

## Economic Evaluation Glossary of Terms

### A

**Attributable fraction:** indirect health expenditures associated with a given diagnosis through other diseases or conditions  
(Prevented fraction: indicates the proportion of an outcome averted by the presence of an exposure that decreases the likelihood of the outcome; indicates the number or proportion of an outcome prevented by the “exposure”)

**Average cost:** total resource cost, including all support and overhead costs, divided by the total units of output

### B

**Benefit-cost analysis (BCA):** (or *cost-benefit analysis*) a type of economic analysis in which all costs and benefits are converted into monetary (dollar) values and results are expressed as either the net present value or the dollars of benefits per dollars expended

**Benefit-cost ratio:** a mathematical comparison of the benefits divided by the costs of a project or intervention. When the benefit-cost ratio is greater than 1, benefits exceed costs

### C

**Comorbidity:** presence of one or more serious conditions in addition to the primary disease or disorder

**Cost analysis:** the process of estimating the cost of prevention activities; also called *cost identification, programmatic cost analysis, cost outcome analysis, cost minimization analysis, or cost consequence analysis*

**Cost effectiveness analysis (CEA):** an economic analysis in which all costs are related to a single, common effect. Results are usually stated as additional cost expended per additional health outcome achieved. Results can be categorized as average cost-effectiveness, marginal cost-effectiveness, and incremental cost-effectiveness; contrast with *benefit-cost analysis (BCA)*

**Cost of illness analysis (COI):** an approach to estimate the costs of a health intervention, in which two type of costs are collected: the direct medical and nonmedical costs associated with the illness and the indirect costs associated with lost productivity due to morbidity or premature mortality

**Cost-utility analysis (CUA):** a type of cost-effectiveness analysis in which benefits are expressed as the number of life years saved adjusted to account for loss of quality from morbidity of the health outcome or side effects from the intervention. The most common measure in *CUA* is the *quality-adjusted life year (QALY)*; also called the *economic impact analysis*

## D

**Direct benefits:** medical expenditures saved because of prevention or treatment of the disease or illness; contrast with *indirect benefits*

**Disability adjusted life years (DALYs):** a standard measure for comparing health outcomes for various health conditions; years of potential life lost due to premature mortality and the years of productive life lost due to disability

## E

**Economic costs:** opportunity costs of the resources used to implement the intervention, such as the value of the resources if those resources had been used for another productive purpose; contrast with *financial cost*

**Economic evaluation:** comparison of two or more alternative courses of action in terms of both their costs and their consequences; economists usually distinguish several types of economic evaluation differing in how consequences are measured

**Economic impact analysis:** a type of cost-effectiveness analysis in which benefits are expressed as the number of life years saved, adjusted to account for loss of quality from morbidity of the health outcome or side effects from the intervention. The most common measure in *CUA* is the *quality-adjusted life year (QALY)*; also called *cost of illness analysis (COI)*

## F

**Financial costs:** costs of an intervention are the money outlays for resources required to produce the intervention, such as salaries, rent, or office supplies; contrast with *economic cost*

**Fixed costs:** costs whose total remains constant (within a relevant range) even though the volume of the activity may vary; contrast with *variable costs*

**Friction cost method:** analysis method that calculates productivity based on what an employer would have to pay to replace a person as an employee

## H

**Human capital approach (HC):** a method for estimating the economic impact of disease, which includes the resources used for medical care and the forgone earnings due to morbidity or premature mortality

## I

**Incidence-based approach:** calculates the present value of lifetime costs of new cases of a disease or illness; essential for calculating the value of prevention; contrast with *prevalence-based approach*

**Incidence-base costs:** the total lifetime costs resulting from disease or illness

**Incremental cost:** the additional cost of producing one more additional unit of output by an alternative intervention

**Indirect benefits:** benefits associated with productivity gains because of prevention or treatment of the disease or illness; contrast with *direct benefits*

## M

**Marginal cost (MC):** the additional cost of an intervention to produce new additional unit of output; an intraprogram measure

## O

**Opportunity cost:** the value of the resources used in providing a specific set of health-care services valued in terms of forgone alternative uses

## P

**Preference weight:** the value of a preferred outcome when considered from a particular perspective; also called *utility*

**Prevalence-based approach:** analysis of total number of those with a disease or condition, regardless of when the disease or condition initially occurred: contrast with *incidence-based approach*

**Prevalence-based costs:** total costs associated with the existing cases of a health problem that accrue in a specific period, divided by the total population

**Program costs:** costs of implementation and maintenance of programs

**Programmatic cost analysis:** the process of estimating the cost of prevention activities; also called *cost identification* and *cost analysis*

## Q

**Quality adjusted life years (QALYs):** a frequently used outcome measure in cost utility analysis that incorporates the quality or desirability of a health state with the duration of survival. The quality of life is integrated with length of life using a multiplicative formula.

## R

**Regression method:** statistical term for analyzing data in which one value remains constant and others vary

**Resource:** an input in a prevention intervention, without which the intervention would not exist, or an input in the treatment of a health outcome

**Return on investment (ROI):** assessment of the business case model for prevention; similar to a *benefit-cost analysis (BCA)*, except only the perspective of the entity paying for the intervention is considered, rather than assessing the benefits and costs of the intervention from the societal perspective

## S

**Shadow price:** an imputed valuation of a commodity or service for which no market price exists; the social opportunity cost of an outcome

**Standard gamble approach:** In cost utility analysis, a lottery-based approach to determining the utility of a particular outcome

## U

**Utility:** In decision analysis, a quantitative measure of the strength of a preferred outcome

## V

**Variable cost (VC):** costs which vary with the level of output and which respond proportionately to changes in volume of activity