Improving care in residential care homes: a literature review

October 2008

This review examines the research evidence available to support improved care for older people in residential homes.

Key points

- In general, few studies report specifically on residential care. Most research has been conducted in nursing homes; several other studies make no distinction between nursing and residential homes, using the umbrella term ‘care homes’ to encompass both.

- The literature on improved care focuses primarily on the quality of clinical care. There is a paucity of quality-of-life measures reflecting the resident’s voice. The voice of minority ethnic residents is almost entirely absent from the literature.

- There is evidence that medical cover for care home residents is sub-optimal. Care could be restructured to give greater scope for proactive and preventive interventions.

- Partnership working between district nurses and care home staff appears largely to occur by default at present. There is opportunity for a more strategic approach to providing nursing support in residential homes.

- There is considerable research on the relationship between nurse staffing and nursing care home quality in the US. Quality is measured through clinical-based outcomes for residents and organisational outcomes. Conclusions are difficult to draw, however, due to inconsistencies in the evidence base.

- There is evidence that better management of medication is needed in nursing homes. Pharmacist reviews of medication can have a positive effect. Similar evidence is lacking for residential care homes.

- Inter-institutional transfers and ensuring patient safety across settings is important. To date, research has mainly focused on the care home and hospital interface; transfers from residential to nursing homes represent a research gap.

- Interesting research is reported from the US and other non-UK sources. Some findings will be generalisable to UK residential care; a systematic process is recommended to identify these.
There is considerable debate about the relationship between quality of care and quality of life as joint, but not necessarily competing, measures of quality. Research indicates that residents’ perceptions of nursing staff are a good indicator of quality of care. The importance of measures of social care and of ‘homeliness’ epitomise the divide between health and social care provision in care homes. Other factors influencing residents’ satisfaction with care include staffing levels, staff turnover, family involvement, meal-time experience, personal control, recreational activities, and residential environment.

In measuring quality of life, researchers emphasise the centrality of the resident’s voice. Family involvement, where appropriate, is valuable and care home staff need to develop relationships with relatives and value their opinions. Research identifies peer networks as important sources of social support, and empowerment and facilitating choice as important to resident well-being.

There is limited research on the health status of residents in residential homes, some of whom may have unmet health needs. There is also evidence of self-funded, low-dependency admissions to nursing homes. A combination of higher-dependency residents in residential homes and lower-dependency residents in nursing homes suggests that placement criteria need to be improved.

Transitions to care homes and factors influencing the choice of residential care over alternatives require further research. This should cover the experiences of older people from minority ethnic groups. Relatives’ experiences of the transition to care homes suggest that there is potential for practitioners to enhance the experience for older people. There is no evidence base on transfers from residential to nursing home care.

Although most of the research is focused on nursing homes, findings may be generalisable to the residential care context since all individuals are in long-term care.

**Clinical areas for improvement**
The largest evidence base in this area is on palliative care; this is mostly confined to nursing homes, with some papers on residential care homes. Elements of good practice are applicable to residential care. A second body of literature, which includes residential homes, is on mental health care. There is evidence of unmet need amongst older people with dementia, poor quality of life, and inappropriate use of psychotropic drugs. For depression, evidence indicates a need for improved detection and drug treatment.

In other clinical conditions, staff training appears to produce improvements in diabetes care in residential homes. For other areas (e.g. infection, rehabilitation, preventive care), there is limited research on residential homes. There is some literature on improving the nutritional status of older people in residential care.

Some clinical areas have been used as indicators of improved quality of care, but not palliative care.

**Medication in care homes**
There is a clear need for better management of medication in nursing homes. Appropriateness of drug use is an important indicator of the quality of care. It is unclear how the literature on nursing homes relates to residential care. Along with poor use of psychotropic medication, studies identify a need to improve assessment and management of pain. Research on medication errors and adverse events in nursing homes suggests that patients taking antipsychotic agents, anticoagulants, diuretics, and antiepileptics are at increased risk, as are patients transferred between acute and long-term care facilities.

Studies assessing the introduction of a pharmacist’s medication review in nursing homes show a positive effect. Extended nurse prescribing has also been discussed in the context of nursing homes. A physician outreach intervention focused on psychotropic drug prescribing and stroke risk reduction was well received.
but produced no change in prescribing patterns. Other interventions, such as multidisciplinary case conferences and a pharmacy coordinator, have been reported to improve medication.

**Medical input into care homes**

Evidence on medical input to care homes focuses on nursing homes. There is mention of residential homes in some UK literature, primarily in terms of general practitioners’ (GP) workload and poor access to medical services. Studies of workload associated with patients in UK nursing homes indicate nearly twice the number of contacts as similar-age patients in the community. There is evidence that although nursing home residents receive more face-to-face GP consultations, they are no more likely to be referred to hospital and less likely to be followed up by their GP.

There is evidence that medical cover for nursing home residents is sub-optimal and that it could be restructured to give greater scope for proactive and preventive interventions and for consulting with several patients during one visit. Research has looked at improving communication between GPs and nursing home physicians in the Netherlands; the role of the consultant in US long-term care facilities; and the role of nurse practitioners and physician assistants to enhance medical care in nursing homes. The latter is set within the wider debate on doctor-nurse substitution and the problems of delivering medical care to frail older people in the community. Recent research has discussed whether practice could be enhanced by physicians specialising in nursing home care or being paid on quality-of-care measures.

**Nursing care in care homes**

A growing body of literature examines links between nurse staffing levels in nursing homes and quality of care. Evidence is focused on US nursing facilities; no UK/European studies were identified and no evidence was found on residential care homes.

‘Quality’ is a difficult concept to capture directly. Resident or organisational outcomes are often used as a proxy for quality and these tend to focus on ‘clinical’ outcomes. Limited studies take a broader view of resident outcomes, such as quality-of-life measures and social indicators. Research should encompass physical, mental and social care outcomes to broaden understanding of the multi-dimensional nature of quality.

Inconsistent and contradictory results about the link between nurse staffing and quality in nursing care homes make it difficult to make recommendations. Research has concentrated on measuring quality in relation to numbers of nurses. Other staffing factors, such as turnover, staffing levels, worker stability, agency staff use, training and the way care is organised, may determine staff effectiveness. Medical and therapist inputs may also influence quality of care. There is no economic evidence on the cost-effectiveness of nurse staffing in care homes. Future research needs to address what combination of nursing skill levels contribute to quality in the most cost-effective manner.

**Interface between care homes and other services**

Although there is research on the interface between hospitals and care homes, studies do not generally distinguish residential homes. Some have considered variations in hospital admission rates between nursing homes to identify potentially preventable or inappropriate hospitalisations. The interface with hospital emergency care is particularly important, including hospitalisation of residents for suspected respiratory infection.

Older adults who are hospitalised can decline in a matter of days, emphasising the importance of timely hospital discharge. Research suggests that a heterogeneous patient population, relatively unqualified staff and cultural differences between sectors can limit the effectiveness of an early discharge model in residential homes. Some evidence suggests that stroke patients in nursing homes are less likely to receive physiotherapy or occupational therapy than those in hospital-based extended nursing care and that patients discharged to a nursing home have a greater risk of dying. Placement in nursing homes after stroke discharge needs to be better understood to manage length of stay and the cost of acute care.

Inter-institutional transfers are common in older patients after hospital discharge, emphasising the need to improve care transitions and ensure patient safety across settings. Research to date has not considered transfers from residential to nursing home care.

The literature on district nurse and therapist roles in care homes includes little research on residential care. UK research has identified that partnership working between district nurses and care home staff largely occurs by default, partly due to the perceived demands that older people in nursing and residential homes make on the district nursing service.

There is far less evidence on therapist input. The role of podiatry and occupational therapy has been discussed but research does not differentiate nursing and residential homes. The impact of occupational therapy cost on service use in residential homes has been raised recently.

**Care improvement in care homes**

The literature identifies a number of approaches to care improvement, mainly from nursing homes.

**Integration/partnership**

Better integration of services for older people has long been promoted as improving quality of care and potentially reducing costs. Local circumstances, legal context, funding streams, procedural and structural arrangements will all affect integration, as
will a collaborative culture. Multidisciplinary reviews also show benefits. However, a more formal systems approach to identifying organisational and environmental characteristics associated with nursing homes which are more successful has demonstrated limited value.

**Quality improvement initiatives**

Quality improvement interventions include monitoring quality of care, strengthening the care-giving workforce and building organisational capacity. Simply providing nursing homes with comparative quality performance feedback, access to training, and staff performance incentives does not appear to lead to significant improvements. Additional real-time feedback of adherence may produce improvements, although these are not sustainable. Quality improvement is more likely to be successful in homes with a culture that promotes innovation and staff empowerment.

**Evidence-based practice**

The use of evidence-based clinical guidelines and administrative policies/practices is not widespread. Discussion of the role of nursing homes as a suitable alternative to hospital care for older people has highlighted the need to advance the development of evidence-based practice in UK care homes.

**Geriatric nurse specialists**

Introducing a geriatric nurse practitioner into a nursing home is reported to lead to a reduction in hospital admissions, improvements in pressure ulcers, incontinence, depression, and aggressive behaviour, but little difference in residents’ functional status, physical condition, or satisfaction. A US model involving case management of frail older people by nurse practitioners (EverCare) has reduced mortality and preventable hospitalisations. Transfer of the EverCare model to the UK has produced less favourable effects.

**In-reach, support teams and telecare**

A few studies describe the establishment of nursing in-reach teams to improve clinical care in care homes. Only one evaluation has considered cost-effectiveness. Having an older people’s specialist nurse in a multidisciplinary team is reported to have benefits, especially in managing the interface between nursing homes and primary care. The potential for telecare has been extensively discussed. This may make better use of professionals’ time, but the potential for remote patient monitoring in residential care homes has only been considered recently and systems will need careful assessment.

**Resident-oriented care**

Resident-oriented care focuses on quality of life. Factors considered include resident activities, social contacts and staff knowledge and evaluation of individuals. This approach can reduce care gaps, particularly in psychosocial aspects of care. It can also have a positive impact on staff e.g. lower frequency of sick leave. It appears to have a limited effect on job characteristics, however, with task-oriented care remaining and delegation to nursing care-givers difficult to achieve.

**Management of change**

Management and leadership style have an important impact on quality improvement initiatives. Culture change may be required to facilitate improvement, especially if staff, residents and family members have different interpretations of care. Culture change must begin with owners and managers building new relationships with all stakeholders. New work practices may be insufficient if adopted without investment in training or a commitment to establish participatory decision-making.

**About the project**

The review was carried out by Ala Szczepura and Diane Clay of Warwick Medical School, University of Warwick, with Sara Nelson and Deidre Wild of the Faculty of Health and Social Care, University of the West of England, Bristol. Karen Spilsbury, University of York, reviewed the evidence on nurse staffing levels in nursing homes and quality of care.