

UMC VAT (Vascular Access Team) Implementation and Benefits



Xenia Dye, BSN, RN, Francisco Santiago BSN, RN, Ian Nato, BSN, RN, Claudia Medesan, BSN, RN, Angelica Chavez BSN, RN, Olivia Cartwright MSN, RN

BACKGROUND

• Overview of issues regarding vascular access

Vascular access is a critical aspect of patient care, particularly for those requiring long-term IV therapy, or frequent blood draws. However, improper placement, device selection, infections, thrombosis, device management and catheter occlusions are some of the more common challenges.

• Current practice

Many healthcare facilities rely on general nursing staff for vascular access, which at times leads to variability in success rates, increase in complications, and resource use.

• Rationale for VAT

Establishing a VAT team has been shown to standardize care, reduce complications, and improve patient outcome by ensuring that highly trained professionals are managing vascular access and selecting the right device for the therapy prescribed.

PURPOSE

1. Primary Objective

The purpose of implementing a VAT is to improve patient outcomes by reducing complications such as infections and line failures, while also increasing efficiency and decreasing substantial healthcare costs (Morrow et al., 2022).

2. Secondary Objectives:

Standardize procedure, enhance skillset, and improve patient satisfaction through quicker, more reliable vascular access placement.

METHODS

1. Team Formation

Select and train nurses with specialized skill in vascular access technique and management.

2. Implementation Strategy

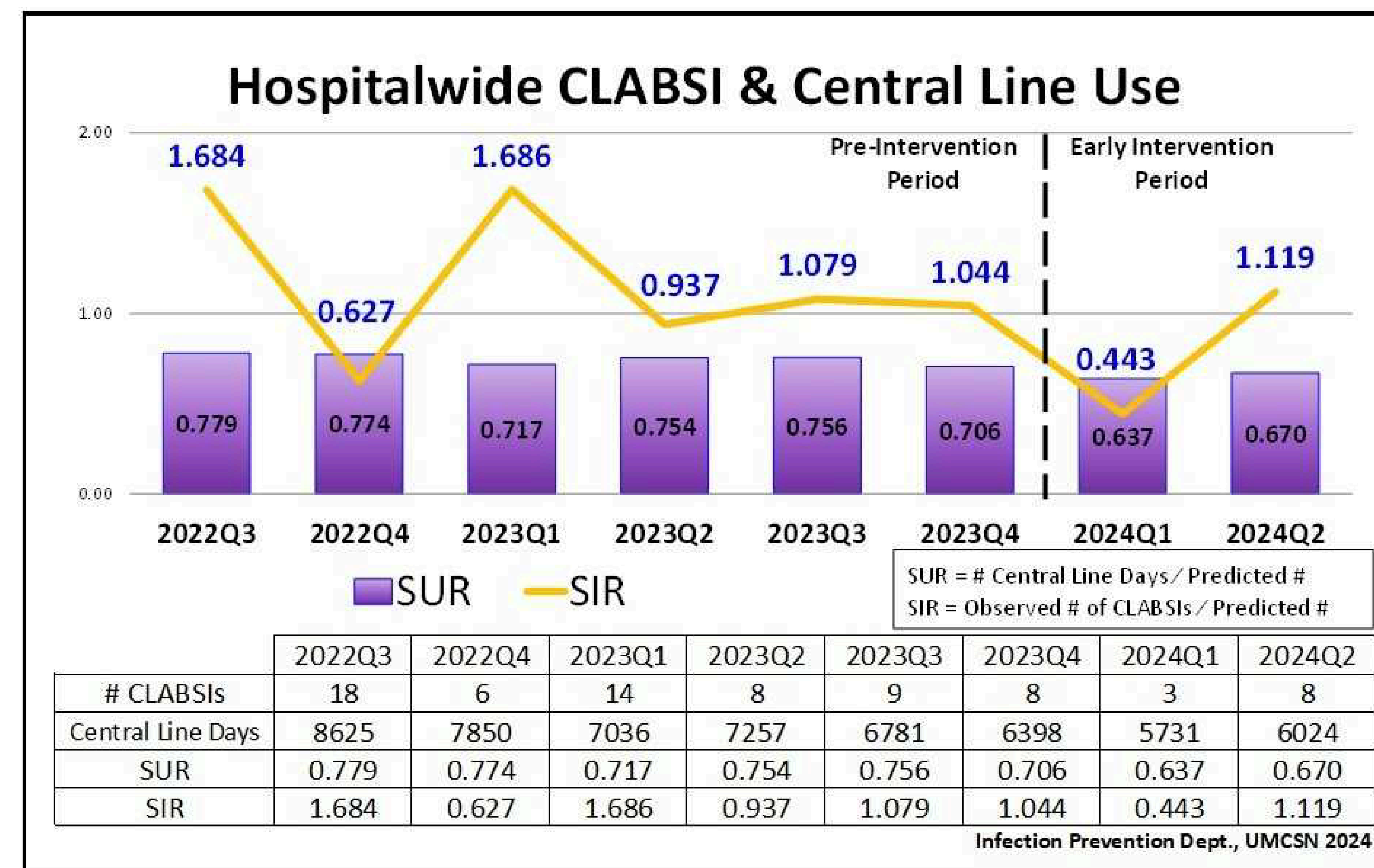
Conduct assessments based on patient's needs, develop and implement standardized protocols and guidelines for vascular access, including insertion, maintenance, and removal procedures; roll out VAT with pilot testing in specific departments, followed by full hospital-wide implementation.

3. Data Collection

Track data such as infection rates, infiltration, patient satisfaction, and cost savings.

PRELIMINARY RESULTS

INFECTION CONTROL DATA ANALYSIS



DEVICE TYPE:

June 2024:

USGPV – 227
PIV- 14

July 2024:

USGPV – 244
PIV - 28

August 2024:

USGPV: 352
PIV: 7

Midline: 12

ACCUCATH: 7

September 2024

USGPV: 200
PIV: 3

MIDLINE: 9

ACCUCATH: 28

VAD SUCCESS RATE:

June 2024

1 attempt: 191
2 attempts: 11

July 2024

1 attempt: 239
2 attempts: 29

August 2024

1 attempt: 358
2 attempts: 18

September 2024:

1 attempt: 233
2 attempts: 9

"Hospital infection preventionists will continue data collection and synthesis using standard surveillance definitions from the National Healthcare Safety Network (NHSN) Patient safety Component Manual (2024) and analyze changes in standardized infection ratios (SIRs) and Standardized utilization ratios (SURs) to determine the clinical significance of the intervention.

Measures to be monitored will adhere to NHSN definitions and include central line associated bloodstream infections (CLABSIs) and usage of central line devices."

-Data analysis and contribution for this poster provided by Skip G. Katipunan BSN, RN Infection Preventionist - Epidemiology

CONCLUSIONS

- ❖ Implementation of VAT is showing promise in improving patient outcomes, staff efficiency, and reducing healthcare costs.
- ❖ Continued monitoring and data collection will help refine VAT's protocols and expand role in the healthcare facility.
- ❖ Based on preliminary results, it is recommended that the VAT be fully integrated into the healthcare system, with ongoing training and support to sustain its success (Quinn et al., 2023).



REFERENCES

- Morrow, S., DeBoer, E., Potter, C., Gala, S., & Alsbrooks, K. (2022). Vascular access teams: a global outlook on challenges, benefits, opportunities, and future perspectives. *British Journal of Nursing*, 31(14), S26–S35. <https://doi.org/10.12968/bjon.2022.31.14.s26>
- Quinn, M., Horowitz, J. K., Krein, S. L., Gaston, A., Ullman, A., & Chopra, V. (2023). The role of hospital-based vascular access teams and implications for patient safety: A multi-methods study. *Journal of Hospital Medicine*, 19(1), 13–23. <https://doi.org/10.1002/jhm.13253>

