

PROJECT TITLE:

Implementing Evidence Based Practices in Achieving Zero Tolerance CLABSI Rates in Heart Hospital CTICU

DESCRIPTION:

Central Line Blood Stream Infections (CLABSI) is one of the most frequent causes of health care associated infections. In Heart Hospital, most of the post-operative patients admitted in CTICU has central line inserted in OR and maintained in CTICU. It was noted that there was a high CLABSI rates in January, February, April, May and July 2012 with 1 infection respectively and with high central line utilization. In order to reduce the high rate of CLABSI, contributing factors such as insertion procedure, system and equipment factors were analyzed thoroughly and action plan was developed .

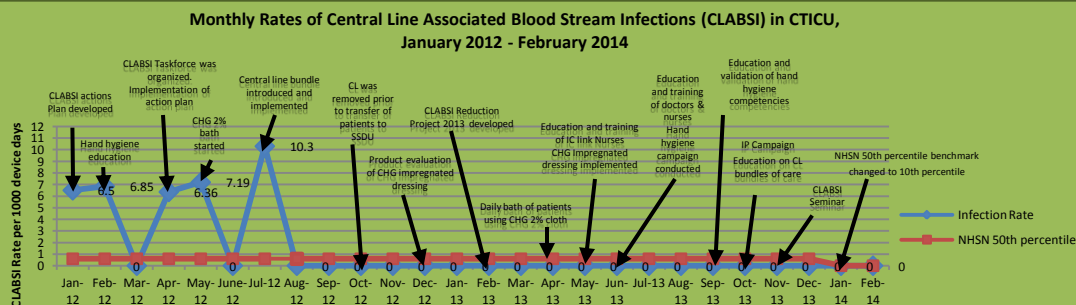
AIM:

Reduce the 2012 Annual CLABSI rates of 4.27 to ≤ 0.6 , NHSN 50th percentile benchmark by June 2013 and achieve the zero tolerance CLABSI rates by the end of December 2013.

INTERVENTIONS:

- Review and implementation of protocols and evidence-based guidelines.
- Hand hygiene education, hand hygiene campaign and implementation of hand hygiene time to enhance staff compliance.
- Education and training of physicians, nurses, and other paramedical staff about central line bundle, scrubless surgical hand scrub, bundles of care for central lines, CHG impregnated dressings and CHG 2% cleansing cloth.
- The Line Insertion Checklist (Central Line Bundle) was implemented. Train observers on appropriate line insertion techniques.
- Vascular access training for CT Anesthesia Doctors.
- Empower staff through the use of simple rules and independent redundancies "Stop the Line" authority.
- Standardized kit made available in OR and ICUs.
- Reviewing of line necessity of each case and to discuss the removal of the line if not needed.
- Use of Chlorhexidine 2% antiseptic solution in all insertions as part of insertion bundle.
- Use of Chlorhexidine impregnated dressing and chlorhexidine 2% in 70% alcohol for hub disinfection for central line.
- Daily bath using Chlorhexidine 2% cleansing cloth instead of pharmacy prepared chlorhexidine solution.
- Education of Prevention of CLABSI was highlighted during Infection Prevention Campaign 2013.

RESULTS



DEPARTMENT:

Quality Management – Infection Prevention and Control

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CONCLUSION:

- The collaborative efforts of multidisciplinary teams, the creation of CLABSI Task Force, staff education , implementation of evidence based practices and strict implementation of central line bundle are keys in achieving the zero tolerance CLABSI rates in CTICU for 19 months.

- CTICU maintained zero tolerance CLABSI rates from August 2012 to February 2014.

NEXT STEP:

- Review, revision and implementation of Central Line Insertion and Maintenance Bundle in 2014.
- Implementation of IHI Best Care Always Central Line Pack to maintain zero tolerance infection rates till December 2014.