

Contents

Glossary of Abbreviations and Terms	vii
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<i>Chapter</i>	<i>Page</i>
1. Summary and Policy Implications	3
2. Disseminating Information to Consumers: Present Context and Future Strategy	33
3. Evaluating Quality From the Perspective of Individual Consumers	51
4. Hospital Mortality Rates	71
5. Adverse Events	101
6. Disciplinary Actions, Sanctions, and Malpractice Compensation.	121
7. Evaluation of Physicians' Performance: Care for Hypertension	145
8. Volume of Services in Hospitals or Performed by Physicians	165
9. Scope of Hospital Services: External Standards and Guidelines	187
10. Physician Specialization	209
11. Patients' Assessments of Their Care	231

<i>Appendixes</i>	<i>Page</i>
A. Method of the Study	251
B. Acknowledgments.	253
C. Method Used by OTA To Evaluate Indicators of Quality	257
D. Quality Assessment Activities by Selected Organizations	274
E. Selected Studies Related to the Quality of Medical Care	286
References	291

Glossary of Abbreviations and Terms

Glossary of Abbreviations

ABMS	—American Board of Medical Specialties
ACEP	—American College of Emergency Physicians
ACOG	—American College of Obstetricians and Gynecologists
AMA	—American Medical Association
APACHE	—Acute Physiology and Chronic Health Evaluation
CABG	—coronary artery bypass graft surgery
CDC	—Centers for Disease Control (HHS)
CFR	—Code of Federal Regulations
CPHA	—Commission on Professional and Hospital Activities
CMP	—competitive medical plan
COBRA	—Consolidated Omnibus Budget Reconciliation Act of 1985 (Public Law 99-272)
DHHS	—U.S. Department of Health and Human Services
DRG	—diagnosis-related group
ENA	—Emergency Nurses Association
HCFA	—Health Care Financing Administration (HHS)
HHS	—U.S. Department of Health and Human Services
HMO	—health maintenance organization
ICD-9-CM	—International Classification of Diseases, Ninth Revision, Clinical Modification
IPA	—individual practice association
JCAHO	—Joint Commission on the Accreditation of Healthcare Organizations
MEDISGRPS	—Medical Illness Severity Grouping System
OIG	—Office of the Inspector General (HHS)
OBRA-86	—Omnibus Budget Reconciliation Act of 1986 (Public Law 99-509)
OBRA-87	—Omnibus Budget Reconciliation Act of 1987 (Public Law 100-203)
OTA	—Office of Technology Assessment (U.S. Congress)
PPI	—Physician Performance Index
PPS	—prospective payment system
PRO	—utilization and quality control peer review organization

SENIC	—Study on the Efficacy of Nosocomial Infection Control (CDC study)
VA	—Veterans Administration

Glossary of Terms

Access: Potential and actual entry of a population into the health care delivery system.

Accreditation by JCAHO: A statement by the Joint Commission on the Accreditation of Healthcare Organizations that an eligible health care organization, such as a hospital, complies wholly or substantially with JCAHO standards. Hospitals or other health care organizations that are surveyed but do not meet JCAHO standards are referred to as *nonaccredited*. Hospitals that either do not request a surveyor are not eligible to be surveyed are referred to as *unaccredited*. Compare *certification by HCFA*.

Acute myocardial infarction: Necrosis (death) of tissue in the myocardium (heart muscle) that results from insufficient blood supply to the heart.

Adverse events: Untoward events involving patients. Adverse events are typically unanticipated poor patient outcomes, such as death or readmission to the hospital. Other incidents such as improper administration of medications or patient falls are also considered adverse events even if there is no effect on the patient. See *incident reporting* and *occurrence screen*.

Ambulatory care: Medical services provided to patients 'who have not been admitted 'to a hospital or nursing home.

Aneurysm: A permanent, abnormal, blood-filled dilation of a blood vessel or the heart resulting from disease of the vessel or heart wall.

APACHE: A system that uses physiological values, age, and certain aspects of chronic health status to measure a patient's risk of dying. The system has been applied chiefly to patients in hospital intensive care units.

Bacteremia: The presence of bacteria in the blood.

Biliary tract surgery: Surgery involving the bile-conveying structures (duodenum, gall bladder, liver).

Board certification: A method of formally identifying a physician who has completed a specified amount of training and a certain set of requirements, and passed an examination required by a medical specialty board.

- Cardiac catheterization: The passage of a catheter through a vein into the heart for diagnostic purposes.
- Case finding: The identification of instances of a particular disease or condition through screening of asymptomatic people or surveillance of defined populations.
- Case mix: The relative frequency of different medical conditions or diagnoses among patients.
- Certification by HCFA: A statement by the Health Care Financing Administration (HCFA) that a hospital meets HCFA'S conditions of participation. Certification by HCFA is required for Medicare and Medicaid reimbursement. Compare *accreditation by JCAHO*.
- Certification by a medical specialty board: See *board certification*.
- Cholecystectomy: Surgical removal of the gall bladder.
- Claims data: Data derived from medical providers' claims to third-party payers.
- Clinical data: Data on patients derived from clinical examination and tests.
- Comorbidities: Diseases or conditions present at the same time as the principal condition of a patient.
- Complications: Adverse patient conditions that arise during the process of medical care.
- Contingency: A decision by the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) that a hospital is in substantial noncompliance with the requirements for a certain JCAHO standard. The hospital must then conform to that standard within a time period that is shorter than the 3-year accreditation cycle, or risk nonaccreditation.
- Coronary artery bypass graft (CABG) surgery: A surgical procedure in which a vein or an artery is used to bypass a constricted portion of one or more coronary arteries. This procedure has become the primary surgical approach to the treatment of coronary artery disease.
- Diagnosis-related groups (DRGs): 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 are the case-mix measure mandated for Medicare's prospective hospital payment system by the Social Security Amendments of 1983 (Public Law 98-21).
- Discharge abstract: A summary of data abstracted from a hospitalized patient's medical record that usually includes specific clinical data such as diagnostic and procedure codes as well as other information about the patient, the physician, and insurance and financial status.
- Disciplinary actions by State medical boards: See *State medical boards' disciplinary actions*.
- 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.
- Explicit review: Review of the process of medical care using explicit criteria specified in advance. Compare *implicit review*.
- External validity: See *vaZidity*.
- Face validity: See *vaZidity*.
- False negative: A negative result in a case that actually has the condition or characteristic for which a test was conducted.
- False positive: A positive result in a case that does not have the condition or characteristic for which a test was conducted.
- Feasibility: In the context of evaluations of indicators of medical quality, whether it is practical to use a certain indicator to convey information to the public about quality.
- Femur fracture: Fracture of the thigh bone.
- Generic screen: See *HCFA generic quality screens*.
- Gross and flagrant violation: A violation that presents an imminent danger to the health, safety, or well-being of a Medicare beneficiary or that unnecessarily places the beneficiary at risk of substantial and permanent harm. Utilization and quality control peer review organizations (PROS) identify potential violations and recommend sanctions, but the Office of the Inspector General of the U.S. Department of Health and Human Services makes the final decision as to whether to impose sanctions. Compare *substantial violation*.
- HCFA generic quality screens: The list of occurrences applied by utilization and quality control peer review organizations (PROS) to select cases that may have quality problems and that merit scrutiny. Because these screens generate a large portion of false positives, their application is only the first step in a multistage review process.
- 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 medical services. A defined set of physicians provide services to a voluntarily enrolled population. Prepaid group practices and individual practice associations are types of HMOs.
- Hernia: Any abnormal protrusion of one anatomical structure through another. The most common variety is herniation of part of the intestine through a weakness in the abdominal wall.
- High-mortality outliers: Providers with mortality rates that are higher than expected after adjustment for patient or other characteristics. Compare *Zow-mortality outliers*.
- Hospital accreditation: See *accreditation by JCAHO*.
- Hospital discharge abstract: See *discharge abstract*.

- Hospital mortality rate:** Number of deaths as a proportion of the total number of hospital patients or admissions. See *mortality rate*.
- Hospital volume:** The number of a particular procedure performed or condition treated in a hospital. See *volume*.
- Hypertension:** Persistently high blood pressure. The chief importance of hypertension lies in the increased risk it confers of illness and death from cardiovascular, cerebrovascular, and renal disease.
- Hysterectomy:** Surgical removal of the uterus.
- Iatrogenic illness:** Any adverse condition in a patient that is caused by medical treatment.
- Impaired physician:** A physician who does not have the ability to practice medicine with reasonable skill and safety to patients because of physical or mental illness, including alcoholism or drug dependence.
- Implicit review:** Review of the process of medical care using subjective criteria. Compare *explicit review*.
- Incidence:** The frequency of new occurrences of a condition within a defined time interval. Incidence rate is the number of new cases of specified disease divided by the number of people in a population over a specified period of time, usually 1 year. Compare *prevalence*.
- Incident reporting:** A system for collecting and reporting information about adverse events that affect patients in hospitals. Hospital personnel (most frequently nurses) complete forms when they observe an adverse event; the definition of an "incident" is discretionary by the frontline health professionals who deal with patients. Examples of incidents include patient falls, medication errors, equipment failures, and procedure or treatment errors.
- Inpatient care:** Medical services provided to patients who have been admitted to hospitals.
- Internal validity:** See *validity*.
- International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Coding:** A two-part system of coding patient medical information used in abstracting systems and for classifying patients into DRGs for Medicare. The first part is a comprehensive list of diseases with corresponding codes compatible with the World Health Organization's list of disease codes. The second part contains procedure codes, independent of the disease codes.
- Interpersonal aspects of medical care:** The personal interaction between patient and provider.
- Interrater reliability:** Consistency of judgments among raters or sets of raters.
- Intrater reliability:** Consistency of judgments by a single rater.
- Liability:** Accountability and responsibility that are enforceable by legal sanctions.
- Licensure:** The process by which a State grants permission to a physician to practice medicine upon finding that she or he has met acceptable qualification standards. Licensure also involves ongoing State regulation of physicians, including the State's authority to revoke or otherwise restrict a physician's license to practice.
- Low-mortality outliers:** Providers with mortality rates that are higher than expected after adjustment for patient or other characteristics. Compare *high-mortality outliers*.
- Medicaid:** A federally aided, State-administered program that provides medical assistance to certain low-income people.
- Medical injury:** An adverse outcome that could be either unavoidable or avoidable, i.e., negligently induced.
- Medical malpractice:** A judicial determination that there has been a negligent (or, rarely, willful) failure to adhere to the current standards of medical care, resulting in injury to the patient. Since the judgment of malpractice is social-legal and is made on a case-by-case rather than systematic basis, standards and processes for determining malpractice vary by area.
- Medical practice act:** A State law that provides statutory authority for the State to license and discipline physicians and other health care professionals.
- Medical record:** The account compiled by physicians or other medical professionals of patients' medical history, present illness, findings on examination, details of treatment, and notes on progress. The medical record is the legal record of care.
- Medical record audit:** See *medical record review*.
- Medical record review:** Review of a patient's medical record to determine how the medical provider performed.
- Medical technology:** The drugs, devices, and medical and surgical procedures used in medical care, and the organizational and support systems within which such care is provided.
- Medicare:** A nationwide, federally administered health insurance program first authorized in 1965 that now covers hospitalization, physician 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 conditions of participation:** Requirements that institutional providers (including hospitals, skilled nursing homes, home health agencies, etc.) must meet in order to be allowed to receive payments for Medicare patients. An example is the requirement that hospitals conduct utilization review.

Medical Illness Severity Grouping System (MEDISGRPS): A computerized data system developed by MediQual Systems, Inc., that categorizes patients' risk of dying or of increased morbidity based on key physiological findings.

MEDLINE data base: The original, largest, and most utilized data base in the National Library of Medicine's computerized retrieval and technical processing system. MEDLINE contains references to biomedical and other literature relevant to health and health services.

Meta-analysis: The quantitative analysis of a large collection of results from individual studies for the purpose of integrating the findings.

Morbidity rate: The rate of illness in a population. The number of people ill during a time period divided by the number of people in the total population.

Mortality rate: The death rate, often made explicit for a particular characteristic, e.g., age, sex, or specific cause of death. A mortality rate contains three essential elements: 1) the number of people in a population group exposed to the risk of death (the denominator); 2) a time factor; and 3) the number of deaths occurring in the exposed population during a certain time period (the numerator).

Negotiated settlement: The resolution of a malpractice claim prior to a judicial determination.

Neonatal: Pertaining to the first 4 weeks after birth.

Nonaccreditation: See accreditation *by JCAHO*.

Nosocomial infection: An infection that a patient acquires in a hospital or other institution. The most common nosocomial infections are urinary tract infections, followed by surgical wound infections, pneumonia, and infections of the bloodstream.

Occurrences: Adverse events. See *adverse events*.

Occurrence screen: A list of criteria used to screen patients' medical records for occurrences. Examples of occurrences include deaths, unusually long lengths of stay, hospital-acquired infections, and unscheduled procedures, readmission, or transfers.

Outcome measures of quality: Measures of changes in patient outcomes, that is, patient health status and satisfaction. Attributing changes in outcomes to medical care requires distinguishing the effects of care from the effects of the many other factors that influence patients' health and satisfaction.

Outliers: See *high-mortality outliers* and *Zow-mortality outliers*.

Outpatient care: Care that is provided in a hospital and that does not include an overnight stay.

p value: The probability of concluding that a statistical association exists between, for instance, a risk factor and a health endpoint, when, in fact, there is no real association. In other words, the likelihood that an observed association in a study is due to chance. Also called "Type I error" or "alpha," and commonly called the level of significance.

Patients' assessments: Patients' ratings and reports.

Patients' ratings: Personal evaluations of aspects of medical care providers and services. Ratings are inherently subjective because they reflect personal experiences, expectations, and preferences, as well as the standards patients apply when evaluating care. Compare *patients' reports*.

Patients' reports: Information from patients about things that did or did not happen during their medical care. Patients' reports are inherently more objective than patients' ratings and can be more readily confirmed by an outside observer. Compare *patients' ratings*.

Peer review organizations: See *utilization and quality control peer review organizations*.

Perinatal: Pertaining to or occurring in the period shortly before and after birth; variously defined as beginning with the completion of the 20th to 28th week of gestation and ending 7 to 28 days after birth.

Physician credentialing: A process that includes education, licensure, specialty certification, and conferring hospital privileges and that is intended to ensure physician competence and protect public safety.

Physician Performance Index (PPI): A process measure of physician performance that evaluates physicians' compliance with certain explicit criteria. The criteria were weighted by a panel of physicians and aggregated to generate a single PPI score for each diagnosis or examination. A physician performance score represents a physician's average PPI score over all of his or her treated cases.

Physician volume: The number of a procedure performed or condition treated by individual physicians. See *volume*.

Predictive validity: See *validity*.

Prevalence: The number of existing cases of a disease or condition in a given population at a specific time. Compare *incidence*.

Principal diagnosis: The diagnosis which, after study, is judged to be the principal reason for hospitalization or other medical care.

Process measures of quality: Measures of the activities of physicians and other health professionals in caring for patients. To evaluate providers' performance, it is valid to use only process measures that have been shown to improve or harm patients' health and satisfaction, a link that has been established for relatively few processes.

Prospective study: A study in which data are gathered after a hypothesis has been generated and the study approved. Compare *retrospective study*.

Prostatectomy: Surgical removal of the prostate gland.

Quality of medical care: Evaluation of the performance of medical providers according to the degree to which the process of care increases the probab-

- ity 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 assessment: Measurement and evaluation of the quality of medical care for individuals, groups, or populations.
- Quality assurance: Activities to safeguard or improve the quality of medical care by assessing quality and taking action to correct any problems found.
- Randomized trial: A study in which subjects are assigned randomly to either the experimental or the control condition.
- Readmission: Admission to a hospital within a specified period of time after a prior admission or because of complications of a prior admission.
- Regression analysis: A statistical procedure for determining the best approximation of the relationship between variables. Multiple regression analysis is a method for measuring the effects of several factors concurrently.
- Reliability: Consistency in results of a measure, including the tendency of the measurement to produce the same results twice when it measures some entity or attribute believed not to have changed in the interval of measurements. Reliability is a prerequisite to validity. See *interrater reliability* and *intrarater reliability*.
- Retrospective study: A study in which data that are already available are analyzed to test a hypothesis. Compare *prospective study*.
- Risk management: Programs that institutions, especially hospitals, undertake to prevent medical mishaps and to minimize the adverse effects of injury and loss to patients, employees, visitors, and the institution itself. Quality assurance is often considered a subset of the larger issue of risk management.
- Scope of hospital services: A structural measure of the quality of care that reflects whether a hospital has the resources—facilities, staff, and equipment—to provide care for the medical conditions it professes to treat or to care for the medical condition affecting a potential patient.
- Secondary diagnosis: Any medical condition of a patient other than the principal diagnosis. See *comorbidities*.
- Selective referral: The referral or attraction of patients to physicians and hospitals with better outcomes.
- Sensitivity of a test: For a particular test, the percentage of individuals who actually have the condition being tested for who are correctly identified as positive by the test. Operationally, sensitivity is the number of true positive test results divided by the number that actually have the condition (true positives divided by the sum of true positives plus false negatives). Compare *specificity of a test*.
- Specificity of a test: For a particular test, the percentage of individuals who do not have the condition being tested for who are correctly identified as negative by the test. Operationally, specificity is the number of negative test results divided by the number of individuals who actually do not have the condition (true negatives divided by the sum of true negatives plus false positives). Compare *sensitivity of a test*.
- State medical boards: State licensing bodies and State disciplinary bodies. States exercise their authority to license physicians through State licensing boards. The disciplinary functions may be incorporated in the same body as the licensure function or in a separate body.
- State medical boards' disciplinary actions: The penalties imposed by State medical boards on physicians who have transgressed provisions in State medical practice acts. The penalties range from revoking licenses to practice medicine through lesser penalties such as suspension of licenses for a period of time; probation; stipulations; limitations and conditions relating to practice; reprimands; letters of censure and letters of concern.
- Statistical conclusion validity: The extent to which research is sufficiently precise or powerful to enable observers to detect effects. Conclusion errors are of two types: Type I is to conclude there are effects (or relationships) when there are not; Type II is to conclude there are no effects (or relationships) when in fact they exist.
- Statistical power: The probability of detecting a difference between the groups being compared when one does exist. Failure to detect an effect is called "Type II error" or "beta," analogous to "false negative."
- Statistically significant: The likelihood that an observed association is not due to chance. See *p-value*.
- Structural measures of quality: Measures of the resources and organizational arrangements that are in place to deliver medical care, such as the number, type, and distribution of medical personnel, equipment, and facilities. Underlying the use of such measures to assess quality is the assumption that such characteristics increase or decrease the likelihood that providers will perform well and their absence, that providers will perform poorly. This assumption in turn raises the question whether specific structural characteristics are in fact associated with better process or outcome.
- Substantial violation: A pattern of care over a substantial number of cases that is inappropriate, unnecessary, does not meet the recognized standards of care, or is not supported by the documentation of care required by the PRO. PROs identify potential violations; the Office of the Inspector General of the U.S. Department of Health and Human Services makes the final decision as to whether the vio-

lation occurred. Compare *gross and flagrant violation*.

SuperPRO: An independent organization, working under contract to HCFA, that re-reviews a sample of the patient records evaluated by each of the s4 PROs. The purpose of the SuperPRO reviews is to validate the determinations made by PROs, including the application of the HCFA generic quality screens. To date, the SuperPRO contract has been held by SysteMetrics, Inc., in Santa Barbara, California.

Targeted mortality method: An approach to quality assessment used, for example, by the New York State Department of Health in which deaths in certain types of cases are targeted for review. Examples include deaths in primary procedures or DRGs with an average death rate of less than 5 percent, deaths occurring within 1 day of any procedure, and deaths in which burns are reported as a secondary diagnosis.

Technical aspects of medical care: The application of medical science and technology to a medical problem.

Third-party payment: Payment by a private insurer or government program to a medical provider for care given to a patient.

Tort liability: Liability imposed by a court for breach of a duty implied by law, contrasted with contractual liability, which is breach of duty arising from an agreement. The tort liability system determines fault and awards compensation for civil wrongs, including medical malpractice.

UB-82: The uniform billing form required by the Health Care Financing Administration for submitting and processing Medicare claims. It merges billing information with diagnostic codes, including almost all the elements from the uniform hospital discharge data set.

Unaccredited: See *accreditation by JCAHO*.

Utilization and quality control peer review organizations (PROs): Organizations established by the Tax Equity and Fiscal Responsibility Act of 1982 (Public Law 97-248) with which the U.S. Department of Health and Human Services contracts to review the appropriateness of settings of care and the quality of care provided to Medicare beneficiaries.

Validity: A measure of the extent to which an observed situation reflects the true situation or an indicator

of medical quality measures what it purports to measure. There are several types of validity:

Construct validity: The extent to which an indicator measures what it is supposed to measure. If construct validity has been established for a measure, it may be used as a criterion or gold standard against which other measures (tests, indicators) are evaluated.

Content validity: How representative a sample of items is of the universe that it was intended to represent.

Convergent validity: A demonstration of the validity of a measure by correlations among two or more purported measures of a concept. Convergent validity does not, however, presuppose that one measure is a standard against which other measures should be evaluated.

Discriminant validity: A demonstration of the validity of a measure by the lack of correlation among two or more supposedly unrelated measures of a concept.

External validity: The extent to which the results of a study may be generalized beyond the subjects of a study to other settings, providers, procedures, diagnoses, etc.

Face validity: Intelligibility, i.e., the extent to which an indicator and hypothesized relationships would make sense to the average consumer and provider.

Internal validity: The extent to which the design of a study contributes to the confidence that can be placed in the study's results. Internal validity is relevant to both measurement studies and studies of causal relationships; it is the extent to which the detected relationships are most likely due to factors accounted for in the study, rather than other factors.

Predictive validity: The ability of an indicator to predict future events.

Validity variable: A measure of the quality of care derived independently of the indicator being evaluated. Experimental manipulation, observation and simulation, provider report, or chart review are all sources of information for validity variables.

Volume: The number of cases with a specific procedure, diagnosis, or condition treated in a hospital or by a physician.