A review and analysis of the clinical and cost-effectiveness studies of comprehensive health promotion and disease management programs at the worksite: update VI 2000-2004

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CRD summary
This review assessed clinical and cost-effectiveness of comprehensive work-site health promotion in the US. The author concluded that comprehensive disease management programmes, incorporating high-risk interventions, were the most promising option. It is difficult to determine the reliability of the conclusions, as health outcomes were not the primary focus of the synthesis and study quality was not formally assessed.

Authors’ objectives
To update a review of the clinical and cost-effectiveness of work-site health promotion and disease management programmes.

Searching
The databases MEDLINE, ERIC, ADI, EDGAR, CARL, ABI/INFORM and LexisNexis were searched for peer-reviewed studies published in English between 2000 and 2004 (updating previous reviews, see Other Publications of Related Interest field). Search terms were not reported. Work-site researchers and corporate medical directors were also contacted and relevant journals were handsearched.

Study selection
Studies evaluating a comprehensive work-site health promotion and/or disease management programme (defined as providing an ongoing integrated programme which is coherent and consistent with corporate objectives) conducted in work-sites in the continental United States (US) were eligible for inclusion in the review. Studies of interventions to reduce single risk factors were excluded from the review. Eligible studies were required to report evaluations of clinical and/or cost outcomes. A wide range of both types of outcomes were reported. Studies were required as a minimum to contain a pre-test/post-test comparison; studies with more rigorous quasi-experimental or experimental designs were also eligible for inclusion. Included studies were randomised controlled trials (RCTs), quasi-experimental designs, or pre-test/post-test designs. Study durations varied from one to five years. [A: Two independent reviewers selected studies for the review.]

Assessment of study quality
The author did not state that he assessed validity, but the strength of the designs of included studies was discussed.

Data extraction
[A: Two independent reviewers extracted results from each study]; the information extracted was whether the intervention produced an overall improvement or worsening in outcomes.

Methods of synthesis
The studies were combined in a narrative synthesis. Differences between the studies were apparent from the text and the evidence tables. The synthesis also draws on the results of previous reviews of the evidence (see Publications of Related Interest field).

Results of the review
Twelve studies (n = at least 77,663) were included in the review. These included one RCT, three quasi-experimental studies with non-randomised control groups, one cohort study and seven pre-test/post-test studies.

Two quasi-experimental showed positive impacts of programmes on short term disability, while one also showed a positive impact on long term disability. All studies in the review indicated favourable clinical and/or cost outcomes.

Authors’ conclusions
The most promising future directions appear to be disease management programmes which are both comprehensive and include higher-risk interventions focusing on a dose-response model of increasing levels of intensity.

**CRD commentary**

The review question and the inclusion criteria were clear. The author searched a number of relevant databases and other sources. The restriction to studies reported in English is unlikely to have resulted in the exclusion of relevant studies, as only US-based programmes were eligible for the review, but the restriction to published studies may have had such an effect. Two independent reviewers extracted results from each study; the information extracted was whether the intervention produced an overall improvement or worsening in outcomes. The decision to employ a narrative synthesis appears appropriate given the clinical and methodological heterogeneity between the included studies. The synthesis appeared to have a primary focus on methodological developments in the field, and on cost outcomes, and did not provide an informative synthesis of the health-related outcomes of the review. As no formal assessment of study validity was reported, and the primary focus of the synthesis was not health outcomes, it is difficult to determine the reliability of the conclusions.

**Implications of the review for practice and research**

**Practice:** The author did not state any implications for practice.

**Research:** The author stated that RCTs of multifactorial health promotion and disease management programmes are needed to establish clinical and cost-effectiveness.

**Funding**

Not stated.

**Bibliographic details**


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**Other publications of related interest**

This review updates the following previous reviews:


Indexing Status
Subject indexing assigned by NLM

MeSH
Cost-Benefit Analysis; Disease Management; Health Promotion /economics; Health Services Research; Humans; Occupational Health Services /economics; Outcome Assessment (Health Care); Randomized Controlled Trials as Topic; Workplace

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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.