

An Innovative Model for Managing Chest Pain Presentations

Category 2

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An innovative model for managing chest pain presentations
Sydney South West Area Health Service

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Aims

- To reduce unnecessary admissions
- To better utilise inpatient beds
- To improve access to Exercise Stress Testing (EST)
- To reduce Emergency Department (ED) access block

Nature and Extent of the Problem

- NHF/CSANZ guidelines recommend EST prior to discharge for patients with intermediate risk chest pain
 - No reliable process available to offer EST to patients in ED
 - Patients required admission to CCU to await inpatient EST
 - High demand for cardiology beds led to ED access block
 - Existing EST service limited by cardiology registrar availability
 - Delayed access to inpatient EST identified as largest single cause of avoidable extended LOS in CCU

Strategic importance

- This model provides appropriate care in a timelier manner, without compromising patient safety (Strategic Direction 2)
- Supports existing initiatives to reduce ED wait times & length of stay
- Reduces the number of patients awaiting admission
- Reduces the number of patients awaiting specialist review by Cardiology
- Relates well to the NSW Health goal “to provide the health care that people need”

Planning & Implementing solutions

- Proposal developed for an additional 7 day/week specialist nurse-led EST service designed specifically to meet ED demand
- Policies & procedures to support the service were developed in consultation with the ED (including the introduction of a chest pain pathway)
- Regular interdepartmental meetings scheduled to review progress during the trial period
- Model process clearly defined & documented

Outcomes & Evaluation

- From May 20 2006 until April 30 2007, the Cardiac Liaison Nurses conducted **476** EST on patients in the ED
 - **400** (84%) were discharged directly from the ED, with outpatient follow up – negating the need for an inpatient bed
 - **296** patients with a “negative” result discharged by the ED physician
 - **104** patients discharged after further review by the Cardiology team
 - No adverse outcomes identified during 30 day telephone follow-up of eligible intermediate risk patients

Sustaining Change

- Initial project conducted as 6 month trial
 - No ADO/annual leave/sick leave cover identified as major concern
- Permanent funding approved following evaluation of benefit
 - 1 .42 RN FTE added to CCU staffing profile
 - Additional staff trained (5) to allow rotation and provide leave cover
- Outcomes monitored via CNC review of data collected by CLNs

Lessons Learned

- Involve both ED & Cardiology in development
- Incorporate process within a chest pain pathway
- Establish policies to clearly define CLN role & line of responsibility
- Establish clear process for medical confirmation of EST results & determine discharge responsibility
- Regular interdepartmental meetings during implementation
- Address concerns as they arise

Future Scope

- This model is transferable to any hospital where chest pain presentations constitute a significant percentage of the ED workload
 - Safe, effective method of assessing & managing patients with intermediate & low risk chest pain
 - Customises an EST service to meet ED demand

- The *principles* of this model may also succeed for other diagnostic groups
 - Facilitates timely access to a diagnostic service
 - Reduces the workload of specialist medical teams