

Title

Intermediate Care in Nursing Home after Hospital Admission Reduced the Need for Home Services, but Increased Mortality. A Randomized Controlled Trial with One Year Follow-up.

Authors

Jo Kåre Herfjord, Håkon Erstad, Torhild Heggstad, Anette Hysten Ranhoff.

Introduction

The aim of intermediate care is to reduce demand for hospital beds, while providing adequate treatment and care at a lower cost. Typically the target population is elderly people.

Storetveit nursing home has organized a 19-bed intermediate care unit staffed with a geriatrician and increased nursing staff. Elderly patients with acute illness are transferred 1-3 days after hospital admission for further treatment and care. The aim of this study was to evaluate whether treatment in this intermediate care unit was safe and beneficial, compared with usual care in hospital.

Method

400 patients over 70 years and living at home, admitted to hospital with acute medical illness or orthopedic non-surgical trauma were included and randomized to transfer to Storetveit nursing home (the intervention group) or usual care in hospital (the control group).

The study population consisted of 376 patients (74% females, mean age 84 years) after 24 patients withdrew their consent or were lost to follow-up. Main outcomes were one-year mortality, hospital admissions and readmissions, days in nursing home and use of home care. Data were obtained from hospital and community patient registers.

Results

After one year, 42 intervention patients and 32 controls were dead (22,1% vs 17,2%, $p=0,29$). Among orthopedic patients 15 intervention patients and only 7 controls were dead (25,0% vs 10,3%, $p=0,049$). For medical patients there was no difference in one-year mortality (25,6% vs 25,0%, $p=0,99$).

In the intervention group fewer patients used home services (68,4% vs 80,1%, $p=0,0067$), and there was a trend towards less time in nursing homes (40 vs 55 days, $p=0,09$). There were no difference in hospital admissions ($p=0,411$) and readmissions ($p=0,12$).

Conclusion

This model of intermediate care resulted in less use of home care services and a trend toward less nursing home care, but gave concern about patient safety because more of the orthopedic patients died in the group who were transferred to intermediate care.