## A Multidisciplinary Approach to Implementing Evidence-Based Practice: Achieving Zero CLABSI in the Immunocompromised Cancer Patient

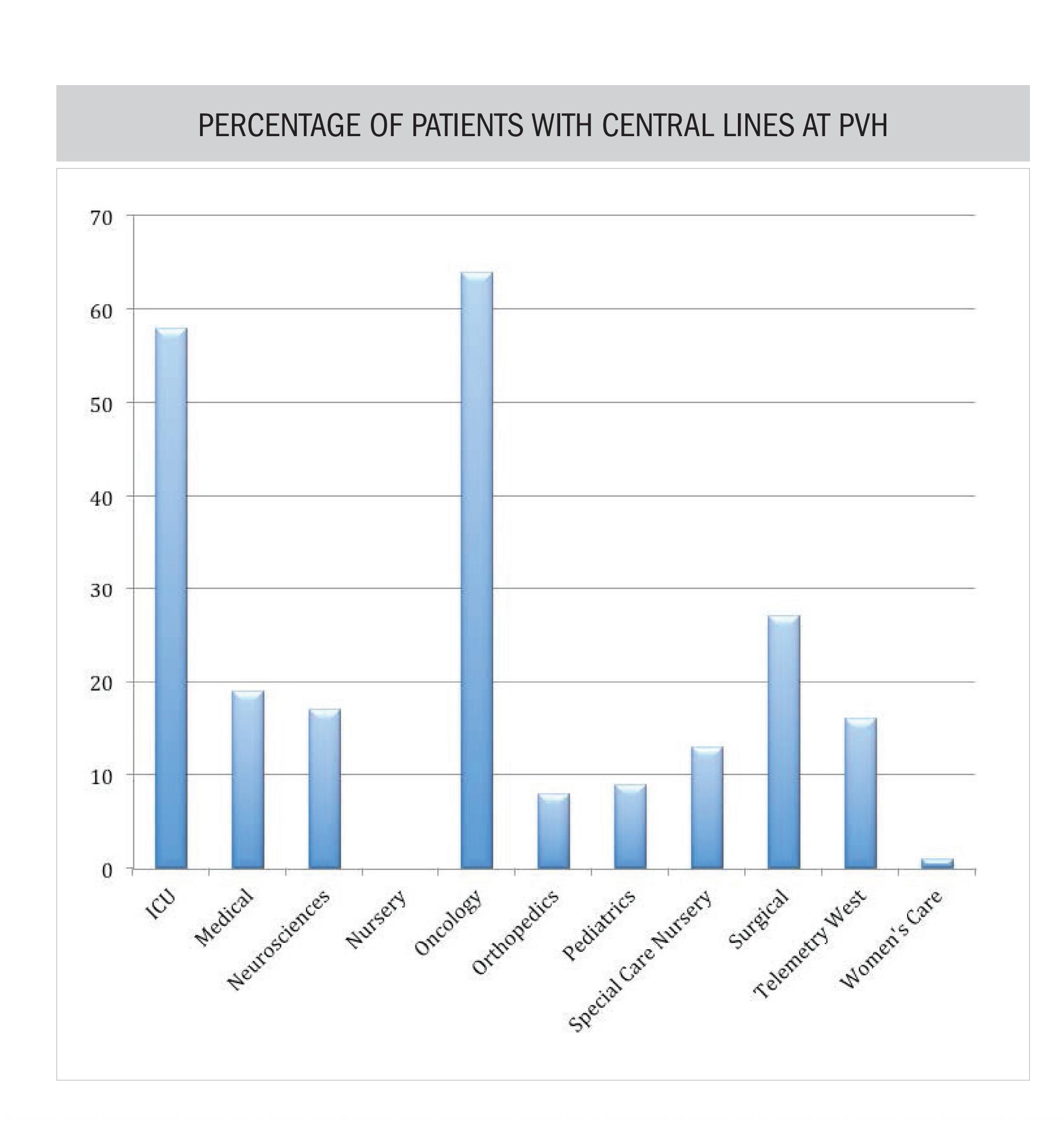
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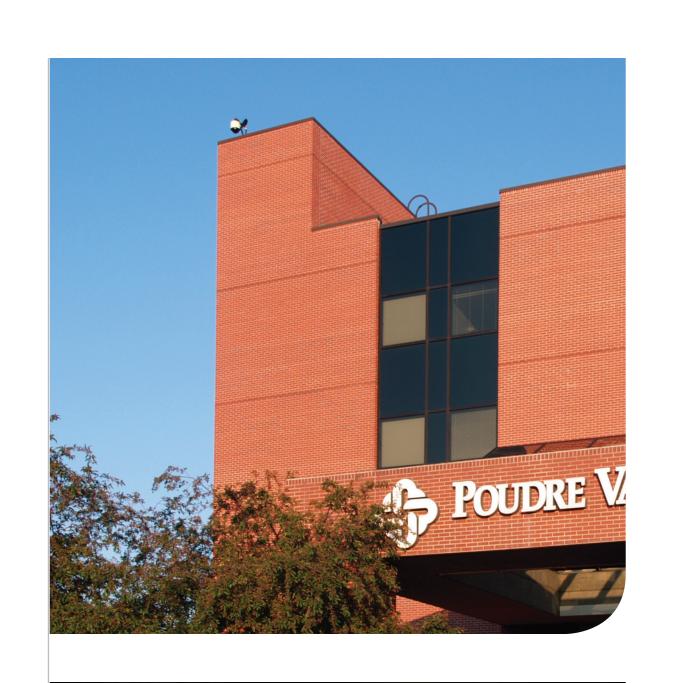


- + CLABSI prevention has been a Joint Commission National Patient Safety Goal for over 10 years NPSG 07.04.01 (The Joint Commission, 2015)
- + Neutropenic patients are at a high risk for infection
- + Central lines are the lifeline of a cancer patient
- + Can CLABSIs be fully prevented in such immunocompromised patients?

### **BACKGROUND**

- + Seven out of nine CLABSI events at PVH 2009-2014 were on the oncology unit and in patients with neutropenia
- + 64% Central Line Usage and 2154 Central Line Days
- + 88 Patients with neutropenia and central lines were admitted over the last year





### **AGENCY SETTING**

- Poudre Valley Hospital has 241 beds
- + 14 beds are Inpatient Oncology
- + 15 RNs, 6 PCTs, 2 Oncology Physician Groups

### **TARGET POPULATION**

- Patients with a central line
- Hickman, PICC, Port, Ashcath, Broviac, Groshong
- + ANC less than 1000 (Oncology Nursing Society, 2015)

### GOALS, AIMS, AND MEASURES

- + GOAL: reduce CLABSIs on the Inpatient Oncology Unit with 80% compliance of interventions
- + AIM: Introduce two interventions and provide education to staff caring for patients
- + MEASURES: compliance measured through chart auditing

### **SIGNIFICANCE**

- + 65% of CLABSI are considered preventable measures
- + Average cost of a single CLABSI is \$16,550
- + CLABSI Cost in Oncology Patient = increased hospital stay, ICU stay, high mortality, delay in treatment, removal of line, compromise in cancer treatment outcome (Joint Commission, 2012)

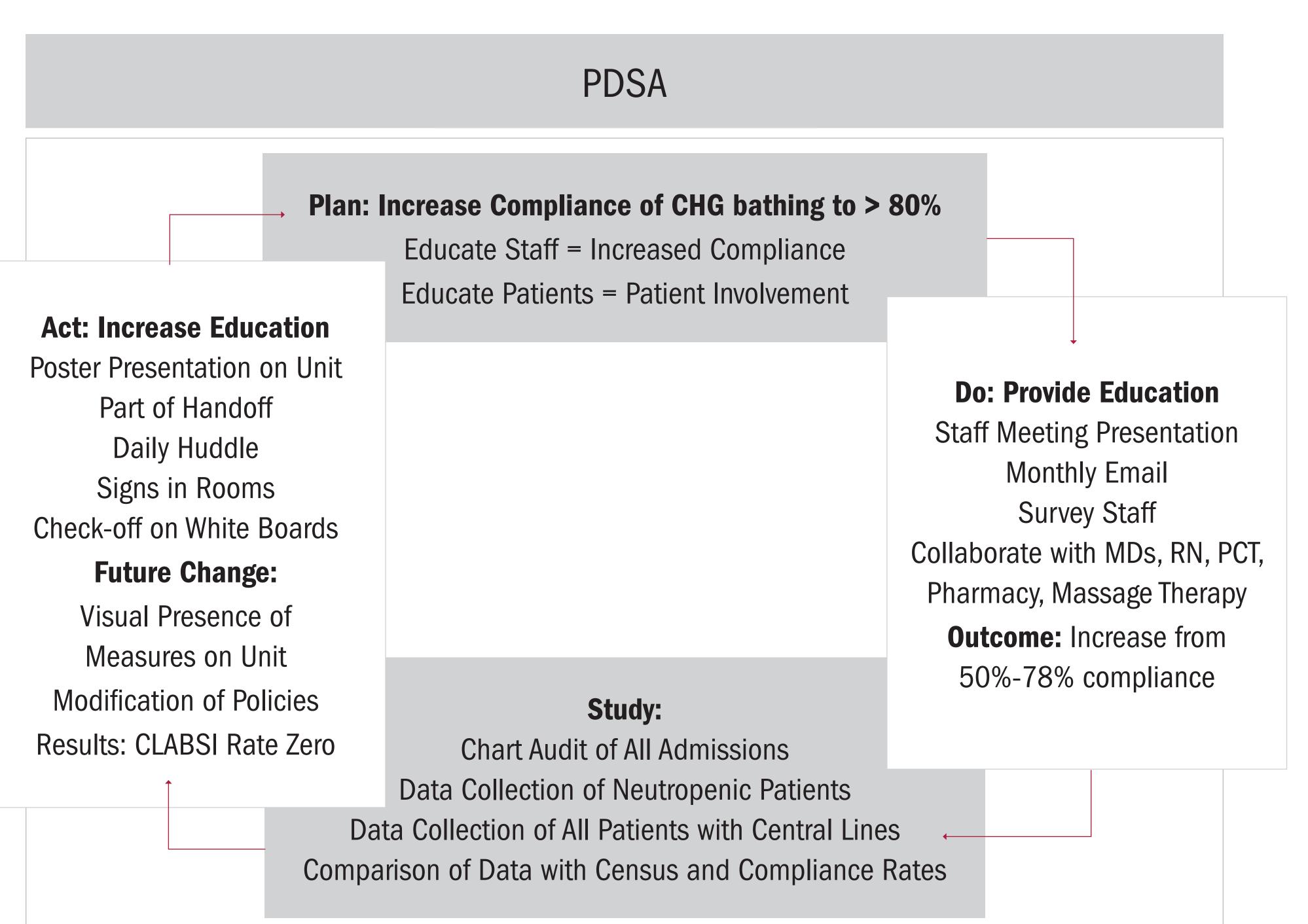
### **EVIDENCE-BASED INTERVENTIONS**

- + Daily CHG bathing with 2% chlorhexadine gluconate wipes on all patients with neutropenia and a central line (Dixon & Carver, 2010)
- Use of a neutron cap on all central lines
  (Chernecky, Macklin, Jarvis, & Joshua, 2014)

### **COMPLIANCE MEASUREMENT**

- + The chart of every patient admitted to the Oncology unit between May 2014 and May 2015, audited for compliance of CHG bathing
- + 88 Patients with neutropenia admitted over the past year
- + 167 patients with a central line and not neutropenic admitted in the last six months

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### **RE-FOCUS AND RE-MEASURE**

- Increased communication with staff
- + Implementation of line checks at bedside handoff
- + CLABSI information and visibility on the unit
- Include more stakeholders

### **RESULTS**

- + CLABSI rate of ZERO for the first time in over 5 years
- + Last CLABSI was 16 months ago
- + 82% Compliance Rate of daily CHG bathing and neutral pressure cap usage following PDSA Cycle

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All Clinical Inpatient Oncology Staff

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