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One Million Global Catheters PIVC Worldwide Prevalence Study

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One Million Global Catheters PIVC Worldwide Prevalence Study



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Background

In North America the use of Peripheral Intravenous Catheters (PIVC) has been reported to be at least 330 million (Alexandrou et al., 2015). While the number is not known outside of the United States, estimates from global device sales have been reported to be approximately 1.2 billion (TechNavio, 2014). While these devices are common place in the hospital setting, they can have serious complications including bloodstream infections (Zingg & Pittet, 2009).

There is very little data available on the management of these catheters from a global perspective (Alexandrou et al., 2015). The One Million Global (OMG) PIVC study was an international prevalence study targeting assessment and management of PIVCs across more than 50 countries.

Objective

The objective of this study was to gather prevalence data on PIVC use globally, to identify those healthcare facilities using best practice, and identify knowledge-practice gaps in PIVC care and management.

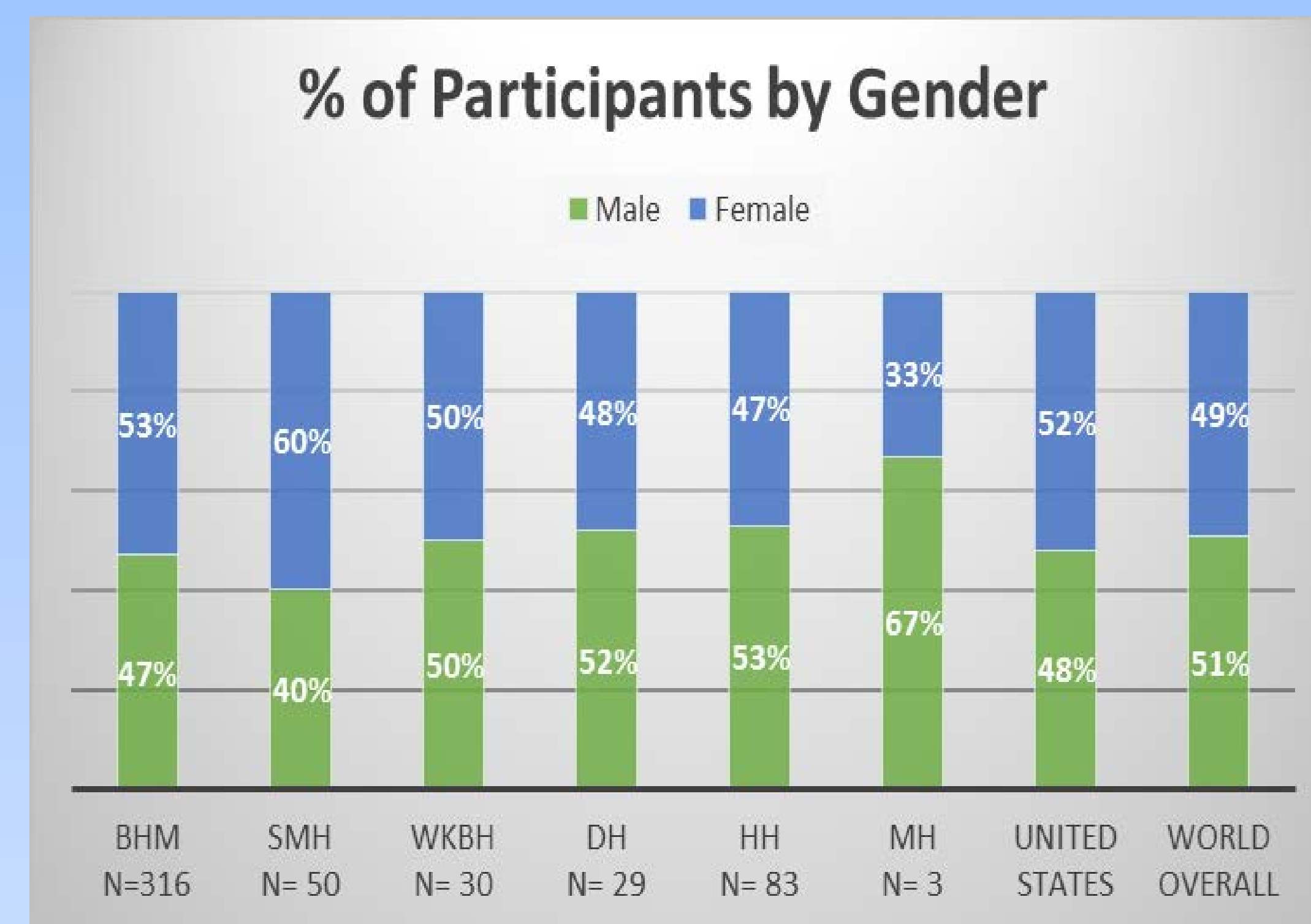
Methods

After IRB approval, a prevalence study was conducted in each of the BHSF hospitals on a designated day. A validated data collection tool was used to collect PIVC data on all adult and pediatric hospitalized patients. All data was de-identified and no physical intervention occurred. The following information was collected:

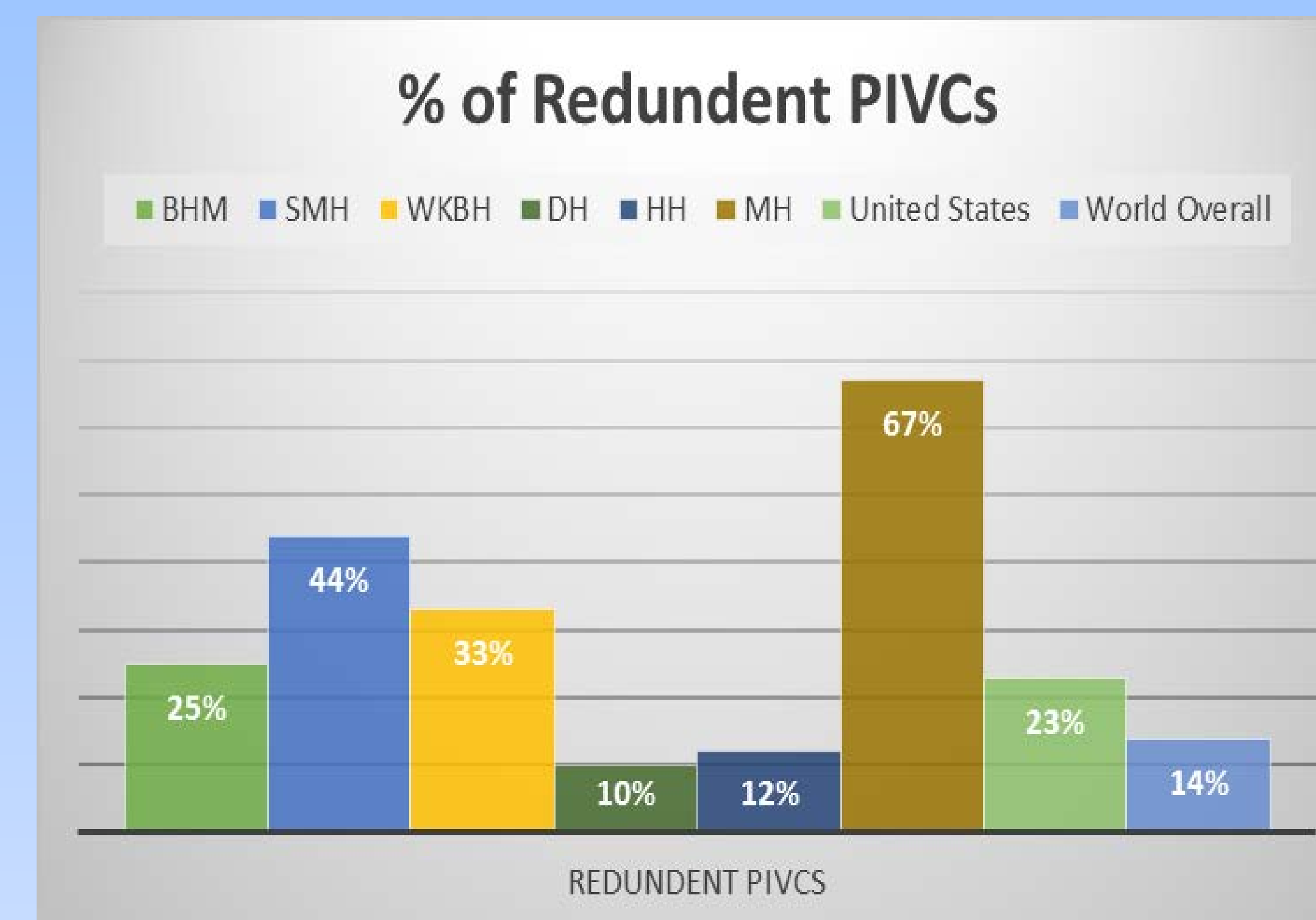
- ❖ Demographic information
- ❖ Number of PIVCs in situ per patient
- ❖ Primary reason for PIVC insertion
- ❖ Type of PIVC
- ❖ Anatomical position
- ❖ State of dressing and securement
- ❖ Type of infusate
- ❖ Number of redundant PIVCs
- ❖ Prevalence of PIVC site phlebitis

A total of 480 patients participated throughout Baptist Health.

Results



Results



Discussion

Key areas of concern identified by the study included: the high percentage of redundant PIVCs left in for no reason; the lack of IV documentation; the number of PIVCs with signs of phlebitis or infiltration; and the number of PIVC dressings that were soiled, loose or lifting, placing the cannula at risk of dislodgement. The reasons for the PIVC insertion were many however, the top two reasons were for IV medications and IV fluids. The forearm site location is considered best practice however, the majority of the PIVCs were inserted in the patient's hand. The most common gauge catheter inserted was #20 ga . Literature recommends the smallest shorter catheter to reduce IV complications.

Conclusion

This international prevalence study was the largest study ever conducted in vascular access, with 418 hospitals in 51 countries participating and data collected on over 40,000 PIVCs.

The results from this world wide study have identified future directions that include:

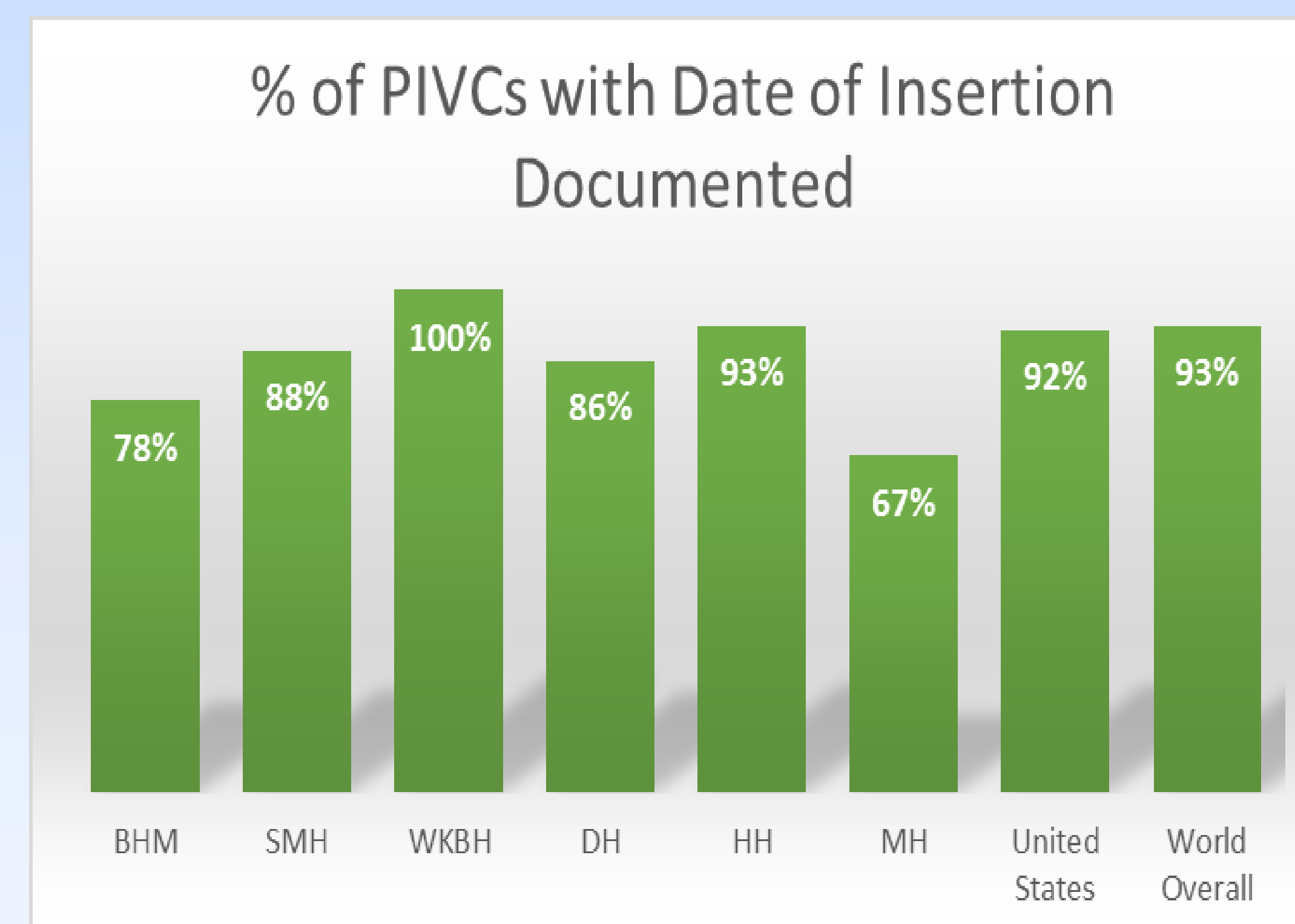
- ❖ Using experts for PIVC insertion
- ❖ Removal of PIVCs that are not being utilized
- ❖ Defining phlebitis
- ❖ Continuing to add data to the existing PIVC database
- ❖ Developing PIVC best practice bundles

In conclusion Helm et al (2015) stated it best, "Meaningful change will require that the concept of the peripheral IV catheter as an expendable and replaceable tool be discarded."

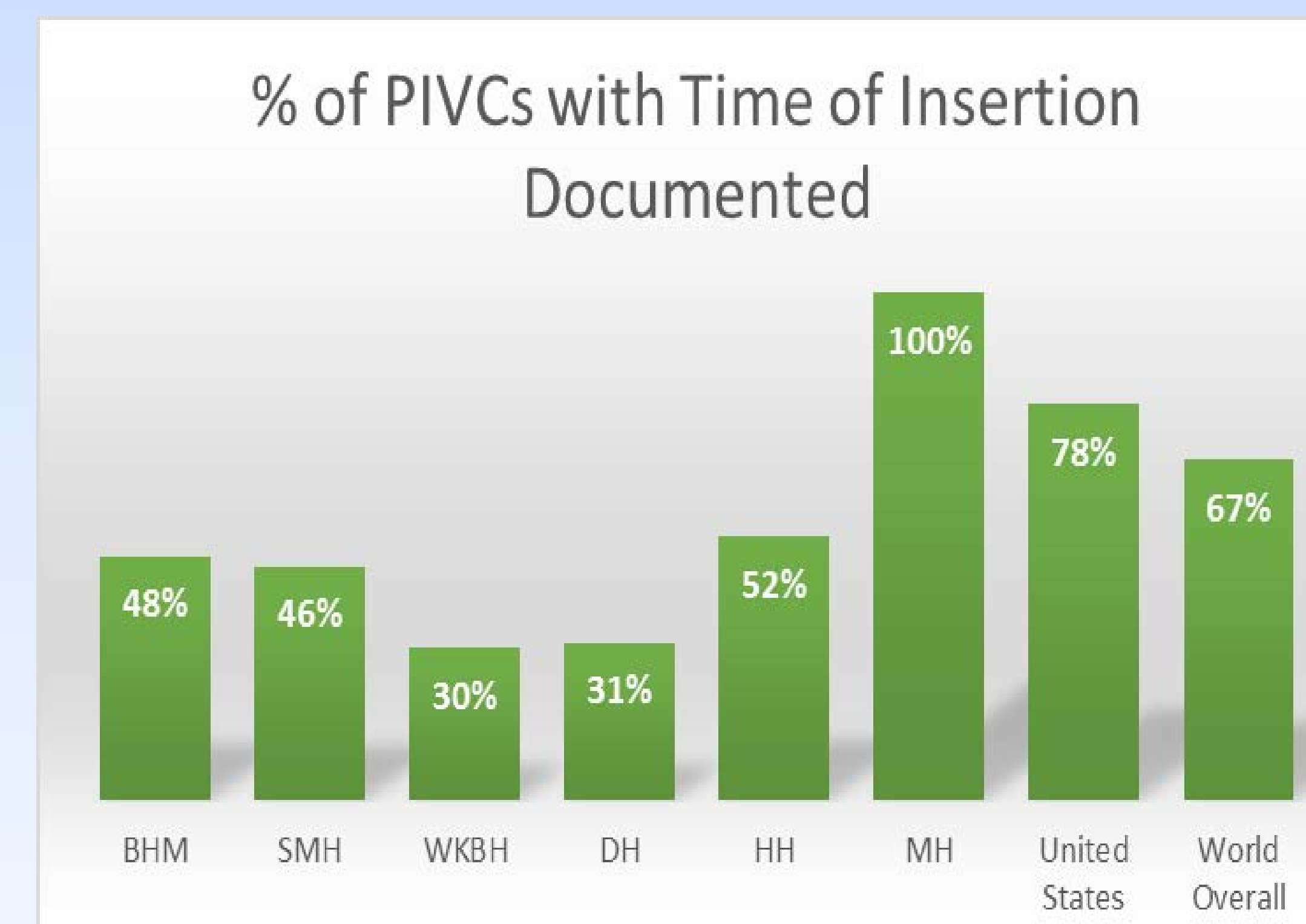
Acknowledgments

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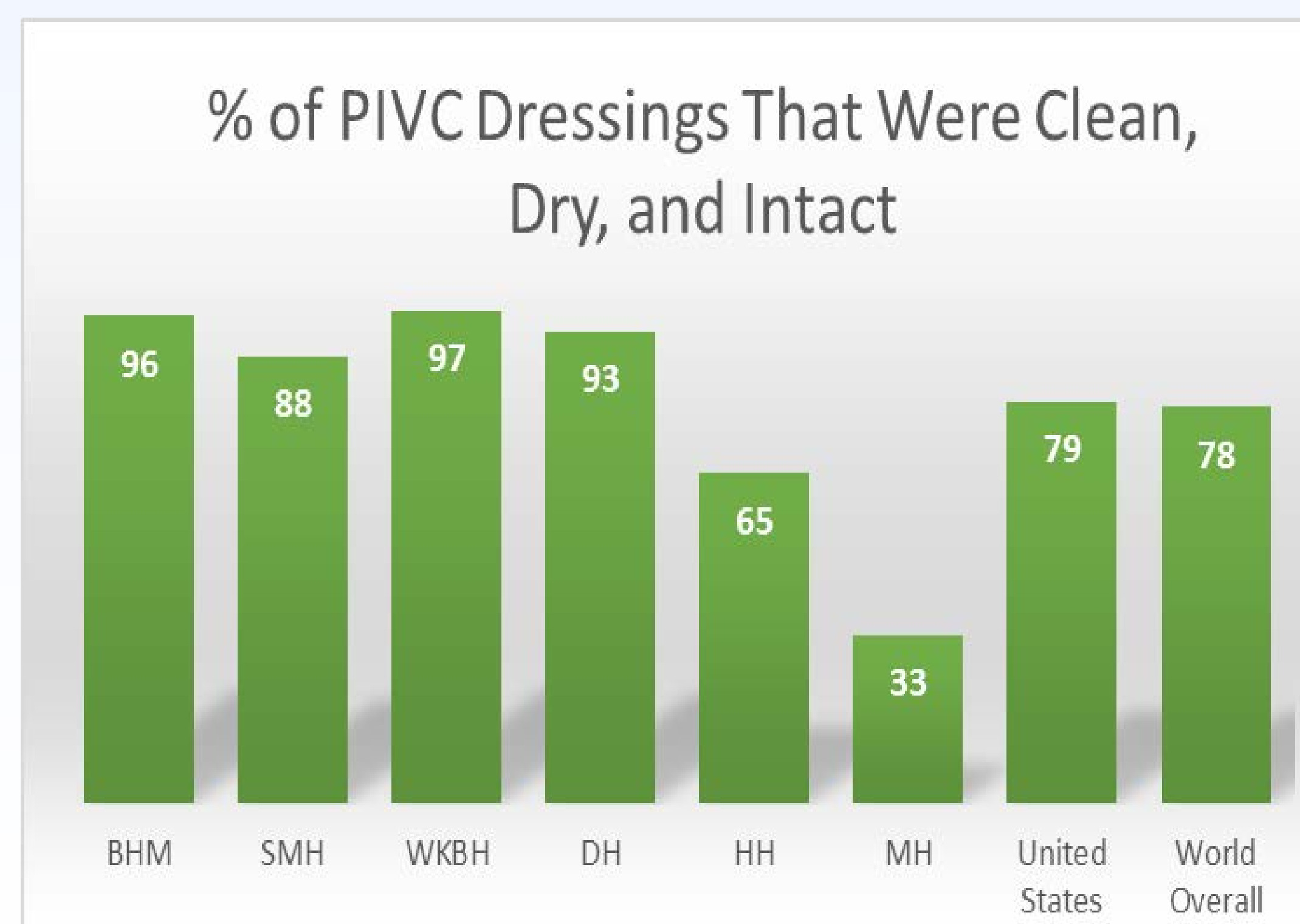
% of PIVCs with Date of Insertion Documented



% of PIVCs with Time of Insertion Documented



% of PIVC Dressings That Were Clean, Dry, and Intact



PIVC Site Assessment

