Multi-model Approach in Prevention of Surgical Site Infections for Caesarean Surgeries in Hamad Medical Corporation-Women's Hospital

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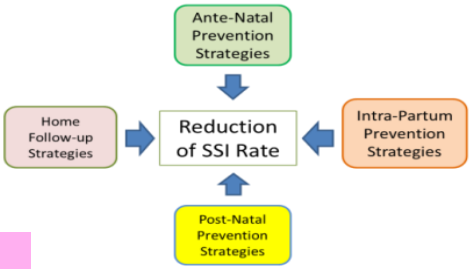
BACKGROUND

Surgical site infections (SSI) are a substantial concern for cesarian deliveries in which a surgical site complication is most unwelcomed for a mother with a new infant. Steps take pre, intra, and post-operativiely to reduce the number of complications may be of substantial benefit clinically, economically and psychologically.

OBJECTIVE

To reduce the SSI rate for all risk index categories of caesarean section surgeries in WH below 5oth percentile of NHSN Benchmark trhough pre, intra, post natal, and home care strategies.

CONCEPTUAL FRAMEWORK OF SSI PREVENTION PROJECT



MULTIMODAL INTERVENTIONS

Ante-natal

Out Patient Department:

Patient education on personal hygiene and appropriate hair removal method

New leaflet -individualized teaching on use of clipper and not remov... hair for bikini line.

Labor Room and Emergency Department

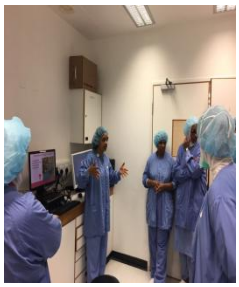
1. Skin cleansing with 4% CHG detergent based sponge/ 2% CHG skin cloth for category 1 CS before sending to Operating room for emergency CS
2. Change the dress after personal hygiene before sending to OR
3. Transfer patient on trolley and not on bed
4. Hand hygiene improvement project activities

Intra natal

Operating room:

Monitoring activities

1. Surgical asepsis – training & monitoring & reminding on the hand scrubbing ,gowning & gloving
2. Waiting time for skin prep-for 3 minutes
3. Environmental cleaning & disinfection



Post natal

Post natal units:

New interventions with Monitoring activities

1. Expose wound after 48 hours only . Difficult to be accepted by the surgeons initially ,later on 100% compliance.
2. First bath in the hospital itself soon after the wound exposure
3. Aseptic technique in dressing and handling of wound including hand hygiene .

Home care

Upon discharge:

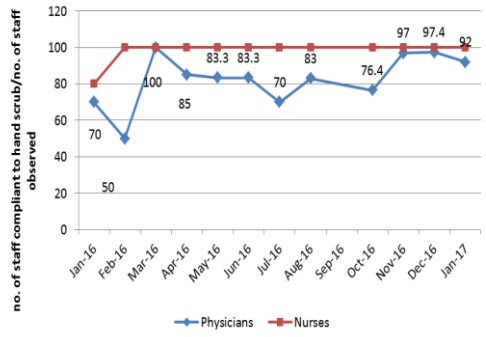
Patient education on wound care:

1. Daily bath & personal hygiene
2. hand hygiene before touching the wound
3. Wound care with CHG wipes 2% for 8 days
4. Special instruction for caring of the CHG pack

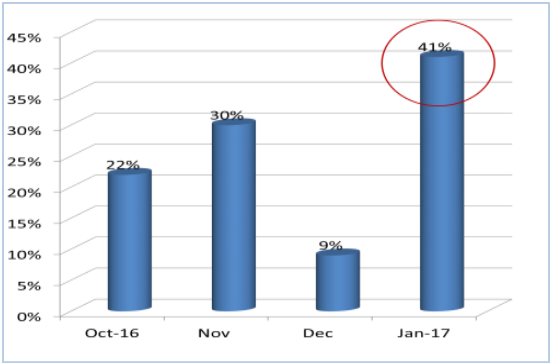
Home follow up at 7th and 14th day post discharge to evaluate effectiveness of discharge education for High risk cases

RESULTS

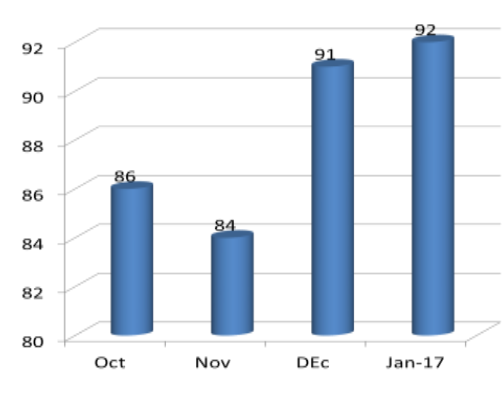
Compliance to Hand scrubbing in OR



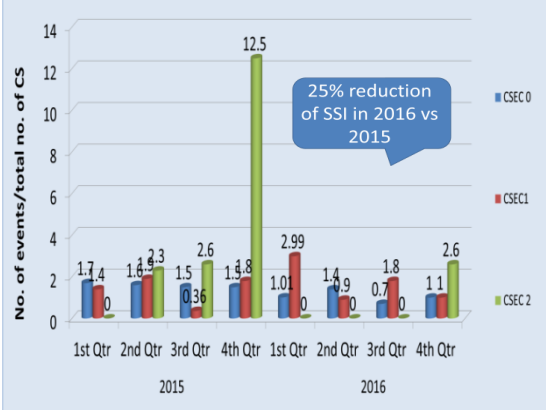
Hair Removal by cream/clippers



Gown change before OR



WH-SSI Rate (2015 to 2016)



Achievements

1. 25% reduction in the rate of surgical site infections for CS surgeries in 2016.
2. The rate of infection is below 50th percentile for all risk index categories by 4th Qtr. 2016.
3. Created a team spirit among the multidisciplinary staff

Challenges

1. Language barrier
2. Shortage of Patient Educators
3. Rapid patient turn over
4. Shortage of Operating Theaters vs. patient census

References:

1. Strategies to Prevent Surgical Site Infections in Acute Care Hospitals: 2014 Update s h e a / i d s a p r a c t i c e recommendation
2. Global guidelines on the prevention of surgical site infection November 2016
3. CDC and HICPAC DRAFT Guideline for Prevention of Surgical Site Infection March 14, 2013