



Economic Evaluation Studies of Self-Management Interventions in Chronic Diseases: a systematic review

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IHEA Dublin Thursday July 15th

Health Services Research
Focusing on Chronic Care and Ageing

Background

- Future of chronic health care
- Challenge for policy makers
- Self-management: a popular intervention...
- ...yet difficult to conceptualize

- And, what about the cost-effectiveness of self-management interventions?

Aim

The aim of this study is to:

systematically review the literature economic evaluation studies conducted alongside a trial of one or more self-management interventions in adolescents, and to investigate the cost-effectiveness outcomes and methodological quality of these studies

Methods

Inclusion criteria:

- The study was a full economic evaluation, either conducted alongside a trial or a model based economic evaluation
- The study reported a self-management intervention
- The study participants were 18+
- The study was published in or after 1990

Exclusion criteria:

- Review, abstract, study protocol, editorial, commentary, policy decision, final rule, pilot study, internet article, literature study, qualitative study, opinion case study or letter

Methods(2)

Search strategy (key terms):

`self-management', `self management', `self-care', `self care',
`economics', `cost analysis', `cost benefit analysis', `cost-benefit
analysis', `cost-effective', `cost effective'

- Period covered: 1990-2012 (May)

- Databases:

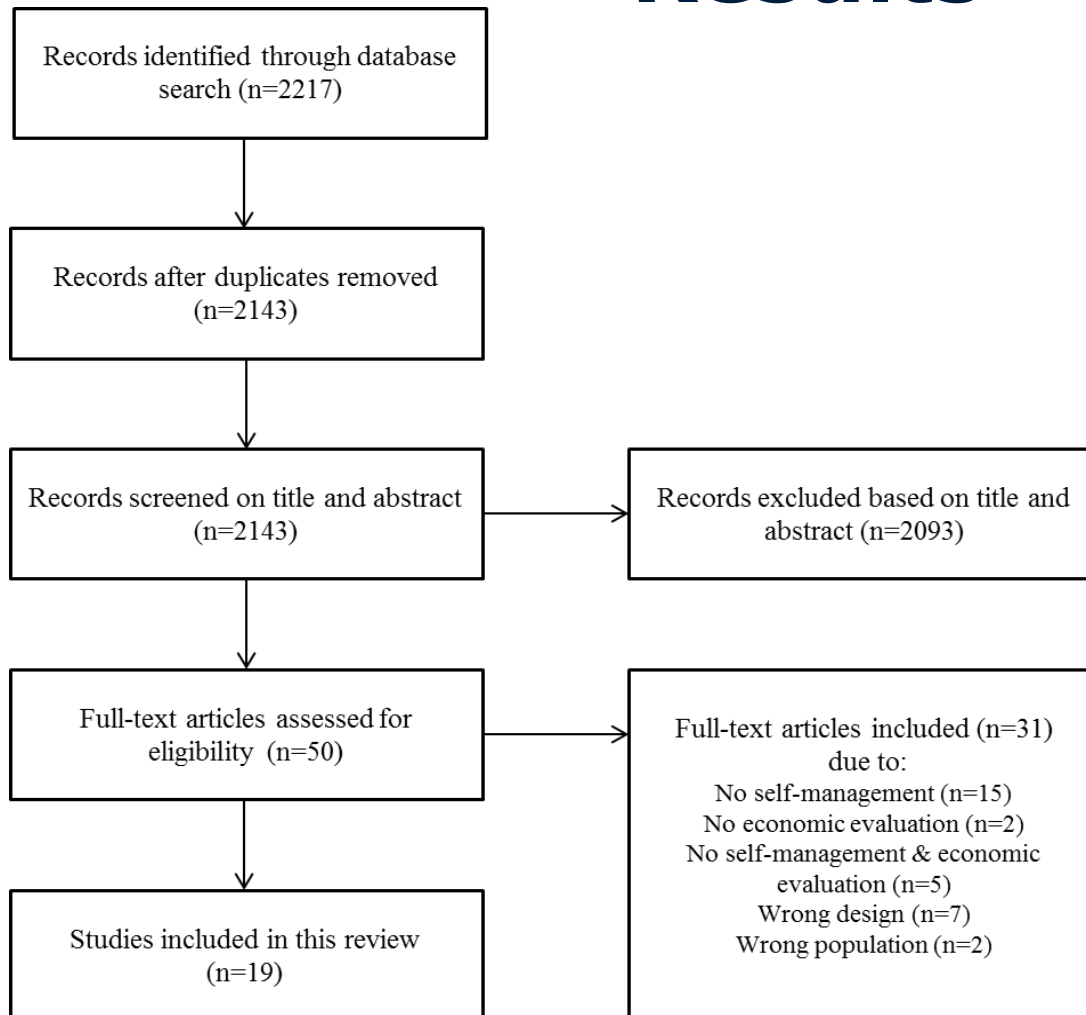
- NHS EED (CINAHL, Embase, PsycINFO, MEDLINE, PubMed)
- PubMed

Methods(3)

- Study selection
- Data abstraction and methodological quality assessment
- Using an existing checklist (customized) to abstract data:
 - General and epidemiological information
 - Cost-effectiveness of self-management interventions
 - Economic information
 - Critical appraisal of the quality of the economic evaluation (CHEC)

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Results



Results (2)

General and epidem. characteristics Summary of results (n=19)

Country	Netherlands (3), Finland (2), Sweden (1), Norway (1), United States (6), United Kingdom (5), Canada (2)
Perspective	Societal (11), Healthcare sector (5), Healthcare payer (1), Healthcare system (1), NHS (1)
Self-management intervention defined as:	Self-management (7), self-management education (5), education (4), group rehabilitation (1), self-help (1), exercise training (1)
Comparison	Usual care (11), education (4), guidebook (1), exercise programme (1), home programme (1), unknown (1)
Follow-up	12 months (14), 24 months (2), 6 months (1), 18 months (1), 60 months (1)
Disease category	Asthma (7), COPD (2), arthritis (2), diabetes (2), heart failure (1), knee pain (1), hypertension (1), IBS, (1), back pain (1), Anticoagulation therapy (1)
Groups	2 (14), 3 (3), 4 (2)

Results (3)

Economic characteristics and cost-effectiveness		Summary of results (n=19)
Design		CEA (13), CUA (6)
Cost identification	Healthcare (HC)	Yes (18), no (1)
	Patient & family	Yes (11), no (8)
	Outside HC	Yes (11), no (8)
	Intervention	Yes (19), no (0)
Cost measurement (>1 per study possible)		Medical records (11), cost-questionnaire (9), databases (3), telephone (2), cost diary (2)
Cost valuation (>1 per study possible)		Cost price estimations (9), cost guidelines (4), tariffs (3), unknown (3), database (1), human capital approach (1)
Effect identification & measurements (>1 per study possible)		Generic QoL measure (15), disease specific effect measure (12), disease specific QoL measure (1)
Self-management intervention cost effective?		Yes (16), no (3)

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Results (4)

CHEC-list item (n=19)	Yes	No
Competing alternatives clearly described	7	12
Appropriate time horizon	18	1
Costs for each alternative described	10	9
Costs valued adequately	12	7
Outcomes for each alternative described	14	5
Outcomes valued adequately	9	10
Incremental analysis of costs and outcomes conducted	12	7
Sensitivity analysis/analyses conducted	10	9
Do the conclusions follow the reported data?	16	3

Conclusions

- Self-management is a cost-effective treatment based on this review
- Moderate methodological and economic quality of included studies
- Economic evaluation studies comparing one or more self-management intervention are rare
- The challenge of defining self-management
- Recommendations:
 - Solid methodological and economic quality of future research is imperative
 - Future research would benefit from a golden standard definition of self-management

Limitations

- Time span starts in 1990
- Two databases were used
- Conference abstracts were excluded
- Absence of a study protocol for this study



Thank you for your attention!

Questions?

Questions may also be addressed to:
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