The National Heart Association of Malaysia is embarking on a project named “MySTEMI Program” for the Klang Valley region. At the moment, efforts to provide the best care for patients who has suffered from a myocardial infarction in the critical early stages (primary PCI) has been offered only by certain hospitals around the area. We hope by piloting a regional based network, this form of treatment can be offered to many more sufferers of this condition in the Klang valley region covering many hospitals in the area. For the very first time, NHAM is coordinating a project with the main stakeholders from the MoH Hospitals, Universities and IJN. A hub-and-spoke concept has been adopted, in which a few hospitals (spoke) will feed their patients to a hub hospital with a cardiac catheterization laboratory. The Hub centres are Institut Jantung Negara, University Malaya Medical Centre, Hospital Serdang, Universiti Teknologi MARA and Pusat Perubatan UKM.

The hospitals participating as Spoke centres are Hospital Kuala Lumpur, Hospital Ampang, Hospital Tengku Ampuan Rahimah Klang, Hospital Putrajaya, Hospital Banting, Hospital Kajang, Hospital Selayang, Hospital Sungai Buloh and Hospital Shah Alam.

This program commenced on the 15th of December 2015. We hope to have your full cooperation and commitment for this project. Our main goal is to provide the people of Klang Valley with the best care for the treatment of myocardial infarction based on the best available evidence and service availability.

Datuk Dr Rosli Mohd Ali on behalf of the MySTEMI network Central Working Committee,
This year LUMEN Global had an overwhelming turnout of more than 900 attendees with strong regional KOLs and large audiences from Malaysia including 300 emergency physicians.

A special closed-door session was organized to highlight the importance of primary PCI (pPCI) and its economic value for STEMI patients in Malaysia. The session was attended by the Minister of Health, Director General of Health and his team. The current treatment options, NCVD data, cost-benefit and effectiveness of pPCI were presented in this session. The session was chaired by Dr Sameer Mehta and Datuk Dr Rosli Mohd Ali. The speakers were Tan Sri Dr Robaayah Zambahari, Prof. Dr Wan Azman, Dr Christopher Granger, Mr Alex Au-Yeong and Dr Sameer Mehta.

Pre-hospital services; such as equipping ambulances with ECG machine capable of transmitting ECG securely and the separation of ambulance services from hospital emergency department were discussed in this session. Dr Sabariah, Head of Emergency Services added that collaboration between public and private hospitals are also needed in handling patient referral for pPCI.

The Facebook posts by Minister of Health and Director General of Health, respectively, reiterated the importance of pPCI and its benefits in saving lives and cost effectiveness.
The data collection for MySTEMI commenced on 15th December 2015. As of 31th January 2016, 62 cases of STEMI were referred to Hub centres. Out of these cases, a total of 59 primary PCI were conducted.

Since standardized forms were implemented for MySTEMI network data collection, only 3 sites are currently active, Institut Jantung Negara (IJN), Hospital Serdang, and UiTM hospital. Data collection for University Malaya Medical Centre (UMMC) and Pusat Perubatan Universiti Kebangsaan Malaysia (PPUKM) remains inactive for the time being and hopefully they will up and running soon.

### Issues and Challenges

The Ethics Committees (ECs) approval from the respective institutions is currently the main challenges for this study. Although the data collection commenced in most centres, the collected patient data were not transmitted to MySTEMI Data Centre in NHAM, until the EC approval is obtained. In some instances, no patient data can be collected, until the Case Report Forms (CRFs) used for data collection is approved by the EC.

### Actions Taken

The documentations and forms required by the ECs were prepared. As of 15th February 2016, the EC submission dossiers were submitted to Medical Research Ethics Committee (MREC), IJN Ethics Committee (IJN EC) and UMMC Medical Ethics Committee (UMMC MEC) respectively. Prior obtaining EC approval, the participating hub centres are encouraged to report the number of pPCI cases, procedure date and name of referring/spoke hospitals to the MySTEMI Data Centre.

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**pPCI conducted per week within MySTEMI network**
PPUKM–IJN–Hospital Ampang: Hubs-Spoke discussion

PPUKM- IJN- Hospital Ampang initiated hubs-spoke centre discussion on 9th Jan 2016 during LUMEN Global 2016. With the continued commitment and teamwork, the processes for transferring STEMI patients for pPCI were established. Hospital Ampang can now transfer patients with STEMI presented between 8am to 3pm during working days. The transfer process from Hospital Ampang to PPUKM is initiated after receiving green light from PPUKM cardiologist on-call. In the event the patient could not be referred to PPUKM, IJN would support as a Hub centre to Hospital Ampang.

Meeting between Hubs centres, PPUKM and IJN with Hospital Ampang during LUMEN Global 2016 - from PPUKM Cardiology Unit, Prof. Dr Oteh Maskon and team; PPUKM Emergency Department, Dr Siti Sarah; Hospital Ampang Emergency Department, Dr Ridzuan Mohd Isa and team; Hospital Ampang Medical Department, Dr Mohd Rahal Yusoff and IJN Cardiology Department, Dr Al Fazir Omar.

Data Collection: Query avoidance hints

Queries or data discrepancies present potential data problems and propose resolutions to those problems. When are queries generated?

1. Missing item values
2. Variations from an expected range
3. Inconsistencies between values within the forms/multiple forms
4. Illegible data/ unclear written entry

For MySTEMI, the TIMELINE to answer query is within 5 working days.

Hint #1
Review the completeness of MySTEMI form. Kindly take note for the followings:

a. The CORRECT form is used for data collection. If the form is almost depleted or not available, please contact the MySTEMI Data Centre immediately.

b. All time points marked with the RED star (★) are completed. Kindly pay extra attention to TRANSFER Time and CONSENT Time.

c. Patient’s medical history and risk factors is completed

d. Arrival blood pressure at Hub’s Emergency Dept.

Hint #2
Timely update of the NCVD ACS and PCI registries for patients enrolled in MySTEMI.
MySTEMI Network

Program Timeline

• Identify challenges
• Discussion with Central Working Committee, Hub and Spoke Centres

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