

The evidence that older people in care homes are equally at risk of falls and malnutrition as those people being cared for in hospitals is clear (Leslie, 2006; Mitty and Flores, 2007; Gaskill, 2008). The low referral rates to occupational therapists and dieticians reported in this study of care homes in the Midlands is therefore concerning. The authors note that staff may not be knowledgeable about the services available from some allied health professional roles but it is arguably their professional duty to be aware of current findings on the risks to older people in residential care, and manage those risks to the best of their ability.

An alternative explanation might be related to the study's conclusion that privately funded services are more available to care home residents. Unlike care provided by chiropodists, opticians or physiotherapists, the care recommendations of dieticians, occupational therapists and speech therapists may involve extra costs for care home owners. If under-nourishment or malnutrition is an issue for a resident, then alternative menus, individual assistance with feeding and regular body mass index checks might also be on the agenda. Similarly, an occupational therapist could recommend changes in the building structures (for example larger showers or the installation of ramps and rails) or purchase of equipment to assist with activities of daily living, both of which involve extra costs for owners.

Privately funded residents may be able to support the purchase of some equipment for their own use and also extra food and assistance, but not so publicly funded residents.

In the hospital setting, these costs are budgeted for as part of the infrastructure of the service. The care home setting may be funded on a per diem basis, with capital expenditure and alternative diet and feeding assistance assumed to be included. If cost, rather than lack of knowledge, is a barrier to access to services which may involve further expenditure, then there is a policy or standards issue here for government payers. Further research on the barriers to referrals is clearly necessary.

As with any agency, care homes respond to incentives and changes in the cost of production (e.g. labour and capital). The authors highlight this aspect, showing a link between funding sources and the provision of allied health services. The mix of services and materials reflect the trade-offs faced by care homes. Several studies have found evidence of factor substitution and lower quality outcomes in care homes. Factor substitution relates to firms changing their mix of inputs (e.g. labour and capital) to produce the same good or service. For instance, some care homes may replace certain tasks performed by carers with feeding tubes, catheters and physical restraints. Higher labour costs are associated with greater receipt of

prescription sedatives (Grabowski and Hirth, 2003; Cawley et al, 2006) and greater use of catheters, physical restraints and feeding tubes (Zinn, 1993). Owing to imperfect information, cognitive impairment and transaction costs, residents are less likely to shift from a lower quality to a higher quality nursing home when quality of services decrease (Cawley et al, 2006).

In contrast to the care home sector, we suspect the quality of service within the at home sector remains constant when substitution arises. At home, clients possess greater flexibility in their choice of services. Minimal transaction costs arise from switching from one service provider to another. Also, since a primary carer is often involved in the decisions when the client is cognitively impaired, decisions about services tend to be rational. Informal carers may also perform extra duties to meet agency shortfalls.

Our own investigation (Stevens and Vecchio, 2009) of one at-home agency found evidence of labour substitution between nursing and allied health services, after controlling for client characteristics. The higher labour turnover among allied health staff compared with the nursing staff implied a substitution of labour between the two professions to ensure that the needs of clients were met.

Disparities in health care provision are common, but those between acute and community care (to include both care homes

and at home care) seem to have a structural permanency. If we are committed to community care from both a social and an economic imperative—and readers are referred to Vecchio and Stevens (2008) for a discussion of this—it is essential that we begin to address these disparities.

Stella Stevens
Senior Lecturer,
Faculty of Health,
University of Tasmania
and **Nerina Vecchio**
Senior Lecturer,
Business School,
Griffith University, Australia
n.vecchio@griffith.edu.au

- Cawley J, Grabowski D, Hirth R (2006) Factor substitution in nursing homes. *J Health Econ* 25: 234–47
- Grabowski DC, Hirth RA (2003) Competitive spillovers across nonprofit and for-profit nursing homes. *J Health Econ* 22(1): 1–22
- Gaskill D (2008) Malnutrition prevalence and nutrition issues in residential aged care facilities. *Australas J Ageing* 27(4): 189–94
- Leslie W (2006) Unidentified under-nutrition: dietary intake and anthropometric indices in a residential care home population. *J Hum Nutr Diet* 19(5): 243–7
- Mitty E, Flores S (2007) Fall prevention in assisted living: assessment and strategies. *Geriatr Nurs* 28(6): 349–57
- Stevens S, Vecchio N (2009) Substitution across professions within the home care sector: An investigation of nursing and allied health services. *Aust Health Rev* 33(1): 19–26
- Vecchio N, Stevens S (2008) Caring for people with a mental disability at home: Australian carers' perceptions of service provision. *Community Ment Health J* 44(2): 125–34
- Zinn JS (1993) The influences of nursing wage differentials on nursing home staffing and resident care decisions. *Gerontologist* 33(6): 721–9

The demographic trends of continuing growth of the number of older people will lead to an increasing need for long-term services such as nursing homes. The intensive work delivered by the rehabilitative services provided in nursing homes includes care by allied health personnel, includ-

ing physiotherapists, occupational therapists, speech and language therapists and dieticians. These professions play an important role not only in the scope of improvement of health conditions, but also in the increase in self-coping strategies of residents. In this article the authors address the

important issue of older people living in care homes who are not receiving the appropriate levels of allied health care.

In the Netherlands, we performed a national study to examine how many nursing home residents receive physiotherapy and the extent to which the provision

of physiotherapy varies across homes (de Boer et al, 2007; Leemrijse et al, 2007). We found on average 69% of residents were receiving physiotherapy, which is a rather high percentage in comparison with the international literature. It is likely that this high percentage is partly owing