

# Service Priorities and Programmes Electronic Presentations

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#### Introduction

It is not uncommon that patients with mild hyperglycaemia or hypoglycaemia who may require in-patient care in EMW of AED for temporary observation and management. Some patients even were firstly diagnosed of Diabetes Mellitus (DM). In current clinical practice, patients were referred to Specialist Outpatient Clinic (SOPC) or General Outpatient Clinic (GOPC) for further management upon discharge from EMW after settling their acute medical problems. Some of them may not receive timely structured diabetes self-management education or supportive monitoring after discharge and may re-attend AED with same problems. Diabetes Nurse Clinic (DMNC) plays an important role to fill in this gap.

## **Objectives**

To evaluate the outcomes and the effectiveness of diabetes nurse clinic on patient with diabetes discharged from EMW due to hyperglycaemia and hypoglycaemia.

#### Methodology

The program was commenced since 5 December 2016. Diabetic patients, who were discharged from EMW due to hyperglycaemia or hypoglycaemia without serious acute medical conditions, were referred to DMC through the Generic Clinical Request System. Diabetes nurses interviewed patients within 4 weeks after receiving the referral and provided patients on structured diabetic education, Metabolic Risk Assessment (MRA) and adjustment of anti-diabetic drugs which is according to the protocol and under the supervision of endocrinologists in regular case conference. Care planning was formulated to patients during the consultations. For those complicated cases, patients were referred to Endocrinologists in Diabetes Intensification Clinic in Diabetes Center at Tuen Mun Hospital. Patients were discharged from DMNC when individualized treatment goal was reached. Patients, who were referred from EMW to DMNC from 5 December 2016 to 31 October 2017, were assessed by 19 January 2018. The demographic data, clinical characteristic,

treatment and intervention outcomes were analyzed.

## Result

Eighty-two patients were referred from EMW to DMNC. Thirty-seven patients were female and 45 patients were male, aged from 37 to 94 years old (mean age was 66.3 ± 14 years old). Thirty-three percent of the patients were admitted for hypoglycaemia while 67 percent of the patients were admitted for hyperglycaemia. Sixty-three patients (76.8%) with pre-existing diabetes and mean duration of diagnosis was 14.6 ± 9.4 years. Thirty-nine patients of them (61.9%) were managed with adjustment of the OADs regime and eight of them (20.5%) were initiated with insulin therapy and the remaining 24 patients (38.1%) were discharged with unchanged drug regime from EMW. Nineteen patients (23.2%) were newly diagnosed of DM, seventeen of them were referred to GOPC and two patients were referred to SOPC upon discharge from EMW. Eighteen patients (94.7%) were started with OADs and one patient was started with insulin and OADs. Sixty-one patients (74.4% of referral cases from EMW) attended DMNC. The mean number of sessions of nurse clinic was 1.8. After intervention, the number of patients performing SMBG was increased from 44% to 72%. Seventeen patients (27.9%) required drug adjustment by diabetes nurses. The mean baseline HbA1c was 9.9% and was decreased to 7.4% after intervention period (paired t-test, p<0.000). Seven patients were arranged to have assessment by endocrinologist for treatment intensification, and one of them was arranged with clinical admission for glycaemic control due to dementia. There was no emergency admission to AED and no death during the reviewed period. Nineteen patients with newly diagnosed of DM were arranged to attend MRA. Three of them were diagnosed of retinopathy with referral to ophthalmologists for further assessment. Under the support of the Diabetes Nurse Clinic, the collaborative program was safe and effective in the care pathway for patients with diabetic problems discharged from EMW.