## Using theory to inform implementation research: The iSOLVE Project

The use of theory to guide the development, implementation and sustainability of complex interventions has been recommended. However, researchers are faced with a large and growing number of knowledge translation theories to choose from. Currently, there is no accepted approach to theory selection and the rationale for the choice of theory in intervention studies is often missing or not well articulated. In addition, there is varying evidence to support the many theories reported in the literature, thus making theory selection difficult. The Integrated Solutions for Sustainable Fall Prevention research study, the iSOLVE project, is an implementation study funded through a National Health and Medical Research (NHMRC) Partnership Project Grant. The aim of the study is to improve access to appropriate evidence-based fall prevention interventions for older people by establishing integrated multidisciplinary processes and pathways in primary care. In designing this complex intervention, we needed to identify theories that could be used to underpin the successful implementation and sustainability of the intervention over time. Given the scope and multicomponent nature of our study we considered a range of theories related to knowledge translation, implementation science, program sustainability and fall prevention. No single theory fitted our needs. Thus, we selected a suite of theories and models to: 1) provide an overarching framework for the study, 2) inform the various components of the complex intervention and 3) guide the study evaluation. This presentation will describe the theory selection process and how we are using these theories to inform this implementation project.