# The OPTIMAL Research Project

(**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)

## Background

The transition from hospital to residential aged care is a precarious time, particularly for those entering into permanent residential care for the first time. Findings from a Registry of Senior Australians (ROSA) study show that around 20 per cent of older people who move to residential aged care re-present to hospital within the first 3 months of transition.

The OPTIMAL study forms part of a larger Medical Research Future Fund (MRFF) funded project aimed at addressing the increasing demand and pressures on acute services, taking a 'whole of system' approach. The overall project will examine both 'upstream' (entering the system) and 'downstream' (discharge from hospital) workflows. OPTIMAL addresses downstream workflows, specifically first-time transition to permanent residential aged care for older people.

The OPTIMAL project is applying previous research from the Kaiser Permanente system in the US, which focused on stratifying risk and then applying different levels of risk-adjusted interventions. These ranged from a follow up phone call to the patient, through to intensive case management for the patients at highest risk of re-presentation to hospital.

OPTIMAL is led by a research team from Flinders University with partners including SA Health, Health Translation SA and the Commission on Excellence and Innovation in Health (CEIH), who have developed a clinician decision support dashboard to identity and monitor older persons at high risk of readmissions.

## Methodology

**Aim:** To investigate the implementation, clinical and cost-effectiveness of a risk-adjusted post-discharge intervention for older people on reducing readmission rates after first-time entry into residential aged care.

**Design:** Stepped Wedge Cluster Randomised Controlled Trial with embedded process evaluation across 3 Local Health Networks (LHNs) (3-5 wards in each).

OPTIMAL will focus on people aged 65 years and older, discharged from hospital to a residential aged care facility for the first time. It will be carried out across multiple hospital sites in Central Adelaide LHN (CALHN), Northern Adelaide LHN (NALHN) and Southern Adelaide LHN (SALHN). The intervention will be rolled out over 14 months in the three LHNs in a stepped wise manner. In the control phase, LHNs will deliver usual care.

Eligible patients being discharged to a residential aged care facility for the first time will be identified and categorised (low to high) based on their risk of readmission. A nurse will be appointed to each LHN at least one month prior to start of the intervention. The nurse will work and communicate with ward staff and residential aged care staff and support the implementation of the interventions.

CALHN has been randomised to go first, with SALHN second and NALHN third. CALHN's establishment (set-up) phase began in September, with their project nurse starting at the beginning of October and the intervention to commence in November 2024. Pre-implementation data collection will be undertaken at

CALHN before the intervention commences to assess readiness for change and potential barriers and enablers of implementation.

### OPTIMAL workshop 1 May 2024

A workshop was held in May 2024, bringing the relevant LHNs and other stakeholders together to learn more about the study and consider the evidence-based interventions to be included in the risk-stratified bundle of interventions. The aim of the workshop was to provide an overview of the OPTIMAL Project and for participants to discuss the following key areas:

1. Enablers for a good transition from hospital
2. Barriers to a good transition from hospital
3. Availability of evidence-based interventions
4. Identification of the challenges that evidence-based interventions are addressing

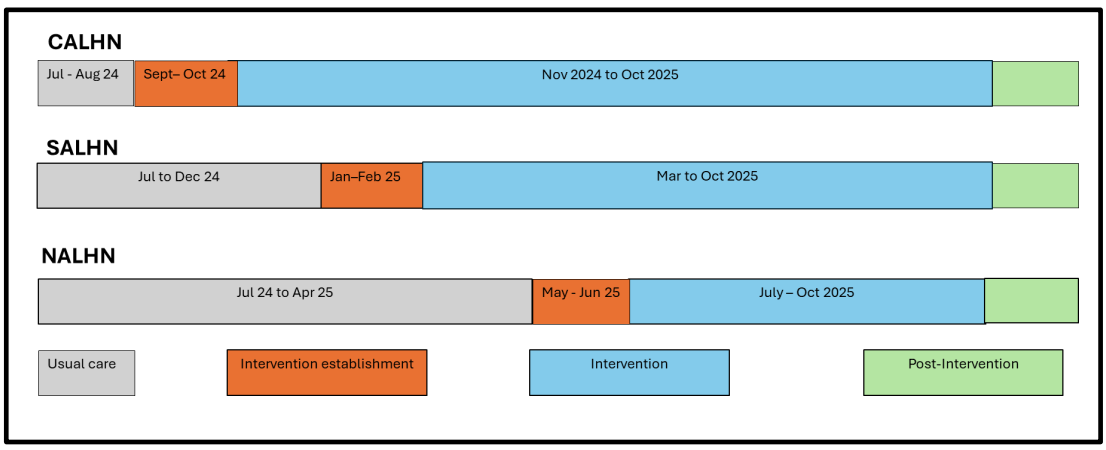
### Amendments to the Discharge Plan Note

A challenge recognised early in the project, was how to systematically identify patients, who were first time transitioning to permanent residential care, from hospital. As mentioned, this cohort is highly vulnerable and there was no standard mechanism to easily identify the older person at risk and monitor transitions. Amendments have been made to the Discharge Planning Note, in the Sunrise Electronic Medical Records (EMR) system and a new Discharge Planning Note, (DCPNv2.0) was deployed on 25 September 2024.

The dashboard developed by CEIH, will use the EMR to extract and flag the eligible older person at risk of readmission, from the information being entered into the Discharge Planning Note by clinical staff. The project nurse will use this information to identify the intervention or bundle of interventions to be delivered, according to the older person's level of risk.

### Next OPTIMAL Workshop – 27 February 2025

The next OPTIMAL workshop is planned for February 2025 (re-scheduled from Nov 2024) and will provide an opportunity to hear how the project is progressing in CALHN and their learnings to date. This will be of benefit to SALHN, who are randomised to start in February 2025 and NALHN who will start in May 2025. Further details about the February workshop will be circulated soon.

For further information please contact Carmel McNamara, Senior Translational Project Officer, Flinders University on carmel.mcnamara@flinders.edu.au

**OPTIMAL Project design and timeline**