Cost-benefit analysis of long-term haemodialysis for chronic renal failure

Buxton M J, West R R

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
Long term haemodialysis.

Type of intervention
Secondary prevention.

Economic study type
Cost-effectiveness analysis.

Study population
Patients on long term maintenance dialysis for chronic renal failure in hospital and at home.

Setting
The study was carried out in the United Kingdom.

Dates to which data relate
Price related to 1972.

Source of effectiveness data
Single study.

Modelling
Epidemiological cohort model (model of survival and disease)

Measure of benefits used in the economic analysis
Life years gained.

Direct costs
Direct costs are to the health service and other agencies. For long term maintenance dialysis for chronic renal failure in hospital these are building, dialysis equipment, and running cost. For long term maintenance dialysis for chronic renal failure at home these are dialysis equipment and installation, building modification, direct running costs, and 5% hospital cost. Price information related to 1972.

Currency
UK pounds sterling. In the DH Register of Cost-effectiveness Studies, the original results were 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 and cost duration was 20 years. For long term maintenance dialysis for chronic renal failure in hospital the incremental cost per life-year was 49700. For long term maintenance dialysis for chronic renal failure at home the incremental cost per life-year gained was 34000. Costs and benefits were discounted at 10%.

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

1) For long term maintenance dialysis for chronic renal failure in hospital survival is extrapolated from data for six year survival (50%). The authors question the reliability of this figure. 2) For long term maintenance dialysis for chronic renal failure at home life years gained is extrapolated from data for six year survival (68.4%). The authors question the reliability of this figure. 3) The parameters investigated by sensitivity analysis were not adequately justified.

**Bibliographic details**

**PubMedID**
1131608

**Indexing Status**
Subject indexing assigned by NLM

**MeSH**
Costs and Cost Analysis; Hemodialysis, Home; Hepatitis A / etiology; Hospitalization; Humans; Kidney Failure, Chronic / therapy; Length of Stay; Renal Dialysis / adverse effects / mortality

**AccessionNumber**
21995005182

**Date bibliographic record published**
19/06/1996

**Date abstract record published**
19/06/1996