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# Improving Knowledge of PICC Line Maintenance

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# BACKGROUND

The unit 4KS has had 2 CLABSI infections in the past two years. The 4KS unit had an audit which showed that there was inconsistent practice in the care of central lines. These inconsistent practice may be a reason that the PICC team began with a pilot on 4KS that included PICC maintenance by the PICC nurses.

# PICO QUESTION

Population: Registered Nurses

Intervention: Education of PICC dressing care and

maintenance

Control: compared to no education

Outcome: Increase Nurse's knowledge of PICC care and

maintenance

### EVIDENCE

- "Infections associated with intravascular catheters account for 10% to 20% of all nosocomial infections" (Labeu et al, 2008)
- "A focused, educational intervention among nurses and physicians...resulted in sustained reduction in the incidence of catheter-associated bloodstream infection" (Warren et al, 2003)
- "To optimize knowledge of CLABSIs educational curricula and continuing refresher education programs should include CLABSI-prevention guidelines" (Humphrey, J, 2015)

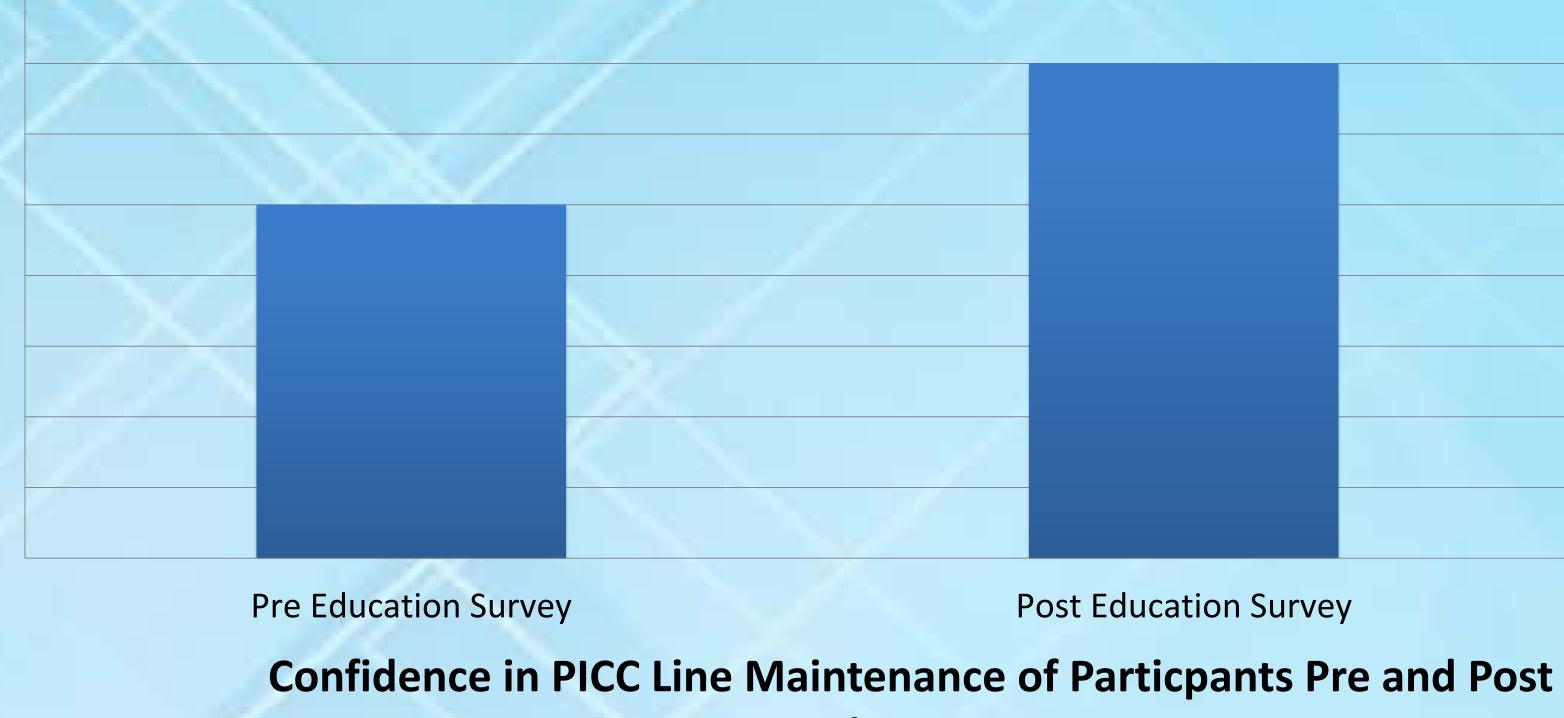
### METHODS

- A knowledge assessment presurvey was administered to staff on both 4KS and Transitional Skilled Unit in order to assess basic knowledge of PICC line maintenance and to measure the overall confidence level of maintaining the PICC according to LVHN policy. 13 surveys were completed.
- An educational handout was developed and distributed to registered nurses on each unit
- A knowledge assessment postsurvey was administered to staff on both 4KS and Transitional Skilled Unit in order to assess knowledge after the education. 7 surveys were completed. The distribution of the pre and post-survey took place over a 3 month time period.

### RESULTS

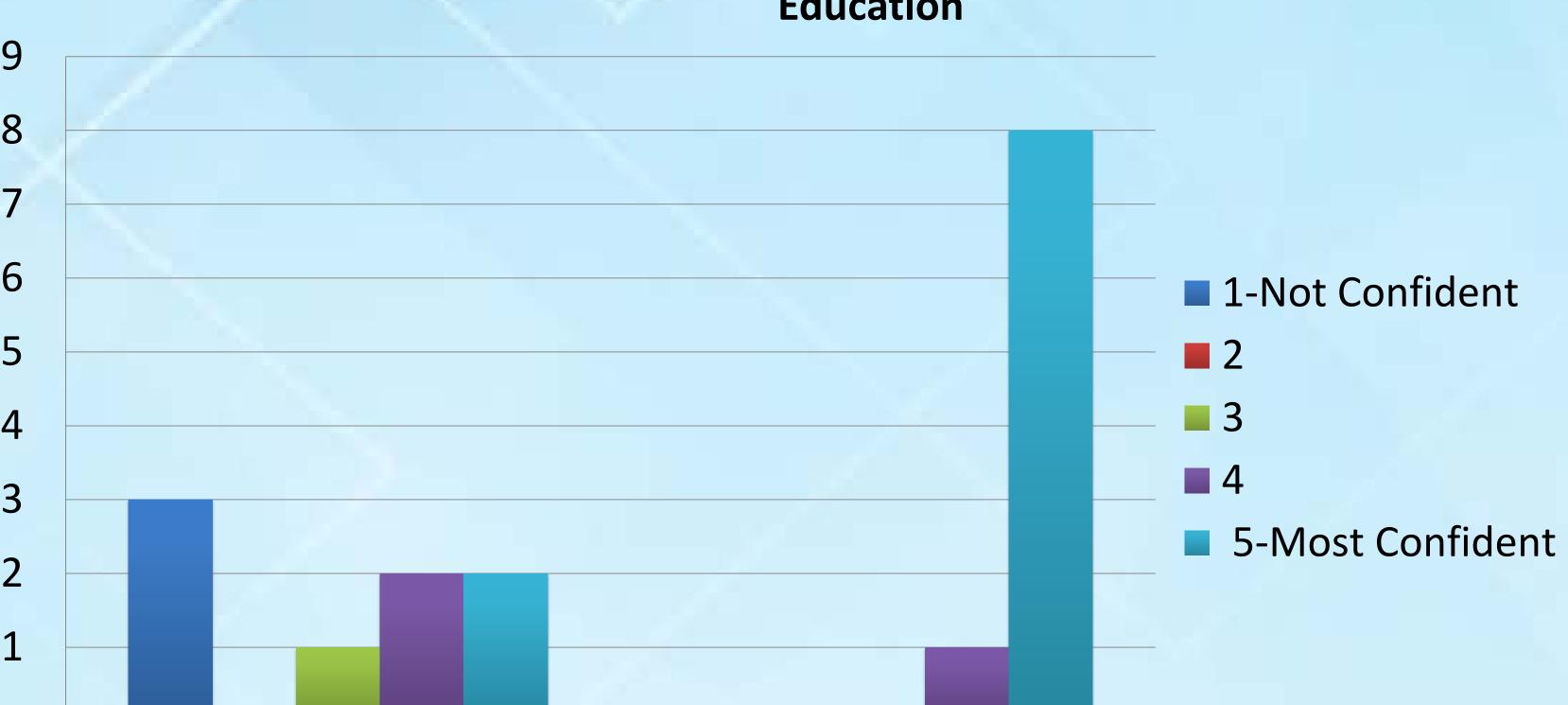
- Pre-survey showed that there was a lack of knowledge regarding the policy on PICC Line maintenance.
- After education was provided, the post survey results showed that there was an improvement in PICC line maintenance knowledge and overall confidence in PICC line maintenance increased.

**Average Scores of Participants on Pre and Post Survey** 8 piece survey consisiting of questions about PICC Line Maintenance



Education

Post Education



Pre Education

# OUTCOMES

- Based on the pre and post education surveys there was a measurable improvement in knowledge on PICC line maintenance.
- RN's also rated themselves higher on the confidence scale on the post survey after a refresher of the policy was provided.

## CONCLUSIONS

- In conclusion, the staff had an improvement in knowledge.
- One influence in our project was that the PICC team began taking care of 4KS for all their PICC maintenance and dressing changes.
- In addition, all staff were educated at our annual education day related to central line care.
- With this boost of knowledge and confidence RN's have the ability to provide competent care to their patients with PICC lines with an overall goal of keeping infection rates down.

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