Introduction

- Despite implementing best practices across the organization, the central line associated bloodstream infection (CLABSI) rate failed to improve.
- To address this challenge in the 30 bed surgical ICU (SICU), a unit-based initiative was developed based on the concepts of relational coordination.
- We hypothesized that the coordination of work through relationships of shared goals, shared knowledge, and mutual respect would impact our success.

Methods

- An innovative CLABSI prevention program was developed in January 2013.
  - Founded on the principles of relational coordination
  - Mission: Establish shared knowledge and goals while building mutual respect.
- Key concepts emphasized:
  - Bundled access
  - Standardized maintenance
  - Continuous evaluation of device need
- Monthly meetings held:
  - To review infections
  - To identify opportunities for improvement
  - To share collective gains
- Device utilization and CLABSI rates were analyzed in a pre–post design 18 months before and after program inception.

Results

- From July 2011 - December 2012:
  - SICU mean CLABSI rate was 2.24
  - No CLABSI were observed for 7 individual months
  - Longest consecutive stretch without a CLABSI was 3 months
- After introduction of relational coordination concepts:
  - 2 infections within the first quarter of 2013.
  - Since April 2013 the CLABSI rate has remained zero.
- From the program launch in January 2013 - June 2014:
  - SICU mean CLABSI rate ↓ to 0.25
  - This ↓ (p<0.05) occurred despite a consistent device utilization rate (0.53 vs. 0.52, p=0.77)
  - A ↓ in variance was also observed (4.66 vs. 0.55, p<0.05)
- Despite the organization having a lower device utilization rate (0.37 vs. 0.52) and a concurrent institutional CLABSI prevention program existing during both study periods, the organizational CLABSI rate was not significantly reduced (1.45 vs. 1.32, p=0.55).

Conclusions

- Relational coordination:
  - Is an effective tool to enhance and implement best practices to achieve the highest quality of care.
  - Possesses great potential in facilitating critical care quality improvement and patient safety initiatives.

References