The effects of gatekeeping: a systematic review of the literature
Velasco Garrido M, Zentner A, Busse R

CRD summary
The review concluded that evidence on the effects of gatekeeping was of limited quality. Many studies were available for the effects on health care utilisation and expenditure, but effects of health- and patient-related outcomes had been studied only exceptionally and were inconclusive. The review was generally well conducted and the authors’ conclusions are suitably cautious and appear appropriate.

Authors’ objectives
To assess the effects of physician centred gatekeeping on health, health care utilisation and costs.

Searching
PubMed, EMBASE and The Cochrane Library were searched from inception to January 2010 for articles published in any language. Search terms were reported. Reference lists of included articles were searched.

Study selection
Randomised controlled trials (RCTs), non-randomised controlled trials, controlled before-and-after studies, cohort studies, case control studies and interrupted time series of physician-centred gatekeeping were eligible for inclusion. Studies had to report at least one of the outcomes: health- and patient-related outcomes (mortality, morbidity, satisfaction or quality of life), quality of care and healthcare utilisation.

The included studies considered physician gatekeeping in children and adults (where reported) diagnosed with a variety of conditions typically seen in general practice. Most studies were retrospective cohort studies. Most studies were conducted in the USA. The type of gatekeeping included requirement of both co-payments and enrolment with a primary care physician. Reported data sources included routine administrative data, satisfaction questionnaires, routine clinical data and survey.

Two reviewers independently performed the study selection.

Assessment of study quality
Quality assessment was independently conducted by two reviewers who used the US task force on prevention services criteria to assess allocation, outcome assessment, data sources, risk of contamination and risk of attrition bias. Studies were scored as good, fair or poor quality. Discrepancies between reviewers were resolved by consensus.

Data extraction
Data were extracted, using a standardised extraction form, on health outcomes, healthcare utilisation, quality of care and costs.

The authors did not state how many reviewers were involved in data extraction.

Methods of synthesis
A narrative synthesis was presented with studies grouped by outcomes.

Results of the review
Twenty-six studies were included in the review: one RCT, two quasi-RCTs, four prospective cohort studies, five controlled before-and-after studies, 12 retrospective cohort studies and two interrupted time series. Study sample sizes, where reported, ranged from 234 to 4,210,737 participants. Follow-up ranged from 10 days to three years; most were 12 months or more. Study quality was generally suboptimal: two studies were good quality, three were fair quality and 21 were poor quality.
Health- and patient-related outcomes: Physician gatekeeping was associated with mixed effects on satisfaction (four studies), quality of care (eight studies) and symptoms of morbidity (seven studies). Physician gatekeeping was associated with increased quality of life (two studies). There was a trend towards shorter length of hospital stay (five studies), fewer hospitalisations (10 studies), fewer specialist visits (17 studies) and fewer emergency room visits (six studies) with physician gatekeeping.

Cost information
There was a reduction of 6% to 80% in health care expenditure (12 studies) with physician gatekeeping.

Authors’ conclusions
The evidence regarding the effects of gatekeeping was of limited quality. Many studies were available for effects on health care utilisation and expenditure; health- and patient-related outcomes had been studied only exceptionally and were inconclusive.

CRD commentary
Inclusion criteria for the review were clearly defined. Several relevant data sources were searched. There were no language restrictions. Publication bias was not assessed, but was not likely to be a major issue considering the number and type of studies included (acknowledged by the authors). Attempts were made to reduce risks of reviewer error and bias during study selection and quality assessment; it was unclear whether such attempts were made for data extraction. Study quality was assessed using a standard checklist, which indicated the generally poor quality of the included studies (acknowledged by the authors).

A narrative synthesis was presented. Studies were grouped by outcome and graphically presented to aid interpretation, which was appropriate in light of substantial variation among the included studies.

The review was generally well conducted. The authors’ conclusions are suitably cautious and appear appropriate.

Implications of the review for practice and research
Practice: The authors stated that when considering gatekeeping, policy-makers needed to be aware of the limitations and uncertainties uncovered by this review.

Research: The authors stated that future research should focus on studying effects on health outcomes and on patient satisfaction in health system contexts other than managed care.

Funding
German Advisory Council on Assessment of Developments in the Health Care System.

Bibliographic details

PubMedID
21192758

DOI
10.3109/02813432.2010.537015

Original Paper URL

Indexing Status
Subject indexing assigned by NLM
MeSH
Evidence-Based Medicine; Gatekeeping; Health Care Costs; Health Expenditures; Health Services /economics /standards /utilization; Humans; Outcome and Process Assessment (Health Care); Physician Self-Referral; Primary Health Care /economics /standards /utilization; Quality of Health Care

AccessionNumber
12011002057

Date bibliographic record published
01/06/2011

Date abstract record published
26/10/2011

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.