

## Aim Statement:

By July 2021 reduce transfer times by 10% for all STEMI patients requiring cardiac reperfusion.

## Background to problem worth solving

Reduction of the delay between onset of symptoms and cardiac reperfusion is increasingly recognized as an important clinical goal, with various strategies for achieving this have been implemented across New South Wales (NSW), including improvement of inter-hospital transfers for management of ST Elevation Myocardial Infarction (STEMI) patients.

## Team members

- Sponsor (Guidance Team)**
  - Tracey Szanto, A/Director Models of Care
- Project Team**
  - Dean Pennell Manager Cardiovascular
  - Nick Dutton, Educator Cardiac
  - Steven Faddy – QI
  - Bethany O'Leary Manager Policy & Governance Control Centre
  - Mick Skahill NSW Ambulance Health Relationship Manager
  - Jacqueline Colgan CNC Cardiology Central Coast
  - David Foster, Wyong Emergency Department Clinical nurse Consultant

## Link to National Standard or Strategic Imperative

- NSW State Health Plan – Towards 2021 Direction One and Two.
- NSW Rural Health Plan – Towards 2021 Strategy Two.
- NSW State Cardiac Reperfusion Strategy

## Literature review (list articles reviewed)

- “Nationwide Analysis of Patients With ST-Segment-Elevation Myocardial Infarction Transferred for Primary Percutaneous Intervention” HL Dauerman 2015
- “Timeliness of Interfacility Transfer for ED Patients with ST-elevation Myocardial Infarction” MJ Ward 2015

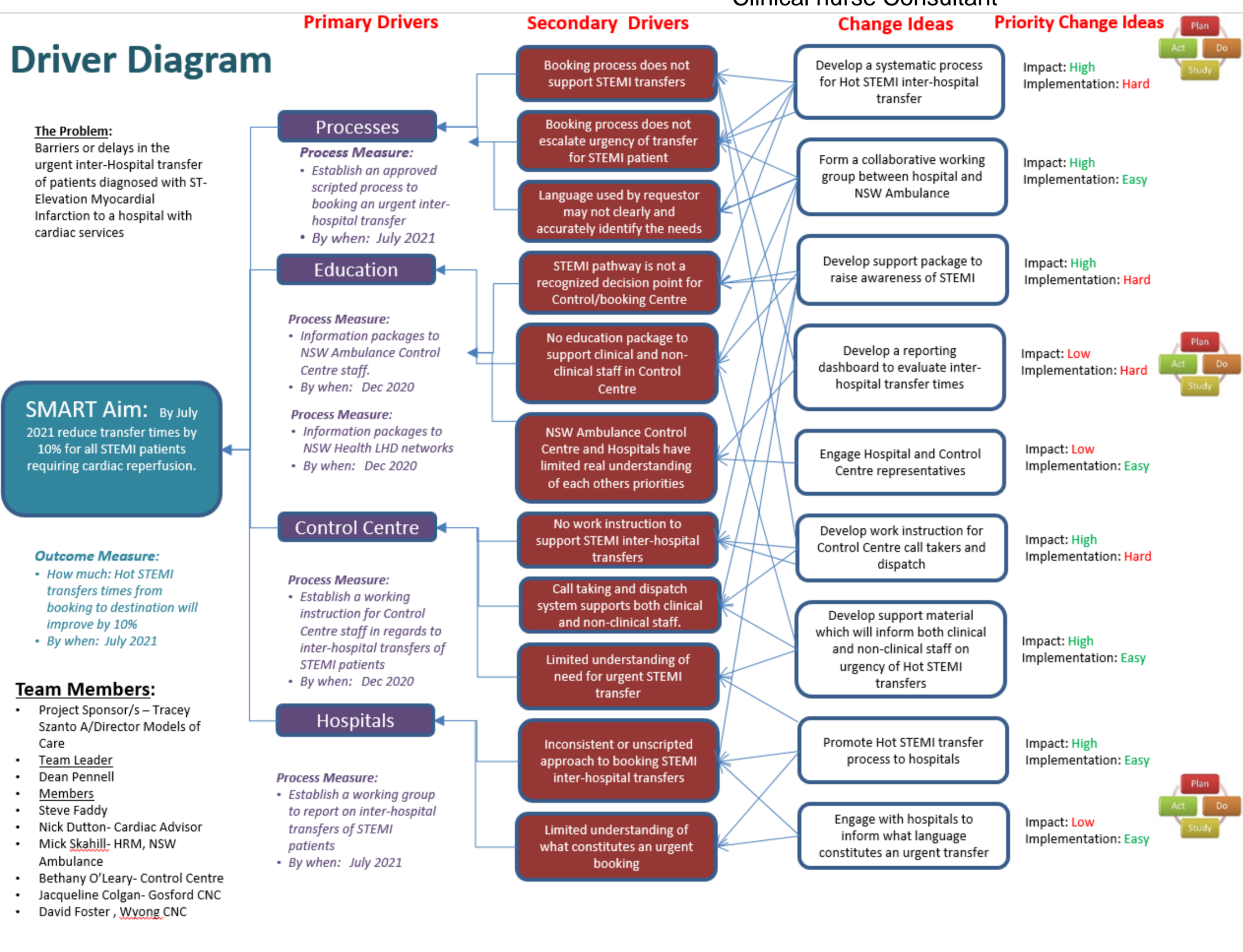
## Driver Diagram

**The Problem:**  
Barriers or delays in the urgent inter-hospital transfer of patients diagnosed with ST-Elevation Myocardial Infarction to a hospital with cardiac services

**SMART Aim:** By July 2021 reduce transfer times by 10% for all STEMI patients requiring cardiac reperfusion.

**Outcome Measure:**  
• How much: Hot STEMI transfers times from booking to destination will improve by 10%  
• By when: July 2021

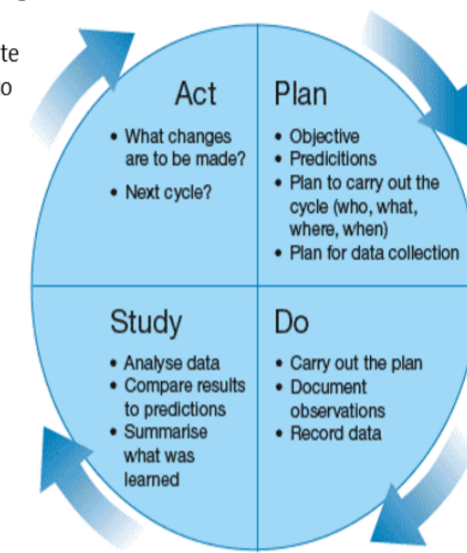
- Team Members:**
- Project Sponsor/s – Tracey Szanto A/Director Models of Care
  - Team Leader – Dean Pennell
  - Members – Steve Faddy, Nick Dutton- Cardiac Advisor, Mick Skahill- HRM, NSW Ambulance, Bethany O'Leary- Control Centre, Jacqueline Colgan- Gosford CNC, David Foster, Wyong CNC



## Testing a Change Idea via a PDSA Cycle:

### 4. Act on the data:

- Next steps:**
  - Raise awareness of transfer times at monthly meetings with working group.
  - Promote patient stories demonstrating benefits of Hot STEMI transfers
  - Clinical Support Managers to promote a "STEMI" focused communication to Control Centre staff.



### 1. Plan your change:

- What? Develop a work instruction for control centre staff.
- Why? Put in place an approved process to facilitate urgent transfer of STEMI patients from hospital to hospital.
- Who did it? Dean Pennell to work with control centre work instruction developers
- When? December 2020
- Prediction? Improvement in reducing inter-hospital transfer times for STEMI patients.
- Baseline data: Measure average of transfer times for past 12 months

### 3. Study the data & anecdotes

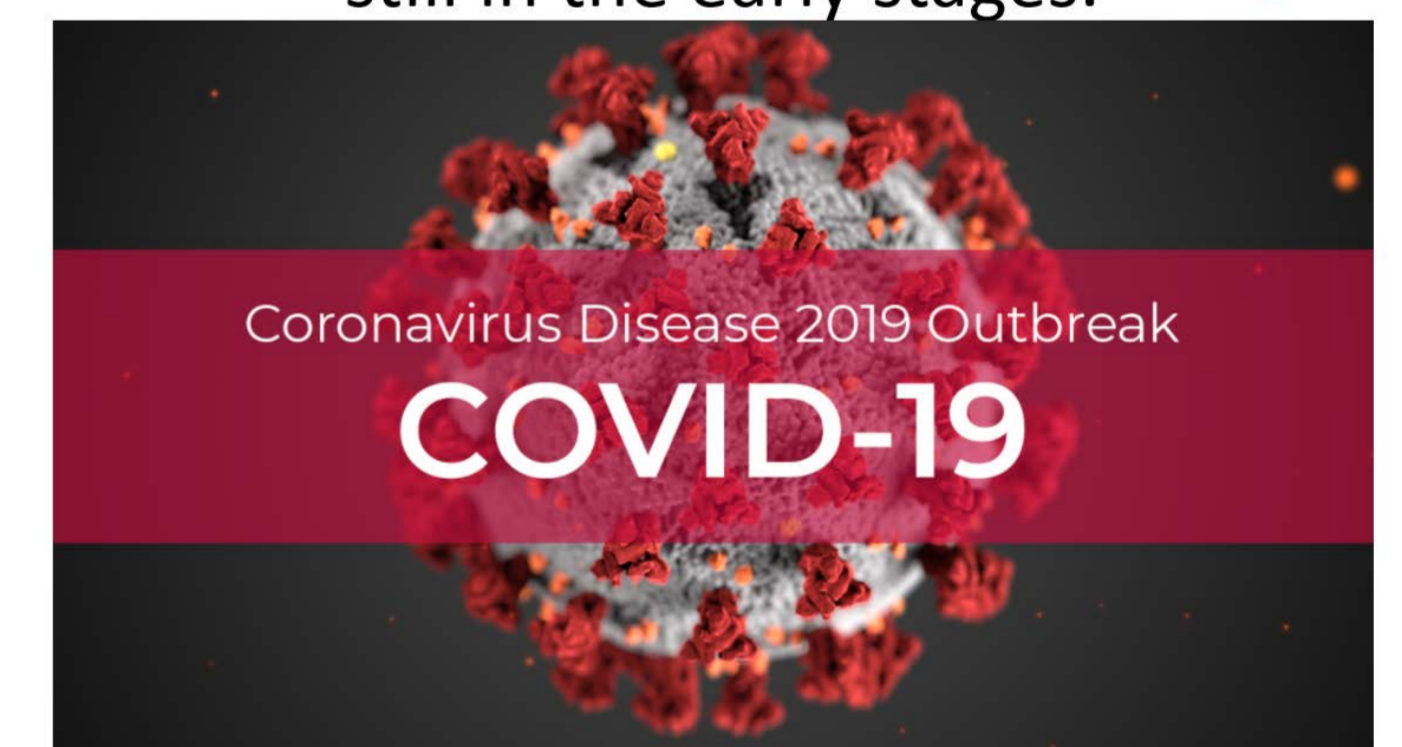
- Result:** Delays in acquiring data has postponed data analysis until December 2020. COVID19 priorities for NSW Control Centre have limited ability to work with data collection units.
- Proposal:** Compare past 12 months transfer times with next 12 month period. Monitor patterns monthly to detect changes and report back to the working group

### 2. Carry out your change, observe and measure?

- Evaluation of monthly reports to identify trends in performance with feedback to working group.

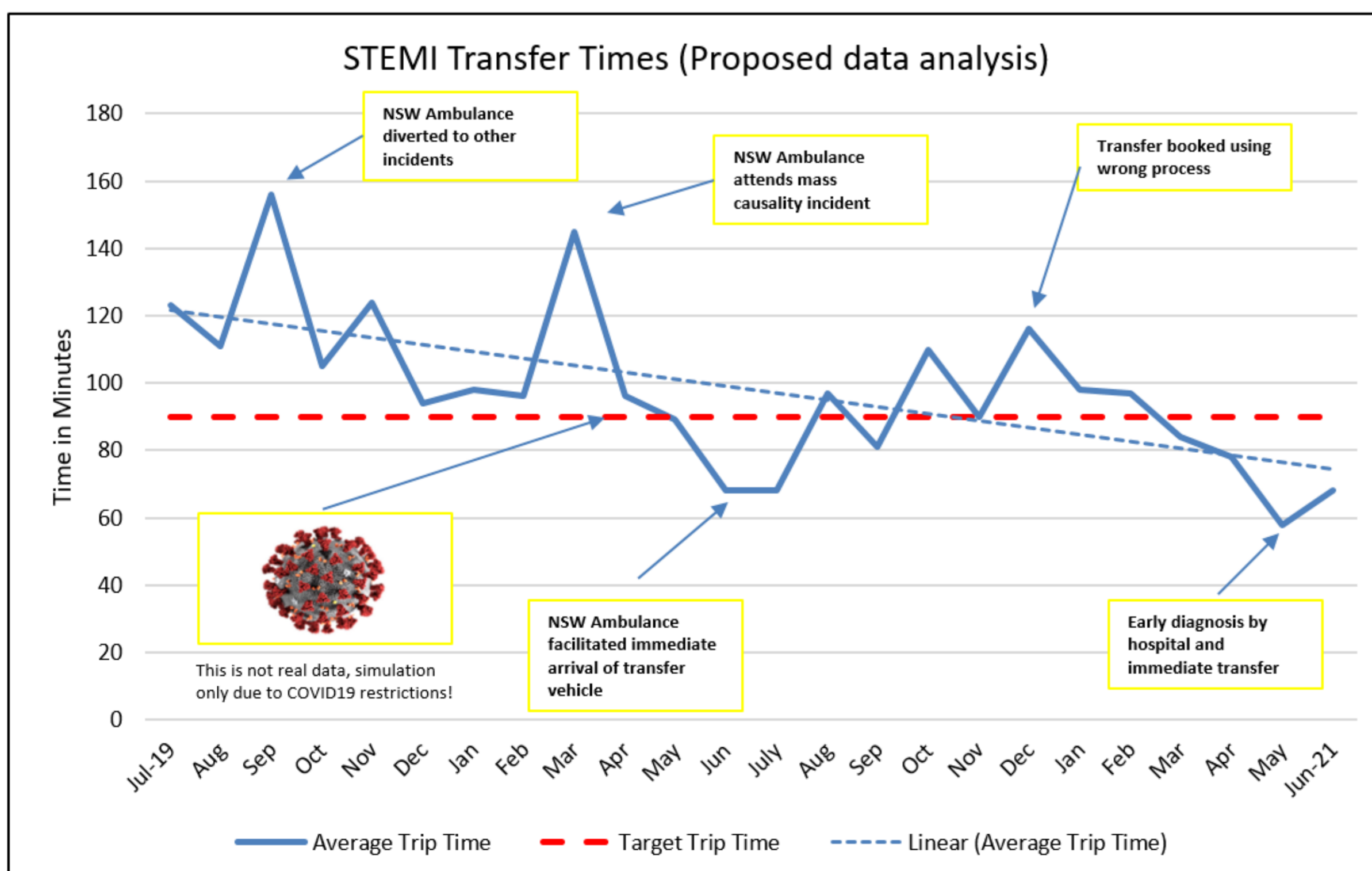
## Overall Outcome of the Project

Due to a number of factors, this project is still in the early stages. 😞



## Results

Disclaimer: This is not actual data, simulation only due to COVID19 impact on ability to collect data!



## Strategies for Sustaining Improvement - Holding the gains

- Standardisation:** This is required for consistent processes to support and facilitate improved inter-hospital transfers.
- Measurement** – Monitoring and reporting will provide a running report card to ensure quality improvement.
- Education:** Promotion and education is the key to supporting the human element in all we do. Systems and processes will provide a consistent pathway, winning the hearts and minds of the people doing the work will ensure success.

## Patient Story

### Hot STEMI Project (Western NSW)

- 49M patient from Mudgee
- Mudgee Emergency Department to Orange Hospital Service(OHS) with inferior STEMI successfully reperused using Pre-Hospital Thrombolysis (PHT)
- Recurrence of blockage enroute to OHS
- CCL activated
- Normal LV function, discharged home day 3.

