



## Service Priorities and Programmes Electronic Presentations

**Convention ID:** 926

**Submitting author:** Mr Kam Kuen KWONG

**Post title:** Advanced Practice Nurse, Ruttonjee & Tang Shiu Kin Hospitals

### **Quality Improvement Program on Ventilatory Care to Enhance Patient Safety and Improve Nurses Efficiency**

*Cheng MW (1), Cheung HT (1), Chu KM (1), Kwong KK (1), Lai SK (1), Law KC (1), Leung YL (1), Li HY (1), Chan YK (2), Lee OKA (1)(2)*

*(1) Department of Integrated Medical Services, (2) Department of Cardiac and Intensive Care Unit, Ruttonjee & Tang Shiu Kin Hospitals*

#### **Keywords:**

Ventilator

Care delivery system

#### **Introduction**

Caring of patients with mechanical ventilator support in both ICU and acute medical settings is common in RTSKH. It is also recognized as a high-risk, high-flow and high volume nursing process in our daily clinical practice. A safe and effective care delivery system on mechanical ventilator and noninvasive ventilation is of essential to ensure the appropriate care with minimal complication is maintained.

#### **Objectives**

1. To streamline clinical nursing operations on caring of patients who are mechanically ventilated
2. To provide appropriate preventive and control strategies for patient safety
3. To increase nursing staff's awareness on managing patients with mechanical ventilation

#### **Methodology**

A total of ten members of the Evidence-based Nursing Quality Improvement Program Team on Intermittent Mechanical Ventilator and Noninvasive Ventilator was established. Plan-Do-Check-Act approach was used in this project. The project targeted to (1) formulate a structured system on nursing care of patients with mechanical ventilation and noninvasive ventilation in the Department of Integrated Medical Services; (2) plan nursing development, quality and safety in relation to ventilatory care, and (3) make recommendations on standardize, implement and evaluate the nurses' practices concerning ventilator care.

#### **Result**

Limitations of caring patients with mechanically ventilated and areas for improvement were identified, which included (1) an integrated ventilator observation chart with nursing care plan and intervention was proposed that provided a comprehensive view to nursing staff for easy monitoring, early recognition of deteriorating patients and

delivering apposite high quality care in the short period of time; (2) smart instruction cards posted nearby the ventilator supports to increase nurses' awareness on safe and effective application of the ventilator; (3) standardization of change interval of ventilator circuits will be addressed to limit use of risk function "standby mode". With active participation and support of the team, care system and delivery of care on mechanical ventilator and noninvasive ventilator would be more structured and systematic. Understanding and compliance on the ventilator care from nurses and patient outcome will be further evaluated to achieve the mutual goal of patient safety.