

A1² Digital Support Tool for Mental Illness

What is the challenge?

After a relapse, people with severe mental illness flow through hospital emergency departments into community-based mental health care. Upon release from Community Mental Health Care, the ongoing care of these individuals come under the jurisdiction of local GPs. In this period of transition to primary care the risk of relapse significantly increases - e.g. the discontinuation of medication (antipsychotic drug therapy) increases the risk of relapse almost five times. Moreover, a lack of connectivity between community based information systems and hospital based systems has the potential to result in ineffective handover of medication schedules posthospitalisation. Patients need regular monitoring and support to ensure they adhere to their medication and treatment plans. Given the importance of medication in managing mental health, and the trauma and cost associated with relapse, detecting non-adherence to medications or missed appointments offers immense opportunity to prevent relapse through early intervention.

About this research translation project

Our research will help community mental health teams decide when to safely discharge patients to the care of GPs without the risk of relapse. Decisions regarding a patient's release are based on their adherence to prescribed care pathways and medication. Al² is a digital platform developed to monitor adherence to care pathways and medication using data from Medicare Benefit Scheme (MBS) and Prescription Benefit Scheme (PBS) using a patients My Health Record (MyHR). The grant obtained through the Medical Research Future Fund (MRFF) will allow us to explore whether the use of patients' MBS and PBS data via the Al² platform, can support improved decision making by clinicians and other healthcare professionals, and whether this optimises health care for individuals with severe mental illness by assisting in the transition between community and primary care.

What will be the impact?

Communication between primary and secondary health services is challenging. By embedding the proposed Al² model in to current clinical practice, we anticipate an increase in the



potential for early intervention through the identification of missed appointments, medication discontinuation and polypharmacy within the Al² system. We expect continued impacts to improve patient safety and long term outcomes, while reducing hospitalisations due to relapse. Specifically, we aim to:

- Reduce duplication and improve efficiency of mental health care by digitally connecting all mental health services i.e., State and Federally funded, including both primary and secondary health services
- Improve health care systems by capitalising on the use of existing MyHR data to provide personalised and responsive care for individuals with high mental health needs
- Improve the efficiency of early intervention, diagnosis and management of patients with chronic and severe mental illness
- Redesign care delivery by improving efficiency and safety through cooperative partnerships between government, industry and healthcare providers
- Reduce preventable hospitalisations through improved adherence to treatment
- Build scalability of digital technology for national application and translation to other health priority areas

Project contact details

Project Title Implementing a decision support tool to facilitate early access to community-based care for people with severe mental illness

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