

# Asking BEFORE Accessing: Increasing Patient Safety While Decreasing Central Line Utilization

## CHI Health Lakeside Hospital Omaha, NE



### Background

- CHI Health Lakeside: 157 bed acute care hospital located in the Omaha Metro.
- Despite no change in nursing practice, a dramatic rise in Central Line Associated Blood Stream Infections (CLABSI) was noticed and reviewed in early 2016.
- FY2016 CLABSI SIR: 2.55, SUR: 1.54 (Figure 3)
- CLABSI task force was formed by staff active in quality improvement and shared governance.
- Research, literature reviews and point prevalence studies were completed to look for themes. The taskforce developed strict standards for central line care and a strong stance as to when they are appropriate for use. Mapping out the various issues that could easily lead to infection (Figure 1).

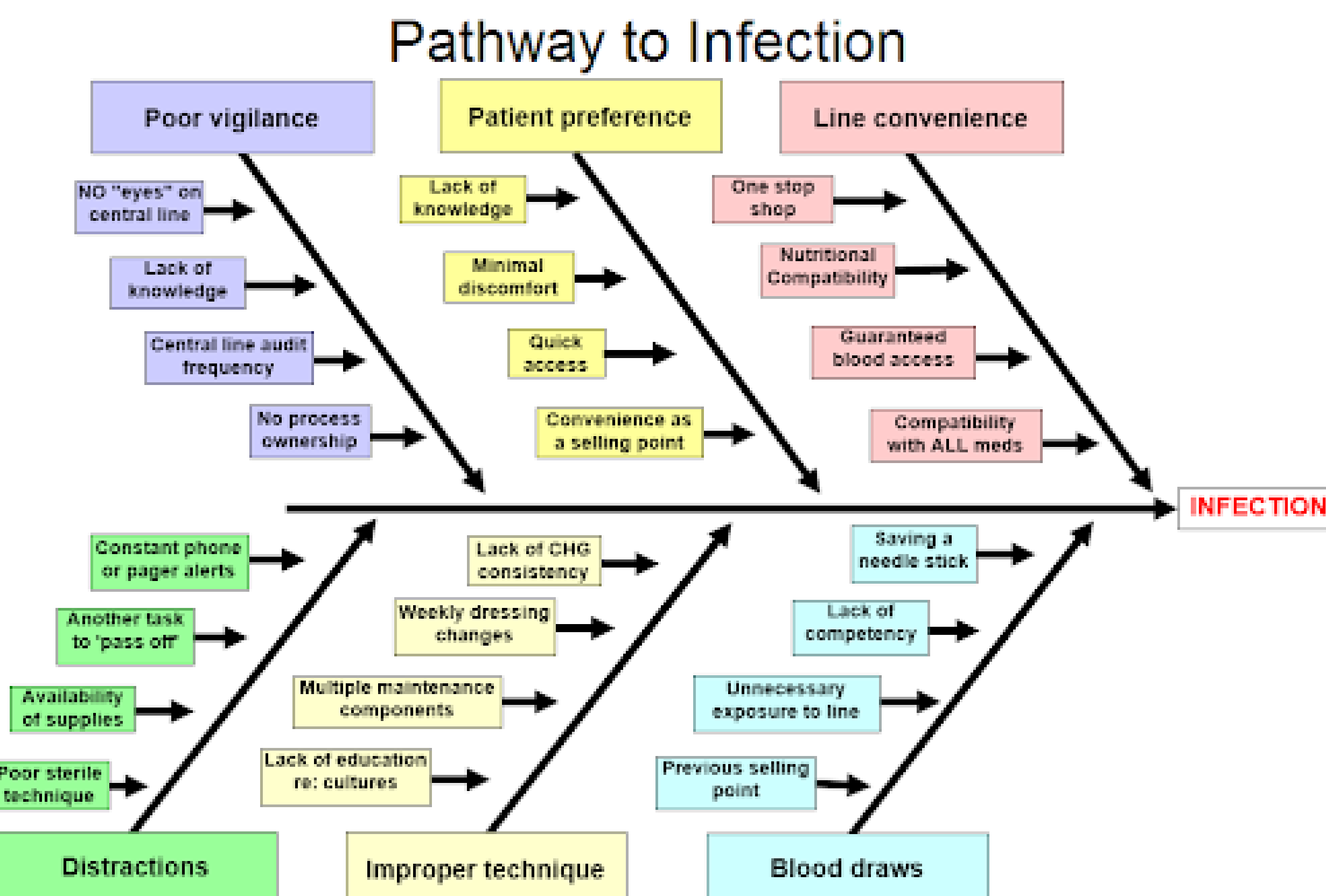


Figure 1

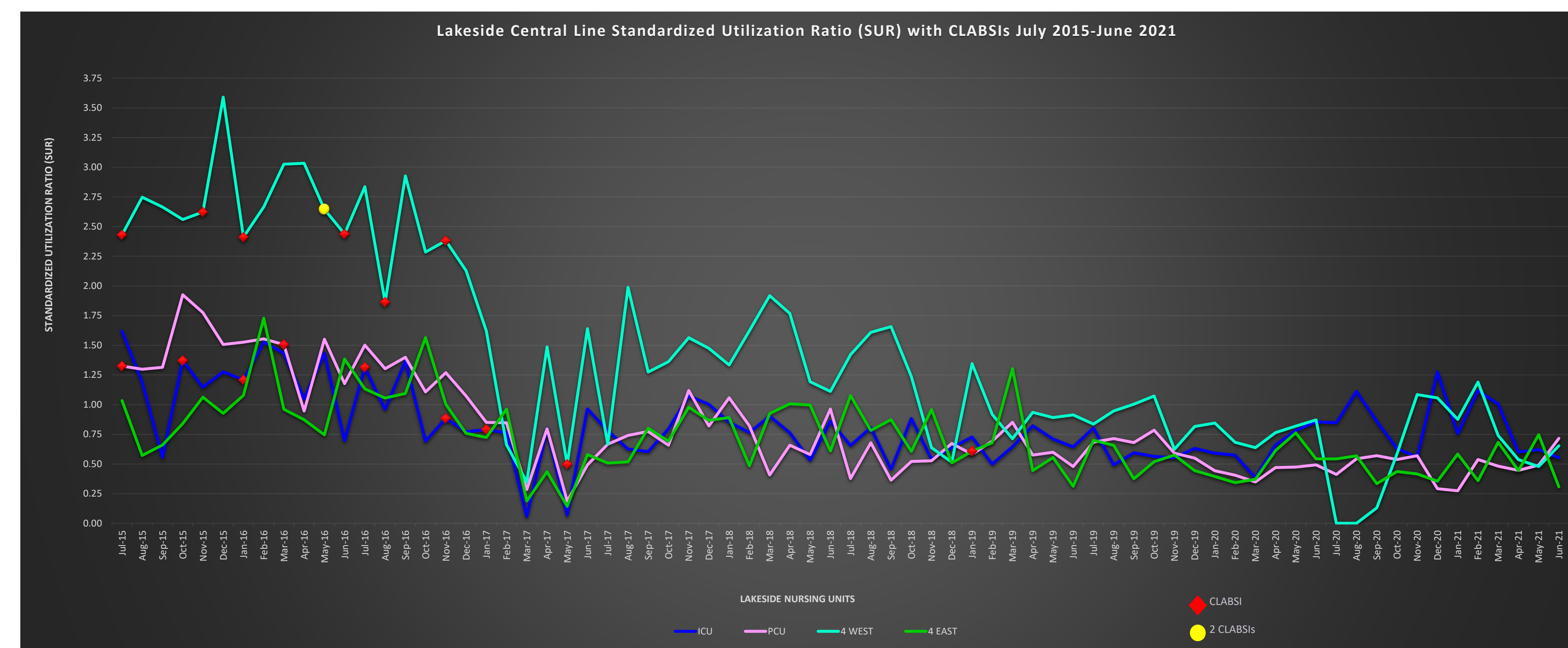
### Aims

- Reduce central line infections and device utilization rates.

### Plan

- Monitoring – audits/questioning the need for central lines became a daily piece of interdisciplinary care rounds, as did central line dressing checks
- Algorithm created to guide staff to appropriate central line usage (Figure 4).
- Staff collaborated with Radiology and the ED to ensure all patients received same message regarding access/use of central lines.
- Nursing partnered with Lab: peripheral blood draws = norm, limiting use of central lines for blood draws. Two vein viewers purchased to aid peripheral IV starts.
- Questioning central lines: Is the reason for line appropriate? Can the line be removed?
- Infection prevention rounded daily to reinforce practices and answer questions.
- Staff scripted cares to CHG treatment rather than CHG bath to emphasize importance.
- Education given to patients regarding the importance of CHG treatments, reinforced by Hospital Medicine Physicians during rounding
- Staff required to attend mandatory annual skills day. Stations offered a variety of topics, including central line care. Staff educated on proper technique, educational checklists, perform a return demonstration and instructed on policy and procedures.

Figure 2



### Measure

- Measures included: Audit Findings (completed percentages of individual components), Standardized Utilization Ratio (SUR), Standardized Infection Ratio (SIR), Days since infection

### Results

- As of July 2021, Lakeside is over 900 days CLABSI free, and over 1500 days with only 1 CLABSI. (Figure 2)
- Annual mandatory skills days
- Daily uniformed audits performed on Central Lines hospital-wide, with daily questioning of line necessity.
- 100% administrative support. (Figure 3)

Fiscal Year (FY)	SIR	SUR
FY16	2.55	1.54
FY17 (Project Implementation)	2.61	1.38
FY18	0.00	0.93
FY19	0.38	0.76
FY20	0.00	0.65
FY21 (Year of COVID)	0.00	0.66

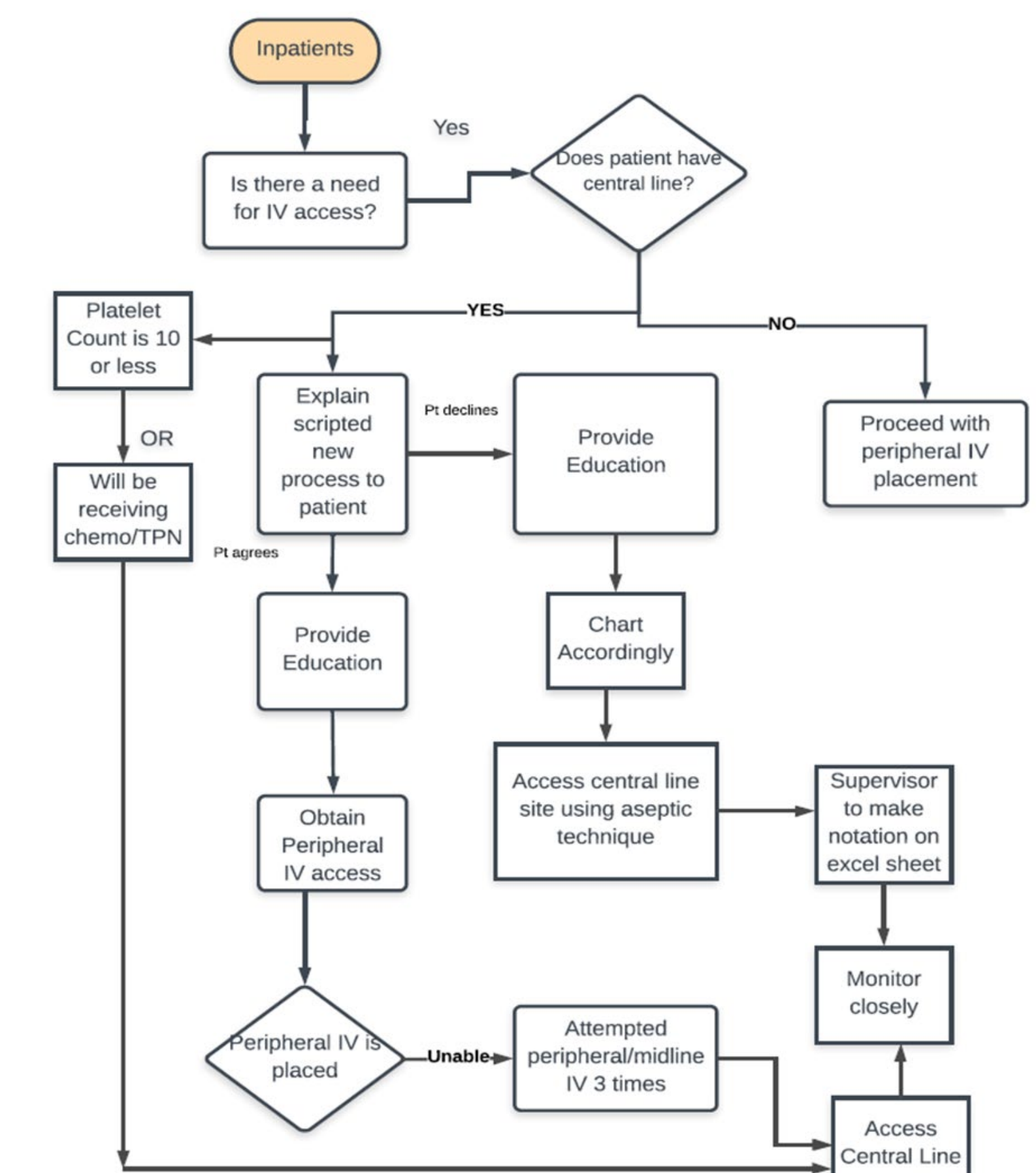


Figure 4

### Next Steps

- Increase staff competency/education on Central Lines to twice yearly
- Continued education for patients and expand practice of judicious central line usage to other facilities
- Continue empowerment of individual departments to own/manage central line usage

### Team

- Jennifer Baumert DNP, RN-BC, OCN- Nursing Practice Coordinator
- Mariah Gesink MPH- Infection Preventionist
- Patricia Murock-Langan, MD- Chief Medical Officer
- Teresa Hawlik MSN, MBA- Chief Nursing Officer