Enhancing the quality of diabetes mellitus management in a General Outpatient Clinic in Kowloon East Cluster using a multidisciplinary approach
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Introduction
In 2012, around 204000 diabetic patients were followed up in 74 General Out-patient Clinics (GOPCs). The Quality Assurance Subcommittee of Family Medicine (FM) COC had carried out a territory wide audit on the management of diabetes in GOPCs since 2009. As a pilot GOPC and FM training center, Tseung Kwan O Jockey Club GOPC (TKOJCGOPC) has been putting a lot of efforts to provide high quality patient care. The outcomes of diabetic care achieved during the past 3 years had been very encouraging.

Objectives
To improve the quality of diabetic care through a multidisciplinary approach in a General Outpatient Clinic.

Methodology
Risk Assessment and Management Programme – Diabetes Mellitus (RAMP-DM) was implemented in 2011. Updated guidelines on management of diabetes, hyperlipidaemia and hypertension were prepared. Regular feedbacks and individualized training were provided to all clinic trainees. Joint FM Specialist Diabetic Clinic and Diabetic Nurse Clinic were set up. On site dietetic service was provided. Insulins including premixed insulin analogues as self-financed items were introduced. The HbA1c and blood pressure (BP) control rates from 2009 to 2012 were reviewed from HAHO data. The clinical outcomes of the Diabetic Clinics were retrieved by CDARS and further evaluated.

Result
Results: The number of diabetic patients in TKOJCGOPC increased from 3491 in 2009 to 4413 in 2012. The HbA1c control rate (HbA1c<7%) improved from 56% in 2009 to 71% (the best among all GOPCs with overall control rate 51%) in 2012. The BP control rate (latest BP<130/80mmHg) improved from 33% in 2009 to 55.2% (the best among all GOPCs with overall control rate 37.3%) in 2012. From 1st April 2011 to 31st December 2012, 483 patients had been seen in our Diabetic Clinics. 198 patients
were put on a DPP-4 inhibitor and 183 patients were put on insulins. There was significant improvement in mean HbA1c level of all patients from 8.51% to 7.33% after > 3 months of follow up (p<0.001). The mean HbA1c level of patients on insulins improved from 9.01% to 7.75% on discharge or after > 6 months follow up (p<0.001). 50.6% of all patients and 32% of patients on insulins had their HbA1c level controlled to target on discharge or after > 6 months follow up respectively (p<0.001). The BP control rate improved from 41.5% to 59.7% (p<0.001) and the LDL-cholesterol control rate (<2.6mmol/l) improved from 58.7% to 83.9% (p<0.001) after follow up for > 3 months. Discussion: This review showed that high quality of diabetic care could be achieved in primary care after a joint multidisciplinary effort.