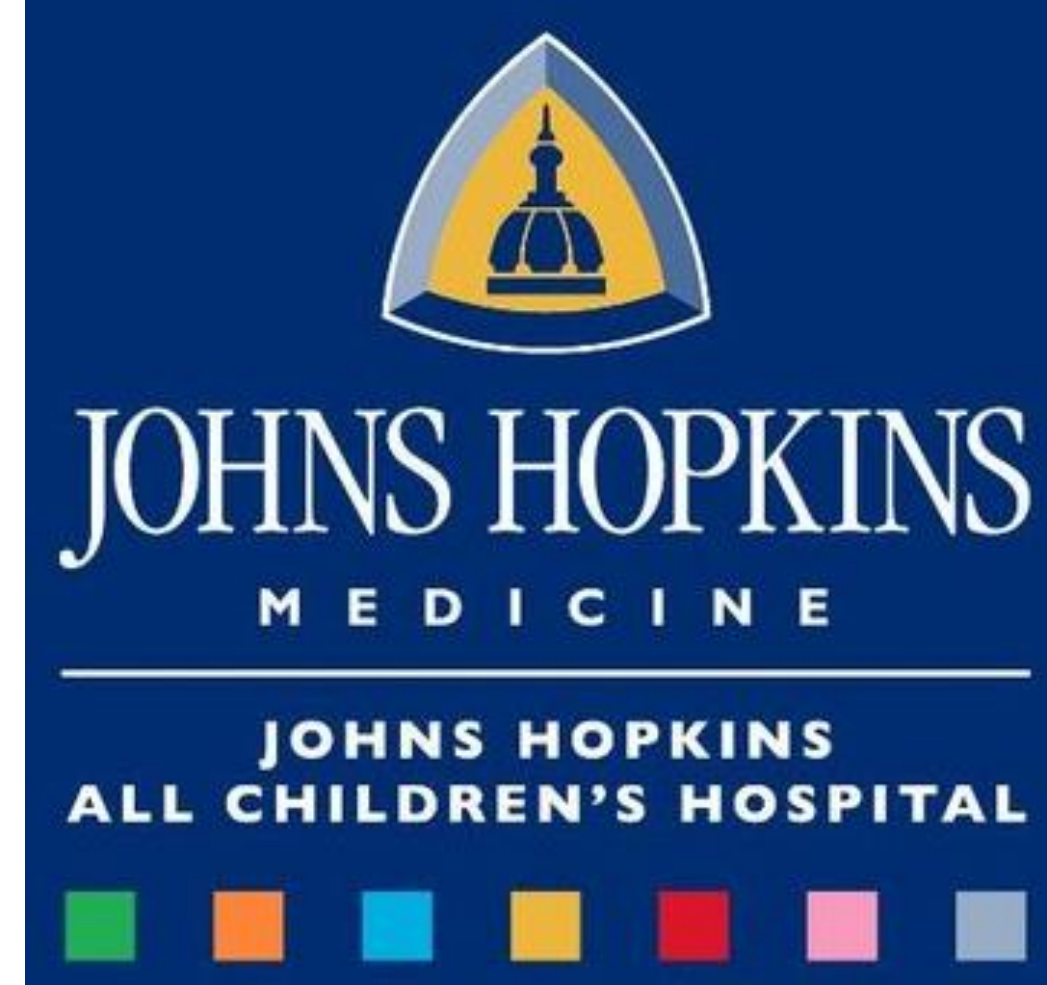


Impacting Patient Outcomes: Standardizing Multidisciplinary Rounds

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Introduction

The multidisciplinary rounding format has been proven to:

- Decrease mortality
- Reduce ventilator days
- Prevent hospital acquired conditions (HAC)
- Improve patient safety by promoting enhanced teamwork and communication

Methods

- QI project, PDSA, aimed to standardize multidisciplinary rounds for all patients admitted to the CVICU from Dec 2021 to Jun 2022 by introducing a rounding tool in script format.
- **Primary aim:** achieve 90% compliance with utilization of rounding tool in its entirety.
- **Secondary aims:** decrease line and overall device days, reduce CLABSI rate, increase average days between reportable harm events, and prevent discharge related readmissions.
- **Process measures:** % of tool utilization, % of closed loop communication utilization, % of time discharge checklist, vascular access, central line days, and other safety (preventable harm) elements were discussed in rounds.
- **Outcome measures:** line and overall device days, CLABSI rate, average days between reportable harm events, and discharge related preventable readmissions.
- **Key balancing measure:** rounding length of time.

Results

A total of 165 pre-intervention patient encounters (Dec 2021-Jan 2022), and 278 post-intervention encounters (Mar-Jun 2022) were included.

- **Pre-intervention process measures:**
 - Rounding script utilization 4% (7/165)
 - Closed loop communication utilized 25% (42/165)
 - Discharge checklist discussed 40% (54/134)
 - Central line days and necessity discussed 33% (31/94)
 - Safety (preventable harm) elements discussed 24% (40/165)
- **Post-intervention process measures:**
 - Rounding script utilization 59% (163/278)
 - Closed loop communication utilized 86% (238/278)
 - Discharge checklist discussed 93% (124/134)
 - Central line days and necessity discussed 80% (144/180)
 - Preventable harm elements discussed 77% (215/278)
- **Outcome measures:**
 - Central line days decreased from a mean of 0.34 to a mean of 0.26.
 - CLABSI rate per 1,000 central line days decreased from 2.70 pre-intervention (Jul-Dec 2021) to 0 post-intervention (Jan-Jun 2022).
 - Average days between reportable harm (unplanned extubations excluded) increased by 60% from 38 to 81 days post-intervention.
 - There were 9 readmissions, none related to discharge.
- **Key balancing measure:**
 - Rounding time averaged 1 hour 29 minutes pre-intervention, and 1 hour and 24 minutes post-intervention.

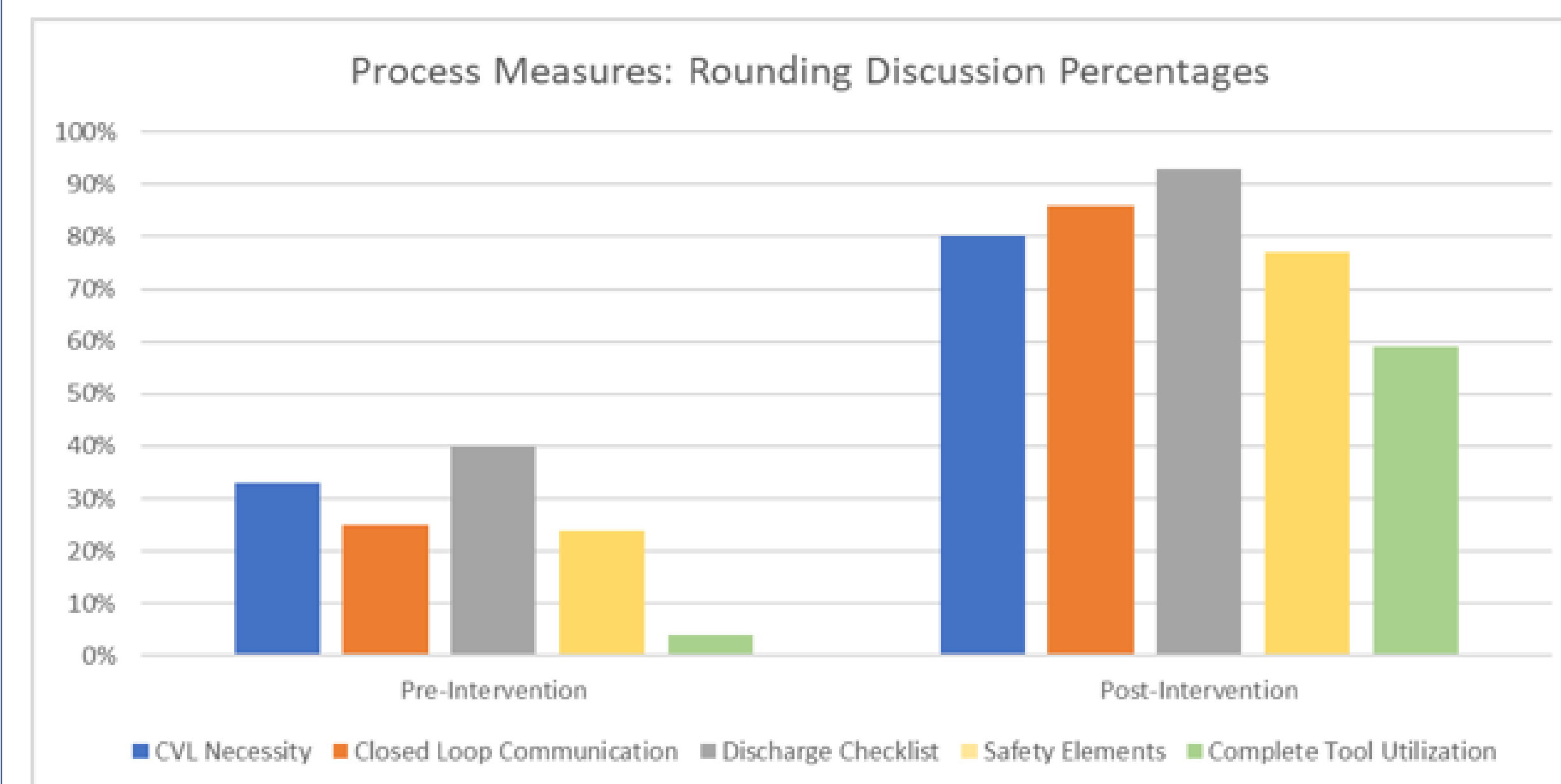


Figure 1. Comparison of rounding tool compliance in the pre- and post-intervention phases.

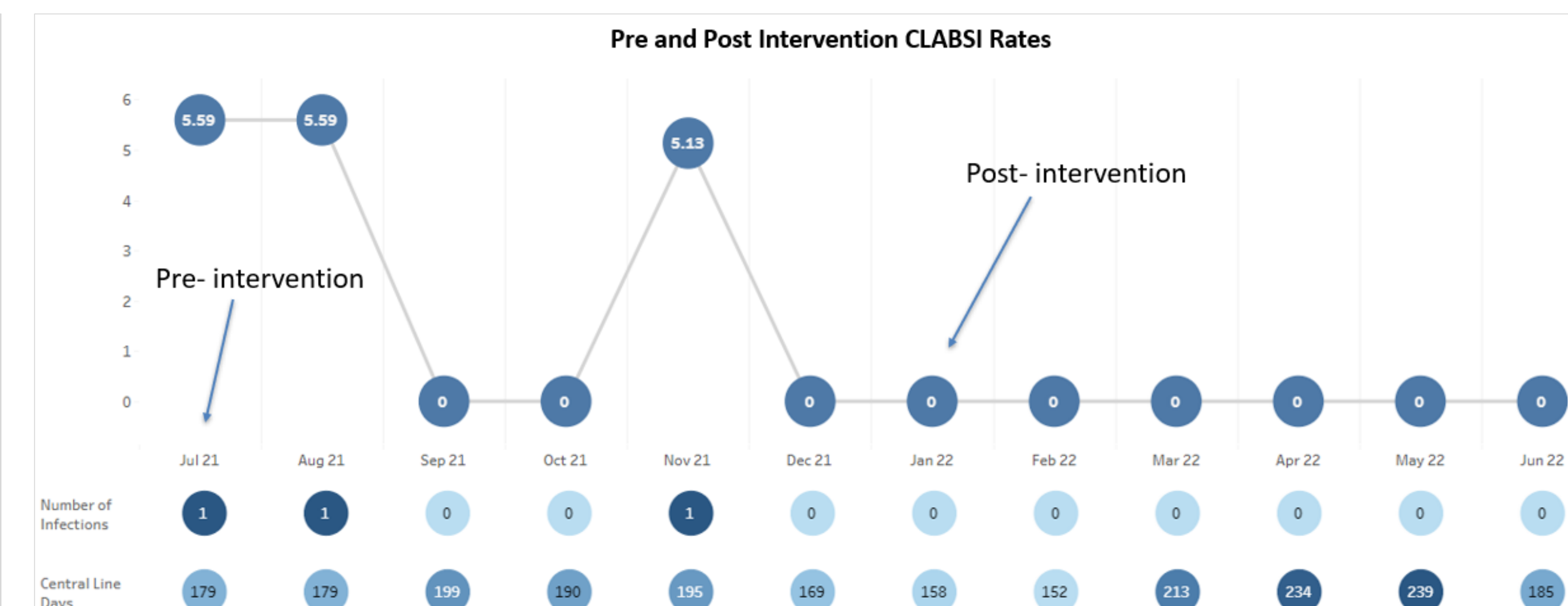


Figure 2. CLABSI rates during the six months leading up to the intervention compared to CLABSI rates during the six months following the intervention.

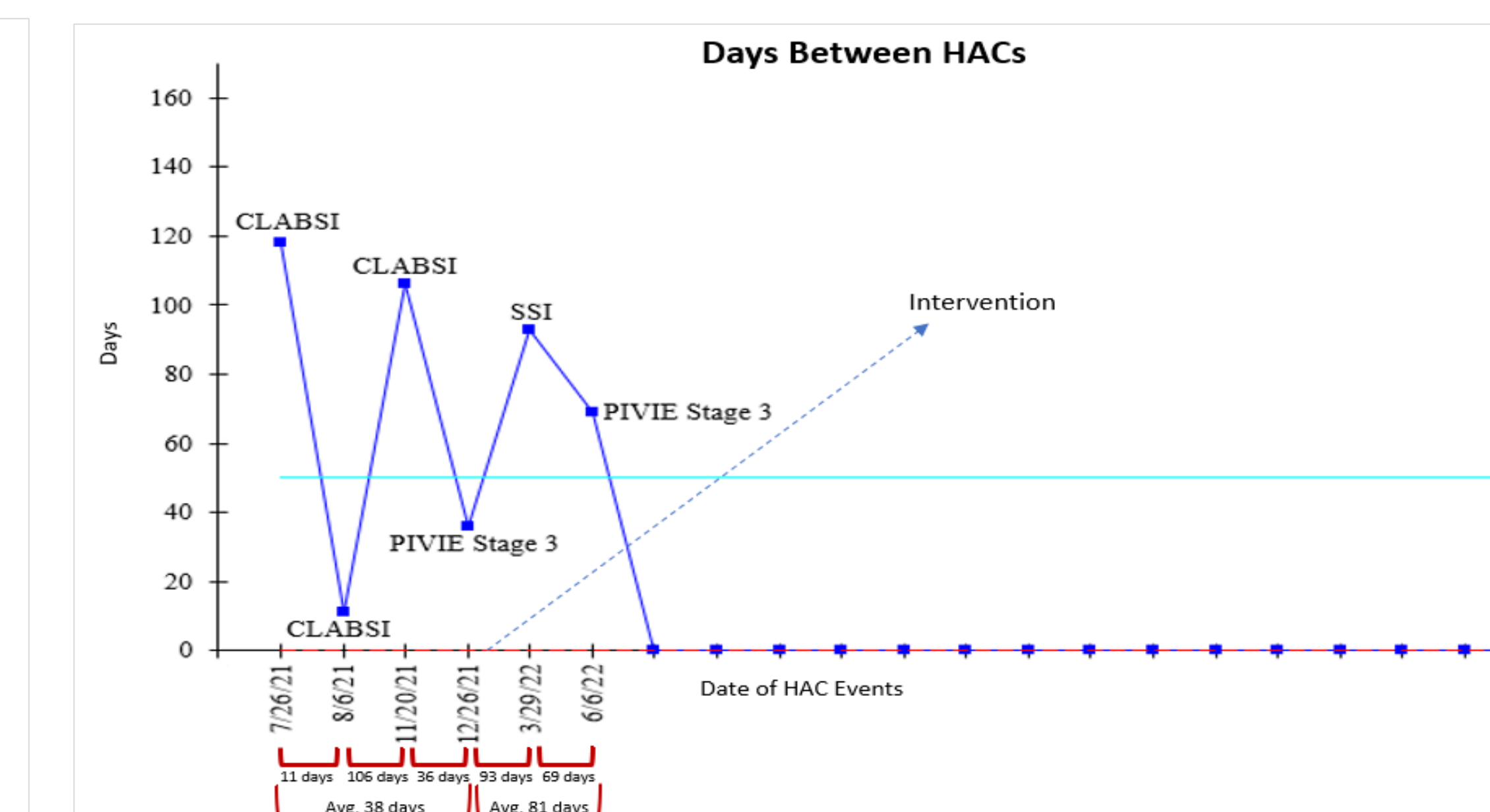


Figure 3. Days between individual HAC events during initial PDSA cycle. Average days between HAC events occurring in the pre- and post-intervention time frame.

Conclusions

Although all the elements on the rounding tool were discussed 59% of the time, we demonstrated the value of standardizing rounds to reach consistency in discussing key safety elements on all patients. By empowering interdisciplinary staff to adopt this as a routine practice, we improved closed loop communication and increased discussions of discharge checklists, central line days and necessity, and preventable harm elements, ultimately impacting line days, CLABSI rates, and incidence of HAC events. Through the implementation of the rounding tool, we were able to efficiently discuss key elements that positively impact patient safety and outcomes without increasing rounding time.