SWINDON HEART ATTACK PROGRAM TO EVALUATE AND IMPROVE TIMING OF ANGIOGRAPHY IN NSTEMI (SHAPE-IT NSTEMI)

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Abstract 44

Figure 1

Angiography for NSTEMI patients within 72 hours of admission pre improvement

Abstract 44 Figure 2

Angiography for NSTEMI patients post improvement

Aim To improve NSTEMI care; with a particular focus on the timing of angiography in NSTEMI and same day discharge after angiography and follow on percutaneous coronary intervention (PCI).

Setting: Single site non-surgical centre in the NHS, with a national target for 75% of NSTEMI patients to have angiography within 72 hours of admission.

Methods In August 2020 we invited a change expert to facilitate a session. Stakeholders included: Nurses - ACS/ACU/Cardiology Ward/Cath Lab/Rehab/MINAP audit/Matron; Head of Service; Site managers; Radiographers; Cardiac physiologists; Emergency Physicians; Paramedics; Cardiologists and our local pathway manager. The session focussed on heart attack care and set realistic goals. The patient pathway, current model of care and future directions were discussed, and an improvement plan was made.

The goals included:

- Improving patient experience
- ≥ 75% of angiography within 72 hours of admission for NSTEMI
- Increased same day discharge (golden patient)
- Direct admission to a free bed on the Acute Cardiac Unit (ACU) for high risk NSTEMI from the community via the ambulance service

The key steps to achieving change were:

- Smart listing – cases were labelled NSTEMI or NSTEMI GP (golden patient) on the ordering system – started in April 2021
- Buy in from operators for a NSTEMI patient on the list each morning ahead of elective work
- Recovering PCI cases in the general cardiology ward
- NSTEMI patient information, a new leaflet given to patients - Notional PCI CENTRE
- INTER-HOSPITAL TRANSFER VS DIRECT ADMISSION TO PPCI CENTRE

BACKGROUND

Primary PCI is the treatment of choice in patients presenting with ST elevation myocardial infarction. The delay in reperfusion leads to increased morbidity and mortality. The secular trends in the impact of inter-hospital transfers (IT) on mortality in the United Kingdom (UK) have not been recently investigated.

AIM To investigate the impact of Inter-hospital transfers on in-hospital major adverse cardiovascular events and 5 years mortality among patients admitted to a tertiary care Centre in the UK

METHODS The patient level data on STEMI patients admitted between 2011 to 2021 were retrospectively collected in line with (NICOR) data fields. We compared baseline characteristics and mortality data of IT group to age and gender matched DA group. Primary end point was in hospital major adverse cardiovascular complications and secondary end point was mortality at five years for patients admitted from 2011 to 2016. Of 4269 patients, 3044 (71%) were directly admitted and 1225 (29%) presented by inter hospital transfer. Inter hospital transfer group were more likely to present with cardiogenic shock and their median call to balloon time was 108 minutes longer than direct admission group. There was no