Use of spirometry for patients with Chronic Obstructive Pulmonary Disease in 2 primary care clinics in Hong Kong
Chu TK(1), Lee KF(1), Cheng SY(1), Chan ML(1), Liang J(1)
Department of Family Medicine and Primary Health Care, New Territories West Cluster

Keywords:
spirometry
primary care
COPD

Introduction
Based on international guidelines, use of spirometry is recommended in making an accurate diagnosis of COPD and for combined assessment to guide its treatment. However, overseas studies demonstrated deficiencies in diagnosis of COPD in primary care setting, while there was limited local data for that. A clinical audit on diagnosis and management of COPD in 2 regional General Outpatient Clinics in the New Territories West in Hong Kong was initiated in 2015 to identify deficiencies in diagnosis of COPD, particularly in the area of use of spirometry.

Objectives
To review the standard of care in use of spirometry in diagnosis of COPD in 2 primary care clinics

Methodology
Retrospective review on patient medical record is done to evaluate diagnosis of COPD in 2 General Outpatient Clinics in the New Territories West. All COPD registers aged age >18 with ICPC coding of “chronic obstructive pulmonary disease” in these 2 GOPC from one year period from July 2013 to June 2014 were included. Patients who are actively followed up in these clinics or have co-morbidity which hampered diagnosis and treatment of COPD such as malignant disease and dementia, were excluded.

Result
514 patient records were reviewed and 351 patients were included. 68% of COPD patients were diagnosed in primary care setting, while around 1/4 of them were diagnosed in secondary care (24% in Specialist Outpatient Clinics and 3% in the Accident and Emergency Department) where patients were advised to continue COPD treatment (stepdown) in primary care setting. Among all included subjects, only 46.7% of them have ever undergone spirometry or pulmonary function test.

Conclusion: Use of spirometry data is essential for diagnosis and management in COPD. This review identified the service gap and room for improvement for standard
of care for COPD patients in our local public healthcare system.