

ECONOMIC EVALUATION

Glossary

Acquisition cost	The purchase cost of a drug to an institution, agency or person
Analytic perspective	The viewpoint chosen for the analysis (e.g. societal, government, healthcare system, payer)
Average cost	Total costs of a treatment or programme divided by total quantity of treatment units provided
Bootstrapping	A non-parametric statistical method which takes into account the skewness of data and involves the simulation of data
Comparators	The alternative technologies considered within an economic evaluation
Conjoint analysis	A method for establishing the relative importance of different attributes in the provision of a good or a service
Cost-benefit analysis (CBA)	Type of analysis that measures costs and benefits in monetary units and computes a net monetary gain/loss or cost/benefit ratio
Cost-benefit ratio	The ratio of the total monetary cost of a programme divided by the benefits expressed in monetary terms
Cost (burden)-of-illness analysis	Study that identifies and evaluates the direct and sometimes indirect costs of a particular disease or risk factor (e.g. smoking or alcohol consumption)
Cost-consequence analysis	Type of analysis when more than one outcome is considered to be important. Results are presented in a disaggregated form

Cost-effectiveness analysis (CEA)	Type of analysis that compares costs and outcomes programmes having a common health outcome (e.g. reduction of blood pressure; life-years saved)
Cost-minimisation analysis (CMA)	Type of analysis that finds the least costly programme among those shown to be of equal benefit
Cost-utility analysis (CUA)	Type of analysis that measures costs and outcomes, where the latter is usually expressed terms of quality-adjusted life-years (QALYs)
Decision analysis	An explicit quantitative approach for decisions under conditions of uncertainty
Decision tree	A framework for representing alternatives for use in decision analysis
Deterministic	No uncertainty in parameters is accounted for
Direct medical costs	Fixed and variable costs associated directly with a healthcare intervention (e.g. physician salaries)
Direct non-medical cost	Non-medical costs associated with provision of medical services (e.g. transportation of a patient to a hospital)
Disability Adjusted Life Years (DALYs)	Combines mortality and productive life lost due to disability
Discount rate	Rate of discount used to convert future costs and benefits into equivalent present values
Discounting	The process of applying negative weights to costs and benefits that occur in the future to express them in terms of a present value
Disease specific quality of life measure	An instrument designed to consider the impact of a specific clinical condition on quality of life (HRQL)

Economic evaluation	The comparative analysis of alternative courses of action in terms of both their costs and their consequences
Effectiveness	A measure of how well a technology achieves its objectives under conditions which apply in routine practice
Efficacy	A measure of how well a technology achieves its objectives under experimental conditions
Equivalent annual cost	The purchase cost of an asset with a finite useful life expressed as an annual cost which takes into consideration depreciation and the opportunity cost of holding the asset rather than realising its value and investing elsewhere
Generalisability	The extent to which the results of a study, as they apply to a particular population and/or a specific context hold true for another population and/or in a different context
Global health index	An index of health status that combines all aspects of health-related quality of life into a single number
Health profile	A health status measure that produces scores of different health domains (e.g. physical wellbeing, role functioning, mental health) using the same metric
Health state	A specific combination of levels of health measured on different dimensions
Health-related quality of life (HRQL)	Quality of life affected by physical or mental health
Healthy years equivalent (HYE)	The hypothetical number of years spent in perfect health that could be considered equivalent to the actual number of years spent in a defined imperfect state of health

Human capital method	A means of calculating the indirect cost of medical illness, based on the remaining lifetime economic value to society of a healthy individual of that age, measured by market earnings
Incremental cost	Difference between the cost of a programme and the cost of the comparison programme
Incremental cost-effectiveness ratio	The ratio of the incremental cost of a programme divided by the additional health outcomes (e.g. cost per life-year gained); used in CEA to select among programmes
Incremental cost per QALY gained	A measure used in CUA to assist in comparisons among programmes; expressed as monetary cost per QALY gained
Indirect cost	The value of patients' (or others') time resulting from illness or treatment (may be estimated by loss of wages and other means)
Internal rate of return	Discount rate applied to future savings or revenue, allowing the present value of savings or revenue to be compared to current implementation costs; allowing net-benefit to be estimated
Marginal cost	The extra cost of one extra unit of product or service delivered (usually differs from average cost)
Markov cycle	The time interval an individual is assumed to remain in a health state before potentially moving to another state
Markov model	A statistical representation of recurrent events over time that can be incorporated into decision analysis
Meta analysis	The systematic pooling of the results of a number of similar evaluation studies

Modelling	The use of equations and available data to approximate the process and outcomes of health care (see decision analysis)
Multi-attribute scale instrument	An instrument for quality-of-life measurement that includes several domains of patient functioning (e.g. physical, mental, emotional)
Net benefit	Benefit (in monetary units) minus total cost (in monetary units): a basic decision criterion in CBA
Opportunity cost	The benefit that would be derived from using a resource in its best alternative use
Pharmacoeconomics	The application of economic evaluation to pharmaceutical techniques
Present value	The result of discounting a stream of (cost of benefit) values that occur into the future
Prices	The value of a resource as set through some form of market system
Probabilistic	Representation of uncertainty in the accuracy of key variables using probability distributions.
Probabilistic sensitivity analysis	Probability distributions are applied to the specified ranges for the key parameters and samples are drawn at random from these distributions to generate an empirical distribution of the cost-effectiveness ratio.
Quality-adjusted life year (QALY)	A common measure of health improvement used in CUA: combines mortality and HRQL gains (outcome of a treatment measured as the number of years of life saved, adjusted for quality)
Regression model	A statistical method of explaining/predicting the variability in a dependent variable using one or more independent variables

Resource use	The various inputs that are used in the health care process (e.g. staff, consumables, capital)
Sensitivity analysis	The practice of systematically varying the values/assumptions employed in an evaluation to determine the implication for the results of that evaluation
Standard gamble	A measure of health state value (or utility) which is elicited from individuals by asking them to make choices between the certainty of living in a particular health state and a gamble involving the risk of death
State transition models	Collective terms for decision models describe/predict movement between health states over time
Time trade-off	A measure of health state value (or utility) which is elicited from individuals by asking them to make choices between periods of time in various health states
Utility scale	A scale, defined by 2 anchor states or outcomes and their scores, on which utilities are measured. Often defined by full health = 1.0 and dead = 0.0
Utility measure of HRQL	A single summary score on the conventional utility scale of healthy = 1.0, dead = 0.0
Visual analogue instrument	A horizontal or vertical line anchored at one end with 'dead' and the other with 'perfect health'; used by patients to assess current health status
Willingness to pay	The measurement of the value of the outcome of an intervention according to a hypothetical monetary value placed on it by individuals