three steps:
  - Were checklist items discussed?
  - Were best practices followed?
  - What feedback can you offer?

### It is designed to help you

- Organize observations and coaching tasks.
- Focus on specific behaviors.
- Standardize observations.
- Record information.
- Frame feedback in the form of a 3-part question.

## Give structured feedback using the 3-part question

The 3-part question is an effective technique for giving teams structured feedback during coaching. This technique helps coaches offer feedback in a neutral way, and it gives surgical team members an opportunity to have their own insights and reach their own conclusions.

### The 3-part question is: observation + opinion + question

#### PART 1 Your observation

##### GOALS

- Explain your observation.
- Be specific and clear.
- Remain as objective as possible.

##### EXAMPLES

*“I saw...”*

*“I observed...”*

*“The team didn’t...”*

*“I noticed...”*

#### PART 2 Your opinion

##### GOAL

Share why you are focusing on a specific behavior or action, and explain its importance.

##### EXAMPLES

*“I think...”*

*“I am pleased that...”*

*“I am concerned that...”*

#### PART 3 Your question

##### GOALS

- Allow the team to reflect.
- Display genuine interest.

##### EXAMPLES

*“Can you help me understand?”*

*“I’m curious, what do you think happened?”*

*“I wonder what you think happened.”*

##### Putting the parts together...

*“I noticed that the team did not debrief at the end of the case. I think that debriefing is really important. Can you help me understand what happened?”*

### Use language that is neutral and that feels natural to you

It’s important to use language that is neutral and also feels comfortable for you to say.

##### EXAMPLES

*“I noticed the team didn’t use the checklist on the wall to prompt your discussions. I believe reading from the checklist helps so that all items on the checklist are discussed. I’m curious: Why didn’t the team read the items on the poster?”*

*“I noticed that your team skipped the introductions. I think they’re an important part of the checklist because they give everyone a chance to say something before the start of the case. Can you tell me why the team skipped them?”*

*“I saw that your team didn’t confirm that the antibiotics were completely infused before the start of the case. I believe it is important that the team confirms that the antibiotics are infused so the patient doesn’t get an infection. Can you help me understand how you think this happened?”*

## Avoid these mistakes when coaching with the 3-part question

### Don't make generalizations

#### EXAMPLE

*Avoid saying:* "I noticed that communication wasn't very good. I think that having good communication is important. Can you help me understand what happened?"

*Instead, give the team specific examples of what you saw:* "I noticed that your team didn't use the checklist on the wall to prompt your discussions. I believe reading from the checklist helps so that all items on the checklist are discussed. I'm curious about why the team didn't read the items on the poster."

### Don't assume that you understand people's actions or motivations

#### EXAMPLE

*Avoid saying:* "I noticed that you skipped the introductions because you were in a hurry."

*Instead say:* "I noticed that the team skipped the introductions. I think they're an important part of the checklist because they give everyone a chance to say something before the start of the case. Can you tell me why the team skipped them?"

### Don't make the team guess what you are thinking

#### EXAMPLE

*Avoid saying:* "Can you tell me what you did wrong?" when you already know exactly what you are after.

*Instead say:* "I noticed that your team didn't confirm that the antibiotics were completely infused before the start of the case. I think it is important for the team to confirm that antibiotics

*are infused so that the patient doesn't get an infection. Can you help me understand why this didn't happen?"*

### Don't ask questions that contain an answer

#### EXAMPLE

*Avoid saying:* "Don't you think it would have been better if you had...?"

*Instead say:* "I noticed that the whole team didn't stop all activity when performing the Time Out. I think it is important for patient safety that everyone in the operating room stop so they can fully participate in the Time Out. Can you help me understand what happened?"

### Don't disguise a statement as a question

#### EXAMPLE

*Avoid saying:* "You didn't really want to do that, did you?"

*Instead say:* "I saw that your team didn't review the specimen labeling before the patient left the room. I believe it is important to read back the specimen labeling, including the patient's name, so that there is no confusion over what the specimen is. I am curious, what do you think happened?"

## Before you offer feedback...

Good coaches offer feedback to the right people, at the right time, in the right place, and in the right way. Pay attention to team dynamics as you observe the case. Before you give feedback to the team, consider the following questions.

### What is the team doing?

Provide feedback to the team when it does not interfere with patient care, and when as many team members as possible are present.

### Should I say something now or in a discussion after the case?

It is best to coach when the case is finished, so that your interaction with the team does not detract from patient care.

#### IMPORTANT

*If you see something during a case that could cause harm to the patient, you should always speak up and say something to the surgical team.*

### What happened during the case?

Coaching is best received when team members are not stressed. For example, it may not be appropriate to give feedback when an adverse event occurs. In these circumstances, you may want to reconnect with the team or the individual members at a later time.

### Is the entire team going to be receptive to my feedback?

The team needs to be open to hearing feedback. If, after watching the case, you become aware that some members of the team will not be open to feedback, coaching the team as a whole may be ineffective. Instead, consider coaching that team by having individual conversations with each team member.

### Do I need to coach an individual or the team as a whole?

If you are coaching an individual, give that person feedback privately to avoid singling out the individual in front of the team. If you are trying to improve the performance of the entire team, it is appropriate to coach the team together.

#### **Coach the team together**

Coach the team as a group when the issues you see involve or apply to the entire team. Avoid discussing team issues with individuals, so as not to create the impression that the coaching does not apply to the whole team. If the team is not

available as a group, it's okay to speak to each individual about a team issue — just be sure to give every team member the same information.

#### EXAMPLE

Here is an example of coaching that is directed toward the whole team and takes place after — not during — the case.

**What the coach sees:** The team does not come to a hard stop during the Time Out.

**What the coach says:** *“I noticed that team members were still moving around when you started the Time Out. I think that it's really important that we come to a hard stop so that everyone can engage in that discussion. Can you tell me why that may have happened for this case?”*

#### **Coach individuals in a 1-on-1 conversation**

It is not appropriate to coach an individual in front of the team. Always provide individual coaching in private.

#### EXAMPLE

If one person on the team will not use the checklist, is not using it as intended, or is vocally negative about the checklist, have a 1-on-1 conversation with that person using the 3-part question to offer feedback.

In many instances, the coach who observed the case is the most appropriate and effective person to have this conversation. In some circumstances, someone in a leadership role may be more effective. For instance, if the person you need to speak with is a surgeon, it may be more effective for the head of that surgical department to have the 1-on-1 conversation.



# Creating and managing a coaching program

## Choose your coaches

Checklist coaches are often drawn from the implementation team, but it can be beneficial to recruit and train additional coaches who are not on the implementation team. Many facilities, for instance, find that nurse educators make good coaches.

It's important to recognize that not everyone has the temperament to be a good coach. Before asking someone to coach the checklist, consider the following criteria.

### A good coach is someone who:

#### Can be coached

People who respond poorly to coaching are not likely to have the insight, the sensitivity, or the level of understanding needed to coach other people. If people are not willing to be observed and answer questions about their performance, they should not be coaching other teams.

#### Is widely respected

The coach should be trusted and respected by peers and other members of the surgical team.

#### Communicates well

An effective coach is someone who knows how and when to listen, who speaks to others with respect and kindness, and who communicates ideas clearly and simply.

#### Understands the clinical environment

The coach needs to understand the clinical environment. Someone who has never set foot in an operating room would not make a good coach.

#### Understands what useful feedback is

- simple
- focused
- respectful
- kind

#### Avoids the negative feedback common in healthcare settings

- criticizing
- telling
- yelling
- being one-sided
- assuming incompetence

#### Observers should be impartial

Ideally, the coach should not be part of the clinical team being observed. Individuals who are not part of the case are likely to be (or be perceived as) less biased.

## Train your coaches

Coaches need guidance and practice in order to be comfortable and effective.

### Give coaches information

Appendix D contains the quick-reference guide *Techniques for coaches*. The guide presents content from this chapter in a coach-focused format. Print the quick-reference guide and give it to each of your coaches as a supplemental resource. *Techniques for coaches* includes:

- principles of effective coaching.
- how to use the Coaching Observation Tool.
- how to prepare for coaching sessions.
- how to give feedback using the 3-part question.
- Action guide: *Coaches' guide to giving feedback*.

## Create opportunities for coaches to practice

It is important for people to practice coaching away from the operating/procedure room. Although the 3-part question technique is easy to understand, coaches need practice in order to be comfortable and skilled in using it.

### IDEAS

#### Have coaches practice during implementation team meetings

- An implementation team meeting can provide a safe opportunity for coaches to try the 3-part question technique.

#### Stage a mock checklist coaching session

- Have a group of people read the Safe Surgery Checklist Practice Script, pretending to do the checklist in a case. Ask the coach to record observations on the Coaching Observation Tool and give the mock surgical team feedback.
- Switch roles and repeat the exercise, so several different people get practice being the coach.

#### Watch videos of teams using the checklist

Ask new coaches to watch checklist videos in pairs. You can use the checklist demonstration video you created or one of the many examples available on YouTube.

- Use the Coaching Observation Tool to track what you see in the video. At the end of the case, the coaches can practice using the 3-part question to give feedback to their partners. Having a partner is important because it helps coaches get more comfortable with using the language out loud.

#### Suggest that coaches try using the 3-part question with their family and friends

- This structured way of asking questions and bringing issues to people's attention can be used anywhere. It helps the person using the technique avoid turning people off with criticism, so it can be practiced (and be valuable) in many kinds of interactions.

## Have new coaches start in a safe and supportive environment

When first coaching actual cases in the operating/procedure room, coaches should have the opportunity to coach a surgical team that is supportive, flexible, and committed to the checklist effort. For instance, have new coaches start by coaching cases performed by the surgeon champion on your implementation team.

## Create opportunities for coaches to learn from each other

### IDEAS

- Have two coaches watch the same case in the operating/procedure room and ask them to give feedback together. After the case, the coaches can debrief with each other about how the coaching felt and how they can improve.
- Schedule meetings with all of your coaches on a regular basis to share their coaching experiences with one another and to learn from each other.

## Stay engaged with your coaches

When possible, it is important for the implementation lead to stay engaged with checklist coaches. For instance, the implementation lead can:

- attend cases with new coaches and provide feedback to the coaches after their sessions.
- debrief with coaches after their coaching sessions to stay abreast of progress or problems.

## Plan and schedule coaching sessions

The Implementation Lead Project Spreadsheet can be used to help you plan and document who will be coached, when, and by whom. You can also use it to document what the outcome of each coaching session was, and whether additional follow-up will be needed.

Before scheduling a surgical team for coaching, always be sure that everyone on the team has been:

- introduced to the checklist with a 1-on-1 conversation.
- shown how to properly use the checklist.

During the initial expansion of checklist use (see “During first/early use” in Diagram 13.1 on page 181), your goal is to coach all teams at least once, and multiple times when possible.

During the continual improvement phase (see “Ongoing” in Diagram 13.1), your goals are to provide ongoing support for teams, continue to learn and gather ideas from surgical team members, and keep an eye on the quality of checklist use. The best way to do this is to:

- randomly choose teams to coach.
- watch different specialties.
- watch different types of cases.
- watch on different days of the week and times of the day.

## Think strategically

When planning coaching sessions, start by thinking about which teams you should observe and coach first.

Begin with teams that you think will be receptive, open to feedback, and willing to work on improving their performance. This approach helps you get early “wins” with surgical teams, and helps give coaches an opportunity to get comfortable with the Coaching Observation Tool and the dynamic of coaching surgical teams.

If you know that some members of a surgical team are not going to be open to observation in the operating/procedure room, plan to coach that surgical team later in your coaching efforts. That will give you time to work more with those team members one on one.

## Pick appropriate cases

Coaching is best received when team members are not under unusual stress. Try to have your coaches observe cases that are likely to be routine procedures.

If a case is expected to be complicated, the stress level may be high and it may not be a good time to coach. For example, we don’t recommend coaching a surgical team during an emergency or urgent case.

## Schedule coaching when the surgical team will have time to talk

You want to coach teams that have time to talk about their performance after the procedure or at the end of the day. The best way to have dedicated time to talk with the team is to schedule a meeting. Another strategy is to coach on a day when the team has a lighter case load and is not pressured for time.

Whenever possible, coaches should meet with the entire team to talk about performance. If some team members are not available, the coach can meet with the remaining team members, or the coach can schedule time to talk with people individually about the team’s performance. Remind coaches that they can still coach team performance when working directly with individual team members, but they should be sure to discuss the same points with each team member so that everyone on the team has the same information.

## Maximize the use of coaches' time

Time is at a premium for everyone. Work diligently to ensure that each coach's time is used efficiently.

### IDEAS

- Some facilities set up blocks of time in which a coach can observe multiple teams and/or cases.
- It's okay to have coaches watch just one or two portions of the checklist.

## Remind coaches to prepare for each of their coaching sessions

Coaches must be organized and professional. Because they are representatives of the implementation team, the coaches' interactions with the surgical teams will affect surgical team members' perceptions of the overall checklist effort.

### New coaches should...

#### Prepare and bring materials

Coaches should bring to each case a copy of:

- your facility's Safe Surgery Checklist.
- the Coaching Observation Tool (all three pages).

#### Confirm that the team to be coached knows the coach is coming

- Coaches should confirm with the implementation lead or the person who scheduled the coaching that the surgical team is expecting them.
- Coaches should confirm where and when they will be giving the team feedback (at the end of the case, end of the day, or at a later date).

#### Know when to arrive or return to the operating/procedure room

Coaches don't need to stay for the whole case — they only need to be present while the team is performing the checklist. Timing the arrival

of the coach in the operating/procedure room requires coordination and flexibility, especially if the surgical schedule changes on the day of the coaching.

Coaches should confirm the location and time for each case and be sure that they are ready to observe when the teams are ready to perform the checklist. If they choose to observe the teams using only one or two sections of the checklist, they should tell the teams which portions they plan to watch and let the surgical teams know when they will return to give them feedback.

When coaches plan to leave the operating/procedure room after the skin incision section and return for the debriefing, they must return at the right time. Some of the ways they can manage this include:

- having the circulating nurse call or page the coach when the case is starting to wrap up.
- watching a video feed from the operating/procedure room (if available).
- looking through a window to see when the team is ready.

## Keep track of what you learn

In order to translate your observations into learning, and your learning into actions that improve patient safety, your implementation team must compile and review coaches' findings.

### Track observations

It's important that you find a way to track the observations that coaches make while they are coaching the checklist in your facility.

#### TIP

The coaching tab of the Implementation Lead Project Spreadsheet can be used both to schedule coaching sessions and to capture notes from all coaching sessions.

**Meet periodically to review and discuss your findings**

Have your implementation team and coaches meet periodically (e.g., quarterly, or more frequently if you are doing many coaching sessions) to discuss what you are observing and how well surgical teams are using the checklist.

Some of the questions you might ask are:

- What are we seeing?
- How does checklist use vary between different services?
- What lessons can we learn from what we're seeing? How can we do better to support checklist use?
- What are the most common challenges?
- How are things changing over time?

**Share your progress and challenges with leadership**

Think about sharing your findings and what you are learning with your facility's executive team or departmental leadership. (It is best to summarize your findings in a way that keeps surgical team members anonymous, except in rare instances when you have a compelling reason to discuss a specific person with their service or departmental leadership.)

## Coaches' guide to giving feedback

### STEP 1 Set the stage

- Thank the team for letting you observe.
- Remind the team that the purpose of your observation and feedback is to improve patient care by enhancing their performance as a team.

### STEP 2 Start with an open-ended question

*Ask: "How did it go using the checklist?" or "How did it go today?"*

These questions allow team members to say what is on their minds, making it easier for you to direct the conversation where you want it to go.

### STEP 3 Share your observations using the 3-part question technique

State your **observation** in a specific, clear, and objective way.

*"I saw..."*

*"The team didn't..."*

*"I noticed..."*

Share your **opinion** on a specific behavior or action, and explain its importance.

*"I think..."*

*"It's really important to..."*

*"I am pleased that..."*

Ask a **question** that allows team members to reflect on what happened.

*"Can you help me understand?"*

*"I am curious..."*

*"I wonder what you think happened?"*

### STEP 4 Motivate the team members by focusing on what they can do better

- Invite the team to identify and discuss what went well.
- Then ask the team to identify opportunities to improve, and discuss how to implement them in the future.

### STEP 5 Close the session

- Ask team members if they would like to talk about anything else.
- Let the team members know how they can follow up if they have questions or comments.
- Thank the team.

# Chapter 14

## The Debriefing: How to make it count

### CONTENTS

---

<i>Introduction</i>	197
How debriefing works	197
<b>How to make your debriefing effective</b>	198
Find a trigger	198
Build a system	199

# Instructions for the team lead

## OVERVIEW

This chapter describes the purpose and value of debriefing at the end of the case, identifies key challenges, and shares ideas for using the debriefing to drive continuous process improvement in your operating/procedure rooms.

This chapter supports the Own phase and the Improve phase of checklist implementation and will be helpful when working on:

- Step 6: Plan Your Expansion
- Step 11: Continually Improve

## RELATED CONTENT

- “What are the benefits of using the Safe Surgery Checklist?” on page 6 in Chapter 1: *What are the benefits of using the Safe Surgery Checklist?*
- Chapter 3: *Building a checklist implementation team*
- Chapter 9: *Creating a plan for checklist expansion*

## RESOURCES AND MATERIALS

- Quick-reference guide: *Rationale and origin of items on the Safe Surgery Checklist* (see Appendix A)

## KEY CONCEPTS

- A debriefing discussion at the end of each case is a critical safety step for postsurgical care.
- The debriefing also provides an opportunity for surgical team members to identify problems that should be addressed to improve the safety or efficiency of future cases.
- Finding a reliable way to trigger the debriefing is an essential part of making the debriefing work well in your facility.
- Debriefing is most valuable when supported with a system to collect, compile, evaluate, and address concerns that are raised during the debriefing.
- Asking people to identify problems and opportunities for improvement — and then not swiftly addressing those concerns — can undermine your improvement efforts.



## Introduction

The Safe Surgery Checklist prompts a discussion near the end of each case, which is called the debriefing.

### The benefits of debriefing

Debriefing gives the surgical team a valuable opportunity to:

- ensure that all team members are on the same page about patient recovery and management.
- identify equipment problems.
- discuss adverse or potentially adverse events that occurred during the case and how to stop problems from reoccurring.
- identify other ways to improve safety or efficiency.

Debriefing can help your facility:

- improve postsurgical care for patients.
- improve efficiency by reducing delays and problems related to faulty equipment and instruments.
- drive continuous process improvement in the operating/procedure room.
- gain buy-in from surgeons.

### Understanding the challenge

Some facilities find that getting their surgical teams to consistently debrief is a challenging part of implementation. Sometimes people are unsure how and when to initiate the discussion or are concerned that debriefing takes too much time.

The practices and considerations outlined in this chapter will help your facility understand what the team debriefing discussion should look like, how to create a trigger for the discussion, and how you can build a system for getting the most out of the debriefing.

## How debriefing works

### Characteristics of an effective debriefing

Although each facility will develop its own style of debriefing that suits its culture, three main characteristics are essential:

- All team members should be present for the debriefing.
- Team members should reflect on what happened during the procedure.
- All team members should pay close attention and participate in the discussion.

### Key points of discussion

The debriefing discussion should answer the following questions:

- What is the plan for the patient's recovery and management?
- Are there any equipment problems that should be addressed?
- Are there other opportunities for improvement?

The Safe Surgery Checklist includes conversation prompts for those three questions after the items that prompt a review of the counts and confirmation of specimen labeling.

#### Before Patient Leaves Room

**Nurse** reviews with team:

- Instrument, sponge, and needle counts
- Name of the procedure performed

**Nurse** reads aloud to team:

- Specimen labeling, including patient's name

#### TEAM DEBRIEFING

**Entire Surgical Team** discusses:

- Key concerns for patient recovery and management
- Equipment problems that need to be addressed
- Other opportunities for improvement

### **Debriefing does not replace sharing information during a case**

Setting aside time to debrief at the end of a case does not mean that you don't communicate about things throughout the case as needed.

- Talk about issues or concerns as they occur during a case.
- Revisit that information at the end of the case and ask: "Did we do all of the right things?"

### **How long does debriefing take?**

People are sometimes concerned that they do not have time to do a debriefing. In fact, routine debriefing will often just be a thirty-second discussion. As with other aspects of the checklist, surgical teams need less time to complete the debriefing once they have become accustomed to doing it every time in every case.

### **A hard stop of team activity is preferred**

It is desirable, when possible, for surgical teams to come to a hard stop when doing the debriefing. In some cases, however, a team member may need to continue to perform critical actions. Even when it is not possible to completely halt all activity, the debriefing should only happen when all surgical team members can pay attention to and participate in the discussion.

### **Debriefing in front of patients**

In some types of cases, patients are awake and aware at the end of the surgery or procedure. Surgical team members may feel uncomfortable doing a debriefing in front of the patient, especially when discussing issues that arose during the case.

One approach to manage this is to tell patients about the debriefing discussion in advance. Then, when the team begins a debriefing discussion, patients can feel reassured that the discussion is routine and is part of how your facility keeps them safe.

Another alternative is to perform safety steps that must be completed in the operating/procedure room (e.g., counts and specimen labeling) while in the room with the patient, and then conduct the rest of the debriefing away from the patient when all team members can come together for the discussion.

## **How to make your debriefing effective**

To get the full value of debriefing in your facility, you will need to:

- find a way to trigger the debriefing.
- build a system for tracking and addressing problems.

### **Find a trigger**

In other parts of the checklist, there are natural pauses in workflow that are used to prompt the team to stop and talk (e.g., "Before Induction of Anesthesia" and "Before Skin Incision"). At the end of the case, natural pauses are inconsistent and depend on the case being performed.

### **How will the debriefing be triggered in your facility?**

A trigger is simply a routine task, event, or action that acts as a prompt for the debriefing discussion. Find an activity or behavior that happens consistently at the end of every case in your facility, and use that activity to trigger the conversation.

Some triggers are tied to specific actions:

- before the patient leaves room
- before the surgeon leaves room
- after the final sponge and instrument counts
- before the surgeon removes her or his gloves

**Some triggers are tied to specific people**

Many facilities designate a member of the team to lead or trigger the discussion at her or his discretion. The circulating nurse is often the best person to do that because he or she:

- already triggers other discussions at that time (e.g., sponge/instrument/needle counts).
- is already asking questions of the team to complete items for the medical record.
- is preparing the patient to leave the room.

**Considerations for timing the debriefing****Include the entire team whenever possible**

Key team members sometimes leave the operating/procedure room before the case is finished. For instance, the attending surgeon may leave and have a resident or assistant close for them. It is important that your trigger provide a way to have the debriefing when the people who know the most about the patient and the case are still available.

**Avoid interrupting key moments of focus**

The debriefing should not interrupt surgical team members when they are intently focused on key tasks (e.g., when the sponge and instrument counts are being performed, or when the anesthesia professional is bringing the patient out of anesthesia).

**Build a system**

Debriefing gives surgical teams a way to identify problems and opportunities, but that information can only be useful when your facility responds to it.

It takes a system — people and processes and resources — to manage and react to the information discussed during debriefings. This section provides ideas and examples to help you create a system for supporting your debriefing. (See also Case Study 14.1 Turning debriefing into a tool for continuous improvement on page 202.)

**Maximize the benefits of debriefing****Demonstrate support of your surgical teams**

A good system will help you be responsive to the needs of surgical teams. Fixing their problems quickly and communicating openly about your progress is a powerful way to demonstrate that you value their work.

**Improve surgeon buy-in**

Equipment problems are a common source of frustration and inefficiency in many facilities. When debriefing is accompanied by a system to catch and fix equipment problems, surgeons often realize that they personally benefit and become advocates for debriefing.

**Improve efficiency**

Room utilization is a major concern in most facilities. Identifying and fixing equipment problems can help save time that might otherwise be wasted.

**Identify ideas for your next improvement project**

Debriefing gives surgical team members a way to communicate ideas for doing better and can help your facility identify other potential projects to improve quality in the operating/procedure room.

**Engage leadership in your planning**

Be sure to involve your facility's leadership in planning your debriefing system. They will be instrumental in finding the resources that you need to initially develop your system and to sustain it over time.

**Expand your implementation team**

Think about the expertise and people you need to support the work that a debriefing system requires. It may be useful to expand your implementation team to include individuals in charge of departments that will help address problems (e.g., sterile processing).

## Essential tasks

To manage debriefing information, your facility will need to:

- identify when and where a problem has been reported.
- know who identified the problem.
- prioritize problems as they arise.
- identify how each problem can be fixed and who in your organization should have responsibility for seeing that it is corrected.
- communicate status and progress to surgical teams.
- track progress over time, identify trends, and report issues and results to facility leadership.

The following seven tasks present a framework for addressing those needs.

### TASK 1

#### Log information during each debriefing

Build a solid foundation for your system by making it easy for surgical teams to log information during each debriefing.

The kind of information collected from debriefings might include:

- What is the problem/issue?
- Who reported it?
- When did it happen?
- Where was it reported?
- Why did it happen?
- How can we do better?

#### IDEAS

##### Use a paper version of the checklist

- Create space on the back of a handheld checklist where notes about the debriefing can be written and subsequently collected (see “Task 2” on page 200 for more information).

##### Use a written log book (sometimes referred to as a “glitch book”)

- Put a log book (e.g., standard binder) in every operating/procedure room.
- When surgical teams identify problems or suggestions in a case, have them write the information down in the log book.

##### Use an electronic form

A digital form can simplify documentation and will make analysis of debriefing information much easier. *A debriefing form should never replace the discussion*—it should only be used to document what the surgical team members discuss. There are several forms this can take:

- a screen or form built into the EMR
- a simple spreadsheet
- a PDF form

### TASK 2

#### Collect information from all debriefings

The information from each debriefing, in all cases throughout your facility, needs to be collected. It is best to do this daily (or as frequently as possible), so that you are able to rapidly spot and respond to concerns. If your teams report debriefing information electronically, this step will be done automatically.

#### IDEAS

##### Collect checklists or log book pages on a regular basis (daily is best)

- Assign one person responsibility for collecting debriefing information from all operating/procedure rooms daily.
- Assign a person in each service/location to collect the information (i.e., checklists or log books) from their cases or operating/procedure rooms and return them to a central location.

**TASK 3****Review and assess the collected debriefings**

Once the information is collected, it is important for the debriefing reports to be reviewed and acted upon promptly.

Assign someone to:

- review all of the information collected.
- prioritize problems.
- assess whether additional information is needed from the surgical team.
- identify potential solutions.
- identify people and/or departments who can address each problem.
- estimate how long it will take to address and resolve each problem.

**TASK 4****Assign each issue to someone**

It is important to create accountability in your debriefing system by assigning each reported incident and issue to an individual person. That person should be responsible for investigating the concern (as necessary) and ensuring that it is addressed or fixed.

For each issue, determine:

- Who will be responsible for resolving this?
- What steps will they take?
- By when?

**TASK 5****Communicate back to surgical teams**

When surgical team members identify a problem, acknowledge that you received their input, and set their expectations for what will happen next.

- Follow up with the person/team that reported the issue and thank them for reporting it.
- Tell them who is responsible for looking into it.
- When possible, give them an estimated timeline for when it will be fixed.

**TASK 6****Track and share your progress**

Have someone take responsibility for tracking the status of each reported issue. As each issue is addressed, follow up with the surgical team that reported the issue and let them know it is fixed.

**IDEAS**

Some facilities use a large whiteboard to track each problem identified in their debriefings, noting how each problem is being addressed and when the problem has been resolved.

**TASK 7****Analyze your data periodically**

It's important to periodically examine your debriefing reports and responses, to look for patterns and broad, system-level issues.

For instance, you might have someone analyze your debriefing issues and responses quarterly. There are many different ways to look at your data, and many questions you can ask.

**EXAMPLES**

- What types of problems are most common?
- Do the most serious problems have anything in common (surgical teams, locations, etc.)?
- What kinds of equipment problems are most and least common?
- How long does it take our facility to address reported problems?
- What kinds of problems take the longest to address?

**The frequency and severity of issues reported in debriefings tends to change over time**

Many facilities will have a number of serious issues reported when debriefings are first introduced. Over time, the overall number of issues reported tends to increase, but the severity of the issues tends to decrease.

**CASE STUDY 14.1 Turning debriefing into a tool for continuous improvement**

*Contributed by Michael Rose, MD, Vice President of Surgical Services, McLeod Health*

**What we've accomplished**

As of February 2015, we have collected 76,000 debriefs, about 90% of the cases at McLeod Regional. In total, we have captured 5,800 events; about 100 of those were critical events in which something happened to those patients.

Half of the reported events had something to do with instruments, supplies, equipment, and technology. We found that these types of issues evoke negative emotions and can lead to cascading error. Teams on the front lines experience these more often than we know, and when they hold themselves accountable for perfection in the care they deliver to their patient, and the system around them isn't held to those standards, it saps their spirit.

A third of events had faults in some part of the process: patient care, delays in flow, or mismatched or incomplete paper work.

We asked surgical team members to tell us anything that could have been done better in their case so that we could share it, take their lessons learned and spread them... and we promised to systematically repair and rebuild the supporting infrastructure of communication and supply chain. "See it, say it, fix it" became the way of life for us.

Working on the debriefing — and building a system to capture feedback and fix what was reported — has really helped us to gain buy-in for the checklist from our surgeons and other team members and to improve our culture. It has also helped us make the case to our leadership that this work is important.

This helped us create a system that gave teams immediate gratification. As opposed to some vague concept, doing the checklist actually helped their cases run more smoothly.

We asked representatives from sterile processing, scheduling, pre-op, post-op, and other departments to join our team so they could help us fix issues that were identified through debriefings.

*(continued on page 203)*

CASE STUDY 14.1 **Turning debriefing into a tool for continuous improvement** (continued)**How our system works**

1. Teams complete the back of the checklist for every case, reporting any issues that occurred in the operating room. The circulating nurse is required to complete the form and turn it in.

The form is titled "Lessons Learned & Opportunities". It contains the following sections:

- BRIEF TEAM & MANAGERS**: A large text area for "What Happened? What are the details of the event? Who, What, When, Where, How? Why did it happen?"
- LEARN, TEACH, ACT...**: A text area for "Action Items, Assigned To, FIU Date, Logged"
- FOR SURGICAL BRIEF**: A small text area for "Key learning from today that we all should know tomorrow" with a "LIMIT 140 CHARACTERS" warning.
- Patient Label Here**: A box containing a logo for "Q" and "SAFE SURGERY" with the text "Patient Label Here".

*We use the back of our checklist to collect information.*

2. We have one person who is responsible for reviewing all of the checklists and documenting the reported issues in an Excel spreadsheet. We then categorize the issues and assign them to managers whose responsibility it is to fix the reported issues.
3. We proactively communicate to the surgical team that reported the issue that we are working on a solution and we go back again to let them know when the issue is fixed.

When we first put our system into place it took someone about three hours per day to review the checklists and assign individuals to fix them. After doing this for a number of years, it now takes someone about one hour.

**What would we do differently?**

Looking back, we should have purchased a scanner right away instead of waiting. Once we were able to scan the collected forms, we significantly cut the time spent extracting information from the returned checklists!





# Chapter 15

## Continually improve

### CONTENTS

---

<i>Introduction</i>	207
Actions that support continued improvement	207
Build upon your success	211

# Instructions for the team lead

## OVERVIEW

This chapter describes ways in which you can sustain and improve checklist use during the Improve phase of checklist implementation.

The content in this chapter will be helpful when working on:

- Step 10: Watch and Coach
- Step 11: Continually Improve

## RELATED CONTENT

- Chapter 4: *Assessing your surgical culture and environment*
- Chapter 7: *Customizing the checklist*

## RESOURCES AND MATERIALS

- Coaching Observation Tool
- Implementation Lead Project Spreadsheet

## KEY CONCEPTS

- It's important to celebrate and publicize the work you've done.
- The implementation team continues to have an important ongoing role.
- Continued observation and coaching in the operating/procedure room is critical.
- Reassess your culture periodically so that you can evaluate changes over time.
- Keeping senior leadership engaged is vital to long-term success.
- Use success as a springboard for other quality improvement initiatives in the surgical arena.

## Introduction

The mantra we recommend for this phase of the work is: “Never stop looking.” It will take a sustained effort on your part to ensure that surgical teams use the checklist properly for the benefit of your patients.

The ultimate goal is for the checklist to become so ingrained in the surgical culture of your operating rooms that team members defend its use in the same way that they defend the sterile field. Reaching this goal takes time and dedication.

This chapter describes the tasks that need to continue in your facility so that, over time, people feel that using the checklist at a high level “is just the way that we do the work here” and will defend its use.

## Actions that support continued improvement

You have put a great deal of effort into telling people about the checklist, raising its profile, talking to people individually, training and coaching them on proper checklist use — throughout the implementation period, the checklist has received lots of attention.

If your facility is like most, you will now face a different challenge: how to sustain the work and improve it over time. As soon as we turn our eyes toward the next problem to be addressed in the operating/procedure room, whether it’s redosing of antibiotics or updating the skin preparation to the latest protocol or something else, our attention shifts and the checklist work may start to slide a bit.

The following actions will help you remain vigilant and drive continual improvement.

- Celebrate your progress.
- Keep observing and coaching.
- Keep information flowing.
- Keep working as a team.
- Continue to promote the checklist.
- Reassess your culture.
- Create a plan for updating your checklist.
- Keep leadership engaged.

### Celebrate your progress

Remind people of the progress that has been made in your facility. Even though additional challenges may remain, it is important for your implementation team and the surgical teams to recognize their hard work and progress.

Changing behavior is difficult work, and a little positive reinforcement and a positive attitude will help create an environment where people continue to be engaged and want to improve.

### Keep information flowing

#### Stay in touch with your surgical teams

Your initial 1-on-1 conversations laid a good foundation. You can build upon that by continuing to “check in” with front-line staff, including physicians, to ask them how they think checklist use is going. Don’t be afraid to circle back more than once. It continues to show that you value their opinion, and you may learn something valuable about how the experience of surgical team members changes once they have had more time to use the checklist.

#### Collect and share stories

Keep following up with surgical teams to collect stories about the checklist, especially catches where potential harm was avoided. Continue to share those stories with others through

bulletin boards, newsletters, meetings, and other ways — be creative! Stories help connect the abstract idea of checklist benefits to real events with real people and can continue to stimulate interest long after the checklist is introduced.

## Keep working as a team

Your checklist implementation team continues to be important. The team should continue to meet regularly as you:

- address gaps.
- plan and administer a culture survey periodically.
- plan and manage continued observation and coaching.
- plan *when* and *how* changes should be made to the checklist.
- evaluate potential changes to the checklist.

## It's okay for the team to evolve and change

- Your meeting schedule can change to reflect the pace of ongoing activities.
- Consider refreshing the team with new members.

## Keep observing and coaching

The best way to know what is actually happening in your operating/procedure rooms is to continue watching and coaching teams. Sometimes, the problems that facilities see in checklist use change as people get comfortable with new behaviors and as the balance shifts within the team dynamics.

For instance, some facilities initially struggle to get surgeons to do the “Before Skin Incision” briefing, but later, as surgeons begin to do the initial briefing more consistently, nurses may tend to participate less.

Maintaining an ongoing program for checklist coaching requires attention and effort. Be sure that you have an effective, sustainable system in place. Review your coaching program with your implementation team to be sure that it is serving your facility well and will continue to support effective checklist use over the long term.

The following questions can help get you started.

### Who will observe and coach?

- Which members of the implementation team will continue to coach?
- How will you share the work?
- Can you recruit and train members of successful surgical teams to coach other teams?

### How many teams will be observed over what period of time?

To capture a holistic view of checklist use, consider these ideas:

- Schedule at least three observations a month, preferably one case a week.
- Vary the teams, services, days, and times of day.
- Make your coaching sessions random; e.g., plan to coach the third case every other Tuesday.

### How will you manage data collection and analysis?

- What data will you collect from coaching sessions?
- Who will analyze the data for trends?
- With whom will you share the data and analysis?
- How will you provide feedback to teams?

## Continue to promote the checklist

Continued promotional efforts can help maintain awareness of the checklist effort and highlight your progress. As the checklist becomes more integrated into your culture, think about how you can refresh your approach.

- Share checklist catches and stories.
- Share changes or trends in your facility's operating/procedure room safety record.
- Consider patient-oriented materials about your Safe Surgery Checklist.

## Reassess your culture

Looking at your culture, and how it has changed over time, is a vital way to understand the impact that the checklist work is having in your facility. It can also help you identify next steps for your checklist implementation, as well as other opportunities for quality improvement projects.

- Evaluate results against the prior culture survey.
- Share results with participants and leadership.

For more information, see “Conducting periodic follow-up culture surveys” on page 75 in Chapter 4.

## Update your checklist

Your checklist will need to evolve over time so that it continues to serve the needs of your patients and surgical teams. A good practice is to plan a comprehensive review of your checklist every 18 to 24 months.

### Reasons to update your checklist

If you consistently see the same problem in coaching sessions, not only case by case within the same team, but across many cases in many operating/procedure rooms, your checklist may need to be improved.

Other reasons to modify your checklist include:

- changing local needs or preferences.
- revised standards of practice.
- removal of a checklist item because your facility now has a different, highly reliable system for managing a safety check.
- physical changes to room layouts requiring posters of a different size or shape.
- reinvigorating or relaunching your checklist if use diminishes over time.

### Collecting feedback about your facility's checklist

Collecting feedback from surgical team members about your checklist is integral to improving checklist use. Feedback helps your implementation team update the checklist over time and can make surgical team members feel invested in, and part of, the checklist project.

It is important to build a system to collect individuals' feedback and to manage their expectations. Feedback about your organization's checklist can be collected in a variety of ways including:

- coaching sessions.
- 1-on-1 conversations.
- anonymous surveys.

### How will you incorporate changes?

Whenever possible, it is preferable to reprint the revised checklist with the desired changes. In some facilities, we have seen newly added items printed on pieces of paper and taped to the checklist. In others, pieces of paper are used to cover up checklist items. Although these are creative low-budget ways to update the checklist immediately, they can undermine the usability of the checklist, create inconsistency from room to room, and increase the potential for confusion.

If you use a handheld version of the checklist, the cost of changes is usually minimal. With a poster or an electronic checklist incorporated into an EMR, the cost of changes may be a barrier. Try to build periodic printing or programming costs into your annual budget.

When you make changes to your checklist, remember to follow the process outlined in Step 5: Customize and Test (see Chapter 7 and Chapter 8 of this guide).

## Training new surgical team members

Your organization will inevitably have staff and physician turnover. New and visiting surgical team members will need to be trained on how to use the checklist *before* they work in your operating/procedure rooms. Develop a process for how your organization will train and orient new and visiting surgical team members.

## Keep leadership engaged

Keeping your facility's leadership engaged in the checklist will help you achieve long-term success.

- The ongoing support of key leaders can help you get and keep the resources you need.
- Visible executive support communicates to the entire organization that your facility is serious about making the checklist work well.
- You may need their help addressing clinicians who refuse to participate.

How you leverage your facility's leadership will depend on the leadership team, your organizational culture, and your specific needs for checklist implementation, but here are some ideas that can help get and keep them engaged.

## Show executives what you are trying to do

The following suggestions refer to the CEO, but the ideas are applicable to other executives in your facility or hospital system.

### Demonstrate the checklist for your CEO, board members, or other leadership

In an empty operating/procedure room, have a surgical team demonstrate how they use the checklist. Have someone play the role of patient. We suggest that hospital leadership not observe a real case, as this might be distracting to the surgical team and could compromise patient care.

Teams can show how the checklist project changed communication and teamwork practices in the operating/procedure room, by demonstrating what routine communication looked like before checklist use.

### Provide regular updates

- Keep senior leadership informed about what is going well and what needs to be improved.
- Share the results of surveys, debriefing statistics, or other data you collect to measure the quality of checklist use. (De-emphasize simple measures of checklist compliance — it's the *quality* of communication and teamwork that matter.)

### Ask executives to acknowledge champions

Ask departmental and facility leadership to personally thank champions in your checklist effort, and have them publicly recognize people who are doing a good job and can serve as examples for their peers.

## Build upon your success

Now that you have integrated the routine use of checklists into your surgical culture, look for opportunities to draw upon that success and improve teamwork and communication in other ways.

The Safe Surgery Checklist helps keep teams out of trouble by improving team communication before induction, before skin incision, and before the patient leaves the room. A related project, the Operating Room Crisis Checklists, can help get teams out of trouble in rare emergencies.

### Operating Room Crisis Checklists

The Operating Room Crisis Checklists (see Diagram 15.1) were developed by the team at Ariadne Labs with the goal of improving care during 12 of the most common operating room crises. Multiple experts worked with our team over a period of several years to create the checklists.

Although these are the most common crises, the events themselves are rare, so it is challenging for surgical team members to recall the complete set of diagnostic and therapeutic actions that should be considered.

The checklists we developed were tested in a randomized control simulator trial, and the results published in the New England Journal of Medicine article “A Simulation-Based Trial of Surgical Crisis Checklists.” Checklist use during operating room crises resulted in nearly a 75% reduction in failure to adhere to critical steps in management. Every team performed better when the crisis checklists were available.

For more information about this work, and to learn how you can implement crisis checklists in your operating/procedure rooms, visit [www.projectcheck.org/crisis](http://www.projectcheck.org/crisis).

#### DIAGRAM 15.1 Operating Room Crisis Checklists

The Operating Room Crisis Checklists can help teams coordinate their efforts and follow best practices when dealing with 12 rare crisis events.

### 4 Cardiac Arrest – Asystole/PEA

*Non-shockable pulseless cardiac arrest*

**START**

- 1 **Call for help and a code cart**
  - ▶ Ask: “Who will be the crisis manager?”
  - ▶ Say: “The top priority is high-quality CPR”
- 2 **Put backboard under patient, supine position**
- 3 **Turn FIO<sub>2</sub> to 100%, turn off volatile anesthetics**
- 4 **Start CPR and assessment cycle...**
  - ▶ **Perform CPR**
    - “Hard and fast” about 100 compressions/min
    - Ensure full chest recoil with minimal interruptions
    - 8 breaths/minute, do not overventilate
  - ▶ **Give epinephrine**
    - Repeat epinephrine every 3–5 minutes
    - Can give vasopressin to replace 1<sup>st</sup> or 2<sup>nd</sup> dose of epinephrine
  - ▶ **Assess every 2 minutes**
    - Change CPR compression provider
    - Check ETCO<sub>2</sub>
      - If: < 10 mm Hg, evaluate CPR technique
      - If: Sudden increase to > 40 mm Hg, may indicate return of spontaneous circulation
    - Check rhythm; if rhythm organized check pulse
      - If: Asystole/PEA continues:
        - Resume CPR and assessment cycle (restart Step 4)
        - Read aloud Hs & Ts (see list in right column)
      - If: VF/VT
        - Resume CPR
        - go to > CHRLIST 5

Asystole

PEA

DRUG DOSES and treatments	
Epinephrine: 1 mg IV, repeat every 3–5 mins.	
Vasopressin: 40 U IV can replace 1 <sup>st</sup> or 2 <sup>nd</sup> dose of epinephrine	
<b>TOXIN treatment</b>	
Local anesthetic: • Intralipid 1.5 mL/kg IV bolus	
• Repeat 1–2 times for persistent asystole	
• Start infusion 0.25–0.5 mL/kg/min for 30–60 minutes for refractory hypotension	
Beta-blocker: Glucagon 2–4 mg IV push	
Calcium channel blocker: Calcium chloride 1 g IV	
<b>HYPERKALEMIA treatment</b>	
1. Calcium gluconate	• 30 mg/kg IV
– or –	
Calcium chloride	• 10 mg/kg IV
2. Insulin	• 10 units regular IV with 1–2 amps D50W as needed
3. Sodium bicarbonate if pH < 7.2	• 1–2 mEq/kg slow IV push
<b>Hs &amp; Ts</b>	
• Hypoxia	• Toxin (local anesthetic, beta blocker, calcium channel blocker)
• Hydrogen ion (acidosis)	• Tamponade (cardiac)
• Hypokalemia	• Tension pneumothorax
• Hypothermia	• Thrombosis (coronary/pulmonary)
• Hypovolemia	
<b>During CPR</b>	
Airway:	• Bag-mask sufficient (if ventilation adequate)
Circulation:	• Confirm adequate IV or IO access
	• Consider IV fluids wide open
Assign roles:	• Chest compressions, Airway, Vascular access, Documentation, Code cart, Time keeping

All reasonable precautions have been taken to verify the information contained in this publication. The responsibility for the interpretation and use of the materials lies with the reader. Revised July 2015 072413.1

Chapter 15: Continually improve 211





# Appendix A

## Rationale and origin of items on the Safe Surgery Checklist

# Instructions for the team lead

## OVERVIEW

This appendix contains the quick-reference guide *Rationale and origin of items on the Safe Surgery Checklist*, a document that describes the purpose, rationale, and origin of each item on the Safe Surgery Checklist template.

It is vital to educate your implementation team and surgical team members about the purpose of each checklist item and how the items should be used in the operating/procedure room. The content of the Safe Surgery Checklist has evolved over time and reflects improvements made through many iterations of design and testing and the experiences of facilities like yours. The checklist incorporates key safety checks, including items you already do, into a process that enhances team communication.

*Rationale and origin of items on the Safe Surgery Checklist* is also available for download as a PDF at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).

## HOW TO USE THIS QUICK-REFERENCE GUIDE

- Give a copy to each member of your implementation team.
- Review this content as a team in Step 5: Customize and Test so that everyone understands the logic behind the existing items.
- Refer to the content as your team evaluates items while customizing and testing your checklist.

This reference will be helpful during these implementation process steps:

- Step 2: Understand the Work
- Step 5: Customize and Test

## RELATED CONTENT

- *Safe Surgery Checklist – Master version*
- Chapter 7: *Customizing the checklist*

# Rationale and origin of items on the Safe Surgery Checklist

## Introduction

The checklist template shown below reflects lessons learned in over 4,000 facilities globally and embodies best practices of checklist design. However, a key part of the work that each facility must do is to customize the checklist to meet the facility’s own unique needs.

This reference guide explains the purpose of each item so that your implementation team can thoughtfully evaluate how and why your local checklist may need to be different. (Note that the master version of the Safe Surgery Checklist was developed in a high-income setting and may need to be customized for use in other settings.)

<b>Safe Surgery Checklist template</b>		Hospital Name
<div style="background-color: #0056b3; color: white; padding: 5px; margin-bottom: 5px;"><b>Before Induction of Anesthesia</b></div> <p><b>Nurse</b> and <b>Anesthesia Professional</b> verify:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient identification (name and DOB)</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Surgical procedure to be performed matches the consent</li> <li><input type="checkbox"/> Site marked</li> <li><input type="checkbox"/> Known allergies</li> <li><input type="checkbox"/> Patient positioning</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Risk of hypothermia (if operation &gt;1 hour)                             <ul style="list-style-type: none"> <li>• Warmer in place</li> </ul> </li> <li><input type="checkbox"/> Risk of venous thromboembolism                             <ul style="list-style-type: none"> <li>• Boots in place and/or anticoagulants</li> </ul> </li> <li><input type="checkbox"/> Anesthesia safety check completed</li> </ul> <div style="background-color: #00a0c9; color: white; padding: 5px; margin-top: 5px;"><b>ANESTHESIA BRIEFING</b></div> <p><b>Anesthesia Professional</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anticipated airway or aspiration risk</li> <li><input type="checkbox"/> Risk of significant blood loss                             <ul style="list-style-type: none"> <li>• Two IVs/central access and fluids planned</li> <li>• Type and crossmatch/screen</li> <li>• Blood availability</li> </ul> </li> </ul>	<div style="background-color: #0056b3; color: white; padding: 5px; margin-bottom: 5px;"><b>Before Skin Incision</b></div> <div style="background-color: #00a0c9; color: white; padding: 5px; margin-bottom: 5px;"><b>TIME OUT</b></div> <p><b>Circulating Nurse</b> asks:</p> <p><i>“Is everyone ready to perform the time out? Please state your name and role.”</i></p> <p><b>Entire Surgical Team</b> confirms:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient name</li> <li><input type="checkbox"/> Surgical procedure to be performed</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Antibiotic prophylaxis given within the last 60 minutes                             <ul style="list-style-type: none"> <li>• Antibiotic redosing plan discussed</li> </ul> </li> </ul> <div style="background-color: #00a0c9; color: white; padding: 5px; margin-top: 5px;"><b>TEAM BRIEFING</b></div> <p><b>Surgeon</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Operative plan</li> <li><input type="checkbox"/> Possible difficulties</li> <li><input type="checkbox"/> Expected duration</li> <li><input type="checkbox"/> Anticipated blood loss</li> <li><input type="checkbox"/> Implants or special equipment needed</li> </ul> <p><b>Anesthesia Professional</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anesthetic plan</li> <li><input type="checkbox"/> Airway concerns</li> <li><input type="checkbox"/> Other concerns</li> </ul> <p><b>Circulating Nurse</b> and <b>Scrub Tech</b> share:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sterility, including indicator results</li> <li><input type="checkbox"/> Equipment issues</li> <li><input type="checkbox"/> Other concerns</li> </ul> <p><b>Surgeon</b> asks:</p> <p><i>“Does anybody have any concerns? If you see something that concerns you during this case, please speak up.”</i></p>	<div style="background-color: #0056b3; color: white; padding: 5px; margin-bottom: 5px;"><b>Before Patient Leaves Room</b></div> <p><b>Nurse</b> reviews with team:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Instrument, sponge, and needle counts</li> <li><input type="checkbox"/> Name of the procedure performed</li> </ul> <p><b>Nurse</b> reads aloud to team:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Specimen labeling, including patient’s name</li> </ul> <div style="background-color: #00a0c9; color: white; padding: 5px; margin-top: 5px;"><b>TEAM DEBRIEFING</b></div> <p><b>Entire Surgical Team</b> discusses:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Key concerns for patient recovery and management</li> <li><input type="checkbox"/> Equipment problems that need to be addressed</li> <li><input type="checkbox"/> Other opportunities for improvement</li> </ul>
<p>This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Based on the WHO Surgical Safety Checklist (<a href="http://www.who.int/patientsafety/safesurgery/en">http://www.who.int/patientsafety/safesurgery/en</a>) © 2008 World Health Organization All rights reserved. SSC-Master template Revised: 7 August 2015</p>		

## Two types of checklist items

The Safe Surgery Checklist includes two kinds of items that help make every surgical patient safer:

- **Process checks** remind team members to verify, perform, and discuss critical safety steps.
- **Conversation prompts** remind team members to share and discuss critical information about the patient, risks, and surgical plans so that they are prepared to work together more effectively as a unit (see Diagram A.1).

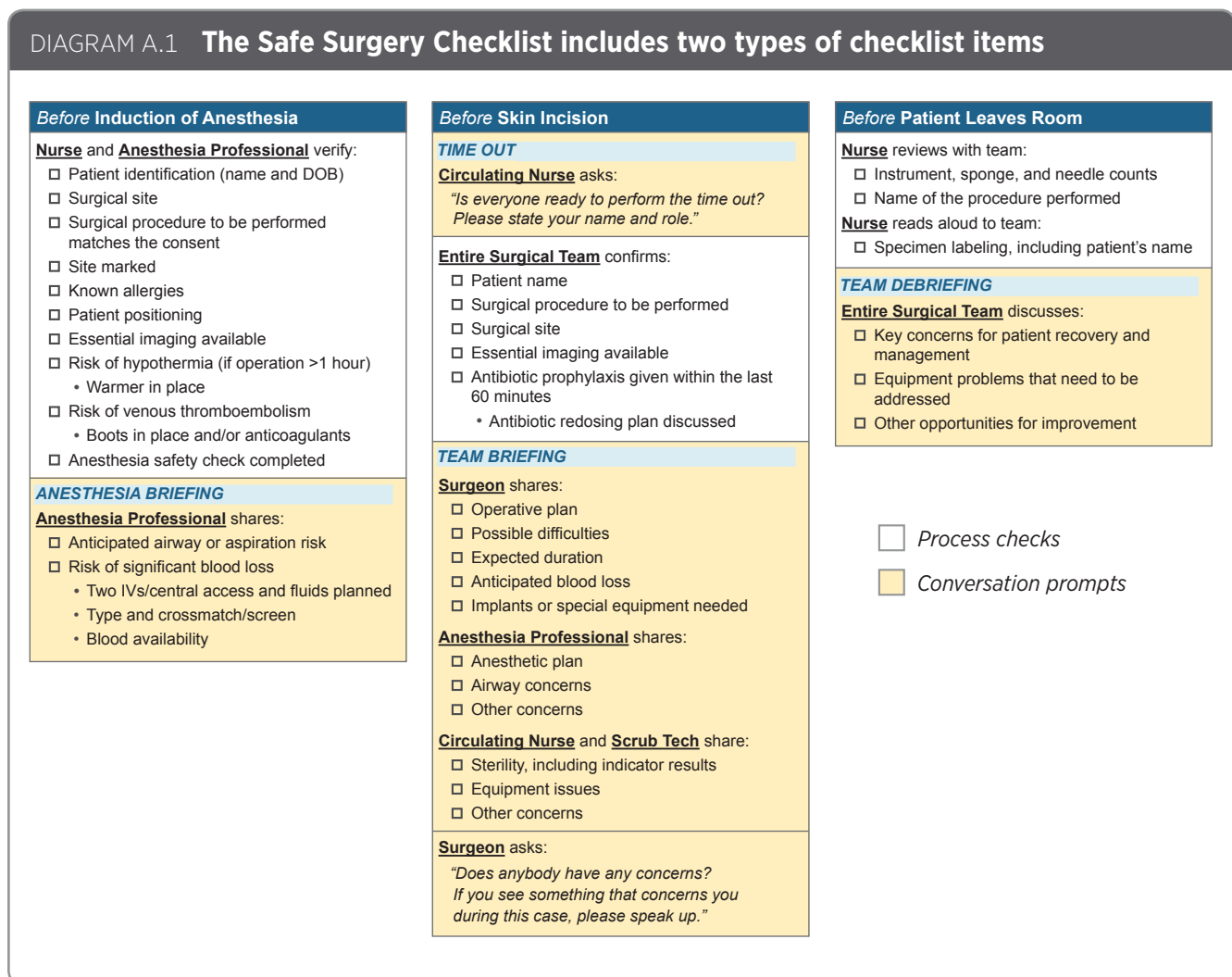
The conversation prompts on the checklist have had a tremendous impact on improving surgical care and positively changing the way in which

surgical team members interact with one another and the patient. They should not be removed when customizing the checklist (though they may be reworded), because they trigger conversation about events in the operating/procedure room that might not otherwise be discussed as a team.

### Key conversation prompts on the checklist

- anesthesia briefing
- introductions
- team briefing, including surgeon's safety statement
- team debriefing

DIAGRAM A.1 The Safe Surgery Checklist includes two types of checklist items



# Master list of Safe Surgery Checklist items

## SECTION 1

### Before Induction of Anesthesia

#### Nurse and Anesthesia Professional verify:

*The first four items are intended to ensure that the correct surgery is done on the correct patient and at the correct place on the patient's body.*

#### **Patient identification (name and DOB)**

To make sure that each patient gets the correct medicine and treatment, patient identification should occur in all stages of diagnosis and treatment (when administering medication, blood, tests, and procedures). The Joint Commission recommends the use of at least two ways to identify patients. Acceptable identifiers include the patient's name, date of birth, medical record number, and other person-specific identifiers.

In the operating room, patient identification should be performed as a redundant check prior to induction. This is essential to ensure that the team does not operate on the wrong patient.

Origin: The Joint Commission National Patient Safety Goal

#### **Surgical site**

Verifying the site of the surgery is essential to ensure that the team does not operate on the wrong site. This redundant check is an opportunity to confirm the operative site with the patient and team just prior to induction.

Origin: The Joint Commission National Patient Safety Goal

#### **Surgical procedure to be performed matches the consent**

Surgical team members should always make certain that any procedure is what the patient needs and is performed on the right person. Verifying the surgical procedure and consent is an ongoing process of information gathering and confirmation and is initially confirmed in the preoperative holding area by multiple team members.

This check is the last opportunity to verify with the patient and team that the consent is consistent with the patient's expectations and the team's understanding of the procedure to be performed. It provides an important opportunity to address any questions, concerns, or discrepancies prior to induction of anesthesia. This step should include the surgeon and/or scrub nurse or technician if they are present.

Origin: South Carolina Safe Surgery 2015

**Site marked**

Verifying correct site marking in the operating/procedure room prior to induction is a redundant step for the patient and team to assure that the correct site was marked, and creates an opportunity to rectify any discrepancies.

Each facility has procedures for marking of the incision or insertion site. At minimum, a site should be marked when there is more than one possible location for the procedure and when performing the procedure in a different location. For spinal procedures, in addition to preoperative skin marking of the general spinal region, special intra-operative imaging techniques may be used for locating and marking the exact vertebral level. Site marking should occur before the procedure is performed and with the patient awake and involved (if possible). The site should be marked by a licensed independent practitioner who is ultimately accountable for the procedure and who will be present when the procedure is performed. The method of marking the site and the type of mark should be unambiguous and used consistently throughout the hospital. The mark should be made at or near the incision/insertion site and needs to be sufficiently permanent to be visible after the skin is prepped and draped.

Origin: The Joint Commission National Patient Safety Goal Universal Protocol

**Known allergies**

This item prompts the surgical team members who are present to review the patient's known allergies so that necessary steps can be taken to avoid the patient having an allergic reaction during the procedure. The practice of stating allergies out loud and together as a team with the patient just prior to induction helps ensure that all team members are aware of any allergies so that precautions can be taken as needed.

Origin: WHO Surgical Safety Checklist

**Patient positioning**

This item prompts the surgical team to review and discuss the intended patient position for the procedure. Verifying the intended patient position aids the team in planning line placement and optimizing access to the surgical site and allows the team to ensure that necessary positioning devices are available.

Origin: South Carolina Safe Surgery 2015

**Essential imaging available**

This item is intended to prompt a review of whether essential imaging is needed during the procedure and a verification that it is fully functional and is prominently displayed for use during the operation. If imaging is needed but not available, it should be obtained before skin incision. This information should be verified again at a time when the surgeon is present, so the item also appears as a redundant check in the “Before Skin Incision” section.

Origin: WHO Surgical Safety Checklist

**Risk of hypothermia (if operation > 1 hour)**

- Warmer in place

Core temperatures outside the normal range pose a risk in all patients undergoing surgery. This item prompts a discussion among care providers about whether warming is appropriate for the patient. Discussing the risk of hypothermia together as a team prior to induction prepares the team to secure appropriate patient warming devices if needed. The Surgical Care Improvement Project (SCIP) recommends patient warming if the procedure is anticipated to be greater than one hour, for the purpose of maintaining normothermia. The sub-item prompts the team to verify that warming devices are ready or in place if needed.

Origin: Surgical Care Improvement Project

**Risk of venous thromboembolism**

- Boots in place and/or anticoagulants

This item prompts discussion and planning prior to induction to reduce the risk of venous thromboembolism (VTE) and helps ensure that a plan is in place for VTE prophylaxis.

SCIP performance measures recommend that VTE prophylaxis is ordered anytime from hospital arrival to 24 hours after anesthesia end time. VTE is one of the most common postoperative complications, and prophylaxis is the most effective strategy to reduce morbidity and mortality. The frequency of VTE that includes deep vein thrombosis and pulmonary embolism is related to the type and duration of surgery, patient risk factors, duration and extent of postoperative immobilization, and use or nonuse of prophylaxis. Studies have shown that appropriately used thromboprophylaxis has a positive risk/benefit ratio and is cost effective.

Origin: Surgical Care Improvement Project

**Anesthesia safety check completed**

Conducting an anesthesia safety check is a standard of practice and is understood as a complete formal inspection of the anesthetic equipment, medications, and patient’s anesthetic risk before each case. This item prompts the anesthesia professional to verify completion of the safety check.

Origin: WHO Surgical Safety Checklist

## **ANESTHESIA BRIEFING – Anesthesia Professional shares:**

### **Anticipated airway or aspiration risk**

This item prompts the anesthesia professional to discuss the airway and aspiration risk with surgical team members. Reviewing plans for a difficult airway or an aspiration risk helps prepare the team.

The WHO guidelines recommend that an anesthesia provider objectively assess and determine whether the patient has a difficult airway or is at risk for aspiration. The airway can be graded by one of the scoring systems such as Mallampati score, thyromental distance, and Bellhouse-Doré score. Preparing for a difficult airway can prevent death from airway loss during anesthesia. Patients with reflux or a full stomach are at higher risk, and techniques such as rapid sequence induction or cricoid pressure during induction can reduce such risk.

Origin: WHO Surgical Safety Checklist

### **Risk of significant blood loss**

- Two IVs/central access and fluids planned
- Type and crossmatch screen
- Blood availability

Discussing the risk of blood loss before induction helps the team determine appropriate line placement and prepare for needed blood products. The WHO Surgical Safety Checklist recommends a discussion of blood loss and a review of appropriate IVs, type and cross, and blood availability. There are times when the surgeon is the only person that holds this information, so the Safe Surgery Checklist recommends including a redundant check in the “Before Skin Incision” section when the surgeon is present.

Patients who are at risk for losing >500 ml (>7 ml in children) of blood during surgery need preparation for this critical event: The team should place at least two large-bore intravenous lines or a central venous catheter prior to incision.

Origin: WHO Surgical Safety Checklist



## SECTION 2

# Before Skin Incision

### **TIME OUT – Circulating Nurse asks:**

**“Is everyone ready to perform the Time Out?”**

Asking if the team is ready for the Time Out promotes a hard stop of all other activities so that team members can give their full attention to the Time Out and briefing.

Nurses sometimes tell everyone to stop for the Time Out. This can be disruptive to the team and may create hostility if other team members are not ready. Facilities that *ask* if everyone is ready, and then wait for the team to be ready, tend to have better team engagement for the Time Out.

Origin: South Carolina Safe Surgery 2015

**“Please state your name and role”**

The WHO recommends that every person in the operating/procedure room introduce himself or herself by name and role before skin incision.

Introductions are also critical in creating an environment where individuals can voice concerns about the patient. People who are given the opportunity to contribute to a conversation will also find it easier to speak up later. It is recommended that every person in the operating/procedure room introduce himself or herself, including manufacturer/equipment representatives, students, and observers.

Many clinicians have raised concerns about having surgical team members introduce themselves before every case because everybody already knows each other or the team will be working together for the entire day. A best practice is to have surgical team members introduce themselves by name and role prior to the first case and have surgical team members check off with each other in subsequent cases. An example of checking off with one another is, “Betty, are you ready to go?”

Origin: WHO Surgical Safety Checklist

## **TIME OUT – Entire Surgical Team confirms:**

*The Time Out items are intended to ensure that the correct surgery is done on the correct patient and at the correct place on the patient's body.*

<b>Patient name</b>	<p>Reconfirming the patient's identity prior to the incision is a redundant step to prevent surgery on the wrong patient.</p> <p>Origin: The Joint Commission National Patient Safety Goal</p>
<b>Surgical procedure to be performed</b>	<p>This item is part of the Time Out requirements and ensures that the correct procedure is performed on the correct patient and at the correct place on the patient's body. The stated surgery to be performed should be checked against the written consent to ensure that they match.</p> <p>Origin: The Joint Commission National Patient Safety Goal</p>
<b>Surgical site</b>	<p>This item is essential to ensure that the team does not operate on the wrong site. This redundant check is an opportunity to confirm the operative site with the patient and team just prior to skin incision.</p> <p>Origin: The Joint Commission National Patient Safety Goal Universal Protocol</p>
<b>Essential imaging available</b>	<p>The WHO Surgical Safety Checklist recommends reviewing essential imaging if it is needed during the procedure. It should be prominently displayed for use during the operation. If imaging is needed but not available, it should be obtained before skin incision. It is important that this item be performed at a time when the surgeon is present.</p> <p>Origin: WHO Surgical Safety Checklist</p>
<b>Antibiotic prophylaxis given within the last 60 minutes</b>	<p>This item prompts confirmation that antibiotics are fully infused prior to skin incision. A patient's risk of developing a surgical site infection is reduced if prophylactic antibiotics are infused within one hour prior to surgical incision.</p> <p>Origin: WHO Surgical Safety Checklist</p>
<b>Antibiotic redosing plan discussed</b>	<p>For cases that are going to last longer than three hours, a plan for antibiotic redosing should be discussed.</p> <p>Origin: South Carolina Safe Surgery 2015</p>

## **TEAM BRIEFING — Surgeon shares:**

### **Operative plan**

This item prompts the surgeon to share a summary of the operative plan for the patient with all surgical team members.

Important details of the procedure to be performed are often known only to the surgeon, even though the team is usually aware of the type of procedure. This item gives the surgeon the opportunity to share this information, which in turn helps facilitate the team's performance. If the plan is routine, the surgeon may state "routine procedure."

The surgeon may discuss possible difficulties, expected duration, anticipated blood loss, and whether special equipment is required as part of the operative plan. However, those items are also listed separately to ensure that this critical information is communicated to the team.

Origin: WHO Surgical Safety Checklist

### **Possible difficulties**

A discussion of any possible difficulties that might be encountered during the procedure, such as rapid blood loss, injury, or other major morbidity helps the team prepare for potential complications. If no difficulties are expected, the surgeon may state "no anticipated difficulties." Possible difficulties may have been discussed in the operative plan.

Origin: WHO Surgical Safety Checklist

### **Expected duration**

This item prompts the surgeon to set the surgical team's expectations about the likely duration of each case. Informing the team of the expected duration helps the anesthesia professional plan for an appropriate emergence and helps the nursing team to plan for subsequent procedures. Expected duration may have been discussed in the operative plan.

Origin: WHO Surgical Safety Checklist

### **Anticipated blood loss**

This is a redundant check and is the last opportunity for the team to discuss estimated blood loss before skin incision so the team can be fully prepared. It is important to confirm this multiple times, especially if the entire surgical team was not together before the induction of anesthesia. Risk of blood loss may have been discussed in the operative plan.

Origin: WHO Surgical Safety Checklist

**Implants or special equipment needed**

This item prompts a discussion of implants or special equipment that is required and helps the team adequately prepare and anticipate needs for the procedure. Discussing appropriate implants or equipment has been shown to decrease the number of times the circulator leaves the room, and ultimately decreases room time.

Origin: WHO Surgical Safety Checklist

**TEAM BRIEFING — Anesthesia Professional shares:**

**Anesthetic plan**

The WHO Surgical Safety Checklist recommends that the anesthesia professional share the anesthetic plan, particularly any concerns with major morbidities. Discussing the anesthetic plan helps ensure that team members are adequately prepared and ready to anticipate potential risks.

Origin: WHO Surgical Safety Checklist

**Airway concerns**

The WHO Surgical Safety Checklist recommends that the anesthesia professional share any concerns about the patient’s airway, to alert all teams members about possible complications. If no problems are expected, the anesthesia professional may report “no airway risks or concerns.”

Origin: WHO Surgical Safety Checklist

**Other concerns**

The WHO Surgical Safety Checklist recommends building in an opportunity for the anesthesia professional to raise any other concerns that they might have. Sometimes people won’t share concerns unless they are given the specific opportunity to do so.

Origin: WHO Surgical Safety Checklist

**TEAM BRIEFING — Circulating Nurse and Scrub Tech share:**

**Sterility, including indicator results**

The WHO Surgical Safety Checklist recommends that the scrub nurse or technologist verbally confirm that the sterilization was performed and that for heat sterilized instruments, a sterility indicator has verified successful sterilization.

Origin: WHO Surgical Safety Checklist

## Equipment Issues

The WHO Surgical Safety Checklist recommends that the nursing team discuss any equipment problems or concerns to adequately prepare and anticipate needs for the procedure. This is another opportunity for the nursing and technology team to discuss equipment problems or ask questions regarding the surgical team's anticipated needs. Adequate preparations for the procedure reduce wait time in the operating/procedure room and help reduce the need for the circulating nurse to leave the room during surgery.

Origin: WHO Surgical Safety Checklist

## Other Concerns

The WHO Surgical Safety Checklist recommends building in an opportunity for the circulating nurse, scrub nurse, or technologist to ask other questions or express concerns. Sometimes people won't share concerns unless they are given the specific opportunity to do so.

Origin: WHO Surgical Safety Checklist

## TEAM BRIEFING — Surgeon asks:

**“Does anybody have any concerns? If you see something that concerns you during this case, please speak up.”**

This item is sometimes referred to as “the surgeon safety statement.” When the surgeon invites other surgical team members to speak up, she or he sets a positive a tone in the operating room, creates a sense of openness, and encourages everyone in the operating room to be comfortable voicing concerns during the case.

Origin: Safe Surgery Checklist

## SECTION 3

# Before Patient Leaves Room

### Nurse reviews with team:

#### **Instrument, sponge, and needle counts**

This item prompts the nurse to announce the final count status out loud to the team. This allows the team to reconcile counts as needed and alerts the team to incorrect counts so that appropriate steps can be taken, such as searching for the missing item, exploring the wound, or taking an intraoperative radiograph.

Origin: WHO Surgical Safety Checklist

#### **Name of the procedure performed**

This item prompts confirmation of the procedure that was performed. In many cases, the procedure changes or expands during the course of the operation. The nurse should confirm with the surgeon the name of the procedure(s) and how it should be recorded in the patient records. This step avoids discrepancies in documentation.

Origin: WHO Surgical Safety Checklist

### Nurse reads aloud to team:

#### **Specimen labeling, including patient's name**

This item prompts verification that patient specimens collected during surgery are correctly labeled. Mislabeling and mishandling of specimens are common errors and pose risks to all patients. The circulator should confirm the correct labeling by reading out loud the patient name, specimen description, and any orienting marks by verifying the label with the surgeon. Specimen reconciliation at the end of the procedure prevents errors and assures with the surgeon correct labeling and documentation of specimens.

Origin: WHO Surgical Safety Checklist

## **DEBRIEFING — Entire Surgical Team discusses:**

### **Key concerns for patient recovery and management**

This item prompts the team to share and discuss concerns related to the patient's postoperative recovery and management. This discussion should focus on intraoperative and anesthetic issues that may affect the patient, and key information that should be transferred to the team that will be taking care of the patient in the recovery area.

Origin: WHO Surgical Safety Checklist

### **Equipment problems that need to be addressed**

This item prompts team members to identify equipment or instrument problems. This helps ensure that subsequent cases are not negatively affected by known equipment and instrument issues. This prompt should be supported by a system to document, track, and address issues, and to report a resolution back to the originating surgical team. Reports indicate that creating this type of system helps engage physicians, particularly surgeons, in using the checklist and can decrease the amount of surgical time wasted by equipment and instrument problems.

Origin: WHO Surgical Safety Checklist

### **Other opportunities for improvement**

This item invites the team to take stock of what happened during surgery and identify anything that could improve the next case. A debriefing discussion promotes an open environment of learning and helps teams improve communication and teamwork.

Origin: South Carolina Safe Surgery 2015





## Appendix B

# Addressing questions and objections

# Instructions for the team lead

## OVERVIEW

This appendix contains the quick-reference guide *Addressing questions and objections*, a document that describes responses to common questions and objections to the Safe Surgery Checklist.

Each member of your implementation team and others who may lead 1-on-1 conversations should be familiar with these common concerns and strategies for addressing them.

*Addressing questions and objections* is also available for download as a PDF at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).

## HOW TO USE THIS QUICK-REFERENCE GUIDE

- Give a copy to each member of your implementation team, and review this content together as a team in Step 2: Understand the Work.
- Give a copy to everyone who will be leading 1-on-1 conversations with surgical team members.
- Use the content to help you prepare before talking about the checklist to large groups.

This reference will be helpful during these implementation process steps:

- Step 2: Understand the Work
- Step 7: Have 1-on-1 Conversations
- Step 8: Promote the Checklist
- Step 9: Train and Spread

## RELATED CONTENT

- Chapter 1: *The Safe Surgery Checklist*
- Chapter 10: *The 1-on-1 conversation*

# Addressing questions and objections

## How to address common questions and objections

### Acknowledge and validate the concern

When someone expresses a concern about the checklist in a 1-on-1 conversation, the most important thing you can do is acknowledge and validate that person's feelings.

### Be prepared to listen

Objections are often based on legitimate concerns — you will be able to address those concerns most effectively once you've demonstrated a willingness to listen.

Arguing with someone or telling them that they should not have a concern is a good way to shut down communication.

### Be prepared to respond

#### Know in advance what you might say

The following tables pair common objections with considerations and examples for how you can respond. The more familiar you are with these concerns and responses, the more prepared you will be to speak convincingly.

#### Evidence

Be prepared with evidence, but don't expect data to change someone's mind. Checklist skeptics, especially clinicians, may want to focus on clinical evidence, but data alone rarely convinces someone to use the checklist. Often, a focus on evidence masks other underlying concerns. Discussing the evidence is important, but is best viewed as the first step in having further conversations about how the checklist might affect that person's role, time, perceived authority, workflow, etc.

## How to respond to hostility

### The best strategy is good communication

If you encounter someone who is particularly opposed to the checklist, tell them what you are trying to do in your facility. Give them a chance to say that they don't agree with the checklist, approach, or timing — listen to and acknowledge their objections.

### Talk to potentially hostile skeptics early

If you can, speak to potentially hostile staff or physicians individually *before* talking about the checklist in meetings that they will attend.

It is particularly important to have a 1-on-1 conversation with suspected resisters before any large meeting. If you don't do this, there is a danger that they will hijack your presentation, raise concerns in front of the group, and cause their peers to become more hesitant.

### Steps for talking with skeptics

- Talk to them first.
- Ask for their help.
- If they won't help, ask them to at least not get in your way.
- Regardless of the outcome, thank them for their time and tell them you will keep them apprised of your progress.

### How to ask people not to stand in your way

Stress that others want to use the checklist:

*"I understand your position and that's certainly okay, but I'd ask that you not stand in the way of our work with other surgical team members. There are surgeons, physicians, and other folks on staff here who want to use a checklist to improve communication and patient safety."*

## Responses to common questions

What you might hear...	How you might respond...
<p>I am already safe. I don't need to do it.</p>	<p>The goal here is to get past the implication that by asking them to use the checklist you are implying that they are not safe.</p> <p>People often think there is another person in the facility that could do better, and you can make the case that you want this person to be as safe as possible for the benefit of the patients.</p> <p><i>“Yes, you are already safe, but the rest of the team can benefit. We need it because we feel safer when you do this.”</i></p> <p><i>“Yes, you are safe. But is there anybody else here who doesn't have quite that same attitude toward safety that you do?” Then you can talk about a different surgeon or an event if you need to. “They won't do it unless you do it, so can you help me?”</i></p> <p><i>“You are safe, but we think that something like this tool can help make our entire center better.”</i></p>
<p>There isn't time to do this.</p>	<p>We find that when the checklist is used in a meaningful way and has become the habit of how people work, it takes less and less time. In fact, it can <i>save time</i> because teams are better prepared to work together.</p> <p><i>“Have you ever had the frustration of getting 20 minutes into a case and then having something not available that was necessary?”</i></p> <p>Point out that by doing briefings and sharing information proactively, the checklist can help prevent that type of delay — that waste of everyone's time and resources — and make the place run better.</p>
<p>I don't want to do it. I've never had to do this before and it makes me feel weird.</p>	<p>Doing something new feels weird for a while. Prepare people for this:</p> <p><i>“Yes, we know that changing how you communicate and interact may feel uncomfortable, but that feeling goes away with time.”</i></p> <p>People who initially felt weird doing the checklist start to feel weird <i>not</i> doing the checklist. We've heard people say that when they operate at another facility, they almost feel naked without doing the checklist once they've gotten used to it.</p>

## Responses to common questions

What you might hear...	How you might respond...
<p>I need to stay focused, and the checklist is a distraction.</p>	<p>We hear from surgeons and anesthesia professionals that the checklist will interrupt their focus, particularly before skin incision for surgeons, and before induction for the anesthesia professional. This is a real issue, so be prepared to listen and acknowledge that. You can validate those concerns by saying, “Yes, we understand that, and this is how the checklist can actually help you.”</p> <p>Intense focus is clearly an important part of mentally preparing to perform an invasive procedure on a patient. The checklist is a way for everyone on the team to be focused, and to align everyone’s focus in the same direction. If each person is focused individually and everyone’s seeing a slightly different picture, it’s very hard to arrive at the same destination.</p> <p><i>“The checklist is one or two minutes of making sure that everyone’s focus is on the same plan and in the same direction, so that we can ensure the best outcome, in terms of both efficiency and safety for the patient.”</i></p>
<p>My team knows what I want without me asking.</p>	<p>Sometimes this might be true, but it’s helpful to talk about times when perhaps the team didn’t know, or wasn’t as prepared as they could have been. When things don’t go well or something bad happens, it will often turn out that someone on the team had information that may have helped prevent harm but that they didn’t have an opportunity to share that information with others. The checklist gives everyone an opportunity to share information with the team as a whole.</p> <p>Ask the person to reflect on things they can say to make the team even better prepared.</p> <p>Another approach is:  <i>“There are some studies that show that if you have a fixed OR team that you perform better, but there are also some suggestions that fixed teams may get complacent about things, that they start taking things for granted. And that’s not really what you’d consider to be a high-reliability approach. A high-reliability approach is to standardize things, and the checklist will help us do that throughout our facility.”</i></p>

## Responses to common questions

What you might hear...	How you might respond...
<p>There is no evidence that the checklist works in my specific environment.</p>	<p>Always validate people’s concerns.</p> <p>Don’t suggest that there is evidence for a specific use or setting if there is not.</p> <p>When someone asks about the use of a checklist in a specific setting or for a specific surgery, acknowledge that there may not be as much direct evidence for those specific uses at this point in time.</p> <p>Point out that there is a growing body of evidence for complex operations like heart surgery or significant cancer surgeries that briefings and debriefings help and the use of checklists makes a difference in care. Even in surgeries that are short or where the risk of a procedure is significantly lower, the risk is still not zero and the potential exists to really harm patients.</p> <p><i>“Even if the checklist makes a difference for one in a thousand patients, or only one in ten thousand patients, isn’t it still worth that little bit of an investment to help that patient not have something happen to them?”</i></p> <p><i>“Think about how many airline accidents are acceptable. It’s zero, right? We want to be working toward zero harm in our facility, so if the checklist can lead us to better communication, better teamwork, briefings, and debriefings, we think that’s worth trying.”</i></p>

## Responses to common questions

What you might hear...	How you might respond...	
<p>Recent studies show that surgical safety checklists don't work.</p>	<p>This statement may refer to the two studies below. In both cases, checklist use was not actually measured and the quality of implementation was not assessed. Review the study summaries below and use the talking points to help you address this concern.</p>	
	<p><b>NEJM</b>  <b>“Introduction of Surgical Safety Checklists in Ontario, Canada”</b>            Urbach DR, Govindarajan A, Saskin R, Wilton AS, and Baxter NN. Introduction of surgical safety checklists in Ontario, Canada. <i>The New England Journal of Medicine</i> 2014, 370(11), 1029–38. doi:10.1056/NEJMsa1308261.</p> <p><b>Talking points</b></p> <ul style="list-style-type: none"> <li>• Researchers did not measure how the checklist was used in the hospitals. If you don't use the checklist, it can't work.</li> <li>• A well-used checklist changes process and culture. Changing culture takes longer than three months.</li> </ul> <p><b>SUMMARY</b></p> <ul style="list-style-type: none"> <li>• a province-wide mandate implementing checklists in the operating room put into place in beginning July 2010</li> <li>• study period was three months before checklist introduction and three months following checklist implementation</li> <li>• used administrative data to measure outcomes</li> </ul> <p><b>RESULTS</b></p> <ul style="list-style-type: none"> <li>• no statistical differences in a set of complications and mortality</li> <li>• concluded that the checklist didn't change patient outcomes</li> </ul>	<p><b>Medical Care</b>  <b>“Evaluation of the Effectiveness of a Surgical Checklist in Medicare Patients”</b>            Reames BN, Scally CP, Thumma JR, Dimick JB. Evaluation of the Effectiveness of a Surgical Checklist in Medicare Patients. <i>Med Care</i> [Internet]. 2015 Jan [cited 2015 Mar 13];53(1):87–94. Available from: <a href="http://www.ncbi.nlm.nih.gov/pubmed/2546416">http://www.ncbi.nlm.nih.gov/pubmed/2546416</a>.</p> <p><b>Talking points</b></p> <ul style="list-style-type: none"> <li>• The “checklist” used in the Keystone Surgery program is very different from the Safe Surgery Checklist.</li> <li>• Researchers did not measure how the checklist was used or quality of implementation. If you don't use the checklist, it can't work.</li> </ul> <p><b>SUMMARY</b></p> <ul style="list-style-type: none"> <li>• 95 Michigan hospitals implemented Keystone over two years</li> <li>• Comprehensive Unit-based Safety Program (CUSP) encouraged hospitals to use the checklist during briefings and debriefings</li> <li>• used a surgical checklist that included six CMS Surgical Care Improvement (SCIP) measures</li> <li>• used Medicare data sets to assess outcomes; Michigan hospitals were compared to hospitals nationally</li> </ul> <p><b>RESULTS</b></p> <ul style="list-style-type: none"> <li>• found no association with improved outcomes</li> <li>• concluded that the checklist (SCIP measures) didn't change patient outcomes</li> </ul>





# Appendix C

## Techniques for coaches

# Instructions for the team lead

## OVERVIEW

This appendix contains the quick-reference guide *Techniques for coaches*, a document that describes how to coach checklist use in the operating/procedure room. The content in *Techniques for coaches* comes from Chapter 13: *Coaching the checklist*, but has been rewritten to speak to coaches directly and is intended to serve as their guide. Included as part of *Techniques for coaches* is the action guide *Coaches' guide to giving feedback*, which appears at the end of this appendix.

*Techniques for Coaches* is also available for download as a PDF at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).

## HOW TO USE THIS QUICK-REFERENCE GUIDE

- Give a copy to each person who will coach the checklist, along with a copy of the Coaching Observation Tool, for them to use as a resource.
- Review the content with coaches, individually or as a group, when you train them in how to coach the checklist in the operating/procedure room.

This reference will support the work you do during these implementation process steps:

- Step 10: Watch and Coach
- Step 11: Continually Improve

## RELATED CONTENT

- Chapter 13: *Coaching the checklist*

## RESOURCES AND MATERIALS

- Coaching Observation Tool
- Action guide: *Coaches' guide to giving feedback*
- Safe Surgery Checklist Practice Scripts

# Techniques for coaches

## KEY CONCEPTS

- Coaching helps improve both individual and team performance.
- Coaching, at its simplest, means watching and giving feedback.
- Effective coaching requires training and practice.
- Structured feedback (e.g., the 3-part question technique) is a simple and effective way to provide positive coaching.
- The Coaching Observation Tool provides a framework for coaching.
- Good coaches offer feedback to the right people, at the right time, in the right place, and in the right way.
- Adults learn best when they arrive at their own conclusions.
- Coaching is an ongoing activity that helps sustain effective checklist use over time.

## Introduction

Coaching is an important part of every successful checklist implementation (see Diagram 1). It leads individuals and teams to better performance and helps sustain effective checklist use over time.

This quick-reference guide is intended for checklist coaches. It describes what good coaching looks like and how to use a 3-part question technique for coaching surgical teams and individual team members.

## What does “coaching” mean?

Coaching a surgical team on proper use of the checklist starts by observing the team in the operating/procedure room. The coach pays close attention to what is going on: watching the team members and how they perform the items on the checklist, and listening to their conversations and questions. The coach will then either give feedback to the team as a whole or work with individual team members, depending on the observed behavior and the nature of the feedback.

DIAGRAM 1 The Safe Surgery Checklist Implementation Training Model

Coaching is the third activity in the checklist implementation training model. Coaching reinforces and builds on the checklist knowledge and experience that surgical team members have been given prior to using the checklist. Coaching also provides a means for the ongoing continuous improvement of checklist performance.

	Time →							
	ENGAGEMENT		TRAINING		COACHING			
When:	Before training		Before first use		During first/early use		Ongoing	
What:	<i>“Introduce me to the idea”</i>	<i>“Tell me why”</i>	<i>“Tell me how”</i>	<i>“Show me how”</i>	<i>“Watch me do it”</i>	<i>“Give me feedback”</i>	<i>“Watch me do it”</i>	<i>“Give me feedback”</i>
How:	Have 1-on-1 conversations	Promote the effort internally	Explain + Demonstrate + Practice proper checklist use		Observe + Coach Use the Coaching Observation Tool and 3-part question		Observe + Coach Use the Coaching Observation Tool and 3-part question	

## What does good coaching look like?

The idea of “coaching” may bring to mind movie scenes in which angry coaches yell, jump up and down, and dress down their players. Perhaps you’ve even seen that behavior at a football game or other sporting event. But that is *not* what coaching is about — and it’s certainly not effective in the operating/procedure room.

### Coaching is:

- listening and watching.
- asking questions.
- inviting the team members to reflect on their behavior.
- guiding the team to understand how to improve its performance.
- acknowledging the positive work people do.

### Coaching is not:

- telling people what to do.
- criticizing people.
- instructing them in the moment about what to do.

## Principles of being an effective checklist coach

The following principles apply any time you are coaching, regardless of whether you are coaching an individual or a team.

### A good coach is someone who...

#### Can be coached

Coaches should be willing to be observed and answer questions about their own performance. People who respond well to being coached usually have the insight, sensitivity, and level of understanding needed to coach other people.

#### Is widely respected

Coaches need to be trusted and respected by their peers and members of the surgical team.

#### Communicates well

Coaches know how and when to listen, speak to others with respect and kindness, and communicate ideas clearly and simply.

#### Understands the clinical environment

Coaches need to understand the clinical environment. Someone who has never set foot in an operating room would not make a good coach.

#### Understands what useful feedback is

- simple
- focused
- respectful
- kind

#### Avoids the kind of negative feedback that is sometimes common in healthcare settings

- criticizing
- telling
- yelling
- being one-sided
- assuming incompetence

### Patient care is the highest priority

- Coaching should never affect the ability of surgical team members to focus on patient care or do their work. Pay close attention to the clinical circumstances of each case, and act accordingly.
- Always wait until the team has finished providing patient care before offering feedback to the team.

#### IMPORTANT

*While observing the case, if you see something that may harm the patient, you should always speak up to prevent the harm.*

## Assume the best

Most people who work in healthcare do so because they want to help people; they are well meaning and try to deliver safe and effective care to patients. The people being coached in an operating/procedure room are knowledgeable adults.

Treat all team members as though they are trying their best to help the patient. With this attitude, you will be much more likely to get team members to listen to your feedback.

## Acknowledge the positive

Be sure to recognize team members for the positive things they do, and acknowledge that they are all trying to learn and do their best for their patients.

## Let people reach their own conclusions

Adults learn best when they are allowed reach their own conclusions. Effective coaches are able to get people to reflect on what has happened and guide them to identify — for themselves — problems and potential solutions for improving performance.

## Use the Coaching Observation Tool

The Coaching Observation Tool (see Diagram 2 Understanding the Safe Surgery Coaching Observation Tool on page C4) is a document that you use during surgical observation to help you:

- focus attention on specific behaviors.
- standardize observations between observers and between teams.
- organize observation and coaching tasks.
- record information, either during or after the case.

The observation tool can be used to watch a team perform the entire checklist or a particular portion of the checklist.

### Explain that your observation is for learning

Using an observation tool during a case can have a negative connotation. Watching a case while holding a clipboard or piece of paper can lead some members of the team to feel that you are conducting an audit.

Put people at ease by telling the team in advance or at the beginning of the case that the form you will be filling out is an observation tool:

- to help you stay organized.
- to improve team performance.

### Take notes either during or after a case

The observation tool can be filled out during the case, or immediately after, to help you remember what specifically happened during the case.

Consider these points:

- Writing during the case may help some people remember, but writing can be a distraction from watching and listening.
- Take the attitude of the team into account. If the team seems uncomfortable with you using an observation tool, even after an assurance that the observation is about learning, it may be best to write notes after the case.

### Avoid personal identifiers

Do not write personal identifiers (e.g., names) on the observation tool. By respecting confidentiality, you will help build trust for checklist coaching and for the implementation effort as a whole.

## Give structured feedback

Structured feedback allows you to present information in a neutral way that invites reflection.

One effective technique for giving feedback is the 3-part question, which is based on a simple

## DIAGRAM 2 Understanding the Safe Surgery Coaching Observation Tool

The Coaching Observation Tool was developed to help you focus on key elements of what surgical team members do and how they do it. Here is the first page of the three-page Coaching Observation Tool.

**Coaching Observation Tool**

COACHING OBSERVATION TOOL — page 1 of 3

DATE \_\_\_\_\_ ← Date  
(mm/dd/yyyy)

**Before Induction of Anesthesia**

Use this form along with a copy of your facility's checklist to record your observations, notes, and feedback for the surgical team.

**Step 1: Checklist discussion Items**

- On a copy of your facility's Safe Surgery Checklist, mark each item that the team discusses.
- Use the space below to take notes about your observations.

**Step 2: Quality of discussion**

*After the discussion, please mark how well the checklist was used:*

a. Did the circulating nurse discuss all items when at least one other care provider was present?  
 Yes    Some, not all    No

b. Was the patient actively engaged in this discussion?  
 Yes    Somewhat    No    N/A

c. Were the checklist items done from memory?  
 Yes    Some, not all    None

d. Did every team member that was present say something?  
 Yes    Some, not all    No one

e. Could the team have performed this section of the checklist better?  
 Yes    No

**Step 3: What feedback can you give the team?**

*Reflect on what you saw the team do well or what they could have done better during the cases using the 3-part question:*

YOUR OBSERVATION	YOUR OPINION	YOUR QUESTION

Revised 052915

One page for each checklist section →

Record whether the team discusses each item that appears on your checklist →

Add notes or comments as needed →

Record feedback in the form of a 3-part question →

Record the quality of discussion and whether the team followed best practices for checklist use ←

### It is simple and easy to use

- There is a separate page for each section of the Safe Surgery Checklist.
- Each page has three steps:
  - Were checklist items discussed?
  - Were best practices followed?
  - What feedback can you offer?

### It is designed to help you

- Organize observations and coaching tasks.
- Focus on specific behaviors.
- Standardize observations.
- Record information.
- Frame feedback in the form of a 3-part question.

formula: observation + opinion + question (see Diagram 3 Understanding the 3-part question on page C6).

Although this technique is easy to understand, it does take practice.

- Practice the 3-part question during an implementation team meeting before you try coaching in the operating/procedure room.
- Consider using the 3-part question with your family and friends. This structured way of asking questions and bringing issues to people's attention keeps you from criticizing and possibly turning people off, and it can be used anywhere.
- Ask your implementation lead about other opportunities to practice.

## How to give feedback using the 3-part question

The 3-part question is an effective technique for giving teams structured feedback during coaching. This technique will help you offer feedback in a neutral way, and it gives surgical team members an opportunity to have their own insights and reach their own conclusions.

### Use language that is neutral and that feels natural to you

It's important to use language that is neutral and also feels comfortable for you to say. Here are some examples of language that can be used when coaching the checklist with the 3-part question:

*"I noticed that the team didn't use the checklist on the wall to prompt your discussions. I believe reading from the checklist helps so that all items on the checklist are discussed. I'm curious: Why didn't the team read the items on the poster?"*

*"I noticed that your team skipped the introductions. I think they're an important part of the*

*checklist because they give everyone a chance to say something before the start of the case. Can you tell me why the team skipped them?"*

*"I saw that your team didn't confirm that the antibiotics were completely infused before the start of the case. I believe it is important that the team confirms that the antibiotics are infused so the patient doesn't get an infection. Can you help me understand how you think this happened?"*

## Avoid these mistakes when coaching with the 3-part question

### Don't make generalizations

#### EXAMPLE

*Avoid saying: "I noticed that communication wasn't very good. I think that having good communication is important. Can you help me understand what happened?"*

*Instead, give the team specific examples of what you saw: "I noticed that your team didn't use the checklist on the wall to prompt your discussions. I believe reading from the checklist helps so that all items on the checklist are discussed. I'm curious about why the team didn't read the items on the poster."*

### Don't assume that you understand people's actions or motivations

#### EXAMPLE

*Avoid saying: "I noticed that you skipped the introductions because you were in a hurry."*

*Instead say: "I noticed that the team skipped the introductions. I think they're an important part of the checklist because they give everyone a chance to say something before the start of the case. Can you tell me why the team skipped them?"*

### DIAGRAM 3 Understanding the 3-part question

Structured feedback allows you to present information in a neutral way that invites reflection. One effective technique for giving feedback is the 3-part question.

The 3-part question is based on a simple formula: observation + opinion + question

#### PART 1

### Your observation

#### GOAL

- Explain your observation.
- Be specific and clear.
- Remain as objective as possible.

#### EXAMPLES

*"I saw..."*  
*"I observed..."*  
*"I watched..."*  
*"The team did..."*  
*"The team didn't..."*  
*"I noticed..."*

#### PART 2

### + Your opinion

#### GOAL

Share why you are focusing on a specific behavior or action, and explain its importance.

#### EXAMPLES

*"I think..."*  
*"I believe..."*  
*"It's really important to..."*  
*"I am pleased that..."*  
*"I am concerned that..."*

#### PART 3

### + Your question

#### GOAL

- Allow the team to reflect.
- Display genuine interest in what happened.

#### EXAMPLES

*"Can you help me understand?"*  
*"I am curious, what do you think happened?"*  
*"How did it make you feel?"*  
*"What is your point of view?"*  
*"How did you experience that?"*  
*"I wonder what you think happened."*  
*"Where do you think your team was coming from?"*

### Putting the parts together...

***"I noticed** that the team did not debrief at the end of the case.  
**I think that** debriefing is really important.  
**Can you help me understand** what happened?"*



## Don't make the team guess what you are thinking

### EXAMPLE

*Avoid saying:* "Can you tell me what you did wrong?" when you already know exactly what you are after.

*Instead say:* "I noticed that your team didn't confirm that the antibiotics were completely infused before the start of the case. I think it is important for the team to confirm that antibiotics are infused so that the patient doesn't get an infection. Can you help me understand why this didn't happen?"

## Don't ask questions that contain an answer

### EXAMPLE

*Avoid saying:* "Don't you think it would have been better if you had...?"

*Instead say:* "I noticed that the whole team didn't stop all activity when performing the Time Out. I think it is important for patient safety that everyone in the operating room stop so they can fully participate in the Time Out. Can you help me understand what happened?"

## Don't disguise a statement as a question

### EXAMPLE

*Avoid saying:* "You didn't really want to do that, did you?"

*Instead say:* "I saw that your team didn't review the specimen labeling before the patient left the room. I believe it is important to read back the specimen labeling, including the patient's name, so that there is no confusion over what the specimen is. I am curious, what do you think happened?"

## Before you offer feedback...

Good coaches offer feedback to the right people, at the right time, in the right place, and in the right way. Pay attention to team dynamics as you observe the case. Before you give feedback to the team, consider the following questions.

### What is the team doing?

Provide feedback to the team when it does not interfere with patient care, and when as many team members as possible are present.

### Should I say something now or in a discussion after the case?

It is best to coach when the case is finished, so that your interaction with the team does not detract from patient care.

### IMPORTANT

*If you see something during a case that could cause harm to the patient, you should always speak up and say something to the surgical team.*

### What happened during the case?

Coaching is best received when team members are not stressed. For example, it may not be appropriate to give feedback when an adverse event occurs. In these circumstances, you may want to reconnect with the team or the individual members at a later time.

### Is the entire team going to be receptive to my feedback?

The team needs to be open to hearing feedback. If, after watching the case, you become aware that some members of the team will not be open to feedback, coaching the team as a whole may be ineffective. Instead, consider coaching that team by having individual conversations with each team member.

## Do I need to coach an individual or the team as a whole?

If you are coaching an individual, give that person feedback privately to avoid singling out the individual in front of the team. If you are trying to improve the performance of the entire team, it is appropriate to coach the team together.

### Coach the team together

Use the 3-part question with the team when the issues you see involve or apply to the entire team. Avoid discussing team issues with individuals, so as not to create the impression that the coaching does not apply to the whole team. If the team is not available as a group, it's okay to speak to each individual about a team issue — just be sure to give every team member the same information.

#### EXAMPLE

Here is an example of coaching that is directed toward the whole team and takes place after — not during — the case.

**What the coach sees:** The team does not come to a hard stop during the Time Out.

**What the coach says:** *“I noticed that team members were still moving around when you started the Time Out. I think that it’s really important that we come to a hard stop so that everyone can engage in that discussion. Can you tell me why that may have happened for this case?”*

### Coach individuals in a 1-on-1 conversation

It is not appropriate to coach an individual in front of the team. Always provide individual coaching in private.

#### EXAMPLE

If one person on the team will not use the checklist, is not using it as intended, or is vocally negative about the checklist, have a 1-on-1 conversation with that person using the 3-part question to offer feedback.

In many instances, the coach who observed the case is the most appropriate and effective person to have this conversation. In some circumstances, someone in a leadership role may be more effective. For instance, if the person you need to speak with is a surgeon, it may be more effective for the head of that surgical department to have the 1-on-1 conversation.

## Preparing for and managing your coaching sessions

Coaches must be organized and professional. Because you are a representative of the implementation team, your interactions with the surgical team will directly affect team members’ perceptions of the overall checklist effort.

### Prepare and bring materials

For each case you will observe and coach, print and bring a copy of:

- your facility’s Safe Surgery Checklist.
- the Coaching Observation Tool (all three pages).

### Confirm that the team you plan to be coaching knows that you are coming

- Confirm with the implementation lead or the person who scheduled the coaching that the surgical team is expecting you.
- Confirm where and when you will be giving the team feedback (at the end of the case, end of the day, or at a later date).

### Know when to arrive or return to the operating/procedure room

You don’t need to stay for the whole case — you only need to be present while the team is performing the checklist. Timing your arrival in the operating/procedure room requires coordination and flexibility, especially if the surgical schedule changes that day.

Confirm the location and time for the case(s) and be sure that you are ready to observe when the team is ready to start the case. If you choose to only observe the team using one or two sections of the checklist, tell the team which portions you plan to watch and let them know when you will be back to give them feedback.

If you plan to leave the operating/procedure room after the skin incision section and return for the debriefing, be sure that you return at the right time. Some of the ways you can manage this include:

- Have the circulating nurse call or page you when the case is starting to wrap up.
- Watch a video feed from the operating/procedure room (if available).
- Look through a window to see when the team is ready.

## Coaches' guide to giving feedback

### STEP 1 Set the stage

- Thank the team for letting you observe.
- Remind the team that the purpose of your observation and feedback is to improve patient care by enhancing their performance as a team.

### STEP 2 Start with an open-ended question

*Ask: "How did it go using the checklist?" or "How did it go today?"*

These questions allow team members to say what is on their minds, making it easier for you to direct the conversation where you want it to go.

### STEP 3 Share your observations using the 3-part question technique

State your **observation** in a specific, clear, and objective way.

*"I saw..."*

*"The team didn't..."*

*"I noticed..."*

Share your **opinion** on a specific behavior or action, and explain its importance.

*"I think..."*

*"It's really important to..."*

*"I am pleased that..."*

Ask a **question** that allows team members to reflect on what happened.

*"Can you help me understand?"*

*"I am curious..."*

*"I wonder what you think happened?"*

### STEP 4 Motivate the team members by focusing on what they can do better

- Invite the team to identify and discuss what went well.
- Then ask the team to identify opportunities to improve, and discuss how to implement them in the future.

### STEP 5 Close the session

- Ask team members if they would like to talk about anything else.
- Let the team members know how they can follow up if they have questions or comments.
- Thank the team.

# Appendix D

## Fact sheets

# Instructions for the team lead

## OVERVIEW

This appendix contains three fact sheets. Each fact sheet is a single-page document that presents a condensed overview of a key topic.

Each fact sheet is also available for download as a separate PDF at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).

## HOW TO USE THESE FACT SHEETS

- Print the fact sheets as needed for use by your implementation team.

Fact sheets may be helpful during these implementation process steps:

- Step 1: Recruit a Team
- Step 2: Understand the Work
- Step 6: Plan Your Expansion

## RELATED CONTENT

- Chapter 2: *A framework for checklist implementation*
- Chapter 3: *Building a checklist implementation team*
- Chapter 9: *Creating a plan for checklist expansion*

FACT SHEET

# Overview of checklist implementation

The framework below reflects lessons learned in over 4,000 facilities globally. It will help you avoid common pitfalls and prepare your organization to successfully harness the power of the Safe Surgery Checklist to improve teamwork and communication.

## The Safe Surgery framework puts your checklist initiative on a path to success.



### How long does it take?

The amount of time needed to implement the checklist varies greatly depending on the size, culture, and resources of each facility.

The implementation process can take as little as four weeks in small facilities, or as long as three years in larger or more challenging organizations.

Most facilities will fall somewhere in the middle.

## Eleven essential steps guide your team.

Each step prepares your team to be successful in the work that follows.

<b>1. Recruit a Team</b> Build a multidisciplinary team to plan and execute your implementation effort. Establish roles, expectations, and process.	<b>2. Understand the Work</b> Equip your team with a common understanding of the history and evidence supporting Safe Surgery Checklist use and implementation.	<b>3. Assess Your Environment</b> Assess the culture and practices in your operating and procedure rooms to identify your facility's specific opportunities for improvement.	<b>4. Decide: Are We Ready?</b> Based on culture and process assessments, gauge your facility's readiness. Consult with hospital leadership and confirm their commitment.	<b>5. Customize and Test</b> Customize your checklist to address facility-specific issues. Test and revise your checklist until it is ready for wider use.
<b>6. Plan Your Expansion</b> Create a plan for how you will handle 1-on-1 conversations, promotion, training, coaching, and display of your checklist. Itemize specific tasks and create a schedule.	<b>7. Have 1-on-1 Conversations</b> Execute the plan you created for having 1-on-1 conversations with all operating and procedure room team members.	<b>8. Promote the Checklist</b> Execute the plan you created for promoting the checklist in your facility. Showcase your efforts and progress.	<b>9. Train and Spread</b> Execute the plan you created for training surgical team members and spreading checklist use. Collect feedback and troubleshoot problems as they arise.	<b>10. Watch and Coach</b> Continue to watch how the checklist is actually used. Use coaching to enhance checklist use and team communication.
<b>11. Continually Improve...</b> Never stop looking. Make periodic revisions that enhance use and help teams adapt to changing conditions. Use the debriefing as a strategy for continuous quality improvement.				

For more information, refer to the Safe Surgery Implementation Guide or visit <http://www.safesurgery2015.org/checklist-resources.html>

## FACT SHEET

## Implementation team roles and responsibilities

*Your active participation and enthusiasm can help improve our care of surgical patients.*

### Help improve surgical care by joining the Surgical Safety Checklist team

Implementation of the Surgical Safety Checklist is a quality improvement initiative designed to enhance communication and teamwork in surgery. The successful integration of the checklist into surgical workflow and practice is deeply influenced by the commitment and effort of the implementation team. That's why we need leaders like you.

#### What is the implementation team?

This team is a multidisciplinary group of people responsible for planning and executing our initiative.

#### Who is on the team?

Every role in the operating room needs a voice — we hope to include at least one representative of each of these roles:

- administrator and/or quality improvement officer
- anesthesiologist and/or CRNA
- circulating nurse
- scrub technician
- surgeon
- others (perfusionists, pre-op and post-op nurses, anesthesia technicians, physician assistants, biomedical engineers)

#### How does the team work?

- One person — the team lead — is responsible for meeting logistics and team communication.
- The team meets regularly to work through the essential steps of the checklist implementation process.
- After the initial planning and expansion of the checklist, meetings may become less frequent.

### As a team member, you will contribute by:

- providing insight into workflow and processes.
- providing clinical expertise.
- learning about checklist-related evidence.
- helping customize and test the checklist.
- modeling good checklist practice.
- having 1-on-1 conversations with peers.
- teaching others how to use the checklist.
- coaching checklist use in the operating room.
- presenting information to hospital leadership.
- providing feedback to other team members and leadership about the implementation effort.
- attending team meetings (as many as possible).

#### What is the time commitment and how long does the implementation effort last?

The time commitment will depend on our facility's unique needs and culture. We will do our best to make the best use of your time.



## FACT SHEET

## Checklist demonstration video

*Creating a video can be a fun and educational experience for your teams — and you do not need professional equipment or a lot of money.*

### Why is video important?



Image courtesy Palmetto Health.

Video is a powerful tool for showing people how to use (or not use) the checklist. Seeing a team from your hospital using a checklist makes the effort tangible.

#### A VIDEO HELPS:

- generate buy-in.
- publicize the effort internally.
- supplement your training.

#### YOU CAN SHOW:

- how your customized version of the checklist works.
- proper use of the checklist as a communication tool.
- how the checklist will be displayed in your facility.
- how *not* to use the checklist (this is fun for teams to create).

#### SEE EXAMPLES:

- demonstration videos from facilities around the world, available at <http://www.safesurgery2015.org/videos.html>

### How to CREATE your video

#### Recruit people to participate

- Draw from your implementation team and consider physicians, staff, administrators, and stakeholders who can be important advocates.

#### Find a convenient location

- Use an empty operating room, a simulator, or a conference room.

#### Use existing camera and supplies

- Use a portable video camera or smartphone. Specialized equipment is not required, but if your hospital has an AV department they may be able to help film.
- Bring your facility's checklist.
- Bring scrubs, drapes, equipment, etc., to simulate the OR environment.

#### Never use a real patient

- Have a person stretch out on the table and pretend to be your patient, or simply cover some pillows with a sheet.

#### Plan a block of time

- Practice helps; you may need to record the simulation more than once to get the result you want.

### How to USE your video

#### Publicize your effort internally

- Directly: Show it in department and staff meetings; share it during 1-on-1 conversations with surgical team members.
- Indirectly: Use it as a screensaver on computers or run as a continuous loop in physician and staff lounges.

#### Supplement (but never replace) 1-on-1 conversations and training

- Video can be used when training individuals or teams.
- Video cannot replace talking to every person about the checklist, and should never be used as a substitute for hands-on training.

---

*Consider sharing your video on YouTube or with Ariadne Labs ([safesurgery2015@hsph.harvard.edu](mailto:safesurgery2015@hsph.harvard.edu)) so that others can learn from your facility.*



# Appendix E

## Checklist templates

# Instructions for the team lead

## OVERVIEW

This appendix contains samples of checklist templates that are available for download at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).

## HOW TO USE THESE TEMPLATES

- Refer to the checklist templates as needed.

Checklist templates may be helpful during these implementation process steps:

- Step 2: Understand the Work
- Step 5: Customize and Test

## RELATED CONTENT

- Chapter 1: *The Safe Surgery Checklist*
- Chapter 6: *Checklist design and display*
- Chapter 7: *Customizing the checklist*
- Appendix A: *Rationale and origin of items on the Safe Surgery Checklist*

## SAMPLE: Safe Surgery Checklist – Master version

## Safe Surgery Checklist template

Hospital Name

<p><b>Before Induction of Anesthesia</b></p> <p><b>Nurse</b> and <b>Anesthesia Professional</b> verify:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient identification (name and DOB)</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Surgical procedure to be performed matches the consent</li> <li><input type="checkbox"/> Site marked</li> <li><input type="checkbox"/> Known allergies</li> <li><input type="checkbox"/> Patient positioning</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Risk of hypothermia (if operation &gt;1 hour) <ul style="list-style-type: none"> <li>• Warmer in place</li> </ul> </li> <li><input type="checkbox"/> Risk of venous thromboembolism <ul style="list-style-type: none"> <li>• Boots and/or anticoagulants in place</li> </ul> </li> <li><input type="checkbox"/> Anesthesia safety check completed</li> </ul>	<p><b>Before Skin Incision</b></p> <p><b>TIME OUT</b></p> <p><b>Circulating Nurse</b> asks:  <i>"Is everyone ready to perform the time out? Please state your name and role."</i></p> <p><b>Entire Surgical Team</b> confirms:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient name</li> <li><input type="checkbox"/> Surgical procedure to be performed</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Antibiotic prophylaxis given within the last 60 minutes <ul style="list-style-type: none"> <li>• Antibiotic redosing plan discussed</li> </ul> </li> </ul>	<p><b>Before Patient Leaves Room</b></p> <p><b>Nurse</b> reviews with team:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Instrument, sponge, and needle counts</li> <li><input type="checkbox"/> Name of the procedure performed</li> </ul> <p><b>Nurse</b> reads aloud to team:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Specimen labeling, including patient's name</li> </ul>
<p><b>ANESTHESIA BRIEFING</b></p> <p><b>Anesthesia Professional</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anticipated airway or aspiration risk</li> <li><input type="checkbox"/> Risk of significant blood loss <ul style="list-style-type: none"> <li>• Two IVs/central access and fluids planned</li> <li>• Type and crossmatch/screen</li> <li>• Blood availability</li> </ul> </li> </ul>	<p><b>TEAM BRIEFING</b></p> <p><b>Surgeon</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Operative plan</li> <li><input type="checkbox"/> Possible difficulties</li> <li><input type="checkbox"/> Expected duration</li> <li><input type="checkbox"/> Anticipated blood loss</li> <li><input type="checkbox"/> Implants or special equipment needed</li> </ul> <p><b>Anesthesia Professional</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anesthetic plan</li> <li><input type="checkbox"/> Airway concerns</li> <li><input type="checkbox"/> Other concerns</li> </ul>	<p><b>TEAM DEBRIEFING</b></p> <p><b>Entire Surgical Team</b> discusses:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Key concerns for patient recovery and management</li> <li><input type="checkbox"/> Equipment problems that need to be addressed</li> <li><input type="checkbox"/> Other opportunities for improvement</li> </ul>
	<p><b>Circulating Nurse</b> and <b>Scrub Tech</b> share:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sterility, including indicator results</li> <li><input type="checkbox"/> Equipment issues</li> <li><input type="checkbox"/> Other concerns</li> </ul>	
	<p><b>Surgeon</b> asks:  <i>"Does anybody have any concerns? If you see something that concerns you during this case, please speak up."</i></p>	

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Based on the WHO Surgical Safety Checklist (<http://www.who.int/patientsafety/safesurgery/en>)  
© 2008 World Health Organization. All rights reserved. SSC-Master template Revised: 15 April 2015

SAMPLE: Safe Surgery Checklist — Two-page version

# Safe Surgery Checklist template

Hospital Name

## Before Induction of Anesthesia

**Nurse** and **Anesthesia Professional** verify:

- Patient identification (name and DOB)
- Surgical site
- Surgical procedure to be performed matches the consent
- Site marked
- Known allergies
- Patient positioning
- Essential imaging available
- Risk of hypothermia (if operation >1 hour)
  - Warmer in place
- Risk of venous thromboembolism
  - Boots and/or anticoagulants in place
- Anesthesia safety check completed

## ANESTHESIA BRIEFING

**Anesthesia Professional** shares:

- Anticipated airway or aspiration risk
- Risk of significant blood loss
  - Two IVs/central access and fluids planned
  - Type and crossmatch/screen
  - Blood availability

This version of the Safe Surgery Checklist template is intended for facilities in which the Before Induction steps are performed in the preoperative area and the Before Incision and Before Patient Leaves Room sections are performed in the operating/procedure room. This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Based on the WHO Surgical Safety Checklist (<http://www.who.int/patientsafety/safesurgery/en>)  
 © 2008 World Health Organization All rights reserved. SSC-2page.1 Revised: 15 April 2015

SAMPLE: Safe Surgery Checklist — Two-page version (page 2)

# Safe Surgery Checklist template

Hospital Name

## Before Skin Incision

### TIME OUT

**Circulating Nurse** asks:

*“Is everyone ready to perform the time out?  
Please state your name and role.”*

**Entire Surgical Team** confirms:

- Patient name
- Surgical procedure to be performed
- Surgical site
- Essential imaging available
- Antibiotic prophylaxis given within the last 60 minutes
  - Antibiotic redosing plan discussed

### TEAM BRIEFING

**Surgeon** shares:

- Operative plan
- Possible difficulties
- Expected duration
- Anticipated blood loss
- Implants or special equipment needed

**Anesthesia Professional** shares:

- Anesthetic plan
- Airway concerns
- Other concerns

**Circulating Nurse** and **Scrub Tech** share:

- Sterility, including indicator results
- Equipment issues
- Other concerns

**Surgeon** asks:

*“Does anybody have any concerns?  
If you see something that concerns you  
during this case, please speak up.”*

## Before Patient Leaves Room

**Nurse** reviews with team:

- Instrument, sponge, and needle counts
- Name of the procedure performed

**Nurse** reads aloud to team:

- Specimen labeling, including patient's name

### TEAM DEBRIEFING

**Entire Surgical Team** discusses:

- Key concerns for patient recovery and management
- Equipment problems that need to be addressed
- Other opportunities for improvement

This version of the Safe Surgery Checklist template is intended for facilities in which the Before Induction steps are performed in the preoperative area and the Before Incision and Before Patient Leaves Room sections are performed in the operating/procedure room. This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

Based on the WHO Surgical Safety Checklist (<http://www.who.int/patientsafety/safesurgery/en>)  
© 2008 World Health Organization All rights reserved. SSC-2page.2 Revised: 15 April 2015

SAMPLE: Safe Surgery Checklist – Briefing before induction version

# Safe Surgery Checklist template

Hospital Name

## Before Induction of Anesthesia

### INTRODUCTIONS

**Everyone in the room** introduces themselves to the patient:

- State your name and role

### TEAM BRIEFING

**Entire Surgical Team** verifies:

- Patient identification (name and DOB)
- Surgical site
- Surgical procedure to be performed matches the consent
- Site marked
- Known allergies
- Patient positioning
- Risk of hypothermia (if operation >1 hour)
  - Warmer in place
- Risk of venous thromboembolism
  - Boots in place and/or anticoagulants

**Surgeon** shares:

- Operative plan
- Possible difficulties
- Expected duration
- Risk of significant blood loss
  - Two IVs/central access and fluids planned
  - Type and crossmatch/screen
  - Blood availability
- Implants or special equipment needed

**Anesthesia Professional** shares:

- Anesthesia safety check completed
- Anesthetic plan
- Airway concerns
- Other concerns

**Circulating Nurse** and **Scrub Tech** share:

- Sterility, including indicator results
- Essential imaging available
- Equipment issues
- Other concerns

## Before Skin Incision

### TIME OUT

**Circulating Nurse** asks:

*“Is everyone ready to perform the time out?”*

**Entire Surgical Team** confirms:

- Patient name
- Surgical procedure to be performed
- Surgical site
- Essential imaging available
- Antibiotic prophylaxis given within the last 60 minutes
  - Antibiotic redosing plan discussed

**Surgeon** asks:

*“Does anybody have any concerns?  
If you see something that concerns you during this case, please speak up.”*

## Before Patient Leaves Room

**Nurse** reviews with team:

- Instrument, sponge, and needle counts
- Name of the procedure performed

**Nurse** reads aloud to team:

- Specimen labeling, including patient's name

### TEAM DEBRIEFING

**Entire Surgical Team** discusses:

- Key concerns for patient recovery and management
- Equipment problems that need to be addressed
- Other opportunities for improvement

This version of the Safe Surgery Checklist template is intended for facilities in which the entire surgical team is present before induction. It is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Based on the WHO Surgical Safety Checklist (<http://www.who.int/patientsafety/safesurgery/en>)

© 2008 World Health Organization All rights reserved. SSC-Team briefing before induction Revised: 7 August 2015 (011216)



SAMPLE: Safe Surgery Checklist – Team already knows each other version

<h1>Safe Surgery Checklist template</h1>		Hospital Name
<p><b>Before Induction of Anesthesia</b></p> <p><u>Nurse</u> and <u>Anesthesia Professional</u> verify:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient identification (name and DOB)</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Surgical procedure to be performed matches the consent</li> <li><input type="checkbox"/> Site marked</li> <li><input type="checkbox"/> Known allergies</li> <li><input type="checkbox"/> Patient positioning</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Risk of hypothermia (if operation &gt;1 hour)               <ul style="list-style-type: none"> <li>• Warmer in place</li> </ul> </li> <li><input type="checkbox"/> Risk of venous thromboembolism               <ul style="list-style-type: none"> <li>• Boots and/or anticoagulants in place</li> </ul> </li> <li><input type="checkbox"/> Anesthesia safety check completed</li> </ul> <p><b>ANESTHESIA BRIEFING</b></p> <p><u>Anesthesia Professional</u> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anticipated airway or aspiration risk</li> <li><input type="checkbox"/> Risk of significant blood loss               <ul style="list-style-type: none"> <li>• Two IVs/central access and fluids planned</li> <li>• Type and crossmatch/screen</li> <li>• Blood availability</li> </ul> </li> </ul>	<p><b>Before Skin Incision</b></p> <p><b>TIME OUT</b></p> <p><u>Circulating Nurse</u> asks: "Is everyone ready to perform the time out?"</p> <p><u>Entire Surgical Team</u> confirms:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient name</li> <li><input type="checkbox"/> Surgical procedure to be performed</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Antibiotic prophylaxis given within the last 60 minutes               <ul style="list-style-type: none"> <li>• Antibiotic redosing plan discussed</li> </ul> </li> </ul> <p><b>TEAM BRIEFING</b></p> <p><u>Surgeon</u> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Operative plan and possible difficulties</li> <li><input type="checkbox"/> Expected duration</li> <li><input type="checkbox"/> Anticipated blood loss</li> <li><input type="checkbox"/> Implants or special equipment needed</li> </ul> <p><u>Anesthesia Professional</u> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anesthetic plan</li> <li><input type="checkbox"/> Airway concerns</li> <li><input type="checkbox"/> Other concerns</li> </ul> <p><u>Circulating Nurse</u> and <u>Scrub Tech</u> share:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sterility, including indicator results</li> <li><input type="checkbox"/> Equipment issues</li> <li><input type="checkbox"/> Other concerns</li> </ul> <p><u>Surgeon</u> asks each team member by name: "_____, are you ready to proceed?"</p> <p><u>Surgeon</u> states: "If you see something that concerns you during this case, please speak up."</p>	<p><b>Before Patient Leaves Room</b></p> <p><u>Nurse</u> reviews with team:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Instrument, sponge, and needle counts</li> <li><input type="checkbox"/> Name of the procedure performed</li> </ul> <p><u>Nurse</u> reads aloud to team:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Specimen labeling, including patient's name</li> </ul> <p><b>TEAM DEBRIEFING</b></p> <p><u>Entire Surgical Team</u> discusses:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Key concerns for patient recovery and management</li> <li><input type="checkbox"/> Equipment problems that need to be addressed</li> <li><input type="checkbox"/> Other opportunities for improvement</li> </ul>

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Based on the WHO Surgical Safety Checklist (<http://www.who.int/patientsafety/safesurgery/en>) © 2008 World Health Organization. All rights reserved. SSC-Team already knows each other Revised: 15 April 2015

SAMPLE: Ambulatory Safe Surgery Checklist – Two-page version

## Ambulatory Safe Surgery Checklist template

Hospital Name

### Before Induction of Anesthesia

**Nurse** and **Anesthesia Professional** verify with the **Patient**:

- Patient identification (name and DOB)
- Surgical site
- Surgical procedure to be performed matches the consent
- Site marked
- Known allergies
- Patient positioning
- Patient weight

**Nurse** and **Anesthesia Professional** verify:

- Implants available in the OR
  - Correct size and type
- Essential imaging available
- Risk of hypothermia (if operation >1 hour)
  - Warmer in place
- Risk of venous thromboembolism
  - Boots in place and/or anticoagulants
- Anesthesia safety check completed

**Nurse** and **Anesthesia Professional** share:

- Anticipated airway or aspiration risk
- Changes in patient's cardiac history
- Changes in patient's respiratory history

This version of the Safe Surgery Checklist template is intended for ambulatory surgery centers.  
 This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.  
 Based on the WHO Surgical Safety Checklist (<http://www.who.int/patientsafety/safesurgery/en>)  
 © 2008 World Health Organization All rights reserved. ASCSSC-2page.1 7 August 2015

SAMPLE: Ambulatory Safe Surgery Checklist – Two-page version (page 2)

## Ambulatory Safe Surgery Checklist template

Hospital Name

### Before Skin Incision

#### TIME OUT

**Circulating Nurse** asks:

*“Is everyone ready to perform the time out?  
Please state your name and role.”*

**Entire Team** confirms:

- Patient name
- Surgical procedure to be performed
- Surgical site
- Essential imaging available
- Antibiotic prophylaxis given within the last 60 minutes

#### TEAM BRIEFING

**Surgeon / Proceduralist** shares:

- Any changes to procedure plan
- Possible difficulties

**Anesthesia Professional** shares:

- Anesthetic plan
- Airway concerns
- Other concerns

**Circulating Nurse** and **Scrub Tech** share:

- All medications are correct and labeled
- Implant type and size
- Equipment availability or issues
- Other concerns

**Surgeon / Proceduralist** asks:

*“Does anybody have any concerns?  
If you see something that concerns you  
during this case, please speak up.”*

### Before Patient Leaves Room

**Nurse** reviews with team:

- Instrument, sponge, and needle counts
- Name of the procedure performed

**Nurse** reads aloud to team:

- Specimen labeling, including patient's name

#### TEAM DEBRIEFING

**Entire Team** discusses:

- Key concerns for patient recovery and management
- Equipment problems that need to be addressed
- Other opportunities for improvement

SAMPLE: Cardiac Surgery Checklist — Handheld version

PART **1** of 4

## CARDIAC SURGERY CHECKLIST

*Before*  
**Anesthesia**

**Nurse** and **Anesthesia Professional** verify:

- Patient identification (name and DOB)
- Surgical procedure matches consent
- Site marked
- Known allergies
- History and physical in patient chart
- Anesthesia safety check is completed

**Anesthesia Professional** shares:

- Anticipated airway or aspiration risk
- Appropriate blood products available
- Intravenous access/monitoring plans
- Lung isolation

**Team** confirms:

- Warming blanket, if indicated
- Patient positioning
- R2 pads on and hooked up
- C-arm needed

Generic Hospital System Name

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

Revised October 2013 (102213.1)

SAMPLE: Cardiac Surgery Checklist — Handheld version (page 2)

PART **2** of 4**CARDIAC SURGERY CHECKLIST****Before  
Incision**

TIME OUT

**Circulating Nurse** asks:*“Is everyone ready for the time out? Please state your name and role.”***Entire Surgical Team** confirms:

- Patient identification
- Procedure matches consent
- Essential imaging available
- Bloodborne pathogen
- Antibiotic prophylaxis given within last 60 minutes?
- Antibiotic redosing plan discussed?

**Surgeon** shares:

- Operative plan
- Possible difficulties
- Expected duration
- Implants or special equipment

**Anesthesia Professional** shares:

- Anesthetic plan
- Other concerns

TEAM BRIEFING

**Nursing Team** shares:

- Sterility, including indicator results
- Any equipment issues
- Other concerns

**Perfusion Team** shares:

- Anticoagulation strategy
- Temperature management
- Cannulation strategy
- Cardioplegia strategy
- Other concerns

**Surgeon** says:*“Does anyone have any concerns?  
If you have concerns during the case, please speak up.”*

Generic Hospital System Name

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

Revised October 2013 (102213.1)

SAMPLE: Cardiac Surgery Checklist — Handheld version (page 3)

PART **3** of 4

## CARDIAC SURGERY CHECKLIST

*Before*  
**Bypass**

**Surgeon** and **Anesthesia Professional** discuss:

- Echo and other relevant findings

**Perfusion Team** shares:

- Cannulation and pressure strategy
- Adequate anticoagulation for bypass
- Temperature strategy

**Surgeon** discusses with team:

- Any changes to the operative plan

**Surgeon** asks:

*“Is everybody ready for bypass?”*

---

*Before*  
**Wean from**  
**Bypass**

**Surgeon** discusses:

- Surgical procedure performed

**Anesthesia Professional** confirms:

- Accurate placement and connection of pacing wires

**Perfusionist** shares:

- Need for vasoactive agents
- Volume status of patient

**Anesthesia Professional** shares:

- Need for inotropic support
- Oxygenation/ventilation concerns
- Coagulation, need for blood products
- Confirmation that ventilator is on

**Surgeon** asks:

*“Is everybody ready to go off bypass?”*

---

*Before*  
**Protomine**  
**given**

**Surgeon** and **Anesthesia Professional** discuss:

- Echo results
- 12-lead EKG results
- Stability of cardiac function on current inotrope/pressor management

Generic Hospital System Name

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

Revised October 2013 (102213.1)

SAMPLE: Cardiac Surgery Checklist — Handheld version (page 4)

PART **4** of 4

## CARDIAC SURGERY CHECKLIST

*Before*  
**Patient**  
**leaves room**

**Nurse** reviews with team:

- Instrument, sponge, needle counts
- Read back specimen labels including patient's name
- Patient's armband on/accurate

**Entire Surgical Team** discusses:

- Name of the procedure performed
- Equipment problems to be addressed
- Key concerns for patient recovery and management
- All anticoagulation reversed
- Post-pump antibiotics given/applicable
- Medication/drips
- If difficult airway/information transmitted to ICU

**Surgeon** asks:

*"What can be done to make the next case safer or more efficient?"*

TEAM DEBRIEFING

Generic Hospital System Name

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

Revised October 2013 (102213.1)

## SAMPLE: Cardiac Surgery Checklist – Poster version

## PART 1 CARDIAC SURGERY CHECKLIST

## Before Anesthesia

**Nurse** and **Anesthesia Professional** verify:

- Patient identification (name and DOB)
- Surgical procedure matches consent
- Site marked
- Known allergies
- History and physical in patient chart
- Anesthesia safety check is completed

**Anesthesia Professional** shares:

- Anticipated airway or aspiration risk
- Appropriate blood products available
- Intravenous access/monitoring plans
- Lung isolation

**Team** confirms:

- Warming blanket, if indicated
- Patient positioning
- R2 pads on and hooked up
- C-arm needed

## Before Incision

**Circulating Nurse** asks:

*"Is everyone ready for the time out?  
Please state your name and role."*

**Entire Surgical Team** confirms:

- Patient identification
- Procedure matches consent
- Essential imaging available
- Bloodborne pathogen
- Antibiotic prophylaxis given within last 60 minutes?
- Antibiotic redosing plan discussed?

**Surgeon** shares:

- Operative plan
- Possible difficulties
- Expected duration
- Implants or special equipment

**Anesthesia Professional** shares:

- Anesthetic plan
- Other concerns

**Nursing Team** shares:

- Sterility, including indicator results
- Any equipment issues
- Other concerns

**Perfusion Team** shares:

- Anticoagulation strategy
- Temperature management
- Cannulation strategy
- Cardioplegia strategy
- Other concerns

**Surgeon** says:

*"Does anyone have any concerns?  
If you have concerns during the case, please speak up."*

TIME OUT

TEAM BRIEFING

Generic Hospital System Name

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Revised October 2013 (102213)

## PART 2 CARDIAC SURGERY CHECKLIST

## Before Bypass

**Surgeon** and **Anesthesia Professional** discuss

- Echo and other relevant findings

**Perfusion Team** shares:

- Cannulation and pressure strategy
- Adequate anticoagulation for bypass
- Temperature strategy

**Surgeon** discusses with team:

- Any changes to the operative plan

**Surgeon** asks:

*"Is everybody ready for bypass?"*

## Before Wean

**Surgeon** discusses:

- Surgical procedure performed

**Anesthesia Professional** confirms:

- Accurate placement and connection of pacing wires

**Perfusionist** shares:

- Need for vasoactive agents
- Volume status of patient

**Anesthesia Professional** shares:

- Need for inotropic support
- Oxygenation/ventilation concerns
- Coagulation, need for blood products
- Confirmation that ventilator is on

**Surgeon** asks:

*"Is everybody ready to go off bypass?"*

## Before Protomine

**Surgeon** and **Anesthesia Professional** discuss:

- Echo results
- 12-lead EKG results
- Stability of cardiac function on current inotrope/pressor management

## Before Patient Leaves Room

**Nurse** reviews with team:

- Instrument, sponge, needle counts
- Read back specimen labels including patient's name
- Patient's armband on/accurate

**Entire Surgical Team** discusses:

- Name of the procedure performed
- Equipment problems to be addressed
- Key concerns for patient recovery and management
- All anticoagulation reversed
- Post-pump antibiotics given/applicable
- Medication/drips
- If difficult airway/information transmitted to ICU

**Surgeon** asks:

*"What can be done to make the next case safer or more efficient?"*

TEAM DEBRIEFING

Generic Hospital System Name

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Revised October 2013 (102213)



# Appendix F

## Other tools and materials

# Instructions for the team lead

## OVERVIEW

This appendix contains additional tools and materials for your use when implementating the Safe Surgery Checklist. Each of the documents is also available for download at [www.SafeSurgery2015.org](http://www.SafeSurgery2015.org).

## HOW TO USE THE TOOLS

The five stand-alone documents included in this appendix are intended to be printed “as is” for your use. Because of this, page numbers are not included within this appendix.

The documents appear in the order listed below:

- Assessment Observation Tool
- Safe Surgery Checklist Culture Survey – Pre survey (no existing checklist)
- Safe Surgery Checklist Culture Survey – Pre survey (existing checklist)/  
Post survey for all facilities
- Coaching Observation Tool
- Safe Surgery Checklist Practice Scripts

# Before Induction of Anesthesia

## Step 1: Checklist discussion items

Using the Safe Surgery Checklist image below, listen to the team's conversation and mark each item that the team discusses.

### Before Induction of Anesthesia

**Nurse** and **Anesthesia Professional** verify:

- Patient identification (name and DOB)
- Surgical site
- Surgical procedure to be performed matches the consent
- Site marked
- Known allergies
- Patient positioning
- Essential imaging available
- Risk of hypothermia (if operation >1 hour)
  - Warmer in place
- Risk of venous thromboembolism
  - Boots and/or anticoagulants in place
- Anesthesia safety check completed

### ANESTHESIA BRIEFING

**Anesthesia Professional** shares:

- Anticipated airway or aspiration risk
- Risk of significant blood loss
  - Two IVs/central access and fluids planned
  - Type and crossmatch/screen
  - Blood availability

## Step 2: Quality of discussion

After the discussion, answer the following questions:

- a. Did the circulating nurse discuss *all* items when at least one other care provider was present?
  - Yes     No
- b. Was the patient actively engaged in this discussion?
  - Yes     No     N/A
- c. Did *every* team member that was present say something?
  - Yes     No
- d. Were *all* of the checklist items done from memory?
  - Yes     No     N/A (don't use a checklist)
- e. Could the team have had a better discussion?
  - Yes     No

If yes, please explain:

## Step 3: Notes

Record any additional comments or observations in the space below:

# Before Skin Incision

## Step 1: Checklist discussion items

Using the Safe Surgery Checklist image below, listen to the team's conversation and mark each item that the team discusses.

Before Skin Incision
<b>TIME OUT</b>
<p><b>Circulating Nurse</b> asks:</p> <p><i>“Is everyone ready to perform the time out? Please state your name and role.”</i></p>
<p><b>Entire Surgical Team</b> confirms:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patient name</li> <li><input type="checkbox"/> Surgical procedure to be performed</li> <li><input type="checkbox"/> Surgical site</li> <li><input type="checkbox"/> Essential imaging available</li> <li><input type="checkbox"/> Antibiotic prophylaxis given within the last 60 minutes           <ul style="list-style-type: none"> <li>• Antibiotic redosing plan discussed</li> </ul> </li> </ul>
<b>TEAM BRIEFING</b>
<p><b>Surgeon</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Operative plan</li> <li><input type="checkbox"/> Possible difficulties</li> <li><input type="checkbox"/> Expected duration</li> <li><input type="checkbox"/> Anticipated blood loss</li> <li><input type="checkbox"/> Implants or special equipment needed</li> </ul>
<p><b>Anesthesia Professional</b> shares:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anesthetic plan</li> <li><input type="checkbox"/> Airway concerns</li> <li><input type="checkbox"/> Other concerns</li> </ul>
<p><b>Circulating Nurse</b> and <b>Scrub Tech</b> share:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sterility, including indicator results</li> <li><input type="checkbox"/> Equipment issues</li> <li><input type="checkbox"/> Other concerns</li> </ul>
<p><b>Surgeon</b> asks:</p> <p><i>“Does anybody have any concerns? If you see something that concerns you during this case, please speak up.”</i></p>

## Step 2: Quality of discussion

After the discussion, answer the following questions:

- a. Did someone in the room ensure everyone was ready to perform the checklist/Time Out before starting the discussion?
  - Yes    No
- b. Did *everyone* in the room come to a “hard stop”?
  - Yes    No
- c. Did *every* person in the room introduce themselves?
  - Yes    No
- d. Did *every* team member say something?
  - Yes    No
- e. Were *all* of the checklist items done from memory?
  - Yes    No    N/A (don't use a checklist)
- f. Could the team have had a better discussion?
  - Yes    No

If yes, please explain:

## Step 3: Notes

Record any additional comments or observations in the space below:

# Before Patient Leaves Room

## Step 1: Checklist discussion items

Using the Safe Surgery Checklist image below, listen to the team's conversation and mark each item that the team discusses.

### Before Patient Leaves Room

**Nurse** reviews with team:

- Instrument, sponge, and needle counts
- Name of the procedure performed

**Nurse** reads aloud to team:

- Specimen labeling, including patient's name

### TEAM DEBRIEFING

**Entire Surgical Team** discusses:

- Key concerns for patient recovery and management
- Equipment problems that need to be addressed
- Other opportunities for improvement

## Step 2: Quality of discussion

After the discussion, answer the following questions:

- a. Did someone in the room ensure everyone was ready to perform the debriefing before starting the discussion?
  - Yes     No
- b. If there was a specimen still in the room, did a team member read aloud the label on the specimen container?
  - Yes     No     N/A
- c. Was every team member paying attention to the discussion?
  - Yes     No
- d. Was the surgeon/proceduralist in the room for this discussion?
  - Yes     No
- e. Were *all* of the checklist items done from memory?
  - Yes     No     N/A (don't use a checklist)
- f. Could the team have had a better discussion?
  - Yes     No

If yes, please explain:

## Step 3: Notes

Record any additional comments or observations in the space below:

## Safe Surgery Checklist Pre Culture Survey

This survey asks you to think about the operating rooms in which you work most often and the teams that you work with in the operating room (OR)/procedure room. Many of the questions refer to your team. By team, we mean everyone working in the OR/procedure room with you during operations/procedures. Think about your average experience when taking the survey. This survey should take no more than 5 minutes to complete.

### A. What is your primary professional role?

<sup>01</sup>  Surgeon

<sup>02</sup>  Anesthesiologist

<sup>03</sup>  CRNA

<sup>04</sup>  Surgical nurse

<sup>05</sup>  Physician assistant

<sup>06</sup>  Surgical tech

<sup>07</sup>  Perfusionist

<sup>08</sup>  Intern/Resident/Fellow

<sup>99</sup>  Other: \_\_\_\_\_

### B. How many years have you worked in this role (at any facility)?

<sup>01</sup>  <1

<sup>02</sup>  1-5

<sup>03</sup>  6-10

<sup>04</sup>  >10

### How much do you agree or disagree with the following statements? In the ORs/Procedure Rooms where I work...

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Everyone participates in efforts to improve patient safety. . . . .	①	②	③	④	⑤	⑥	⑦
2. Team members are open to changes that improve patient safety even if it means slowing down. . . . .	①	②	③	④	⑤	⑥	⑦
3. Pressure to move quickly from case to case gets in the way of patient safety. . . . .	①	②	③	④	⑤	⑥	⑦
4. Physicians are present and actively participating in patient care prior to skin incision. . . . .	①	②	③	④	⑤	⑥	⑦
5. Team discussions (e.g., briefings or debriefings) are common. . . . .	①	②	③	④	⑤	⑥	⑦
6. It is difficult to speak up when I perceive problems with patient care. . . . .	①	②	③	④	⑤	⑥	⑦
7. Physicians maintain a positive tone throughout operations. . . . .	①	②	③	④	⑤	⑥	⑦
8. All team members work together as a well-coordinated team. . . . .	①	②	③	④	⑤	⑥	⑦
9. For complex cases, briefings include planning for potential problems. . . . .	①	②	③	④	⑤	⑥	⑦
10. Team members share key information as it becomes available. . . . .	①	②	③	④	⑤	⑥	⑦
11. Physicians are only open to suggestions from other physicians. . . . .	①	②	③	④	⑤	⑥	⑦
12. Team members communicate with me in a respectful manner. . . . .	①	②	③	④	⑤	⑥	⑦
13. I am treated as a highly valued member of the team. . . . .	①	②	③	④	⑤	⑥	⑦
14. It is difficult to discuss medical mistakes. . . . .	①	②	③	④	⑤	⑥	⑦
15. The entire team discusses key concerns for patient recovery and management before the patient leaves the room. . . . .	①	②	③	④	⑤	⑥	⑦

### How much do you agree or disagree with the following statement?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
16. I would feel safe being treated here as a patient. . . . .	①	②	③	④	⑤	⑥	⑦

If you have any other comments, please use the space below and the back of the survey to elaborate:

# Safe Surgery Checklist Culture Survey

This survey asks you to think about the operating rooms in which you work most often and the teams that you work with in the operating room (OR)/procedure room. Many of the questions refer to your team. By team we mean everyone working in the OR/procedure room with you during operations/procedures. Think about your average experience when taking the survey. This survey should take no more than 5 minutes to complete.

A. What is your primary professional role?

<sup>01</sup>  Surgeon

<sup>02</sup>  Anesthesiologist

<sup>03</sup>  CRNA

<sup>04</sup>  Surgical nurse

<sup>05</sup>  Physician assistant

<sup>06</sup>  Surgical tech

<sup>07</sup>  Perfusionist

<sup>08</sup>  Intern/Resident/Fellow

<sup>99</sup>  Other: \_\_\_\_\_

B. How many years have you worked in this role (at any facility)?

<sup>01</sup>  <1

<sup>02</sup>  1-5

<sup>03</sup>  6-10

<sup>04</sup>  >10

How much do you agree or disagree with the following statements?  
In the ORs/Procedure Rooms where I work...

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1. Everyone participates in efforts to improve patient safety. . . . .	①	②	③	④	⑤	⑥	⑦
2. Team members are open to changes that improve patient safety even if it means slowing down. . . . .	①	②	③	④	⑤	⑥	⑦
3. Pressure to move quickly from case to case gets in the way of patient safety. . . . .	①	②	③	④	⑤	⑥	⑦
4. Physicians are present and actively participating in patient care prior to skin incision. . . . .	①	②	③	④	⑤	⑥	⑦
5. Team discussions (e.g., briefings or debriefings) are common . . . . .	①	②	③	④	⑤	⑥	⑦
6. It is difficult to speak up when I perceive problems with patient care. . .	①	②	③	④	⑤	⑥	⑦
7. The entire team stops at all 3 critical points during the procedure to read the safe surgery checklist (before induction of anesthesia, before skin incision, and before the patient leaves the room) . . . . .	①	②	③	④	⑤	⑥	⑦
8. Physicians maintain a positive tone throughout operations. . . . .	①	②	③	④	⑤	⑥	⑦
9. All team members work together as a well-coordinated team. . . . .	①	②	③	④	⑤	⑥	⑦
10. For complex cases, briefings include planning for potential problems. .	①	②	③	④	⑤	⑥	⑦
11. Team members share key information as it becomes available. . . . .	①	②	③	④	⑤	⑥	⑦
12. Physicians are only open to suggestions from other physicians . . . . .	①	②	③	④	⑤	⑥	⑦
13. Team members communicate with me in a respectful manner. . . . .	①	②	③	④	⑤	⑥	⑦
14. I am treated as a highly valued member of the team. . . . .	①	②	③	④	⑤	⑥	⑦
15. It is difficult to discuss medical mistakes . . . . .	①	②	③	④	⑤	⑥	⑦
16. The entire team discusses key concerns for patient recovery and management before the patient leaves the room . . . . .	①	②	③	④	⑤	⑥	⑦
17. Using the safe surgery checklist helps my cases run more smoothly . .	①	②	③	④	⑤	⑥	⑦

How much do you agree or disagree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
18. I was given a strong explanation for why it is important to use the safe surgery checklist. . . . .	①	②	③	④	⑤	⑥	⑦
19. The training I received about how to use the safe surgery checklist allowed me to use it effectively during surgical procedures. . . . .	①	②	③	④	⑤	⑥	⑦
20. If I were having an operation, I would want a safe surgery checklist to be used . . . . .	①	②	③	④	⑤	⑥	⑦
21. I would feel safe being treated here as a patient. . . . .	①	②	③	④	⑤	⑥	⑦

22. In the ORs/Procedure Rooms where I work, problems or complications have been averted by the safe surgery checklist. . . . . <sup>01</sup>  Yes <sup>00</sup>  No

If problems or complications have been averted by the safe surgery checklist or if you have any other comments, please use the space below and the back of the survey to elaborate:

## Before Induction of Anesthesia

Use this form along with a copy of your facility's checklist to record your observations, notes, and feedback for the surgical team.

### Step 1: Checklist discussion items

- On a copy of your facility's *Safe Surgery Checklist*, mark each item that the team discusses.
- Use the space below to take notes about your observations.

### Step 2: Quality of discussion

After the discussion, please mark how well the checklist was used:

- Did the circulating nurse discuss *all* items when at least one other care provider was present?
   
 Yes    Some, not all    No
- Was the patient actively engaged in this discussion?
   
 Yes    Somewhat    No    N/A
- Were the checklist items done from memory?
   
 Yes    Some, not all    None
- Did every team member that was present say something?
   
 Yes    Some, not all    No one
- Could the team have performed this section of the checklist better?
   
 Yes    No

### Step 3: What feedback can you give the team?

Reflect on what you saw the team do well or what they could have done better during the cases using the 3-part question:

YOUR OBSERVATION	YOUR OPINION	YOUR QUESTION



## Before Skin Incision

Use this form along with a copy of your facility's checklist to record your observations, notes, and feedback for the surgical team.

### Step 1: Checklist discussion items

- On a copy of your facility's *Safe Surgery Checklist*, mark each item that the team discusses.
- Use the space below to take notes about your observations.

### Step 2: Quality of discussion

After the discussion, please mark how well the checklist was used:

- Did someone in the room ensure everyone was ready to perform the checklist before starting the discussion?
   
 Yes    Somewhat    No
- Did everyone in the room come to a "hard stop"?
   
 Yes    Some, not all    No
- Did every person in the room introduce themselves?
   
 Yes    Some, not all    No one
- Were the checklist items done from memory?
   
 Yes    Some, not all    None
- Did every team member say something?
   
 Yes    Some, not all    No one
- Could the team have performed this section of the checklist better?
   
 Yes    No

### Step 3: What feedback can you give the team?

Reflect on what you saw the team do well or what they could have done better during the cases using the 3-part question:

YOUR OBSERVATION	YOUR OPINION	YOUR QUESTION

## Before Patient Leaves Room

DATE \_\_\_\_\_

(mm/dd/yyyy)

Use this form along with a copy of your facility's checklist to record your observations, notes, and feedback for the surgical team.

### Step 1: Checklist discussion items

- On a copy of your facility's *Safe Surgery Checklist*, mark each item that the team discusses.
- Use the space below to take notes about your observations.

### Step 2: Quality of discussion

After the discussion, please mark how well the checklist was used:

- Did someone in the room ensure everyone was ready to perform this section of the checklist before starting the discussion?
   
 Yes    Somewhat    No
- If there was a specimen still in the room, did a team member read aloud the label on the specimen container?
   
 Yes    No    N/A
- Were the checklist items done from memory?
   
 Yes    Some, not all    None
- Was every team member paying attention to the discussion?
   
 Yes    Some, not all    No one
- Was the surgeon/proceduralist in the room for the entire discussion?
   
 Yes    No
- Could the team have performed this section of the checklist better?
   
 Yes    No

### Step 3: What feedback can you give the team?

Reflect on what you saw the team do well or what they could have done better during the cases using the 3-part question:

YOUR OBSERVATION	YOUR OPINION	YOUR QUESTION

# Safe Surgery Checklist Practice Scripts

## Benefits of using a script

The Safe Surgery Checklist Practice Scripts provide scripted scenarios that can be used when training surgical team members to use the Safe Surgery Checklist.

### A script is a valuable learning tool

When you ask someone to follow the checklist, you are asking them to do something new and to change their normal routines. Giving surgical team members an opportunity to rehearse the checklist with a practice script:

- provides an opportunity for them to experience what it feels like to run the checklist.
- helps make people comfortable by enabling them to focus on the content and what their role should be when using the checklist.
- helps prompt questions and discussion.

### Scripted practice can be used throughout the implementation process

A practice script is helpful in a number of situations throughout the implementation process. Use the practice script to:

- give your implementation team experience with the checklist before you customize the checklist for your facility.
- do a tabletop simulation.
- practice with surgical teams during training.
- give a live demonstration of the checklist.
- make a checklist demonstration video.
- teach coaches.

## How to use the scripts

### About the two scripted scenarios

- The script for Scenario One follows best practices for using the checklist in a case. *Always use this script when training surgical team members so that the participants gain experience using the checklist properly.*
- The script for Scenario Two introduces omissions and problems in how the team follows the checklist. This script can be used in training or coaching sessions to facilitate discussion.

### Customize the scripts before you use them

The Safe Surgery Checklist Practice Scripts follow the items on the Safe Surgery Checklist master template. The script you use in training should match the surgical safety checklist you will actually use.

Review and edit each script so that it reflects your checklist and facility:

- Change the language and sequence of checklist items as needed to match your checklist.
- Change the names or roles to match your checklist and teams.
- Change the patient and case details.
- When using the script with a specialty group (e.g., orthopedic surgeons), change the case details to fit the types of surgeries they perform.

# Safe Surgery Checklist Practice Script

## Scenario One

### **PART 1 — Before induction of anesthesia**

The nurse and anesthesia professional bring the patient into the OR and introduce the patient to other members of the team. They help position the patient onto the OR table.

The anesthesia professional says to the patient, “We are going to do a safety check with you before we get started.” The patient has been medicated and is too sleepy to participate, so the anesthesia professional reviews the first column of the checklist with the circulating nurse and scrub technician.

**INSTRUCTIONS:**     *Each person should read their role’s lines out loud to the team unless the script gives other direction.*

**Anesthesiologist :**     What is our patient’s name and date of birth?

**Circulator :**             William Marlon, 5/25/38

**Anesthesiologist :**     Surgical site?

**Circulator :**             Midline.

**Anesthesiologist :**     Does the consent state hemicolectomy?

**Circulator :**             Consent states right hemicolectomy.

**Anesthesiologist :**     Is the site marked?

**Circulator :**             No, we don’t need to mark midline incisions.

**Anesthesiologist :**     Does the patient have any allergies?

**Circulator :**             No known drug allergies (NKDA)

**Anesthesiologist :**     Will Mr. Marlon will be positioned supine?

**Circulator :** Yes.

**Anesthesiologist :** The anesthesia safety check has been completed.  
He is a former heavy smoker but his airway is normal and should be an easy intubation.  
Blood loss should be minimal, but I have placed an 18 gram IV and an A-line for close monitoring. Do you know if we have a type and screen in the blood bank?

**Circulator :** Yes.

**Anesthesiologist :** I plan to use a Lower Body Bair Hugger.  
He has his SCD boot ready to go, and I plan on giving him heparin as well.

**Circulator :** Sounds good. Are we ready to go?

**Anesthesiologist :** I think that we are good to go.

**Scrub :** I'm ready.

## **PART 2 — Before skin incision**

The patient is induced and draped. The surgeon enters the room.

**Surgeon :** Is everyone ready to perform the time out?

**Anesthesiologist** Good here.

**Circulator :** Ready.

**Scrub** I'm ready.

**Surgeon :** I am \_\_\_\_\_, surgeon.

**Scrub tech:** I am \_\_\_\_\_, scrub tech.

**Circulator:** I am \_\_\_\_\_, circulating nurse.

**Anesthesiologist:** I am \_\_\_\_\_, anesthesiologist.

**Surgeon :** This is William Marlon.  
We will be doing a right Hemicolectomy.  
Midline incision.  
I won't need any imaging for the case.  
Have antibiotics been given?

**Anesthesiologist :** The Unasyn is in and I will re-dose if we go longer than 6 hours.

**Surgeon:** Now let's do the briefing.  
This patient has a history of CAD and CHF and has been cleared by cardiology. Did he get his beta blockers?

**Anesthesiologist :** Yes.

**Surgeon:** I don't expect any difficulties; the procedure should take about 2 hours.

I don't expect too much blood loss, but we should have 1 unit set up and available in the blood bank.

I plan on using the GIA stapler but don't open it yet. Are you ready to do the anesthesia briefing?

**Anesthesiologist:** Sure, Mr. Marlon has been a heavy smoker in the past, but I was able to easily intubate and I plan on extubating at the end of the procedure.

I have no airway concerns.

**Scrub Tech:** Our instruments are all sterile.

I didn't open any suture so let me know what you need.

**Surgeon** Okay, I will let you know as we go so we don't waste.

**Circulator:** We have the GIA in the room. Do you anticipate needing anything else out of the ordinary?

**Surgeon:** No, just my usual preferences.

Does anyone have any questions or concerns?

If you see something that concerns you during the case, please speak up.

### **PART 3 — Before the patient leaves the room**

The patient is doing well and the surgery went as expected. The nursing team just performed the final counts and is ready to go through the final portion of the checklist.

**Circulator:** Is everyone ready to do our debriefing?

**Anesthesiologist:** Ready.

**Scrub Tech:** Ready.

**Surgeon:** Ready.

**Circulator:** The instrument, sponge and needle counts were all correct.  
I have documented the procedure as right hemicolectomy.  
Is this correct?

**Surgeon:** That is correct.

**Circulator:** I have a specimen labeled 'right ascending colon'. Is this correct?

**Surgeon:** That is correct.

**Circulator:** We marked the dull scissor so they will get sharpened.

**Surgeon:** Great, I seem to get that pair back every case!

**Circulator:** What are the key concerns for the patient's recovery and management?

**Anesthesiologist:** He did great from my perspective.

**Surgeon:** I think he did well too and I don't have any specific concerns.

**Circulator:** Are there any other equipment problems that should be addressed?

**Anesthesiologist:** No.

**Scrub Tech:** No.

**Surgeon:** No.

**Circulator:** Are there other opportunities for improvement?

**Surgeon:** No, I think the case went very well. Thank you everybody.



# Safe Surgery Checklist Practice Script

## Scenario Two

### **PART 1 — Before induction of anesthesia**

The Nurse and Anesthesiologist bring the patient into the OR. They help position the patient onto the OR table.

The patient is awake and alert. The Circulator, Scrub, and Anesthesiologist are going to perform the first column of the checklist together with the patient.

**INSTRUCTIONS:**     *Each person should read their role's lines out loud to the team unless the script gives other direction.*

**Anesthesiologist**     Mr. Kinsella, let me introduce you to the rest of your surgical team  
(to patient)             today.

**Scrub** (to patient):     Hi Mr. Kinsella. My name is \_\_\_\_\_.

**Circulator:**             My name is \_\_\_\_\_.  
(to patient)

**Anesthesiologist**     Now we are going to do a safety check with you before we get  
(to patient)             started.

**Patient:** (to team)     Okay, sounds good.

**Anesthesiologist**     What is your name?  
(to patient)

**Patient:** (to team)     William Kinsella.

**Anesthesiologist**     What is your date of birth?  
(to patient)

**Patient:** (to team)     July 11, 1976.

**Anesthesiologist**     Do you know where you are having your surgery?

(to patient)

**Patient:** (to team) On my right side.

**Anesthesiologist:** Does the consent state Right Inguinal Hernia?

**Anesthesiologist,  
Scrub, Circulator,  
and Patient:** (to team)

Yes.

**Anesthesiologist**  
(to patient) Did Dr. Wilson mark your right side with his initials?

**Patient:** (to team) Yes.

**Anesthesiologist**  
(to team) Mr. Kinsella will be positioned supine.

**Circulator:** (to Scrub) Correct.

**Anesthesiologist**

The anesthesia safety check has been completed.

I do not expect any airway or aspiration risk.

I have placed an 18 gram IV. Blood loss should be minimal.

This procedure should be under a hour so we shouldn't need any warmers.

Mr. Kinsella already has his SCD boot in place.

**Anesthesiologist**  
(to Circulator) Can we get those plugged in before we start?

**Circulator :** Sure.

Are we ready to go?

**Anesthesiologist :** I think that we are good to go.

**Scrub :** I'm ready.

## **PART 2 — Before skin incision**

The patient is induced and draped. The surgeon enters the room.

**Surgeon :** Is everyone ready to perform the time out?

**Anesthesiologist** Ready to go.

**Circulator :** Ready.

**Scrub** I'm ready.

**Surgeon :** I am \_\_\_\_\_.

**Scrub tech:** I am \_\_\_\_\_, scrub tech.

**Anesthesiologist:** I am \_\_\_\_\_, anesthesiologist.

**Surgeon :** This is William Kinsella.  
We will be doing a Right Inguinal Hernia.  
Our site is right.  
No imaging necessary.

**Surgeon:** (to  
Anesthesiologist) Have antibiotics been given?

**Anesthesiologist:** Yes, the Clindamycin has been given.

**Surgeon:** Let's go ahead and do the briefing. I expect this to be a straight forward right inguinal hernia repair.  
I don't expect any difficulties.  
It should take about 1 hour.  
I will need some mesh for the repair.  
Let's move on to the anesthesia briefing.

**Anesthesiologist :** This was a straight forward general anesthetic with no complications.  
I have no airway or other concerns.

**Scrub Tech:** Our instruments are all sterile.

**Circulator:** I brought in the box of different size mesh.

**Surgeon:** Great, don't open any yet.

**Scrub Tech:** I don't have any other concerns.

**Circulator:** I don't either. I think that we are good to go.

**Surgeon:** Speak now or forever hold your peace!  
(with hint of sarcasm)  
Knife please.

### **PART 3 — Before the patient leaves the room**

The patient is doing well and the surgery went as expected. The nursing team just performed the final counts and is ready to go through the final portion of the checklist.

**Circulator:** Is everyone ready to do our debriefing?

**Anesthesiologist:** Ready.

**Scrub Tech:** Yep.

**Surgeon:** Let's do it.

**Circulator:** The instrument, sponge and needle counts were all correct.

**Surgeon** I'm all finished closing here. I am going to head up to the floor to check on one of my patients and I will be back for the next case.

# Index

## A

### Action guides

- Assessment observer's guide 76
- Checklist for customizing the Safe Surgery Checklist 114
- Coaches' guide to giving feedback 194
- Font target for checking checklist poster readability 97
- Guide to the Safe Surgery Checklist 1-on-1 conversation 154
- How to customize the Safe Surgery Checklist for your facility 113
- How to make improvements to your existing surgical checklist 112
- Observer's guide for checklist testing 122
- Safe Surgery Checklist trainers' guide 178

Administrators 6, 52, 135, 162

Advance training 118, 168

Advertising 160–161. *See also* Promotion

Alternate wordings for checklist items 109

Ambulatory Safe Surgery Checklist samples E6–E7

Anesthesia briefing 16, 102, A6

Anesthesia professionals 17, 54, 69, 104, 105, 106, 107. *See also* Physician engagement  
on implementation team 52, 54–55  
origin of items for A3–A14

*Annals of Surgery* 25, 26

### Anonymity

- in observation notes 63, 184
- of survey responses 69, 71

Antibiotic prophylaxis 105, 106

*Archives of Surgery* 24

Asking for help 53, 143, 147, 159, 175

Assertiveness 67

### Assessment

- culture 37, 57–76, 63–75, 209
- environmental 37, 57–76

of readiness 38, 67, 77–82

of teamwork 67

periodic 75, 209

value of 63

Assessment Observation Tool 61, 62, 76, F1–F3

how to use 61

Assessment observer's guide 76

Aviation, checklist use in 7

## B

“Before Induction of Anesthesia” checks 16–17, 82

best practices for 21

master list of items for A3–A6

timing of items 106

where to conduct 16–17, 103–105

“Before Patient Leaves Room” checks 20

best practices for 21

master list of items for A12–A13

“Before Skin Incision” checks 18–19, 82

best practices for 21

master list of items for A7–A11

Best practices for using the checklist 21

Boxes, on checklist 95

Briefings. *See also* Debriefing, the

anesthesia 16, 102, A6

before induction 105, E4

team 102, 105

when to conduct 105

Bulletin boards 134, 161, 162

Buttons 161

## C

Cardiac Surgery Checklist 12

handheld version E8–E11

poster version E12

- Checklist. See Safe Surgery Checklist
- Circulating nurses 8, 16, 17, 60, 69, 90, 91, 103, 104, 105, 106, 107, 134, 144, 192, 199, 203. See *also* Nurses
  - as trainers 170
  - holding checklist for sterile team members 87
  - on implementation team 52
  - origin of items for A7–A8, A10–A11
- Clinical leadership 67
- Coaches 132, 189, 189–190, 208
  - engagement with 190
  - training 133, 189–190
- Coaches' guide to giving feedback 194
- Coaching 44, 48, 179–194
  - 1-on-1 conversations for 188
  - benefits of 182
  - continual 208
  - individual vs group 188
  - mistakes to avoid 187
  - planning and scheduling 132–133, 190–192
  - preparation for 192
  - principles of 183
  - tips for 192
  - training for 132, 189–190
  - what effective coaching looks like 182
- Coaching Observation Tool 184, 185, F6–F8
- Collaboration 36
- Color, on checklists 95
- Communication 102, 107, 144, 189. See *also* Promotion
  - 1-on-1 conversations 41, 53–54, 130, 137–154
  - assessment of 67
  - email messages 160
  - improving 75, 82, 102, 107, 211
  - key messages 128
  - reporting back to surgical teams 201
  - setting a positive tone 146
  - targeting messages to your audience 159
  - with prospective team members 53–54
- Continual or continuous improvement 45, 205–212
  - actions to help drive 207–210
  - continuous process improvement 7
  - using the debriefing to support 202, 203
- Contrast, on checklists 94
- Conversation prompts 102, A2
- Conversations, 1-on-1 41, 130, 137–154
  - coaching individuals with 188
  - for recruiting implementation team members 53
  - Guide to the Safe Surgery Checklist 1-on-1 conversation 154
  - importance of 140, 157
  - key points 143–147, 154
  - leading 148
  - need for more than one 148
  - planning for 130, 148–149
  - principles behind 140–143
  - range of responses to 142
  - suggested flow 143, 154
  - tips for managing 148–149
- Cover letters 69, 70
- Culture
  - definition 63
  - importance of monitoring 63, 75, 209
- Culture assessment 59, 63–75
- Culture of safety 7, 63, 162
- Culture Survey, Safe Surgery Checklist 64–68
  - administration of 69–72, 79
  - analyzing and interpreting data 73–74
  - anonymity of 69
  - cautions 75
  - considerations for large facilities 69
  - considerations for practitioners infrequently using facility 69
  - cover letters 69, 70
  - electronic/online surveys 72
  - general guidelines for 69
  - hybrid approach 72

- limitations 75
  - paper surveys 71–72, 72
  - periodic follow-up surveys 75, 209
  - physician response rates 79
  - presenting results 74–75
  - Pre survey (existing checklist)/Post survey for all facilities 66, 67, F5
  - Pre survey (no existing checklist) 65, F4
  - success 79
  - tips for improving physician response rates 72
  - versions 64
- Culture surveys, generic 59, 64, 68
- Customizing scripts 173
- Customizing the checklist 39, 99–114
- actions guides for 113–114
  - checklist for 114
  - local changes, importance of 101
  - principles of 102–103
  - procedures for 103–108, 113–114
  - questions for evaluating items 105–107
  - timing of checklist items 106
- D**
- Data analysis 73–74, 208
- Data collection 200, 208
- Debriefing, the 195–204
- benefits of 197
  - case study 202
  - essential tasks for 200–201
  - forms for 200
  - key points of 197
  - planning your approach to 129
  - reports 201
  - timing of 199
  - trigger for 198–199
- Demonstration videos 135–136, 158, 160
- fact sheet for D3
  - for promotion 160
  - tips for creating 135
- tips for using 136
- Department leadership 80
- Design and display 83–98
- definitions 85
  - design tips 93–96
  - display options 85–90
  - electronic displays 86, 89–90, 92
  - examples of display options 92
  - guiding principles for 85
  - planning 129
  - simplicity 103
  - testing 85
- Digital displays. *See* Electronic checklists
- Documentation
- of debriefings 200
  - of observations 61
  - of readiness 82
- E**
- Efficiency 7, 199
- ways the checklist can save time 22
- Electronic checklists 86, 89–90
- considerations for 129
  - examples of display options 92
  - integration into EMRs 90
  - vetting recommendations from vendors 90
- Electronic surveys 72
- Email messages 160
- Engagement 139, 167
- through checklist customization 101
  - with coaches 190
  - with patients and families 163–164
  - with physicians 142
- Environment, assessment of 37, 57–76
- Equipment problems 7, 197, 199, 201, A11, A13
- Evidence 23–27, 152, 153
- studies that demonstrate benefits of use 23–26
  - studies that question checklists 27, 153

Executives 46, 74, 210

Expand phase 32, 33

Expansion 40, 125

Expansion planning 40, 123–136

    characteristics of a good plan 126

    logistics 127–134

    strategy for success 127

## F

Facilities, large 69

Facility leadership 125, 210

Facility name 103

Facility readiness 79–81

Fact sheets

    Checklist demonstration video D3

    Implementation team roles and responsibilities D2

    Overview of checklist implementation D1

Families of patients 163–164

Feedback (from surgical teams) 133–134

    collecting 134

    continual collection of 209

    inviting 172, 176

    plan for collecting and managing 133–134

    points of contact for 133, 134

    recording 134

    responding to 134

Feedback (to surgical teams)

    Coaches' guide to giving feedback 194

    negative, avoiding 189

    offering 187–188

    structured (3-part question technique) 183, 186–188

    timing of 187, 188

    useful 189

Filming demonstration videos 135–136

Focus, in operating/procedure room 151, 183, 199

Follow-up conversations 148

Follow-up culture surveys 75

Fonts 93

    target to assess size used on poster 97

Formatting 94, 95

Framing, of checklist posters 91

## G

Glitch books 200

Graphics, on checklist 95

Group training 170, 175–177

    considerations for larger groups 175–177

    suggested flow for 175–176

## H

Handheld checklists 86, 87, 87–88

    collecting feedback on 134

    considerations for 129

    example of multipage 87

    examples of display options 92

    font sizes for 93

    for initial testing 120

    single vs multiple pages 87

Hospital leadership 80

Hostility, deep 142, 149

## I

IHI. See Institute for Healthcare Improvement

Impact assessment 68

Implementation 27

    assessment of 68

    essential steps 35–45

    framework for 29–48

    key factors affecting ease of 79–81

    phases of 32–33

    process overview 32

Implementation lead 51, 80, 181

    role in coaching 181

Implementation Lead Project Spreadsheet 48, 60, 69, 126, 128, 131, 148, 158, 190

Implementation materials list x



- Implementation team
    - as trainers 170
    - building 49–56
    - duration of 52
    - expansion of 199
    - importance of for success 79
    - meetings 51
    - membership of 52
    - physician champions 80
    - recruitment to 35, 52–54, 80
    - tips for conversation with prospective team members 53–54
    - ways to contribute 51, D2
  - Implementation Training Model 34, 139, 157, 167, 181
  - Improvement
    - continual or continuous 45, 205–212
    - continuous quality improvement 7
    - to existing checklists 47, 112
  - Improve phase 32, 33
  - Individual training 168
  - Institute for Healthcare Improvement (IHI) 11
  - International pilot study 23
  - Introductions (of surgical team members) 102, 106, 109, 186, 187, A2, A7
- J**
- Journal of American Medical Association (JAMA)* 24
  - Journal of the American College of Surgeons* 25
- K**
- Key messages 128
- L**
- Lamination 91
  - Language 95, 108
    - comfortable 103
    - examples of alternate wordings 109
    - for structured feedback 186
    - neutral 186
  - Leadership 46–48
    - clinical 67
    - department/service line 80, 210
    - facility 80, 125, 210
    - implementation lead 51, 80, 181
    - involvement in planning for debriefing 199
    - keeping leaders informed 125, 128, 136, 193, 200, 210
    - key moments for involving 48, 199
    - ongoing engagement of 210
    - support of 80–81
  - Leading 1-on-1 conversations 148
  - Lines, on checklist 95
  - Listening 54, 119, 149, 151, 182, 183, 189
  - Locations
    - for advertising 161
    - for “Before Induction of Anesthesia” checks 103–105
    - for checklist 85
    - for demonstration videos 135
    - for training 170–171
  - Log books 200
  - Logistics 127–134
- M**
- Materials. *See* Supplies
  - Media, internal 160
  - Medical Care* (journal) 27, 153
  - Medication checks, patient 105, 106
  - Meetings 71
    - implementation team 36, 51, 208
    - promoting the checklist at 130, 158–160
  - Memorization, avoiding 8, 21
  - Morale 182
  - Movable middle 141
  - Multiple checklists, using 108–110

**N**

National Patient Safety Agency (NPSA) 26  
*New England Journal of Medicine* (NEJM) 11, 23,  
 24, 27, 153  
 Newsletters 160  
 Notes, taking 61, 62, 63, 111, 119, 121, 184  
 Nurses 69. *See also* Circulating nurses  
   as trainers 170  
   origin of items for A3–A14

**O**

Objections. *See* Questions and objections  
 Observations  
   best approach for 60  
   continual 208  
   documenting 61  
   during testing 117  
   in the operating/procedure room 59  
   of current practices 59–62  
   of surgical teams 183–184  
   planning 60–61  
   putting people at ease 61, 183–184, 184  
   questions to ask teams after testing 119, 121  
   tracking 61, 192–193  
   training observers 61–63  
 Observation tools  
   Assessment Observation Tool 62, 76  
   Assessment observer’s guide 76  
   Coaching Observation Tool 184, 185, F6–F8  
   Observer’s guide for checklist testing 122  
 Observers 59, 189, 208  
   selecting 60  
   training 61–63  
 One-on-one conversations. *See* Conversations,  
 1-on-1  
 Online surveys 72  
 Operating/procedure room  
   “Before Induction of Anesthesia” checks in 16  
   environmental assessment 37, 59–63

  examples of checklist display in 92  
   focus in 151, 183, 199  
   observation in 59  
   patient engagement in 164  
   principles for coaching in 183  
   testing in 115–122  
   ways to record feedback in 134

Operating Room Crisis Checklists 211  
 Operative plan 106, 107, 146  
 Organizational readiness 67  
 Organizational support 80–81  
 Origin of Safe Surgery Checklist items A1–A14  
 Ownership, importance of 33, 101  
 Own phase 32, 33

**P**

Paper checklists 87–88, 117, 200. *See also* Handheld checklists  
 Paper culture surveys 71–72  
 Passively compliant 142  
 Patient  
   care 59, 76, 182, 183  
   education 163–164  
   participation 16–17, 21, 198  
 Patients and families 163–164  
 Performance evaluation 68  
 Personal identifiers 63, 184  
 Phases of implementation 32–33  
 Photos, used to promote checklist 158, 162  
 Physician champions 54–55, 80, 142  
 Physician engagement 6, 142, 199  
   response types 142  
 Physician response rates 72, 79  
 Pilot study 23  
 Planning  
   management of coaching 132–133, 190–192,  
   208  
   management of training 132, 168  
   observations 60–75

- promotion of the checklist 130
  - sharing plans 82
  - system for debriefing 199–201
  - tools for 126
- Planning checklist expansion 40, 123–136
  - logistics of 127–134
  - strategy for success 127
  - with Implementation Lead Project Spreadsheet 131
- Poster checklists 86, 88–89
  - considerations for 129
  - examples 88–89
  - examples of display options 92
  - font sizes for 93, 97
  - importance of size 88
  - lamination or framing of 91
- Posters for advertising 161
- Practice scripts 173, F9–F18
- Practicing (checklist use) 146, 172, 173–174, 176
  - ideas for 172
- Practicing (the 3-part question) 190
- Pre-op/holding area
  - “Before Induction of Anesthesia” checks in 16–17
  - patient engagement in 164
- Prepare phase 32, 33
- Printing 40, 87, 129
  - budget for 46, 209–210
  - updated checklists 209–210
- Process checks 102, A2
- Professionalism 147
- Project launch 48
- Project management 46–48
- Promotion 42, 155–164
  - at meetings 130, 158–160
  - continual 209
  - planning 130
  - responding to feedback as part of 134
- Prompts
  - conversation prompts 102, A2

- language for 108
- Publicity. *See also* Promotion
  - external 157
  - internal 42, 136
- Pulse oximetry 105

## Q

- Quality improvement
  - continuous 7. *See also* Continual or continuous improvement
  - prior successes 80
- Question, 3-part 183, 186–188
  - definition 186
  - example of 186
  - mistakes to avoid 187
  - practicing 190
- Questions and objections
  - answering 172, 176
  - concerns about talking to patients and families 164
  - how to handle 149–153
  - quick-reference guide for B1–B6
  - responding to objections 54, 150–153
- Questions for evaluation of checklist items 105–107
- Quick-reference guides
  - Addressing questions and objections B1
  - Rationale and origin of items on the Safe Surgery Checklist A1
  - Techniques for coaches C1

## R

- Readability 103
- Readiness
  - assessment of 38, 67, 77–82
  - key factors in assessing 79
  - organizational 67
- Reading checklist items aloud 16, 21, 90, 103, 107, 111, 119, 172

Recruiting implementation team members 35, 52–54  
 physician champions 80

Research  
 studies demonstrating benefits of checklist use 23–26  
 studies that question checklists 27, 153

Resistance to checklist 142  
 deep hostility 142  
 handling questions and objections 149–153

Resistant people 142

Resources (organizational support) 46, 80–81, 148

Respect 67

Response types 142

Revisions 39

## S

Safe Surgery 2015 program 12

Safe Surgery Checklist  
 “Before Induction of Anesthesia” section 16–17  
 “Before Patient Leaves Room” section 20  
 “Before Skin Incision” section 18–19  
 benefits of 6–7, 9, 23–27, 144, 145, 159, 171  
 best practices 21  
 coaching use of 183–188  
 customizing 39, 99–114  
 demonstration of 135, 172, 176, 210  
 design 14, 15, 85–98  
 display 85–90, 91, 129  
 electronic versions 86, 89–90  
 evaluation of 105–107  
 evidence for benefits of 23–27  
 expansion of use 33, 40, 125  
 framework for implementation 29–48  
 goals of 102  
 guiding principles 85  
 handheld versions 86  
 history of 10–13  
 ideas for practicing 172  
 implementation of 27, 29–48  
 international pilot study 23  
 items to include 105–107  
 key factors for implementation 79–81  
 key features 15  
 location 85  
 master list of items A3–A14  
 Master version 110  
 organization of 14–20  
 paper versions 87–88, 117, 200  
 poster versions 86, 88–89  
 practicing 172, 173–174  
 printing 129  
 process overview 32  
 promoting 42, 155–164  
 proper use of 21–22, 172, 175  
 revisions 39  
 single vs multiple 108–110  
 specialty checklists 108–110  
 teaching 165–178  
 templates 101, E1–E12  
 testing 39  
 three-pause framework 103  
 time required for 22  
 timing of items 106, 107  
 Two-page version E2–E3  
 types of items A2  
 updating 209–210

Safe Surgery Checklist Culture Survey. See Culture Survey, Safe Surgery Checklist

Safety 7, 63, 145

Safety checklists  
 improving existing checklists 47, 112  
 signs that your checklist may not be delivering 8

Safety statement 82, 102, 109, 146, A11

Scheduling  
 1-on-1 conversations 143, 148, 149

- coaching 133, 190–192
  - filming of demonstration video 136
  - full-day testing 120–121
  - initial testing 119
  - promotion at meetings 158
  - target dates 128, 149
  - testing 117
  - training on checklist use 132
  - SCIP. *See* Surgical Care Improvement Project
  - Scripted practice 173
  - Scripts
    - customizing 173
    - for demonstration videos 136
    - practice scripts 173
  - Scrub techs 17, 18, 69, 103–108, 106, 107, 121, A10
    - on implementation team 52
    - origin of items for A10–A11
  - Sharing plans
    - for coaching 172
    - for implementation 82
    - operative, with surgical team 151
  - Simulations
    - filming 135–136
    - tabletop 110–111
  - Simulators 171
  - Skill building 34, 168
  - South Carolina Checklist template 12, 105
  - South Carolina Hospital Association (SCHA) 12
  - Speaking up 59, 67
  - Specialty checklists 108–110
  - Spreadsheets 148
  - Sterility 87
  - Storytelling 159–160, 207–208
  - Structured feedback 183, 186–188. *See also* Question, 3-part
  - Supplies
    - for 1-on-1 conversation 143
    - for demonstration video 135
    - for modifying existing checklist 112
    - for modifying Safe Surgery Checklist 113
    - for tabletop simulation 111
    - for training 175
  - Surgeons 18–19, 20, 69, 72, 73. *See also* Physician engagement
    - ideas for engaging 146
    - on implementation team 52, 54–55
    - origin of items for A7–A14
  - Surgeon’s safety statement 12, 82, 102, 109, A11
  - Surgical Care Improvement Project (SCIP) 11
  - Surgical culture
    - assessment of 57–76
  - Surgical plan. *See* Operative plan
  - Surgical safety checklists
    - improving existing checklists 47, 112
    - signs that your existing checklist may not be delivering 8
  - Surgical Safety Checklist (WHO) 10, 11, 105
    - Guiding principles 11
    - studies demonstrating benefits of 25, 26
  - Surgical teams
    - following up with 201
    - observing 183–184
    - staying in touch with 207
    - training new members 210
    - training of 170
  - Surgical technologists. *See* Scrub techs
  - Surveys
    - culture survey. *See* Culture Survey, Safe Surgery Checklist
    - electronic 72
    - follow-up 75
    - paper 71–72
    - to collect feedback 134
- T**
- Tabletop simulations 110–111
  - Teaching 165–178
    - new skills 168
    - preparation for 168

- Teaching the checklist 165–178
    - before testing 117, 118, 120
  - Team briefings. *See* Briefings
  - Team building 49–56
  - Team meetings 51
  - Teamwork (implementation team) 208
    - recruiting team members 35, 52–54
  - Teamwork (surgical teams) 144
    - assessment of 67
    - coaching teams 188
  - Templates
    - for checklists 101, E-i-E12
    - for practice scripts F9
    - for presentations 159
  - Testing 39
    - design and display 85
    - full-day 120–121
    - goal of 117
    - importance of 117
    - initial 118, 118–119
    - in operating/procedure room 115–122
    - in real cases 118–121
    - in tabletop simulations 110–111
    - Observer’s guide for 122
    - principles of 117
    - small-scale, value of 117, 118
    - tips for 120
  - Testing teams 117
    - for full-day testing 120–121
    - questions to ask after testing 119, 121
  - Three-part question. *See* Question, 3-part
  - Three-pause framework 103
  - Time management
    - time required for the checklist 22
    - with coaches 192
  - Time Out 8, 81, 91
    - considering your success with 81
    - engaging patients during 163
  - Tracking 1-on-1 conversations 130, 131, 148
  - Trainers 132, 170
  - Trainers’ guide 178
  - Training 43, 167–178. *See also* Teaching
    - coaches 132
    - debriefing with trainers 177
    - groups 170
    - ideas for practicing 172
    - implementation model 34, 139, 157, 167, 181
    - introduce practice to trainees 173–174
    - larger groups 175–177
    - new members of surgical teams 210
    - observers 61–63
    - planning and scheduling of 132, 168–171
    - practice, as key element of 172, 173–174
    - proper checklist use 172
    - steps of 171–172
    - surgical teams 170
  - Training trainers 132
  - Triggering the debriefing 198–199
- U**
- Updating the checklist 209–210
- V**
- Veterans Health Administration (VHA) 24
  - Videos 135–136, 158, 160, 190
- W**
- Waiting areas 163
  - Whiteboards 126, 134, 161, 201
    - as part of debriefing system 201
    - checklist as 92
  - White space, on checklists 94
  - World Health Organization (WHO)
    - Global Patient Safety Challenge 10
    - “Safe Surgery Saves Lives” campaign 10
    - Surgical Safety Checklist 10, 11, 25, 26, 105