Using a State-wide Learning Health System for the Rapid Deployment, Evaluation and Translation of New Models of Care in South Australia to Reduce Pressure on Emergency Departments and Acute Care

2 Inpatient Care

Reducing unwanted variation in care in general medicine wards

Project 2 aims to design a closed feedback loop for the Gen Med workforce to standardise clinical pathways for frequently encountered conditions and create safe cultures of feedback. This is being delivered through clinical community engagement, embedding of machine-learning based decision support coupled with continuous evaluation.

1 Pre Hospital Care

Safe hospital avoidance for chest pain

Project 1 is a cluster-randomised, health system-level clinical trial which will implement and evaluate a model of care for pre-hospital chest pain assessment by integrating point of care high sensitivity troponin and risk-based clinical decision support to divert low risk patients to hospital avoidance services.

3 Transition to Community Care

Enhancing transition of care to the community

Project 3, The **O**ptimising older **P**eople's **T**ransition from acute care **I**nto residential aged care through **M**ultidisciplinary **A**ssessment and **L**iaison (OPTIMAL) trial, is a multi-site hybrid type II stepped wedge cluster randomised controlled trial with embedded process and economic evaluations.

4 Learning Health System Platform

Evolution of existing statewide digital health platform

Project 4 is focused on enhancing the digital architecture within the health system to support digital phenotyping of clinical conditions, embedded decision analytic models and implement measures for routine variation in care and health economic evaluation of clinical pathways and processes.