Randomized controlled trial of supported employment in England: 2 Year follow-up of the Supported Work and Needs (SWAN) study


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.

CRD summary
The study assessed the clinical/economic impact of supported employment using the Individual Placement and Support (IPS) model to help individuals with severe and persistent mental illness gain competitive employment. Significantly more participants obtained competitive employment with IPS and costs were similar to standard care. IPS appeared the preferred strategy although the clinical trial highlighted difficulties in programme implementation. This economic evaluation was performed alongside a methodologically robust clinical trial, which enhances the validity of the authors’ conclusions.

Type of economic evaluation
Cost-effectiveness analysis

Study objective
The study assessed the clinical and economic impact of supported employment using the Individual Placement and Support (IPS) model to help individuals with severe and persistent mental illness gain competitive employment.

Interventions
The intervention was the IPS model of supported employment. This was focused on vocational rehabilitation as part of mental health treatment and aimed for rapid job replacement into competitive employment followed by support and necessary training in the job from four employment specialists. The control strategy was treatment as usual (existing psychosocial rehabilitation and day care programmes).

Location/setting
UK/community (mental health services).

Methods
Analytical approach:
This economic evaluation was carried out alongside a single study with a two-year time horizon. The authors did not state explicitly which perspective was adopted in the study.

Effectiveness data:
Clinical inputs were derived from the Supported Work and Needs (SWAN) randomised clinical trial (RCT) that enrolled a final sample of 219 participants (109 in the intervention group and 110 in the treatment as usual group) from community mental health teams in two boroughs in south London. Researchers that assessed the clinical outcomes were blinded to allocation status. Follow-up was for two years. Thirty participants were lost to follow-up at two years (15 per group). Key endpoints were measures of psychosocial functioning such as Manchester Short Assessment (MANS) version 2, brief modified versions of Lancashire Quality of Life Profile and the proportion of participants who found employment. Logistic and regression models were fitted to assess the potential impact of confounding factors.

Monetary benefit and utility valuations:
Not considered.

Measure of benefit:
The main endpoint used as the summary benefit measure was the proportion of participants in employment during the
two-year follow-up period.

Cost data:
The economic analysis included costs of in-patient stay, visits to health care professionals and medications. Resource quantities were collected alongside the clinical trial. In particular, in-patient data were collected for the entire 24-month period. Other service data were collected for the three-month period prior to 12- and 24-month follow-up interviews. Costs of medications were derived from the British National Formulary. Other costs were based on official prices from the Personal Social Services Research Unit. Costs were in UK pounds sterling (£) and referred to 2006/2007 prices.

Analysis of uncertainty:
A cost-effectiveness acceptability curve was produced to show the probability that IPS was more cost-effective than treatment as usual for a range of values placed on a unit improvement in outcome (from £0 to £1,000). A sensitivity analysis considered the assumption that all patients who were not followed up had not worked.

Results
The rate of competitive employment over two years was 11% for treatment as usual and 22% for the intervention.

Total costs for the two-year period were £11,932 ± £13,694 in the control group and £9,571 ± £11,217 in the intervention group. The difference in costs did not reach statistical significance.

The probability of IPS being cost-effective was 90% even when a value of £0 was placed on one more person gaining employment.

Authors’ conclusions
The authors concluded that relatively low employment rates were found with both the intervention and standard care, but significantly more participants obtained competitive employment with IPS. As costs were similar between groups, IPS appeared to be the preferred strategy. The clinical trial highlighted the difficulties in implementation of the programme.

CRD commentary
Interventions:
The rationale for selection of comparators was clear as the proposed intervention was compared against the standard pattern of care in the authors’ setting.

Effectiveness/benefits:
The clinical analysis was appropriately based on a RCT with a robust methodological framework. Inclusion criteria and reasons for exclusion of potentially eligible patients were clearly reported. Study groups were well balanced at baseline for clinical and demographic factors. Statistical analyses took into account the impact of confounding factors on clinical outcomes. Power calculations were performed in the preliminary phase of the study to ensure the appropriateness of sample size with respect to employment rate. The analysis was based on the intention-to-treat principle. Various endpoints were reported to examine the impact of the interventions on several dimensions of patients’ health. These issues tended to enhance the robustness of the clinical side of the study. The benefit measure represented the most immediate outcome of the programme as it focused on the efficacy of IPS.

Costs:
Although not stated explicitly, the cost categories included in the analysis and the sources used reflected the perspective of the third-party payer. Resource use data were collected alongside the clinical trial with a detailed methodology. The authors stated that the two boroughs selected were representative of real-world deprived areas. Resource use was reported in detail with total costs for each category. Bootstrapping was used to create confidence intervals around total costs given the skewed nature of economic estimates. The price year was reported and details on the sources of unit costs were provided.

Analysis and results:
The study results were clearly reported. Incremental cost-effectiveness ratios were not calculated as the study intervention was dominant over treatment as usual. Statistical analyses were carried out to investigate the issue of
variability around clinical and economic outcomes, but no conventional sensitivity analyses were performed. The authors highlighted some differences with previous RCTs conducted in the USA that generally showed better results for the intervention. Study results should be considered specific to the UK setting (especially for deprived areas).

Concluding remarks:
This economic evaluation was performed alongside a methodologically robust clinical trial, which enhances the validity of the authors’ conclusions.

Bibliographic details

PubMedID
21633690

Original Paper URL
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3105475/?tool=pubmed

Indexing Status
Subject indexing assigned by CRD

MeSH
Employment, Supported; England; Humans; Mental Disorders; Cost-Benefit Analysis

AccessionNumber
22011001765

Date bibliographic record published
25/04/2012

Date abstract record published
17/05/2012