**Background:**
The challenge of non-ST-elevation acute coronary syndromes (NSTE-ACS)
- Patients with NSTE-ACS are at risk of further cardiovascular events and early death (Fox 2004).
- Early diagnosis and risk stratification can identify those at high risk who are likely to benefit from evidence-based drug therapy and angiography.
- Recommendations ESC (Bassand 2007), SIGN (SIGN 2007):
  - 12-lead ECG should be obtained & interpreted within 10mins of admission.
  - ACS patients should be risk stratified.
  - Dual anti-platelet therapy & anti-thrombin therapy should be prescribed once ACS diagnosed.

**Methods:**
NET 1 & 2
- Patients with NSTE-ACS
- Signed consent
- Patients aged 18-80
- Excluded emergency patients admitted via A&E.

**Setting:**
- District General Hospital with 270 beds
- Catchment population 180,000

**Objectives of Study:**
- To evaluate if nurse-led chest pain triage can improve time to assessment and the immediate management of ACS patients.
- To re-evaluate if any benefits are sustained several years later when established as routine care.

**Results:**
**NET 1 study:**
- Triage vs non-triage
- Demonstrated statistically significant differences in:
  - Time to take & interpret the ECG (fig 1) p<0.001
  - Clotidogrel prescribing (fig 2) p<0.05
  - Managed in CCU - 83% vs 34% p<0.001

**NET 2 study:**
- Triage vs non-triage
- Compared the same end-points for the established triage service NET-2 (n=92) with the initial triage service NET-1 (n=103), demonstrated no significant differences in:
  - Comparative ECG times (fig 1)
  - Clotidogrel prescribing (fig 2)
  - Whether managed in CCU

**Results: NET-2 triage v NET-1 triage**
Comparing the same end-points for the established triage service NET-2 (n=92) with the initial triage service NET-1 (n=103), demonstrated no significant differences in:
- Comparative ECG times (fig 1)
- Clotidogrel prescribing (fig 2)
- Whether managed in CCU

**Results: NET-2 triage v NET-2 non-triage**
Comparing the current triage service (n=92) with the minority non-triage group (n=22) demonstrated:
- A statistically significant difference in number having ECG recorded within 10 mins (fig 1) p<0.001.
- For high risk NSTE-ACS patients:
  - 86% (32/37) triage vs 75% (6/8) non-triage were prescribed Clotidogrel
  - 79% (29/38) vs 75% (6/8) prescribed Fondaparinux
  - 38% vs 40% were referred for angiography.

**Results of time to drug therapy:**
NET-2 triage v NET-2 non-triage
- However patients in triage started anti-platelet therapy more promptly and the difference in median time was significant: 1hr 37min vs 9hr 50min p<0.05.

**Conclusion:**
Nurse-led Early Triage facilitates:
- Rapid assessment of chest pain patients
- Risk stratification of those suspected to be ACS
- High risk patients being managed in CCU
- Drug therapy optimised for high risk NSTE-ACS

**References:**

**Acknowledgements:**
Karen Smith Nurse Consultant, Dougie Elder Cardiology Registrar, NHS Tayside
Li Wei, Statistician, University of Dundee

This study was completed by L O Neill as part of a Masters Dissertation at the University of Brighton.