

# Appendix L—Glossary of Acronyms and Terms

## Glossary of Acronyms

ADAMHA	Alcohol, Drug Abuse, and Mental Health Administration (PHS)	HEW	Department of Health, Education, and Welfare (now DHHS)
AHA	American Hospital Association	HHS	Department of Health and Human Services (formerly DHEW)
AKCUP	Artificial Kidney-Chronic Uremia program (NIH)	HMO	health maintenance organization
AMA	American Medical Association	HRA	Health Resources Administration (PHS)
ANDA	abbreviated new drug application	HSA	health systems agency
BC/BS	Blue Cross/Blue Shield	HSQB	Health Standards and Quality Bureau (HCFA)
BHP	Bureau of Health Planning (HRA)	HUP	Hospital Utilization Project
BLS	Bureau of Labor Statistics (DOL)	IDE	investigational device exemption
BRS	Bibliographic Retrieval Service	IHCE	Institute for Health Care Evaluation (proposed)
CABG	coronary artery bypass graft	IND	investigational exemption for a new drug
CAPD	continuous ambulatory peritoneal dialysis	IOM	Institute of Medicine (National Academy of Sciences)
CAS	Chemical Abstracts Service	IPD	intermittent peritoneal dialysis
CAT	computerized axial tomograph, (scanner)	KDCP	Kidney Disease Control program (PHS)
CBA	cost-benefit analysis	MEDLARS	Medical Literature Analysis and Retrieval System (NLM)
CBO	Congressional Budget Office (U.S. Congress)	MEDLINE	MEDLARS On-line (NLM)
CCU	coronary care unit	MSAFP	maternal serum alpha-fetoprotein
CDC	Centers for Disease Control (PHS)	NAS	National Academy of Sciences
CEA	cost-effectiveness analysis	NASA	National Aeronautics and Space Administration
CEA/CBA	cost-effectiveness analysis/cost-benefit analysis (when referred to as a class of analytical techniques)	NCHCT	National Center for Health Care Technology (OASH)
CEAP	Clinical Efficacy Assessment Project	NCHS	National Center for Health Statistics (OASH)
CHAMPUS	Civilian Health and Medical Program of the Uniformed Services	NCHSR	National Center for Health Services Research (OASH)
CHSS	Cooperative Health Statistics System	NCI	National Cancer Institute (NIH)
CON	certificate of need	NDA	new drug application
CPHA	Commission on Professional and Hospital Activities	NDI	national death index
CT	computed tomography (scanner)	NECGD	nonequivalent control group design
DHEW	Department of Health, Education, and Welfare (now DHHS)	NEI	National Eye Institute (NIH)
DHHS	Department of Health and Human Services (formerly DHEW)	NGT	nominal group technique
DIALOG	DIALOG Information Services, Inc.	NHLBI	National Heart, Lung, and Blood Institute (NIH)
DOD	Department of Defense	NIA	National Institute on Aging (NIH)
DOE	Department of Energy	NIAAA	National Institute on Alcohol Abuse and Alcoholism (ADAMHA)
DOL	Department of Labor	NIADDK	National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIH)
ECRI	Emergency Care Research Institute	NIAID	National Institute of Allergy and Infectious Diseases (NIH)
EFM	electronic fetal monitoring	NIAMDD	National Institute of Arthritis, Metabolism, and Digestive Diseases (now NIADDK)
ESRD	end-stage renal disease		
FDA	Food and Drug Administration (PHS)		
GAO	General Accounting Office (U.S. Congress)		
HCFA	Health Care Financing Administration (DHHS)		

NICHD	National Institute of Child Health and Human Development (NIH)
NIDA	National Institute on Drug Abuse (ADAMHA)
NIDR	National Institute of Dental Research (NIH)
NIEHS	National Institute of Environmental Health Sciences (NIH)
NIGMS	National Institute of General Medical Sciences (NIH)
NIH	National Institutes of Health (PHS)
NIMH	National Institute of Mental Health (ADAMHA)
NINCDS	National Institute of Neurological and Communicative Disorders and Stroke (NIH)
NLM	National Library of Medicine (NIH)
NSF	National Science Foundation
NTIS	National Technical Information Service (Department of Commerce)
OASH	Office of the Assistant Secretary for Health (DHHS)
OASPE	Office of the Assistant Secretary for Planning and Education (DHHS)
OHRST	Office of Health Research, Statistics, and Technology (OASH)
OMAR	Office for Medical Applications of Research (NIH)
OPE	Office of Planning and Evaluation (OASH)
OPEL	Office of Planning, Evaluation, and Legislation
OPPR	Office of Policy Planning and Research (HCFA)
ORD	Office of Research and Demonstrations (HCFA)
OTA	Office of Technology Assessment (U.S. Congress)
OTC	over-the-counter (Drug Review program) (FDA)
PAS	Professional Activity Study
PHS	Public Health Service (DHHS)
PSRO	Professional Standards Review Organization, Office of PSRO (HCFA)
PTA	percutaneous transluminal angioplasty
PTCA	percutaneous transluminal coronary angioplasty
QALY	quality-adjusted life year
R&D	research and development
RCT	randomized clinical trial
SDC	System Development Corp.
SEER	Surveillance, Epidemiology, and End Results program (NCI)

SSA	Social Security Administration (DHHS)
TA	technology assessment
TCC	Technology Coordinating Committee (DHHS)
VA	Veterans Administration

## Glossary of Terms

**Biomedical and behavioral research:** A combination of biological, medical, psychological, social, and physical scientific investigations focused on eradicating disease and generating new scientific knowledge.

**Cavitation financing method:** The method of paying for medical care on a fixed, periodic prepayment basis per individual enrolled in a health plan. Payment by “cavitation” implies that the amount paid by the individual is independent of the number of services that individual has received.

**Case-control study:** An observational study design, referred to by some authors as “retrospective,” in which individuals with a condition of interest (e.g., a suspected adverse effect of a medical treatment), i.e., cases, are compared to individuals without the condition, i.e., controls, with respect to factors (e.g., previous exposure to the treatment) which are judged relevant.

**Certificate of need (CON):** A regulatory planning mechanism required by the National Health Planning Resources Development Act of 1974 to control large health care capital expenditures. Each State is required to enact a CON law. CON applications by institutions are reviewed by local health systems agencies, who recommend approval or disapproval; they are denied or approved by State health planning and development agencies.

**Cohort study:** An observational study design, referred to by some authors as “prospective,” in which two (or more) groups who vary with respect to their exposure to a factor of interest (e.g., a treatment method) are observed over a period of time. The status of individuals in all groups is assessed after an appropriate interval, and the outcomes compared to determine the effect of the factor of interest.

**Consensus development conference:** A process in which biomedical researchers, practicing health professionals, and others, as appropriate, are brought together by the National Institutes of Health to explore publicly the scientific *background*, state of knowledge, proper use(s), and any other issues pertinent to the technology under consideration.

**Cost-benefit analysis (CBA):** An analytical technique that compares the costs of a project or technological application to the resultant benefits, with both costs and benefits expressed by the same measure. This measure is nearly always monetary.

**Cost-effectiveness analysis (CEA):** An analytical technique that compares the costs of a project or of alternative projects to the resultant benefits, with costs and benefits/effectiveness expressed by different measures. Costs are usually expressed in dollars, but benefits/effectiveness are ordinarily expressed in terms such as “lives saved,” “disability avoided,” “quality-adjusted life years saved,” or any other relevant objectives. Also, when benefits/effectiveness are difficult to express in a common metric, they may be presented as an “array”.

**CEA/CBA:** A composite term referring to a family of analytical techniques that are employed to compare costs and benefits of programs or technologies. Literally, the term as used in this assessment means “cost-effectiveness analysis/cost-benefit analysis.”

**Data base:** An organized collection of information in machine-readable form and accessible by computer.

**Device (medical):** Any physical item, excluding drugs, used in medical care (including instruments, apparatus, machines, implants, and reagents).

**Discounting:** A procedure used in economic analysis to reduce to present value those costs and effects that occur in future years. Discounting is based on two premises: 1) individuals prefer to receive benefits today rather than in the future; and 2) resources invested today in alternative programs could earn a return over time.

**Distributive justice:** A philosophical concept whose objective is to ensure that benefits in society are allocated in proper proportion to each individual's legitimate claim to them.

**Drug:** Any chemical or biological substance that may be applied to, ingested by, or injected into humans in order to prevent, treat, or diagnose disease or other medical conditions.

**Effectiveness:** Same as efficacy (see below) except that it refers to “. . . average or actual conditions of use.”

**Efficacy:** The probability of benefit to individuals in a defined population from a medical technology applied for a given medical problem under ideal conditions of use.

**Epidemiology:** The study of the distribution, determinants, and control of diseases in human populations.

**Experimental method:** Any method of hypothesis-testing in which the investigator controls the application or withholding of the factor under study to individuals (or animals). Clinical trials (with control groups) of all types fall into this category.

**Fee-for-service:** A method of paying for medical care on a retrospective basis by which each service actually received by an individual bears a related charge.

**Health maintenance organization (HMO):** A health care organization that acts as both insurer and provider of comprehensive but specified medical services by a defined set of physicians to a voluntarily enrolled population paying a prospective per capita fee (i.e., paying by “cavitation”).

**Health services research:** A field of inquiry that focuses on the structure, production, distribution, and effects of delivering personal health services.

**Health systems agency (HSA):** One of the approximately 200 local health planning agencies designated under the National Health Planning and Resources Development Act of 1974 to develop local health planning goals and implement plans in consonance with State and national health care goals. HSAs are federally funded and are governed by a body which is broadly representative of both provider and consumer interests, the latter being in the majority.

**Incidence:** In epidemiology, the number of cases of disease, infection, or some other event having their onset during a prescribed period of time in relation to the unit of population in which they occur. It measures morbidity or other events as they happen over a period of time.

**Marginal benefit:** An economic concept referring to the additional benefit achieved by incurring an additional unit of cost.

**Marginal cost:** An economic concept referring to the additional cost of achieving one more unit of benefit.

**Medicaid:** A Federal program that is administered and operated individually by each participating State government that provides medical benefits to certain low-income persons in need of health and medical care.

**Medical technology:** The drugs, devices, and medical and surgical procedures used in medical care, and

the organizational and supportive systems within which such care is provided.

**Medicare:** A nationwide, federally administered health insurance program authorized in 1965 to cover the cost of hospitalization, medical care, and some related services for eligible persons over age 65, persons receiving Social Security Disability Insurance payments for 2 years, and persons with end-stage renal disease. Medicare consists of two separate but coordinated programs—hospital insurance (part A) and supplementary medical insurance (part B). Health insurance protection is available to insured persons without regard to income.

**MEDLARS:** The computerized Medical Literature Analysis and Retrieval System of the National Library of Medicine. Available through a network of centers at more than 1,000 universities, medical schools, hospitals, Government agencies, and commercial organizations, MEDLARS contains some 4,500,000 references to journal articles and books in the health sciences published after 1965.

**MEDLINE (MEDLARS On-line):** The National Library of Medicine's online data base containing approximately 600,000 references to biomedical journal articles published in the U.S. and 70 foreign countries in the current and preceding 2 years.

**Morbidity:** A measure of illness, injury, or disability in a defined population. It is usually expressed in general or specific rates of incidence or prevalence. Sometimes used to refer to any episode of disease. See also "mortality (death)."

**Mortality (death):** A measure of deaths, used to describe the relation of deaths to the population in which they occur. The mortality rate (death rate) expresses the number of deaths in a unit of population within a prescribed time.

**Observational method:** Any method of hypothesis-testing in which the investigator does not control the application or withholding of the factor under study to individuals (or animals).

**On-line:** A term applied to a computerized "interactive" information retrieval system that allows an information specialist (or other user) sitting at a remote processing facility (i.e., typewriter or video terminal) to engage in a direct dialog with a central computer on which information (e.g., data bases, indexes) is stored, and thus to have immediate access to that information. The central computer and the information stored on the computer are said to be on-line to the remote processing facility (ies).

**Prevalence:** In epidemiology, the number of cases or disease, infected persons, or persons with disabilities or some other condition, present at a particular time and in relation to the size of the population. It is a measure of morbidity at a point in time.

**Procedure (medical or surgical):** A medical technology involving any combination of drugs, devices, and provider skills and abilities. Appendectomy, for example, may involve at least drugs (for anesthesia), monitoring devices, surgical devices, and the skilled actions of physicians, nurses, and support staffs.

**Professional Standards Review Organizations (PSROs):** Community-based, physician-directed, nonprofit agencies established under the Social Security Amendments of 1972 to monitor the quality and appropriateness of institutional health care provided to Medicare and Medicaid beneficiaries.

**Randomization:** The assignment by an investigator of individuals to treatment or control groups based on chance alone.

**Randomized clinical trial (RCT):** An experimental design by which human or animal subjects are randomly assigned, either to an experimental group (in which subjects receive the treatment being studied) or to a control group (in which subjects do not receive the treatment being studied). Also referred to as "randomized controlled clinical trial" or "controlled clinical trial."

**Reliability:** A measure of the consistency of a method in producing results. A reliable test gives the same results when applied more than once under the same conditions. Also called "precision."

**Risk:** A measure of the probability of an adverse or untoward outcome and the severity of the resultant harm to health of individuals in a defined population associated with use of a medical technology applied for a given medical problem under specified conditions of use.

**Risk-benefit analysis:** The formal comparison of the probability and level of adverse or untoward outcomes v. positive outcomes for any given action. The comparison of outcomes does not take into consideration the resource costs involved in the intended action.

**Safety:** A judgment of the acceptability of risk (see above) in a specified situation.

**Technology:** The application of organized knowledge to practical ends.

**Technology assessment:** A comprehensive form of policy research that examines the technical, economic, and social consequences of technological

applications. It is especially concerned with unintended, indirect, or delayed social impacts. In health policy, the term has also come to mean any form of policy analysis concerned with medical technology, especially the evaluation of efficacy and safety. The comprehensive form of technology assessment is then termed “comprehensive technology assessment.”

Validity: A measure of the extent to which an observed situation reflects the “true” situation. **Internal**

**validity** is a measure of the extent to which study results reflect the true relationship of a “risk factor” (e.g., treatment or technology) to the outcome of interest in study subjects. **External validity** is a measure of the extent to which study results can be generalized to the population which is represented by individuals in the study which assumes that the characteristics of that population are accurately specified.