Record Status
This is a critical abstract of an economic evaluation that meets the criteria for inclusion on NHS EED. Each abstract contains a brief summary of the methods, the results and conclusions followed by a detailed critical assessment on the reliability of the study and the conclusions drawn.

Health technology
Goal Focus Treatment Planning and Outcomes (GFTPO), a programme of flexibly managed outpatient psychotherapy which was implemented in 1992 by the employer division of United Behavioral Health (UBH), was examined. The programme had two main objectives. The first objective was to provide focused, goal-oriented psychotherapy. The second objective was to provide a nonintrusive, cost-effective means of studying treatment processes and outcomes. The programme consisted of two main parts. First, providers were offered a template of treatment goals consistent with their working diagnosis early in the treatment planning process. Second, regular audits of all medication regimens were conducted by a UBH staff psychopharmacologist.

Type of intervention
Treatment.

Economic study type
Cost-effectiveness analysis.

Study population
The study population comprised patients requiring psychotherapy.

Setting
The setting was an outpatient clinic. The economic study was carried out in the USA.

Dates to which data relate
The effectiveness and resource use data were gathered from 1995 to 1998. The price year was not reported.

Source of effectiveness data
The effectiveness evidence was derived from a single study.

Link between effectiveness and cost data
The costing was carried out retrospectively on the same sample of patients as that used in the effectiveness study.

Study sample
Power calculations were not reported, but a very large sample size was used. Intervention patients were enrolled from seven large employers who participated continually in the GFTPO programme for 48 months. These patients were then matched with comparable patients identified from seven employers within the UBH. Matching was based on industry type and benefit design. Patients receiving medication management alone, or psychotherapy solely from a non-network provider, were excluded. Overall, 28,741 eligible patients were identified, of which 17,752 were in the GFTPO group.
and 10,989 were in the non-GFTPO group. The GFTPO comprised 40% men: 23.1% in the 0 - 18 year age group, 12.7% in the 18 - 29 year age group, 25.9% in the 30 - 39 year age group, 26.4% in the 40 - 49 year age group, and 11.7% in the 50 years or older age group. The non-GFTPO group comprised 39.6% men: 20.5% in the 0 - 18 year age group, 11.1% in the 18 - 29 year age group, 20.6% in the 30 - 39 year age group, 31.1% in the 40 - 49 year age group, and 15.9% in the 50 years or older age group. The vast majority of patients were suffering from adjustment disorders or depressive disorders.

**Study design**
This was a retrospective, population-based cohort study that was carried out across the USA. The length of and loss to follow-up were not reported. Blinding was used only for some outcomes.

**Analysis of effectiveness**
All of the patients included in the initial study sample were accounted for in the effectiveness analysis. The outcome measures used were four indicators of quality of care:

first, "therapist switching" as a measure of therapeutic continuity (measured as the number of different outpatient therapists used by a patient during his or her index treatment episode);

second, the likelihood of early termination (defined as a treatment episode that involved no more than three sessions);

third, the likelihood of having multiple treatment episodes (defined as having two or more discrete treatment episodes during the study period);

fourth, the likelihood of a provider submitting a treatment plan to UBH with a potential medication problem.

The latter (fourth) measure was obtained by auditing a sample of individual treatment plans, where the records were blinded as to whether the case was from the GFTPO sample or the non-GFTPO sample. Each measure was calculated at the level of the treatment episode, which was defined as a continuous period of treatment for which the time between sequential dates of service was not greater than 90 days. A generalised linear mixed-model approach was used to examine the relationship between group assignment (GFTPO or non-GFTPO) and quality of care indicators. The study groups differed significantly at baseline in several demographic and clinical characteristics. However, the authors stated that such differences were probably not clinically meaningful. Baseline differences between the groups were taken into consideration in two ways. First, matching was based on industry type, geographic region, and benefit design. Second, random regression models were run to investigate the impact of confounding factors.

**Effectiveness results**
The statistical analysis showed that there was a strong association between the GFTPO programme and a decreased likelihood of medication errors.

The adjusted odds ratio (OR) was 3.21, suggesting that medication errors were estimated to be approximately three times as likely in the non-GFTPO sample as in the GFTPO sample.

The likelihood of early termination and the likelihood of having multiple treatment episodes were similar between the two groups. The ORs for GFTPO with respect to non-GFTPO were 1.01 (early termination) and 1.20 (multiple treatment episodes), respectively. However, the GFTPO programme was significantly associated with lower rates of therapist switching.

**Clinical conclusions**
The effectiveness analysis showed that the GFTPO programme was effective in reducing significantly medication errors and therapist switching.
Measure of benefits used in the economic analysis
The health outcomes were left disaggregated and no summary benefit measure was used in the economic analysis. In effect, a cost-consequences analysis was performed.

Direct costs
Discounting was not relevant since the costs were incurred during 12 months. The unit costs were not presented separately from the quantities of resources used. The health services included in the economic evaluation were psychotherapy only, all outpatient care, and all inpatient care. The cost/resource boundary of the study was that of an HMO. The costs were estimated as the UBH net paid amount with and without patient co-payments. Resource use was derived from the sample of patients included in the clinical study. The price year was not reported.

Statistical analysis of costs
The analyses of utilisation and cost data were based on random regression models using matched pairs of employers as clustering variables. Several predictor variables, including demographics, diagnostic and Census data, were entered as covariates in the random regression model. Since the cost and use variables were positively skewed, a natural log transformation of these variables was used to normalise such distributions.

Indirect Costs
The indirect costs were not included in the economic evaluation.

Currency
US dollars ($).

Sensitivity analysis
Sensitivity analyses were not performed.

Estimated benefits used in the economic analysis
See the 'Effectiveness Results' section.

Cost results
The estimated total costs were not reported. Only the results of the regression model were provided.

The analysis revealed that the use of both psychotherapy sessions and outpatient sessions were significantly lower with the GFTPO programme (reduction of 10.4% for both categories). Moreover, with the GFTPO programme, total payments were significantly reduced by 9.5% and total payments and co-payments were significantly reduced by 7.7%.

The administrative cost of the GFTPO programme was $0.06 per employee per month.

Synthesis of costs and benefits
A synthesis of the costs and benefits was not relevant since a cost-consequence analysis was carried out.

Authors’ conclusions
The implementation of the Goal Focus Treatment Planning and Outcomes (GFTPO) programme, which encouraged a goal-focused approach to outpatient psychotherapy combined with pharmacotherapy audits, was effective in improving quality of care and reduced payer's costs in the management of patients requiring psychotherapy.
CRD COMMENTARY - Selection of comparators
The selection of the comparator was appropriate, as it reflected the standard approach for the management of patients requiring psychotherapy in the USA. You should decide whether this is a valid comparator in your own setting.

Validity of estimate of measure of effectiveness
The effectiveness evidence came from a cohort study and patient allocation to the study intervention was not random. The internal validity of the study was limited by several factors. More specifically, the retrospective nature of the analysis, the baseline differences between the groups, and the lack of information on follow-up. The authors performed statistical analyses to take the impact of potential confounding factors into consideration. Although an accurate matching procedure was applied to reduce selection bias, the differences between the groups remained. Power calculations were not performed but a very large sample of patients was considered. The outcome measures used in the study did not examine the impact of the intervention directly on the patients' health. In fact, intermediate measures (i.e. four aspects of quality of care) were used. The authors noted that the definition of one of the outcome measures, namely early termination, was arbitrary and could not reflect appropriately quality of care.

Validity of estimate of measure of benefit
No summary benefit measure was used in the analysis because a cost-consequences analysis was conducted. Please refer to the comments in the 'Validity of estimate of measure of effectiveness' field (above).

Validity of estimate of costs
The authors reported clearly the perspective that was adopted in the study. All the relevant categories of costs were considered. Information on the unit costs and the quantities of resources used was not presented separately. This limits the possibility of replicating the study as a detailed breakdown of the cost categories was not provided. The source of the data was the HMO. A statistical approach was used to deal with the skewed distribution of both the costs and resources. Further, a regression analysis was run to control for baseline differences in clinical and economic variables. The price year was not reported, which makes reflation exercises in other settings difficult.

Other issues
The authors did not compare their findings with those from other studies. They also did not address the issue of the generalisability of the study results to other settings. Sensitivity analyses were not performed. This reduces the external validity of the analysis. Owing to the limitations of the study, the authors stressed that the current economic evaluations should be considered as an initial exploration of the potential for population-based, qualitative investigations in national managed behavioural health organisations.

Implications of the study
The study results suggested that the HMO improved quality of care through the use of the GFTPO programme, while reducing health care costs for the management of patients requiring psychotherapy. The authors noted that the current study supported the feasibility of future trials.

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None stated.

Bibliographic details

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Other publications of related interest


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MeSH
Adolescent; Adult; Ambulatory Care; Child; Child, Preschool; Female; Follow-Up Studies; Humans; Infant; Male; Managed Care Programs /economics /organization & administration /utilization; Mental Disorders /economics /therapy; Mental Health Services /economics /organization & administration /utilization; Middle Aged; Population Surveillance; Psychotherapy /methods; Quality of Health Care; United States

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