POSTER ABSTRACT

Primary PCI service for Donegal patients available in Derry

17th International Conference on Integrated Care, Dublin, 08-10 May 2017

Anne Mc Shane, Vinnie Krishnan, Gerard Lane, Sinead O Gorman

HSE North West, Ireland

The 2012 Acute Coronary Syndrome (ACS) report described standards of care for ST elevation Myocardial Infarctions (STEMI) and non-ST elevation Myocardial Infarctions (NSTEMI). The recommended pathways depend on proximity to a Percutaneous Coronary Intervention (PCI) centre. No such facility existed in the Northwest. The Wright report (2012) highlighted that most of the population (91.4%) lived at a distance greater than 90 minutes road time from the nearest primary PCI centre in Dublin or Galway.

The HSE, through the ACS Clinical programme has designated a range of centres across the country to deliver PPCI. International evidence has shown that PPCI intervention is most effective if the dedicated centre can be reached within 90 minutes of diagnosis. The gold standard treatment for a major heart attack (ST Elevation Myocardial Infarction - STEMI) is primary percutaneous coronary intervention (PPCI). The establishment of dedicated cardiology teams in PPCI centres allowing for the maintenance of a 24/7 service with direct access to cardiac catheterisation labs has been essential for the development of the service.

In Co Donegal with a population of 161,137 the nearest PPCI centres are University College Hospital Galway (3.5 hrs) or Dublin 3 hrs approximately. Prior to May 2016 patients presenting to Letterkenny University Hospital with an acute STEMI were given fibrinolysis and transferred to Galway. The cardiology Review group Report, 2013 made a recommendation that patients requiring PPCI who are within 90 minutes road time from Derry should be referred.

Altnagelvin Hospital in Derry is 32.5km from Letterkenny, and is one of two designated PPCI centres in Northern Ireland. The advent of the peace process has allowed the free flow of traffic across the border. The designation of Altnagelvin Hospital in Derry presented the opportunity as a PPCI centre for the people of Donegal in another jurisdiction, and so in May 2016 links with Altnagelvin have been firmly established. Pathways have been devised and all STEMIs are transferred to Altnagelvin Hospital to the catheterisation lab, a journey time of 20 minutes, which has reduced significant transport costs and the cost of nursing resources in the process.

There were many key issues involved in the rolling out of this programme, across another jurisdiction, communication with ambulance staff in relation to PPCI and the need for emergency transit, the development and dissemination of devised pathways to staff both in
the Emergency Department (ED) and the Coronary Care Unit (CCU) were communicated and the repatriation of the patient back to the hospital post procedure had to be devised. A surgical referral pathway for patients requiring emergency surgery was also required. Financial implications and contingencies were highlighted.

The Information Computer Technology (ICT) provision and protocols for transferring personal data across to another jurisdiction initially presented difficulty because of the disparate Data Protection Laws. The transmission of Electrocardiographs (ECG) from the National Ambulance Service (NAS) and the ED in keeping with data protection laws was fundamental to the success and viability of the service.

**Keywords:** ppci; stemi; nstemi; integrated; jurisdiction