

# **Service Priorities and Programmes**

**Electronic Presentations** 

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# The Effectiveness of the Respiratory Nurse Clinic in Managing the Healthcare Utilization of Patients with Chronic Obstructive Pulmonary Disease (COPD) CHAN YY(1), CHAN PF(1), CHOI MW(1), NG SW(1), SUEN KM(1), POON CL(1), CHAN LV(1), CHU CM(1)

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## Keywords:

nurse clinic healthcare utilization

## **Introduction**

Chronic Obstructive Pulmonary Disease (COPD) is one of the leading causes of worldwide mortality and it is expected that the prevalence is more than double by 2030. Patients with COPD or other chronic lung diseases are the high risk groups contributed to frequent healthcare utilizations. To manage the growing demand of these patients, a respiratory nurse clinic has been established since November 2009 to provide respiratory nursing services in the United Christian Hospital.

## **Objectives**

To evaluate the effectiveness of the respiratory nurse clinic related to healthcare utilization of COPD patients before and after joining the clinic services.

## **Methodology**

The respiratory nurse clinic provides comprehensive healthcare services to COPD patients according to an approved protocol with the following key components: - Patient Registry: A system for creating, validating and updating a register of COPD patients to systematically manage their care - Risk Stratification: Stratify different risk factors of COPD patients to provide appropriate level of nursing care - Evidence-based Guideline: Protocols were developed with reference to guidelines such as Guideline for Specialty Nursing Service, HAHO and Global Initiative of Obstructive Lung Diseases (GOLD) - COPD Care: Assessment & monitoring, individualized care plan, nursing interventions and continuous care - 24-hour Hotline: Enhance patient's health access and follow up - Multi-disciplinary Approach: Refer to other disciplines appropriately to optimize patient care

## <u>Result</u>

There were 50 patients with 43 male and 7 female newly recruited to the respiratory nurse clinic during January 2015 to June 2015 inclusively. These patients were analyzed for their healthcare utilization in 6 months before and after joining the clinic. Their mean age was 75.52 (range 23-92). Majority of them were COPD (90%). Two patients died within 6 months after recruited to the clinic. The result shows that there were significant reduction in healthcare utilization including pre (2.79) and post

(1.71) average emergency department attendance (p<0.001), pre (2.69) and post (2.1) average unplanned admission (p<0.001), and pre (6.26 days) and post (2.84) days average length of stay (p=0.002). The respiratory nurse clinic provides quality and effective care to COPD patients. In managing the growing healthcare demand of these patients, the clinic services could contribute in reducing avoidable healthcare utilization.