Strategy for Poorly Controlled DM Patients In Primary Care Setting – Initiating Insulin Injection at Risk Assessment and Management Program - Associate Consultant (RAMP AC) Clinic of Hong Kong West Cluster in 2015
Cheung D, Sze HH, Wang J, Kwong A, Ko W, Tsui W
Department of Family Medicine and Primary Healthcare
Queen Mary Hospital

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Introduction
Risk Assessment and Management Program - Associate Consultant (RAMP-AC) clinic was established since 2010. It was managed by the Department of Family Medicine and Primary Healthcare of Hong Kong West Cluster (HKWC). Patients with poor DM control in General Out Patient Clinic (GOPC) setting were recruited under the program for insulin initiation. This program involved patients whose:
1. HbA1c $\geq$ 8.5% and categorized as very high risk
2. HbA1c $\geq$ 10% for any categorized risk level
3. Oral anti-diabetic drug (OAD) failure and needs insulin initiation (i.e. HbA1c persistently >8.5%, on maximum dose)

Objectives
#NAME?

Methodology
Statistics of all patients recruited by HKWC RAMP AC clinic from 1/2015 to 12/2015 and starting insulin were reviewed. BP control, Hba1c control and LDL control were the objective markers for the efficacy of service.

Result
From 1/1/2015 to 31/12/2015, there were 318 patients recruited into RAMP AC clinic for insulin initiation. The mean consultations were 10 times. The mean durations of consultation were 17 months. There were 215 patients on protaphane, 82 patients on mixtard, 12 patients on insulin glargine, 4 patients on insulin aspart and mixtard, 4 patients on actrapid and mixtard, 1 patient on protaphane and mixtard
When comparing pre- and post- treatment with paired t-test
The pre- vs post- treatment mean Hba1c = 9.1% vs 8.0% ; t(317)=13.7, p<=0.05
The pre- vs post- treatment mean LDL = 2.3mmol/L vs 2.1mmol/L ; t(317)=6.3,
p<=0.05
The pre- vs post- treatment mean systolic BP = 130mmHg vs 129mmHg ; t(317) =1.3 , p=0.21
The pre- vs post- treatment mean diastolic BP = 77mmHg vs 76mmHg ; t(317) =2.1 , p<=0.05

Improvements were shown at all objective outcomes and further titration of their insulin doses would be continued at GOPC after discharged from RAMP AC clinic. From the result we also knew the indications of referring out RAMP-AC patients to GOPC were within 1.5 yrs of consultations or 10 visits. Since there was significant improvement in all outcomes after initiating insulin at RAMP AC clinic, it was proved to be an important and effective provider for the service. DM patients at primary care do not need to refer to Specialty Out Patient Clinic for insulin initiation.