



## Service Priorities and Programmes Electronic Presentations

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### **Respiratory Nurse-led Service from Hospital to Clinic: COPD patient with Domiciliary Non-Invasive Ventilation**

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#### **Keywords:**

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#### **Introduction**

In PMH, Chronic Obstructive Pulmonary Disease (COPD) accounted for 8% of all M&G emergency admissions in 2009 and 2010. As the disease progress, domiciliary NIV is being increasingly employed to treat respiratory failure in COPD patients. It is proved to be effective for treating chronic hypercapnic patients as well as improving their quality of life. Patient compliance, disease knowledge, equipment operation, post discharge support are all key determinants of treatment efficacy. Respiratory nurse-led interventions are important to improve patient adherence

#### **Objectives**

Through nurse-led services, it aims to: -COPD patient compliance and competency in using domiciliary NIV -Provide support to patient and caregiver after discharge -Improve patient quality of life

#### **Methodology**

Comprehensive assessment Respiratory nurse perform comprehensive assessment. Full assessment is necessary to determine the exact form of NIV support, the selection of home NIV model, mask size and accessories required. Pre-discharge education and arrangement Patient and/or their carers will have to take part in the pre-discharge plan and an education program as provided by the Respiratory nurse. The nature and consequence of the disease, the basic principle and operation of the ventilator, the circuit connection, mask fitting technique, simple equipment cleansing and contingency when machine malfunction are included in the education. Skills are assessed daily and return demonstration checklist is used to ensure competency. Home emergency drug kit may necessary. NIV pamphlet and drug information sheet are given. Financial assistance, home visit, CNS and other disciplines support are arranged prior to discharge. Telephone follow up Telephone follow up is provided within one month or if necessary after discharge. Compliance depends on how effective and comfortable patient feel the NIV therapy is. Respiratory nurse provide support, reassurance and trouble shooting advice. If patient state he is not benefiting from using domiciliary NIV, an early follow up or home visit will be arranged. Discharge Support in Specialty Clinics Patients are followed up at Specialty Clinics.

Evaluation is done by Respiratory nurse and self care reinforced. An annual full BiPAP assessment by multi-disciplinary professionals is arranged that include clinical indicators, quality of life and CAT score assessment. Team members discussed patient progress and ensure continuity of care achieved.

### **Result**

46 patients were discharged with domiciliary NIV from 2010 to 2012. All patients and/or caregivers fulfilled the competency checklist requirement before discharge. 6 patients were transferred to other clinics for residential reason. 1 patient had domiciliary NIV terminated with poor family support. Follow up 6 months statistics, there were 68% reduction in hospital emergency admission and 64% decrease of AED attendance for patient established with domiciliary NIV. Non-invasive ventilation is increasingly being used by patients at home It is important that they receive adequate support after discharge. Respiratory nurse undoubtedly plays a crucial role in offering appropriate support and help to maintain compliance, optimize patient outcomes and assure continuity of care. The development of Respiratory Nurse-Led Clinic is going to be the direction of respiratory service in the hospital.