CONFERENCE ABSTRACT

Standardising care for heart attack (STEMI) patients, Ireland

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Under a reform agenda, the Health Service Executive (HSE) in Ireland initiated the National Clinical Programme for Acute Coronary Syndrome (ACS) in 2010, as a joint venture with the Royal College of Physicians of Ireland (RCPI). Early attention was focussed on treatment of patients with ST elevation myocardial infarction (STEMI) as treatment varied nationally depending on distance from a Cardiac centre offering 24/7 primary Percutaneous Coronary Intervention (PPCI) (direct clot removal), a more effective treatment with less complications but requiring specialised facilities compared with thrombolysis (clot dissolving drug treatment) available in all general hospitals.

The aim of the programme was to save lives by standardising the care of patients with STEMI nationally through implementing a national Optimal Reperfusion Service (ORS) protocol.

Following development and consultation 2011-2012, the protocol was implemented nationally in 2013, ensuring that:

1. All acute services were aware of the ORS protocol, (early detection of suspected STEMI patients, rapid transfer within 90 minutes drivetime to nearest PPCI centre)

2. Ambulances were equipped and paramedics trained (to undertake 12-lead ECG, recognise STEMI, transmit ECG, communicate directly with cardiology staff (Code STEMI) and transport the patient rapidly to the Catheter Lab in PPCI centre thus bypassing local hospitals and emergency departments.

3. Primary PCI centre hospitals were designated based on criteria: a) two catheter laboratories, b) ability to provide a cardiology roster of 1:5 minimum. There are 5 designated 24/7 PPCI centres and one 9-5, Monday to Friday PPCI centre.

4. General hospitals were clear on implementing early detection and rapid transfer to PPCI centres similar to (2) above.

5. A monitoring system was put in place to measure the performance of the ACS programme.

There was active participation of a) National Ambulance Service, b) Emergency medical services regulatory body), c) RCPI who supported an Advisory Forum of interventional cardiologists, c) Cardiac nurses and those in cardiac rehabilitation. Consultation was held with Irish Heart Foundation and CROI charity. Finally, to ensure provision for patients in the North West region, cross border discussions with the health service in Northern Ireland led to contracting a service with similar parameters across the border in Derry, Northern Ireland.
The ACS programme successfully implemented an early detection and by-pass programme to reach a small number of PPCI centres in conjunction with all parties in hospital and pre-hospital environment in an era of recession. The result is that PPCI is now the dominant form of reperfusion treatment, 94% in 2015 compared with 55% in 2011. To promote sustainability and address quality improvement, a real time feedback loop is currently being finalised.

Lessons learnt: importance of professional co-operation, acknowledging that change takes time, persistence and keeping the long term goal in view, using old and new communications. Also there are answers outside the box e.g. cross border development which allowed both communities to benefit from newer treatment. The protocol and lessons learnt are eminently transferable especially to other emergency situations e.g. advice has been sought by colleagues developing a thrombectomy service for ischaemic stroke.

**Keywords**: heart attack; national protocol; paramedics