



Understanding Use of Peripherally Inserted Central Catheters (PICCs) in VHA

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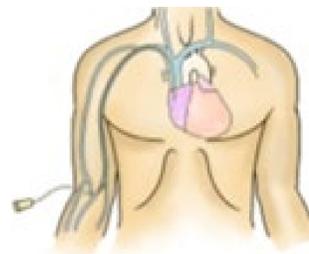
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BACKGROUND & OBJECTIVE

- Peripherally inserted central catheters (PICCs) are used to deliver medications, such as antibiotics.



Peripherally Inserted Central Catheter (PICC)

- Little is known about their use in the Veterans Health Administration (VHA).

- This study focuses on PICC use, care, and management to inform interventions and enhance patient safety.

METHODS

Study Design

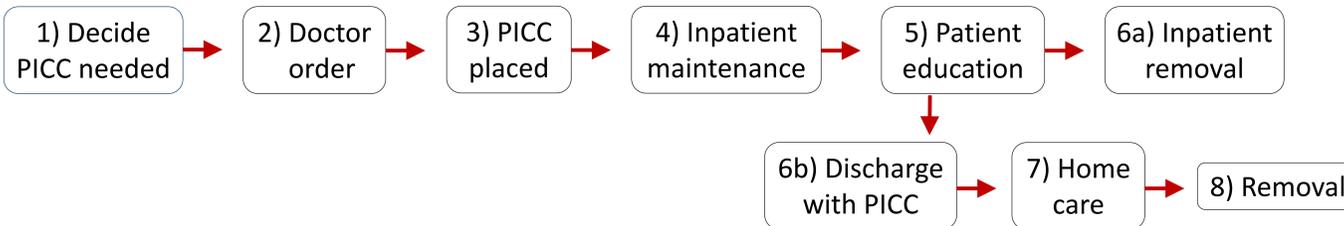
- We interviewed 23 doctors and 33 nurses at 5 VHA medical centers between July 2018 and January 2019.
- We asked how they decide a patient needs a PICC and how they care for patients with PICCs at their VHA site.

Data Analysis

- Interviews were summarized to identify when, how, and by whom PICCs are ordered, placed, and maintained.
- Individual summaries were grouped by site and used to create site process maps.

PROCESS MAPPING

We used interview data to identify steps of the PICC process (below) and how these steps were accomplished at each site.



RESULTS

Site 1

PICCs placed by interventional radiology (IR) & ICU Vascular Access Team (VAT)

- Staff Knowledge: Gaps in knowledge of site PICC processes; potential gap in ICU understanding of appropriate PICC use
- Decision Process: unclear ICU VAT & IR criteria
- Maintenance: IV team nurses perform care (inpatient and ICU)
- Patient Education: No education materials

Site 2

PICCs placed by interventional radiology (IR)

- Staff Knowledge: Gaps in knowledge of appropriate PICC use; disagreement among staff regarding who screens, educates patient
- Decision Process: No formal criteria; provider decision
- Maintenance: Bedside nurses perform care
- Patient Education: Printed education sheet

Site 3

Patients referred out for PICC placement

- Staff Knowledge: Gaps in knowledge of appropriate PICC use; disagreement regarding who performs removal
- Decision Process: No formal criteria or decision aids
- Maintenance: Bedside RNs perform care
- Patient Education: No education materials

Site 4

PICCs placed by Vascular Access Team (VAT)

- Staff Knowledge: Limited understanding of VAT role, who cares for PICCs; incomplete knowledge of risks associated with PICCs, available alternatives
- Decision Process: VAT use specific criteria
- Maintenance: VAT check daily, 7 day dressing change; bedside nurses as needed
- Patient Education: Contracted video, patient and family education sheet

Site 5

PICCs placed by Vascular Access Team (VAT)

- Staff Knowledge: Lack of clarity regarding site protocol and PICC processes; limited knowledge of PICC criteria
- Decision Process: VAT use specific criteria
- Maintenance: VAT perform inpatient care; unit nurses care for ICU/PCU PICCs
- Patient Education: Materials developed by VAT

CONCLUSIONS

- We found that the processes used to decide a PICC is needed and how to care for patients with PICCs varies across sites.
- We identified gaps in understanding appropriate PICC use and current site practices.
- Reasons for choosing a PICC are not always based on clear criteria, resulting in PICCs placed for different reasons between sites.
- Staff responsible for PICC care and maintenance differs across sites.
- The content of patient education and staff responsible for teaching differs both across and within sites.

FUTURE DIRECTIONS

Several opportunities for improving PICC use and care were identified. We are now identifying strategies to enhance PICC care and safety in VHA.

Please contact lauren.weston@va.gov for more information about this study

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