Changing behaviour to reduce breast surgical site infections: A service improvement project

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Introduction

Based on all surveillance methods the incidence of breast surgical site infections (SSI) between April and June 2014 was 7.0%. The inpatient/readmission rate was 2.2%, identifying the Trust as a high outlier above the national 90th percentile. Results were used to drive practice transformation through audit and observation, highlighting areas of change to reduce SSIs and improve patient safety.

The aim of the service improvement project was to demonstrate a reduction in SSIs within breast surgery following implementation of changes to practice to meet current guidelines published by the National Institute of Clinical Excellence and the Association of Breast Surgery.

Outcomes

Collaborative working between infection control, breast and theatre teams was paramount to ensure full co-operation and understanding of the improvement initiative. Interventions included standardisation of skin prep to alcoholic chlorhexidine, adherence to Trust antimicrobial prophylaxis guidelines, pre-operative MSSA screening and 4% chlorhexidine gluconate body wash for implant based reconstructions, improved temperature of the operating theatre and patient education about methods of hair removal.

During the observation period care elements were recorded using a modified Department of Health High Impact Intervention Care bundle to prevent surgical site infection to ensure appropriate and high quality patient care.

Results & Conclusions

Results verified by Public Health England (PHE) demonstrated a marked reduction in SSI rates. Enhancing knowledge and changing practice reduced the overall rate from 7% to 2.0% with a comparable national benchmark of 4.2%. Inpatient and readmission rates reduced from 2.2% to 0.7% with a comparable national benchmark of 0.9%.

Throughout the project clinical teams demonstrated commitment and cooperation with a joint desire of reducing SSIs and improving patient safety by adhering to national guidelines.

References

1. Department of Health. 2007. High Impact Intervention Care bundle to prevent surgical site infection