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Optimizing Blood Pressure Management – Introduction of Ambulatory Blood Pressure Monitoring Service in General Outpatient Clinics in Hong Kong West Cluster
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Introduction
Blood pressure (BP) measurements at the doctor’s office are conventionally used for diagnosis and monitoring of hypertension. However, there have been concerns over the reliability of clinic BP measurements (1). Compared to clinic measurement, ambulatory BP has better correlation with cardiovascular outcomes and end organ damage (2). In fact, ABPM is advocated as the gold standard for diagnosis of hypertension in the NICE 2011 Hypertension Guideline (3).

Objectives
ABPM service has been introduced to GOPCs in Hong Kong West Cluster since July 2012. It aims to confirm the diagnosis of hypertension and to monitor BP control in hypertensive patients who have been labeled as having ‘white-coat’ effect.

Methodology
Any patient with marked discrepancy between clinic and home BP over two clinic visits (>20mmHg for systolic and >10mmHg for diastolic values) can be referred for ABPM. Subjects with acute illnesses, stressful life events or unstable psychiatric conditions are excluded. Patients would wear a mobile monitor which measures BP automatically at 30-minute interval for 24 hours. Hypertension is defined by daytime average >= 135/85 mmHg (for non-diabetics) or >= 120/75 mmHg (for diabetics) and/or night time average >= 120/70 mmHg (4).

Result
66 patients were referred for ABPM between July 2012 and January 2013. They ranged from 25 to 86 years old with a mean age of 61 (SD 10.6). There were 23 males and 43 females. 32 subjects labeled as having white-coat hypertension were referred for confirmation of diagnosis. Only one had genuine white-coat hypertension and the remaining 31 (97%) were found to have true hypertension. 27 of these patients were followed up among which 23 were started on anti-hypertensive drugs. 34 hypertensive patients with either normal or borderline home BP but high clinic BP were referred for BP monitoring. Only three had true white-coat effect while 27 (79%)