



Care

Evaluating new screening tools to detect cognitive decline and dementia

What is the focus of the research?

Identifying a screening tool that detects subtle impairment in a person's ability to perform everyday activities, which may indicate cognitive decline or dementia.

Why is this important?

Completing everyday activities is important for quality of life as we age. Decline in these abilities (functional impairment) can be a predictor of dementia.

Detecting subtle change in functional ability is difficult and commonly used assessments don't always identify subtle change. Directly observing how people perform activities is best, but this can be time consuming, expensive and Australia doesn't have enough occupational therapists to perform observational assessments. Subtle functional decline is going undetected and people may be missing out on necessary services.

Screening is an effective, low-cost alternative, but there are no brief, routinely used observational functional cognition screens in Australia. Research shows functional cognition tests can detect impaired function in people with mild cognitive impairment, dementia and, critically, 'cognitively normal' people with dementia-related brain changes.

Dr Wesson's project will uncover an effective functional cognitive screen that can be used by a range of health professionals to provide wider surveillance of people at risk of dementia.

How will this happen?

Stage 1: invite 90 older people with varying cognitive abilities to perform two functional cognition screening tests. Compare the results against data from a larger study that is developing a new computerised assessment.

Stage 2: assess the effectiveness of each test in detecting subtle functional issues alone or when combined with a traditional cognitive test.

Stage 3: survey participants to explore their perspectives on the tests.



What will it mean for older Australians?

- Early detection of functional decline associated with cognitive decline and/or dementia.
- Evidence to support new screening measures that target subtle functional decline.
- Early diagnosis or referral to interventions that prevent or delay dementia.
- Reduction of unnecessary detailed functional testing and better use of healthcare resources.

What is functional cognition?

It describes how we use our cognitive skills (e.g. attention, memory, judgement and planning skills) to perform everyday tasks, such as self-care, familiar routines, and more complex activities like household routines and financial management. Impaired functional cognition can cause a person to have difficulties performing these tasks, which, in turn, can lead to functional decline.



Who's undertaking the research?

Dr Jacqueline Wesson, The University of Sydney

Dr Wesson is an early-career researcher, registered occupational therapist and senior lecturer at The University of Sydney. She has expertise in functional cognition, performance-based assessment of function, behaviour support and dementia interventions to support participation.

Dr Wesson has extensive clinical experience working with people living with dementia and their carers in hospital, community and residential care settings. This includes memory clinic, advisory and senior policy roles, and most recently, as a dementia consultant in residential care.

The title of Dr Wesson's project is *Functional cognition screening to detect subtle functional difficulties in everyday activities in older adults: which tool is fit for purpose?*

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