Oral Care to Prevent Non-Ventilator Hospital Acquired Pneumonia (NV-HAP)

Rose Timmerman, DNP, APRN, CCNS, CCRN-CSC-CMC, Bonnie Barnard MPH, CIC, FAPIC and Emily Anderson, MSN, RN, PCCN-K, CHFP

Project Goals
- Implement an oral care protocol in the Progressive Care Unit (PCU)
- Increase the percentage of patients receiving oral care in PCU
- Reduce the incidence of NV-HAP in the PCU

Project plan and Implementation
- QI project using PDSA implemented in PCU.
- Evidence-based oral care protocol developed Sept. 2021
- NV-HAP education for caregivers completed Oct. 2021
- ADA compliant oral care kits stocked Sept. 2021
- Vendor in-services Sept. 2021 & Jan. 2022
- Text-page reminders for oral care Feb 2022
- Process measure data collected Jan – May 2022
- PCU leadership team used process measures to provide feedback and coaching to staff Jan- May 2022
- NV-HAP stories shared with staff March 2022

Data
- The proportion of patients who received oral care at least once during a 24-hour period has risen from an average of 5% in July 2021 to 64% in March 2022.
- The NV-HAP rate dropped from 3.24/1,000 patient days at baseline to 1.0/1,000 patient days by Jan. 2022. There were no cases of NV-HAP during Feb. 2022

Outcomes or Results
- Using PDSA cycles resulted in incremental improvements.
- Engagement of PCU leaders and frontline staff as well as an interprofessional approach was essential.
- Oral care supplies bundled in a kit helped reduce practice variations.
- Although the proportion of patients who received oral care increased, use of the protocol was not optimized.
- However, as the proportion of patients who received oral care with products meeting ADA recommendations rose, the incidence of NV-HAP decreased by almost 70% within 3 months.

Future Opportunities
- Optimize use of oral care protocol on PCU
- Spread oral care best practices to other in-patient nursing departments at PAMC

References
1. NEJM. 2018; 379: 1732-1744.
4. Inf Control Hosp Epidemiol. 2015; 36: 899

Bonnie Barnard: bonnie.barnard@providence.org
Rose Timmerman: rose.timmerman@providence.org
Emily Anderson: emily.anderson@providence.org

Oral Care Kits
Oral care is an interventional nursing procedure that reduces morbidity and mortality associated with NV-HAP.