

Preventing Surgical Site Infections in Maternity - a collaborative approach

Child / Family Health

Prepared by Deirdre O' Mahony

Preventing Surgical Site Infections in Maternity-a collaborative approach

Northern Sydney Central Coast Area Health Service

October 2007

Aim

- To decrease the incidence of surgical site infections (SSI) to LSCS patients thus preventing fatal and non-fatal harm.
- To achieve 100% compliance with the four components of the 'Preventing SSI' bundle from the *Safer Systems Saving Lives (SSSL)* project.

Nature and Extent of the Problem

- In 2003 the Australian Council for Safety and Quality in Health Care suggested that the incidence of SSI nationally is between 2- 13%.
- Prior to SSSL there was no documented evidence at Hornsby Hospital (HKH) of infection rates in the population of women undergoing caesarean sections.
- Clinical practice gaps were identified through a retrospective review of 50 patient's medical records. The audit at HKH demonstrated an SSI rate measured at 20%.

Strategic importance

The project :

- Relates to the strategic directions of NSW Health: “make prevention everyone’s business”
- Is a collaborative approach to preventing adverse outcomes for women with SSI after LSCS such as:
 - increase length of stay (LOS) and associated increased costs
 - delay in the establishment and continuation of breastfeeding and mother / child interaction
- Enhances and supports the vision of NSW Health to deliver high quality services and promote health with early intervention to reduce risk

Planning & Implementing solutions

- **A project team was formed from Maternity, Operating Theatres, Quality and Safety Department and Infection Control**
 - *The project was colour-coded orange for heightened staff awareness*
 - *Gaps were identified and audit tools developed with input from key stakeholders to facilitate compliance monitoring and highlight the practice changes.*
 - *The audit tools were completed by Maternity, Operating theatre (OT) staff and the project officer*

Planning & Implementing solutions

- **The following strategies were implemented:**
 - *All elective LSCS were given pre-operative skin care advice*
 - *An information pamphlet called 'Are you having a Caesarean Section?' was developed.*
 - *Hair removal was attended with clippers in the operating theatre only . Clippers were removed from all other areas*
 - *Appropriate prophylactic antibiotics doses were promoted through advertising and the purchasing of The Therapeutic Guidelines for Antibiotics 2006 for each operating theatre*
 - *A local surgical wound care protocol was developed in consultation with wound care consultants*
 - *Compliance and data were monitored daily by Project Officer with assistance of SSI Champions, from Maternity and OT staff.*
 - *Non-compliance was investigated and monitored continually*

Outcomes & Evaluation

- There has been a statistically significant improvement in patient outcomes with infection rates dropping from a mean of 20% to 0%
- Subsequent benefits include:
 - decrease LOS and costs for health service
 - promotion of early mother and baby interaction and sustainability of breastfeeding
- The bundle components were adopted readily for LSCS population

Sustaining Change

- All components of the SSI project have been sustained since the project finalised in February 2007
- The Division of Women's Children and Family services hope to sustain surveillance by appointing a Quality Resource Nurse to continue to monitor compliance

Lessons Learned

- The project demonstrates that optimal outcomes can be achieved if there is collaboration with key stakeholders and a clear purpose.
- The project built bonds between three major disciplines Maternity, Operating Theatres and Infection Control.
- Sometimes you have to ask the right people the right questions to discover you have a problem

Future Scope

The project could be implemented for other surgical procedures without difficulty.

With a collaborative approach the potential for preventing and or minimising adverse outcomes in patient undergoing surgery is within reach

Furthermore, this collaboration exemplifies the notion of “making prevention” is “everyone’s business”.