

Strategies to Eliminate Catheter-Related Bloodstream Infections

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BACKGROUND

Regional Medical Center Bayonet Point is a 293 bed acute care hospital. Between 2006 and 2007 we experienced a steady increase in our catheter-related bloodstream infection (CRBSI) rates. By the end of 2007, our CRBSI rate climbed to 3.4 per 1000 patient days. A formal committee convened to research and formulate strategies to decrease CRBSI.

OBJECTIVE

Achieving a rate of 0 CRBSI was the goal of the committee members.



PICC Team

MATERIALS and METHODS

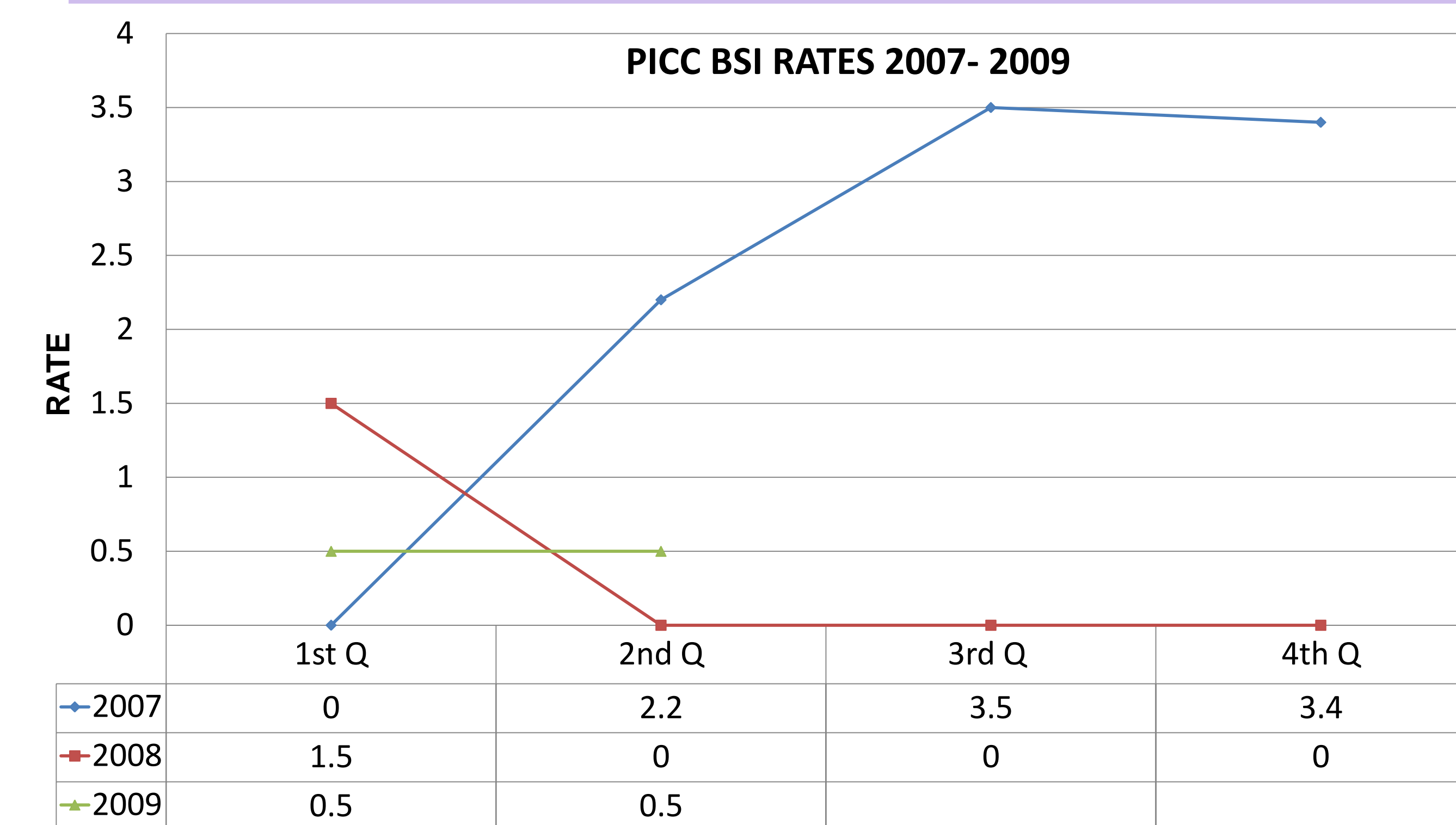
The Intravascular Team implemented a practice change (in 1st and 2nd Quarter 2008) including the following:

- PICC Team oversees dressing changes and monitors integrity and performance of all central lines.
- Changed from luer-access mechanical valve with positive displacement to neutral displacement valve.
- Improved insertion technique and site selection.
- Improved surveillance: Appropriateness of placement and discontinuation of central lines.
- Staff Education: Skills lab, orientation, and real time at bedside with patients and bedside nurse.
- Changed dressing from silver patch¹ to CHG gel pad dressing².
- Revised policy to reflect the changes related to *insertion, maintenance* and *use* of central lines.

RESULTS

By the 2nd Quarter 2008, our CRBSI rate dropped to 0 and was maintained until 2nd Q 2009, when our rate increased to 0.5/1000. Between 2/08 and 6/09 we have had two CRBSIs.

RESULTS (cont.)



CONCLUSIONS

- A multidisciplinary approach, along with established standards, ongoing education and literature research were imperative to achieving our objective of lowering CRBSI rates.
- We recommend the CHG gel pad dressing² as part of our bundle to reduce CRBSIs.
- Our next objective is to integrate the 2010 National Patient Safety Goals to improve outcomes.

¹ DeRoyal® Algidex™ Ag IV Patch Silver Alginate Catheter Dressing

² 3M™ Tegaderm™ CHG Chlorhexidine Gluconate IV Securement Dressing