Randomised controlled trial of two models of care for discharged psychiatric patients

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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
Two models of care for severe mental illness: care programming Organized through community multidisciplinary teams versus care programming organized by a hospital based team.

Type of intervention
Supportive care.

Economic study type
Cost-effectiveness analysis.

Study population
Patients aged 16 to 65 years with severe mental illness (psychosis or severe non-psychosis mood disorder), with a previous admission within the past 3 years.

Setting
Hospital. The economic study was carried out in London, UK.

Dates to which data relate
The data for the effectiveness analysis and resources used were collected from 1993 to 1994. The price year used was not stated.

Source of effectiveness data
The estimates of effectiveness were derived from a single study.

Link between effectiveness and cost data
The costing was undertaken prospectively on the same patient sample as that used in the effectiveness study.

Study sample
From 180 patients registered or eligible, 25 were not included in the study. Of the remaining 155 patients, 82 were randomised on discharge to community aftercare and 72 respectively to hospital-focused aftercare. Power calculations to determine the sample size were not stated. 61 patients completed the study period in the community team and 55 in the hospital team. Patients were randomly allocated to community and hospital teams using the sealed envelope technique.

Study design
The study was a randomised controlled trial (RCT) located in two sites in inner London (Paddington and North Kensington), and outer London (Brent) psychiatric services. The follow-up period for the two models of care was 1 year. The method of random blinding allocation was adopted. The loss to follow up for the community and hospital teams was 14 and 16 patients respectively.

**Analysis of effectiveness**

The analysis of the clinical study was based on intention to treat. The primary health outcomes were rates of clinical psychopathology, depression, anxiety and social functioning. Clinical symptoms were recorded using the comprehensive psychopathological rating scale together with its associated subscales for depression and anxiety. Groups were shown to be comparable in terms of age and prognostic features. There was no evidence of adjustment for confounding variables.

**Effectiveness results**

The clinical outcomes were similar for both community care and hospital care and were as follows:

- Clinical psychopathology rating: 15.5 versus 15 at baseline against 12.5 versus 15 at one year;
- Depression rating: 8 versus 6 at baseline against 6.5 versus 7.0 at one year;
- Anxiety rating: 10.5 versus 10.0 at baseline against 9.0 versus 8.0 at one year;
- Social functioning rating: 10.0 versus 10.0 at baseline against 9.0 versus 10.0 at one year.

**Clinical conclusions**

The clinical outcomes of the two models of care were essentially similar.

**Measure of benefits used in the economic analysis**

No summary benefit measure was identified in the economic study, and only separate clinical outcomes were reported.

**Direct costs**

Quantities were not reported separately from the costs. The cost items were reported separately. Hospital costs included primary care, community psychiatric services, social services and general hospital services and miscellaneous costs. Full records of all health service costs were made for patients in each group using a standard procedure. Price data were not reported.

**Statistical analysis of costs**

F-test was performed for the comparison of the resource use between the groups and it was shown that the same distribution was reflected in the total costs.

**Indirect Costs**

Indirect costs were not estimated.

**Currency**

UK Pounds Sterling (£).

**Sensitivity analysis**

A sensitivity analysis was not carried out.
Estimated benefits used in the economic analysis
Not applicable.

Cost results
The hospital and community group costs were 1,165,676 and 1,286,628, respectively. The average cost was 16,765 for the community group versus 19,125 for the hospital group. The authors stated that the costs of the hospital-based care group “were 14% greater per patient than in the community group. This was dwarfed by a twofold difference in the costs of care in the outer London services compared with those in the inner London services”.

Synthesis of costs and benefits
The estimated benefits and costs were not combined, since aftercare by community teams had a similar outcome with less costs.

Authors’ conclusions
Delivery of care by community-based teams offers no advantage in terms of clinical outcome over equivalent hospital-based teams. The hospital care programme was more expensive.

CRD COMMENTARY - Selection of comparators
The reason for the choice of comparator is clear. The comparator chosen (hospital-based care programmes) was commonly used for patients with severe mental illness.

Validity of estimate of measure of benefit
The random assignment of patients to the two models of care, decreases the possibility of bias in the results. However there is no evidence of adjustment for confounding variables.

Validity of estimate of costs
More details about the methods of quantity/cost estimation would have been useful as would information about the sources of the quantity and cost data without which the validity of the estimate of costs cannot be validated.

Other issues
A sensitivity analysis was not carried out, therefore the results may not be generalisable to other settings.

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