Can post-acute care programmes for older people reduce overall costs in the health system?  
A case study using the Australian Transition Care Programme  
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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.

CRD summary  
The study examined the clinical and economic impact of the Australian Transition Care Program designed to offer post-acute care in both community and institutional settings for older people. The authors concluded that the Transition Care Program was not cost-saving to the health care system but was potentially cost-effective relative to other potential interventions. The study presented some methodological limitations that might affect the validity of the authors’ conclusions.

Type of economic evaluation  
Cost-effectiveness analysis, cost-utility analysis

Study objective  
The study examined the clinical and economic impact of the Australian Transition Care Program designed to offer post-acute care in community and institutional settings for older people.

Interventions  
The main areas of the Transition Care Program were earlier discharge from hospital, accelerated recovery, reduced likelihood of readmission to hospital and delayed entry into permanent institutional care.

The comparator was usual care, which involved no post-acute management programme.

Location/setting  
Australia/hospital and community.

Methods  
Analytical approach:  
The analysis was based on a synthesis of published evidence. A short-term horizon was considered. The authors stated that the analysis took the perspective of the health care system.

Effectiveness data:  
Clinical data were based on published sources supplemented by data reporting the outcomes of the programme implementation. Some data were taken from a similar programme implemented in UK. Most data were from observational studies. Assumptions based on authors’ opinions were required. Efficacy of the programme in the four main areas affected by the programme implementation (earlier discharge from hospital, accelerated recovery, reduced likelihood of readmission to hospital and delayed entry into permanent institutional care) was the key endpoint of the cost-effectiveness analysis.

Monetary benefit and utility valuations:  
Utility valuations were taken from published sources and were based on authors’ assumptions.

Measure of benefit:  
Quality-adjusted life-years (QALYs) were used as the summary benefit measure in the cost-utility analysis. Intermediate endpoints were considered in the cost-effectiveness analysis.

Cost data:
The economic analysis included costs of the programme and cost savings associated with the four areas of programme efficacy, length of hospitalisation, accelerated recovery (reduced use of health care services), reduced readmissions and delay to entry to residential aged care. Costs of the programme were taken from data published in the Australian Report on Government Services for a period of three years of programme implementation. Quantities of resources used were taken from published sources and authors’ assumptions. Costs were based on Australian sources and other published studies. Costs were in Australian dollars ($). The price year was 2010.

Analysis of uncertainty:
Not considered.

Results
Cost per recipient of the Transition Care Program was $12,441.

In comparison with usual care, the programme reduced early hospital discharge by two days and saved $768, reduced community health spending by 70 days and saved $700, reduced hospital readmissions by 35% and saved $3,500 and delayed entry to residential aged care by 91.25 days and saved $1,150.

The net cost per recipient of the programme was $6,323.

At a willingness to pay threshold of $50,000 per QALY, a gain of 0.13 QALYs was required for the programme to be cost-effective over usual care. The authors stated that on the basis of published evidence, health gains from providing post-acute programmes that delayed or prevent admission to residential aged care for older people could be close to or even exceed the QALYs required. As a consequence, the Transition Care Program was likely to be cost-effective in a cost-utility framework.

Authors’ conclusions
The authors concluded that the Transition Care Program was not cost-saving to the health care system but was potentially cost-effective relative to other potential interventions.

CRD commentary
Interventions:
Selection of comparators (Transition Care Program and usual care) was appropriate. No clear description was provided of the conventional pattern of care.

Effectiveness/benefits:
Data on treatment effect were taken from various sources and included actual data on implementation of the programme, published evidence and authors’ assumptions. Optimistic assumptions for the programme were made and these were not tested in the sensitivity analysis. Clinical data did not appear to be based on solid evidence.

Use of QALYs was appropriate given the potential impact on mortality and morbidity of different length of hospitalisation and readmissions. No details were given on sources of utility weights.

Costs:
The economic analysis was consistent with the perspective stated by the authors. It appeared that relevant cost categories were included. Economic data were taken from various published sources and some assumptions were required. Unit costs and quantities of resources used were not presented separately as most costs were reported as macro-categories. The cost of the programme was based on a top-down approach and included the entire cost of running a service (including administration, building costs and so on) and might have been overestimated. The Transition Care Program policy stipulated that patients could remain in the programme up to 12 weeks (i.e. more than the expected eight weeks) with a possible inefficiency of the system. The price year was reported, which enabled reflation exercises in other time periods. Variations in cost estimates were not considered.

Analysis and results:
The study results were presented selectively. Cost-effectiveness ratios were not calculated as the analysis focused on cost savings rather than on cost-effectiveness ratios. The cost-utility analysis was based on the hypothetical gains of
QALYs associated with the programme. The issue of uncertainty was not investigated. The authors acknowledged potential overestimation in the cost of the programme. Study results were specific to the Australian context and the specific programme analysed.

Concluding remarks:
The study presented some methodological limitations that might affect the validity of the authors’ conclusions.

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