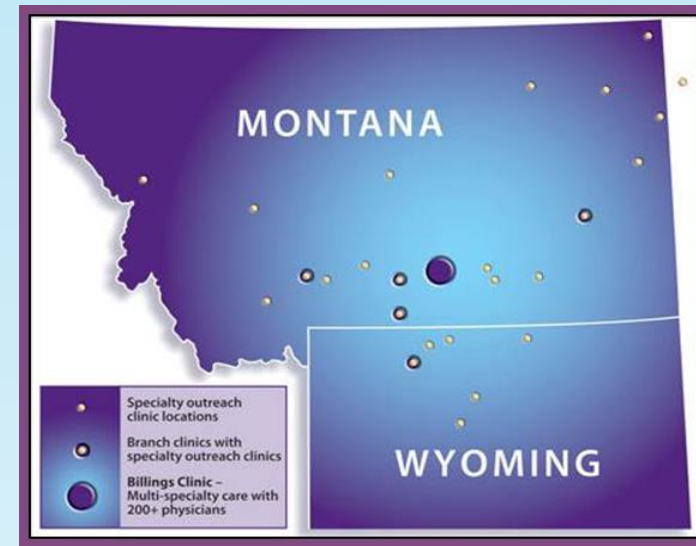


About Billings Clinic

Billings Clinic in Billings, Montana, is a not-for-profit multispecialty organization with a hospital and long term care facility, serving the communities of Montana, northern Wyoming and the western Dakotas. As the largest healthcare organization in the region, we have 3,500 employees, which includes 240 physicians and 75 physician assistants and nurse practitioners, 48 of which are primary care providers.



Background

Our ICU had a significant increase in central line related blood stream infections in 2014. Our team evaluated the process we used to care for patients with central lines, including insertion, care and maintenance.

Significance

Nurses were engaged in the identification and solution to decreasing CLABSI. The goal was to improve patient safety and quality care. As a result, the ICU nursing team determined some process changes to improve outcomes.

Data

In a random observation, patients had 3 – 10 infusions. The nurses were using a combination of peripheral and triple lumen central lines to manage these infusions. Multiple manipulation of these infusions during a 12 hour shift took up to 60 minutes. As additional medications were ordered, current infusions were again manipulated for compatibility.

Strategy

Evidence demonstrates the more a central line is manipulated, the greater the potential for infection. Evidence also supports the use of a central line for vesicant and osmolality medication infusions.

The nurses recognized an increase in the number of continuous infusions, antibiotics and blood products which require central access. Each time a new medication was added, the nurse needed to manipulate the central line access to comply with drug compatibility recommendations

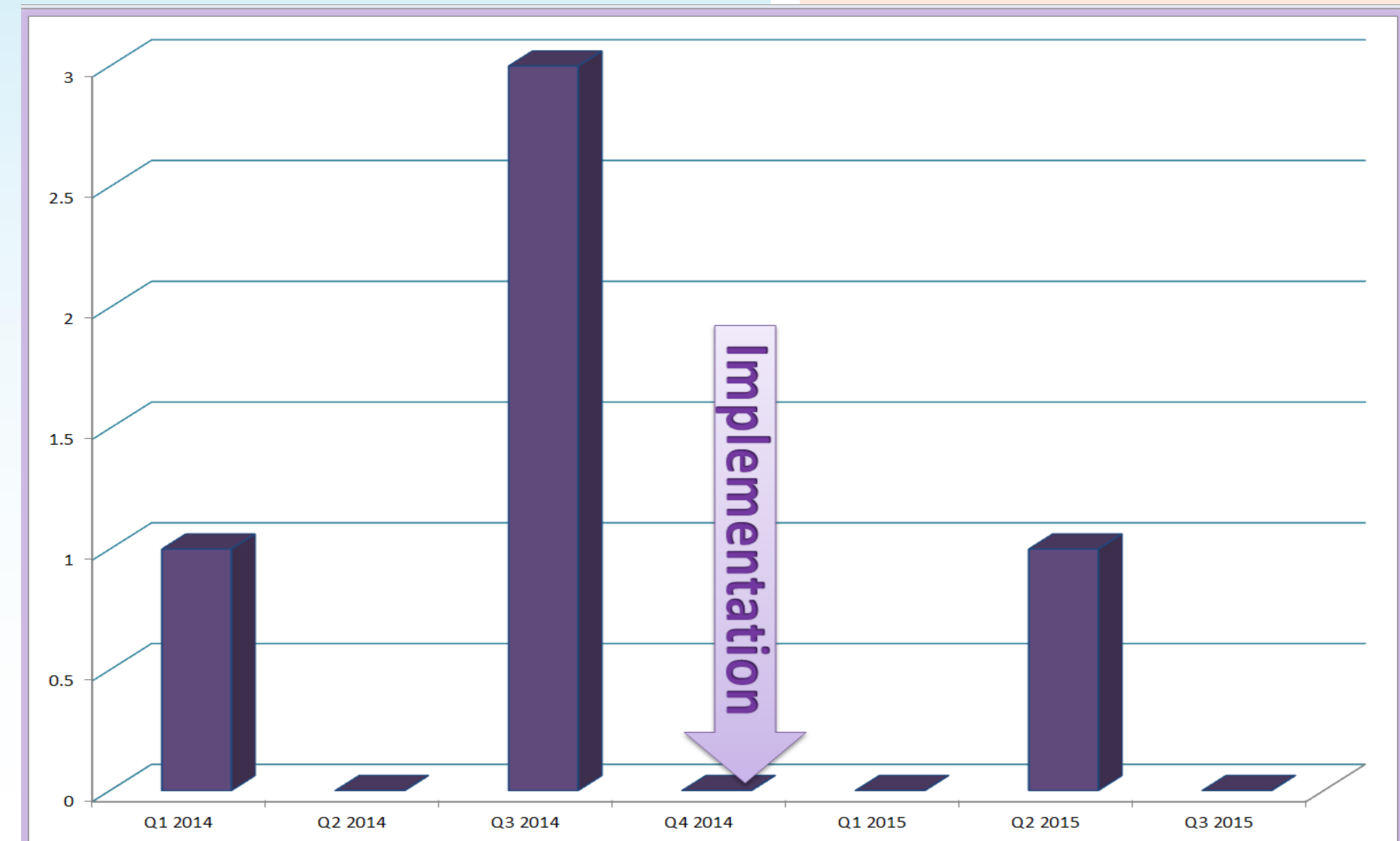
Implementation

Nurses request secondary central line access when multiple medications need to be given via a central line. The MD will insert a short term central line catheter in addition to a PICC. The short term catheter is removed when no longer needed.

Implication For Practice

At first it seems counter intuitive to add a central line when trying to decrease CLABSI. We were able to demonstrate, that when managed appropriately, infection rates actually decrease with the addition of a second central line. The nurses also reported increased efficiency with the use of additional lines. The time they were spending on determining compatibility and re-arranging medications can now be used providing patient care and family support.

Program Outcomes



pzinnecker@billingsclinic.org
lsutphin@billingsclinic.org