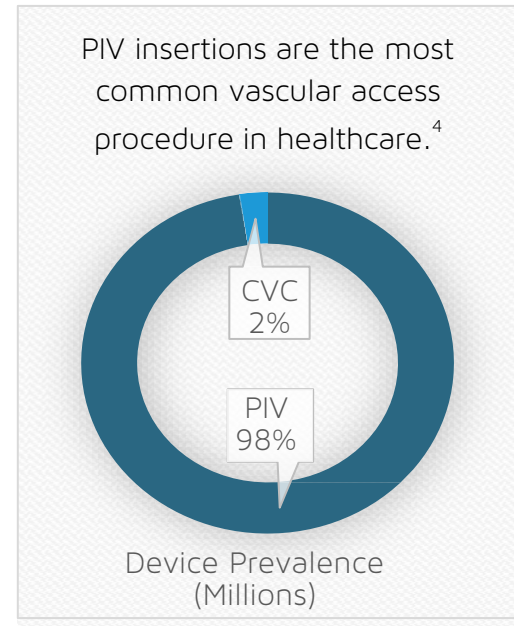


Background

There were over 36 million patients admitted into the United States Healthcare system in 2018. Studies show that up to 90% (32.4 million) of these patients required a PIV catheter during their hospital stay. Reports indicate there are over 200 million PIVs placed each year.^{1,2}

Impact Data

A retrospective, Premier Healthcare Database analysis was performed to estimate the clinical and economic impact of PIV-associated complications on hospitalized patients. Specific PIV related ICD-9 codes were searched within 588,375 patient records across more than 700 U.S. hospitals.³



Patients with a PIV complication showed

1.45% Blood Stream Infection (BSI) rate which was the most common reported complication

More likely to be admitted to the Intensive Care Unit
20.4% vs those without
11.0%

Less likely to be discharged home
62.4% vs
77.6%

More likely to have died
3.6% vs
0.7%

Analytic Conclusion

Patients with PIV-associated complications have longer length of stay (LOS), higher costs, and greater risk of death than patients without. Reducing these complications could improve clinical and economic outcomes.

United States 2018	Admissions	90% PIV required	1.45% PIVRBSI	\$30K each in Treatment Cost ⁵
Community Hospital	36.3M	32.6M	472,700	\$14.1B

CMS Hospital Reimbursement and Performance

The National Healthcare Safety Network of the Centers for Disease Control and Prevention (CDC), is the nation's most widely used health care-associated infection (HAI) tracking system. Since 2009, infection data has been reported to the NHSN to track the national progress of the reduction of HAIs.

Every 5 years, the Department of Health and Human Services (HHS) announces new targets for the national acute care hospital metrics for the National Action Plan to Prevent Health Care-Associated Infections: Road Map to Elimination (HAI Action Plan). The latest targets have been in effect for 5 years (2015 to 2020).

During this period, the Society for Healthcare Epidemiology of America (SHEA) and the Infectious Disease Society of America (ISDA) published an update to their CLABSI compendium document, introducing the concept of possible peripheral intravenous catheter (PIV) surveillance expansion. PIVs also earned national recognition by making the top 10 patient safety concerns of 2019 by the ECRI institute.

Finally, the CDC in 2019 issued a public call for comments, regarding extending CLBSI surveillance to encompass all hospital onset bacteremia including PIVs. These activities provide strong indicators toward the inclusion of PIV quality data to the HHS targets in the next published update due in 2020.



Reduce central line-associated bloodstream infections (CLABSI) in intensive care units and ward-located patients.



Reduce catheter-associated urinary tracts infections (CAUTI) in intensive care units and ward-located patients.



Reduce the incidence of invasive health care-associated methicillin-resistant Staphylococcus aureus (MRSA) infections.



Reduce hospital-onset MRSA bloodstream infections, reduce hospital-onset Clostridium difficile infections (CDI) Reduce the rate of Clostridium difficile hospitalizations.



Reduce surgical site infections (SSI)

This update may lead to \$14.1B in non-reimbursed hospital BSI treatment expenses



PIV Replacement Frequency and Economic Outcomes



The mean number of attempts per successful IV insertion is 2.18.¹⁰



Average cost of a PIV catheter is \$2.00 x 2.18 attempts.

The hospital incurs \$4.36 catheter cost with each start.

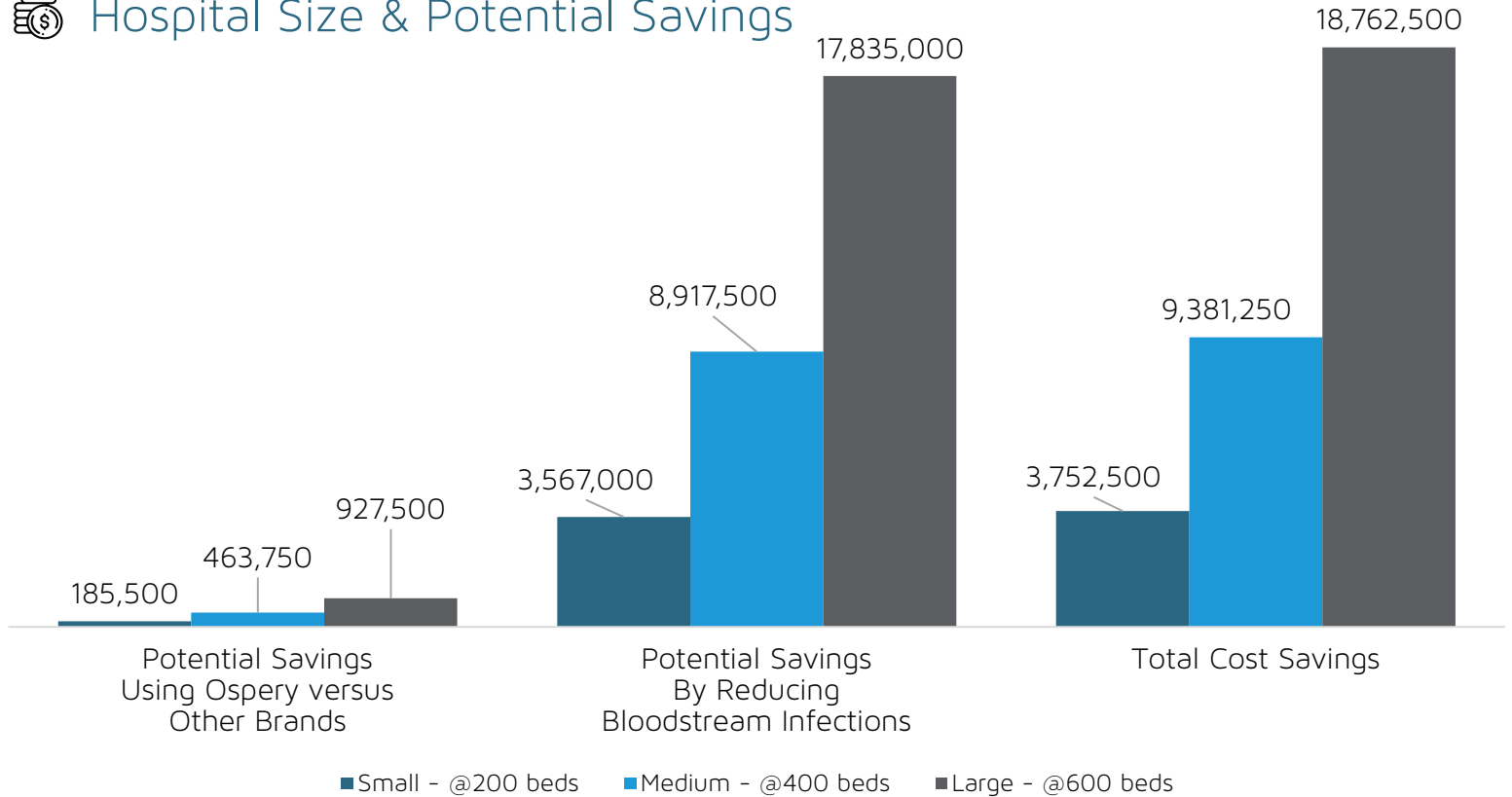


Additional insertion supplies incurred can be \$5.50 per start kit.

Start kit includes single sterile supplies of dressing, skin prep, alcohol pads, as well as saline flush, connector, infusion cap, tape, gauze wrap, and gloves.



Hospital Size & Potential Savings



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