

# The Power of Innovation

A health care system to meet our needs

NSW Health  
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## Nurse Initiated Thrombolysis in Rural Facilities [NIT] Improving Access to Timely Quality Health Care

Robyn Mears, Lindsay Savage, Dawn McIvor, Dianna Galbraith, Kevin Crosdale, Jenny Skilton, Gary Spain, Yvonne Patricks, Peter Fletcher

### Introduction

ST Elevation Acute Myocardial Infarction (STEMI) remains a challenging issue for hospital systems and a leading cause of death worldwide.

Identification and treatment is critical to reduction in morbidity and mortality. Rural sites particularly have difficulty gaining medical support in a timely manner, with many hospitals having no medical coverage or limited and distant medical support.

### Aim

Increase early identification and confirmation of STEMI and reduce time to treatment in Rural hospitals thus improving the patient's fast access to thrombolysis and critical services.

Up-skill Rural nurses, using Standing orders and guidelines, to confidently deliver safe best practice care in the absence of a Medical Officer.

### Method

The Ministry of Health through Clinical Redesign notified to ensure compliance with the Ministry's Reperfusion Strategy.

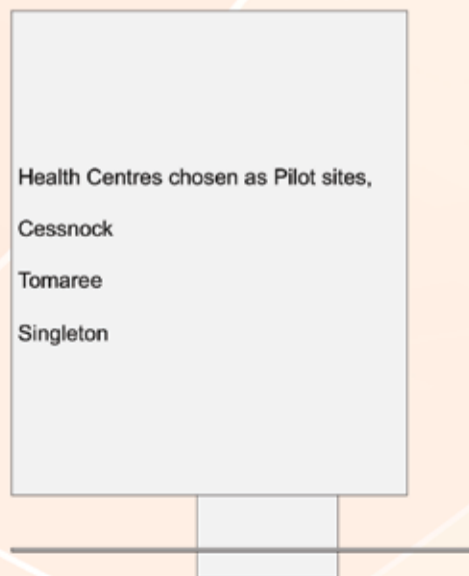
An application to HNE Clinical Governance for a New Clinical Initiative.

Three rural sites involved, ECGs attended and transmitted to Cardiologist for interpretation. LifePac 15 ECG machine utilized.

Major education program and up-skilling of nursing staff in essential competencies attended.

Flow charts, allowing redundancies, developed.

Standing orders for required medications developed with assistance from Area Pharmacy.



### Results

STEMI identified in eleven cases using this process, all successfully thrombolysed by nurses using Standing Orders. The average time from door to needle is 14 minutes.

The protocol has since been activated 15 times. The LifePac algorithm identifies STEMI and nursing staff follow protocol, transmitting to a cardiologist and receiving a response within an average of 5 minutes. The NSW Ministry of Health maintains a goal of delivery of thrombolysis with STEMI within 60 minutes of presentation. This program has easily met that requirement, reducing average time to thrombolysis by 46 minutes from the MoH recommendation and by 29 minutes from Rural hospital average

### Conclusion

The project is the first in Australia to allow nurses to treat patients with thrombolytics.

It addresses the need in remote and rural hospitals for rapid patient access to acute STEMI treatment when a medical officer is not present.

Gives great patient and nursing satisfaction.

Patient comments, 'walked in, time to needle very short, 9 minutes, nurses fast and reassuring. Told doctor good resolution. Was back with my cows the next week'

2010 to 2012

