The effect of policy on end-of-life care practice within nursing care homes: a systematic review

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CRD summary
The authors appeared to conclude that evidence was limited but suggested improved outcomes for staff, residents and families following the implementation of the Gold Standards Framework in Care Homes Programme (Phase two and four) and an integrated care pathway. This conclusion accurately reflects the small number and limited quality of included studies.

Authors' objectives
To evaluate the impact of implementing end of life care policy (the Gold Standards Framework in Care Homes Programme, the Liverpool Care Pathway or an Integrated Care Pathway, and educational/training interventions) to support the provision of end of life care within nursing care homes in the United Kingdom.

Searching
MEDLINE, CINAHL, EMBASE, Web of Science and The Cochrane Library were searched for articles in English published between 2000 and 2010. A MEDLINE search strategy was presented. Websites of government and palliative care organisations were also searched. Reference lists of relevant studies were scanned, and experts were contacted to maximise the retrieval of relevant studies.

Study selection
Eligible for inclusion were all studies implementing the Gold Standards Framework in Care Homes Programme, the Liverpool Care Pathway or an Integrated Care Pathway, and educational/training interventions aimed at adult nursing care home residents, their relatives and staff, in the United Kingdom. Studies had to provide comparative data.

The included interventions were the Gold Standards Framework in Care Homes Programme (Phase two and four) and an integrated care pathway. Outcomes related to residents and relatives were communication, co-ordination, control of symptoms, continuity of care, carer bereavement support, care of the dying, collaboration with other primary care and palliative care specialists, number of crisis admissions to hospital and number of residents dying in hospital. Staff outcomes were levels of knowledge, skill, and behaviour in relation to care provision.

The authors did not state how many reviewers were involved in the selection of studies.

Assessment of study quality
No formal quality assessment was reported.

Data extraction
Data were extracted on pre- and post-intervention percentage changes on the outcomes of interest.

One reviewer extracted the data. A second reviewer examined a sample of the data extracted.

Methods of synthesis
A narrative synthesis was presented according to the different interventions, and grouped by outcomes for residents, their relatives and staff.

Results of the review
Three case series studies were included (64 nursing care homes).

Gold Standards Framework in Care Homes Programme (two studies; 56 nursing care homes): Implementation of this programme resulted in benefits for residents in terms of improved communication (increases in documentation for "do not attempt resuscitation", and advanced care planning); continuity of care (increased "when necessary" or "prn")
medication); care of the dying (increased use of a "last days of life" pathway); reduced number of hospital admissions, reduced number of inappropriate days spent in hospital, and consequently reduced number of deaths taking place in hospital; and a lower number of crisis events.

Staff reported that the programme resulted in increased knowledge, skills and confidence in relation to delivering palliative care. As a result of changed staff behaviour, plans for cardiopulmonary resuscitation were increasingly discussed; the use of a register to enable end of life care needs to be identified and routine advance care planning were increasingly implemented. In relation to care of the dying, more protocols for the last days of life were employed, and increases were seen in the use of integrated care pathways and anticipatory prescribing. This was accompanied (according to care home staff) by improved quality of care and support for residents and their relatives. Results for all outcomes were reported in the paper.

**Integrated Care Pathway** (one study; eight nursing care homes): Improvements were seen in relation to the use of "when necessary" or "prn" medication, and a reduction in antibiotic use in the last days of life. Beneficial effects were also noted on staff skills and residents' symptom control.

**Authors’ conclusions**
The review provided limited evidence on improved outcomes for staff, residents, and families, following the implementation of the Gold Standards Framework in Care Homes Programme (Phase two and four) and an integrated care pathway.

**CRD commentary**
This review had a clear research question and inclusion criteria were specified for all aspects apart from outcomes. However, the requirement for comparative data was not fully reflected in the included studies, which compared outcomes before and after intervention but had no control group. Whilst a number of relevant databases were searched, the restriction to published articles in English may have meant that relevant studies were overlooked and associated biases were possible. Steps to minimise error and bias in the review process were reported only for data extraction.

There was no formal quality assessment, but to some extent this was irrelevant as the included study designs were generally considered high risk of bias. In particular, pre-post studies without a control group did not rule out that other factors beside the study intervention may have been responsible for observed changes in outcomes. Some study details were presented, but participant characteristics were lacking. The reported variation in residents and systems within nursing care homes, and the fact that results of this review covered only a small proportion of the care homes reported to be implementing the Gold Standards Framework, meant that any interpretation of applicability arising from the review was limited.

The authors’ conclusions and recommendations for further research appropriately reflect the limited evidence presented.

**Implications of the review for practice and research**
**Practice:** The authors did not state any implications for practice.

**Research:** The authors stated that further research was needed (in the United Kingdom and internationally) to identify explicit outcomes relating to the provision of end of life care in nursing home residents. Until these outcomes were identified, researchers should concentrate on resident's documented place of death; the number of crisis admissions to hospital in the last six months of life; and the presence of a documented advance care planning or "do not resuscitate" form. Comparative studies with pre- and post- intervention data were needed.

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**Bibliographic details**
Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.