Central Ventilator Service (CVS) : Ensure Quality, Patient Safety and Create Opportunity to Enhance Staff Growth and Development.

**Keywords:**
safety
 collaboration
staff satisfaction
 training
 development

**Introduction**
TKOH ICU provided a series of ventilator support service to general wards since 2000. With the expansion of TKOH, challenges in increase service demand from patients is tremendous. The service volume is greatly increased in demand. There is 800% of increased demand in care of mechanical ventilators gradually (the rise of demand is seven verses sixty seven from 2000 to 2017 including both invasive and non-invasive mechanical ventilators). At the same time, manpower demand for CVS is also progressively increased. It is an opportunity for ICU to enhance patient safety and quality service in TKOH. On the other hand, through the implementation of CVS, it can promote staff job satisfaction and eventually achieve staff retention. As CVS is a hospital wide program, ICU collaborated with other department to enhance smooth running of the service.

**Objectives**
1. Ensure quality service and patient safety through central coordination of life saving equipment - mechanical ventilators.
2. Improve staff engagement through re-engineering of service.
3. Acknowledge development need of staff, improve staff satisfaction and retention through in-service training and on-the- job coaching.

**Methodology**
1. Reengineering of mechanical ventilators turnaround work flow:

To facilitate the increasing demand of on loan mechanical ventilators in general wards, the system for monitoring the mechanical ventilators turnaround is reviewed and reengineered. On the other hand, non-invasive ventilator utilization is also increasing, to encounter such tremendous growth in demand, a novel logistic for on loan and return of non-invasive ventilators is developed. This logistic required collaboration with other departments to ensure quality service. To meet the service need, a designated person is assigned to monitor the daily utilization of various kinds of ventilators.
2. Develop a training program and competency assessment to ensure quality service in equipment monitoring. Target PCA group is identified for training in skill and knowledge so as to encourage personal growth.
3. Duty arrangement to facilitate appropriate support to CVS.

**Result**
Ensure functional mechanical ventilator is prepared to meet service need
Training program that enhance knowledge and skill enhancement
Collaborate with general ward for redesign work flow on non-invasive mechanical ventilator is successfully implemented in 2Q 2017. The compliance on workflow is increasing. The designated staff is responsible for the readiness of non-invasive ventilators for general wards.
Directed to the need of CVS, designated PCAs are trained. The training program included preparation, functional test, logistic of reporting machine failure and follow up actions. 4 PCAs completed skill enhancement program and have satisfactory result in the assessment.
A special duty is arranged for the trained PCAs to meet the service need of CVS, the continuity of CVS is guaranteed, the service provision by CVS can be maintained through the year.