

# Cost-effectiveness analysis – A novice’s experience

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## Background:

As the healthcare system faces ever-increasing costs, the incorporation of health economics research is increasingly important to determine the sustainability and efficiency of clinical interventions. The experience of conducting a cost-effectiveness analysis is presented using the Hospital to Home Outreach for Malnourished Elders (HHOME) project as an example.

## Methods:

HHOME involved providing enhanced dietetic discharge support for older medical patients after acute hospital admission. A range of nutrition and functional outcomes were collected in order to evaluate the project outcomes. To measure the cost of the intervention, data relating to healthcare system utilisation were collected including Emergency Department presentations, hospital readmissions, mortality and discharge to Aged Care Facility using hospital databases at 3 and 6 months after discharge. Frequency of visits to General Practitioners and other health professionals were collected by patient recall over the telephone fortnightly for 3 months post discharge. The cost of delivering the HHOME intervention was compared with routine clinical care using Dietitian statistics. Data were also collected to consider societal costs (absenteeism from paid/unpaid work by patients/carers) and direct costs to the patient (e.g. Costs of additional nutritional supplements).

## Results:

The cost-effectiveness data were collected alongside HHOME outcomes data. A Markov Economic Model was developed in collaboration with a health economist to estimate the cost-effectiveness of the intervention with walk speed used as the measure of effect. A hospital perspective was taken, and so only those costs borne by the hospital were included in the analysis.

## Discussion:

Analysis of cost-effectiveness by allied health clinicians is a valuable inclusion to health services research in order to assist with decision making around implementation of healthcare interventions. The project has highlighted the importance of partnerships with health economists both in developing research plan and in economic modelling.