



# Reducing morbidity, mortality and costs by initiation of a novel in-hospital intervention for patients with Type 2 Diabetes

## (The REMIT-2-D Project)

### What is the challenge?

In Australia, type 2 diabetes (T2D) is the fastest growing chronic condition, with prevalence tripling over 25 years (1990-2015). More than a million Australians have diagnosed T2D and estimates put undiagnosed T2D at another half million. Indigenous Australian adults are four times as likely to have T2D as non-Indigenous adults. Complications of T2D are serious but preventable. In 2015-16, 10% of all hospital admissions in Australia (over 1 million hospitalisations) had T2D recorded as the principal or additional diagnosis and if this continues to rise at current rates, up to 3 million Australians over 25 will have T2D by the year 2025. In 2016, T2D was the seventh leading cause of death in Australia with a total annual cost impact estimated at \$14.6 billion. Many people with complex, long-term conditions such as T2D have more than one chronic condition (comorbidities,) with associated complex care needs. However, care is often fragmented across the different service areas, resulting in suboptimal outcomes and use of resources.

### About this research translation project

REMIT-2-D stands for Reducing morbidity mortality and costs by initiation of a novel in-hospital intervention for patients with Type 2 Diabetes. The project is based on observations that:

- People with T2D, particularly when they have two or more chronic medical conditions at the same time, have increased lengths of stay and are more likely to be re-admitted.
- A process of care initiated in hospital and followed through into the community, that focuses on best practice for the disease as well as the social determinants that underpin its presence and severity, will reduce morbidity, improve quality of life and reduce the likelihood of readmission.

**An In-Hospital Intervention (IHI)** will be developed in consultation with stakeholder groups, including medical, nursing, dietetic,

primary care and consumers. The IHI will begin on admission to hospital (tertiary care) and will continue back in the community (primary care) after hospital discharge, to provide an integrated and seamless, patient-centred care pathway. Strategies to address the social determinants that underpin much of chronic disease and the consequent need for hospitalisation will be central to the design of both the in-hospital intervention and subsequent pathways of care. This project aims to design an IHI for T2D and is the first stage of a two-stage project. Stage two will test and evaluate the IHI in one location that could be implemented in other locations if effective.

### What was the impact?

Stage 1 has focused on building the framework to inform the IHI including;

- completing a systematic review of evidence for the most effective models of integrated care for T2D, with submission to the Joanna Briggs Institute Database of Systematic Reviews and Implementation Reports Journal,
- completing data extraction, linkage and analysis over a 2-year period for patients with T2D admitted to the Lyell McEwen Hospital (where Stage 2 will take place) to understand the main drivers of readmission, readmission rates and bed day usage,
- the design of an economic model to assess the cost-effectiveness of in-hospital interventions compared to usual care, and
- conducted a series of focus groups to help guide the design of an effective IHI with Aboriginal and non-Aboriginal consumers and health professionals seeking feedback on the IHI.

### Project contact details

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