



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

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**Submitting author:** Ms W C LAM

**Post title:** Registered Nurse, Princess Margaret Hospital, KWC

**Nurse-led Central Ventilator Service for Medicine & Geriatrics Department  
Improves Service Delivery**

*Lam WC(1), Lee MF(1), Fok MY(1), Chan ML(1), Yu WC(1)*

*(1)Respiratory Unit, Department of Medicine & Geriatrics, Princess Margaret Hospital*

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**Introduction**

There are many patients in need of ventilator care in our M&G department and it is unrealistic for ICU to take over all of them. In 2011 & 2012, there were 1062 invasive ventilator and 1287 non-invasive ventilator patient-episodes scattered around 12 general medical wards. It used to be that in each general medical ward possess their own ventilators with a lot of problems including inadequate nursing expertise in machine handling and maintenance with great stress on staff, inadequate systematic renewal of old machines, malfunctioning machines, and refusal to borrow by other wards.

**Objectives**

To develop a service model to ensure quality respiratory care, promote safety, alleviate staff workload, and render adequate nursing and technical support to ventilator cases in all wards of the M&G department

**Methodology**

In 1995 all ventilators of the M&G department except transport-types are collected under the Central Ventilator Service run by the Respiratory Unit. Currently we have 26 invasive ventilators and 22 non-invasive ventilators serving the whole department. All cleansing, disinfection, assembly and maintenance are taken care of by a service team run by 2 registered nurses and 1 PCA. Strict QA and functional tests ensures all ventilators supplied to wards are good and safe. Respiratory consumables are also stocked centrally. Patients receiving mechanical ventilation are assessed daily and advice is offered so as to promote quality care and ensure safety. Change of machine tubing and filters are also performed by service team. Telephone consultation is offered. Technical problems, troubles shooting, or any other respiratory nursing issues: chest drainage, tracheostomy, smoking cessation, discharge patient support etc. Onsite support was also provided as required. Service team assists in nurses training for Respiratory PRCC; improve ward nurses basic knowledge and skills to meet their daily operation need and patient care; and participate in teaching aids and video production.

**Result**

In 2011 & 2012, the service team managed 2,480 ventilator and BiPAP episodes with an estimated 1,860 man-hours saved in general wards. There was not a single episode of non-availability of ventilators for use or machine malfunction when newly borrowed. Replacement of old ventilators was done on a yearly basis. The supply of respiratory consumables to wards was well controlled and smooth. 30-40 telephones and ward consultations were received monthly with performance pledge of same day response 100% attained. Education poster was displayed, and quick procedure guide and teaching video can be accessed in hospital webpage. The services were further extended to Surgical and Orthopaedic departments in 2011. The setting up of a central ventilator service improves quality of service delivery, improves safety and reduces hassles to staff, and enhances systematic maintenance and modernization of the ventilators.