

Review: Evidence of the effectiveness of discharge planning is equivocal

Parkes J, Shepperd S. Discharge planning from hospital to home. *Cochrane Database Syst Rev*. 2000;(4):CD000313 (latest version 17 Aug 2000).

QUESTION

Does discharge planning from hospital to home improve patient care and reduce health care costs?

DATA SOURCES

Studies were identified by searching MEDLINE (1966 to 1996), EMBASE/Excerpta Medica (1980 to 1996), Sigle (1980 to 1996), Bioethics (1985 to 1996), Health Plan (all years), Assia (all years), PsycLIT (1974 to 1996), CINAHL (1982 to 1996), the Cochrane Library (all years), EconLit (1969 to 1996), *Social Science Citation Index* (1992 to 1996), and the Cochrane Effective Practice and Organization of Care (EPOC) specialized register; reviewing reference lists of relevant articles; and contacting experts.

STUDY SELECTION

Randomized controlled trials and other controlled trials were selected if they included patients in acute, rehabilitation, or community hospitals and assessed a discharge planning intervention (development of an individualized discharge plan for a patient before discharge). Studies were excluded if they did not include an assessment and implementation phase or if discharge planning was provided as part of a multifaceted intervention.

DATA EXTRACTION

Data were extracted on study design, participants, setting, intervention, and outcomes. The 2 authors independently assessed

methodologic quality of studies by using a modified version of the EPOC criteria. Main outcomes included process of care (length of hospital stay, unscheduled readmissions, and complications), patient outcomes (mortality, health outcome, and satisfaction with care), and health care costs (hospital, community, and overall costs).

MAIN RESULTS

8 randomized controlled trials comparing discharge planning with usual care met the inclusion criteria. The findings for various outcomes and patient groups are summarized in the Table. Because of study variation, only 1 meta-analysis was possible. This

analysis of 4 studies of elderly medical patients showed a nonsignificant difference in length of hospital stay favoring discharge planning (weighted mean difference -1.01 , 95% CI -2.06 to 0.05).

CONCLUSION

Evidence of the effectiveness of discharge planning is equivocal.

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Discharge planning vs usual care

Outcomes	Patients	Result (number of trials)
Length of stay	Elderly medical	No difference (4 trials)
	Surgical	No difference (1 trial)
	Medical and surgical	Reduced for only 1 of 2 hospitals (1 trial) No difference (2 trials)
Unscheduled readmission	Medical	Increased at 1 mo but not 6 mo (1 trial) Decreased at 1 wk but not 8 wk (1 trial) No difference (2 trials)
	Surgical	No difference (1 trial)
	Medical and surgical	Decreased at 4 wk but not 9 mo (1 trial)
Mortality	Medical and surgical	No difference at 9 mo (1 trial)
Hospital care costs	Medical	No difference for cost of initial stay; lower total charges at 2 wk and 2 to 6 wk
	Surgical	No difference (1 trial)
Overall costs	Medical	No difference (1 trial)

COMMENTARY

In this review by Parkes and Shepperd, discharge planning is defined as the development of individualized discharge plans for patients before they are discharged home from the hospital. Such planning should improve care and reduce the necessity for premature readmission.

In this report and in the articles reviewed, descriptions of the discharge-planning process and of the care provided to control groups were unclear and variable between studies. Dissection of the discharge-planning process from overall care is difficult and limits the application of this information to one's own practice setting. Studies were identified for this review by searching relevant databases to 1996. I identified 2 more-recent articles of discharge planning for children with asthma and for the elderly that came to similar conclusions (1, 2).

The reviewers' conclusions are appropriately conservative. Although 8 studies were reviewed, meta-analysis was not possible because of

differences in the patient populations. The clinical outcomes were equivocal in all groups. The review and the original articles would have to be carefully examined before one could recommend widespread application of the information. Despite the lack of evidence for or against discharge planning, I believe that all hospitalized patients should receive such planning because it makes sense to do so. But more effective means of planning are clearly needed.

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References

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2. Rosswurm MA, Lanham DM. Discharge planning for elderly patients. *J Gerontol Nurs*. 1998;24:14-21.