THE NEW ZEALAND MEDICAL JOURNAL
Journal of the New Zealand Medical Association

Improving care for older people in residential care

Ngaire Kerse, Michal Boyd

In New Zealand, the older population (age 65 years and over) has increased by 43% and the number of residential care beds has increased by 3% in the last 20 years. Thus the proportion of older people in aged residential care has decreased from 74 to 53 persons per 1000 people aged 65 years and over and the level of dependency of those in care have significantly increased.[1] The corresponding funds to meet an increased need for care as a result of increased dependency have not been forthcoming from the public sector. This mismatch is most acutely experienced in rest home level facilities. Residential care for older people is, therefore, an area in need of ongoing quality improvement.[2]

Kenealy and colleagues, in this issue of the *NZMJ—A complex intervention to support 'rest home' care: a pilot study*; http://www.nzma.org.nz/journal/123-1308/3948—report a pilot study involving a complex intervention delivered to a long-term residential care facility housing rest home and hospital level residents by a geriatrician and clinical nurse specialist team.

Residents aged 85 and older and those with polypharmacy (taking 9 or more medications) were systematically assessed. The intervention was evidence-based[3] and involved medication review, education for all staff, and ongoing support. The number of prescribed medications decreased but parts of the strategy, particularly the education for nurses and the hotline support for GPs were not utilised and there was no apparent decrease in admission to acute hospital. The intervention was welcomed by staff and management and everyone felt good about providing support for this under resourced health sector.

This project is one of several actively being developed and implemented around New Zealand in response to increased identified needs in residential aged care. Further research is desperately needed to avoid disseminating sensible, but potentially ineffective and wasteful, programmes. Previously seemingly sensible interventions have not been able to show measureable positive effects[4] and some programmes may have caused harm.[5] In this century, research in residential care is increasingly possible and must be encouraged.[6]

The particular focus of the intervention does make a difference to the chance of success and having a defined outcome that has relevance to: the older person; the burden of care; and the health care funder is essential. Hospitalisation (to the acute sector) is such an outcome and at least one programme, *Evercare*, has been successful in reducing hospitalisations.[7] The same programme is not effective in other countries however, meaning that retesting in each different health care system is necessary. The project reported in this edition did not appear to benefit hospitalisation, and requires more rigorous testing with a larger sample before this can be commented on further.

Inappropriate medication use is another relevant outcome and is very common in older populations with between 21% (community) and 40% (residential care) of older

people being categorised as being prescribed inappropriate medications.[8] Adverse medication events are also common and increase in likelihood according to the number of medications per day an older person is prescribed. Most errors in medications are attributable to human error and there is a large potential for systematic processes and reviews to improve resident safety, at least with respect to medication use.[9] While some individual programmes, the current one included, have been successful, systematic reviews of medication related interventions are awaited.

Physical rehabilitation interventions are in general safe and provide benefit in reducing disability[10] however the intervention has to provide enough 'dosage and intensity' of physical rehabilitation to be effective and, when coupled with a health care component, may result in wider benefits. Other important outcomes the relate to staff retention, job satisfaction, family/whānau satisfaction are more difficult to measure.

Any intervention will require a significant expansion of the publically funded health care workforce. The residential aged care sector in New Zealand is publically subsidised and largely privately owned and administered. Privately owned facilities may appear to deliver poorer quality care than not-for-profit facilities, at least in the United States of America, and lower staffing levels may be one of the discernable reasons for this[11,12]

It is not surprising that the private sector has difficulty investing in improving health care quality as the financial savings of reduced hospitalisations and other consequences of poor care are realised in the acute hospital sector and not currently returned to residential care. Without some form of systematic overhaul of the funding and structure of aged residential care, with a focus on a population based approach and return of the health care savings to those paying for quality improvement, real progress is difficult to imagine.

Publically funded programmes, such as that represented in the report in this journal, are perhaps a logical response, but these must be accompanied by leadership from the residential care sector and incentives for staff and management to fully engage with new programmes. Adequate staffing levels are necessary to encompass change. Such incentives would most logically come from the providers of residential aged care. Public and private partnerships are needed in New Zealand so that success in improving resident outcomes is at least possible.

Competing interests: None known.

Author information: Ngaire Kerse, Professor, General Practice and Primary Health Care; Michal Boyd, Senior Lecturer, Freemasons' Department of Geriatric Medicine; Faculty of Medical and Health Sciences, University of Auckland

Correspondence: Professor Ngaire Kerse, Department of General Practice and Primary Health Care, University of Auckland, Private Bag 92019, Auckland, New Zealand. Fax: (09) 373 7006; email: n.kerse@auckland.ac.nz

References:

1. Boyd M, Connolly M, Kerse N, et al. Changes in Aged Care Residents' Characteristics NAd Dependence in Auckland 1988 to 2008. findings from OPAL 10/9/8 Older Persons' Ability Level Census. Auckland: Freemasons Department of Geriatric Medicine, University of Auckland; 2009.

2. Flicker L. Healthcare for older people in residential care--who cares? Medical Journal of Australia. 2000 17;173(2):77-9.
3. Fick DM, Cooper JW, Wade WE, et al. Updating the Beers criteria for potentially inappropriate medication use in older adults: results of a US consensus panel of experts.[see comment]. Archives of Internal Medicine. 2003;163:2716-24.
4. Kerse N, Peri K, Robinson E, et al. Does a functional activity programme improve function, quality of life and falls for residents in long term care? A cluster randomised controlled trial. BMJ 2008. 2008;337:al445.
5. Kerse N, Butler M, Robinson E, Todd M. Falls prevention in residential care: A cluster randomized controlled trial. Journal of the American Geriatrics Society. 2004;52:524-3.
6. Flicker L. Intervention research in nursing homes: the rise and rise of the cluster randomized trial. Journal of the American Medical Directors Association. 2008 May;9(4):213-4.
7. Kane RL, Keckhafer G, Flood S, et al. The effect of Evercare on hospital use. Journal of the American Geriatrics Society. 2003 Oct;51(10):1427-34.
8. Liu GG, Christensen DB. The Continuing Challenge of Inappropriate Prescribing in the Elderly: An Update of the Evidence. J Am Pharm Assoc. 2002;42:847-57.
9. Pierson S, Hansen R, Greene S, Williams C, Akers R, Jonsson M, et al. Preventing medication errors in long-term care: results and evaluation of a large scale web-based error reporting system. Qual Saf Health Care. 2007 August 1, 2007;16(4):297-302.
10. Forster A, Lambley R, Hardy J, et al. Rehabilitation for older people in long-term care. Cochrane Database of Systematic Reviews. 2009(1):CD004294.
11. Schnelle JF, Simmons SF, Harrington C, et al. Relationship of nursing home staffing to quality of care. Health Services Research. 2004 Apr;39(2):225-50.
12. Harrington C, Woolhandler S, Mullan J,et al. Does investor-ownership of nursing homes compromise the quality of care? International Journal of Health Services. 2002;32(2):315-25.