

# CLINICAL IMPACT OF USING PIVO™ TO MOVE BLOOD DRAWS FROM CVC LINES TO THE PERIPHERY

## THE IMPACT OF REDUCING CENTRAL LINE UTILIZATION FOR BLOOD DRAWS

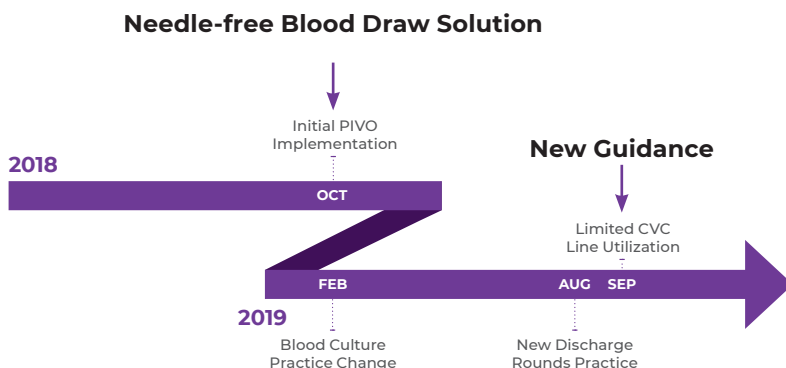
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*Awarded "Best Poster in Practice Innovation/Quality Improvement Initiative"*

### Methodology for PIVO Introduction and Process Change

- Virginia Mason Medical Center recognized a need to limit the risk for central line bloodstream infections (CLABSIs) by reducing CVC utilization for blood draws.
- The PIVO™ needle-free blood draw system was used to move blood draws to the periphery.
- Through a systematic approach adopting four clinical practice changes, this quality improvement initiative sets a new standard for CVC utilization.



### Reduced Rates of Bloodstream Infections and Improved Clinical Quality Following PIVO Implementation

	2018	2019 <sup>2</sup>	IMPROVEMENT
HO-BSI	0.94%	0.34% <sup>3</sup>	64%
CLABSI	5	2	60%
Lab Defects <sup>1</sup> (for nurse inpatient draw)	2.1%	1.4%	36%
Hemolysis (for nurse inpatient draws)	0.7%	0.22%	69%

#### CONSISTENT IMPROVEMENT IN HO-BSI, HEMOLYSIS AND LAB DEFECTS

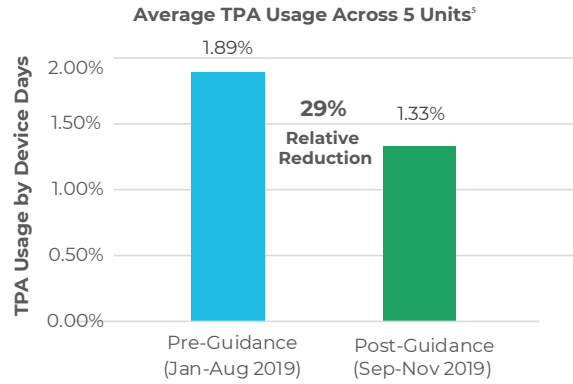
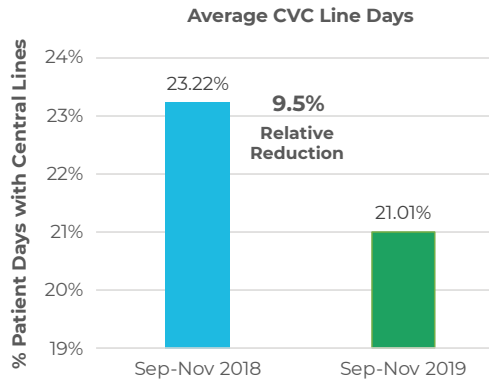
HO-BSI is an invasive infection in an inpatient population that was not present at the time of admission.<sup>4</sup>

#### References

1. Lab defects are defined as samples with insufficient quantity, hemolysis, contamination, or clotted.
2. 2019 data represents data collected from January through November 2019
3. 2019 data represents data collected from January through September 2019
4. Fakih M, Battjes R, Sturm L, et al. Introducing Hospital Onset Bloodstream Infection (HOBSI) as a Tool to Evaluate Infection Prevention: Assessment of 51 US Hospitals. *Open Forum Infect Dis.* 2017;4(Suppl 1):S181-S182.

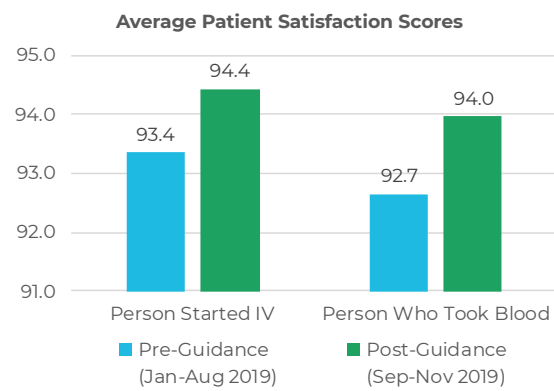
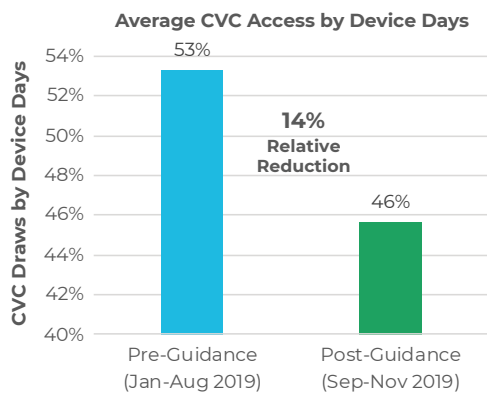


# Improved Clinical Quality Shows Early Indications of Reducing Supply Costs



Review of CVC line days showed a seasonality effect in 2018 & 2019, where rate increased towards end of the year, after accounting for patient volume. Therefore, CVC line days post-guidance were compared to the same time period from the previous year.

## Successful Practice Change Positively Impacts Patient Experience



<sup>5</sup> Units included in this analysis are the same units where the guidance to limit CVC utilization was implemented (L14, L15, L16, L17 and CCU)