

# Appendix D: Abbreviations and Glossary **D**

## ABBREVIATIONS

ABMT/HDC	autologous bone marrow transplant/high-dose chemotherapy	AUA	American Urological Association
ACC	American College of Cardiology	BCBSA	Blue Cross and Blue Shield Association
ACIP	Advisory Committee on Immunization Practices (CDC)	BPH	benign prostatic hyperplasia
ACOG	American College of Obstetricians and Gynecologists	CABG	coronary artery bypass graft surgery
ACP	American College of Physicians	CCOP	Community Clinical Oncology Program (NCI)
AGA	American Gastroenterological Association	CCU	coronary care unit
AHA	American Hospital Association	CDC	Centers for Disease Control and Prevention
AHCPR	Agency for Health Care policy and Research	CEA	cost-effectiveness analysis
AIDS	acquired immunodeficiency syndrome	CEAP	Clinical Efficacy Assessment Project (ACP)
ALD	adenoleukodystrophy	CHAMPUS	Civilian Health and Medical program of the Uniformed Services
ALLHAT	Antihypertensive and Lipid Lowering Treatment to Prevent Heart Attack Trial	CHF	congestive heart failure
AMA	American Medical Association	CHQC	Cleveland Health Quality Choice project
AMCC	Academic Medical Center Consortium	CPR	cardiopulmonary resuscitation
AMI	acute myocardial infarction	CQI	continuous quality improvement
APSAC	anisoylated plasminogen-activator complex	CRC	colorectal cancer
ASPN	Ambulatory Sentinel Practice Network	CUA	cost-utility analysis

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DATTA	Diagnostic and Therapeutic Technology Assessment program (AMA)	NCHSR	National Center for Health Services Research
DES	diethylstilbestrol	NCI	National Cancer Institute
DHHS	U.S. Department of Health and Human Services	NCQA	National Committee for Quality Assurance
ESRD	end-stage renal disease	NGT	Nominal Group Technique
EU	European Union	NHLBI	National Heart, Lung, and Blood Institute
FDA	Food and Drug Administration	NICHD	National Institute for Child Health and Human Development
FOBT	fecal occult blood testing	NIH	National Institutes of Health
GAO	U.S. General Accounting Office	NIMH	National Institute of Mental Health
GHPS	Group Health of Puget Sound	NLM	National Library of Medicine
GISSI	The Gruppo Italiano per 10 Studio della Streptochinasi Nell' Infarto Miocardio	ODPHP	Office of Disease Prevention and Health Promotion
GUSTO	Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Coronary Arteries	OHTA	Office of Health Technology Assessment (AHCPR)
HCFA	Health Care Financing Administration	OMAR	Office of Medical Applications of Research (NIH)
HCHP	Harvard Community Health Plan	OTA	Office of Technology Assessment (U.S. Congress)
HIE	RAND Health Insurance Experiment	PDQ	Physician Data Query database
HIV	human immunodeficiency virus	PHS	Public Health Service
HMO	health maintenance organization	PIVOT	Prostate Cancer Intervention Versus Observation Trial
HPB	High Blood Pressure (educational program of NHLBI)	PORT	Patient Outcomes Research Team
ICU	intensive care unit	PSA	prostate-specific antigen
IOM	Institute of Medicine	QALY	quality-adjusted life year
ISIS	International Study of Infarct Survival	QWB	Quality of Well-Being scale
JAMA	Journal of the American Medical Association	QOL	quality of life
JCAHO	Joint Commission on Accreditation of Healthcare Organizations	R&D	research and development
MEDTEP	Medical Technology Effectiveness Program (AHCPR)	RCT	randomized controlled trial
MMAF	Maine Medical Assessment Foundation	SEER	Surveillance, Epidemiology, and End Results database
MMWR	Morbidity and Mortality Weekly Reports	SF-36	RAND Short Form 36
MOS	Medical Outcomes Study	SIP	Sickness Impact Profile
NCHCT	National Center for Health Care Technologies	TPA	tissue-type plasminogen activator
		TURP	transurethral resection of the prostate
		UR	utilization review

USPSTF	U.S. Preventive Services Task Force
VA	Department of Veterans Affairs

## GLOSSARY

### **AIDS (acquired immunodeficiency syndrome)**

A disease caused by the HIV virus and characterized by a deficiency of the immune system.

### **Acute myocardial infarction**

A type of heart attack. Usually caused by insufficient blood supply to the heart, in myocardial infarction the sudden death of heart muscle is characterized by severe, unremitting chest pain, leading to arrhythmia (irregular heartbeat) and/or heart failure.

### **Administrative databases**

Computerized databases that contain the administrative records of health insurers and health care providers (e.g., information from health insurance claims). These large databases contain information on medical, demographic, financial, and other characteristics of patients and their care that are useful for describing many aspects of health care.

### **Algorithm**

A format for presenting a clinical practice guideline that consists of a structured flowchart of decision steps and preferred clinical management pathways. An algorithm prescribes what sequence of steps to take given particular circumstances or characteristics (e.g., a particular lab test result). Some algorithms also include designated points in the decisionmaking process where physicians and other caregivers need to discuss with patients or families their preferences for particular options.

### **Appendectomy**

Surgical removal of the appendix.

### **Appropriate**

Appropriate care is commonly defined as treatment that is considered to be effective and suitable in a specific clinical situation (i.e. for a particular patient) (compare with effectiveness.) Appropriateness research is a line of health services research that attempts to define the appropriate uses of particular medical technologies or practices.

### **Benign prostatic hyperplasia**

A noncancerous enlargement of the prostate gland.

### **Beta-blockers**

Drugs sometimes used to treat high blood pressure, irregular heartbeats, chest pain, stroke, and other cardiovascular disorders.

### **Bias**

Systematic error introduced into a study. Bias can be introduced unconsciously into nonexperimental clinical studies by any characteristic or risk factor that systematically affects the results but is not actually due to the intervention being studied.

### **Blinding**

In randomized controlled trials, keeping secret which treatment is assigned to participants. When only the patient is kept unaware of his or her treatment assignment, the study is single-blind. When the person administering the treatment (e.g. the physician) also is unaware, the study is double-blind. Additional layers of blinding can be added--e.g., when a third individual (usually the evaluator of outcomes, the individual analyzing data) also is unaware of treatment assignments.

### **Carotid endarterectomy**

Surgical removal of the inner layer of the carotid artery (a major blood vessel leading to the head) when it is thickened and obstructed. Carotid endarterectomy is sometimes performed to lower the risk of a future stroke.

### **Case-control study**

An observational epidemiological study that starts with the identification of a group of individuals with a disease (or other condition or outcome variable) of interest (cases), and a suitable group of persons without the disease, but who are otherwise similar to the cases (controls). The relationship of a risk factor or other attribute (e.g., exposures to a chemical or physical agent, past receipt of a screening test) to the disease is evaluated by determining how frequently the risk factor is present in the cases and controls.

### **Cholecystectomy**

Surgical removal of the gall bladder.

### **Clinical practice guidelines**

The Institute of Medicine defines clinical practice guidelines as “systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances.” However, guidelines can also be developed with additional goals explicitly in mind, such as cost containment or reduction of defensive medicine. In this report, clinical practice guidelines that address medical technologies and practices, and that are created through a structured format of synthesis and analysis, are considered a special category of health technology assessments.

### **Clinical-economic trial**

A *clinical trial* (e.g., an RCT) that includes an economic data collection component, usually for use in a cost-effectiveness analysis.

### **Clinical trial**

The systematic investigation of the effects of materials or methods (e.g., a medical technology) on humans in a clinical setting. Clinical trials can be either nonrandomized (e.g., a small trial to test a drug for major side effects) or randomized (see *randomized controlled trial*).

### **Cohort study**

A study in which the experiences of a defined group (the cohort) are followed over time to link patient and/or clinical management characteristics with various health outcomes. A hypothetical cohort might be children living in homes with high levels of radon in 1980; a cohort study might examine how these children fare over time, and whether different subgroups of children fare differently.

### **Colonoscopy**

A procedure that uses a long, flexible, fiberoptic instrument to visualize the large intestine (e.g., to detect signs of colon cancer). If abnormalities are seen, a biopsy (tissue sample) can be taken as part of the same procedure.

### **Comorbidity**

Diseases or conditions present at the same time as the principal condition of a patient.

### **Comparative effectiveness**

The effectiveness of two or more health care interventions relative to each other—i.e., which of two medical technologies leads to better health outcomes. See *effectiveness* and *effectiveness research*.

### **Congestive heart failure**

A chronic medical condition usually caused by a heart disorder and retention of salt and water by the kidneys. It is characterized by shortness of breath, prolonged circulation time, and edema (swelling) of the extremities.

### **Consensus**

In the context of the group process used to derive a *clinical practice guideline*, consensus does not necessarily mean unanimous agreement. Often, consensus merely means that most members of the group agree. A few guideline development efforts have developed definitions of consensus that specify in detail the level of agreement that group members must have in order for consensus to be achieved.

### **Continuous quality improvement (CQI)**

An array of formal quality improvement techniques based on the collection and analysis of data generated in the course of current clinical practice in a defined clinical setting in order to identify and solve problems in the system.

### **Contrast agent**

A substance that is used to improve the visibility of structures during radiologic imaging—i.e., angiography, intravenous urography, or computerized tomography scans. A low-osmolality contrast agent has an osmolality (i.e., concentration of dissolved particles in solution) that is closer to the osmolality of body fluids than the osmolality of traditional contrast agents.

### **Coronary angiography**

The radiological visualization of the coronary arteries (the blood vessels that feed the heart muscle), after injection of a contrast agent.

### **Coronary artery bypass graft (CABG) surgery**

A surgical procedure to treat coronary artery disease in which a vein or an artery is used to bypass a

constricted portion of one or more coronary arteries.

### **Cost-benefit analysis**

An analytic technique that enumerates and compares the net costs of an intervention (e.g. a medical technology or a public health program) with the net cost savings that arise as a consequence of applying that intervention. Results are expressed entirely in monetary units.

### **Cost-effectiveness analysis**

An analytic technique that calculates the cost per specified health effect of a technology or program (e.g., cost per lives saved, or cost per cases of cancer avoided) and compares this cost-effectiveness ratio with ratios from other interventions. Effects of all interventions are expressed in similar values. In contrast to *cost-benefit analysis*, health outcomes are not translated into monetary values.

### **Cost-utility analysis**

A form of cost-effectiveness analysis in which values are assigned to different kinds of health outcomes, reflecting the relative importance of the different outcomes to people, and results are expressed in units such as cost per *quality-adjusted life year*. Expressing results in this way facilitates comparisons across health care interventions with very different effects (e.g., saving lives vs. reducing disability).

### **Cross-sectional study**

A study that examines the relationship between diseases (or other health-related characteristics) and other variables of interest as they exist in a defined population at one particular time (compare with *cohort study*).

### **Decision analysis**

A technique to aid decisionmaking under conditions of uncertainty. A decision analysis involves the systematic, schematic representation and examination of all of the relevant information for a decision, the points at which decisions or uncertain events occur, and the relative preferences the decisionmaker would have for the array of various possible outcomes for a decision.

### **Delphi technique**

A formal process for eliciting judgments from a group that involves a set of iterative cycles in which individuals in a group provide their ratings or opinions. A summary of the responses is made and given back to the individuals, and the individuals are then asked to re-evaluate their previous ratings. The Delphi technique does not require that the individuals in the group actually meet in person (although they may).

### **Detailing**

The use of personal contacts between a designated liaison individual and a physician as a mechanism for encouraging that physician (or other health care professional) to alter his or her behavior. The detail person might be, for example, a drug company representative trying to convince a physician to prescribe a particular brand of drug more often, or another clinician who is trying to convince the physician to follow a particular clinical practice guideline.

### **Diagnosis-related group (DRG)**

Entries in a taxonomy of types of hospitalizations based on groupings of diagnostic categories drawn from the *International Classification of Diseases* and modified by the presence of a surgical procedure, patient age, presence or absence of significant comorbidities or complications, and other relevant criteria. DRGs have been inundated for use in establishing payment amounts for individual admissions under Medicare prospective hospital payment system as required by the Social Security Amendments of 1983 (Public Law 98-21).

### **Discounting**

A procedure used in economic analysis (e.g. cost-effectiveness analysis) to express as ‘present values’ those costs and benefits that will 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.

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### **Effectiveness**

The probability of benefit to individuals in a defined population from a medical technology applied for a given medical problem under average or actual conditions of use. Compare with *efficacy*.

### **Effectiveness research**

The category of research efforts aimed at broadly identifying effective technologies and practices, and developing and refining methods to support the identification of effective care. Effectiveness research includes experimental research that is aimed at gaining information on effectiveness of an intervention for a broad population in community health care settings.

### **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. Efficacy is generally evaluated in controlled trials of an experimental therapy and a control condition. Compare with *effectiveness*.

### **End-stage renal disease (ESRD)**

Chronic renal failure that occurs when an individual irreversibly loses a sufficient amount of kidney function so that life cannot be sustained without treatment (e.g., hemodialysis, kidney transplant surgery, or continuous ambulatory peritoneal dialysis).

### **Endoscopy**

Inspection of an internal cavity using a fiberoptic imaging device.

### **Epidemiology**

The scientific study of the distribution and occurrence of human diseases and health conditions, and their determinants.

### **Experimental study**

A study in which the experiences of the groups being studied are intentionally influenced by the researcher. The *randomized controlled trial* is a form of experimental study common in the medical sciences.

### **Firms trial**

A form of *randomized controlled trial* in which patients are randomized among entire clinics or other institutional settings (i.e., the patients are randomized to experimental and control clinics, rather than only to experimental and control treatments within a single clinic).

### **Formulary**

A list of selected pharmaceuticals and their appropriate dosages judged to be the most useful or cost-effective for patient care from which physicians are required or encouraged to prescribe. A formulary may also be a list of drugs that may not be prescribed without special appeals.

### **Generalizability**

See *validity (external validity)*.

### **Geographic variation**

In the context of health services research, variations across geographic areas (e.g., states) in the rates with which particular medical procedures are performed, the costs of medical care, or other variables of interest.

### **Generic measure of health-related quality of life**

A measure of *health-related quality of life* that is designed to be broadly applicable across diseases and health conditions, populations, and health care interventions and that summarizes individuals' health across the various aspects of health-related quality of life. In contrast, a disease-specific instrument measures only those aspects applicable to a single disease or condition.

### **Health maintenance organization (HMO)**

A health care organization that, in return for prospective per capita (cavitation) payments, acts as both insurer and provider of comprehensive but specified health care services. A defined set of physicians (and, often, other health care providers such as physician assistants and nurse midwives) provide services to a voluntarily enrolled population. Prepaid group practices and individual practice associations, as well as staff models, are types of HMOs.

**Health services research**

The integration of epidemiological, sociological, economic, and other analytic sciences in the study of health services. Health services research is concerned with relationships between need, demand, supply, use, cost, and outcome of health services.

**Health technologies**

Drugs, devices, procedures, and the organizational and support systems within which health care is delivered.

**Health technology assessment**

A structured analysis of a health technology, a set of related technologies, or a technology-related issue that is performed for the purpose of providing input to a policy decision.

**Hypertension**

High blood pressure.

**Hysterectomy**

Surgical removal of the uterus.

**Immunotherapy**

The treatment of disease by the administration to the patient of an antibody raised in another individual or another species (passive immunotherapy) or by immunizing the patient with antigens appropriate to the disease (active immunotherapy).

**Longitudinal study**

See *cohort study*.

**Laparoscopic cholecystectomy**

The surgical removal of the gall bladder and its contents through a small incision, with the aid of an imaging device.

**Lidocaine**

A drug that acts as a local anesthetic but that, injected into the bloodstream, is also sometimes used to treat abnormal heartbeat and *acute myocardial infarction*.

**Managed care**

A general term applied to a range of initiatives from organized health care delivery systems (e.g., HMOs) to features of health care plans (e.g., preadmission certification programs. *utilization?*

*review* programs) that attempt to control or coordinate enrollees' use of (and thus control the cost of) services.

**Medical technology**

See *health technology*.

**Medicaid**

A joint federal/state program intended to improve health care and health-related services for low-income individuals. Medicaid regulations are established by each state within federal guidelines, and the eligibility requirements and services covered vary significantly among the states. In general, Medicaid pays for medical, nursing home, and home health care for individuals who meet the eligibility requirements for those services. Financial eligibility for Medicaid is determined by a means test, in which a ceiling is placed on the maximum income and assets an individual may have in order to qualify for assistance.

**Medicare**

A nationwide, federally administered health insurance program authorized by Title XVIII of the Social Security Act of 1965 to cover the cost of hospitalization, medical care, and some related services for eligible persons over the age of 65, persons receiving Social Security Disability Insurance payments for two 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.

**Meta-analysis**

A systematic, quantitative review of a subject. Three major features distinguish this method from a traditional narrative review: the formal and comprehensive search for relevant data; the explicit, objective criteria for selecting studies to be included; and the quantitative statistical analysis of the studies results. See also *systematic review*.

**Morbidity**

The condition of being ill or otherwise afflicted with an unhealed condition.

**Multiple sclerosis**

A progressive, chronic disease in which nerve fibers of the brain and spinal cord lose their myelin cover and do not function properly, often leading to difficulty walking and other disabilities.

**Nominal Group Technique (NGT)**

A formal technique for managing interactions among individuals in a group. The NGT splits problem solving into two phases, an idea-generating phase and a decisionmaking phase. In the first phase, each member of the group individually makes a list of ideas for group consideration. All individually generated ideas are then recorded on a flip chart for the group and are openly discussed. In the second decisionmaking phase of the process, individuals vote on priority ideas and a group decision is mathematically derived through rank-ordering or rating.

**Observational study**

A study in which the actual experiences of the groups being compared are simply observed, often retrospectively (i.e., after the event of interest, such as having surgery or exposure to a toxic substance, has occurred).

**Off-label use**

The prescription or use of ethical pharmaceuticals for indications other than those specified in FDA-approved labeling of the drug.

**Opinion leader**

An influential clinical peer or respected expert in the field.

**Outcome**

Any result that stems from exposure to a causal factor, or from preventive or therapeutic interventions.

**Outcomes research**

A term originally used to describe a particular line of health services research that focused on identifying variations in medical procedures and associated health outcomes. The term has since been applied to a wide variety of vaguely associated activities and no longer has a clearly identifiable meaning. See effectiveness *research*.

**Patient Outcomes Research Teams (PORTS)**

Multidisciplinary research teams, funded by the Agency for Health Care Policy and Research, that investigate particular health care conditions, with attention to variations in how those conditions are managed and the effectiveness and costs of the technologies used to treat them.

**Patient preferences**

**A patient's judgments** of the desirability of a particular set of health outcomes or situations (see also *utility*).

**Payer**

An entity that pays for health care services (e.g., individuals, health insurers, government programs). Third-party payers are payers other than the individuals receiving the services, usually health insurers.

**Performance indicators**

Also sometimes called report cards or scorecards, performance indicators are measures that can be used to rate providers, insurers, or health care plans according to their performance along several criteria. Common indicators include mortality rates, costs, rates of specific procedures, or rates of hospitalization for preventable diseases.

**Perinatal**

Pertaining to or occurring in the period shortly before and after birth; variously defined as beginning with the completion of the 20th to the twenty-eighth week of gestation and ending seven to 28 days after birth.

**Placebo**

A drug or procedure with no intrinsic therapeutic value. In a *randomized controlled trial*, a placebo is given to patients in control groups as a means to blind investigators and patients as to whether an individual is receiving the experimental or the control treatment. See *blinding*.

**Practice profiling**

Expressing a provider's pattern of practice as a rate—some measure of use (costs or services) or outcome (functional status, morbidity or mortality) aggregated over time for a defined **population of patients** under the provider's care—for the pur-



pose of comparison with other providers' practice patterns.

### **Prospective payment**

Payment for medical care on the basis of rates set in advance of the time period in which they apply. The unit of payment may vary from individual medical services to broader categories, such as hospital case, episode of illness, or person (capitation). Medicare's DRG payment system for inpatient hospital services is a particular form of prospective payment.

### **Prostatectomy**

**Surgical** removal of the prostate gland.

### **Protocol**

The plan or outline of a scientific experiment, treatment, or study.

### **Provider**

A person or organization that provides health care services (e.g., physician, optometrist, hospital, home health agency).

### **Publication bias**

Occurs when the published studies are not representative of the results of all studies that have been conducted on the research question. Publication bias reflects the preference for publishing studies that have statistically significant findings or that support popular ideas.

### **Quality of care**

Evaluation of the performance of medical providers according to the degree to which the process of care increases the probability of outcomes desired by patients and reduces the probability of undesired outcomes, given the state of medical knowledge. Which elements of patient outcomes predominate depends on the patient condition.

### **Quality of life**

In the context of *effectiveness research* and *cost-effectiveness analysis*, health-related quality of life is "the value assigned to duration of life as modified by the impairments, functional states, perceptions and social opportunities that are influenced by disease, injury, treatment, or policy" (591).

### **Quality-adjusted life year (QALY)**

Years of life saved by a technology or service, adjusted according to the quality of those lives (as determined by some valuation process; see also *utilities*). The QALY is the most commonly used unit to express the results of cost-utility analyses.

### **Randomized controlled trial**

An *experimental study* designed to test the safety, efficacy, or effectiveness of a health care intervention, in which people are randomly allocated to experimental or control groups, and the outcomes are compared. The experimental group or groups receive the intervention of interest, while the control group receives a *placebo* or usual care.

### **Reliability**

The reproducibility of a measure. A measure is reliable if it yields similar results each time it is used on similar samples, or if its components yield similar results for the same or similar samples (compare *validity*).

### **Scoliosis**

An abnormal lateral (sideward) curve of the spine.

### **Sensitivity analysis**

An analysis of the effect of changes in key assumptions or uncertainties on the findings and outcomes of a scientifically conducted study.

### **Sickle-cell disease**

A hereditary disease in which the body's red blood cells are sickle shaped and fragile and can become plugged in small blood vessels.

### **Sigmoidoscopy**

An *endoscopic* procedure for visualizing the sigmoid colon (the lower portion of the large intestine) (see also *colonoscopy*).

### **Standard of care**

A legal standard defined as the level of care provided by the majority of physicians in a particular clinical situation. In a malpractice action, a physician's actions are judged against the prevailing standard of care.

### **Statistical power**

The probability of detecting a statistically significant difference between the groups being

compared in a randomized experiment when a real difference does exist.

**Statistical significance**

A statistically significant finding is one that is unlikely to have occurred solely as a result of chance. A finding is typically considered to be statistically significant if the probability that it occurred by chance alone is no greater than five out of 100—i. e., a p value of 0.05 or less (although the usefulness of having an exact cutoff level is widely debated).

**Stroke**

A condition in which a hemorrhage (internal bleeding) or blockage of blood vessels leading to the brain results in a lack of oxygen in the brain tissue and a sudden loss of functional ability.

**Systematic review**

A highly structured review that synthesizes the results of previously conducted studies on a particular health topic. A *meta-analysis* is one type of systematic review.

**Thrombolytic drugs**

Drugs used to promote the dissolution of blood clots within the circulatory system.

**Thrombus**

A blood clot attached to the internal wall of a blood vessel.

**Toxicity**

The quality of being poisonous or the degree to which a substance is poisonous. Referring to medical treatments, the degree to which they produce unwanted, adverse effects.

**Transurethral prostatectomy**

See *transurethral resection of the prostate (TURP)*.

**Transurethral resection of the prostate (TURP)**

A surgical technique involving the insertion of an instrument through the urethra (urinary conduit) in order to remove tissue from the prostate gland.

**Treatment effect**

The outcome measure (e.g., the rate of death or the proportion of subjects who died) in the treated group compared with that in the control group.

**Utility**

In decision analysis and economics, a concept referring to the desirability of, or preference for, a particular health outcome or health state. Utilities are quantitative—i.e., they describe not only whether outcome A is preferred to outcome B, but how much is preferred.

**Utilization review**

The review of services delivered by a health care provider or supplier to determine whether those services were medically necessary.

**Validity**

Broadly defined, validity is 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 an intervention to the outcome of interest in the study subjects. *External* validity is the extent to which the results of a study may be generalized beyond the subjects of the study to other settings, providers, procedures, diagnostics, etc. (compare *reliability*).