

# A Regional Quality Improvement Collaborative to

# **Reduce Surgical Site Infection in Elective Colorectal Surgery**

9.65%

a 49% reduction!

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#### Introduction

The PreciSSIon collaborative (Preventing Surgical Site Infection across a region) is a collaboration between 7 NHS hospitals in the West of England with the aim of reducing SSI after elective colorectal surgery.

# Aim & Objectives

Measurement of SSI To reduce SSI in colorectal surgery by 50% by **March 2021** 

SSI bundle

## Local measurement plan

PHE surveillance for 30-day patient reported SSI Establish sustainable data collection

Improve cultures & learning systems

OI education

Promote collaborative team working

#### Implement bundle

Promote evidence-based bundle Training for theatre teams

Measure and improve compliance

**Bundle compliance** 

Surveillance questionnaire response rates

## Methods

The Institute for Healthcare Improvement's (IHI) Breakthrough Series collaborative model was used. Quarterly learning and sharing events with QI coaching were used to implement a mutually agreed, evidence based wound care bundle in elective colorectal surgery across the 7 hospitals. Our Precission bundle:

# chlorhexidine

Antibacterial sutures

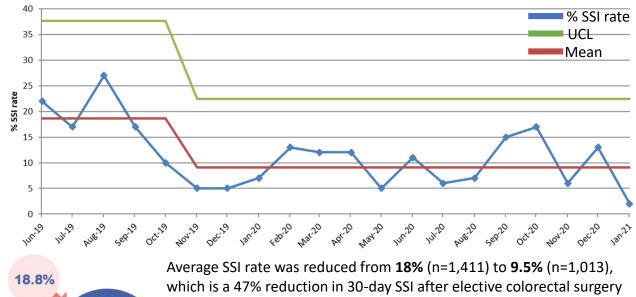
**Antibiotics** after 4hrs



Wound protector

# Results

West of England SSI rate for colorectal surgery June 2019 - January 2021 following implementation of 'Precission' bundle (all 7 trusts)



across the whole region!

Science Network

Patient response rate was over 80%.

Compliance to each of the bundle elements was high from 72% to 92%. A correlation between increasing bundle compliance and decreasing SSI rate was shown.

## **Conclusions**

We have demonstrated that using a collaborative approach to quality improvement can be effective in improving patient outcomes on a regional scale.

By reducing SSI we have decreased patient morbidity and reduced cost. The bundle is easily adaptable to other surgical procedures as shown by 3 hospitals implementing the bundle after emergency abdominal surgery.