Supplemented primary care units compared to hospitalisation

This is an excerpt from the full technical report, which is written in Norwegian.

The excerpt provides the report's main messages in English.

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Systematic review

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We would like to thank all contributers for their expertise in this project. Norwegian Knowledge Centre for the Health Services assumes final responsibility for the content of this report.

Norwegian Knowledge Centre for the Health Services
Oslo, December 2014

Key messages (English)

The aim of this systematic review was to summarise the results of studies that compared the effects on patient outcomes for patients admitted to a supplemented primary care unit instead of a general hospital or who examined whether patients with access to a supplemented primary care unit had fewer hospital admissions than patients without such access. Patients should satisfy certain criteria, i.e. they should be in need of emergency treatment, but not need intensive treatment in hospital. A secondary aim was to summarise results of studies that compared larger supplemented primary care units with smaller ones.

We identified only three small studies as eligible for inclusion, one randomised controlled trial conducted in Norway and two observation studies conducted in England. The assessment of the evidence base shows that:

- It is possible that admission to a supplemented primary care unit compared with hospitalisation provides slightly better patient satisfaction, but the quality of the evidence for this result is low.
- There is insufficient scientific evidence to determine whether admission to a supplemented primary care unit compared to hospitalisation affects patient outcomes such as physical function and quality of life or affects the number of readmissions.
- We identified no prospective controlled studies that examined whether supplemented primary care units lead to fewer hospital admissions, or are associated with reduced expense.
- We identified no studies that compared larger inter-municipal units with smaller.

Title:
Supplemented primary care units compared to hospitalisation

Type of publication:

Systematic review

A review of a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise relevant research, and to collect and analyse data from the studies that are included in the review. Statistical methods (meta-analysis) may or may not be used to analyse and summarise the results of the included studies.

Doesn't answer everything:

Available evidence does not answer whether supplemented primary care units compared to general hospitals leads to fewer hospitalisations or whether there are differences in patient outcomes or costs.

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Executive summary (English)

Background

The proportion of elderly in the Norwegian population and the number of people with chronic illnesses and complex care needs are increasing. This creates challenges for the management of health care, particularly in the specialist health services. One initiative to address this required all municipalities to establish supplemented primary care units for the treatment of patients of any age from 2016 (under the Health and Care Services Law). A more specific term is 'municipal emergency beds'. In Norway, these bed-based intermediate care units are defined as municipal or inter-municipal emergency assistance services which can accommodate people in urgent need of help and for whom the municipality is able to provide care for. There is wide variation between municipalities in how these services are organised and staffed, and how many beds that are made available. Some may be compared to community hospitals and others may involve one or two beds located in a nursing home. For our purposes, we will include all studies of interventions that deal with any kind of local emergency overnight services – or supplemented primary care units - *outside* general hospitals, such as for instance community hospitals or GP hospitals.

Objective

The aim of this systematic review was to summarise the results of studies that either compared the effects of admitting patients to supplemented primary care units of some kind instead of general hospitals, or that investigated whether admitting patients to supplemented primary care units reduced admissions to general hospitals. Summarising studies of any comparisons of supplemented primary care units of different size were also a target of this review.

Method

We searched for primary studies in relevant databases, without any restrictions on language or time period. The search was completed in March 2014. Two people independently screened the reference list generated by the literature search and selected the publications that seemed relevant, based on the title and summary. Poten-

tially relevant publications were ordered in full text and assessed for inclusion or exclusion based on predetermined inclusion criteria. The same two people assessed the studies that were included for risk of bias in the results, for each outcome, using a recognised checklist. One person assessed the evidence for each outcome, using GRADE, and the assessments were then checked by another person.

Results

We identified three small studies that compared the effects of admission to a community hospital with hospitalisation to a general hospital on patient outcomes. All patients had been assessed by a physician as satisfying the criteria for admission to emergency overnight services. There was no age restriction in one of the studies, but in practice it turned out that the average age was just above 71 years. The other two studies included patients aged 65 and older or 70 years and older. The studies had different designs; one study was a randomised controlled trial conducted in Norway and the other two were observational studies conducted in England. Two studies reported that patients admitted to a community hospital expressed more satisfaction with their stay than those who had been hospitalised. The mean difference in scores for patient satisfaction between the groups in one study was 0.5 (p = 0.021). In the second study 36% (CI 1.02 to 1.82) more of those who had been treated in the local emergency overnight service versus those who had been hospitalised, would recommend the offer to a friend - as an expression of patient satisfaction. Physical function was measured in one study and quality of life in another, but the uncertainty around the effect estimates makes it difficult to draw any conclusions: The mean difference in functional score was -1.5 (p = 0.47) and mean difference in change of quality of life score was -0.09 (p = 0.97). Likewise, the two studies that measured readmissions reported wide confidence intervals for the effect estimates, respectively, RR 0.77 (CI 0.4 to 1.47) and RR 3.27 (CI 0.39 to 27.58).

Discussion

Because the evidence for each outcome only consisted of one or two small studies with methodological shortcomings, we judged the evidence to be of mainly very low quality. Little or no evidence does not mean little or no effect. It means that it is difficult to draw conclusions on a scientific basis. The criteria for which patients are suitable for admission to supplemented primary care units rather than to hospitals are very general and it may be difficult to judge which patients fall within the criteria. Accordingly, supplemented primary care units should be introduced under controlled circumstances, monitored and evaluated carefully.

Conclusion

Evidence of low quality suggests that patients admitted to a supplemented primary care unit are slightly more satisfied with their stay than those who are hospitalised. However, there is insufficient scientific evidence to determine whether there are differences in outcomes such as physical function, quality of life or the number of readmissions. No studies that met the inclusion criteria measured whether there were differences in costs or whether there were fewer general hospital admissions when admitting patients to a supplemented primary care unit.