Implementing Best Practices to Decrease Ventilator-Associated Pneumonia
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Problem
Ventilator-Associated Pneumonia (VAP) rates at two large military medical centers were consistently above National Nosocomial Infection Surveillance (NNIS) median rates. Would a tailored educational intervention improve staff compliance with prevention strategies for VAP?

Evidence
Literature was searched; evidence reviewed and graded using the United States Preventive Task Force (USPTF) criteria.

Policy Change
Based on the evidence, a Clinical Practice Guideline (CPG) and policy for clinical management of VAP was developed and implemented

Strategies
- Leveraged expertise from nationally recognized experts
- Baseline evaluation of current practices
- An evidence summary of a systematic literature review
- Assisting multiple teams with implementation of the CPG
- Measuring CPG implementation
- Evaluating the results with clinicians at each site at scheduled intervals

Practice Change
- Improved education for hand hygiene.
- Created Standard Order Set (SOS) for ventilator patients to monitor
  - HOB at >30 degrees.
  - Created SOS for oral care on ventilator patients to include tooth-brushing at least BID.

Evaluation
Pre and post intervention measures were obtained for
- VAP rates using NNIS criteria
- Staff clinical practice behaviors including:
  - hand hygiene as appropriate by CDC guidelines (pre, during, & post patient care)
  - oral care
  - Degree of HOB on selected ventilator patients

Results
Change is difficult to sustain without constant reinforcement by leadership. Oral care and HOB showed improvement due to continued reinforcement. There was inconsistency in hand hygiene practices across time. VAP rates did not show a sustained improvement.

Recommendations
Practice change requires ongoing reinforcement from leadership to convey importance of individual practices, such as hand hygiene. Staff must feel involved and share in establishing outcomes and evaluating performance feedback.
References


