Clinical Pathway Helps to Maximize the Care of STEMI Patients
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Introduction
ST-elevation myocardial infarction (STEMI) is one of the leading causes of mortality & morbidity in Hong Kong. The management relies on rapid recognition and timely reperfusion. ESC/EACTS recommended that STEMI patients should be monitored in CCU to optimize management. In Princess Margaret Hospital (PMH), less than 50% of STEMI patients could be admitted to Coronary Care Unit (CCU). The implementation of Clinical Pathways aids delivers the high quality care and prevents delays in management of patients who develop STEMI.

Objectives
To outline and standardize the process of care for STEMI patients
To enable prompt and accurate adverse events identification and management
To facilitate early discharge

Methodology
The STEMI Clinical Pathway was developed and piloted in PMH, CCU from August to September 2014. After the evaluation, the Pathway rolled out to all general wards from November 2015. Immediately after STEMI was diagnosed, the case doctor triaged patients to Primary Percutaneous Coronary Intervention (PCI) Pathway or Thrombolytic Pathway accordingly. Both medical treatment and nursing assessment and care were included. The discharge planning was incorporated to facilitate early discharge. Every STEMI patient had his/her individual Clinical Pathway with data entered by corresponding doctor and nurse on Day 0, 1 & discharge day. The evaluation for the compliance and clinical outcome were performed yearly.

Result
In 2016, there were total 163 STEMI patients admitted to PMH and managed according to the pathway protocol. To compare the pre & post implementation of Clinical Pathway, it showed that median door-to-balloon time was shortened from 132 to 113 minutes, and the average length of stay was shortened from 8.57 to 6.7 days.
The percentage of patients prescribed Aspirin or other Anti-platelet agent, and Statin at discharge was increased from 92.9% to 95.4%, and 75.6% to 87.2% respectively. The data in 2016 also showed that 33.3% of patients could be received fibrinolytic therapy within 30 minutes. More than 75% of patients were referred to cardiac rehabilitation in-patient program within 48 hours. 77.6% of smokers were referred to smoking cessation program for receiving quit smoking advice.

Conclusion:
STEMI Clinical Pathway fosters an efficient & responsible management with favorable outcomes. It helps to standardize and maximize the care of patients no matter they are admitted to CCU or general wards.