



Service Priorities and Programmes

Electronic Presentations

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Congestive heart failure clinical pathway

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Introduction

Congestive heart failure is one of leading cause of death and major health burden worldwide. Guideline based clinical pathway for congestive heart failure patients is proven to improve survival and unplanned readmission.

Objectives

To develop a guideline based clinical pathway in managing patients with Congestive Heart Failure. By using the CHF clinical pathway, patients can receive evidence-based management; thus help to improve survival and reduce unplanned readmission.

Methodology

Inclusion criteria: All patients, less than 80 years old, admitted from AED with diagnosis of CHF/heart failure/Acute Pulmonary Oedema(APO) in acute M&G wards
Exclusion criteria: Patients with baseline Cr \geq 300mmol/L Patients transferred in from other departments apart from AED
Workflow of Integrated Patient Care Plan:
• In-patient care plan started from Day 1 to around Day 5 of hospitalization period
• Admission of heart failure patients from AED
• Nurse in acute medical wards would identify patients according to the diagnosis made by the Department of Accident and Emergency
• Patients with diagnosis of "heart failure /Acute Pulmonary Edema/Pulmonary edema" are recruited
• Pre-printed clinical pathway will be placed into patient's folder
• Ward staff will inform cardiac nurse for cases screening and selection into the in-patient heart failure care program
• Cardiologist reviews the management plan and offer suggestion from D2-D5
• Medication review in the usage of evidence based medication for heart failure
• Coronary angiogram (coro) +/- Percutaneous Coronary Intervention(PCI), echocardiogram assessment or CRT implantation will be arranged for selected patients
• Refer Physiotherapist or Occupational therapist for early rehabilitation according to clinical condition
• Refer Dietitian for advices according to clinical condition
• Cardiac nurse will educate patients about the use of medication, drug and fluid compliance
• Recruit suitable heart failure patients (ambulatory patients with admission more than 2 times) into out-patient nurse-led heart failure care program.
From pilot phase to full implementation, up to the end of 2015, total 33 patients were cared under the CHF clinical pathway
Baseline characteristics of CHF patients, risk factors, percentage use of evidence-based-medicine, 6 month unplanned admission and 6

month mortality were collected in the period of pilot phase and will continue to be collected after implementation of the pathway. Same set of data were also collected for CHF patients with matched inclusion criteria before the implementation period. Owing to the fact that the formal implementation was started in late 2015, only some of the clinical outcome could be showed after analysis.

Result

Prescription percentage of ACEI improved significantly from 47.1% to 84.8% ($p=0.007$). Prescription percentage of beta-blocker was similar ($p=0.7$). All risk factors identification percentage was significantly improved. Fasting glucose and Hba1c checking percentage improved from 64.1% to 100% ($p<0.001$) and 24.9% to 84.8% ($p<0.001$). LDL and Triglyceride (TG) checking improved from 47.1% to 100% ($p<0.001$) and 52.9% to 100% ($p=0.001$). Prescription of evidence based medication and risk factor identification after the implementation of CHF clinical pathway improved significantly. By providing the guideline and evidence based congestive heart failure care pathway, cardiology care for patients with congestive heart failure would be improved. Long term outcome of patients under the care of pathway, e.g. unplanned readmission rate, mortality rate, symptoms control (NYHA & Angina class), and length of stay will be collected and analyzed