Surgical Skin Preparation Audit Tool

# Introduction

## Problem Statement

Surgical skin preparation is an important strategy to prevent surgical site infection. Adequate surgical skin preparation reduces the burden of skin microorganisms prior to incision. Though it seems straightforward, surgical skin preparation is a complex process that requires the coordination and responsiveness of individuals and systems in the operating room. There are often many opportunities to improve the adequacy of surgical skin preparation.

## Purpose of This Tool

This tool will help your safety program team understand how appropriately you are preparing the skin for incision. It can help your team identify practice patterns, so you can more easily pinpoint opportunities for intervention.

## Please Adapt This Tool

A team of clinicians designed this tool to assess the adequacy and variability of surgical skin preparation in its operating room. Please modify this tool to best fit your team’s needs. The manufacturer’s product labeling should be consulted for directions for use of specific products, and may be helpful for developing audit questions.

## How To Use This Tool

An observer who is not assisting with skin preparation passively watches the skin preparation procedure and documents observations on the data table below. We recommend that you collect data from 10 patients undergoing surgery, but there is no right or wrong number of patients to review. The more patients you review, the more likely you are to identify opportunities to improve the adequacy of surgical skin preparation. Your team can determine the approach that will work best in your perioperative area.

At the end of the month, tally your data in the Sensemaking Table and address any variability in practice.

## How To Use Audit Data

Even if some team members are not part of the data collection process, the entire improvement team is responsible for creating a cohesive plan to address performance gaps. If the data reveal defects in surgical skin preparation, your team can design a quality improvement intervention to address them. You can use the AHRQ Safety Program for Surgery Toolkit to guide your team through the quality improvement intervention design process.

# Data Table\*

| **QUESTION** | **DATA** |
| --- | --- |
| Observation Number |  |
| 1. Name of Procedure |  |
| 1. Date of Operation |  |
| 1. Time of Operation |  |
| 1. Surgeon |  |
| 1. What type of skin preparation was used for this case? | Betadine □ ChloraPrep □  DuraPrep □ Other □  Name, if other: |
| 1. If the patient had an ostomy, what type of skin preparation was used on the *ostomy* only? | Betadine □ ChloraPrep □  DuraPrep □ Other □  Name, if other: |
| 1. If DuraPrep was used, was it allowed to air dry for 3 minutes (please time it)? | Yes □ No □  Yes, after reminder □ |
| 1. If ChloraPrep was used, was it allowed to air dry for 2 minutes (please time it)? | Yes □ No □  Yes, after reminder □ |
| 1. If ChloraPrep was used, was it applied using a rigorous back and forth scrubbing motion? | Yes □ No □  Yes, after reminder □ |
| 1. How many skin preparation sticks were used? | 1 □ 2 □ 3 □ |
| 1. Who prepared the skin for incision? | Name:  Role: |
| * 1. Ask if trained in a protocol for skin preparation based on the product used and the manufacturer’s recommendations | Trained: Yes □ No □ |
| 1. Comments |  |

\*Use of brand names is for identification only and does not imply endorsement by the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.

# Sensemaking Table\*

| **QUESTION** | **DATA** |
| --- | --- |
| 1. Month and year |  |
| 1. How many observations were done this month? |  |
| Count responses from Data Table to answer the following questions. |  |
| 1. How many times was ChloraPrep used for skin preparation this month?   *Count the number of “ChloraPrep” responses for question 5.* |  |
| 1. How many times was DuraPrep used for skin preparation this month?   *Count the number of “DuraPrep” responses for question 5.* |  |
| 1. How many times was ChloraPrep used for ostomy prep this month?   *Count the number of “ChloraPrep” responses for question 6.* |  |
| 1. How many times was Betadine used for ostomy prep this month?   *Count the number of ”Betadine” responses for question 6.* |  |
| 1. How many times was DuraPrep allowed to air dry for 3 minutes this month?   *Count the number of “yes” responses for question 7.* |  |
| 1. How many times was a reminder required to allow DuraPrep to air dry for 3 minutes this month?   *Count the number of “yes, after reminder” responses for question 7.* |  |
| 1. How many times was ChloraPrep allowed to air dry for 2 minutes this month?   *Count the number of “yes” responses for question 8.* |  |
| 1. How many times was a reminder required to allow ChloraPrep to air dry for 2 minutes this month?   *Count the number of “yes, after reminder” responses for question 8.* |  |
| 1. How many times were 2 prep sticks used during skin preparation this month?   *Count the number of “2” responses for question 10.* |  |
| 1. How many times did a trained provider perform the skin preparation this month?   *Count the number of “yes” responses for question 11a.* |  |

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