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MEDIA RELEASE

FRAILITY INDEX MAY IMPROVE CARE FOR OLDER AUSTRALIANS

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A NEW “frailty index” has been developed which may help identify elderly people at high risk who could then receive targeted interventions to delay admitting them to residential aged care, according to research published online today by the *Medical Journal of Australia*.

The researchers analysed de-identified data from 903 996 non-Indigenous Australians aged 65 years or more, living in the community and assessed for subsidised aged care eligibility (by an Aged Care Assessment Team) during 2003-2013. They then worked through 204 candidate variables, with the final index including 44 variables: eight activity limitations, 24 health conditions, and 12 signs and symptoms. The validity of the frailty index was assessed by comparing the distribution of frailty index scores with that of service approvals by accredited assessors and how well it predicted mortality and entry into permanent residential care after the aged care eligibility assessment.

The researchers, led by Dr Jyoti Khadka from the Register of Senior Australians at the South Australian Health and Medical Research Institute, found the following:

- the mean frailty index score for the individuals undergoing aged care eligibility assessments in Australia during 2003–2013 was 0.20;
- the proportion of assessed older people with scores exceeding 0.20 (at the higher end of the frail scale) increased from 32.1% in 2003–2005 to 75.0% in 2012–2013;
- the risks of death and entry into permanent residential aged care at 1, 3 and 5 years increased with frailty index score;
- the predictive validity of models including age, sex, and frailty index score was 0.64 for death and 0.63 for entry into permanent residential aged care within 1 year of assessment.

“We found that mean frailty index scores for people for whom aged care services were approved increased between 2003 and 2013,” wrote Khadka and colleagues.

“Our findings mirror the Australian national trends, older people are choosing to remain in their own homes longer; consequently, the proportion with high level care needs entering aged care increased fourfold between 2009 (13%) and 2018 (53%).

“We found that frailty scores were higher for men than women under 93 years of age. Men may be more likely than older women to be cared for by spouses or other relatives, deferring the need for formal aged care and therefore increasing their relative frailty when assessed; this difference also highlights the social importance of informal caregivers.

“Including frailty index scores improved the predictive ability of statistical models for mortality and entry into permanent residential aged care based on age and sex alone,” they wrote.

“The association of frailty index scores with all-cause mortality and admission to residential aged care, independent of chronological age, supports the value of the frailty index as a measure of health in older people.

“Our frailty index could be used to identify people at high risk, who could receive targeted interventions to delay admitting them to residential care,” they concluded.

“We have developed our frailty index from the mandatory items routinely collected through the national ACAT process which is already supported electronically,” they added.

“Frailty scores could be electronically calculated, and therefore support assessment of the risk of vulnerability, during the more than 186 000 ACAT assessments performed each year.

“The frailty index can also be employed by researchers to adjust analyses of national aged care data for frailty.

“The identification of frailer groups at higher risk in this population supports the need for further investigations of novel models of care and interventions for preventing the poor outcomes associated with frailty.”

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