



**Service Priorities and Programmes**  
**Electronic Presentations**

**Convention ID:** 639

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**Not just a routine care—A CQI Journey to Standardize Endotracheal Cuff Pressure Monitoring**

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**Keywords:**

Tracheal Cuff Pressure Measurement

Quality Improvement

Nursing Standard

Ventilator-Associated Pneumonia

**Introduction**

Ventilator-associated pneumonia (VAP) contributes a significant mortality rate in ICU worldwide. Tracheal tube cuff pressure measurement, one of the elements in the VAP bundle demonstrated evidences to reduce VAP risk. Insufficient tracheal cuff pressure monitoring was revealed in our ICU. A continuous quality improvement (CQI) project was launched to review existent practice and enhance quality and standard in tracheal cuff pressure management in our unit.

**Objectives**

1. Review existent practice on tracheal cuff pressure management to sort out weakness of compliance and service gap.
2. Optimize the quality and standard of tracheal cuff pressure monitoring.

**Methodology**

1. Collect data by checking document on the compliance pressure measurement of the 4 specific occasions (admission; after intubation; after adjustment and after transportation) and spot-measuring of cuff pressure for 50 patients.
2. Analyze data and identify weakness of compliances and service gaps;
3. Review and revise department guidelines; standardize documentation; review equipment usage; develop educational program; provide training to nurses.
4. Perform audit for evaluation.

**Result**

1. The rate of optimal cuff pressure dramatically improved from 48% to 93.3%.
2. 88.7% compliance reported on the tracheal cuff pressure measurement guideline audit.
3. Enhanced nurses' awareness and changed nursing practice on cuff pressure monitoring.
4. Updated tracheal cuff pressure measurement guideline and developed photoguide.

5. Rectified documentation in clinical information system.
6. Uphold ICU standard on tracheal cuff pressure management.
7. The success of programme provokes a collaboration work between Accident and Emergency Department (AED), PMH and ICU to enhance the quality of tracheal cuff pressure management of AED in 2017.
8. Built up network among departments. Allow mutual sharing of good nursing practice to uphold the nursing standard in future.
9. Taken up leading role in promulgating information, sharing experience and providing support on tracheal cuff pressure monitoring to other departments in PMH.