Risk of Stroke-Associated Pneumonia & Oral Hygiene

The Problem
Pneumonia is a major complication of stroke, but effective prevention strategies are lacking. Since aspiration of oropharyngeal secretions is the primary mechanism for development of stroke-associated pneumonia (SAP), strategies that decrease colonization of pathogenic bacteria may help curtail pneumonia risk. We therefore hypothesized that systematic oral care protocols can help decrease pneumonia risk in hospitalized stroke patients.

Aim / Goals
- To reduce the incidence of Hospital Acquired Pneumonia (HAP)
- To reduce preventable harm
- To improve patient comfort & safety
- To provide nurses with the tools to safely deliver oral care to patients who aspirate
- To eliminate hunting & fetching by nurses
- To decrease the frequency of oral care needed with routine completion

The Team
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The Interventions
1. Created and implemented the Oral Care Assessment Tool (O-CAT) to determine the frequency of oral care needed per patient
2. Developed an Oral Care Guideline for Nursing that was approved by the Nursing Practice Council
3. Obtained approval from the product committee to stock oral care kits on all med-surg units
4. Implemented hospital-wide standardized oral care with use of the O-CAT tool and 3x/day and 6x/day oral care kits with toothbrushes and swabs attached to suction
5. Collected outcome data

The Results / Progress to Date

Notable Finding: Significant reduction in HAP rate from 14% to 10.33% with stroke patients “most at risk” for swallowing difficulties / aspiration pneumonia.

Lessons Learned
- Total cost of care for one case of HAP has been estimated at $65,000
- Nurses did not have the tools to safely deliver oral care to patients who aspirate
- Education & re-education of nurses & PCT’s is essential to sustaining a change in practice

Next Steps / What Should Happen Next
- Improve daily documentation of OCAT score by nurses of Normal, Mild-Moderate, or Severe impairment of oral cavity integrity.
- Improve documentation when oral care is performed by moving to an electronic flow sheet so that we can more reliably attribute reduced HAP rate to provision of oral care.

For More Information, contact:
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