New procedures for Myocardial Infarction in the community

The gold standard treatment for ST Elevation Myocardial Infarction (STEMI) is now internationally agreed to be primary percutaneous coronary intervention (PPCI) as early as possible after the event. This minimises myocardial damage and ensures optimal outcomes.

The Acute Coronary Syndrome (ACS) clinical programme has designated a range of centres across the country, which can deliver PPCI. The aim is to provide a PPCI within 120 minutes allowing 90 minute travel time plus 30 minutes for the intervention. Unfortunately, geography, infrastructural and other limitations mean that some people will not be able to access PPCI within 120 minutes. In these instances such patients will continue to be assessed in the nearest hospital for thrombolysis. The following is a list of the designated PPCI centres:

Designated 24/7 PPCI centres

1. University College Hospital, Galway (HSE West)
2. Mid Western Regional Hospital, Limerick (HSE West)
3. Cork University Hospital (HSE South)
4. Mater Misericordiae University Hospital, Dublin (HSE DNE)
5. St James's Hospital, Dublin (HSE DML)

Designated 9-5 (Mon to Fri) PPCI centre

1. Waterford Regional Hospital (HSE South)

Optimal reperfusion for your patients

The sooner that the need for PPCI is identified, and the fewer the delays, the best chance a patient has to benefit optimally from the intervention. Achieving an Optimal Reperfusion Service (ORS) for as many patients as possible is a challenge and requires some changes in operating procedures to optimise outcome for patients. **The ORS began in the HSE West and South regions in October 2012 and in HSE DNE and DML (Dublin) regions on 14 January 2013**.

The principal change relates to the ambulance service, where some hospitals that do not have a PPCI Service will be bypassed in favour of direct transport to PPCI centres once a STEMI has been identified and provided that the PPCI centre can be reached within 90 minutes. See the attached graphic of the ORS protocol. While every precise occasion will be unique in the details, the procedure to be followed where myocardial infarction is suspected is set out below.

Once the clinical need for an emergency ambulance is identified (if appropriate even before an ECG is done) the Ambulance service should be contacted immediately, by dialing 999 or 112, in order to minimise delay in travel. Clinical and other details will be requested to facilitate the best response. As a critical link in the clinical chain, the ambulance service should be used to transport these patients, and alternative arrangements should only be made in exceptional circumstances preferably in consultation with the ambulance controller, who will have the best information and appropriate oversight of the situation. **While awaiting the emergency service**, appropriate clinical care should be provided to the patient as per normal practice.

A 12 lead ECG should be performed locally where possible, and a printed copy generated. This should negate the need for the Ambulance crew to do another ECG on arrival thus saving precious time. **As soon as a STEMI is identified on ECG** (either by the local clinician or the ambulance crew on arrival), the ambulance service should be informed and they will then alert the receiving PPCI centre where travel times permit.

Clear communication in sometimes stressed circumstances is paramount, and it is suggested that the phrase **'code STEMI'** is used to clearly indicate a diagnosed STEMI. This will activate a swift response by the ambulance service. The Ambulance crew will determine time from GP practice to PPCI centre in relation to the ORS protocol and the PPCI centre will be alerted where appropriate.

It is hoped that the combined efforts of all involved will allow as many people as possible to benefit from this intervention, and the participation of GPs is a key factor in ensuring success in these circumstances.

Further information available on HSE website
http://hsenet.hse.ie/clinicalstrategyandprogrammes/?importUrl=http://localhost:82/eng/about/Who/clinical/natclinprog/acsprogramme/

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ACUTE CORONARY SYNDROME

Optimal Reperfusion Service (ORS) Protocol