

Follow-up Q&A with Panel Members of the 2019 NSW Falls Prevention Forum

Q&A with Prof. Stephen Lord

Would you recommend any particular outcome measure to monitor change over time due to interventions?

“There is no overall consensus at this stage. A good option is the short physical performance battery that includes measures of chair rising ability, standing balance and gait speed. It has been refined by Onder et al. to provide a continuous outcome measure.”

Guralnik JM, Simonsick EM, Ferrucci L, Glynn RJ, Berkman LF, et al. (1994) A short physical performance battery assessing lower extremity function: association with self-reported disability and prediction of mortality and nursing home admission. *J Gerontol* 49: M85–94.

Onder G, Penninx BW, Lapuerta P, Fried LP, Ostir GV, et al. (2002) Change in physical performance over time in older women: the Women’s Health and Aging Study. *J Gerontol A Biol Sci Med Sci* 57: M289–293.

How do you weigh up the risk of adverse events ‘caused’ by falls prevention programs and the increased risk of perpetuating frailty through limiting mobility and avoiding risk?

“This is an excellent question. Both outcomes need to be measured to fully evaluate the effects of interventions. One recent study did indeed show that a post-hospital home exercise program improved mobility but increased falls in older people. It is therefore crucial to involve older people in the decision making with regard to the risks and benefits of fall prevention programs.”

Sherrington C, Lord SR, Vogler CM, Close JCT, Howard K, Dean CM, Heller GZ, Clemson L, O’Rourke SD, Ramsay E, Barraclough E, Herbert RD, Cumming RG. A post-hospital home exercise program improved mobility but increased falls in older people: a randomised controlled trial. *PLOS ONE*. 2014, 10.1371/journal.pone.0104412.

What evidence is there for introducing falls prevention at younger ages to prevent falls risk?

“Prospective studies have been conducted that show a significant percentage of men and women aged <60 years are at risk of falls, but I am unaware of any intervention in this age-group with falls as the outcome measure.”

Choy NL, Brauer S and Nitz J. Linking stability to demographics, strength and sensory system function in women over 40 to support pre-emptive preventive intervention. *Climacteric* 2008; 11: 144_154.

Nolan M, Nitz J, Choy NL, et al. Age-related changes in musculoskeletal function, balance and mobility measures in men aged 30_80 years. *Aging Male* 2010; 13: 194_201.

Q&A with A/Prof Kim Delbaere

Is there any research about effectiveness of exercise comparing face-to-face interventions vs. mobile health?

“The evidence is still quite scarce, but suggests that if people do the exercises, the effectiveness should be comparable. Use of technology can offer an effective self-managed tool to provide a tailored exercise program and assist health professionals to provide ongoing monitoring and support. Our systematic review provides evidence of high adherence to technology-based interventions and that they provide a safe method to engage in fun and engaging exercises.”

For further reading, see: Valenzuela, et al. Adherence to Technology-Based Exercise Programs in Older Adults: A Systematic Review. *J Geriatr Phys Ther*, 2018. 41(1): p. 49-61.

In the StandingTall RCT, what proportion of participants were metro based and how many were rural?

“To date, StandingTall has only been tested in metropolitan sites in Sydney. StandingTall is currently undergoing international implementation in collaboration with government, health districts and health science alliances. As part of this partnership project in collaboration with NSW Health and others, we will also explore the feasibility of using StandingTall in rural and remote areas.”

For further detail, see: <https://newsroom.unsw.edu.au/news/health/falls-prevention-technology-starts-trials-australia-and-uk>

Does StandingTall include strength exercises? And if not, why not?

“StandingTall offers exercises that are focussed on improving balance, muscle strength, and confidence in daily life activity. The program has a strong focus on balance exercises, as recommended through systematic review evidence. In addition, the program also offers functional strength exercises such as rising from a chair and step (box) exercises.”

For further reading, see:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012424.pub2/full>

Q&A with Dr Morag Taylor

Is diet a modifiable risk factor for dementia?

“There is mixed evidence regarding how diet influences dementia risk. There is some evidence for the Mediterranean diet, in that, adherence to the Mediterranean diet has been associated with cognitive domain improvements. But more research is needed for a definitive recommendation regarding how diet affects cognitive decline and dementia risk.”

Take a look at the new RISK REDUCTION OF COGNITIVE DECLINE AND DEMENTIA WHO GUIDELINES (https://www.who.int/mental_health/neurology/dementia/guidelines_risk_reduction/en/) and Radd-Vergasas 2018 Systematic review and meta-analyses (<https://academic.oup.com/ajcn/article/107/3/389/4939347>)

What is the evidence regarding hospital rehab vs. home-based rehab for people with dementia following #NOF.

“The research is lacking in this area, there are a limited number of studies and these studies are small and low quality with no head-to-head comparisons. There is not enough evidence to recommend one over the other.”

Take a look at the Cochrane review on this topic from 2015 (Smith et al.).
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010569.pub2/epdf/full>

Should we be using the RUDAS to screen for dementia? And is the 4AT effective in screening for dementia?

“There are many different screening and assessment tools for cognitive impairment and dementia. The screening tool you choose depends on many factors e.g. time constraints, the client/patient, your organisation/NSW Health recommendations, setting (e.g. ED, hospital inpatient, home, clinic, RACF), screening vs assessment, validity/reliability etc. The RUDAS assesses memory, gnosis, praxis, visuospatial skills, judgement and language and can be used as a screening tool for dementia. It is particularly useful for culturally and linguistically diverse populations and populations with low education levels (because the RUDAS has been shown to be less affected by education than other tools). Further, there is literature to support the RUDAS’ diagnostic accuracy.

From my understanding, the 4AT’s primary use is for detecting delirium, but can also be used as a very basic cognitive screening tool and is aimed at detecting moderate-severe cognitive impairment (scores 1-3). Again, your selection of screening tool is dependent on many factors and one size does not fit all.”