

# Research Brief

## Effectiveness of quality improvement strategies for coordination of care to reduce use of health care services: a systematic review and meta-analysis

### Summary

We aimed to examine the effectiveness of interventions to improve the coordination of care and reduce health care utilization among frequent users. Care coordination quality improvement strategies reduced emergency department visits among elderly patients and reduced hospital admissions among patients with chronic diseases other than mental illness.

### Implications

These results may help clinicians and policy-makers reduce utilization by using strategies including team changes, case management, promotion of self-management, and patient education. Strategies targeting the patient (self-management, education) are likely less resource-intensive than case management strategies. Further research is needed to determine how to optimize care coordination strategies for specific patient subgroups and care settings.

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### What is the current situation with frequent users of health care services?

- Frequent users of health care services represent a relatively small group of patients who account for a disproportionately large amount of health care utilization
- Disproportionate use of health care services contributes to longer wait times and reduces the quality of care

### Objective

- The objective of this review was to examine the effectiveness of interventions to improve the coordination of care to reduce health care utilization among frequent users

### How was the study conducted?

- The protocol (or plan) for the review was developed and revised with input from researchers, clinicians, and the Ontario Ministry of Health and Long-Term Care
- 3 databases (MEDLINE, Embase, the Cochrane Library) were searched for randomized clinical trials (RCTs) that assessed quality improvement strategies targeting adults who are frequent users of the health care system
- Health utilization outcomes included emergency department visits, hospital admissions, and clinic visits
- Screening of literature search results, data abstraction, and quality assessment were conducted independently by two reviewers
- Random effects meta-analysis was conducted for outcomes reported in at least 2 RCTs

### What did the study find?

- 36 RCTs representing 7,494 patients and an additional 14 companion reports were included in the meta-analysis
- Significantly fewer patients in the intervention group with chronic conditions other than mental illness were admitted to hospital compared to the control (18 studies)
- Quality improvement strategies that reduced hospital admissions included: case management, team changes, promotion of self-management, and patient education
- There was no significant difference between intervention and control in the proportion of patients visiting the emergency department (6 studies), except among older patients (2 studies)
- There was no significant difference between groups in the proportion of patients making clinic visits (5 studies) or in the duration of hospital stay (19 studies)

This research was conducted by investigators affiliated with the following institutions:

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