Cost-effectiveness of brief psychodynamic-interpersonal therapy in high utilizers of psychiatric services

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
Brief Psychodynamic-Interpersonal Therapy (BPIT) for psychiatric clients. Patients were offered 8 sessions of psychodynamic-interpersonal therapy. This model is similar to interpersonal therapy, but places greater emphasis on the patient-therapist relationship as a tool for resolving interpersonal issues. There is less emphasis on the interpretation of transference than in most formal dynamic therapies.

Type of intervention
Treatment.

Economic study type
Cost-effectiveness analysis.

Study population
Clients with non-psychotic disorders unresponsive to 6 months of routine specialist mental health treatment. Patients had to be between the ages of 18 and 65 years. Patients with schizophrenia, dementia, brain damage, learning difficulties, and limited command of the English language were excluded.

Setting
The practice setting was a hospital outpatient department. The study was conducted in Manchester, UK.

Dates to which data relate
Effectiveness and resource data were obtained over a 2 year period, the exact dates of which are not clear. 1996-7 prices were used.

Source of effectiveness data
Evidence for the effectiveness of BPIT in high users of psychiatric services compared with treatment as usual was obtained from a single study.

Link between effectiveness and cost data
Resource data were obtained prospectively from the effectiveness study sample.

Study sample
Over a two year period, 144 patients were referred to the study by their consultant psychiatrists. No power calculations were specified in the determination of the study sample size. 62.7% of patients were female. The mean age of patients was 41.4 years. 75.5% of the sample had a diagnosis of depression. 61.8% were incapable of work and were receiving
state benefits. The median duration of the current illness episode for the whole group was 5 years and the time since the first episode of illness was 10 years. Patients had received treatment from psychiatric services for a median time of 3 years. 34 clients refused to participate after being accepted. The main reason was fear of disruption to their existing relationship with their psychiatrist.

Study design
This was a randomised controlled trial, conducted at 2 centres. Two patients in the control group died during follow-up (1 suicide, 1 due to alcohol abuse). Randomisation was carried out using a computer-generated series of random numbers.

Analysis of effectiveness
The analysis of the clinical study was performed on an intention to treat basis. Primary health outcomes included inpatient days, outpatient attendance, accident and emergency visits, day hospital visits, family physician contacts, practice nurse contacts, community psychiatric nurse contacts, prescription medications, and informal care. Other primary outcomes included psychological assessment using the Short Form 36 (SF-36) tool, and the Global Severity Index (GSI) of the Symptom Checklist-90-Revised (SCL-90-R). Both groups were comparable in terms of their age, and sex.

Effectiveness results
Baseline to six months after trial (T2) primary outcome results were as follows for the psychotherapy group (treatment as usual group figures are in parentheses):

- inpatient days, 5 (14);
- outpatient attendance, 97 (82);
- accident and emergency visits, 4 (8);
- day hospital visits, 3 (7);
- family physician contacts, 82 (82);
- practice nurse contacts, 6 (20);
- community psychiatric nurse contacts, 8 (12);
- prescription medications, 95 (97);
- informal care, 28 (42).

The two group were not significantly different on the GSI or depression subscale of the SCL-90-R or on any subscale of the SF-36 tool. However, at the 6 month follow-up assessment, patients receiving psychotherapy showed significantly greater improvement on the GSI and the depression subscale of the SCL-90-R, and reported significantly better social functioning on the SF-36 than the control patients.

Clinical conclusions
Patients in the psychotherapy group had significantly greater improvement than controls in psychological distress and social functioning at six months after the trial (T2).

Measure of benefits used in the economic analysis
Benefits were expressed in terms of the EuroQol 5D questionnaire utility weights and Quality Adjusted Life Months.
(QALMs) at baseline, end of trial (T1) and six months after trial (T2).

**Direct costs**
Discounting was not required, as the period of analysis/follow-up was less than 12 months. Quantities and costs were not analysed separately. The cost perspective adopted within the study was that of society. Resources measured included inpatient days, outpatient attendance, accident and emergency visits, day hospital visits, family physician contacts, practice nurse contacts, community psychiatric nurse contacts, prescription medications, and informal care. 1996-7 prices were used. Costings were obtained from official PSSRU costings as well as British National Formulary data.

**Statistical analysis of costs**
The ratio of geometric means was assessed with 95% confidence intervals. Student's t-test was used, statistical significance being confirmed at the p<0.05 level.

**Indirect Costs**
Indirect costs included time off work to attend treatment sessions. Again, discounting was not required, and costs and quantities were not analysed separately. Indirect costs were shown from the perspective of society.

**Currency**
US dollars ($).

**Sensitivity analysis**
One way sensitivity analysis was used to examine the robustness of the baseline results to variations in unit cost estimates.

**Estimated benefits used in the economic analysis**
Patients in the psychotherapy group achieved 4.87 QALMs (median) compared with 3.48 QALMs in the treatment as usual group from baseline to T2, although this was not statistically significant. Median utility weight scores were 0.04 (psychotherapy) and 0.00 (usual) from baseline to T2.

**Cost results**
The total cost (direct plus indirect costs) was $1,959 (intervention) and $2,465 (usual).

**Synthesis of costs and benefits**
An incremental cost-utility ratio was not calculated as the results suggested that psychotherapy was unlikely to cost more than treatment as usual.

**Authors' conclusions**
From these preliminary findings it is possible to ascertain that BPIT may be cost-effective relative to usual care for patients with enduring non-psychotic symptoms who are not helped by conventional psychiatric treatment.

**CRD COMMENTARY - Selection of comparators**
The selection of traditional treatment for high users of psychiatric services was justified.

**Validity of estimate of measure of benefit**
Benefits were extracted using the EuroQol 5D questionnaire and obtained directly from the effectiveness analysis, derived from a RCT. As such, the benefit results are likely to have high validity. No power calculations were stated in the study sample size selection.

**Validity of estimate of costs**
All relevant costings were included in the analyses. Costings were adequately reported and sourced, although costs and quantities were not analysed separately.

**Other issues**
The number of patients refusing to participate may be an indication that brief psychotherapy may not be an ideal treatment for all high psychiatric service users. Also, the study was carried out in deprived areas only and is, therefore, not totally representative in terms of catchment area. Finally, the 6 month response rate for completing the relevant questionnaire was low.

**Implications of the study**
Brief psychotherapy for high psychiatric service users may be cost-effective, but this needs to be substantiated through more representative research of this client group, as well as other, more complex, clients. The results add weight to support the growing body of evidence for the benefit of interventions in this domain with an inter personal focus.

**Source of funding**
Supported by a grant from the North West Regional Health Authority, Warrington, England (Drs Guthrie, McGrath and Creed).

**Bibliographic details**

**PubMedID**
10359466

**Indexing Status**
Subject indexing assigned by NLM

**MeSH**
Adult; Cost-Benefit Analysis; Depressive Disorder /economics /psychology /therapy; England; Female; Health Care Costs; Health Services /utilization; Health Status; Humans; Male; Mental Disorders /economics /psychology /therapy; Prospective Studies; Psychiatric Status Rating Scales /statistics & numerical data; Psychotherapy, Brief /economics /methods; Quality of Life; Treatment Outcome

**AccessionNumber**
21999001126

**Date bibliographic record published**
30/04/2001

**Date abstract record published**
30/04/2001