

# Sustainability for 39 Months.... A CLABSI Free Intensive Care Unit

Karen Schmieder, MSN, RN, CCRN and The Staff of Cardiothoracic Intensive Care

University of Pittsburgh Medical Center



## PURPOSE

The objective or focus of our project was to prevent or eliminate hospital Central Line Associated Bloodstream Infections (CLABSIs).

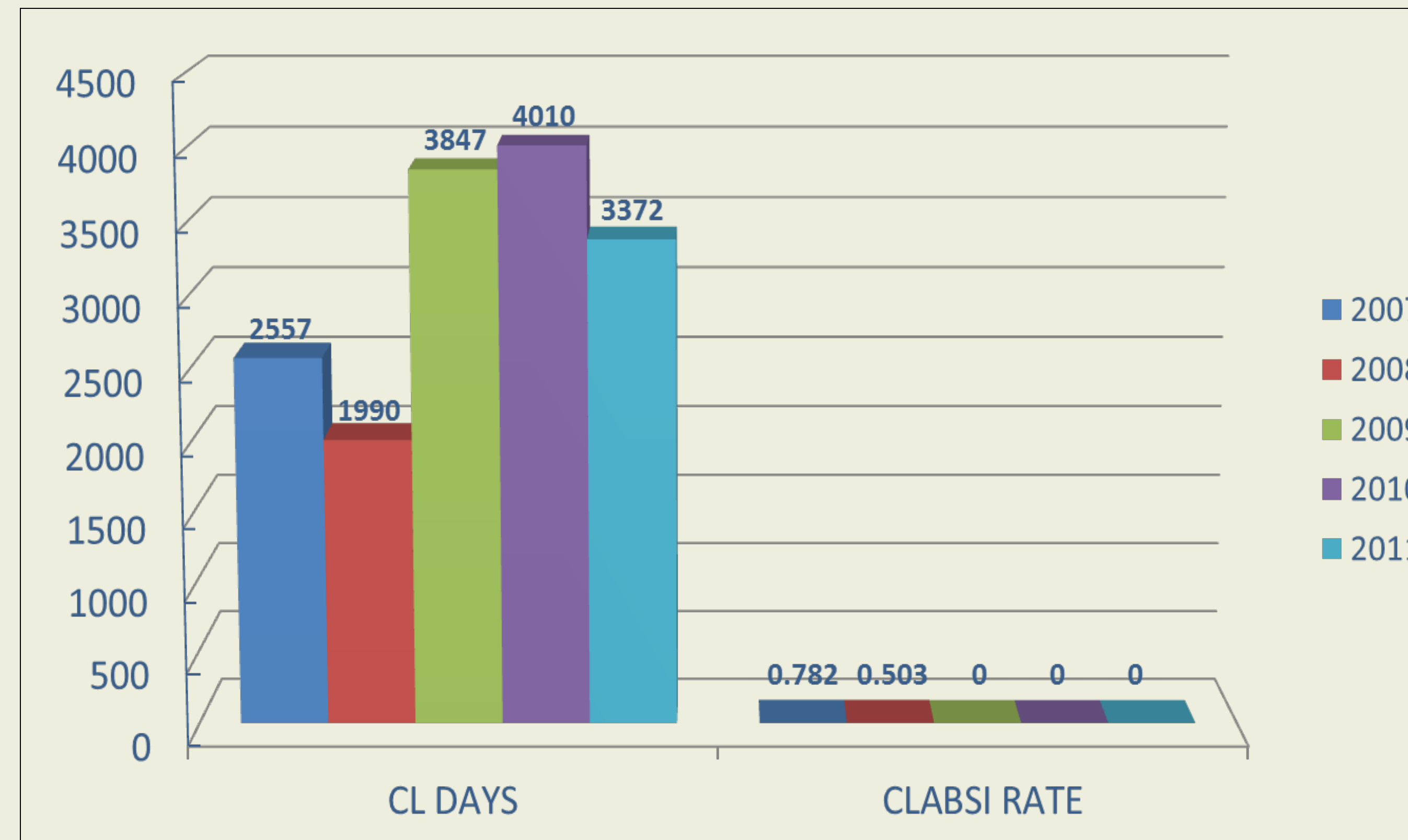
## SIGNIFICANCE

An estimated 41,000 Central Line Associated Bloodstream Infections (CLABSIs) occur in United States hospitals each year. These infections are usually serious and typically cause a prolongation of hospital stay, increased cost (\$25,000.00 per episode) and risk of mortality (12%-25% per infection). CLABSI can be prevented through proper management of the central line. In the summer of 2008 the nursing staff in the Cardiothoracic Intensive Care Unit at UPMC Shadyside identified their quality improvement goal, which was to reach a zero CLABSI rate.

This very engaged team has great pride in the fact that they have achieved a system wide record breaking **39 MONTHS** without a Central Line Associated Bloodstream Infection. The staffs diligence and commitment to patient safety is exemplified in this great accomplishment. They understand how practice drives quality. The two CLABSI in 2007 and the one CLABSI reported in early 2008 stimulated this group to review literature and current best practices performed a gap analysis and began their journey to zero.



## OUTCOMES



## STRATEGY & IMPLEMENTATION

The objective or focus of our initiative was to eliminate hospital associated CLABSIs in the Cardiothoracic Intensive Care. The use of all inclusive premade supply kits for insertion of central lines was being utilized in our institution at the time of our initiative. A procedural bundle for safe insertion was already in place. A newly introduced directive surrounding central line necessity, evaluation and tracking was simplified through the use of the electronic health record. Leadership engaged critical care staff to evaluate and remove high risk lines before transferring patients to the general nursing unit.

One of the major changes in practice that was implemented in the CT-ICU specifically was the use of the product Chlorhexadine Gluconate (CHG) on all levels of patient care. The Unit Director made the decision to remove all patient cleansing products used in the ICU including isopropyl alcohol for scrubbing the hub. CHG liquid skin cleanser and CHG wipes were added to the stock to replace the items removed. Vendor driven education was provided to the staff on proper bathing technique using CHG prior to the trial initiation on February 16, 2010. All aspects of this initiative including the product utilization as well as the workflow changes were supported by both nursing and physician leadership throughout the organization.