A Clinical Audit of Diagnosis and Management of Chronic Obstructive Pulmonary Disease Patient in a General Outpatient Clinic in NTWC

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Introduction
Chronic Obstructive Pulmonary Disease (COPD) is a major cause of morbidity and mortality throughout the world. According to WHO estimates, COPD becomes the third leading cause of death worldwide in 2030. In GOLD guidelines 2015, it suggests combined assessment through symptoms score, GOLD classification of airflow limitation and exacerbation history can give a clear picture of disease severity and guide the management of COPD patients.

Objectives
To review the severity of disease of the COPD patients and the standard of care provided to them in a local general outpatient clinic in NTWC

Methodology
Retrospective reviews of CMS record in one general outpatient clinic in NTWC from January 2014 to December 2014 and May 2015 to April 2016 were conducted respectively. All COPD patients aged 18 or above with International Classification of Primary Care (ICPC) coding “Chronic Obstructive Pulmonary Disease R95” were included. Mismatch ICPC coding, those patients who were not followed up for COPD in that clinic or those patients with spirometry findings not suggestive of mere COPD were excluded.

Result
A total of 220 COPD patients in the first cycle and 233 COPD patients in the second cycle were included. Remarkable improvement was observed in the second cycle. Firstly, the diagnostic spirometry test performed is drastically increased from 50% to
80% in the second cycle. Secondly, the attendance rate of smoking cessation services is increased from 17% to 22% in the second cycle. Similarly, the vaccine coverage rate increased from 51% to 59% for pneumococcal vaccine. Regarding the severity of COPD in that clinic, 49% were categorized as high risk in the combined assessment, of which 17% have exacerbations and need hospital admissions in the past year. 20% of these were referred to specialist care. Deficiencies in diagnosis including inadequate use of spirometry test and combined assessment were identified in the first cycle of our COPD audit. Through implementation of multiple facet of service enhancement, the improvement on spirometry uptake, attendance rate of smoking cessation service and vaccine coverage among COPD patients were shown in the second audit cycle.