Case management: a critical review of the outcome literature

Holloway F, Oliver N, Collins E, Carson J

Authors' objectives
To examine the effect of case management (care management) on psychiatric patients.

Searching
PsycLit CD-ROM was searched from 1987 to March 1993, using the search terms: 'case management' and 'mental disorder'. Citations in the literature and the authors' knowledge of the field were also used.

Study selection
Study designs of evaluations included in the review
Randomised controlled trials (RCTs), matched-control, repeated measures (own-control) and descriptive studies were included.

Specific interventions included in the review
Brokerage case management: focusing on the organisation and coordination of services on behalf of the client.

Clinical case management: Assertive Community Treatment (ACT), the Psychosocial Rehabilitation Model and the Strengths Model.

Participants included in the review
Patients with psychiatric disorder or disability were included. Generally, patients with organic brain disorder or primary diagnosis of alcohol or drug dependence were excluded.

Outcomes assessed in the review
The number of hospital days, the number of admissions, the costs of case management, use of community care services, satisfaction with services, quality of life, symptoms, social functioning, family burden, social networks/relationships.

How were decisions on the relevance of primary studies made?
The authors do not state how the papers were selected for the review, or how many of the authors performed the selection.

Assessment of study quality
Study characteristics (study design, number of subjects, inclusion criteria, follow-up period) were listed in a table. The authors do not state how the papers were assessed for validity, or how many of the authors performed the validity assessment.

Data extraction
The authors do not state how the data were extracted for the review, or how many of the authors performed the data extraction.

Methods of synthesis
How were the studies combined?
The studies were combined in a narrative description.

How were differences between studies investigated?
The studies were categorised according to their design characteristics and service characteristics (services provided,
Results of the review
There were 23 studies (n=3,803) of which 11 were RCTs (n=1,634).

Hospital utilisation (21 studies): a significant decrease in the number of hospital days is reported in 11 studies. Seven studies did not find any significant difference and 2 studies found an increase in hospital days. The number of admissions decreased significantly in 7 studies, increased in 2 studies and no significant difference was found in 6 studies.

Compliance with medication and/or appointment (9 studies): 6 studies showed an improvement in the case management group. Three studies found no significant difference between the case management group and the control group.

Changes in symtomatology (8 studies): 4 studies found no significant difference between groups and 4 studies found a decrease in symptomatology in case management group.

Use of other services (9 studies): 7 studies showed an increase in the use of other services (i.e. social services, after care services). Two studies showed no significant difference.

Overall functioning or social performance (8 studies): 2 studies showed an improvement in the case management group.

Burden on the family (3 studies): 3 studies found that the burden on families of patients receiving case management type services was not increased.

Social networks and relationships (5 studies): 4 of these 5 studies showed a significant improvement for the case management group.

Cost information
Ten studies reported the costs of case management. The cost outcome was dependent on the cost of in-patient care. The shorter the hospital stay, the lower the total cost. However, one study found that the burden of cost was transferred from in-patient care to structured residential care. Comprehensive economic evaluation was made in 3 studies, 2 of which found a decrease in costs for the case management group, when benefits such as increased income through higher employment were included.

Authors’ conclusions
Case management practice can have some impact on patients’ use of services (including a marked decrease in hospital stay), satisfaction with services, engagement with services, and social networks and relationships, when it is delivered as a direct, clinical service with high staff:patient ratios. Different models of case management need to be compared.

CRD commentary
The study characteristics were reported in a table, however, the strength of the evidence from different studies was not graded explicitly based on the study characteristics and quality. The authors of this review highlighted the complex nature of case management and the many different models of case management. The descriptions and definitions of the case management and control interventions are often not explicit in the literature.

Bibliographic details

Indexing Status
Subject indexing assigned by CRD
MeSH
Community Mental Health Services /organization & administration /transplantation; Comprehensive Health Care /organization & administration; Continuity of Patient Care /organization & administration; Delivery of Health Care /organization & administration /transplantation; Health Occupations /education; Health Services Administration; Long-Term Care /organization & administration; Mental Disorders /therapy; Patient Care Planning

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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.