

The Statewide ACRE Project

Accelerated Chest pain Risk Evaluation

www.health.qld.gov.au/caru/html/acre.asp

Statewide Outcome Report

June 2016

Summary

The ACRE Project is a state wide clinical redesign initiative to improve the assessment of chest pain patients in hospital Emergency Departments (EDs).

By implementing an accelerated diagnostic protocol (ADP) described in the ADAPT¹ trial, the project aims to safely fast track assessment of one in five chest pain patients. This is expected to lead to reduced ED and admitted lengths of stay (LOS), and fewer admissions to await diagnostic testing.

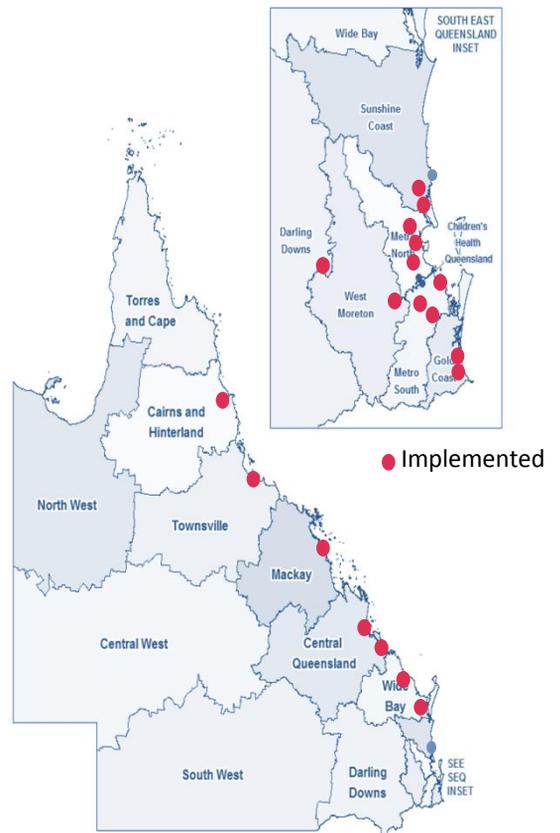
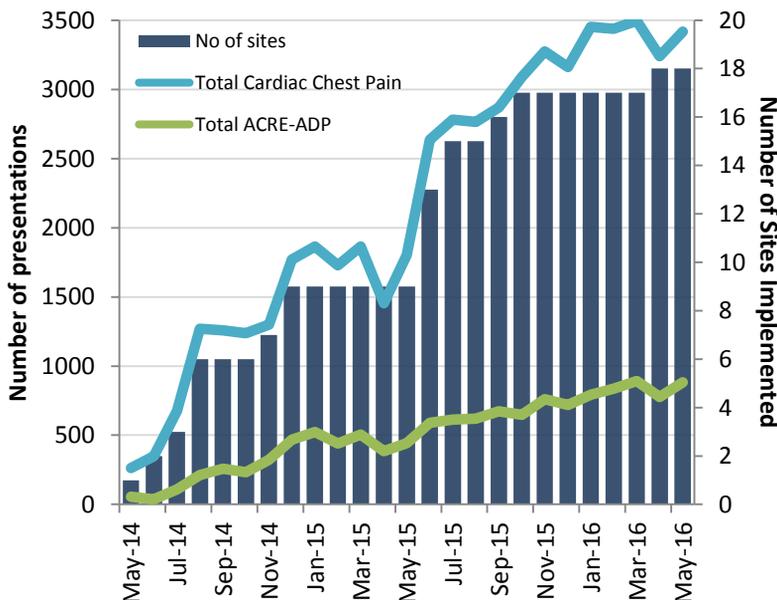
Statewide Outcome Snapshot

For all possible cardiac chest pain presentations:

- ❖ Median hospital LOS ↓ 30%
- ❖ Admission rate ↓ to 52% from 69%
- ❖ 19 hospitals implemented

Outcomes

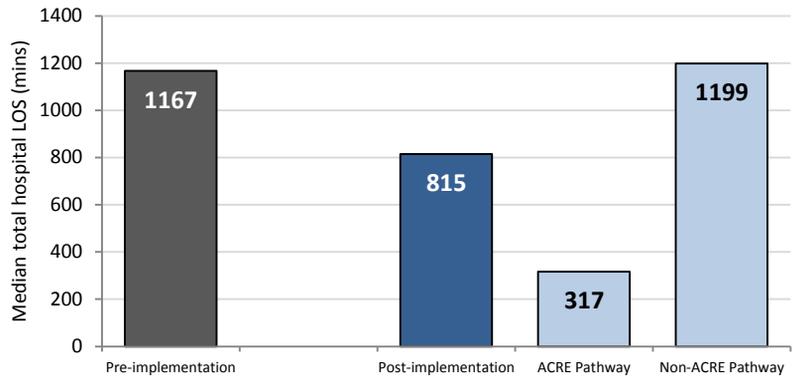
At this stage 19 hospitals across Queensland have implemented the ADAPT-ADP, as shown on the map. At implemented sites to 31st May 2016, **12792 patients**, or **24%** of the 53374 patients presenting with possible cardiac chest pain had been managed using the ADAPT-ADP. Monthly presentation numbers, ADAPT-ADP uptake, and no. of sites implemented and included in data collation are shown on the graph below.



1. Than M, Cullen L, Aldous S, Parsonage WA, Reid CM, Greenslade J, et al. 2-Hour Accelerated Diagnostic Protocol to Assess Patients With Chest Pain Symptoms Using Contemporary Troponins as the Only Biomarker: The ADAPT Trial. J Am Coll Cardiol. 2012;59(23):2091-8. Epub 2012/05/15

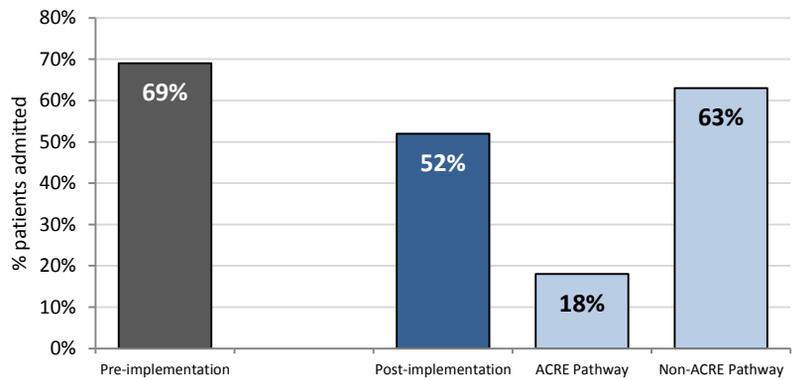
Total Hospital LOS

Reduced by 30%, from 1167 to 815 minutes. This represents the most significant impact of the ACRE Project to date, and a very substantial improvement for a cohort of patients traditionally requiring prolonged assessment and waits for diagnostic testing.



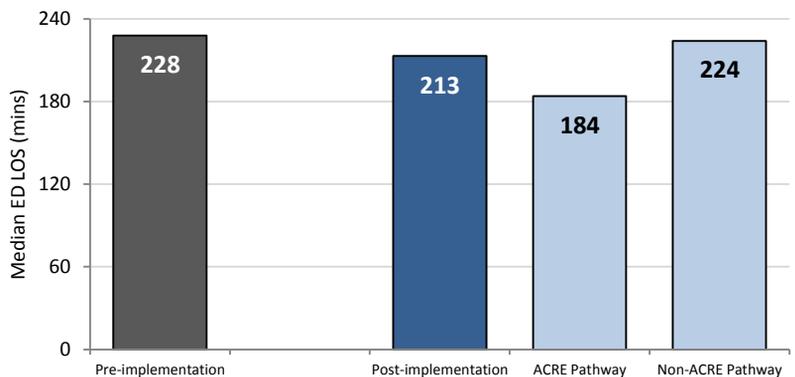
Admissions

Only 18% of patients assessed using the ADAPT-ADP were admitted. This compares favourably to 63% for non ADAPT-ADP patients, which has also dropped slightly from the pre-implementation rate likely due to other factors. The improved rate for ACRE/ADAPT-ADP patients enabled the overall post-implementation rate to drop to 52%.



Median ED Length of Stay

Reduced from 228 to 213 mins, demonstrating a median saving of 15 minutes (7%). While modest in isolation, the impact of this reduction is substantial when scaled across all chest pain patients across all ACRE Project sites.



NEAT (National Emergency Access Target)

Cardiac chest pain patients showed improvement from 56% to 63% following ACRE Project implementation. ACRE/ADAPT-ADP patients performed significantly better than other cardiac chest pain.

