Review question(s)

Which models of self-management interventions are associated with significant reductions in health services utilization (including admissions) without compromising outcomes in people with long-term conditions?

Searches

We have searched CENTRAL, CINAHL, Econlit, EMBASE, HEED, MEDLINE, MEDLINE in process, NHS EED and PsycINFO from inception

Additionally, a separately funded study is conducting a review of reviews of self-management, and if resources allow we will also check published reviews of self-management interventions identified by this second review for relevant primary studies

Types of study to be included

Inclusion: Randomized controlled trials providing details of health related outcomes AND health care utilization or costs

Exclusion: All other study designs

Condition or domain being studied

Long-term conditions: Cost-effectiveness of self-management interventions.

Long-term conditions in this study include conditions that cannot be cured but can be managed through medication and/or therapy

Participants/ population

Inclusion: Adults with long-term conditions.

Exclusion: Children and adolescents (under 18 years of age).

Intervention(s), exposure(s)

We will focus on self-management support interventions in long-term conditions.

A self-management support intervention is one primarily designed to develop the abilities of patients to undertake management of health conditions through education, training and support to develop patient knowledge, skills or psychological and social resources.

We will include all formats and delivery methods (group or individual, face to face or remote, professional or peer led).

We will include interventions across the pyramid of care for long-term conditions, ranging from self-management, monitoring in primary care, and intensive support (such as case management) for older people with complex needs.

We will exclude interventions where the self-management component is only a minor component of the intervention, and we will distinguish studies where self-management is the primary intervention from those where the effects of self-management support cannot be distinguished from broader interventions for long-term conditions.

Comparator(s)/ control

Other (non self-management) intervention groups, usual/routine care control groups and waiting list control groups.

Context

Studies from developing world countries will be excluded from the review.

Outcome(s)

Primary outcomes

Differences between the intervention and control group in hospitalization rates and costs, total costs and quality of life outcomes at follow-up.

Differences between the intervention and control group in hospitalization rates and costs and quality of life measures at follow-up.

Quality of life measures: will include validated self-reports of quality of life (EuroQol), self-report measures of general health status and (psychological) well being.

Secondary outcomes

Differences between the intervention and control group in other major types of costs (e.g. inpatients, outpatients, primary care, community care, out-of pocket expenditure) at follow-up.

Characteristics of models of self-management including characteristics of the population (e.g. type of long-term condition, age, gender, deprivation and multimorbidity), the intervention (e.g. skillmix, intervention content, and delivery method) and the study context (e.g. geographical location, type of health system, date of study) that may moderate the effectiveness of self-management interventions.

Data extraction, (selection and coding)

Abstracts of studies retrieved using the search strategy will be screened independently by two reviewers to identify studies that potentially meet the inclusion criteria of the review. The full text of these potentially eligible studies will be retrieved and independently assessed for eligibility by two reviewers. Any

disagreement between the reviewers over the eligibility of particular studies will be resolved through discussion and involvement of a third reviewer.

A data extraction sheet developed for the purposes of this study will be used to extract data from the included studies for assessment of study quality and evidence synthesis.

Extracted information will include: study setting; study population and participant demographics; details of the intervention and control conditions; study methodology; recruitment and study completion rates; outcomes and times of measurement and information for assessment of the risk of bias.

Moreover, we will extract data on the effect of self-management interventions on core types of health care utilisation (hospital visits and admissions, primary care visits, medication use, other health care use, other costs including patient costs), as well as data on total costs, cost-effectiveness, cost-utility, and patient well-being and health outcomes. Two reviewers will extract data independently, discrepancies will be identified and resolved through discussion (with a third author where necessary).

Risk of bias (quality) assessment

Depending on the number of studies identified, we intend to extract data to assist in the quality assessment of primary studies using the Cochrane risk of bias tool which considers the following study characteristics: sequence generation-randomization, treatment allocation concealment, blinding, completeness of outcome data, selective outcome reporting and other sources of bias. If large numbers of studies are identified, we will limit quality assessment to those characteristics which are most relevant to self-management interventions and most clearly related to bias (allocation concealment)

Two review authors will independently assess the risk of bias in included studies. Disagreements between the review authors over the risk of bias in particular studies will be resolved by discussion and with involvement of a third review author where necessary. Sensitivity analysis will be applied on the high-quality studies based on the outcomes of the methodological quality assessment.

Strategy for data synthesis

In this review, meta-analytic procedures will be used to synthesize and present the data from individual studies.

We will apply standardised measures of effect (such as the standardised mean difference) so that the results of different self-management interventions can be compared by decision-makers to assess their relative value.

The primary analysis will consider the ability of models of self-management to reduce hospitalisation rates and costs, without compromising patient outcomes.

We will present the results using a modification of the permutation matrix, plotting the effect of interventions (together with their associated confidence intervals) on

utilisation and outcomes simultaneously and placing them in the relevant quadrants of the matrix depending on the pattern of outcomes.

We will explore statistical heterogeneity thoroughly in such analyses through use of appropriate statistics such as I-squared. We will consider an I-squared value greater than 50% indicative of substantial heterogeneity. We will conduct sensitivity analyses based on study quality. We will also assess evidence of publication bias.

Analysis of subgroups or subsets

We will conduct meta-analyses pooling data relating to particular models of self-management support where the models, populations and study contexts are sufficiently similar to make such analyses appropriate and interpretable.

We will explore the characteristics of models of self-management showing favourable patterns of outcomes in the matrix through narrative review or through subgroup analysis and meta-regression techniques if the data are amenable.

Characteristics will include those of the population (e.g. type of long-term condition, age, gender, deprivation and multimorbidity), the intervention (e.g. skillmix, intervention content, and delivery method) and the study context (e.g. geographical location, type of health system, date of study).

Subject index terms

Humans; Patient Education as Topic; Self Care

Reference and/or URL for protocol
http://www.crd.york.ac.uk/PROSPEROFILES/2694_PROTOCOL_20120910.pdf

Date of registration in PROSPERO

10 October 2012

Date of publication of this revision

10 October 2012