The health and cost effects of substituting home care for inpatient acute care: a review of the evidence

Soderstrom L, Tousignant P, Kaufman T

Authors' objectives
To assess the health and cost effects of substituting home care for inpatient acute care.

Searching
The authors searched the MEDLINE electronic database (for articles published between 1975 to early 1998) using the search term 'home care'. The authors also searched the HEALTHSTAR database. The authors checked the bibliographies of retrieved articles for additional relevant studies.

Study selection
Study designs of evaluations included in the review
Studies with a control group to evaluate the home care programme. Specific study designs were not stated.

Specific interventions included in the review
Acute home care programmes and inpatient acute care.

Participants included in the review
Non-psychiatric patients, at least 18 years of age, who were not receiving terminal care, and caregivers, in an inpatient and home care setting. Home care was assessed for five specific conditions: hip fracture, hip replacement, chronic obstructive pulmonary disease (COPD), hysterectomy, and knee replacement. Two of the included studies also evaluated home care for various medical and surgical conditions combined.

Outcomes assessed in the review
Health of patients and caregivers and the social costs (public and private) of managing the patients' health conditions.

How were decisions on the relevance of primary studies made?
One author read the articles and determined whether the articles met the inclusion criteria. When there was any uncertainty, the article was read by all of the review authors.

Assessment of study quality
The authors assessed internal validity using six criteria: patients were eligible for home care, comparable patients in home care group and hospital care group, adequate patient sample size, appropriate analytical techniques, appropriate health measures and appropriate costing methods. All three authors agreed on whether each selected study satisfied the six criteria.

Data extraction
All three authors agreed on the health and cost effects reported in each selected study.

Data from the included studies was not reported in the review.

Methods of synthesis
How were the studies combined?
The studies were presented in a narrative discussion of the study results.

How were differences between studies investigated?
The authors do not state how differences between the studies were investigated.

**Results of the review**
Four studies met the inclusion criteria and the validity criteria. The number of participants and study designs were not stated.

Compared with hospital care, home care had no notable effects on patients’ or caregivers’ health. Hip fracture was the only condition for which internally valid evidence provided some support for acute home care. However, there was no evidence regarding the effects on caregivers’ health.

Social costs were not reported for hip fracture. Social costs were unaffected for hip and knee replacement, and higher for COPD and hysterectomy. In the two studies of various conditions combined, social costs were higher in one and longer in the other.

**Cost information**
The authors state that there were substantial reductions in the length of stay for each condition, but the hospital cost savings were still less than the added costs of home care. There were no significant effects on costs borne by patients and caregivers.

**Authors’ conclusions**
The authors state the limited existing evidence indicates that, compared with hospital care, acute home care produces no notable difference in health outcomes. The effects on social and health system costs appear to vary with condition.

**CRD commentary**
This is a limited systematic review. The authors have stated their research question and some inclusion and exclusion criteria. The literature search was limited in its detail and did not state whether there were any language restrictions. It is possible therefore that additional studies may have been missed. The authors do report who, and how many of the authors, performed the selection of studies and the data extraction from the included studies. In addition, data from the included studies were not reported in the review but there was an assessment of validity.

The study data were reported separately and there was no attempt to synthesise the data. There was also no discussion of the effects of differences between the included studies.

The authors conclusions appear to follow from the results but these should be viewed with caution because of the missing data and methodological limitations in the process of the review.

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

Research: The authors state that more well-designed evaluations are needed to determine the appropriate use of acute home care.

**Bibliographic details**

**PubMedID**
10234345
Original Paper URL
http://www.cmaj.ca

Indexing Status
Subject indexing assigned by NLM

MeSH
Acute Disease /economics; Adult; Cost of Illness; Cost-Benefit Analysis; Evidence-Based Medicine; Health Care Costs /statistics & numerical data; Health Services Research; Home Care Services /economics; Hospitalization /economics; Humans; Length of Stay /economics; Outcome Assessment (Health Care); Program Evaluation; Reproducibility of Results; Research Design

AccessionNumber
11999008522

Date bibliographic record published
31/12/2000

Date abstract record published
31/12/2000

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.