Cost-effectiveness of educational interventions to improve patient outcomes in blood pressure control

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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
Educational programmes for blood pressure controls.

Type of intervention
Primary prevention.

Economic study type
Cost-effectiveness analysis.

Study population
Persistent hypertensives.

Setting
The study was carried out in the USA.

Dates to which data relate
Price related to 1974.

Source of effectiveness data
Single study.

Study sample
There is evidence that the study sample is representative of the clinical study question. Power calculations did not determine sample size. It seems that the number of patients overall, and in intervention and control group was 100, 50, 50.

Study design
Single centre randomised controlled trial (RCT). The duration of follow-up of treatment cohort was 5 years. The type of randomisation was unknown. Drop out rates (percentage overall, percentage in intervention group and percentage in control group and the nature of blinding were unknown.

Analysis of effectiveness
It was unknown whether the analysis was based on intention to treat or treatment completers. At analysis the groups were not shown or adjusted to be comparable in age, sex or prognostic. A variety of outcomes were measured:
appointment keeping, weight loss, drug adherence, blood pressure control.

Effectiveness results
Life years gained.

Direct costs
Direct costs were to the health service and the patient and included budgetary expenditure, space rental, patient time and travel, production loss, drug, and drug side-effects. Price information related to 1974.

Indirect Costs
There were indirect costs (production gains/losses).

Currency
US dollars ($). In the DH Register of Cost-effectiveness Studies, the original results were converted to UK pounds sterling (£) using GDP purchasing power parities and reflated to 1991 using the NHS pay and prices index.

Sensitivity analysis
Sensitivity analysis was carried out using the method of single parameter variation.

Synthesis of costs and benefits
Outcome duration was 10 years. Cost duration was 5 years. Costs and benefits were discounted at 5%. For: a series of three 1-hour small group discussions the incremental cost per life-year gained was 653; an exit interview (5-10 minute interview following a clinic visit to clarify treatment) and a series of three 1-hour small group discussions the incremental cost per life-year gained was 697; a home group visit (with the patient and relative) and a series of three 1-hour small group discussions the incremental cost per life-year gained was 701. Drug regime adherence was the most important determinant of net cost.

CRD Commentary
(This commentary was not written by CRD but by the authors of the DH Register).

1) Confidence intervals are not presented and it is not possible to assess the outcome data. 2) Full details of the trial are published elsewhere, it is not possible to adequately assess the paper. 3) The hypothesis was driven. 4) The sensitivity analysis was not adequate.

Bibliographic details

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