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RAPPORT

OVERSIKT OVER SYSTEMATISKE OVERSIKTER

Samorganisering av fastleger med andre primærhelseti

Co-organization of general practitioners with other primary health care services: a systematic review

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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Key messages

As one of several measures to meet existing challenges in primary care, a co-organization of general practitioners with other primary health service providers has been proposed by Norwegian authorities in the Meld. St. 26 (2014–2015): 'The primary health and care services of tomorrow - localized and integrated'.

In this systematic review we have summarized results from 28 controlled US studies that compared co-organized clinics with clinics where primary health care resources were not co-organized. The evidence, therefore, consists only of studies conducted in a different context than the Norwegian context. Based on this evidence we have drawn the following conclusions:

- For the use of health services, it is uncertain whether a co-ordination effort will lead to more, fewer or the same number of visits to an emergency department service or specialist health care service. For hospitalizations, there is possibly little or no difference.
- For follow-up of patients with diabetes or heart disease, respectively measured as the proportion of patients having their HbA1c or lipid values measured, there is possibly little or no difference.
- For preventive work, measured as the proportion of patients being screened for cervical cancer, colorectal cancer or chlamydia, there is possibly little or no difference. On the other hand, it is possible that marginally more patients in co-organized clinics will be screened for breast cancer.
- Co-organization of general practitioners with other primary health care service providers can possibly lead to somewhat lower costs.

For all outcomes, we considered the evidence to be of low quality and we therefore have limited confidence that the estimates are close to the true value. More studies or further follow-up on the interventions that were implemented in the included studies may change the estimates and our confidence in them.

Title:
Co-organization of general practitioners with other primary health care services: a systematic review

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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:
We do not know to what extent the results of the studies can be transferred to the Norwegian context.

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Hilde Lurås, Dr. Polit, Associate Pro-fessor at Institute of Clinical Medicine and Head of Clinic for Health Care and Psychiatry, University of Oslo and Head of Health Services Research Unit at Akershus University Hospital.
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Executive summary (English)

Background

A co-organization of general practitioners with other primary health care providers has been suggested in Meld. St. 26 (2014–2015) 'The primary health and care services of tomorrow - localized and integrated' as one of several interventions to meet what is considered to be the prevailing challenges in primary care. A more comprehensive health service is desired, in which the general practitioner and other primary healthcare practitioners are better integrated and practice interdisciplinary collaboration. The goal is a health service less characterized by fragmented health services, inadequate coordination and more focused on preventive health care, more user involvement and comprehensive patient care.

Objective

Our purpose in this systematic review was to identify and summarize the results of research studies that had investigated whether and to what extent primary healthcare co-organization models affected process, patient and financial outcomes.

Method

We searched for primary studies in relevant databases. The search was done in October 2016. Two people independently screened the reference list from the literature search and chose the publications that seemed relevant, based on the title and the summary. Potentially relevant publications were ordered in full text and considered for inclusion based on the inclusion criteria. The same two people assessed the included studies for risk of bias in the results for each outcome, using a recognized checklist. To assess the possibility for conducting metaanalyses, we assessed the heterogeneity of the material by looking at population, intervention, outcome and design. The quality of the evidence was assessed by one person using GRADE and then controlled by another.

Results

We included 28 studies: Three randomized controlled trials and 25 observational studies. All studies had been performed in the United States and were of a relatively new date. Outcomes measured were the use of various health services, use of laboratory tests, screening and costs. Two studies measured patient satisfaction indicators. None of the studies measured process outcomes.

Except for one of the randomized controlled studies, which we assessed as having low risk of bias, we assessed the risk of bias in the results in all the other studies as unclear, primarily due to the observational design. The overall common feature of the interventions was that they all had the same intention and purpose: Better coordination, easier access to services, comprehensive and interdisciplinary treatment and to lower costs. Duration of studies varied from three to five years. The population was both patients in general and patients with multiple challenges.

Use of health services - children and adults

The meta-analyses of the results from the studies do not allow for an unambiguous interpretation of the effects of a co-organizational model on the use of health services:

- The point estimates showed fewer visits to an emergency department (10 fewer per 1000 (95% KI from 28 fewer to 7 more)) and to the specialist health service (36 fewer per 1000 (95% KI from 76 fewer to 5 more)). However, as we can see, the confidence intervals include more or even fewer visits.
- For visits to the primary health care service, the estimate showed more visits (52 more per 1000), but here too the confidence interval of the estimate varies between even more or fewer visits (95% KI 102 fewer to 206 more).
- For hospitalizations, the estimate showed little or no difference between a co-organizational model and traditional organization (1.52 fewer (95% KI 4.61 fewer to 1.57 more).

Use of laboratory tests as an indicator for patient follow-up - children and adults

For the follow-up of patients with diabetes or heart disease, respectively measured as proportion of patients that had their HbA1c or lipid values measured, the estimates showed little or no difference between a co-organizational and traditional organization. Hence, 0.99% more had their HbA1c values measured (95% KI 0.32 less to 2.31 more) and 0.28% more patients with heart disease had their lipid values measured (1.18 fewer to 1.74 more).

Screening as an indicator of preventive activity - children and adults

- For breast cancer screening, the estimate showed that a few more patients were screened in the co-organized group compared to the traditionally organized group, 1.53% more (95% KI from 0.54 to 2.53 more).
- For other preventive measures, measured as the proportion screened for cervical or colorectal cancer or for chlamydia, the estimates showed little or no difference between the groups.

For all outcomes, we have low confidence in the estimate being close to the true value. More studies or further follow-up on the interventions that were implemented in the included studies may change the estimates and our confidence in them.

Costs per person per year - children and adults

For costs, the estimates from the meta-analysis showed somewhat lower costs for patients in co-organized clinics than for those in traditionally-organized clinics ($ -227.89 per person per year (95% KI -433.77 to -22. 00)). The certainty of the estimate of costs is low.

Use of healthcare, patient satisfaction, and costs - children with chronic illness

We assessed the evidence for the outcomes of use of healthcare, patient satisfaction and the cost of children with chronic disease to have very low quality. It is therefore

uncertain whether co-organizational interventions for clinics treating chronic illnesses affect the number of emergency attendance visits, hospitalizations or costs.

Discussion

We have drawn conclusions based on the results of the meta-analyses, the results of the primary studies that could not be included in the meta-analyses and on the quality we rated this evidence to have. The results for most outcomes varied and were inconsistent across studies. It is therefore difficult to predict which results we can expect from the implementation of a co-organizational intervention. A new fully integrated co-organizational model assumes changes in financial models, a wide range of adaptations, for example, in terms of new structures for cooperation and coordination, training in other ways to collaborate and provide health services and, perhaps, a change of attitudes regarding the relationship with and view on patients and other professions.

None of the studies reported how and to what extent the co-organizational intervention had been implemented. Because the intervention is very complex and the model it is based on does not provide instructions on how to implement it, there is reason to believe that both content of interventions and the implementation processes must have been rather different across settings.

Conclusion

The evidence was judged to be of low certainty and does not unambiguously support the assumption that a co-organizational model for primary care will lead to fewer visits to a medical emergency or specialist health service or fewer hospitalizations for patients in general, nor to more visits to the primary health care service. Moreover, the evidence does not support the assumption that patient follow-up will be improved, measured as a proportion of patients who are undergoing laboratory tests. Although it is possible that a few more patients may be screened for breast cancer, it is uncertain to what degree the other prevention indicators will be affected, i.e. screening for cervical and colorectal cancer and chlamydia. Anyway, the possible differences between the indicators for follow-up and prevention appear to be so small that they would hardly have any clinical significance. Evidence of low certainty supports that a co-organizational intervention may lead to lower costs per patient. For all results, it is uncertain to what degree they can be transferred to Norwegian conditions.