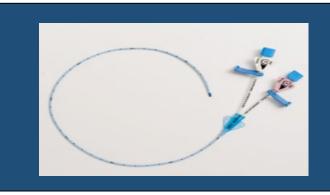


# How the VACT PACU Nurses Led a Sustainable PICC Program: A Success Story October 2011- Present



Presented by: The VHA CT Healthcare System PACU-PICC Team

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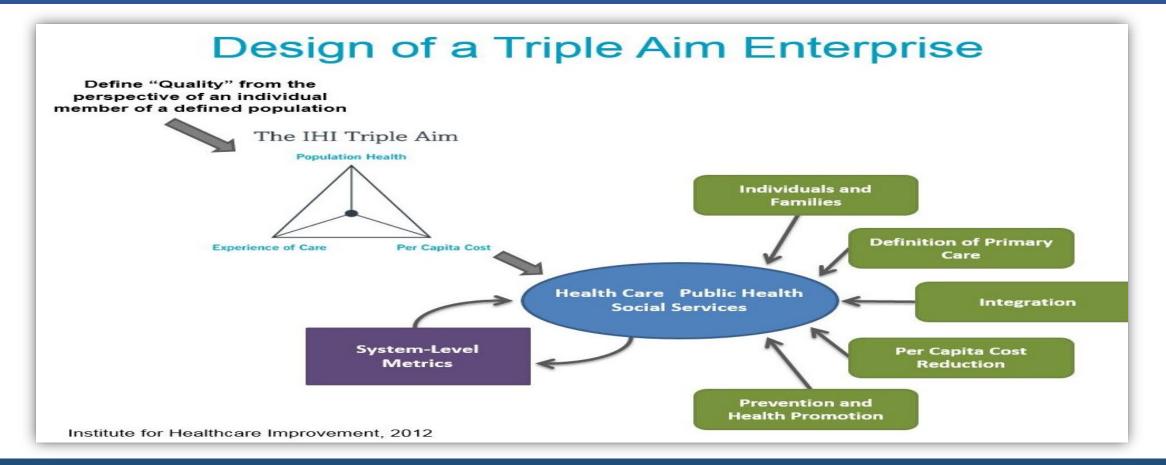
#### Background

The VACT PACU Nursing PICC Team is a nurse-led initiative established after identifying the need to decrease the wait times for PICC line insertions and decrease in-patient's length of stay. To improve the Veteran patients' satisfaction and flow, the PACU nurses utilized the units down times to place PICC lines for Veteran whose discharge was dependent on the PICC line placement.

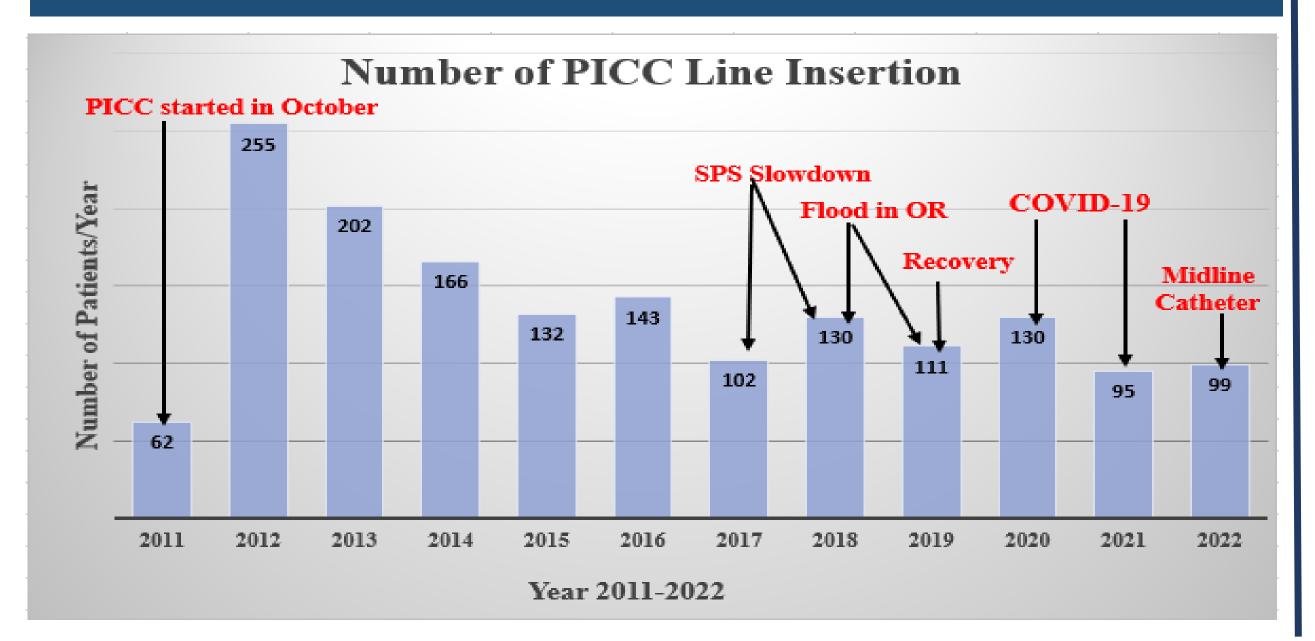
Before 2011, the patient's average wait time from consult to PICC insertion was 3.2 days. The average wait time several years after the program's inception decreased to 0.5 days. It is safe to say that the inpatient length of stay was favorably impacted by this new process by reducing the wait time for PICC line insertion and freeing inpatient beds more quickly. Consequently, the creation of the PICC team resulted in significant cost savings since the first PICC line insertion in the PACU on October 11, 2011.

Over the years, the PICC program continues to grow significantly as evidenced by the increased number of Veteran patients served (n= 1,627 from 2011-2022); the Veteran's positive experience related not only to decrease length of stay but the expertise each PACU nurses offer. The PACU nurses provided educational teaching for the patients to mange their access effectively and safely. The most significant benefit is the continued cost savings for the VACT facility. Without accounting for inflation, the PICC program generated approximately \$4Million return of investment cumulatively.

#### Framework for Delivery of Care: IHI Triple Aim®



### Measure PICC Line Insertion from October 2011-Present



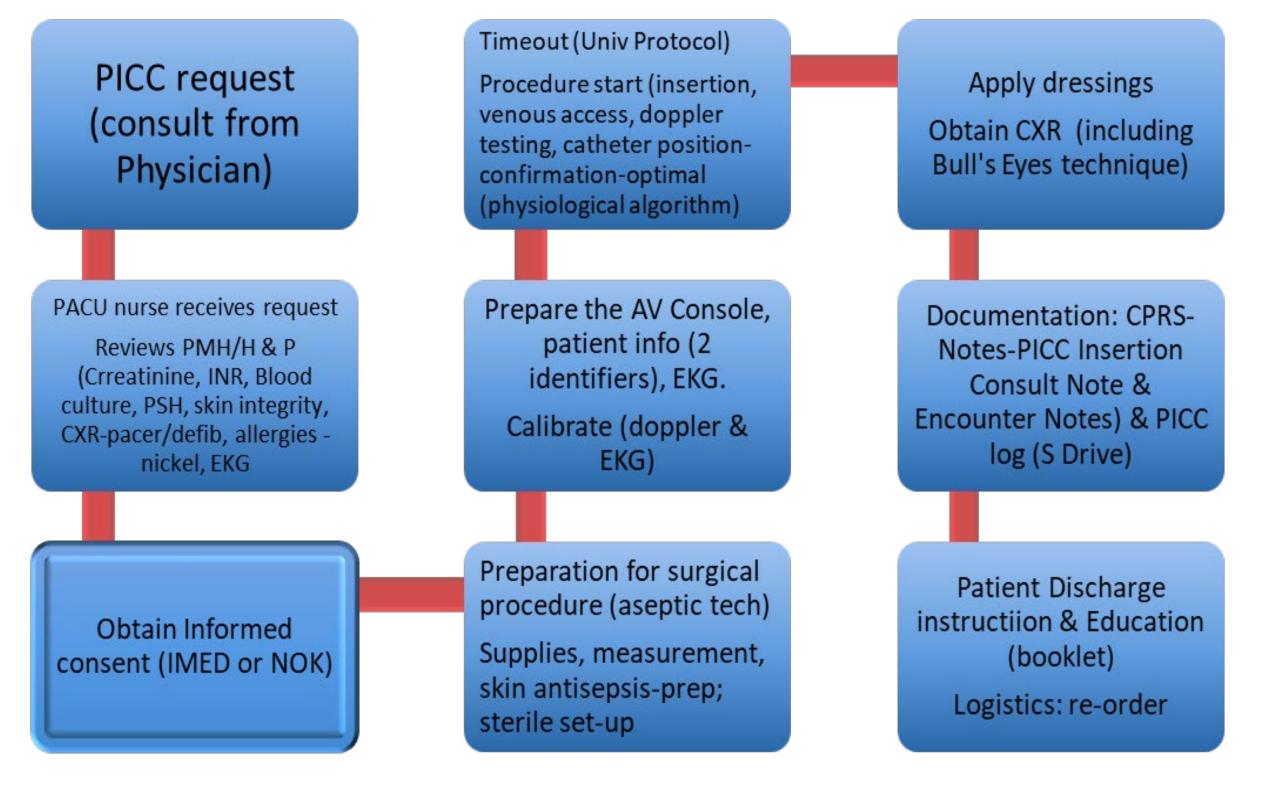
## Pursuing Changes in Veterans Access, Length of Stay, Wait Times, and Cost: the First 10 Years

The PICC team was established in October 2011 with a team of three trained PACU nurses. The Associate Chief of Surgery, Interventional Radiologist (IR), Nurse Manager, and Infection Prevention Team were the major stakeholders who supported the inception for this program.

Initial training began by using a system-approach for ultrasound guidance, positioning, and confirmation of PICCs location accompanied by didactic, simulation, and clinical application. Using the Infusion Nursing Society Standard® and scope of practice, intensive training, competency validation, and repetition of skill through simulation and actual performance were integrated. The curriculum also includes the number of procedures with success rates using the ultrasound guidance, self learning assessment, peer-assisted learning, and feedback from the preceptors and instructors.

The PICC curriculum requires a detailed knowledge of anatomy and physiology of peripheral vascular access and expertise in use of technology and interpretation, anomalies, and the correct placement measurement of the catheter (catheter to vessel ratio). Each RN is required to complete a minimum of 10 successful insertion per year and annual competency validation on principles of aseptic technique, surgical hand scrub (waterless), sterile gowning and gloving, creating sterile field and opening and dispensing sterile supplies. This is all part of the curriculum and continues to promote positive patient outcomes and Veteran experience.

### Process Map for PICC Insertion



### Implication to Patient's Outcome

Organizations and communities that achieve the IHI Triple Aim® drive a healthier population when the care providers have a better grasp on understanding patient's problems and expect less complex and coordinated care as the burden of illness decreases. Both individual and societal changes were needed as we ventured to the next century (www.ihi.org).

In VACT, the PICC team achieves the triple aim framework and continues to expand the program through succession planning and fulfilling the VA mission by tracking changes such as:

- Eliminates delay in treatment
- Decrease length of stay (LOS)
- Decrease Cost (X-ray, Rad Tech workload, RN versus Proceduralist, reduced procedure time,
- Patient Experience & Satisfaction Optimized In 2011, the overhead cost for a PICC line placement in Interventional Radiology (IR) was calculated to be \$3,000. The same PICC line inserted by the PACU nurses had an estimated overhead cost of \$300, a savings of \$2,700 per patient. Total savings was \$1,620,000 (with 600 patients at \$2,700 per patient). In addition, inserting PICC lines in the PACU has opened a total of 600 appointment hours in IR for other procedures and reducing their waitlist too improve access. This strategy continues to be sustainable.

### Implication to Nursing Practice

On September 23, 2015, the PACU-PICC Team was awarded the VISN 1 Clinical Service Line Award (both Silver and Gold) and has continued to provide Veteran patients the opportunity to receive safe and quality care promptly.

Today, the program that started in 2011 brought many benefits to the Veteran population in CT, namely structured patient flow, decreased procedure wait times, timely discharge, and medication administration in a timely fashion.

The PICC program at the VACT is one of the first sustainable initiatives in VISN 1. The program continues to produce a positive impact on the Veterans' quality care, create better use of valuable healthcare human and fiscal resource utilization, improve the standard of care related to patient's experience, access, and safety. All of these factors contribute to improving the healthcare population for our Veterans.

The value of patient education in managing PICC access brings an optimal outcome and overall Veteran satisfaction and experience and mitigates risk.