When telemedicine meet acute chest pain patients: How we use in-hospital tele-ECG to improved quality of care and improved D2BT of STEMI patients

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Tele-ECG triage has been used worldwide in many different scenarios including home monitoring for arrhythmia detection, post pacemaker or ICD implantation followed up and pre-hospital ECG triage by ambulance staffs; reasons for monitoring including arrhythmia detection, chest pain evaluation for possible acute heart attack. How to shorten diagnosis and treatment delay are challenging to clinical practice. Current guidelines recommend that >75% of patients with ST-elevation myocardial infarction (STEMI) receive primary percutaneous coronary intervention (PPCI) within 90 minutes. The goal has been hardly achievable. Many steps were associated with delay diagnosis and treatment from ED to cathroom. However, ECG reading adds PPCI activation is the most critical step. So we conducted a 2-year before-and-after study to determine the impact of emergency department (ED) tele-electrocardiographic (tele-ECG) triage and interventional cardiologist activation of the infarct team at door-to-balloon time (D2BT) and the proportion of patients undergoing PPCI within 90 minutes since arrival. This triage was successfully shorten D2BT and also associated better clinical outcomes in subsequent 3 years follow up. In my presentation, I will share our experience about what difficulty we face before and after implantation these strategy and possible influence to associated team members.

Biography
Kuanchun Chen received complete medical education in National Defense Medical Center, Taipei, Taiwan during 1992-1999. He completed internal medicine resident and fellowship training in Taipei Veterans General Hospital. Since 1996-November, he began to get involved in a new booming growth area: TeleHealth and now become a team member and leader of TeleCare Services Center of department of cardiology, heart center in Cheng Hsin General Hospital, Taipei, Taiwan. As the pioneer of this field, he tried many possibilities of telemedicine in daily medical practice and in different disease population as acute myocardial infarction, hypertension, or diabetes patients.

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