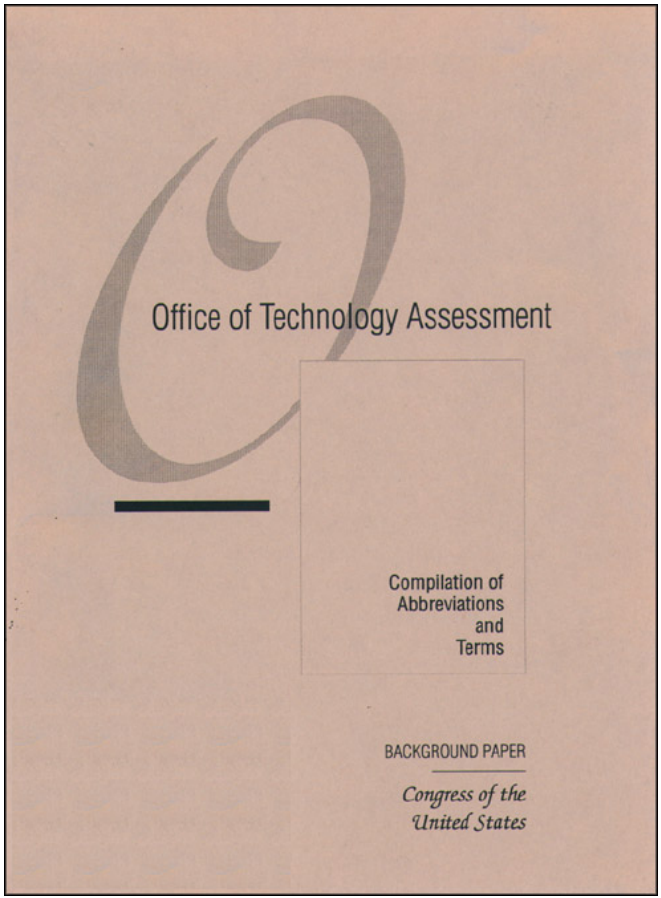
Compilation of Abbreviations and Terms

September 1993

OTA-BP-H-113
NTIS order #PB94-107661



Foreword

This Background Paper contains glossaries of terms and abbreviations compiled from selected reports issued between 1987 and 1992 by the Health Program and the Biological and Behavioral Sciences Program of the Office of Technology Assessment.

It is, therefore, not intended to serve as a complete or comprehensive glossary of terms or abbreviations in the health policy field. Instead, it is a combination of glossaries from the included OTA reports, in some cases updated or corrected.

The source of most of the definitions is OTA staff. In some cases, definitions were modified or adapted from other technical references.

If you notice any incorrect or unclear definitions of terms or incorrect or missing abbreviations, please let us know. If you have comments or corrections, or would like additional copies for congressional use, please call Beckie Erickson, Office Administrator in OTA'S Health Program, at 86590 (202/228-6590).



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Compilation of

ABBREVIATIONS AND ACRONYMS[1]

[1] An acronym is an abbreviation whose letters form a real word. For example, APACHE and COLD are acronyms, but CHAMPUS and NIH are only abbreviations.

Compilation of Abbreviations and Acronyms
September 1993

A

A	Adenine
AA	Alcoholics Anonymous
AAA	Area agency on aging
AAAI	American Association for Artificial Intelligence
NULAC	American Association for Accreditation of Laboratory Animal Care
AAAS	American Association for the Advancement of Science
AABB	American Association of Blood Banks
AABD	Aid to the Aged, Blind, and Disabled
AACN	American Association of Critical-Care Nurses
AADI	Adjusted acceptable daily intake
AAFP	American Academy of Family Physicians
AAFS	American Academy of Forensic Sciences
AN-IA	American Association of Homes for the Aging
ANHC	Association of Academic Health Centers
AAIH	American Academy of Industrial Hygiene
AAIP	Association of American Indian Physicians
AALAS	American Association for Laboratory Animal Science
AAM	Alliance for Alternative Medicine
AAMC	Association of American Medical Colleges
AAMI	Association for the Advancement of Medical Instrumentation
AANP	American Academy of Nurse Practitioners
AANS	American Association of Neurological Surgeons
AAO	American Academy of Ophthalmology
AAP	American Academy of Pediatriatrics
AAPA	American Academy of Physician Assistants
AAPC	American Association for Protecting Children
AAPCC	Average adjusted per capita cost
AAPD	American Academy of Pediatric Dentistry
AARC	American Association for Respiratory Care (formerly AART)
AARP	American Association of Retired Persons
AART	American Association for Respiratory Therapy (now AARC)
AATB	American Association of Tissue Banks
AAVMC	Association of American Veterinary Medical Colleges
ABC	Airway, breathing, and circulation; or assess, breathe, and circulate
ABC	American Blood Commission
ABC	Association of Biotechnology Companies
ABET	American Board of Engineering and Technology
ABIH	American Board of Industrial Hygiene
ABIM	American Board of Internal Medicine
ABMS	American Board of Medical Specialties
ABRA	American Blood Resources Association
ABRAC	Agricultural Biotechnology Research Advisory Committee
ACC	Animal Care Committee (Canada)
ACCC	Association of Community Cancer Centers
ACCP	American College of Chest Physicians
ACEP	American College of Emergency Physicians
ACGIH	American Conference of Governmental Industrial Hygienists
ACGIH	American Conference of Governmenal Industrial Hygienists
ACGME	Accreditation Council for Graduate Medical Education
ACHE	American College of Healthcare Executives

ACIP	Advisory Committee on immunization Practices (Centers for Disease Control)
ACLI	American Council on Life Insurance
ACNM	American College of Nurse-Midwives
ACOG	American College of Obstetrics and Gynecology
ACOM	American College of Occupational Medicine (formerly was AOMA)
ACP	American College of Physicians
ACR	Adjusted community rate
ACR	American College of Radiology
ACRS	Accelerated cost recovery system
ACS	American Cancer Society
ACS	American College of Surgeons
ACS	American Cancer Society
ACSH	American Council on Science and Health
ACT	American Council on Transplantation
ACTH	Adrenocorticotropic hormone
ACUC	Animal care and use committee
ACYF	Administration for Children, Youth, and Families (Office of Human Development Services)
AD	Alzheimer's disease
ADA	Americans with Disabilities Act
ADA	Adenosine deaminase (enzyme)
ADA	American Dental Association
ADA	American Diabetes Association
ADA	American Dietetic Association
ADAMHA	Alcohol, Drug Abuse, and Mental Health Administration (Public Health Service)
ADD	Administration on Developmental Disabilities (Office of Human Development Services)
ADD	Attention deficit disorder
ADEAR	Alzheimer’s Disease Education and Referral (Center)
ADL	Activities of daily living
ADMS	Alcohol, Drug Abuse, and Mental Health Services
ADMS	Alcohol, Drug Abuse, and Mental Health Services Block Grant
ADP	Adenosine diphosphate
ADPL	Average daily patient load
ADR	Adverse drug reaction
ADRCs	Alzheimer's Disease Research Centers
ADRDA	Alzheimer's Disease and Related Disorders Association
ADS	Agua del Sol
AEC	U.S. Atomic Energy Commission
AFAAR	American Fund for Alternatives to Animal Research
AFAR	American Federation for Aging Research
AFDC	Aid to Families With Dependent Children
AFIP	Armed Forces Institute of Pathology
AFIPS	American Federation of Information Processing Societies
AFIS	Automated Fingerprint Identification Systems
AFP	Alpha fetoprotein
AFRRI	Armed Forces Radiobiology Research Institute
AFS	American Fertility Society
AFSCME	American Federation of State, County, and Municipal Employees
AGHE	Association for Gerontology in Higher Education
AGI	Alan Guttmacher Institute
AGRICOLA	Agricultural On-Line Access (National Agricultural Library, U.S. Department of Agriculture)
AGS	Advanced Genetic Sciences, Inc.
AGS	American Geriatrics Society
AHA	American Heart Association

AHA	American Hospital Association
AHCA	American Health Care Association
AHCCCS	Arizona Health Care Cost Containment System
AHCPR	Agency for Health Care Policy and Research (PHS)
AHEC	Area Health Education Center
AHF	Antihemophilic factor
AHP	Accountable Health Plan
AHH	Aryl hydrocarbon hydroxylase
AHP	Allied health professional
AIPC	Aging and Health Policy Center
AHSR	Association for Health Services Research
AI	Artificial intelligence
AIA	American Institute of Architects
AID	U.S. Agency for International Development
AIDS	Aquired Immunodeficiency Syndrome
AIHA	American Industrial Hygiene Association
AIHC	American Industrial Health Council
AIM-TWX	Abridged Index Medicus via the Teletypewriter Exchange Network
AIPRC	American Indian Policy Review Commission
ALA	American Lung Association
ALA	Aminolevulinic acid
ALARA	As low as reasonably achievable
ALD	Approximate lethal dose
ALDF	Animal Legal Defense Fund
ALL	Acute lymphocytic leukemia, or acute lymphatic leukemia
ALOs	Average length of stay
ALS	Advanced life support
AS	Amyotrophic lateral sclerosis
ALS-P-D	Amyotrophic lateral sclerosis-Parkinson's disease-dementia
ALT	Alanine amino transferase (formerly SGPT)
ALT	Alanine immunotransferase
ALT	Argon laser trabeculoplasty
AMA	American Medical Association
AMD	Aerospace Medical Division (U.S. Air Force)
AMDA	American Medical Directors Association
AMI	Acute myocardial infarction
AMI	American Medical International, Inc.
AML	Acute myelocytic leukemia
AMRA	American Medical Records Association
AMS	Automated Microplate Systems
AMVETS	American Veterans of World War Ii, Korea, and Vietnam
AMWA	American Medical Women's Association
ANA	Administration for Native Americans (Office of Human Development Services)
ANA	American Nurses' Association
ANCSA	Alaska Native Claims Settlement Act
ANDA	Aabbreviated new drug application
ANDA-MIS	Abbreviated New Drug Application - Management Information System
ANFI	Absolute nuclear flouresence intensity
ANPRM	Advanced Notice of Proposed Rulemaking
ANR	Americans for Nonsmokers' Rights
ANS	Autonomic nervous system
ANSI	American National Standards Institute
ANT	Alzheimer neurofibrillary tangle
AOA	Administration on Aging (Office of Human Development Services)
AOA	American Optometric Association
AOA	American Osteopathic Association

AOA	American Optometric Association
AOMA	American Occupational Medical Association (former name for ACOM)
AOP	Agent Orange Projects (Centers for Disease Control)
AOWG	Agent Orange Working Group (White House Cabinet Council)
APA	American Psychiatric Association
APA	Administrative Procedures Act
APA	American Polygraph Association
APA	American Psychiatric Association
APA	American Psychological Association
APACHE	Acute Physiology and Chronic Health Evaluation
APB	Advisory Policy Board (NCIC)
APED	Action Programme on Essential Drugs and Vaccines (WHO)
APhA	American Pharmaceutical Association
APHA	American Public Health Association
APHIS	Animal and Plant Health Inspection Service (Department of Agriculture)
APKD	Adult polycystic kidney disease
APS	Attending physician's statement
APTD	Aid to the Permanently and Totally Disabled
AQA	American Quack Association
AR	Attributable risk
ARC	AIDS-related complex
ARC	American Red Cross
ARC	Animal research committee
ARF	Area Resource File (Health Resources and Services Administration)
ARI	Acute respiratory infection
ARS	Administrative Records Survey
ARS	Agriculture Research Service (Department of Agriculture)
ARV	AIDS-related virus
AS	Ankylosing spondylitis
ASC	Ambulatory surgical center
ASCLD	American Society of Crime Laboratory Directors
ASCO	American Society for Clinical Oncology
ASCP	American Society of Clinical Pathologists
ASH	Action on Smoking and Health
ASH	Assistant Secretary for Health (DHHS)
ASHA	American School Health Association
ASHG	American Society of Human Genetics
ASHI	American Society of Histocompatibility and Immunogenetics
ASIM	American Society of Internal Medicine
ASO	Allele specific-oglionucleotide
ASO	Administrative services only
ASPB	American Society to Prevent Blindness
ASPCA	American Society for the Prevention of Cruelty to Animals
ASPE	Assistant Secretary for Planning and Evaluation (DHHS)
ASPEN	American Society for Parenteral and Enteral Nutrition
ASSE	American Society of Safety Engineers
AST	Aspartate amino transferase (formerly SGOT)
ASTHO	Association of State and Territorial Health Officials
ASTM	American Society for Testing and Materials
AT	Ataxia telangiectasia
ATCB	Architectural and Transportation Compliance Bead
ATCC	American Type Culture Association
ATIII	Antithrombin III
ATP	Adenosine triphosphate
ATSDR	Agency for Toxic Substances and Disease Registry (PHS, DHHS)
ATSDR	Agency for Toxic Substances and Disease Registry (Public Health Service)

AUA	American Urological Association
AUCC	Association of Universities and Colleges of Canada
AUPHA	Association of University Programs in Health Administration
AUTS	Adult Use of Tobacco Survey
AVMA	American Veterinary Medical Association
AWP	Average wholesale price
AZT	Azidothymidine (currently known as zidovudine)

B

BAT	Best available technology
BATF	Bureau of Alcohol, Tobacco, and Firearms (Department of Treasury)
BBT	Basal body temperature
BC	Blue Cross (health insurance plan)
BC/BS	Blue Cross/Blue Shield
BCA	Blue Cross Association
BCBSA	Blue Cross and Blue Shield Association
BCBSNJ	Blue Cross/Blue Shield of New Jersey
BCG	Bacillus Calmette-Guerin (vaccine)
BD	Biotinidase deficiency
BDMS	Bureau of Data Management and Strategy (Health Care Financing Administration)
BDZ	Benzodiazepine
BEAC	Biomedical Ethics Advisory Committee
BEIR	Committee on the Biological Effects of Ionizing Radiation (National Research Council)
BEMAR	Backlog of essential maintenance and repair
BERC	Bureau of Eligibility, Reimbursement, and Coverage (Health Care Financing Administration)
BHCDA	Bureau of Health Care Delivery and Assistance (HRSA, PHS)
BHPr	Bureau of Health Professions (HRSA, PHS)
BIA	Bureau of Indian Affairs (Department of Interior)
BID	Bureau, institute, or division (National Institutes of Health)
BIOSEP	Biofeedback Smoking Education Project
BIOSIS	Biosciences Information Service
BJS	Bureau of Justice Statistics (DOJ)
BLS	Basic life support
BLS	Bureau of Labor Statistics (Department of Labor)
BMAA	Beta-N-methyl amino-L-alanine
BMAD	Medicare Physician Procedure Database
BMD	Bureau of Medical Devices (former bureau of the Food and Drug Administration; see CDRH))
BOSTID	Board on Science and Technology for International Development (National Academy of Sciences)
BP	Blood pressure
BP	Blocking Protein
BPD	Bronchopulmonary dysplasia
BPEC	Biotechnology Process Engineering Center (MIT)
BPF	Blocking Protein Factor
BPRS	Brief Psychiatric Rating Scale
BPT	Best practicable technology
BQC	Bureau of Quality Control (Health Care Financing Administration)
BRFS	Behavioral Risk Factor Suveillance System
BS	Blue Shield (insurance plan)

BSA	Blue Shield Association
BSCC	Biotechnology Science Coordinating Committee
BTI	Bacillus thuringiensis israeliensis
BTS	Blood Transfusion Service
BUN	Blood urea nitrogen
BVA	Blinded Veterans Association

C

c	Cytosine
C/MHC	Community/migrant health center
CA	Chromosomal aberration
CA	Cocaine Anonymous
Ca	Cancer
CA	Chromosome aberration
CAA	Clean Air Act
CAAT	Center for Alternatives to Animal Testing (The Johns Hopkins University)
CAB	Cellulose acetate butyrate
CABG	Coronary artery bypass graft
CAC	California Association of Criminalists
CACLD	California Association of Crime Laboratory Directors
CACR	Center for Alternative Cancer Research
CAD	Coronary artery disease
CAG	Carcinogen Assessment Group
CAG	Clinical Appraisal Group
CAH	Chlorinated aromatic hydrocarbon
CAH	Congenital adrenal hyperplasia
CAHBI	Ad Hoc Committee of Experts on Progress in the Biomedical Sciences (Council of Europe)
CALAS	Canadian Association for Laboratory Animal Science
CalPERS	California Public Employees' Retirement System (State of California)
Caltech	California Institute of Technology
CANAH	Coalition for Alternatives in Nutrition and Healthcare
CAP	College of American Pathologists
CAP	Consumer Association of Penang (Malaysia)
CAPD	Continuous ambulatory peritoneal dialysis
CARB	Center for Advanced Research in Biotechnology (MD)
CARE	Comprehensive Assessment and Referral Evaluation
CASA	Community Alternative Systems Agency program (New York State)
CASSP	Child and Adolescent Service System Program (National Institute of Mental Health)
CAT	Computerized axial tomography (see CT')
CATT	Card agglutination test for trypanosomiasis
CAVH	Continuous arteriovenous hemofiltration
CBA	Cost-benefit analysis
CBER	Center for Biologics Evaluation and Research (FDA)
CBO	Congressional Budget Office (U.S. Congress)
CC	Clomiphene citrate
CCAC	Canadian Council on Animal Care
CCBC	Council of Community Blood Centers
CCCI	Connecticut Community Care, Inc.
CCCN	Customs Cooperation Council Nomenclature
CCEC	Community Clinic/Emergency Center
CCERP	Committee to Coordinate Environmental and Related Programs

CCL	Commodity Control List
CCL	Continuous cell line
CCNE	Comité Consultatif National d'Ethique (National Advisory Ethics Committee - France)
CCP	Community Care Program (Illinois)
CCPD	Continuous cycling peritoneal dialysis
CCRN	Critical care registered nurse
CCS	Cancer Control Society
CCU	CoronaRy care unit
CDC	Centers for Disease Control (PHS, DHHS)
CDC	Centers for Disease Control (Public Health Service)
CDD	Program for Control of Diarrheal Diseases (World Health Organization)
CDER	Center for Drug Evaluation and Research (Food and Drug Administration)
CDER	Center for Drug Evaluation and Research (FDA)
CDF	Children's Defense Fund
CDF	Conservative Democratic Forum (U.S. Congress)
CDNA	Complementary DNA (deoxyribonucleic acid)
CDR	Clinical Dementia Rating Scale
CDRH	Center for Devices and Radiological Health (Food and Drug Administration)
CDS	Consumer-Directed Services Initiative
CEA	Carcinoembryonic antigen
CEA	Cost-effectiveness analysis
CEAP	Clinical Efficacy Assessment Project (American College of Physicians)
CEC	Chemical Evaluation Committee
CEC	Commission of the European Communities
CECOS	Centres d'Etude et de la Conservation du Sperme (Centers for the Study and Conservation of Sperm - France)
CEHIC	Center for Environmental Health and Injury Control (CDC, DHHS)
CEN	European Committee for Standardization
CENELEC	European Committee for Electrotechnical Standardization
CEO	Chief Executive Officer
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CETA	Comprehensive Employment and Training Act
CF	Complement fixation (test)
CF	Cystic fibrosis
CFC	Chloroflourocarbon
CFCM	Committee for Freedom of Choice in Medicine
CFHS	Canadian Federation of Humane Societies
CFR	Code of Federal Regulations
CFR	Code of Federal Regulations
CFSAN	Center for Food Safety and Nutrition (FDA)
CH	Congenital hypothyroidism
CHAMPUS	Civilian Health and Medical Program of the Uniformed Services (Department of Defense)
CHAMPUS	Civilian Health and Medical Program of the Uniformed Services
CHAMPVA	Civilian Health and Medical Program of the Veterans Administration
CHAP	Chronic Hazard Advisory Panel
CHC	Community health center
CHD	Coronary heart disease
CHIP	Chemical Hazard Information Profile
CHIPS	catastrophic health insurance plans
CHMSA	Critical Health Manpower Shortage Area
CHO	Chinese hamster ovary
CHP	Community Hospital Program
CHR	Community health representative

CHS	Contract health services
CHSDA	Contract health service delivery area
CID	Commercial Item Description (Department of Veterans Affairs)
CIE	Counterimmunoelectrophoresis
CIIT	Chemical Industry Institute of Toxicology
CIL	Center for independent living (also ILC)
CIM	Cumulated Index Medicus
CIOMS	Council of international Organizations of Medical Sciences
CIS	Cancer Information Service (NCI)
CITES	Convention on International Trade in Endangered Species
CJD	Creutzfeldt-Jakob disease (syndrome)
CJS	Criminal Justice System
CLIA	Clinical Laboratory Improvement Amendments of 1988
CLIA	Clinical Laboratory Improvement Act
CLMA	Contact Lens Manufacturers Association
CLT	Clinical laboratory technician/technologist
CMA	Canadian Medical Association
CMA	Chemical Manufacturers Association
CME	Continuing medical education
CMHC	Community mental health center
CML	Chronic myelogenous leukemia
CMP	3-Chloro-2-methylpropene
CMP	Competitive medical plan
CMP	Comprehensive medical plan; competitive medical plan
CMSS	Council of Medical Specialty Societies
CMV	Cytomegalovirus
CNFA	Comisió n Nacional de Fecundació n Asistida (National Commission on Assisted Reproduction - Spain)
CNM	Certified nurse midwife
CNP	Certified nurse practitioner
CNS	Central nervous system
$C\ 0_2$	Carbon dioxide
CO	Carbon monoxide
COA	Coagglutination (test)
COBRA	Consolidated Omnibus Budget Reconciliation Act of 1985 (P.L. 99-272)
CoCom	Coordinating Committee on Multilateral Export Controls
CODAP	Client Oriented Data Acquisition Process
COGME	Council on Graduate Medical Education
COLD	Chronic obstructive lung disease
CON	Certificate of Need
COPD	Chronic obstructive pulmonary disease
COPT	Circumoval precipitin test
COSH	Committee for Occupational Safety and Health
COTA	Certified occupational therapist assistant
COTH	Council of Teaching Hospitals
CPAP	Continuous positive airway pressure
CPDA-1	Citrate phosphate dextrose adenine-1
CPHA	Commission on Professional and Hospital Activities
CPI	Consumer Price index
CPR	Customary, prevailing, and reasonable
CPR	cardiopulmonary resuscitation
CPS	Current Population Survey (Census Bureau)
CPSA	Consumer Product Safety Act
CPSC	U.S. Consumer Product Safety Commission
CPT-4	Current Procedural Terminology, 4th Edition
CPV	Cumulative present value

CRIHB	California Rural Indian Health Board
CRL	Cholera Research Laboratory (Pakistan)
CRNA	Certified registered nurse anesthetist
CRNI	Certified registered nurse, intravenous
CRS	Congressional Research Service (U.S. Congress)
CRS	Cancer Response System (ACS)
CRTT	Certified respiratory therapy technician
CS	Cushing's syndrome
CSA	Community Services Administration (now Office of Community Services)
CSE	Community Services for the Elderly (New York State)
CSF	Cerebrospinal fluid
CSF	Colony stimulating factor
CSF	Cerebrospinal fluid
CSHCN	Children with Special Health Care Needs
CSHO	Compliance Safety and Health Officer (Occupational Safety and Health Administration)
CSIRO	Commonwealth Scientific Industrial Research Organization (Australia)
CSO	Claims services only
CSP	Cooperative Studies Program (Department of Veterans Affairs)
CSPI	Center for Science in the Public Interest
CSRS	Cooperative State Research Service (Department of Agriculture)
CSWE	Council on Social Work Education
CSWG	Chemical Selection Working Group
CT	Computed tomography (scanning; also seen as CAT, computerized axial tomography)
CTF	Canadian Task Force on the Periodic Health Examination
CTFA	Cosmetic, Toiletry, and Fragrance Association
CTL	Cytotoxic T lymphocyte
CTS	Collaborative Testing Services
CVD	Cardiovascular disease
CVM	Center for Veterinary Medicine
CWA	Clean Water Act
CWLA	Child Welfare League of America

D

DARP	Drug Abuse Reporting Program
DARPA	Defense Advanced Research Projects Agency (Department of Defense)
DATOS	Drug Abuse Treatment Outcome Study
DATTA	Diagnostic and Therapeutic Technology Assessment Program (American Medical Association)
DAV	Disabled American Veterans
DAWN	Drug Abuse Warning Network
DBC	Dedicated biotechnology company
DBCP	1,2dibromo-3-chloropropane
DBP	Diastolic blood pressure
DCB	1,4-Dichloro-2-butene
DCF	Domiciliary care facility (also known as bead and care facility)
DCRT	Division of Computer Research and Technology (National Institutes of Health)
DD	Developmental disability
DDST	Denver Developmental Screening Test
DDT	1,1'-(2,2-trychloroethylidene)

DDT	Dichloro-diphenyl-trichloro-ethane
DEA	U.S. Drug Enforcement Administration
DEC	Diethylcarbamazine
DEFRA	Deficit Reduction Act of 1984 (P.L. 98-369)
DEHP	Di(2-ethylhexyl)phthalate
DEN	Device Experience Network
DEPC	Diethylpyrocarbonate
DES	Diethylstilbestrol
DES	Drug Efficacy Study
DESI	Drug Efficacy Study implementation (project)
DHEW	U.S. Department of Health, Education, and Welfare (see DHHS)
DHF	Dengue hemorrhagic fever
DHHS	U.S. Department of Health and Human Services
DHSS	Department of Health and Social Security (United Kingdom)
DIMED	Drugs Division of the Ministry of Health (Brazil)
DISC	Diagnostic Interview Schedule for Children
DM&S	Department of Medicine and Surgery (now called the Veterans Health Services and Research Administration, Department of Veterans Affairs)
DMD	Duchenne muscular dystrophy
DME	Durable medical equipment
DMF	Drug Master File
DMN	Dimethylnitrosamine
DMSO	Dimethyl sulfoxide
DNA	Deoxyribonucleic acid
DNCP	Diet, Nutrition, and Cancer Program (NCI)
DNI	Do-Not-Intubate order
DNR	Do-Not-Resuscitate order
DNS	Director of nursing services
DO	Doctor of Osteopathy
DOC	U.S. Department of Commerce
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOJ	U.S. Department of Justice
DOL	U.S. Department of Labor
DON	Director of nursing
DOT	U.S. Department of Transportation
DP	Deblocking Protein
DPAHC	Durable power of attorney for health care
DPF	Deblocking Protein Factor
DPT	Diphtheria/pertussis/tetanus (combination vaccine)
DRG	Diagnosis-related group
DRG	Division of Research Grants (National Institutes of Health)
DRR	Division of Research Resources (National Institutes of Health)
DRS	Dementia Rating Scale
DRS	Diabetic Retinopathy Study
DRS	Division of Research Services (National Institutes of Health)
DSA	Digital subtraction angiography
DSF	Digital subtraction fluoroscope
DSM-IIIR	Diagnostic and Statistical Manual for Mental Disorders (Third Edition Revised)
DTH	Delayed-type hypersensitivity
DTP	Diphtheria, tetanus, and pertussis (combination vaccine)
DURIP	Defense University Research Initiative Program
DVA	U.S. Department of Veterans Affairs (formerly, VA)
DVB	Department of Veterans Benefits (now called the Veterans Benefits Administration in the Department of Veterans Affairs)

E

EAA	Export Administration Act
EAAA	Export Administration Act Amendments of 1985
EAB	Ethics Advisory Board (DHHS)
EAC	Estimated acquisition cost (e.g., for pharmaceuticals)
EACH	Essential Access Community Hospital
EBV	Epstein-Barr virus
ECA	Epidemiologic Catchment Area (Survey)
E C A	Epidemiologic Catchment Area program (National Institute of Mental Health)
ECaP	Exceptional Cancer Patients
ECC	Emergency cardiac care
ECG	Electrocardiogram (also EKG)
ECH	Emergency Care Hospital
ECMO	Extracorporeal membrane oxygenation
ECOG	Eastern Cooperative Oncology Group
ED	U.S. Department of Education
EDB	Ethylene dibromide
EDF	Environmental Defense Fund
EDTA	Ethylenediaminetetraacetate
EDTA	European Dialysis and Transplant Association
EEG	Electroencephalogram
EFM	Electronic fetal monitoring
EGF	Epidermal growth factor
EIA	Enzyme immunoassay
EISEP	Expanded In-Home Services for the Elderly (New York State)
EKG	Electrocardiogram (also ECG)
ELA	Establishment licensing application
ELISA	Enzyme-linked immunosorbent assay
EMC	Electronic media claims
EMG	Electromyography
EMS	Emergency medical services
EMT	Emergency medical technician
EMTD	Estimated maximum tolerated dose
ENA	Emergency Nurses Association
EOP	Executive Office of the President
EP	Extraction procedure
EPA	U.S. Environmental Protection Agency
EPC	European Patent Convention
EPCRA	Emergency Planning and Community Right-to-Know Act
EPI	Expanded Program on Immunization (World Health Organization)
EPO	Erythropoietin
EPO	European Patent Office
EPSCoR	Experimental Program to Stimulate Competitive Research (National Science Foundation)
EPSDT	Early and Periodic Screening, Diagnosis, and Treatment program (Medicaid)
ER	Emergency room
ERC	Engineering Research Center (National Science Foundation)
ERC	Environmental Reporter Cases
ERIC	Educational Resources Information Center (National Institute of Education
ERISA	Employee Retirement Income Security Act
ERTA	Economic Recovery Tax Act of 1981

ESG	U.S. Army and Joint Services Environmental Support Group (Department of Defense)
ESRD	End-stage renal disease
ESW	ExtraCorporeal shock waves
ESWL	ExtraCorporeal shock wave lithotripsy
ET	Expenditure target
ETIP	Experimental Technology Incentives Program (Department of Commerce)
ETS	Emergency Temporary Standard
ETS	Environmental tobacco smoke
EVIST	Ethics and Values in Science and Technology (National Science Foundation program)

F

FA	Fanconi's syndrome
FAA	U.S. Federal Aviation Administration
FACT	Foundation for Advancement in Cancer Therapies
FAI	Functional assessment inventory
FAM	Foundation for Alternative Medicine
FAMLI	Family Medicine Literature Index
FARS	Fatal Accident Reporting System
FASEB	Federation of American Societies for Experimental Biology
FBI	Federal Bureau of Investigation (DOJ)
FCA	Freund's complete adjuvant
FCC	U.S. Federal Communications Commission
FDA	Food and Drug Administration (PHS, DHHS)
FDCA	Federal Food, Drug, and Cosmetic Act
FDCA	Food, Drug, and Cosmetic Act
FDF	Fundamentally different factors
FEHB	Federal Employees Health Benefits Plan
FEP	Free erythrocyte protopophyrin
FEPCA	Federal Environmental Pesticide Control Act
FFP	Fresh-frozen plasma
FGF	Fibroblast growth factor
FH	Familial hypercholesterolemia
FHHC	Foundation for Hospice and Home Care
FHSA	Federal Hazardous Substance Labeling Act
FHSA	Federal Hazardous Substances Act
FHT	Face-hand test
FIC	Fogarty International Center (National Institutes of Health) (John E. Fogarty Center for Advanced Study in the Health Sciences)
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FINRRAGE	Feminist International Network of Resistance to Reproductive and Genetic Engineering
FIPR	Fondation de l'Industrie Pharmaceutique pour la Recherche (the French pharmaceuticals industry research foundation)
FMG	Foreign medical graduate
FmHA	Farmers Home Administration (USDA)
FNP	Family nurse practitioner
FNS	Food and Nutrition Service (Department of Agriculture)
FOA	Friends of Animals, Inc.
FOCMA	Feline-oncomavirus-cell-membrane-associated antigen
FOIA	Freedom of Information Act

FP	Family practitioner
FPP	Fetal protection policy
FR	Federal Register
FRAME	Fund for Replacement of Animals in Medical Experiments
FRC	Federal Radiation Council
FSA	Forensic Science Associates
FSA	Family Support Administration (DHHS)
FSCP	Family Supped Center Program
FSF	Forensic Science Foundation
FSH	Follicle-stimulating hormone
FSIS	Food Safety Inspection Service (Department of Agriculture)
FSP	Family Survival Project (California)
F S R T C	Forensic Science Research and Training Center (FBI/DOJ)
FSS	Federal Supply Schedule
FTC	U.S. Federal Trade Commission
FTCA	Federal Tort Claims Act
FTCA	Federal Trade Commission Act
FTE	Full-time equivalent
FUO	Fever of unknown origin
FY	Fiscal year

G

G	Guanine
G-6-PD	Glucose+-phosphate-dehydrogenase
G-CSF	Granulocyte colony stimulating factor
G/FP	General/family practitioner
GABA	Gamma-aminobutyric acid
GAC	Geriatric assessment center
GAO	General Accounting Office (U.S. Congress)
GAIT	General Agreement on Tariffs and Trade
GAU	Geriatric assessment unit
GBS	Guillain-Barré syndrome
GC/MS	Gas chromatography/mass spectrometry
GCRC	General Clinical Research Center
GDP	Gross domestic product
GDS	Global Deterioration Scale
GEC	Geriatric Education Center (Health Resources and Services Administration)
GEU	Geriatric Evaluation Unit
GGT	Gamma-glutamyl transpeptidase
GHAA	Group Health Association of America
GI	Gastrointestinal
GIFT	Gamete intrafallopian transfer
GLP	Good Laboratory Practices
GM	General Motors
GM-CSF	Granulocyte-microphage colony stimulating factor
GME	Graduate medical education
GMENAC	Graduate Medical Education National Advisory Committee
GMI	Gorgas Memorial Institute of Tropical and Preventive Medicine (Panama)
GML	Gorgas Memorial Laboratory (Panama)
GMP	Good manufacturing practices
GND	Great Neglected Diseases of Mankind (program) (Rockefeller Foundation)
GNP	Geriatric nurse practitioner

GNP	Gross national product
GnRH	Gonadotropin releasing hormone
GP	General practitioner
GPCI	Geographic Practice Cost Index
GPIA	Generic Pharmaceutical Industry Association
GPO	U.S. Government Printing Office
GRAFT	General Registry of Adrenal-Fetal Transplantation
GRAS	Generally recognized as safe
GRECC	Geriatric Research, Education, and Clinical Centers (Department of Veterans Affairs)
GSA	Gerontological Society of America
GSA	U.S. General Services Administration
GSH	Reduced glutathione
GVHD	Graft-versus-host disease

H

HAH	Halogenated aromatic hydrocarbon
HAI	Health Action International
HAMM	Human amnion membrane matrix
HANES	Health and Nutrition Examination Survey (National Center for Health Statistics)
HBcAg	Hepatitis B core antigen
HBGM	Home blood glucose monitoring
HBIG	Hepatitis B immune globulin
HBsAg	Hepatitis B surface antigen
HBSM	Health Benefits Simulation Model (Lewin-VHI)
HC	Homocystinuria
HCA	Hospital Corporation of America
HCFA	Health Care Financing Administration (DHHS)
hCG	Human chorionic gonadotropin
HCPCS	HCFA'S Common Procedure Coding System
HCRIS	Hospital Cost Report Information System
HCS	Hereditary cancer syndromes
HCUP	Hospital Cost and Utilization Project (NCHSR&HCTA)
HD	Huntington's disease
HD	Hemodialysis
HDL	High-density lipoprotein
HDLC	High density lipoprotein cholesterol
HDS	Hospital Discharge Survey (National Center for Health Statistics)
HDS	Office of Human Development Services (DHHS)
HEEP	Health and Environmental Effects Profile
HEMA	Hydroxyethylmethacrylate
HERAC	Health and Environmental Research Advisory Committee (Department of Energy)
HERL	Health Effects Research Laboratory (DOE)
HES	Health Examination Suvey
HEW	U.S. Department of Health Education and Welfare
HFV	High frequency ventilation
Hgb	Hemoglobin
hGH	Human growth hormone
HGML	Human Gene Mapping Library
HHA	Home health agency
HHA/HRA	Health hazard/health risk appraisal

HHANES	Hispanic Health and Nutrition Examination Survey (National Center for Health Statistics)
HHI	Herfindahl-Hirschman Index
HHMI	Howard Hughes Medical Institute
HHS	U.S. Department of Health and Human Services (also DHHS)
HI	Hemagglutination inhibition
HI	Hospital Insurance (Part A of Medicare)
HIAA	Health Insurance Association of America
Hib	Haemophilus influenza b
HIDA	Health Industry Distributors Association
HIM	Health Insurance Master Enrollment File
HIMA	Health Industry Manufacturers Association
HIP	Health Insurance Plan of New York
HIPC	Health Insurance Purchasing Cooperative
HIS	Health Interview Survey (National Center for Health Statistics)
HIV	Human immunodeficiency virus (AIDS virus)
HIA	Human leukocyte antigen
HIA	Human leukocyte antigen system
hMG	Human menopausal gonadotropin
HMG CoA	3-Hydroxy-3-methyl glutaryl coenzyme-A reductase
HMO	Health maintenance organization
HMSA	Health manpower shortage area (Federal designation)
HNF	Hans Nieper Foundation
HORL	Home Office Reference Laboratory, Inc.
HP	Habilitation plan (developmental disabilities)
HP	Histolytic proteolytic enzyme
HPA-23	Heteropolytungstate
HPB	Health Protection Branch, Health and Welfare Canada
HPLC	High performance liquid chromatography
HPOL	HMSA Placement Opportunity List
HPRT	Hypoxanthine-guanine phosphoribosyl transferase (or hypoxanthine phosphoribosyl transferase)
HRA	Health Resources Administration (former Public Health Service agency; see HRSA)
HRA	Health risk appraisals
HRET	Health Research and Educational Trust (New Jersey)
HRG	Health Research Group
HRS	Hazardous Ranking System
HRSA	Health Resources and Services Administration (PHS)
HSA	Health Services Administration (former Public Health Service agency; see HRSA)
HSA	Health services area
HSA	Health systems agency
HSDB	Hazardous Substances Data Bank
HSG	Hysterosalpingogram
HSI	Health status index
HSP	Health systems plan
HSQB	Health Standards and Quality Bureau (Health Care Financing Administration)
HSUS	Health Services Utilization Study (RAND Corporation)
HSWA	Hazardous and Solid Waste Amendments of 1984
HTLV	Human T-cell lymphotropic virus (formerly, human T-cell leukemia virus)
HTLV-1	Human T-cell lymphotropic virus-1
HTLV-2	Human T-cell lymphotropic virus-2
HTLV-III	Human T-cell lymphotropic virus, type III (formerly, human T-cell leukemia virus, type III) (see HIV)
HUD	U.S. Department of Housing and Urban Development
HUGO	Human Genome Organization

IACUC	Institutional animal care and use committee
IACVF	international Association of Cancer Victors and Friends
IADL	Instrumental activities of daily living
IARC	International Agency for Research on Cancer
IAT	Immuno-Augmentative Therapy
IATC	Interagency Technical Committee
IATPA	IAT Patients' Association
IBA	Industrial Biotechnology Association
IBC	Institutional biosafety committee
IBV	Infectious bronchitis virus
ICD-9	International Classification of Diseases, 9th Revision
ICD-9-CM	International Classification of Diseases, 9th Revision, Clinical Modification
ICDA	International Classification of Diseases, Amended
ICDDR/B	International Center for Diarrheal Disease Research, Bangladesh
ICF	intermediate care facility
ICF/MR	Intermediate care facilities for the mentally retarded
ICHP	Improved Child Health Project
ICRP	International Commission of Radiological Protection
ICU	Intensive care unit
IDAV	Immune-deficiency-associated virus
IDDM	Insulin-dependent diabetes mellitus
IDE	Investigational device exemption
IEC	Institutional ethics committee
IEC	International Electrotechnical Commission
IEP	Individualized educational program
IFA	Indirect fluorescent antibody (test)
IFAC	Industry Functional Advisory Committee
IFPMA	international Federation of Pharmaceutical Manufacturers Associations
Ig	Immunoglobulin
IgA	Immunoglobulin A
IGC	Intermagnetics General Corporation
IgG	Immunoglobulin G
IgM	Immunoglobulin M
IHA	Indian Housing Authority (Department of Housing and Urban Development)
IHA	Indirect hemagglutination assay
IHCIA	Indian Health Care Improvement Act
IHP	Individualized habilitation plan
IHS	Indian Health Service (Public Health Service)
IHSS	In-Home Supportive Services (program) (California)
IL-2	Interleukin-2
ILAR	Institute of Laboratory Animal Resources (National Research Council)
ILC	Independent living center (also CIL)
ILRAD	International Laboratory for Research on Animal Diseases
IMA	Individual Medical Account
IMD	Institution for mental disease
IMMAL	Scientific Working Group on the Immunology of Malaria (TDR)
IMRU	Institute of Microbiology at Rutgers University
IMU	Index of Medical Underservice
INA	Ice nucleation active
IND	Investigational new drug (notice of claimed investigational exemption for a new drug)

INSERM	Institut national de la santé et de la recherche mé dicale (National Health and Medical Research Institute - France)
IOC	Inorganic compound
IOCU	International Organization of Consumers Unions
IOH	Institute of Occupational Health (Finland)
IOL	Intraocular lenses
IOM	Institute of Medicine (National Academy of Sciences)
IOP	Intraocular pressure
IPA	Independent practice association; also seen as individual practice association
IPD	Intermittent peritoneal dialysis
IPM	Integrated pest management
IPO	Improved Pregnancy Outcome (project)
IPPB	Intermittent positive pressure breathing; and Intermittent Positive Pressure Breathing Trial
IPV	Inactivated polio vaccine
IRAC	Interagency Research Animal Committee
IRB	Institutional review board
IRC	Immunology Researching Centre, Inc. (Bahamas)
IRF	Immunology Research Foundation (Great Neck, NY)
IRLG	Interagency Regulatory Liaison Group
IRS	Internal Revenue Service
ISBT	International Society of Blood Transfusion
ISDM	Indian self-determination memos
ISDN	Integrated services digital network
ISEF	International Science and Engineering Fair
ISFH	International Society for Forensic Haemogenetics
ISG	Immune serum globulin
IS0	International Standards Organization
ISTAHC	International Society for Technology Assessment in Health Care
ITA	U.S. International Trade Administration
ITC	U.S. International Trade Commission
ITC	Interagency Testing Committee
ITC .	Investment tax credit
IUD	Intrauterine device
IUMRRG	Interagency Uranium Mining Radiation Review Group
IV	Intravenous
IVF	In vitro fertilization
IVGG	Intravenous gamma globulin
IVH	Intraventricular hemorrhage
IVI	In Vitro International, Inc.
IWRP	Individualized written rehabilitation program

J

JCAH	Joint Commission on Accreditation of Hospitals (now the JCAHO)
JCAHO	Joint Commission on the Accreditation of Healthcare Organizations
JIS	Japanese Industrial Standards
JISC	Japanese Industrial Standards Committee
JTPA	Job Training Partnership Act

K

KFH	Kaiser Foundation Hospitals
KFHP	Kaiser Foundation Health Plan
kg	Kilogram
KPMCP	Kaiser Permanence Medical Care Program
KPNCR	Kaiser Permanence Northern California Region
KS	Kaposi's Sarcoma

L

LA	Latex agglutination (test)
L A M	Levo-alpha-acetyl-methadol
LADB	Laboratory Animal Data Bank
M M P	Long-Term Care Assessment and Management Program (Pennsylvania)
LAV	Lymphadenopathy-associated virus
LC_{50}	Median lethal concentration
LC	Library of Congress (or LoC)
LC	Locus ceruleus
LD_{50}	Median lethal dose
LDC	Less-developed country
LDL	Low density lipoproteins
LH	Luteinizing hormone
LH-RH	Luteinizing hormone-releasing hormone
LHD	Local health department
LOAEL	Lowest observed adverse effect level
LOCA	Loss of coolant accident (nuclear reactor)
LOS	Length of stay
LPD	Luteal phase defect
LPN	Licensed practical nurse
LPS	Lipopolysaccharide
LRC-CPPT	Lipid Research Clinics-Coronary Primary Prevention Trial
LRE	Least restrictive environment
LRTI	Lower respiratory tract infection
LSD	Lysergic acid diethylamide
LSRO	Life Sciences Research Office (FASEB)
LTC	Long term care
LVAD	Left ventricular assist device
LVN	Licensed vocational nurse
LVPPD	Low-frequency, positive pressure ventilation

M

M&R	Maintenance and repair
MAAC	Maximum allowable actual charge
MAbs	Monoclinal antibodies
MAC	Multispecialty Advisory Committee (BCBSNJ)

MAD	Multidimensional Assessment for Dementia scale
MADRS	Medicare Automated Data Retrieval System
MAF	Medical Assistance Facility
MaLAM	Medical Lobby for Appropriate Marketing (Australia)
MAO-B	Monoamine oxidase B
MBI	Maryland Biotechnology Institute
MCAT	Medical College Admissions Test
MCH	Maternal and child health
MCH	Maternal and Child Health program (Bureau of Maternal and Child Health and Resources Development, HRSA)
MCHSF	Medicare Continuous History Sample File
MCL	Maximum contaminant level
MCLG	Maximum contaminant level goal
MCR	Medicare cost report
MCS	Multiple chemical sensitivity
MD	Medical doctor
MDA	4,4'-methylenedianiline
MDC	Major diagnostic category
ME	Medical examiner
MEDIPP	Medical District Initiated Program Planning (Department of Veterans Affairs)
MEDISGRPS	Medical Illness Seventy Grouping System
MEDLARS	Medical Literature Analysis and Retrieval System
MEDLINE	MEDLARS On-line
MEDPAR	Medicare Provider Analysis and Review file
MEI	Medicare Economic Index
MESA	Mining Enforcement and Safety Administration
MeSH	Medical subject headings
MEST	Muse ear swelling test
METs	Multiple employer trusts
MFI	Master Facility Inventory
mg	Milligram
MHAPPS	Modified Hazardous Air Pollutant Prioritization System
MHC .	Migrant health center
MHREF	Montana Hospital Research and Education Foundation
MHS	Medicare History Sample
MHS	Mmultihospital system
Ml	Myocardial infarction
MIB	Medical Information Bureau, Inc.
. MIC	Maternity and Infant Care (project)
-MID	Multi-infarct dementia
MIS	Management Information Service
MITI	Ministry of International Trade and Industry (Japan)
ML	Mouse lymphoma
MLAA	Medical Library Assistance Act
MLD	Metachromatic leukodystrophy
MLP	Midlevel practitioner
MLR	Mixed leukocyte response
MMACS	Medicare/Medicaid Automated Certification System
MMR	Measles, mumps, and rubella (vaccine)
MMTV	Mouse mammary tumor virus
MMWR	Morbidity and Mortality Weekly Report
MNC	Multinational corporation
MND	Motor neuron disease
MNIL	Medically needy income level
MNP	Medical Necessity Program (BCBSA)
MoAs	Memoranda of Agreement

MOPP	Mechlorethamine [nitrogen mustard] oncovine [vincristine], procarbazine, prednisone
MPBC	Midwest Plant Biotechnology Consortium
MPCA	Michigan Primary Care Association
MPP	Methylpyridine
MPTP	1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine
MR	Magnetic resonance
MR&A	Marketing Research and Analysis (Department of Veterans Affairs)
MREC	Medical Research Ethics Committee (Australia)
MRFIT	Multiple Risk Factor Intervention Trial
MRI	Magnetic resonance imaging
mRNA	Messenger RNA
MRO	Medical research organization
MRP	Medical removal protection
MRS	Magnetic resonance spectroscopy
MS	Multiple sclerosis
MSA	Metropolitan statistical area
MSHA	Mine Safety and Health Administration (Department of Labor)
MSKCC	Memorial Sloan-Kettering Cancer Center
MSQ	Mental Status Questionnaire
MSSD	Model Secondary School for the Deaf (federally-aided corporation; operated by Gallaudet University)
MSSP	Multipurpose Senior Services Program (California)
MSUD	Maple syrup urine disease
MTD	Maximum tolerated dose
mtDNA	Mitochondrial DNA
MUA	Medically underserved area (Federal designation)
MUA	Medically Undersexed Area
MUA/P	Medically Underserved Area/Population
MUP	Medically Underserved Population
MW	Molecular weight

N

NA	Narcotics Anonymous
NAAQS	National Ambient Air Quality Standards
NACAA	National Association of Consumer Agency Administrators
NACDS	National Association of Chain Drug Stores
NACHRI	National Association of Children's Hospitals and Related Institutions
NACo	National Association of Counties
NADA	New Animal Drug Application
NADAR	National AIDS Demonstration Research
NADH	Nicotinamide adenine dinucleotide
NAE	National Academy of Engineering
NAFAC	National Association for Ambulatory Care Centers
NAHMOR	National Association of HMO Regulators
NAIC	National Association of Insurance Commissioners
NAL	National Agricultural Library (Department of Agriculture)
NAMCS	National Ambulatory Medical Care Survey (National Center for Health Statistics)
NAMRU	Naval Medical Research Unit (Department of the Navy)
NANB	Non-A non-B hepatitis
NAPM	National Association of Pharmaceutical Manufacture=
NAPPH	National Association of Private Psychiatric Hospitals

NAPRALERT	Natural Product Data Base
NARD	National Association of Retail Druggists
NARF	National Association of Rehabilitation Facilities
NARIC	National Rehabilitation Information Center
NAS	National Academy of Sciences
NASA	U.S. National Aeronautics and Space Administration
NASADAD	National Association of State Alcohol and Drug Abuse Directors
NASHS	National Adolescent Student Health Survey
NASMHPD	National Association of State Mental Health Program Directors
NBP	National Blood Policy
NBS	National Bureau of Standards (Department of Commerce)
NCAB	National Cancer Advisory Board
NCAHF	National Council Against Health Fraud
NCAMP	National Coalition Against the Misuse of Pesticides
NCCAN	National Center on Child Abuse and Neglect (DHHS)
NCCLS	National Committee on Clinical Laboratory Standards, Inc.
NCEP	National Cholesterol Education Program (sponsored by NHLBI)
NCHCT	National Center for Health Care Technology (former Public Health Service agency)
NCHS	National Center for Health Statistics (Centers for Disease Control)
NCHSR	National Center for Health Services Research (former name of NCHSR&HCTA)
NCHSR&HCTA	National Center for Health Services Research and Health Care Technology Assessment (Public Health Service)
NCI	National Cancer Institute (NIH, DHHS)
NCI	National Cancer Institute (National Institutes of Health)
NCIC	National Crime Information Center
NCLIS	National Commission on Libraries and Information Science
NCNR	National Center for Nursing Research (National Institutes of Health)
NCPIE	National Council for Patient Information and Education
NCRA	National Cooperative Research Act of 1984
NCSH	National Clearinghouse for Smoking and Health
NCTR	National Center for Toxicological Research (FDA, DHHS)
NCVHS	National Committee on Vital and Health Statistics (National Center for Health Statistics)
NDA	New Drug Application
NDATUS	National Drug and Alcoholism Treatment Unit Survey
NDE-MIS	New Drug Evaluation Management Information Systems
NDGA	Nordihydroguaiarectic acid
NEH	National Endowment for the Humanities
NEI	National Eye Institute (National Institutes of Health)
NEISS	National Electronic Injury Surveillance System
NEMA	National Electrical Manufacturers Association
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NFT	Neurofibrillary tangles
NGA	National Governors' Association
NGF	Nerve growth factor
NHANES	National Health and Nutrition Examination Survey (National Center for Health Statistics)
NHCAA	National Health Care Anti-Fraud Association
NHDS	National Hospital Discharge Survey (National Center for Health Statistics)
NHF	National Hemophilia Foundation
NHF	National Health Federation
NHIS	National Health Interview Survey (National Center for Health Statistics)
NHIS-CH	National Health Interview Survey on Child Health (National Center for Health Statistics, Office of Maternal and Child Health [HRSA], and National Institute for Child Health and Human Development)

NHL	Non-Hodgkins lymphoma
NHLBI	National Heart, Lung, and Blood Institute (National Institutes of Health)
NHMRC	National Health and Medical Research Council (Australia)
NHSC	National Health Service Corps (BHCDA, HRSA, PHS)
NHSDA	National Household Survey on Drug Abuse (National Center for Health Statistics and National Institute on Drug Abuse)
NHTSA	National Highway Traffic Safety Administration (Department of Transportation)
NIA	National Institute on Aging (National Institutes of Health)
NIAAA	National Institute on Alcohol Abuse and Alcoholism (Alcohol, Drug Abuse, and Mental Health Administration)
NIAD	National Institute on Adult Daycare
NIADDK	National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases (former institute of the National Institutes of Health; now see NIDDK)
NIAID	National Institute of Allergy and Infectious Diseases (National Institutes of Health)
NIAMS	National Institute of Arthritis and Musculoskeletal and Skin Diseases (National Institutes of Health)
NIC	Newly-industrialized country
NICHD	National Institute of Child Health and Human Development (National Institutes of Health)
NICU	Neonatal intensive care unit
NIDA	National Institute on Drug Abuse (Alcohol, Drug Abuse, and Mental Health Administration)
NIDDK	National Institute of Diabetes and Digestive and Kidney Diseases (National Institutes of Health)
NIDR	National Institute of Dental Research (National Institutes of Health)
NIDRR	National Institute on Disabilities and Rehabilitation Research (Department of Education) (formerly NIHR)
NIEHS	National Institute of Environmental Health Sciences (National Institutes of Health)
NF	Nitrogen fixation
NIGMS	National Institute of General Medical Sciences (National Institutes of Health)
NIH	National Institutes of Health (Public Health Service)
NIHARC	National Institutes of Health Animal Research Committee
NIHB	National Indian Health Board
NIHR	National Institute of Handicapped Research (now see NIDRR)
NIJ	National Institute of Justice
NIMH	National Institute of Mental Health (Alcohol, Drug Abuse, and Mental Health Administration)
NIMS	National Infant Mortality Survey (Centers for Disease Control)
NINCDS	National Institute of Neurological and Communicative Disorders and Stroke (National institutes of Health)
NINDS	National Institute of Neurological Disorders and Stroke
NIOSH	National Institute for Occupational Safety and Health (Centers for Disease Control)
NIST	National Institute of Standards and Technology (DOC)
NK	Natural killer (cells)
NLCHCR	National Leadership Coalition for Health Care Reform
NLETS	National Law Enforcement Telecommunications System
NLM	National Library of Medicine (National Institutes of Health)
NLN	National League for Nursing
NLRA	National Labor Relations Act
NLRB	National Labor Relations Board
NLS	National Longitudinal Survey of Labor Market Experience (Ohio State University)
NLSY	National Longitudinal Survey of Youth (Ohio State University)
NLTCS	National Long-Term Care Survey (Health Care Financing Administration/Assistant Secretary of HHS for Planning and Evaluation and U.S. Department of Commerce)
NMA	National Medical Association
NMAC	National Medical Audiovisual Center (National Library of Medicine)

NMC	National Medical Care, Inc.
NMCES	National Medical Care Expenditure Survey (NCHSR&HCTA)
NMCUES	National Medical Care Utilization and Expenditure Survey (National Center for Health Statistics)
NMES	National Medical Expenditure Survey (NCHSR&HCTA)
NMFI	National Master Facility Inventory
NMR	Nuclear magnetic resonance
NNHS	National Nursing Home Survey (National Center for Health Statistics)
NNS	National Natality Survey (National Center for Health Statistics)
NOAEL	No observed adverse effects level
NOEL	No observed effects level
NOES	National Occupational Exposure Survey (National Institute for Occupational Safety and Health)
NOHS	National Occupational Hazar Survey (National Institute for Occupational Safety and Health)
NOSIE	Nurses' Observation Scale for Inpatient Evaluation
NOTA	National Organ Transplant Act
NP	Nurse practitioner
NPD	National Patent Development Corporation
NPDES	National Pollution Discharge Elimination System
NPDWR	National Primary Drinking Water Regulations
NPH	Normal pressure hydrocephalus
NPL	National Priority List (EPA sites)
NPN	Nonprotein nitrogen
NPRM	Notice of Proposed Rulemaking
NPT	Nocturnal penile tumescence
NRC	National Research Council (National Academy of Sciences)
NRDC	National Research and Demonstration Center
NRDC	Natural Resources Defense Council
NRHA	National Rural Health Association
NSA	National Security Agency
NSA	Normal serum albumin
NSABP	National Surgical Adjuvant Project for Breast and Bowel Cancers
NSAM	National Survey of Adolescent Males
NSC	National Safety Council
NSC	National Survey of Children
NSF	National Science Foundation
NSFG	National Survey of Family Growth (NCHS, NICHD, and OPA)
NSMS	National Safety Management Society
NSO	National Service Officer (Department of Veterans Affairs)
NSPHPC	National Survey of Personal Health Practices and Consequences (National Center for Health Statistics)
NSYM	National Survey of Young Men
NSYW	National Survey of Young Women
NTID	National Technical Institute for the Deaf (federally-aided corporation; part of Rochester Institute of Technology)
NTIS	National Technical Information Service (Department of Commerce)
NTP	National Toxicology Program (PHS, DHHS)
NTP	National Toxicology Program (National Institute of Environmental Health Sciences)
NWHL	National Wildlife Health Laboratory

0

OAA	Older Americans Act
OAG	Open-angle glaucoma
OARS	Older American's Research and Service Center Instrument
OASDI	Old Age and Survivors' Disability Insurance
OASH	Office of the Assistant Secretary for Health (DHHS)
OB-GYN	Obstetrics-gynecology
OB/GYN	Obstetrician/gynecologist
OBER	Office of Basic Energy Research (Department of Energy)
OBRA	Omnibus Budget Reconciliation Act
OBRA-81	Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35)
OBRA-86	Omnibus Budget Reconciliation Act of 1986 (Public Law 99-509)
OBRA-87	Omnibus Budget Reconciliation Act of 1987 (Public Law 100-203)
OBRA-89	Omnibus Budget Reconciliation Act of 1989 (Public Law 101-239)
OBRA-90	Omnibus Budget Reconciliation Act of 1990 (Public Law 101-508)
OCAW	Oil Chemical and Atomic Workers International Union
OCC	Office of Cancer Communications (National Cancer Institute)
OCCPR	Open-chest cardiopulmonary resuscitation
OCHAMPUS	Office of the Civilian Health and Medical Program of the Uniformed Services (Department of Defense)
OCS	Office of Community Services (Family Support Administration)
OCSE	Office of Child Support Enforcement (Family Support Administration)
OCT	Omithine carbamoyl transferase (or omithine transcarbamylase)
ODE	Office of Demonstrations and Evaluation (Health Care Financing Administration)
ODF	Outpatient drug free
ODPHP	Office of Disease Prevention and Health Promotion (Public Health Service)
OECD	Organization for Economic Cooperation and Development
OFA	Office of Family Assistance (Family Support Administration)
O F E	Office of Facilities' Engineering
OH	Ocular hypertension
OHDS	Office of Human Development Services (DHHS)
OHER	Office of Health and Environmental Research (Department of Energy)
OHR	Office of Health Research (EPA)
OHSS	Ovarian hyperstimulation syndrome
OHTA	Office of Health Technology Assessment (NCHSR&HCTA)
OIG	Office of the Inspector General (e.g., of DHHS)
OIML	International Organization for Legal Metrology
OJJDP	Office of Juvenile Justice and Delinquency Prevention (Department of Justice)
OLP	Office of Legislation and Policy (Health Care Financing Administration)
OMAR	Office of Medical Applications of Research (National Institutes of Health)
OMB	Office of Management and Budget (Executive Office of the President)
OME	Object Memory Evaluation
OME	Otitis media with effusion
OMIM	On-Line Mendelian Inheritance in Man
ONR	Office of Naval Research (Department of Defense)
OoB	Office of Biologics Research and Review (Food and Drug Administration)
OPA	Office of Population Affairs (Public Health Service)
OPD	Outpatient department
OPHC	Office of Prepaid Health Care (Health Care Financing Administration)
OPIC	Overseas Private Investment Corporation
OPM	U.S. Office of Personnel Management

OPMC	Office of Professional Medical Conduct (State of New York)
OPP	Office of Pesticide Programs (EPA)
OPV	Oral polio vaccine
OR	Office of Research (Health Care Financing Administration)
OR	Operating room
ORD	Office of Research and Demonstrations (Health Care Financing Administration)
ORH	Office of rural health (State-level)
ORHP	Office of Rural Health Policy (Health Resources and Services Administration)
ORR	Office of Refugee Resettlement (Family Support Administration)
ORT	Oral dehydration therapy
OSAP	Office for Substance Abuse Prevention (Alcohol, Drug Abuse, and Mental Health Administration)
OSERS	Office of Special Education and Rehabilitative Services (Department of Education)
OSH	Office on Smoking and Health (Public Health Service)
OSH Act	Occupational Safety and Health Act
OSHA	Occupational Safety and Health Administration (Department of Labor)
OSMA	Office of Small Manufacturers Assistance (Food and Drug Administration)
OSTP	Office of Science and Technology Policy (Executive Office of the President)
OT	Occupational therapist
OTA	Office of Technology Assessment (U.S. Congress)
OTC	Over-the-counter drug
OTI	Office of Treatment Improvement (ADAMHA, PHS, DHHS)
OTS	Office of Toxic Substances (Environmental Protection Agency)

P

P,P'-DDE	1,1'-(2,2-dichloroethenylidine)
P/S	Pyrimethamine/sulfadoxine
PA	Physician assistant
PA	Plasminogen activator
PA	Physician assistant
PAC	Pharmaceutical Advertising Council
PaCS	Patient Care and Services (quality assurance instrument, DHHS)
PACS	Picture archiving and communications system
PAF	Platelet activating factor
PAH	Polycyclic aromatic hydrocarbons
PAHO	Pan American Health Organization
PAHs	Polycyclic aromatic hydrocarbon, polynuclear aromatic hydrocarbon
PAMIE	Physical and Mental Impairment of Function Evaluation
PAS	Para-aminosalicylic acid
PAS	Professional Activity Study
PASSPORT	Pre-Admission Screening System Providing Options and Resources Today (Ohio)
PATBILL	Medicare's inpatient bills file
PBBs	Polybrominated biphenyls
PC	Progenitor cryptocides
PCBs	Polychlorinated biphenyls
PCCA	Primary care cooperative agreement
PCE	Pentachloroethane
PCEH	President's Committee on Employment of the Handicapped
PCIS	Patient Care Information System
PCP	Phencyclidine
PCP	Pentachlorophenal
PCP	Phencyclidine phosphate ("angel dust")

PCP	Pneumocystis carinii pneumonia
PCR	Polymerase chain reaction
PCT	Patent Cooperation Treaty
PDB	Protein Data Bank
PDD	Pervasive developmental disorder
PDGF	Platelet derived growth factor
PDPRC	Prescription Drug Payment Review Commission (U.S. Congress) (more commonly known as RxPRC)
PDQ	Physician Data Query (NCI)
PDT	Photodynamic therapy
PEEP	Positive end expiatory pressure
PEL	Permissible exposure limit (Occupational Safety and Health Administration)
PET	Positron emission tomography
PFC	Plaque forming cell
PFTH	Program for the Handicapped (CHAMPUS)
PGDRS	Psychogeriatric Dependency Rating Scale
PGP	Prepaid group practice
PHC	Pediatric Home Care
PHDDS	PRO Hospital Discharge Data Set
PHI-IS	Preventive Health and Health Services (block grant)
PHP	Prepaid health plan
PHS	Public Health Service (DHHS)
PHSA	Public Health Service Act
PhysPRC	Physician Payment Review Commission (U.S. Congress) (more generally shown as PPRC)
PIC	Policy Information Center (Office of the Assistant Secretary for Planning and Evaluation, DHHS)
PID	Pelvic inflammatory disease
PID	Program information document
PIR	Protein Identification Resource
PKU	Phenylketonuria
PLA	Product Licensing Application
PMA	Pharmaceutical Manufacturers Association
PMA	Premarket approval
PMAA	Premarket approval application
PMC	Patient management category
PMMA	Polymethylmethacrylate
PMN	Premanufacture Notice
PNI	Psychoneuroimmunology
PNP	Purine nucleoside phosphorylase (enzyme)
PNS	Peripheral nervous system
POD	Polycystic ovarian disease
POMS	Program Operations Manual System
POS	Provider of Service File
POSCH	Program on the Surgical Control of the Hyperlipidemias
PPA	Plant Patent Act
PPA	Private practice assignment
ppb	parts per billion
PPD	Purified protein derivative
PPF	Plasma protein fraction
PPI	Physician Performance Index
pprn	parts per million
PPO	Preferred provider organization
PPO	Private practice option
PPRC	Physician Payment Review Commission (U.S. Congress)
PPS	Prospective payment system (Medicare)

PRI	Primate Research Institute (University of New Mexico)
PRO	Peer review organization
ProPAC	Prospective Payment Assessment Commission (U.S. Congress)
PSAS	Prosthetics and Sensory Aids Service (Department of Veterans Affairs)
PSP	Progressive supranuclear palsy
PSRO	Professional standards review organization
PSTC	Program in Science and Technology Cooperation (U.S. Agency for International Development)
PSU	Primary sampling unit
PT	Physical therapist
PTA	Percutaneous transluminal angioplasty
PTAA	Patent and Trademark Amendment Act
PTC	Prothrombin complex
PTCA	Percutaneous transluminal coronary angioplasty
PTEC	Prosthetic Technology Evaluation Committee (Department of Veterans Affairs)
PTL	Phenylthiourea
PTO	Patent and Trademark Office
PTSD	Post-traumatic stress disorder
PVA	Paralyzed Veterans of America
PVD	Peripheral vascular disease
PVIZT	1-phenyl-5-vinyl-2-imidazolidine-thione
PVN	Predicted value negative
PVP	Predicted value positive
PVPA	Plant Variety Protection Act
Px	Peroxidase

Q

QALY	Quality-adjusted life year
QSAR	Quantitative structure-activity relationships

R

R&D	Research and development
RAC	Recombinant DNA Advisory Committee (National Institutes of Health)
Rb	Retinoblastoma
RB/RVS	Resource-based relative value scale (Medicare)
RBC	Red blood cell
RBRVS	Resource-based relative value scale
rCD4	Recombinant soluble CD4
RCHSA	Radiation Control for Health and Safety Act
RCOG	Royal College of Obstetricians and Gynecologists
RCRA	Resource Conservation and Recovery Act
RCT	Randomized clinical trial
RDA	Recommended dietary allowance
RDLP	Research and development limited partnership
rDNA	Recombinant DNA (deoxyribonucleic acid)
RDS	Respiratory distress syndrome
REACH	Rural Efforts to Assist Children at Home
RES	Reticuloendothelial system
RF	Radiofrequency waves

RFLP	Restriction fragment length polymorphism
RFP	Request for proposal
RHC	Rural health clinic (Medicare/Medicaid-certified)
RHo(D)	anti-Rh antigen immune globulin
rHuEPO	Recombinant (human) erythropoietin
RIA	Radioimmunoassay
RICO	Racketeer Influenced and Corrupt Organizations Act
RICU	Respiratory intensive care unit
RIPA	Radioimmunoprecipitation assay
RISA	Radioimmunosorbent assay
RIT	Rochester Institute of Technology
RMCL	Recommended maximum contaminant level
RMP	Regional Medical Program
RN	Registered nurse
RNA	Ribonucleic acid
ROP	Retinopathy of prematurity
RPAR	Rebuttable presumptions against registration
RPCH	Rural Primary Care Hospital
RPHA	Reverse passive hemagglutination (test)
RPMS	Resource and Patient Management System
RQ	Reportable quantity
RRC	Residency review committee
RRC	Rural referral center (Medicare-certified)
RRF	Registered research facility
RRT	Registered respiratory therapist
RSA	Rehabilitation Services Administration (Office of Special Education and Rehabilitative Services, Department of Education)
RSA	Resource sharing agreement
RSV	Respiratory syncytial virus
RT	Respiratory therapist
RTC	Research and training centers (NIDRR)
RTC	Residential treatment center for emotionally disturbed children
RTECS	Registry of Toxic Effects of Chemical Substances (National Institute for Occupational Safety and Health)
RUG	Resource utilization group
RUG-II	Resource utilization group system used by New York State case mix evaluation
RVF	Rift Valley fever
RVS	Relative value scale
RWJ	Robert Wood Johnson Foundation (also seen as RWJF)
RxPRC	Prescription Drug Payment Review Commission (U.S. Congress)

S

S/HMO	Social (services) and health maintenance organization
SAB	Scientific Advisory Board
SADAP	State Alcohol and Drug Abuse Profile
SAES	State Agricultural Experiment Stations
SAIDS	Simian acquired immunodeficiency syndrome
SAM	Society for Adolescent Medicine
SAMHSA	Substance Abuse and Mental Health Services Administration (in USDHHS, PHS)
SAR	Structure-activity relationship
SARA	Superfund Amendments and Reauthorization Act of 1986
SAT	Serum alpha-1-antitrypsin

SBA	Small Business Administration
SBIR	Small Business Innovation Research (program)
SC	Subcutaneous
SCA	Sickle cell anemia
SCAG	Sandoz Clinical Assessment Geriatric Scale
SCAN	Senior Care Action Network (California)
SCD	Sterile connection device
SCE	Sister chromatid exchange
SCH	Sole community hospital (Medicare-certified)
SCO	Supportive care only
SDAT	Senile dementia of the Alzheimer type
SDD	Specific developmental disorder
SDMIX	South Dakota Medical Information Exchange
SDW	Survey of Disability and Work (Social Security Administration, DHHS)
SDWA	Safe Drinking Water Act
SEC	U.S. Securities and Exchange Commission
SEED	Service Enriched Communities for the Elderly and Disabled (program) (California)
SEER	Suveillance, Epidemiology, and End Results Program (National Cancer Institute)
SENIC	Study on the Efficacy of Nosocomial Infection Control (Centers for Disease Control)
SES	Socioeconomic status
SGA	Substantial gainful activity
SGOT	Serum glutamic oxaloacetic transaminase (former name for AST)
SGPT	Serum glutamic pyruvic transaminase (former name for ALT)
SHCC	Statewide health coordinating council
SHPDA	State health planning and development agency
SIC	Standard industrial code
SIC	Standard Industrial Classification
SIDS	Sudden infant death syndrome
SIP	Survey of Institutionalized Persons (Bureau of the Census, U.S. Department of Commerce)
SITE	Superfund Innovative Technology Evaluation
SLA	Statutory Licensing Authority (United Kingdom)
SMDM	Society for Medical Decision Making
SMHA	State Mental Health Agency
SMHS	State Medicaid Household Survey
SMSA	Standard Metropolitan Statistical Area
SNARL	Suggested no adverse response level
SNF	Skilled nursing facility
SNUR	Significant New Use Rule
SOBRA	Sixth Omnibus Budget Reconciliation Act of 1986
SOC	Synthetic organic chemical
SOD	Superoxide dismutase
SOM	Sensitivity of method
SPCA	Society for the Prevention of Cruelty to Animals
SPECT	Single photon emission computed tomography
SPMSQ	Short Portable Mental Status Questionnaire
SPRANS	Special Projects of Regional and National Significance
SRBC	Sheep red blood cell
SRBI	Schulman, Ronca, & Bucuvalas, Inc.
SRCD	Society for Research in Child Development
SRI	Stanford Research Institute
SSASSA	Social Security Administration (DHHS)
SSDI	Social Security Disability Income
SSDI	Social Security Disability Insurance (program) (Social Security Administration)
SSI	Supplemental Security Income (program) (Social Security Administration)
SSN	Social security number

SSR	Society for the Study of Reproduction
STD	Sexually transmitted disease
STEL	Short term exposure limit
STG	Stuugroep Toekomstscenario's Gezondheidszorg (The Netherlands' Steering Committee on Future Health Scenarios)
STS	Serological test for syphilis
SUP	Sustaining University Program
SUR	Safe Use Rule

T

T	Thymine
T&A	Tonsillectomy and adenoidectomy
T&S	Type-and-screen
T/S	Trimethoprim/sulfamethoxazole
TA1	Tumor Antibody 1
TA2	Tumor Antibody 2
TAR	Treatment assessment research
TASC	Treatment Alternative to Street Crime
TC	Therapeutic community
TC	Tumour Complement
TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
TCDD	Tetrachlorodibenzo-p-dioxin
TCE	Trichloroethylene
TCGF	T-cell growth factor (also known as interleukin-2)
TDB	Toxicology Data Bank (National Library of Medicine)
TDI	Toluene diisocyanate
TDM	Therapeutic drug monitoring
TDR	Special Program for Research and Training in Tropical Diseases (U.N. Development Program/World Bank/World Health Organization)
TDRC	Toxic Design Research Committee
TEC	Technology Evaluation and Coverage Program (BCBSA)
TEFRA	Tax Equity and Fiscal Responsibility Act of 1982 (P.L. 97-248)
TH	Tyrosine hydroxylase
THA	Tetrahydroaminoacridine
THC	delta-9-tetrahydrocannabinol
TIA	Transient ischemic attack
TIACC	Therapeutic Inequivalency Action Coordinating Committee (Food and Drug Administration)
TIF	Tumor induction factor
TIL	Tumor-infiltrating lymphocytes
TIPP	The Injury Prevention Program (American Academy of Pediatrics)
TLV	Threshold limit value
TMV	Tobacco mosaic virus
TNF	Tumor necrosis factor
TOPS	Treatment Outcome Prospective Study
TPA	Third party administrator
tPA	Tissue type plasminogen activator
TPMG	The Permanence Medical Group, Inc.
TPN	Total parenteral nutrition
TPQ	Threshold planning quantity
TRAIS	Tribal Resource and Assistance Information System

TRI	**Toxic Release Inventory**
Triple I	**Interstate Identification Index (NCIC)**
tRNA	**Transfer RNA**
TSCA	**Toxic Substances Control Act**
TSD	**Tay-Sachs disease**
TWA	**time weighted average**
TWGDAM	**Technical Working Group on DNA Analysis Methods (DOJ)**

u

UAGA	**Uniform Anatomical Gifts Act**
UAMCMDS	**Uniform Ambulatory Medical Care Minimum Data Set**
UAW	**United Auto Workers**
UCC	**Uniform Commercial Code**
UCLA	**University of California at Los Angeles**
UCR	**Usual, customary, and reasonable**
UFFI	**Urea-formaldehyde foam insulation**
UHDDS	**Uniform Hospital Discharge Data Set**
UL	**Underwriters Laboratories, Inc.**
UMTA	**Urban Mass Transpiration Administration (Department of Transportation)**
UN	**United Nations**
UNCTAD	**United Nations Conference on Trade and Development**
UNCTC	**United Nations Centre on Translational Corporations**
UNDP	**United Nations Development Program**
UNEP	**United Nations Environment Program**
UNESCO	**United Nations Educational, Scientific and Cultural Organization**
UNICEF	**United Nations International Children's Emergency Fund (now the United Nations Children's Fund)**
UNIDO	**United Nations Industrial Development Organization**
UNSCEAR	**United Nations Scientific Committee on the Effects of Atomic Radiation**
UPF -	**United Parkinson Foundation**
UPOV	**International Union for the Protection of New Varieties of Plants**
UR	**Utilization review**
URTI	**Upper respiratory tract infection**
USAMRIID	**United States Army Medical Research Institute of Infectious Diseases**
USC	**United States Code**
USCA	**United States Court of Appeals**
USCG	**United States Coast Guard**
USDA	**United States Department of Agriculture**
USP	**United States Pharmacopeia**
USP DI	**United States Pharmacopeial Dispensing Information**
USP	**United States Pharmacopoeia**
USPHS	**United States Public Health Service**
USPS	**United States Postal Service**
USPSTF	**United States Preventive Services Task Force"**
USTR	**United States Trade Representative**
USUHS	**Uniformed Services University of the Health Sciences**
UV	**Ultra-violet (radiation)**

V

VA	**Veterans Administration (now Department of Veteran Affairs)**
VAD	**ventricular assist device**
VAMKC	**Veterans Administration Marketing Center, Hines, Illinois**
VAPC	**Veterans Administration Prosthetics Center**
VAT	**Value added tax**
VBA	**Veterans Benefits Administration (Department of Veterans Affairs)**
VCM	**Vinyl chloride monomer**
VFW	**Veterans of Foreign Wars of the United States**
VHA	**Voluntary Hospitals of America**
VHAI	**Voluntary Health Association of India**
VHS&RA	**Veterans Health Services and Research Administration (Department of Veterans Affairs)**
VLA	**Voluntary Licensing Authority (United Kingdom)**
VLDL	**Very low-density lipoprotein**
VNA	**Visiting Nurse Association**
VNTR	**Variable number of tandem repeats**
VOC	**Volatile synthetic organic chemical**
VP	**Vasopressin**
VR	**Vocational rehabilitation**
VSG	**Variant surface glycoprotein**
VZIG	**Varicella zoster immune globulin**

W

WAIS	**Weschler Adult Intelligence Scale**
WAK	**Wearable artificial kidney**
WAMI	**Washington, Alaska, Montana, and Idaho**
WBC	**White blood cell**
WBGH	**Washington Business Group on Health**
WHA	**World Health Assembly**
WHO	**World Health Organization (UN)**
WIC	**Women, Infants, and Children Program**
WIPO	**World International Property Organization**
WMA	**World Medical Association**
WMS	**Weschler Memory Scale**
WRAIR	**Walter Reed Army Institute of Research**
WRPRC	**Wisconsin Regional Primate Research Center**

X Y Z

XP	**Xeroderma pigmentosum**
YAG	**Yttrium/aluminum/garnet (laser)**

OFFICE OF TECHNOLOGY ASSESSMENT

Compiled

GLOSSARY OF TERMS

A

ABO blood group: The major classification system for human blood, which is based on two antigens (A and B) on the surface of red blood cells. Four blood types are defined by the presence of one (type A or B), both (type AB), or neither (type O) of these antigens.

Abortion: The spontaneous or induced termination of pregnancy before the fetus would be capable of independent survival outside the womb (generally before 24 weeks gestation).

Abortion rate: The estimated number of abortions per 1,000 women of childbearing age (usually age 15 to 44).

Abortion ratio: The number of abortions per 1,000 live births.

Abortus: An aborted fetus. See fetus.

Acceptable daily intake (ADI): See reference dose.

Access: The ability to obtain needed medical care. Elements of access include availability, affordability, and approachability.

Accidental injury: Any injury that is not purposely self-inflicted or caused by maltreatment or other violence.

Accounts receivable: The full amount of patient care charges owed to a hospital or other health care facility. Average days in accounts receivable refers to the average number of days it takes a hospital or other facility to collect the full amount of patient care charges.

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 considered nonaccredited. Hospitals that either do not request a survey or are not eligible to be surveyed are considered unaccredited. Compare certification bv HCFA.

Accuracy: The extent to which a measurement conforms with the true value. In describing a diagnostic test, accuracy is the number of correct test results (i.e., the total of true-positives and tree-negatives) divided by the total number of tests performed. Diagnostic accuracy may vary with the prevalence of the disease in the population. See also sensitivity and specificity.

Acetylation: The addition of one *or* more acetyl groups (CH_3CO) to an organic compound,

Acetylcholine: A neurotransmitter, released at the synapses of parasympathetic nerves and at neuromuscular junctions, whose function is to transmit nerve impulses and to initiate contraction of muscles. Acetylcholine is diminished in Alizheimer's disease. See neurotransmitter.

Acetylcholinesterase: An enzyme found at nerve junctions that catalyzes the breakdown of the neurotransmitter acetylcholine after transmission of a nerve impulse so that subsequent impulses may pass. See neurotransmitter.

Achondroplasia: An autosomal dominant genetic disorder of bone growth marked by a defect in the formation of cartilage at the ends of long bones of the arms and legs, leading to short stature.

Acne (vulgaris): A chronic inflammatory disease of the hair follicles and sebaceous glands, with lesions occurring most frequently on the face, chest, and back.

Acquired immunity: Disease resistance aquired after birth. Such immunity may be active or passive (see active immunity and passive immunity). Compare innate immunity.

Acquired immunodeficiency syndrome (or acquired immune deficiency syndrome): See AIDS.

Action level: In the regulation of toxic substances, the point at which steps must be taken to reduce the concentration of a contaminant or toxic substance in food, air, or water. An action level is based on the same criteria as a tolerance, but the action level is temporary, until a tolerance level can be set, and is not legally binding. Compare tolerance level.

Active immunity: Disease resistance in a person or animal due to antibody production or other responses of the immune system after exposure to a disease-causing agent or a vaccine. Compare passive immunity.

Active ingredient (of a pesticide): The component of a chemical compound that produces the desired biochemical effect; specifically, the pesticide itself. Compare inert ingredient.

Activities of daily living (ADLs): Activities related to personal care including bathing, dressing, getting in and out of bed or a chair, using the toilet, and eating. Compare instrumental activities of daily living.

Actual charge (Medicare): The charge billed to the patient by a physician or other supplier of Medicare Part B medical services, equivalent to the billed or submitted charge. Along with the provider's customary charge and the prevailing charge in the locality, the actual charge is used to determine approved charges. See customary, prevailing, and reasonable charges.

Acupuncture: A treatment that involves piercing the skin with very fine needles at certain key "acupoints" on the body. Acupuncture is based on the theory that energy flows along specific pathways or "meridians" connecting the organs deep in the body with the acupoints on the surface of the body. The flow of energy is believed to be disrupted by disease, and may be restored to equilibrium by acupuncture.

Acute care: Medical services offered within a hospital setting over a short period of time designed to treat patients for acute episodes of illness, injuries, and after surgery.

Acute condition: A problem or disease of limited duration, as opposed to one that is chronic. According to the DHHS National Center for Health Statistics, a condition is considered acute if: 1) it was first noticed no longer than three months before the reference date of the interview, and 2) it is not one of the conditions considered chronic regardless of the time of onset. However, any acute condition not associated with either at least one doctor visit or at least one day of restricted activity is considered to be of minor consequence and is excluded from the final data produced by the DHHS National Center for Health Statistics' National Health Interview Survey.

Acute exposure: See duration of exposure, or frequency of exposure.

Acute illness: An illness characterized by a single episode of fairly short duration, usually less than 30 days, from which the patient can be expected to return to his or her normal or previous state of activity. Examples include infections such as pneumonia and influenza. Compare chronic illness.

Acute incontinence: See incontinence.

Acute respiratory infections (ARIs): A group of infections of the respiratory tract caused by viruses, bacteria, or mycoplasma, or, very rarely, by fungi, protozoa, or the secondary effects of worms. Examples are pertussis, influenza, diphtheria, and measles. For clinical purposes, ARIs are divided between the upper and lower respiratory tracts. Upper respiratory tract infections occur around the teeth, gums, sinuses, throat, tonsils, epiglottis, middle ear, larynx, and trachea. Lower respiratory tract infections, in the lungs and bronchi, include various types of pneumonia and bronchitis.

Acute Toxicity Test: Tests that are used to detect the toxic effects (e.g., lethality, eye and skin imitation, sensitization) of single or multiple exposures to a substance. These are frequently the first tests performed to determine the toxic characteristics of a given substance. One of the most common acute toxicity tests is the LD_{50} (median lethal dose) test, which measures the quantity of a chemical compound that, when applied directly to experimental animals, is estimated to be fatal to 50 percent of those animals under the conditions of the test,

Acute-care hospital: A hospital in which the average length of stay is less than 30 days.

Acute: In medical care, used to describe a disorder or symptom that has a sudden onset, sharp rise, and short duration (compare chronic). In occupational and environmental health, used to describe a disease or injury that is manifest soon after exposure to a hazard.

ADA deficiency: An autosomal recessive disorder caused by deficiency of the enzyme adenosine deaminase (a key enzyme in DNA and RNA synthesis and breakdown). ADA deficiency interferes with DNA synthesis, lymphocyte proliferation, and immune response (resulting in impairment of the body's defenses).

Adaptive immunity: See acquired immunity.

Add-on controls: Measures for occupational injury and illness prevention or environmental protection that are put into place after the workplace is built and equipment installed.

Addiction model: A model of treatment for alcohol and drug abuse based on the philosophy that once a person has become a problem user of alcohol or drugs, he or she will always be a problem user and should permanently avoid any use of alcohol and/or drugs.

Adenovirus: Any of a group of DNA-containing viruses originally identified in human adenoid tissue, causing respiratory diseases, and including some capable of inducing malignant tumors in experimental animals. See also virus; compare reovirus and retrovirus.

Adhesions: Fibrous tissue that develops between two previously separate organs or surfaces (e.g., joints, intestinal loops) as a result of inflammation, infection, tissue damage, or healing of a wound following surgery.

Adjustment disorder: A type of mental disorder defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) as "a maladaptive reaction to an identifiable psychosocial stressor that occurs within three months of the onset of the stressor." Such disorders are manifest in impaired functioning or in excessive reactions to the stressor, symptoms which typically remit after the stressor ceases or, if the stressor continues, when a new level of adaptive functioning is achieved.

Adjuvant: A substance or treatment given in conjunction with another treatment. In immunology, a substance added to a vaccine which non-specifically enhances its antigenicity. In cancer treatment, "adjuvant chemotherapy" refers to drug therapy used to combat micrometastases that may be present at the time of primary surgical treatment.

Administration on Aging: The Federal agency within the U.S. Department of Health and Human Services that was established under the Older Americans Act of 1965 to administer the provisions of the act at the Federal level.

Administrative controls: Methods of reducing worker exposures to occupational hazardls through administrative arrangements (e.g., by rotating a worker from areas of high exposure to areas of low exposure to reduce that worker's average exposure level, or through scheduling of jobs or processes that generate hazards at times when few workers are present). Compare engineering controls, personal protective equipment, and work practice controls.

Admissions (to a hospital): Number of patients, excluding newborns, accepted for hospital inpatient service during a particular reporting period (American Hospital Association definition).

Adolescence: Definitions of adolescence vary, and many observers agree that a definition based on age alone is not sufficient. Adolescence typically takes place during the second decade of life, and is initiated by puberty. See early adolescence, middle adolescence, late adolescence, younger adolescents, older adolescents.

Adolescent health: Narrow definitions of adolescent health can include the absence of physical disease and disability, absence of engagement in health-compromising behaviors, social competence, and perceived quality of life. See also health.

Adrenal medulla: The innermost region of the adrenal glands (a pair of small glands that lies atop each kidney) involved in the body's response to physical and emotional stress. Adrenal medulla cells secrete hormones (e.g., epinephrine and norepinephrine) into the circulation in response to stimulation by sympathetic nerves; have also been used experimentally as neural grafting material. See chromaffin cell.

Adult day care centers: See adult day centers.

Adult day centers: Community-based entities that provide health care, social, and other services for small groups of functionally impaired adults in group settings during specified hours of the week. Some adult day centers are freestanding, and others are situated in hospitals, nursing homes, senior centers, or other agencies.

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.

Adverse selection: In health insurance, the tendency of persons with poorer than average health expectations to apply for or continue insurance to a greater extent than persons with average or better health expectations. In prenatal care studies, a bias that results from the tendency of women who experience a problem with their pregnancy or who have information that leads them to expect problems (e.g., a poor pregnancy history) to seek care early and often. These women are likely to be at higher than average risk of poor outcomes.

Advocacy: Refers to support, coordination and linkage to experts, individuals, groups, and institutions who may help adolescents. May be provided by parents or others known to an adolescent.

Aerobic: Growth or activity of living things that requires the presence of oxygen.

Aerosolized vaccine: A vaccine administered through the nose and mouth by inhaling a vapor, rather than by injection or ingestion.

Affective disorders: Psychological disorders with symptoms involving a marked change in the patient's mood or emotional state (e.g., manic depression).

Aftercare: Health care services designed to help individuals make the transition from in-patient care to community-based or home-based care.

Age of majority: The age at which by law a person is entitled to the management of his or her own affairs and to the enjoyment of civic rights, Currently, the age of majority is set at age 18 in every State but Alaska, Nebraska, and Wyoming, where the age is 19.

Age-adjusted mortality rate: The death or mortality rate adjusted for the age distribution of the population under study. Age adjustment allows a direct comparison of the overall mortality experience of 2 or more populations, or examination of mortality over time in a single population, by using a single statistic. Age adjustment is necessary because populations differ in their proportions of people in different age categories, and different age groups have different mortality rates; for example, death rates for 25- to 34-year-olds are much lower than for 55 to 64-year-olds. Comparing populations without adjusting for the different age distributions of persons within each population (for example, a population with a high proportion of persons over 55 yearn of age versus a population with a high proportion of persons under 55 years of age) could lead to erroneous conclusions about the relative health of the populations being compared. See also crude mortalitv rate and mortalitv rate.

Agglutination: A specific reaction in which cells (such as red blood cells) or discrete particles (including bacteria) suspended in a liquid medium adhere to each other and form clumps; used to identify incompatible blood types and unknown bacteria.

Aggravated assault: See assault.

Aging network agencies: Agencies that are part of a loosely related network of agencies that have developed to seine elderly people since the enactment of the Older Americans Act in 1965. These agencies include the 57 State units on aging, the 670 area agencies on aging (AAAs), and thousands of other agencies that provide services for elderly people through contracts or other agreements with AAAs.

- Agnosia: A disorder caused by damage to areas of the brain involved in interpretation and memory recall, usually occurring after a stroke or head injury; manifested by an inability to recognize and interpret certain sensations and perceptions involving one or more of the senses (sight, taste, hearing, smell, and touch). In auditory agnosia, for example, patients cannot interpret the sounds that they hear.

Agonist: A substance that occupies receptors in the brain and activates the receptor eliciting a drug effect or action (compare antagonist).

Agranulocytosis: Absence of granulocytes (basophils, eosinophils, and neutrophils) in the blood; the most severe form of granulocytopenia, an abnormal condition characterized by diminished production of granulocytes in the bone marrow (which can occur as a side effect of certain drug or radiation treatments or with certain disorders affecting the bone marrow) or by a loss of granulocytes in the peripheral blood (e.g., as a result of increased splenic sequestration or certain infections and disorders).

Aid to Families With Dependent Children (AFDC) program: A program, established by the Social Security Act of 1935, providing cash payments to needy children (and their caretakers) who lack support because at least one parent is dead, disabled, continually absent from the home, or unemployed. Eligible families must meet income and resource criteria specified by the State.

AIDS (acquired immunodeficiency syndrome): A disease caused by infection with HIV (human immunodeficiency virus) and characterized by impaired immune function. The primary defect in AIDS is an aquired, persistent, quantitative functional depression within the T4 subset of lymphocytes. This depression often leads to infections caused by microorganisms that usually do not produce infections in

individuals with normal immunity. HIV infection can be transmitted from one infected individual to another by means that include the sharing of a contaminated intravenous needle and engaging in unprotected sexual intercourse (i.e., intercourse without the use of condoms).

AIDS dementia: A form of dementia that is due to brain infection by the virus that causes AIDS.

AIDS-related complex (ARC): A variety of chronic but nonspecific symptoms and physical findings that appear related to AIDS and that may consist of chronic generalized lymphadenopathy, recurrent fevers, weight loss, diarrhea, fatigue, night sweats, minor alterations in the immune system, and minor infections. Some persons with AIDS-related complex may develop full-blown AIDS, while in others the condition may represent the height of clinical illness in reaction to infection with HIV. Compare lymphadenopathv syndrome.

Albumin: A small protein, synthesized in the liver, which is the most abundant protein in blood plasma and is important in maintaining plasma volume through maintenance of an osmotic gradient between plasma in the blood vessels and fluids in the surrounding tissues. Albumin also serves as the earner molecule for fatty acids and other small molecules in plasma. Also called "human serum albumin."

Alcohol abuse: A pattern of habitual, long-term, pathological use of alcohol, causing impairment in social or occupational functioning. Compare alcohol dependence.

Alcohol dependence: Either a pattern of pathological alcohol use (e.g., daily use of alcohol for adequate functioning, inability to cut down or stop drinking) or impairment in social or occupational functioning due to alcohol, andeither tolerance or withdrawal (e.g., shakes) after cessation or reduction in drinking; impairs intellectual functioning, physical skills, memory, and judgment; heavy consumption can cause cardiomyopathy, peripheral neuritis, cirrhosis of the liver, and/or enteritis. Alcohol dependence has also been called alcoholism.

Alcohol, drug abuse, and mental health (ADM) block grant: The major Federal program providing funds to States for outpatient alcohol, drug abuse, and mental health treatment programs (funds are not allowed to be used for inpatient services). States receive a share of the ADM block grant appropriation through a formula based in part on the size of the State population (Subpart 1, part B of Title XIX of the Public Health Service Act). The ADM block grant consolidated funds that were formerly made available under a variety of categorical programs, most significantly programs under the Community Mental Health Centers Act of 1963. The ADM block grant is administered by the Office of Treatment Improvement in the Alcohol, Drug Abuse, and Mental Health Administration in DHHS.

Alcoholics Anonymous (AA): A self-help support group for assisting recovery from alcoholism. The process is based on the 12 steps to recovery, which include admitting addiction, acknowledging one's impotence to stop without the help of a higher power, and confronting the harm one has done.

Alcoholism: A term often used to describe what is now primarily called alcohol dependence.

Allele: An alternative form of a gene, or a group of functionally-related genes, located at the corresponding site on a homologous chromosome. Each allele is inherited separately from each parent. Alleles can be dominant, recessive, or co-dominant for a particular genetic trait.

Allergen: Any of a diverse group of substances (e.g., pollen, fur, feathers, mold, dust) that cause an allergic reaction in an immunologically hypersensitive person.

Allergy: A disorder in which the body's immune system becomes hypersensitive to a particular substance, causing a reaction between the allergen and tissue-bound antibodies; this leads to damage of cells, release of histamine and serotonin, inflammation of tissue, and the characteristic symptoms of the particular allergy (such as asthma, dermatitis, hay fever, or anaphylaxis). See hypersensitivity.

Allogeneic: In immunology, refers to biological material (serum, grafted tissue, cells) derived from genetically different members of the same species.

Allograft: Living tissue or cells transplanted between individuals of the same species.

Alloimmunity: Development of immunity by one individual against the antigens of another individual of the same species (e.g., development of anti-Rh antibodies in an Rh negative individual upon infusion of Rh positive blood).

Allopathy/allopathic practitioner: Terms used to refer to mainstream Western medicine and its practitioners, The term was coined by Samuel Hahnemann, the founder of homeopathy, originally as a pejorative term, though it has largely lost that connotation.

Allotment (in relation to Native Americans): A Federal policy pursued in the late 19th and early 20th centuries to "civilize" Indians by: 1) assigning each adult Indian a specific amount of land (usually 160 acres); 2) setting aside a small amount of land for tribal purposes; 3) opening the resulting "excess" land to non-Indian settlement; and 4) holding the Indian land and proceeds from sales of the 'excess lands" in trust for Indians until they became assimilated. See also assimilation.

Allowable costs: Referring to the Medicare Program, hospital costs that are reimbursable.

Allowed charge: See approved charge.

Alpha thalassemia: A genetic disorder involving defective synthesis of alpha chains of hemoglobin, resulting from deletion of one or more of the four genes that code for the alpha hemoglobin chains. If all four genes are deleted, the disorder is lethal in utero or affected newborns are stillborn with hydrops fetalis; if three of the four genes are deleted, hemoglobin H disease results, causing hemolytic anemia of variable severity; if only one or two of the genes are deleted, alpha thalassemia minor (the carrier state) results, which is associated with no clinical abnormalities.

Alpha-1-antitrypsin deficiency: An autosomal recessive heritable disease named for the lack of a protein enzyme inhibitor called alpha-a-antitrypsin. Affected individuals usually die of degenerative lung and liver disease.

Alpha-fetoprotein: A protein formed in the fetal liver and gastrointestinal tract and present in small amounts in amniotic fluid and maternal blood; unusually high levels may be found in some cases of fetal abnormalities (such as neural tube defects), in multiple pregnancies, and in cases of threatened or actual miscarriage; abnormally low levels may indicate the presence of Down's syndrome in the fetus.

ALT testing: A laboratory test performed on a blood sample to detect a liver enzyme called serum alanine aminotransferase; used to evaluate the presence of acute liver disease, including certain types of hepatitis and cirrhosis. (Previously called SGPT (serum glutamic pyruvic transaminase) testing.)

Alternative facility licensure: The process by which a State creates a new category of licensed health care facility or new licensure rules for existing categories of facilities for the purpose of maintaining the viability and accessibility of certain facilities or services.

Alzheimer's Association chapters: Local chapters of the Alzheimers Association. As of May 1990, there were 210 Alzheimer's Association chapters, in every State except Alaska.

Alzheimer's Association: A national, privately funded, voluntary association, founded in 1980, to: 1) support research on Alzheimer's disease and related disorders; 2) stimulate awareness of Alzheimer's disease among the public and professionals; 3) encourage the formation of local chapters to create a nationwide family support network; 4) advocate legislation at the Federal, State, and local levels; and 5)

provide services for patients and their caregivers. Also known as the Alzheimer's Disease and Related Disorders Association (ADRDA).

Alzheimer's diagnostic and assessment centers: See States' regional Alzheimer's diagnostic and assessment centers.

Alzheimer's Disease and Related Disorders Association (ADRDA): See Alzheimer's Association.

Alzheimer's Disease Research Centers (ADRCS): Fifteen centers, funded by the National Institute on Aging, that conduct biomedical and clinical research on Alzheimer's disease and provide educational programs for the public and information and referrals for people who are involved in their clinical research programs.

Alzheimer's disease: A chronic, progressive disease of unknown cause that attacks brain cells or tissues, first described in 1906 by the German neurologist Alois Alzheimer. Alzheimer's disease is the most common cause of dementia in older people, accounting for 60 to 80 percent or more of all cases. A definitive diagnosis of Alzheimer's disease requires histopathologic confirmation after the patient's death. A probable diagnosis of Alzheimer's disease can be made with confidence if there is a typical insidious onset of dementia with progression and if there are no other systemic or brain diseases (e.g., Parkinson's disease, multi-infarct dementia, drug intoxication, brain disease and other chronic infections of the nervous system), subdural hematoma, Huntington's disease, Creutzfeldt-Jacob disease, or brain tumor-that could account for the progressive memory and other cognitive deficits. See also dementia.

Ambulatory care: Health care services provided to patients who are not inpatients of hospitals or other residential facilities (e.g., residential treatment centers, nursing homes). Such services may be provided by a private physician or group practice, a public clinic, or a hospital outpatient department.

Ambulatory surgery: Scheduled surgical services provided to patients who do not remain in a hospital overnight. The surgery may be performed in hospital operating suites or procedure rooms within a freestanding ambulatory care center.

Ambulatory Tocodynamometry: See tocodvnamometry.

Amebiasis: An infectious disease found in tropical and subtropical countries, caused by the parasite Entamoeba histolytica, which is spread by food or water contaminated by infected feces; characterized by moderate or severe diarrhea, loss of weight, anemia, ulceration of the intestines, and occasionally the development of abscesses in the liver, lung, testes, or brain. Also called "amoebic dysentery."

Amenorrhea: The abnormal absence or cessation of menstruation.

American Indians and Alaska Natives: See Indian.

American trypanosomiasis: See Chagas' disease.

Ames Test: An experimental test of mutagenicity of chemical compounds in which the rate of mutations observed among mutant strains of the bacterium Salmonella typhimurium exposed to a sample of a chemical substance is interpreted as an indication of the carcinogenic potential of the substance tested. The test, named after its developer, Bruce Ames, is commonly used as a preliminary screening test for determining the carcinogenic potential of chemical compounds.

Amino acid: Any of a group of 20 molecules that join together in various combinations to form proteins. A protein's shape, properties, and biological functions are determined in part by the specific sequence of its constituent amino acids.

Aminoaciduria: A group of genetic disorders of amino acid metabolism characterized by the abnormal accumulation of one or more amino acids in the blood (and thus excessive excretion in the urine), each the result of different defective enzymes in the relevant metabolic pathways. Symptoms vary with the specific compounds involved. Examples of such disorders include phenylketonuria (PKU), homocystinuria, alkaptonuria, and cystinuria.

Amniocentesis: A diagnostic procedure that involves withdrawing a small sample (usually 2 to 8 ml) of amniotic fluid surrounding the fetus in utero. The fluid taken contains cells shed by the developing fetus. The cells can be grown in culture and analyzed either biochemically or cytogenetically to detect a variety of genetic abnormalities in the fetus, including genetic diseases such as Down's syndrome and Tay Sachs disease, and developmental disorders such as neural tube defects. Also used in the third trimester before delivery to evaluate the status of fetal lung development.

Anaerobic: Growth or activity of living things that takes place in the absence of oxygen (e.g., fermentation).

Analgesic: An agent that relieves pain; refers to mild non-narcotic drugs (e.g., aspirin and acetominophen) and to more potent narcotic drugs (e.g., morphine).

Anaphylaxis: An abnormal immune response, including the release of histamine, in a hypersensitive person who is reexposed to a previously encountered allergen, such as after an insect bite or drug injection; can be manifested either as a localized response (an allergic attack) or as an extreme and generalized reaction (anaphylactic shock) in which difficult breathing, pallor, hypotension, loss of consciousness, and possibly heart failure may result if untreated. See immediate hypersensitivity.

Ancillary services or technology: Medical technology or services used to support basic clinical services, including diagnostic radiology, radiation therapy, clinical laboratory, and other special services.

Anemia: A reduction in the amount of hemoglobin in the blood (e.g., below 11 grams per deciliter of whole blood), caused by a variety of factors, such as accidental or chronic loss of blood, impaired production of red cells, dietary iron deficiency, an abnormally high rate of destruction of red cells in the circulation, or certain vitamin deficiencies; major types include hemorrhagic anemia, aplastic anemia, iron-deficiency anemia, hemolytic anemia, and megaloblastic anemia; symptoms include excessive fatigue, breathlessness on exertion, pallor, and poor resistance to infection.

Anencephaly: A developmental disorder characterized by the partial or complete absence of the central hemispheres of the brain, the top of the skull, and the spinal cord, usually resulting in death in utero or shortly after birth.

Anesthetic: An agent that causes loss of sensation in all or part of the body or loss of consciousness; includes general, local, or topical agents.

Aneuploidy: An abnormal number (either an excess or a deficiency) of chromosomes or chromosome sets. Normal higher animals have two complete sets of chromosomes (i.e., are diploid), one of paternal origin and one of maternal origin. Aneuploidy includes defects of additional or fewer than normal individual chromosomes (trisomy; monosomy) or of entire chromosome sets (e.g., triploidy).

Aneurysm: An abnormal swelling in the wall of an artery or of the heart resulting from degenerative disease, damage, or congenital abnormality. Aneurysms, which may occur in the aorta or the vessels arising from it, in the heart, or in the brain, can rupture, leading to hemorrhage and local necrosis of tissue.

Angina: Any spasmodic, choking, or suffocating pain. The term is often used to denote angina pectoris--a condition characterized by severe, transient chest pain, accompanied by a feeling of suffocation, which is due to a deficiency in the blood supply to the heart.

Angiography: See arteriography

Animal model: An animal disease analogous to a human disease, used to study the etiology and treatment of human disease (e.g., by laboratory testing of experimental drugs). Animal models may be homologous (sharing a common origin) or analogous (being similar in effect) to the human disease or injury being studied.

Animal patents: The patenting of nonhuman transgenic animal life forms. The United States is currently the only country that has issued a patent for an animal developed with biological techniques. The ability to patent animals introduces a new legal concept of animal ownership and raises a number of ethical, economic, and practical issues.

Animal reservoir: See reservoir and host.

Anorexia nervosa: A psychological disorder characterized by an intense fear of becoming obese, disturbance of body image, significant weight loss (accounted for by no known physical disorder), refusal to maintain a minimal normal 'body weight; and amenorrhea (in females). "Anorexia," which means loss of appetite, is a misnomer because loss of appetite is usually rare until late in the illness.

Anovulation: The absence of ovulation (development and release of an ovum from the ovary).

Antagonist: A substance that tends to nullify the action of another, i.e., a drug that binds to a cell receptor without eliciting a biologic response, and competitively blocks access to that receptor for other drugs or displaces them from the receptor terminating their action. Compare agonist.

Antenatal: See prenatal.

Antenatal transfer: The transport of pregnant women, usually in order to ensure delivery of the infant at a hospital with the appropriate level of care, prior to delivery.

Anthroposophy: A spiritual tradition encompassing all aspects of life, including medicine, founded by the Austrian-born clairvoyant Rudolf Steiner in the early 20th century.

Antibiotic: A chemical substance (often produced by a micro-organism) that is administered to inhibit the growth of bacterial and fungal infections in humans or animals. Examples are penicillin, tetracycline, erythromycin, and cephalosporins.

Antibody: A blood protein (immunoglobulin) produced by lymphocytes, a type of white blood cell, in response to the introduction of a specific antigen (e.g., invading bacteria, incompatible red blood cells, inhaled pollen grains, or foreign tissue grafts). Once produced, the antibody has the ability to combine with the specific antigen that stimulated antibody production, and thereby render the antigen harmless. This reaction to foreign substances is part of the immune response. At present, five classes of antibodies are distinguishable. Most of the circulating antibodies are immunoglobulin G (lgG); the others are lgM, lgA, lgD, and lgE. See also immunoglobulin.

Anticipatory guidance: Counseling about topics important to health, optimally provided before such problems have arisen.

Anticoagulant: A substance that prevents the formation of blood clots or breaks up clots in blood vessels, including substances such as heparin or synthetic warfarin; used to treat thrombosis and to prevent or treat stroke or transient ischemic attack.

Anticodon: A triplet of nucleotides in a transfer RNA molecule that binds to the complementary codon on messenger RNA during the polypeptide-producing (translation) process in the ribosome. The amino acid carried by the transfer RNA is inserted into the growing polypeptide chain. See codon.

Anticore testing: A laboratory test performed on a blood sample to indicate presence or absence of antibody to hepatitis B core antigen.

Anticruelty Statutes: Laws passed by States that prohibit active cruelty, and in some cases passive cruelty (neglect), to animals. Some of these laws acknowledge the potential application of anticruelty statutes to research animals, but more of them exempt "scientific experiments" entirely. Twenty States and the District of Columbia regulate research to some extent. Twenty-one States have some provisions in their codes requiring the teaching of "kindness" to or the "value" of animals, and a few place restrictions on animal experimentation in secondary schools.

Antigen: A substance that the body regars as foreign and that elicits an immune response (generating an antibody to react against the antigen or increasing lymphokine production, or both). Antigenic substances may include microorganisms, cells, tissue grafts, or toxins. See antibody and monoclinal antibodies.

Antihemophilic factor (AHF): A plasma protein involved in blood coagulation. A congenital deficiency of Factor Vlll results in the bleeding disorder known as hemophilia A. AHF is thus used primarily as a treatment for hemophilia A. AHF is also called "Factor Vlll."

Antimalarial: A drug, such as chloroquine, that prevents or suppresses malaria infection.

Antimyosin antibodies: Antibodies directed against myosin, a protein component of muscle.

Antiserum: Blood serum containing antibodies against specific antigens, injected to treat or confer passive immunity against specific diseases.

Antitrust laws: Laws such as the Clayton Act (15 U.S.C. 12-27) that prohibit institutional mergers and acquisitions, exclusive contracts, joint ventures, and other business dealings in areas that may substantially reduce competition or have the tendency to produce a monopoly, and consequently have a detrimental effect on consumer welfare.

Anxiety/Anxiety disorders: Anxiety is a feeling of apprehension, tension, or uneasiness that stems from the anticipation of danger, either internal or external. Anxiety is manifested by physiological changes such as sweating, tremor, and rapid pulse. Anxiety disorders include phobias, obsessive compulsive disorders, and post-traumatic stress disorders, as well as anxiety (panic) attacks and "generalized anxiety disorders" Separation anxiety disorder involves irrational fears or panic about being separated from those to whom one is attached, usually the parent(s). While separation anxiety disorder is more common among children, it may continue into adolescence.

Anxiolytic: A term used to describe a drug that dispels anxiety.

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.

Aphakia: The absence of the crystalline lens of the eye, commonly due to the surgical removal of lens cataracts, causing severe loss of the ability to focus; requires correction by lens implants, contact lenses, or glasses.

Apheresis: A procedure in which blood is separated into its basic components (red cells, white cells, platelets, and plasma), and one or more of these is selectively removed from the blood. The procedure

usually involves removing whole blood from the body, separating the blood into cellular and noncellular (plasma) parts or fractions, and returning the cellular fraction to the patient.

Apnea monitor: A medical device that monitors heartbeat and detects the cessation of breathing, usually used for infants born prematurely or at high risk of sudden death.

Approved charge (Medicare): An individual charge determination made by a Medicare carrier on a covered Part B medical service or device. In the absence of unusual medical circumstances, it is the lowest of: (1) the physician's or supplier's customary charge for that service; (2) the prevailing charge for similar services in the locality; (3) the actual charge made by the physician or supplier; and (4) the carrier's private business charge for a comparable service. Also called allowed charge or reasonable charge. Also see customary, prevailing, and reasonable (CPR) method.

Apraxia: Impairment of the ability to organize skilled, coordinated movements (such as buttoning buttons, walking, dressing, eating a meal, or maintaining a sitting position) due to brain damage from stroke, head injury, infection, or brain disease. Also called dyspraxia.

Arbovirus: One of a large number of RNA-containing viruses transmitted from animals to man via arthropods (insects, ticks, mosquitoes, etc.), responsible for causing a number of diseases, such as various forms of encephalitis, dengue fever, and yellow fever. Although they comprise several groups of viruses that are closely related, arboviruses do not comprise a natural taxonomic category of related organisms, but are grouped together because of their mode of transmission. The term is a shortening of the term arthropod-borne virus.

Area agencies on aging (AAAs): Local public or private nonprofit agencies designated by States to implement certain provisions of the Older Americans Act. As of 1989, there were 670 AAAs. In general, AAAs are mandated to plan for and ensure the availability of services for elderly people rather than to provide the services directly. Some AAAs provide public education, information and referral, outreach, and case management for elderly people, including some people with dementia.

Arenavirus: One of a group of viruses traditionally grouped with the arboviruses, probably incorrectly. Arenaviruses probably are not transmitted by arthropods, though their life cycles still are not fully known.

Argininemia: A rare, potentially fatal, recessive genetic disorder marked by severe mental retardation and various neurological abnormalities (e.g., seizures) in some cases. It is characterized by excessive amounts of the amino acid arginine in the blood and spinal fluid, caused by decreased activity or deficiency of the enzyme arginase.

Arginosuccinate synthetase deficiency: See citrullinemia.

Arrest rate: The number of arrests made in a given population per some population base during a given time period.

Arrhythmia (of the heart): An abnormal variation in the normal rhythm or rate of the heart beat, caused by an intermittent or continuous disturbance in the electrical impulses to the heart; can occur in heart disease or without apparent underlying cause.

Arteriography: A diagnostic procedure that allows blood vessels to be seen on X-ray film after the injection of contrast material into the bloodstream; used to detect abnormalities such as aneurysms, clots, tumors, and injured organs.

Atieriosclerosis: A general term that describes thickened and hardened arteries, the condition that leads to most cases of heart disease and a significant proportion of cerebrovascular disease in the United States. Atherosclerosis, a proliferative condition resulting in the accumulation of fatty deposits and cellular components, is the most common form of arteriosclerosis. See atherosclerosis.

Arteriovenous: Pertaining to or affecting an artery and a vein.

Arthropod: An invertebrate animal belonging to the phylum Arthropod, which includes insects, ticks, spiders, and crustaceans.

Artificial insemination (AI): The introduction of sperm into a woman's vagina or uterus by noncoital methods, for the purpose of conception,

Artificial kidney: See dialvzer.

Arylsulfatase B deficiency: An autosomal recessive disorder of lipid metabolism caused by a deficiency in the production of the enzyme arylsulfatase B. The symptoms of this disorder (which is a form of the brain disorder called metachromatic leukodystrophy) are severe physical changes including hydrocephalus, with death usually occurring by the late teenage years.

Asbestosis: A chronic disease of the respiratory system due to inhalation of asbestos fibers, associated with the development of lung cancer and pleural mesothelioma.

Ascites: The excessive accumulation of fluid in the abdominal cavity, often due to infection, heart failure, hypertension, cirrhosis, and various forms of cancer.

Asexual reproduction: Reproduction without the interaction of two organisms; examples of animals that reproduce asexually include amoeba and paramecium.

Asphyxia: Lack of oxygen resulting in suffocation or near-suffocation (e.g., from drowning, choking, or breathing poisonous gas).

Assault: Unlawful intentional infliction, or the attempt to inflict, injury upon another person. Simple assault is the unlawful intentional infliction of less than serious bodily injury without a deadly or dangerous weapon, or an attempt or threat to inflict bodily injury without a deadly or dangerous weapon. Aggravated assault is the unlawful intentional infliction of serious bodily injury or death by means of a deadly or dangerous weapon with or without actual infliction of injury.

Assignment: A process whereby a Medicare beneficiary assigns his or her right to payment from Medicare to the physician or supplier. In return the physician or supplier agrees to accept Medicare's reasonable or allowed charge as payment in full for covered services. The physician (or supplier) bills Medicare directly and is paid an amount usually equal to 80 percent of Medicare's reasonable or allowed charge (less any deductible, where applicable), The physician (or supplier) may not charge the beneficiary (nor can the physician or supplier collect from another party, such as a private insurer) more than the applicable deductible and coinsurance amounts. For physicians and suppliers who do not accept assignment, payment is made by Medicare directly to the beneficiary, who is responsible for paying the bill. In addition to the deductible and coinsurance amounts, the beneficiary is liable for any difference between the physician's actual charge and Medicare's reasonable (allowed) charge.

Assimilation (in relation to Native Americans): A Federal policy pursued in the late 19th and early 20th centuries, in which tribally held communal lands were broken up and individual Indians were given allotments of land in order to induce them to leave their traditional ways of life. See also allotment.

Assisted ventilation: Mechanical assistance in performing or controlling the breathing function.

Asthma: A disorder leading to recurrent constriction of the bronchial tubes, producing wheezing and difficulty in breathing; typically in response to a wide range of stimuli, including irritation, allergens, physical exertion, emotional stress, or infection.

Astigmatism: A defect of vision in which the cornea is not truly spherical, preventing light rays from meeting at a single focal point; results in distortion of images, a lack of sharpness, or unevenness of focus.

Astrocyte: A type of glial cell (connective tissue in the central nervous system) that may provide nutrients for neurons and may take part in information storage processes. After injury to the central nevous system, astrocytes form a scar at the site of nerve damage and block regeneration of axons. See glial cell.

Atherogenesis: The formulation of patchy plaques of fatty or lipid material on the inner lining of the arteries, restricting blood flow and encouraging the development of blood clots; can result in sudden stoppage of blood flow to the heart.

Atherosclerosis: A descriptive term for thickened and hardened lipid-rich lesions of the medium and large muscular arteries; classified into two forms: early lesions, consisting of fatty streaks, and advanced lesions, consisting of fibrous plaques; commonly occurs in arteriosclerosis, in which deposits of fibrous and cellular tissue, cholesterol, and fat accumulate in large and medium-sized arteries, impeding blood flow; responsible for the majority of cases of myocardial and cerebral infarction.

Atopic: Having a tendency toward immediate hypersensitivity (allergic) reactions distant from the region of contact with the allergen. See immediate hypersensitivity antibody.

"At risk": A phrase used to describe an individual in a particular environment or exhibiting behavior that may result in a poor health outcome.

Attenuated vaccine: A vaccine derived from pathogenic organisms that are weakened by treatment with chemicals, heat, radiation, or other means so that they are rendered incapable of producing disease, but still capable of inducing immunity against the organism.

Attributable risk: In epidemiology, the proportion of a disease in a population associated with a particular risk factor. Attributable risk is often expressed as a percentage.

Augmented care: Care of a greater level, scope, or duration than that normally provided under a particular program or protocol.

Augmented prenatal care services: Prenatal care that includes supplemental services such as outreach, transportation, home visitation, nutrition and social services, health education, followup of missed appointments, case management/coordination of services, and dental care.

'Australia antigen: Hepatitis B surface antigen.

Authoritative parenting: A combination of open communication and give-and-take between parent and adolescent, in an environment of consistent support and firm enforcement of unambiguous roles. Authoritative parents are neither authoritarian (harsh, rigid, domineering), overindulgent, indifferent, nor rejecting.

Autoantibody: An antibody that is formed by an individual against the individual's own tissues.

Autogenous: Self-generated; originated within the body. As applied to bacterial vaccines, the term denotes those vaccines that are made for each specific patient from cultures originating from that patient, as opposed to stock vaccines, which are made from standard cultures.

Autograft: A tissue graft or transplant taken from one part of the body and transferred to another in the same individual (e.g., in the surgical treatment of bums). Such autografted tissue does not elicit

rejection by the body's immune system. Adrenal medullary grafts are an example of autografts. See adrenal medulla, reiection.

Autoimmune disease: A disease in which the body's defenses fail to distinguish the body's own tissue from foreign matter with the result that the body's own tissue is attacked and damaged.

Autoimmune: Referring to a response of the immune system directed against the body's own tissue, an abnormal reaction (the immune system is designed to respond to foreign tissue) believed to contribute to a number of chronic diseases (e.g., rheumatoid arthritis, diabetes mellitus).

Autoimmunity: A disorder of the immune system in which the body generates a hypersensitive immune response against its own tissues or biochemical components (e.g., rheumatoid arthritis, insulin-dependent diabetes mellitus, and systemic lupus erythematosus).

Autologous donation: A blood donation that is stored and resewed for return to the donor as needed, usually in elective surgery.

Autologous transfusion: Transfusion of blood or blood components drawn from a donor and maintained for subsequent transfusion to that same donor.

Autonomic nervous system: The portion of the peripheral nervous system that is not under voluntary control and that controls the activity of cardiac muscle, smooth muscle (e.g., in the digestive tract), and glands; divided into the parasympathetic and the sympathetic nervous systems, which tend to work antagonistically on the same organs to control function.

Autonomy: The quality or state of being self-governing or directing.

Autoradiography: A laboratory technique used to detect the presence of mutations that change the length or number of fragments in a sample of DNA; uses X-ray film to depict radioactively labeled molecules or fragments of molecules that have been separated by gel electrophoresis.

Autosomal dominant: A term used to refer to a genetic trait or a gene carried on one of the non-sex chromosomes (autosomes) that produces its effect even if present in only one copy of the two alleles present for any given gene.

Autosomal recessive: A term used to refer to a trait earned on one of the non-sex chromosomes (autosomes), that must be present in two copies (both of the alleles present must be of the same type) in order for the gene to be expressed (produce its effect) and the trait to be present.

Autosome: A chromosome not involved in sex-determination. In a complete set of human chromosomes, there are 44 autosomes (22 pairs of chromosomes) and 2 sex-determining chromosomes.

Average adjusted per capita cost (AAPCC): As defined under TEFRA, the AAPCC is the estimated average per capita amount that would be payable if covered services for Medicare competitive medical plan (CMP) members were furnished in local fee-for-service practices. The AAPCC formula consists of the product of three major components: (1) the U.S. per capita Medicare cost as projected to the current year, (2) an adjustment based on the historical relationship between national Medicare costs and Medicare per capita reimbursements in the local area that a CMP serves, and (3) an adjustment for the differences between persons who choose to enroll in a CMP and the Medicare population at large from which CMP enrollees are drawn.

Average length of stay: Average stay of hospital patients from admission to discharge during a particular reporting period; derived by dividing the number of inpatient days by the number of admissions for the period.

Avirulent: Lacking virulence (the ability to produce a significant infection or a disease); used to refer to mutant strains or ordinarily pathogenic organisms.

Axon: A tubular projection of the nerve cell that carries impulses away from the nerve cell body toward either an effecter organ or the brain.

Axonopathy: Degeneration of axons. In central-peripheral distal axonopathy, degeneration usually begins at the end of the axon and proceeds toward the cell body (the cell body itself is not affected). In central-distal axonopathy, a less common form, degeneration of the spinal cord, but not the peripheral nervous system, occurs. Compare neuronooathv, neuropathy.

Axoplasm: The cytoplasm of an axon.

Azacytidine (5-azacytidine): A drug that is used in cancer therapy and has also been used experimentally to promote expression of hemoglobin F genes (to replace defective Beta globin genes) in patients with thalassemia and sickle-cell disease.

Azoospermia: The absence of sperm in the semen.

B

B cell: A lymphocyte that produces antibodies. See lymphocyte, antibody.

B-lymphocytes: See lymphocytes.

Baby Doe rules: Federal regulations issued from 1982 to 1984 under Section 504 of the Rehabilitation Act of 1973 that prohibited hospitals from withholding nourishment or care from handicapped infants. Meanwhile, Congress passed the 1984 amendments to the Child Abuse Prevention and Treatment Act that permitted "reasonable medical judgment" to be used in making decisions about treatment for disabled newborns.

Bacillus (pl., bacilli): Any of various rod-shaped bacteria belonging to the genus Bacillus.

Bacillus Calmette-Guerin (BCG) vaccine: A vaccine prepared from attenuated Mycobacterium bovis, an agent that infects cattle, that is used to immunize humans against infection with M. tuberculosis, the related bacterium that causes human tuberculosis.

Bacteremia: A pathologic state characterized by the presence of bacteria in the blood.

Bactericide: An agent capable of killing bacteria,

Bacteriology: The scientific study of bacteria.

Bacteriophage: Any of a number of viruses that infect bacteria. A bacteriophage consists of a core of genetic material (DNA or RNA) that is surrounded by a protein coat or capsule. When a bacteriophage infects a host cell, it commandeers that cell's machinery that manufactures protein in response to genetically encoded instructions and uses it to produce offspring bacteriophage. The bacteriophage lambda is commonly used in recombinant DNA research as a cloning vector to alter the genetic makeup of the host bacterial cell. Also called "phage."

Bacteriostatic: Capable of slowing or halting the growth of bacteria without killing them.

Bacterium (pl., bacteria): Any of a group of single-celled microorganisms having round, rodlike, spiral, or filamentous bodies that are enclosed by a cell wall or membrane and lack fully differentiated nuclei. Bacteria may exist as free-living organisms in soil, water, organic matter, or in the bodies of plants and animals; some types can cause disease.

Baculovirus: A virus of the family Bacloviridae found only in invertebrates, and presently being pursued as a potential biocontrol agent.

Bad debts: Patient care charges owed to a facility that the facility considers to be largely uncollectable.

Balance billing: In the Medicare program, the practice of billing a Medicare beneficiary in excess of Medicare's allowed charge. The "balance billing" amount would be the difference between Medicare's allowed charge and the physician's (or other qualifying providers).

Basal ganglia: A group of small masses of nervous tissue embedded within the cerebrum in the brain **that is involved in subconscious regulation of voluntary movement. See substantial nigra, striatum.**

Base pair (of DNA): A pair of hydrogen-bonded nitrogenous bases (one purine and one pyrimidine) that join the two strands of the DNA double helix (adenine with thymine, cytosine with guanine).

Base rate: The prevalence or incidence of a problem in a population.

Behavior disorders: (in terms of children's mental health) A set of childhood-onset mental disorders characterized by behavior that disturbs or harms the patient or others and which causes distress or disability. Such disorders include attention deficit disorder and conduct disorder.

Behavioral problems: Behavior that disturbs or harms the adolescent or othes, Includes the mental health problems termed behavior disorders (e.g., attention deficit disorder, conduct disorder). See problem behaviors. Compare physical problems.

Behavioral Research: Research into the movement and sensations by which living things interact with their environment, with the purpose of better understanding human behavior. A further goal of behavioral research is the better understanding of animal species of economic or intrinsic interest to humans. Behavioral research differs from biomedical research in that it is difficult to study behavioral phenomena in isolation; therefore continued, but modified, use of animals holds most promise for this area of research.

Behavioral therapy: (in terms of children's mental health) Psychotherapy based on the assumption that a child learns persistent pathological behavior from his or her experience with the social environment. Therapists using behavioral techniques systematically analyze the child's problem and environment and seek to change specific problem behavior by altering the child's environment.

Behavioral treatments: Referring to treatments based on physical and mental activities (e.g., exercise, relaxation, qi gong).

Beneficence: Mercy, kindness, or charity. In ethics, it is the principle that one has a duty to confer benefits or to help others further their legitimate interests.

Beneficiary: An individual entitled to benefits under an insurance plan (e.g., Medicare or Medicaid).

Benign: Not malignant; in reference to tumors, lacking the capacity to invade normal tissue and metastasize to distant sites.

Beta blockers: Drugs used to treat hypertension, cardiac arrhythmia, angina pectoris, stroke, and other disorders by inhibiting neural activity in the cardiovascular system.

Beta globin: A component of hemoglobin, the oxygen-carrying molecule in blood. In normal adult humans, hemoglobin is a compound molecule consisting of four protein subunits (globins) and a heme group. The four globins consist of two alpha and two beta subunits.

Beta thalassemia: See thalassemia,

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

Billed charge: In the Medicare program, the physician's (or supplier's) actual (billed) charge for a service. Compare customary, prevailing. and reasonable charges.

Binswanger's disease: A progressive form of vascular dementia caused by a loss of blood supply to the white matter of the brain (rather than the cerebral cortex). Also known as Binswanger's dementia and subcortical arteriosclerotic encephalopathy,

Bioassay: Determination of the active power of a chemical or physical agent by measuring its effect on a living organism or an isolated organ preparation. Also called "biological assay."

Bioaugmentation: A strategy involved in bioremediation that enhances the activity of an organism to break down or metabolize a pollutant. This involves reseeding a waste site with bacteria as they are worn out.

Biochemical genetics: The study of the genetic, molecular, and metabolic basis of disease.

Biochemical profile: A battery of twelve or more biochemical blood tests (e.g., calcium, glucose, blood urea nitrogen, total protein) that is conducted using large-volume, automated instruments. Biochemical profiles are sometimes used to screen asymptomatic adults in an effort to identify those with latent disease or those at high risk of developing chronic disease.

Bioenrichment: A strategy involved in bioremediation that enhances an organism's ability to break down or metabolize a pollutant. This involves enhancing the site with nutrients required by the microorganisms for growth.

Biofeedback: A technique based on the theory that one can learn to regulate one's own internal state, including the autonomic nervous system, which had been thought to be beyond conscious control.

Biological control: The control of insects or other organisms involved in the development or transmission of disease through measures such as the introduction of natural predators or pathogens of the target organism, the use of naturally produced chemicals, and the introduction of sterile insects to the breeding population. Compare environmental control.

Biologics: Medicinal preparations made from living organisms and their products, including serums, vaccines, antigens, antitoxins, etc.

Biomass: The entire assemblage of living organisms of a particular region, both animal and vegetable, considered collectively.

Biomedical Research: A branch of research devoted to the understanding of life processes and the application of this knowledge to serve humans. Biomedical research covers a broad spectrum of disciplines, such as anatomy, biochemistry, biology, endocrinology, genetics, immunology, nutrition, oncology, and toxicology.

Bionomics: The study of the relationship of organisms to the environment.

Bioprocess engineering: Process that uses complete living cells or their components (e.g., enzymes, chloroplasts) to effect desired physical or chemical changes.

Biopsy: The removal and examination, usually microscopic, of tissue from the living body, performed to establish precise diagnosis.

Bioreactor: A vessel used for bioprocessing.

Biosynthesis: Production, by synthesis or degradation, of a chemical by a living organism.

Biotechnology: Commercial techniques that use living organisms or substances from those organisms to make or modify a product for use in medicine or industry; includes techniques used for the improvement of the characteristics of economically important plants and animals and for the development of microorganisms to act on the environment. Biotechnology includes the use of novel biological techniques--specifically, recombinant DNA techniques, cell fusion techniques, especially for

the production of monoclonal antibodies, hormones, and new bioprocesses for commercial production. See genetic engineenng and recombinant DNA.

Biotransformation: The biochemical processes by which a foreign substance is altered or metabolized by the body (e.g., by the action of enzymes). Although biotransformation usually results in less toxic compounds, it can result in more toxic compounds.

Birthweight: The weight of an infant at the time of delivery. Normal birthweight is 2,500 grams (5 lb. 8 oz.) and above. low birthweight is anything below 2,500 grams. Among low birthweight babies, there are moderatelv low birthweight babies (who weigh between 1,500 grams and 2,500 grams) and verv low birthweight babies (who weigh less than 1,500 grams).

‹ Birth rate: The number of live births per 1,000 total population or over a specified period of time (usually 1 year).

Birthweight distribution: The relative frequency of births in various birthweight categories in a population of newborns.

Birthweight-specific mortality rates: Mortality rates among newborns classified by birthweight. A birthweight-specific infant mortality rate is defined as the number of infants in a given birthweight interval (e.g., 2,000 to 2,500 grams) who die in the first year of life per 1,000 live births in that interval. A birthweight-specific neonatal mortality rate is defined as the number of infants in a given birthweight interval who die in the first 28 days of life per 1,000 live births in that interval.

Bladder: See urinary bladder.

Bladder neck suspension: An operation performed on women with stress incontinence to reposition the bladder neck and urethra; the most common surgical procedure for incontinence. See also incontinence.

Blastocyst: In a mammalian embryo, the developmental stage immediately following the morula. A blastocyst consists of an outer layer (the trophoblast) containing a cell mass attached to the inner wall of the interior cavity, or blastocoele.

Blinding: In randomized clinical 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 treatment (e.g., the physician) also is unaware, the study is "double-blind." Additional layers of blinding can be added-for example, when a third individual (usually the evaluator of outcomes, the individual analyzing the data) also is unaware of treatment assignments.

Block grants: Sums of Federal funds allotted to State agencies (e.g., education, health) which may be passed on to local agencies. States determine the mix of services provided and the population served and are accountable to the Federal Government only to the extent that funds are spent in accordance with program requirements. Sometimes, however, set-asides are required for specific population groups.

Blood: A liquid (plasma) containing red blood cells (erythrocytes), white blood cells (leukocytes), and platelets (thrombocytes) that circulates through the heart, arteries, capillaries, and veins, carrying oxygen and nutrients to body tissues, removing carbon dioxide and other wastes, transferring hormonal messages between organs, carrying substances that prevent excessive bleeding and protect injury sites with clots, and transporting antibodies and infection-fighting cells to sites of infection.

Blood bank: Generally, a facility for the storage of blood and blood components. In hospitals that do not collect their own blood, the blood bank is often incorporated into the hospital laboratory service and may be affiliated with a transfusion service. Some hospitals collect some or all of their own blood by way of a collection facility in-house.

Blood cells: Cells found in whole blood, including erythrocytes (red blood cells) and various types of white blood cells (such as granulocytes, monocytes, and lymphocytes).

Blood center: Generally, a center in a community or region that provides a full range of blood services to a surrounding geographic area. Such services include the collection, testing, and labeling of blood, and distribution of blood and blood products to hospitals, physicians, and hemophilia care centers. In addition, blood centers often conduct research and training programs.

Blood component: A product that is separated from whole blood by physical or mechanical means, such as differential centrifugation. Such components are red cells, white cells, platelets, and plasma.

Blood derivatives: Products derived from the chemical fractionation of plasma for concentration of selected blood proteins.

Blood group: See ABO blood group and Rh blood group.

Blood plasma: See plasma.

Blood quantum: The degree of Indian blood of an individual. Most tribes require a minimum degree of tribal-specific Indian blood for membership.

Blood serum: The clear liquid that separates from blood after the red blood cells, fibrin, and clotting factors are removed by centrifugation or vigorous stirring.

Blood-brain barrier: A semipermeable lipid membrane that separates circulating blood from tissue fluids surrounding brain cells, controlling the passage of substances from the blood to the cerebrospinal fluid. See endothelial cell.

Board and care facilities: Residential care facilities that provide room and board and variable amounts of protective supervision, personal care, and other services but not nursing care. Board and care facilities include adult foster care homes that provide care for one or two individuals as well as group homes, homes for the aged, and large domiciliary care facilities that may house several hundred people.

Board certification: The certification by a medical specialty board that a physician is a specialist in the domain of the specialty board. In order to receive specialty certification, a licensed physician must complete one to five additional years of training (depending on the specialty bead), fulfill a certain set of requirements, and pass an examination.

Board-certified physician: A physician who has completed requirements of advanced training and practice in a particular medical specialty and has passed examinations offered by the national certifying board for that specialty.

Bone marrow: A highly vascular, modified connective tissue found in the long bones and certain flat bones of vertebrates that is the origin of most blood cells.

Brain: The highly developed mass of nervous tissue, encased within the cranium of the skull and continuous with the spinal cord, that forms the upper end of the central nervous system. It is surrounded by three membranes and is bathed in cerebrospinal fluid, which also fills its internal cavities. The main parts of the adult brain are the cerebral cortex, the cerebellum, the medulla oblongata, and the hypothalamus. The brain functions as the seat of intelligence, emotion, and memory, and coordinates the body's nervous activity, receiving sensory impulses and transmitting motor impulses.

Brain imaging: The use of various techniques to directly assess the anatomy of the brain; an essential component in the diagnosis of dementia. The most powerful new technologies use computers to create

images of the brain. The techniques include computerized axial tomography, nuclear magnetic resonance, positron emission tomography, and single photon emission computed tomography.

Brain stem: Part of the brain that extends from the top of the spinal cord into the base of the brain, including the midbrain, pens, and medulla oblongata. The brain stem is involved in the processing of information from the special senses (e.g., taste, hearing), and also contains centers controlling and integrating autonomic (subconscious) functions such as breathing, blood pressure, gastrointestinal function, arousal, and wakefulness.

Breakeven financial status: The point in operations at which a business (e.g., health care facility) neither loses money nor makes a profit.

Broad-based (programs): Typically, programs that take a comprehensive rather than a narrow approach to addressing a single health problem, such as by involving multiple service systems or strategies (e.g., a pregnancy prevention intervention that would involve teaching of life skills and vocational training, as well as provide sexuality education) and possibly by measuring multiple theoretically and practically related outcomes (e.g., avoidance of school dropout as well as pregnancy prevention).

Bronchitis: Acute chronic inflammation of the mucous membranes of the lungs' bronchial tubes.

Bronchoalveolar lavage fluid: The fluid obtained from the lungs by lavage. Lavage is a technique in which an organ is flushed with water in order to analyze material in the drainage fluid (in this case, cells from the bronchioles and alveoli).

Bronchopulmonary aspergillosis: Infection of the bronchi and lungs by the fungus Aspergillus, characterized by inflammatory lesions.

Bronchopulmonary dysplasia: A chronic lung disease in newborns, often defined by a characteristic appearance of the lungs on X-ray, necessitating the use of assisted ventilation for more than 4 weeks.

Bronchus: One of the large conducting air passages of the lung.

Brucellosis: A generalized infection involving the reticuloendothelial system, caused by a species of the microorganism genus Brucella, that is contracted through contact with goats, cattle, pigs, and dogs.

Budget neutrality: A specification of the Social Security Amendments of 1983 (P.L. 98-21) that the aggregate payments for the operating costs of inpatient hospital services in fiscal years 1984 and 1985 will be neither more nor less than would have been paid under the 1982 Tax Equity and Fiscal Responsibility Act (P.L. 97-248) for the costs of the same services.

Bulimia: A psychological disorder characterized by binge eating accompanied by an awareness that the eating pattern is abnormal, fear of not being able to stop eating voluntarily, and depressed mood and self-deprecating thoughts following the eating binges. Binges are usually terminated by abdominal pain, sleep, social interruption, or induced vomiting.

Byssinosis: An occupational respiratory disease associated with inhalation of cotton, flax, or hemp dust. It is characterized initially by chest tightness, shortness of breath, and cough but may lead to permanent lung damage.

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Cachexia: In cancer, the progressive wasting that occurs in the late stages of disease, resulting from derangements in various metabolic processes,

Cadaveric fetal tissue: Tissue obtained from a dead fetus.

Cancer: A tumor with the potential for invading neighboring tissue and/or metastasizing to distant sites, or one that has already done so. Cancers are categorized into major classes by their cell types. See also carcinoma, sarcoma, lymphoma, and leukemia.

Cannula: A tube for insertion into a duct or cavity. This is used to attain a continuous flow of liquid into and out of an organ.

Capital costs: Expenditures for capital plant and equipment used in providing a service. Under Medicare's prospective hospital payment system, established by the Social Security Amendments of 1983 (P.L. 98-21), hospitals' capital costs (depreciation, interest, and return on equity to for-profit institutions) are treated as passthroughs (i.e., they are not subject to the new system's controls).

Cavitation (or per capita) payment: A method of payment for services in which a service provider (e.g., a physician, hospital, or other agency or individual) is paid a fixed amount for each person served regardless of the actual cost of services provided for the person.

Caries: See dental canes.

Carbamate: A type of synthetic organic insecticide. As pesticides, carbamates are reversible inhibitors of cholinesterase.

Carcinogen: An agent that causes cancer (e.g., certain chemicals, ionizing radiation, tobacco smoke, asbestos fibers).

Carcinoma: A cancer arising from epithelial cells, including the external epitheliums (mainly skin and linings of the gastrointestinal tract, lungs, and cervix) and the internal epitheliums that line various glands (e.g., breast, pancreas, thyroid). Compare sarcoma.

Cardiac arrest: Sudden cessation of heart function, leading to absence of pulse, cessation of breathing, and loss of consciousness.

Cardiac arrhythmias: Variations from the normal rate or rhythm of heart beats.

Cardiac catheterization: Passage of a small catheter through a vein or artery into the heart for purposes of securing blood samples, determining intracardiac pressures, and detecting cardiac anomalies.

Cardiac radionuclide imaging: The imaging of the heart by the detection of radioactivity in the heart muscle or heart chambers following the injection of a radionuclide or radiopharmaceutical.

Cardiovascular disease (CVD): Any of a diverse group of diseases affecting the heart, blood vessels, and/or blood circulation. CVD includes diseases of the heart muscle itself, ischemic heart disease, hypertension, cerebrovascular diseases, and various other conditions.

Caregiver: A relative, friend, neighbor, or other individual who provides care for a physically or mentally impaired person on an unpaid basis. A primary caregiver is the individual who provides most of the person's care; a secondary caregiver is an individual who helps out occasionally.

Caregiver support group: A group of people, including family members, friends, and others, who meet on a regular basis to share information, exchange coping strategies, and give and receive mutual support in caring for another person.

Carotid bifurcation: The division into two branches of the principal artery in the neck.

Carpal tunnel syndrome: A necrologic disorder caused by compression of the median nerve in the carpal tunnel, the passage in the wrist through which blood vessels and nerves pass to the hand from the forearm. Carpal tunnel syndrome is often found among workers doing repetitive hand work. The symptoms include pain, numbness, tingling, lack of sweating in the palm, and clumsiness in the use of the hands. The symptoms are often most acute after a period of rest.

Carrier: 1) An individual who carries the specific organisms of a disease and is capable of transmitting them to others, but who does not manifest the symptoms of the disease; or 2) An individual who carries a variant gene and is capable of transmitting it to offspring, but who may or may not (depending on whether the variant gene is dominant or recessive) show the effects of it as a disease or disability. In the context of recombinant DNA technology, see vector.

Carrier (Medicare): See Medicare carrier.

Case control study: Also called case comparison study, case referent study, or retrospective study. An observational epidemiologic 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 control group of persons without the disease, but who are otherwise similar to the cases ("controls"). The relationship of a "risk factor" (which may include exposures to a chemical or physical agent, family history of disease, or other personal attribute) to the disease is evaluated by determining how frequently the risk factor is present, or if quantitative, by the levels of the risk factor, in the cases and controls. Many risk factors may be studied in a single case control study.

Case fatality rate: The proportion of cases of a specific condition that are fatal within a given period of time, usually expressed as a percent.

Case finding: The identification of instances of a particular disease or condition through screening of asymptomatic people or surveillance of defined populations.

Case management: Coordination and oversight of the package of services provided to an individual. Case management may be provided by an insurer, a physician, a social worker, or other health care professional. The comprehensiveness of case management depends on the manager, but usually includes the following functions: assessing a client's needs; developing a plan of care for the client; arranging and coordinating services for the client; monitoring and evaluating the services the client receives; and reassessing the client's situation as the need arises.

Case mix: A measure of the mix of cases being treated by a particular health care provider that is intended to reflect the patients' different needs for resources. Case mix is generally established by estimating the relative frequency of various types of patients seen by the provider in question during a given time period and may be measured by factors such as diagnosis, severity of illness, and provider utilization.

Catastrophic health care fund: (pertaining to Indian health) A revolving fund proposed in 1984 and 1985 congressional legislation to assist in paying for high-cost cases in the Indian Health Service

contract care program. The fund would have contained $12 million, to be used to pay for contract care cases that exceeded a threshold cost between $10,000 and $20,000. See also high-cost case.

Catastrophic reaction: Inappropriate behavior episodes often displayed by persons with dementia in reaction to some outside stimulus. The episodes can be minor (shouting or stubbornness) or major (violent and threatening behavior such as hitting or swinging a weapon).

Catastrophic stop-loss on out-of-pocket expenses: Typically, an annual upper limit on a beneficiary's out-of-pocket payments for insured services.

Catecholamine: A class of neurotransmitter including dopamine, norepinephrine, and epinephrine (a hormone secreted by the adrenal medulla).

Categorical requirements: Requirements that an individual must fit a certain category of need in order to be eligible for assistance. See Aid to Families With Dependent Children (AFDC) program.

Cell: The structural and functional unit of all living organisms. A single cell unit is a complex collection of molecules with many different activities all integrated to form a functioning, self-assembling, self-regulating, biological unit.

Cell body: The portion of the neuron that contains the nucleus; involved more in nutrition of the cell than with propagation of nerve impulses. Compare process.

Cell culture: The propagation of cells removed from organisms in a laboratory environment that has strict sterile, temperature, and nutrient requirements; also used to refer to any particular individual sample. See cell and cell line.

Cell fusion: Joining of the membrane of two cells, thus creating a daughter cell that contains the nuclear material from parent cells. Used in making hybridomas.

Cell line: A sample of cells that has undergone the process of adaptation to artificial laboratory cultivation and is capable of sustaining continuous, long-term growth in culture. See@ and cell culture.

Cell suspension: Individual cells separated out from solid tissue and placed in a supporting fluid; also, as a form of neural grafting, injection of such cells into a host central nervous system. Compare solid tissue graft.

Cell-mediated immunity: Immunity resulting from an increase of activity by living cells in the blood and other tissues (e.g., T-lymphocytes, natural killer cells) that directly and nonspecifically destroys foreign material. Compare humoral immunity.

Centimorgan: A unit of measure of recombination frequency. One centimorgan is equal to a 1 percent chance that a genetic locus will be separated from a marker due to recombination in a single generation. In human beings, 1 centimorgan is equivalent, on average, to 1 million base pairs.

Central nervous system (CNS): One of the two major divisions of the nervous system, made up of the brain and spinal cord, that coordinates all neural functions. Compare peripheral nervous system.

Centrifugation: The rapid whirling of fluids in a machine, known as a centrifuge, to separate substances of different densities by centrifugal force.

Cerebellum: The part of the brain involved in coordination of muscles and the maintenance of muscle tone, balance, and equilibrium.

Cerebral cortex: The convoluted outer layer of grey matter of the brain that is responsible for all higher cognitive, perceptual, and motor functions.

Cerebral infarction: An area of dead tissue in the cerebrum caused by an interruption of blood circulation due to functional constriction or actual obstruction of a blood vessel, hemorrhage, etc. See Cerebrum.

Cerebral palsy: Disorders of movement and posture of varying severity, sometimes accompanied by mental retardation, that result from insufficient oxygen supply to the brain (cerebral hypoxia) usually before or at birth; can also occur in early childhood following encephalitis, meningitis, or head injury.

Cerebrospinal fluid: Clear, watery fluid, containing mainly glucose, salts, and enzymes, that surrounds the brain and spinal cord; it protects the central nervous system from mechanical injury.

Cerebrovascular disease: Any disease of the blood vessels supplying blood to the brain or of the brain's covering membranes (meninges), characterized by rupture of the blood vessels or inadequacy of blood to the brain. Common causes include atheroma, hypertension, cerebral thrombosis, or embolism.

Cerebrum: The largest portion of the brain, playing a critical role in learning processes and integrating complex sensory and neural functions. The cerebrum occupies the upper part of the cranial cavity and consists of two linked hemispheres.

Certificate of need (CON): A regulatory planning mechanism required (in order to receive certain Federal funds) by the National Health Planning and Resources Development Act of 1974 (Public Law 93-841) to control expenditures for and distribution of expensive medical care facilities and equipment. Each State is required to enact a CON law with specific characteristics, such as expenditure thresholds. Compliance with this Federal planning requirement has not been enforced because of a series of legislative amendments. In States where CON laws have been enacted and have not expired or been repealed, CON applications by institutions are reviewed by local health systems agencies and are then denied or approved by State health planning agencies.

Certification by a medical specialty board: See board certification.

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.

Certified Rural Health Clinic (RHC): A facility (or part of a facility), engaged mainly in the provision of outpatient primary medical care, that is eligible to receive cost-based Medicare and Medicaid reimbursement primarily by virtue of its: (1) location in a Census-defined rural health manpower shortage area (HMSA) or medically underserved area (MUA), and (2) employment of at least one midlevel practitioner (i.e., physician's assistant, nurse practitioner, or nurse-midwife).

Cervical cerclage: A surgical procedure in which the mouth of the cervix is physically cinched together with a suture to attempt to prevent premature labor in pregnancy.

Chagas' disease: Infection by the parasitic organisms Trypanosoma cruzi or Schizotrypanum cruzi, transmitted by the bite of blood-sucking insects. The disease was discovered and described by Carlos Chagas of Brazil. It is characterized by an acute course in children with fever, encephalitis, and inflammation of the heart muscle (often life-threatening or fatal), and a chronic course in adults leading to heart disease and heart failure. Also called "American trypanosomiasis." See also trypanosomiasis.

Chakrabary decision: A landmark 1980 Supreme Court decision that held that a live, human-made, microorganism that had been genetically engineered in a laboratory by Ananda Chakrabarty was Patentable as a "manufacture" or "composition of matter."

Challenge: In immunology, administration of an antigen to assess the state of immunity. In immunotoxicological testing, an experimental animal is challenged with an infectious agent or tumor cells to determine whether exposure to a chemical decreased the animal's ability to fight infection or cancer. See antigen.

Charge locality: A geographic area for which a Medicare carrier derives the prevailing charges for services. Usually, a locality is a political or economic subdivision of a State including a cross-section of the population with respect to economic and other characteristics.

Chemoprophylaxis: The prevention of disease by the use of drugs or chemicals.

Chemostats: Growth chamber that keeps a bacterial culture at a specific volume and rate of growth by continually adding fresh nutrient medium while removing spent culture.

Chemotherapy: The use of specific chemical agents to arrest the progress of, or eradicate, disease in the body.

Chick Embryo Chorioallantoic Membrane Assay: A test used to determine the irritancy of a substance. A test sample is placed on the chorioallantoic membrane formed on top around a chick embryo. The membrane is then evaluated for response to the test substance and the embryo is discarded. This test may be a promising alternative to the Draize Test.

Child allowances: Sums provided to parents based on the number of children in the household.

Child maltreatment: Behavior that falls into one of the following categories: physical abuse or neglect, psychological abuse or neglect, or sexual abuse. Abuse generally implies an act of commission on the part of a parent or other caretaker, while neglect implies an act of omission.

Child welfare services: See social services.

Children's protective services: See protective services.

Chimera: An organism consisting of cells or tissues that are genetically different (e.g., from different species).

Chiropractic: A system of treatment based on the theory that disease is produced by disruptions in the normal flow of a natural life force termed "Innate Intelligence." This life force flows through the nervous system and is disrupted by displacements of the spinal vertebrae called subluxation. Chiropractic manipulation is intended to correct the subluxation, allowing the uninterrupted flow of Innate Intelligence to return the body to full health. As practiced currently in the United States, most chiropractic is limited to treating skeletal abnormalities.

Chiropractor: A practitioner of chiropractic.

Chlamydia: A sexually transmitted disease (STD) caused by the bacteria Chlamydia trachomatis. Infection with this bacterial agent can cause nongonococcal urethritis and other syndromes (e.g., genital ulceration) and may lead eventually to meningitis, pneumonia, blindness, and cervical atypia. Chlamydial infection accounts for 25 to 50 percent of the pelvic inflammatory disease cases seen each year. Chlamydia is the most common STD in the United States today.

Chloroplast: A structure within a plant cell where photosynthesis occurs. They contain small circular DNA molecules that replicate independently.

Cholecystectomy: Surgical removal of the gall bladder.

Cholecystokinin: A peptide hormone secreted by the upper intestine that stimulates contraction of the gall bladder and secretion of pancreatic juices to aid in digestion. Recently, the hormone has also been found in the brain, where it seems to suppress appetite and feeding.

Cholera: A severe diarrheal disease caused by the bacterium Vibrio cholerae.

Cholesterol: A sterol present in animal tissues (e.g., cell membranes, blood plasma, and lipoproteins), involved in physiological processes, such as the manufacture of bile acids, sex hormones, and adrenocorticoid hormones; also involved in the development of pathological processes such as atherosclerosis.

Cholinergic drugs: Dregs that are activated by acetylcholine (a neurotransmitter) and associated with the synaptic transmission of nerve impulses.

Cholinesterase inhibition: See acetvlcholinesterase.

Chore services: Services such as heavy house cleaning, minor household repairs, and yard work.

Chorionic villus biopsy: A technique of prenatal diagnosis, performed between 9 and 12 weeks gestation, in which a sample of fetal tissue is taken from the placenta and analyzed to detect the presence or absence of certain genetic abnormalities.

Chromaffin cell: A nonneuronal cell in the adrenal medulla that produces neurotransmitters in response to stimulation of the adrenal gland by sympathetic nerves. See adrenal medulla, precursor cell.

Chromosomal aberrations: An abnormality in the number or structure of chromosomes in a cell nucleus.

Chromosomal disorders: Various genetic disorders associated with changes in the number (aneuploidy) or structure (insertions, deletions, rearrangements) of chromosomes.

Chromosome: A threadlike structure within the nucleus of cells that contains genetic information arranged in a linear sequence of genes that determine individual characteristics of an organism. In humans, body cells contains 46 pairs of chromosomes and germ (reproductive) cells contains 23 pairs.

Chromosome abnormalities: Disorders resulting from changes, or mutations, in the number or structure of chromosomes.

Chromosome banding: The chemical process of staining chromosomes to reveal bands characteristic of each pair of homologous chromosomes. Staining by various techniques produces patterns of light and dark bands (visible under the microscope) that are characteristic of each chromosome pair. Chromosome banding is particularly useful in detecting structural chromosome abnormalities such as inversions and deletions.

Chronic exposure: See duration of exposure, frequency of exposure.

Chronic condition: A problem or disease that is lingering and lasting, as opposed to acute. For purposes of DHHS'S National Health Interview Survey, a condition is considered "chronic" if: 1) the respondent indicates it was first noticed more than three months before the reference date of the interview and it exists at the time of the interview, or 2) it is a type of condition that odinarily has a duration of more than three months. Examples of conditions that are considered chronic regardless of their time of onset are Alzheimer's disease, osteoarthritis, diabetes, heart conditions, emphysema, and arthritis.

Chronic: Lingering or long-term, as opposed to acute. A term used to describe a disease that develops slowly and persists over a long time period, often for the duration of the individual's life. In occupational and environmental health, used to describe a disease or injury that is manifest long after exposure to a hazard.

Chronic toxicity test: Repeated-dose toxicity test with exposure to a test substance lasting at least one year, or the lifetime of the test species; designed to discover any of various toxic effects and to define safety limits to be used in the regulation of chemicals.

Citrullinemia: An autosomal recessive genetic defect whose clinical symptoms (ammonia intoxication, severe vomiting, and mental retardation) are associated with a deficiency in the enzyme argininosuccinate synthetase.

Civilian Health and Medical Program of the Uniformed Services (CHAMPUS): A health insurance program, administered by the U.S. Department of Defense, that provides health benefits to military dependents and retirees who are unable to receive services through uniformed service medical treatment facilities.

Claims data: Data included on forms submitted for payment to third-party payers by providers, suppliers, and to a lesser extent, by beneficiaries.

Class I, II, and Ill medical devices: Three classes of medical devices were set up (by the Medical Device Amendments of 1976 [Public Law 94-295]) for the purpose of regulation by the FDA. For devices in Class 1, the general controls authorized by the Act are deemed sufficient to provide reasonable assurances of safety and effectiveness. Manufacturers of Class I devices must register their establishments and list their devices with the Food and Drug Administration (FDA), notify FDA before marketing a device, and conform to Good Manufacturing Practices. Class II is the class of devices for which general controls are considered insufficient to assure safety and effectiveness and for which sufficient information exists to establish performance standards. For devices in Class III, the general controls of Class I are insufficient to assure safety and effectiveness, information does not exist to establish performance standards, and the device supports life, prevents health impairment, or presents a potentially unreasonable risk of illness or injury.

Clastogens: Chromosome-damaging agents.

Clinical trial: A scientific research activity undertaken to define prospectively the effect and value of prophylactic, diagnostic, or therapeutic agents, devices, regimens, procedures, etc., applied to human subjects.

Cloning: The process of asexually producing many copies of a cell or organism, all identical to the original ancestor. In tissue and cell culture technology, the process by which a culture is grown and amplified starting from a single cell; in recombinant DNA technology, the process of using a variety of recombinant DNA procedures to produce multiple copies of a single gene or segment of DNA.

Coagulation proteins: Proteins found in the plasma that aid in the coagulation process of blood (e.g., Factor Vlll, Factor IX, antihemophilic factor, or prothrombin). Also called "clotting factors."

Coagulation: The process of certain particles joining together to form larger masses. In blood coagulation, liquid blood is converted to solid clots at the site of an injury to prevent further blood loss and bacterial invasion, Clots are formed through the interaction of clotting factors and platelets in the blood, which create a network of insoluble fibrin.

Cobalamins: Cobalt-containing molecules that form part of the vitamin B12 group.

Cocaine: An addictive psychoactive substance obtained from coca leaves that is a central nervous system stimulant.

Cocaine Anonymous: Self-help support groups for cocaine abusers patterned after the Alcoholics Anonymous approach.

Codon: A series of three adjacent nucleotides in a DNA or mRNA molecule that specifies the insertion of a specific amino acid during the synthesis of proteins in a cell.

Cofactor: Factors or agents that are necessary for or that increase the probability of the development of disease in the presence of the basic etiologic agent of that disease.

‘ Cognitive deficit/impairment: The loss of or a disturbance in one or more cognitive abilities, such as memory, intelligence, learning ability, problem-solving, judgment, comprehension, attention, and orientation to time and place and to oneself. Impairment of these abilities is a central feature of dementia.

Cognitive interventions (in health care): Interventions that rely heavily on interpersonal interaction (e.g., counseling) as opposed to more impersonal (technical) services.

Cognitive skills: Specific skills relevant to higher order reasoning and critical thinking. Often part of life-skills training programs.

Cognitive therapy: (in terms of children’s mental health) Psychotherapy based on a view that mental health problems should be treated through altering the way children think about their behavior and their environments. Therapists attempt to change the thinking that takes place during a child’s troublesome behavior and/or try to influence how children think about themselves and others

Cohort study: Also called longitudinal study or prospective study. An observational epidemiologic study that starts with subsets of a defined population (usually, exposed and unexposed) who differ in their exposure to a factor hypothesized to cause a particular disease, or influence the likelihood of that disease’s occurring. The cohort is followed up for a sufficient period of time to assess the incidence of the disease in the exposed and unexposed subsets. More than one disease may be studied in one cohort study.

Coil dialyzer: A machine used in dialysis in which the blood passes through semipermeable membrane tubing that is wound around itself, or “coiled,” and a supporting screen separates the coils.

Coinsurance: That percentage of covered hospital and medical expenses, after subtraction of any deductible, for which an insured person is responsible. Under Medicare Part B, after the annual deductible has been met, Medicare will generally pay 80 percent of approved charges for covered services and supplies; the remaining 20 percent is the coinsurance, for which the beneficiary is liable. Also see copavment and deductible.

Cold chain: The means whereby vaccines can be transferred from their manufacturer to the field at a sufficiently low temperature to ensure the effectiveness of the vaccines. Some of the important childhood vaccines require continuous refrigeration.

Colostomy: A surgical opening between the colon (part of the large intestine) and the surface of the body. A colostomy is perfomed when normal defecation is difficult (e.g., because of lack of control of the necessary muscles) or the intestine is interrupted by cancer or other causes.

Cometabolism: A process in degradation whereby one organism produces the energy needed by the degrading organism. This is especially useful when degradation causes the depletion of the energy source needed for the reaction to continue.

Commissioned Corps: Members of the U.S. Public Health Service Commissioned Corps, including physicians, dentists, nurses, administrators and other health-related personnel.

Commodity chemical: A compound produced by several companies. Compare specialty chemical.

Common Costs: Costs that are not traceable to any one specific product.

Common law: As distinguished from statutory law created by a legislature, the body of principles and rules of action which derive their authority solely from long-standing usages and customs (in particular, Anglo-American usages and customs) or from the judgments and decrees of the courts recognizing, affirming, and enforcing such usages and customs.

Common law rule: A rule grounded in common law (see above) rather than in statutory law.

Community-based comprehensive health centers: Used to refer to those centers providing comprehensive health and/or related services that are situated in the adolescents' home community, but are not school-based.

Community-rating: A method of determining insurance premium rates that is based on the allocation of total costs without regard to past group experience. Community rating is required of federally qualified HMOS.

Comorbidities: Diseases or conditions present at the same time as the principal condition of a patient. See dual-diagnosis.

Companion services: Supervision, socialization, and other services such as reading, letter writing, and light errands, provided by an individual who comes to the home, often in the absence of the primary caregiver.

Competence (to make health care decisions): Having sufficient knowledge, judgment, or skill to make health care decisions. The legal concept of competency is central to existing laws governing health care decisionmaking with respect to minors, and the parental consent requirement is partially an outgrowth of the presumption that minors are incompetent to make health care decisions.

Competitive medical plan (CMP): A health plan eligible to enter into a risk contract with Medicare to provide beneficiaries covered medical services in return for a cavitation payment.

Complaint inspection: An inspection by the Occupational Safety and Health Administration (OSHA) that responds to worker or union complaints about workplace hazards. Compare fatalitY/catastrophe inspection, follow-up inspection, and programmed inspection.

Complement: A group of proteins in blood plasma and tissue fluid that is involved in the immune response when antibodies combine with foreign antigens. When the first complement substance is triggered-usually by an antibody locked to an antigen-it sets in motion a ripple effect. As each component is activated, it acts on the next in carefully regulated steps. This phenomenon, known as the complement cascade, causes release of the chemicals-that produce the redness, warmth, and swelling of the inflammatory response. It can also bring rapid death to bacteria and other cells by puncturing their cell membranes. The genes encoding the complement form part of the major histocompatibility complex. See antibodv, antigen.

Complementary DNA (cDNA): Single-stranded DNA that is complementary to and synthesized from a messenger RNA template. It is often used as a probe to help locate a specific gene in an organism.

Complications: Adverse patient conditions that arise during the process of medical care.

Comprehensive services for adolescents: The elements of comprehensive health and related services for adolescents are not entirely agreed upon. They include, at a minimum, care for acute physical illnesses, general medical examinations in preparation for involvement in athletics, mental health counseling, laboratory tests, reproductive health care, family counseling, prescriptions, advocacy, and coordination of care; the more comprehensive may include educational services, vocational services, legal assistance, recreational opportunities, child care services and parenting education for adolescent parents. Not all services are available at all centers, but a well-functioning comprehensive services center would provide for the coordinated delivery of care both within the center and between the center and outside agencies and providers.

Computed tomography (CT) scanner: A diagnostic device that combines X-ray equipment with a computer and a cathode ray tube (television-like device) to produce images of cross-sections of the body. Also called 'computerized axial tomography (CAT) scanner."

Concentration ratio: In industrial or economic analysis, the share of market output accounted for by the largest firms in an industry--usually by the four largest. Higher values are indicative of greater concentration of economic power and less competitiveness.

Conceptus: The total products of conception, including the embryo or fetus, chorionic sac, and placenta.

Concurrent controls: In a clinical trial, individuals given a "control treatment" during the same time period that individuals are given the experimental treatment. The term is usually used to refer to individuals not formally enrolled in the trial. Compare historical controls.

Condition: A general term that includes any specific illness, injury, or impairment.

Condition-specific: A program or policy relevant to a specific illness, injury, impairment, or other health or related concern, as opposed to an entire population and its health concerns (e.g., women, minorities, children, adolescents).

Conditions of participation: Requirements that a hospital must meet in order to be allowed to receive payments for Medicare patients. An example is the requirement that hospitals conduct utilization review.

Condom: A sheath commonly made of rubber worn over the penis for the purpose of preventing conception or the transmission of AIDS or other sexually transmitted diseases.

Conduct disorder: A mental disorder diagnosed on the basis of a pattern of behavior (lasting at least 6 months) in which a young person violates others' rights as well as age-appropriate social norms and displays at least 3 of 13 specified behavioral symptoms (e.g., truancy, lying, stealing, fighting).

Confidentiality (of the physician/patient relationship): The state or quality of being confidential, that is intended to be held in confidence or kept secret. Courts and legislatures have established a physician-patient privilege to protect the confidentiality of communications between physicians and their patients and have established similar privileges to ensure the confidentiality of communications between other types of health care providers and their patients or clients. By and large, the confidentiality of the relationship between health service providers and minors and the disclosure of confidential information by health service providers to the parents of minors or other third parties are not addressed in case or statutory law. See also parental consent requirement and parental notification.

Congenital: Existing at birth.

Congenital abnormality: Any abnormality, whether genetic or not, that is present at birth.

Congenital adrenal hyperplasia (CAH): A genetic disorder caused by a deficiency of one or another of the enzymes in the adrenal cortex that is required for normal hormone synthesis. Approximately one half of all cases are life-threatening if untreated in the first few days of life.

Congenital hypothyroidism (CH): A congenital disorder involving a deficiency of the hormone thyroxine needed for brain development and physical growth. If untreated or treated late, CH results in mental retardation and physical abnormalities.

Congregate meals: Meals provided to a group of older adults in a community setting, such as a senior center or school.

Conjugation tube: The bridge-like structure by which cell-to-cell contact is maintained during conjugation.

Conjugation: In molecular genetics, the process by which DNA is transferred from bacteria of one mating type to bacteria of another during cell-to-cell contact.

Conjugative plasmid: A plasmid capable of initiating and directing the process of conjugation. Compare nonconiugative plasmid.

Consensus conference: A meeting of scientists, medical practitioners, and informed lay people held under the auspices of the NIH Consensus Development Program (established in 1977), to review scientific information about biomedical technologies and to develop a consensus statement on the clinical application of current medical findings. The statements are published in medical journals and disseminated directly to physicians and other health professionals, the biomedical community, and the public.

Consent: See informed consent, parental consent requirement.

Consent decree: A legally binding mutual agreement between the EPA and the manufacturer of a chemical under which the manufacturer will conduct EPA-specified tests and the EPA will not require further testing.

Consolidated service system: See service svstem.

Consortia: Microbial communities of micro-organisms that do not occur in the environment alone. These communities are sometimes able to degrade pollutants that one organism couldn't do alone.

Contact lens: A ground or molded lens of glass, plastic, or other substances that fits over the corneal portion or more of the scleral surface of the eye, for the purpose of correcting vision problems or for protection. "Gas-permeable lenses" are any lenses made of material through which gases can penetrate so that oxygen can reach the underlying cornea. "Hard lenses" are contact lenses made of rigid, non-gas-permeable plastic materials. "Extended wear lenses" are contact lenses that can be worn for an extended period (e.g., one month) because they are made of gas-pemeable materials or othewise constructed so that oxygen can reach the underlying cornea. "Soft lenses" are made of water-absorbing materials. "Toric lenses" are contact lenses used to correct for uneven focusing of the eye due to corneal abnormalities.

Contact sensitization: To stimulate an immune response upon initial skin contact with an antigen with the consequence of preparing the body for a stronger response upon reexposure to the antigen.

Contigs: In genetics, pieces of DNA representing overlapping, or contiguous, regions of a genome.

Contiguous area: As it relates to health manpower shortage areas (HMSAS), an area in close proximity to an area under consideration for designation as a HMSA (proximity is based on travel time from the population center of the service area to the center of the contiguous areas).

Continuous Ambulatory Peritoneal Dialysis (CAPD): Peritoneal dialysis is a form of kidney dialysis in which sterile fluid is introduced into the abdominal cavity and the peritoneum acts as the semipermeable membrane that allows the molecular exchange. In CAPD, the peritoneal dialysis is performed nearly constantly in ambulatory patients who exchange the fluid every 4 to 8 hours.

Continuous cell line: Sustained, self-propagating cells grown in the laboratory; such cells may arise spontaneously in primary cell culture, be derived from tumors, or be created through genetic engineering. See cell culture, geneticallv engineered cell.

Continuous cycling peritoneal dialysis (CCPD): A form of peritoneal dialysis in which a machine cycles the dialysate in and out of the peritoneal cavity automatically about every 4 hours overnight as the patient sleeps.

Continuous positive airway pressure (CPAP): A respiratory therapy technique that prevents alveolar collapse (of the air sacs of the lung) by keeping up positive pressure on the lungs between breaths.

Contraception: The prevention of conception or impregnation by any of a variety of means, including periodic abstinence (rhythm method); control of ejaculation (coitus interruptus); the use of spermicidal chemicals in jellies or creams; mechanical barriers (e.g., condoms, caps, or diaphragms); prevention of implantation (e.g., intrauterine device); the use of synthetic hormones to control the female reproductive cycle (e.g., the oral contraceptive pill); and sterilization of the male or female partner.

Contract-managed hospitals: General daily management of a hospital by another organization under a formal contract. The managing organization reports directly to the board of trustees or owners of the managed hospital. The managed hospital retains total legal responsibility and ownership of the facility (American Hospital Association definition).

Contractor (Medicare): See Medicare Carrier and Medicare Intermediary.

Control group: In a randomized clinical trial, the group receiving no treatment or some treatment with which the group receiving experimental treatment is compared. The control treatment is generally a standard treatment, a placebo, or no treatment. Compare experimental group.

Conventional: Referring to cancer treatment, "mainstream" or "orthodox" medical treatment. These terms are used interchangeably, with no intended distinctions among them.

Convergent evolution: The evolution of similar structures or similar life strategies in unrelated species because of adaptation in response to similar selection pressures (for example, in similar ecological habitats).

Conversion privilege: The right to change insurance without providing evidence of insurability, usually to an individual policy upon termination of coverage under a group contract. Conversion privileges are mandated by the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) (Public Law 99-272).

Coombs test: A test that is usually used to detect the abnormal presence of proteins, most often antibodies, on the surface of red blood cells.

Cooperative or alliance of hospitals and other facilities: A formal organization working on behalf of its individual members for specific purposes (e.g., sharing of services, development of staff education programs, legislative advocacy).

Copayment: In insurance, a form of cost-sharing whereby the insured pays a specific amount at the point of service or use (e.g., $10 per visit). See also coinsurance and deductible.

Core antigens: Proteins that make up the internal structure or core of a virus. Compare envelope antigens.

Cornea: A transparent layer of tissue that forms the front of the eye (covering the iris and lens), that refracts light entering the eye onto the lens, which then focuses images on the retina.

Corneal Ulcers: Pits, perforations, or other lesions of the surface of the cornea of the eye.

Coronary arteries: Arteries that supply blood to the heart.

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.

Coronary artery disease (CAD): Narrowing or blockage of the coronary arteries, which usually results in reduced blood flow to the heart muscle.

Corpus luteum: A gland that forms on the surface of the ovary at the site of ovulation and produces progesterone during the second half of the menstrual cycle, thereby preparing the uterus for a possible pregnancy. The corpus luteum regresses if fertilization does not occur.

Cosmids: Genetic hybrids, constructed from plasmids and the bacteriophage lambda, which are used as vectors in DNA cloning.

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, usually expressed in monetary terms.

Cost-effectiveness analysis (CEA): An analytical technique that compares the costs 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. When benefits or effectiveness are difficult to express in a common metric, they should be (but usually aren't) presented as an "array."

Cost-effectiveness analysis/cost-benefit analysis (CEA/CBA): A composite term used by OTA to refer to a family of analytical techniques that are employed to compare costs and benefits of programs or technologies.

Cost-effectiveness analysis: A determination of whether the costs of regulating a toxic substance exceed the effectiveness in reducing risks to health or the environment. Costs are measured in monetary units; effectiveness in natural units such as years of life saved, incidence of disease averted, and days of work loss avoided. Compare cost-benefit analysis. See risk.

Cost-saving: An economic concept referring to the results of cost-effectiveness analysis when the net health care costs of implementing one strategy (compared to another) are less than zero.

Cost-sharing: That portion of the payment to a provider of health care services that is the initial liability of the patient and that may include deductibles, copayments, coinsurance, and, under Medicare Part B, unassigned liability. Also, the general set of financial arrangements under which health care insurance is

contingent on a purchaser's acceptance of the obligation to pay some portion of the reimbursements for those services.

Counseling: Assistance and guidance provided by social workers, psychologists, nurses, and others to help define and resolve problems of various kinds, including emotional and relationship problems.

Covariation: The tendency of health problems to occur in the same individual at approximately the same time. The problems may have a single common cause, or one problem may be the cause of another.

Coverage (Medicare): In the Medicare program, coverage refers to the benefits available to eligible beneficiaries and can be distinguished from payment, which refers to the amount and methods of payment for covered services.

Crack: A smokable form of cocaine converted from cocaine powder by mixing it with baking soda or ammonia and water and then heating the mixture to remove the water.

Creutzfeldt-Jakob disease (CJD): A rare, fatal degenerative disorder of the brain believed to be transmitted by an atypical infectious agent, sometimes referred to as a "slow virus" (one that causes no signs of disease until months or yearn after infection); characterized by symptoms of dementia, sudden muscular contractions, and abnormal gait, followed by deterioration of mental functions.

Crisis intervention services: A not well-defined set of mental health services that can include crisis telephone lines (i.e., hot lines), emergency outpatient services, and a range of crisis-oriented outreach services such as home-based care and mobile crisis teams.

Cross-reactivity: The property of an organism able to provoke an immunologic reaction against a different organism. The tuberculosis vaccine BCG, for example, is an attenuated strain of Mycobacterium bovis (a bovine tuberculosis) that provokes the immune reaction against M. tuberculosis, the cause of human tuberculosis.

Crosshatch: A laboratory test used to determine transfusion compatibility of blood types between donor and recipient.

Crossover test: A laboratory or clinical method whereby an animal serves as its own control by first receiving a drug or a placebo and then receiving the reverse. This kind of test has potential applications in anesthesiology, endocrinology, radiology, and various other fields.

Crossover: In a randomized clinical trial, the switching of treatment during the course of the trial. Crossovers can be planned as part of the trial method, or unplanned, a consequence of an individual's changing medical condition.

"Crow-fly" miles: A term used to describe the straight-line or shortest distance in miles between a given number of hospitals regardless of the actual or practical means (e.g., roads) available to travel between these hospitals.

Crude mortality rate: The proportion of a population that dies during a specified time period. Calculated as the number of deaths divided by the total population, over a defined period of time. Also called the death rate. See also mortalitv rate and age-adiusted mortalitv rate.

Cryoprecipitate: A precipitate that remains after blood plasma has been frozen and then thawed. This precipitate is rich in Factor Vlll (antihemophilic factor), fibrinogen, and fibronectin.

Cryptic plasmid: A plasmid of undetermined function.

Cryptorchidism: A developmental disorder of male infants in which the testes fail to descend into the scrotum.

CT scanner: See computed tomography (CT) scanner.

Cultivar: An international botanical term denoting certain cultivated plants that are clearly distinguishable from others by one or more characteristics, and which, when reproduced, retain those characteristics. In the United States "variety" is considered to be synonymous with cultivar (derived from cultivated variety). See strain.

Culturally competent: A set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations. A culturally competent system of care acknowledges and incorporates-at all levels--the importance of culture, the assessment of cross-cultural relations, vigilance towards the dynamics that result from cultural differences, the expansion of cultural knowledge, and the adaptation of services to meet culturally unique needs. See culture.

Culture: Implies the integrated pattern of human behavior that includes houghts, communications, actions, customs, beliefs, values, and institutions of a racial, ethnic, religious or social group.

Cure: (n.) A medical treatment that reliably relieves the patient of the disease. (v.) To heal, to make well; a restoration to health.

Current Procedural Terminology, 4th Revision (CPT-4) Coding: A taxonomy of procedures performed by physicians that is used for recording and billing for services rendered. This taxonomy has been incorporated in the HCFA Common Procedure Coding system, which all Medicare carriers are now required to use.

Customary, prevailing, and reasonable (CPR) method (Medicare): The method used by carriers to determine the approved charge for a particular Part B service from a particular physician or supplier; based on the actual charge for the service, previous charges for the service by the physician or supplier in question, and previous charges by peer physicians or suppliers in the same locality. Customary charge: In the absence of unusual medical circumstances, the maximum amount that a Medicare carrier will approve for payment for a particular service provided by a particular physician practice, The carrier computes the customary charge on the basis of the actual amount that a physician practice or supplier generally charges for a specific service. Prevailing charge: In the absence of unusual medical circumstances, the maximum amount a Medicare carrier will approve for payment for a particular service provided by any physician practice within a particular peer group and locality. Generally, this amount is equal to the lowest charge in an array of customary charges that is high enough to include 75 percent of all the relevant customary charges. Approved or reasonable charge: An individual charge determination made by a Medicare earner on a covered Part B medical service or supply. In the absence of unusual medical circumstances, it is the lowest of: (1) the physician's or supplier's customary charge for that service; (2) the prevailing charge for similar services in the locality; (3) the actual change made by the physician or supplier; and (4) the carrier's private business charge for a comparable service. Also called allowed charge or reasonable charge.

Cystic fibrosis: An autosomal recessive genetic disorder caused by a disorder of the exocrine glands that results in abnormal mucous secretions. The disorder is characterized by chronic obstructive lung disease and is the most common, potentially fatal, genetic disease among Caucasian persons.

Cytapheresis: A type of apheresis involving the selective removal of specific blood cells (red cells, white cells, and/or platelets).

Cytokine: Any soluble substance secreted by cells of the lymphoid system (lymphocytes and macrophages) that transmit messages between cells to control and modulate immune response; include lymphokines, monokines, interferon, and interleukins.

Cytomegalovirus (CMV): One of a group of highly host-specific herpes viruses that infect humans, monkeys, or rodents. CMV infection in man generally produces mild cold-like symptoms, except in immune-compromised individuals and in pregnant women, for whom the infection can have serious consequences (e.g., leading to congenital abnormalities in the children of women infected during pregnancy).

Cytopathic: Pertaining to or characterized by abnormal changes in cells.

Cytoplasm: The protoplasm of a cell exclusive of that of the nucleus. It consists of an aqueous solution and the organelles suspended in it and is the site of most chemical activities of the cell.

Cytotoxic: Poisonous or destructive to living cells.

D

D antigen: A red cell antigen of the Rh blood group system.

Day treatment: A nonresidential mental health service that provides an integrated set of educational, counseling, and family interventions which involve a child or adolescent for at least 5 hours a day, and that can be provided in a school setting, community mental health centers, hospitals or elsewhere in the community. Day treatment programs that are provided in hospitals are referred to as partial hospitalization. Day treatment is considered the most intensive of the nonresidential services that can continue over a longer period of time.

DDT: Dichloro-diphenyl-trichloro-ethane; a pesticide used to control mosquitoes and other insects.

Death rate: The number of deaths per some portion of a population, usually 100,000 individuals.

Decision-specific decisionmaking capacity: An individual's capacity to make a specific decision. A concept that has emerged in the legal and ethical debate about determining individuals' decisionmaking capacity is that an individual's capacity to make a decision may differ for each decision, depending on the characteristics of the decision and the circumstances in which it is made.

Decisionmaking capacity: The ability of a person to make decisions for himself or herself. Three types of criteria are generally used to judge an individual's decisionmaking capacity: status criteria (e.g., consciousness or age), outcome criteria (e.g., a judgment about the "reasonableness" of a person's decision), and functional criteria (e.g., evidencing an understanding of relevant information and issues).

Decisionmaking skills: Skills relevant to the ability to make rational, health-promoting decisions about one's life. Often a part of life-skills training interventions.

Decubitus ulcers: Bedsores.

Deductible: An initial expense of a specified amount of approved charges for covered services within a given time period (e.g., $75 per year) payable by an insured person before the insurer assumes liability for any additional costs of covered services. The Part B deductible is the portion of approved charges (for covered services each calendar year) for which a beneficiary is responsible before Medicare assumes liability.

Degenerative disorders: Diseases whose progression cannot be arrested. These disorders cause progressive deterioration of mental and neurological function, often over years. Alzheimer's disease is the most prevalent degenerative dementia. The ultimate cause of such disorders is unknown.

Degree of shortage: See Priority groups.

Delayed-type hypersensitivity: An inflammatory reaction that occurs 24 to 48 hours after challenge with antigen and is a result of cell-mediated immunity. See hypersensitivity.

Delinquent behavior: As it pertains to adolescence, includes two types of acts: 1) acts committed by minors that would be considered crimes if committed by an adult, and 2) status offenses (i.e., acts that are offenses solely because they are committed by a juvenile, such as running away from home, or truancy). See minor offenses and serious offenses.

Delirium: A decline in the intellectual function with clouded consciousness. It differs from dementia in that it implies a temporary loss of ability. However, persons with dementia frequently develop delirium caused by other illnesses or drug reactions and delirium can be confused with dementia particularly in older individuals.

Delusion: A false belief that is firmly maintained despite contradiction with social reality.

Dementia pugilistic: Brain damage resulting from repeated head trauma. Also known as boxer's or fighter's dementia or encephalopathy.

Dementia: Progressive impairment in mental function and global cognitive abilities of long duration (months to years) in an alert individual due to brain disease. Symptoms include memory loss, loss of language function, inability to think abstractly, inability to care for oneself, personality change, emotional instability, a loss of sense of time and place, and behavior problems. Dementia can be caused by over 70 disorders, but the leading cause in the United States is Alzheimer's disease. Contrast delirium.

Dementing illness, disease, or condition: One of the more than 70 illnesses, diseases, and conditions that can cause dementia, the major one in the United States being Alzheimer's. Disease of blood vessels is the second most common cause of dementia. Some of the diseases that cause dementia are AIDS, Down's Syndrome, Creutzfeldt-Jakob disease, Huntington's disease, Binswanger's disease, and normal pressure hydrocephalus (NPH). Many other types of disorders may or may not produce dementia, such as certain infectious, metabolic, and nutritional disorders.

Demonstration project: An intevention that is typically in an experimental (unproven) stage of effectiveness and is supported for a limited period with an evaluation component.

Demyelinating disorder: See demvelination, multiple sclerosis.

Demyelination: A disease process that destroys the myelin sheaths surrounding nerve fibers in the central or peripheral nervous system, affecting conduction of nerve impulses (e.g., in multiple sclerosis). Demyelination can also occur following head injury or stroke. See mvelin sheath.

Denaturation: The separation of double-stranded DNA into its single strands or of protein into its constituent peptides through treatment with chemicals, heat, or extremes of pH. The narrow range of temperature or chemical concentrations at which DNA and proteins denature is characteristic of the particular molecule and is used to identify their presence. Denaturation also results in loss or reduction of the biological properties of the substance.

Dendrite: Any of the shorter branched extensions of the cell body of a neuron, which makes contact with other neurons and carries nerve impulses into the cell body.

Dengue fever: An acute febrile disease caused by an arbovirus, transmitted by mosquitoes of the genus Aedes, and characterized by fever, severe pains in the head, eyes, muscles, and joints, and a skin eruption.

Dental and oral health: The term dental means of or relating to the teeth or dentistry (the health profession that cares for teeth); and the term oral means of or relating to all aspects of the oral cavity (such as the gums and the tongue). Thus, dental and oral health refers to the health of these stuctures.

Dental caries: The localized, progressive decay of a tooth, starting on the surface, and if untreated, extending to the inner tooth chamber and resulting in infection.

Denver Developmental Screening Test (DDST): A standardized test, developed in 1967, for the detection of developmental and behavioral problems in children.

Deoxyribonucleic acid: See DNA.

Dependency ratio: The number of children and elderly people per every 100 people of working age.

Depreciation: An estimate of the value of consumption of a fixed asset during a specific period of time.

Deprenyl: A drug shown to slow the progression of Parkinson's disease in clinical trials by blocking the activity of MAO-B. See MAO-B.

Depression: A psychiatric syndrome involving prolonged and intense feelings of worthlessness, hopelessness, or irritability and thoughts of death or suicide. It may have genetic and biochemical components and may be triggered by certain physical illnesses, hormonal disorders, or hormonal changes that occur after childbirth. Antidepressant drugs seem to act by affecting neurotransmitters in the brain.

Dermatitis: Inflammation of the skin, manifested by redness, itchiness, and blistering.

Descriptive toxicology: A branch of toxicology dealing with phenomena above the molecular level, Descriptive toxicology relies heavily on the techniques of pathology, statistics, and pharmacology to demonstrate the relationship cause and effect (e.g., that certain substances cause liver cancer in certain species within a certain time). It is most often used in regulatory schemes requiring testing.

Designated driver (programs): The practice of a group designating a person in the group to not drink alcohol and to be the driver for others who may be drinking alcoholic beverages.

Development: A process of growth and differentiation by successive changes. In humans, includes physiological development; cognitive development (increasing ability to think critically and engage in higher order reasoning); ego development (qualitatively different psychosocial stages, including internalization of the rules of social intercourse, increasing cognitive complexity and tolerance of ambiguity, and growing objectivity); and moral development (changes in the ability to recognize and reason about moral dilemmas and to make choices based on moral principles and reasoning).

Developmental disorders: A set of mental disorders characterized by deviations from the normal path of child development. Such disorders may be pervasive, thereby affecting multiple areas of development (e.g., autism), or specific, affecting only one aspect of development (e.g., arithmetic disorder).

Developmental neurotoxicity tests: Experimental studies of the offspring of animals exposed to toxic substances during pregnancy and lactation in order to determine the nature and extent of structural or functional damage to the nervous system of the offspring.

Developmentally appropriate: Health promotion, prevention, and treatment services and environments designed so that they fit the emotional, behavioral/experiential, and intellectual levels of the individual who is to benefit from the service.

Device, medical: An instrument, apparatus, implant, in vitro reagent, or other similar or related article intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease, or intended to affect the structure or function of the body, that works through nonchemical, nonmetabolic means.

Di-methyl adipimidate: An experimental compound used to prevent sickling of the red blood cells of patients with sickle-cell anemia.

Diagnosable mental disorders: Disorders included in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, 3d cd., revised.

Diagnosis-related groups (DRGs): 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 mandated for use in establishing payment amounts for individual admissions under Medicare's prospective hospital payment system as required by the Social Security Amendments of 1983 (Public Law 98-21).

Diagnostic Inteview Schedule for Children (DISC): A child-oriented version of the Diagnostic Interview Schedule, a questionnaire developed for use by the National Institute of Mental Health for its epidemiologic catchment area survey of mental disability in adults.

Diagnostic test: A medical test administered to those asymptomatic but high risk individuals identified by a screening test, or a test used to identify the cause of abnormal physical signs or symptoms. Compare predictive test and screening test.

Dialysate: The sterile fluid used in dialysis to remove toxic substances from the blood. The chemical composition of the dialysate varies according to the types of substances being removed. According to the basic principle of osmosis, the dialysate generally contains low concentrations of the waste substances.

Dialysis: The process of separating large molecules (e.g., carbohydrates, proteins) or small molecules (e.g., glucose, amino acids) in solution by the differences in their rates of diffusion through a semipermeable membrane. Dialysis takes place naturally in normal functioning kidneys cluing the excretion of nitrogenous waste. See continuous ambulator peritoneal dialvsis, continuous cvcling peritoneal dialvsis, intermittent peritoneal dialvsis, and hemodialvsis.

Dialyzer: A device used to effect dialysis. The term is often used synonymously with hemodialyzer.

Diarrheal diseases: Diseases characterized by the passage of loose watery stools, usually at more frequent than normal intervals. The dehydration that accompanies diarrhea is the cause of great morbidity and mortality, particularly among infants and children.

Dibromochloropropane (DBCP): The name of a specific chemical used as a pesticide. In the mid-1970s, a group of male workers discovered that their exposure to DBCP had rendered them sterile. A regulation limiting exposures to DBCP was issued by the Occupational Safety and Health Administration in 1978.

Differentiation: In embryology, the process in which unspecialized cells or tissues become specialized for certain functions. In oncology, the degree of similarity of tumor cells to the cells from which the tumor arose.

Digital subtraction angiography (DSA): A radiologic tool used for the diagnosis of conditions pertaining to the internal structure of arteries. The procedure involves injecting a contrast medium into the patient's blood vessels and then monitoring the medium as it passes through the vessels. A computer "subtracts" the images made of the arteries under study before the injection from the images after the injection to attain a representation of the arterial structure. Intravenous DSA is the term used when the contrast medium is injected into a vein; intra-arterial DSA applies to DSA where the contrast medium is injected into an artery.

Dimethyl Sulfoxide (DMSO): An alkyl sulfoxide, a powerful solvent that can dissolve aromatic and unsaturated hydrocarbons, organic compounds, and many other substances. Its biological activities include the ability to penetrate plant and animal tissues and to preserve living cells during freezing. In mainstream medical treatment, it has been shown efficacious for one condition, interstitial cystitis. It is used in a number of unconventional cancer treatments, applied topically in conjunction with other agents.

Diphtheria, tetanus, pertussis (DTP) vaccine: A combination vaccine composed of two toxoids (diphtheria and tetanus) and one inactivated whole-cell bacterial vaccine (pertussis).

Diphtheria: An acute infectious disease caused by a bacterium that attacks the throat and nasal passages, interfering with breathing and sometimes producing a toxin that can damage the heart and nerves.

Diploid: In genetics, refers to a nucleus, cell, or organism with twice the haploid number of chromosomes characteristic of the species, i.e., two half sets of chromosomes are present, one half set from the female parent and the other from the male parent. In humans, all somatic cells are diploid, with 46 chromosomes, and mature reproductive cells are haploid, with 23 chromosomes. Compare haploid.

Diplopia: A vision disorder characterized by the perception of two images of a single object because of, for example, unequal action of the eye muscles. Also called "double vision."

Direct genetic test: A DNA-based test capable of identifying a specific disease-causing allele. Compare linkage test.

Direct pay: See individual health insurance.

Direct reimbursement: Payment for services that is submitted directly to the health care practitioner who provided those services.

Directed blood donation: Blood donation from identified individuals, such as family and friends, intended to be used as the sole source of blood for the patient for whom the donations were made.

Disability: A term used to denote the presence of one or more functional limitations. A person with a disability has a limited ability or an inability to perform one or more basic life functions (e.g., walking) at a level considered "typical." Compare handicap and impairment.

Discharge abstract: Consists of data abstracted from a hospitalized patient's medical record, usually including specific clinical data such as diagnostic and procedure codes as well as other information about the patient, the physician, and the patient's insurance and financial status.

Discounting: A procedure used in economic 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.

Discretionary adjustment factor: The component of the DRG update factor that accounts for cost increases or decreases that are not necessarily captured by inflation measures (e.g., quality of care). The discretionary adjustment factor was originally set at 1 percent per year but was later limited by Congress to 0.25 percent for fiscal years 1985 and 1986.

Discretionary spending programs (in the Federal budget): Those spending programs subject to the annual appropriations process. Compare entitlement programs.

Discretionary time: That portion of time during which individuals are not engaged in mandatory or maintenance activities (e.g., school, work, sleeping, eating).

Disease: Any deviation from or interruption of the normal structure of function of any part, organ, or system (or combination thereof) of the body that is manifested by a characteristic set of symptoms and signs and whose etiology, pathology, and prognosis may be known or unknown.

Disease prevention: The averting of disease, traditionally characterized as primary, secondary, and tertiary prevention. Primary prevention aims at avoiding disease altogether. Secondary prevention strategies detect disease in its early stages of development, with the hope of preventing its progression. Tertiary prevention attempts to arrest further deterioration in individuals who already suffer from a disease.

Disorientation: The lack of correct knowledge of person, place, or time (e.g., where a person is, who the people around him or her are, and what time of the day, day of the week, or month it is).

Distress: Usually the product of pain, anxiety, or fear. However, distress can also occur in the absence of pain. For example, an animal struggling in a restraint device may be free from pain, but may be in distress. Distress can be eased with tranquilizers.

DNA: Deoxyribonucleic acid. The genetic material of most living things (exceptions include some RNA viruses) that determines hereditary characteristics by directing protein synthesis in the cells. DNA is a double-stranded nucleic acid, with an external "backbone" formed by a chain of attempting phosphate and sugar (deoxyribose) units and an internal ladder-like structure formed by nucleotide base-pairs held together by hydrogen bonds. The nucleotide base pairs consist of the bases adenine (A), cytosine (C), guanine (G) and thymine (T), whose structures are such that A can hydrogen bond only with T, and C only with G. The sequence of each individual strand can be deduced by knowing that of its partner. This complementary is the key to the information transmitting capabilities of DNA. See nucleotide and gene.

DNA adducts: Compounds formed from the binding of exogenous and xenobiotic materials to DNA. Their presence may be indicative of exposure to specific toxicants. See xenobiotic.

DNA probes: Segments of single-strand DNA that are labeled with a radioactive or other chemical marker and used to identify complementary sequences of DNA by hybridizing with them.

DNA sequence: The order of nucleotide bases in the DNA helix.

DNA-DNA hybridization: See nucleic acid hybridization.

Domain: A discrete portion of a protein with its own function. The combination of domains in a single protein determines its unique overall function.

Domestic discretionary spending: As defined by the Budget Enforcement Act of 1990 (Title XIII of OBRA-90 [Public Law 101-508]), discretionary spending that is related to domestic programs (i.e., not to the military or to assist foreign governments).

Domiciliary care facility: A nonmedical residential care facility that provides room and board and variable amounts of protective supevision, personal care, and other services. The term is used for the 29 large residential care facilities currently operated by the Veterans' Administration.

Dominant: In genetics, describes an allele, or genetic trait, that is expressed when present in only one copy in the cells of an organism. Compare recessive.

Donor gametes: Eggs or sperm donated by individuals for medically assisted conception.

Dopamine: A catecholamine derived from dopa that is an intermediate in the synthesis of norepinephrine; found in high concentrations in the adrenal medulla and also in the brain, where it functions as a neurotransmitter in insufficient amounts produces the symptoms of Parkinson's disease. See catecholamine, neurotransmitter.

Doppler ultrasonography: A diagnostic technique to measure and visually record changes in the frequency of a continuous ultrasonic wave, used to indicate changes in the velocity of blood flow through the underlying arteries.

Dorsal root: The portion of the nerve root that brings sensory information from the body to the spinal cord. See nerve root.

Dosage: The amount, frequency, and number of doses of a substance administered.

Dose-response: The quantitative relationship between exposure to a substance, usually expressed as a dose, and the extent of toxic injury or disease.

Dose: The amount of a substance absorbed in a unit volume or in an individual. Dose rate is the dose delivered per unit of time.

Dosimeter: Device or methodology for measuring the dose of a chemical or ionizing radiation to a biological system.

Double helix: In genetics, refers to the Watson-Crick model of DNA structure in which the two chains of nucleotide bases are linked and wound around each other to form a spiral-shaped molecule.

Down syndrome: A genetic disorder caused by the presence of three copies of chromosome 21 (called trisomy 21) or by two copies of chromosome 21 and another chromosome 21 translocated to a different chromosome (usually to chromosome 14). The latter is called "translocation Down syndrome." Down syndrome is characterized by mental retardation and may also include congenital heart defects, immune system abnormalities, various morphological abnormalities, and a reduced life expectancy. Down syndrome has been shown to increase in frequency among children born to older mothers and can be detected prenatally by amniocentesis or chononic villi sampling. The disorder is named after the British physician John Down (1828-1896) who studied its incidence.

Downsizing (of hospitals and other health care facilities): Taking actions such as reducing the number of beds and staff according to a reduction in demand for services.

Draize Eye Irritancy Test: In toxicology, an experimental test for ocular toxicity of chemical compounds that involves applying a single dose of a chemical directly to one eye of each of several experimental animals (e.g., albino rabbits), with the other eye seining as the control.

DRG outliers: Cases with unusually high or low resource use. Defined by the Social Security Amendments of 1983 (Public Law 98-21) as atypical hospital cases that have either an extremely long length of stay or extraordinarily high costs when compared to most discharges classified in the same diagnosis-related group.

DRG weights: The weight assigned a DRG represents its assumed resource use relative to other DRGs. The higher the weight is, the larger the Medicare payment.

DRG: See diagnosis-related group.

Dropout rate: The proportion of a particular group of individuals (usually an age cohort) who are not enrolled in school and have not finished high school at a particular point in time. Compare graduation rate.

Drosophila: A small fruit fly (Drosophila melanogaster) used in a wide variety of genetic studies. The advantages of working with the organism include a short generation time (so that many generations can be studied in a fairly short period of time), a high fecundity (thousands and even millions can be studied in a reasonable length of time), and the extremely favorable giant polytene chromosomes in the salivary

glands of the larvae (which make it possible to correlate genetic phenomena with morphological changes in the chromosomes and follow these characteristics through numerous generations and experimental crosses).

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

Drug abuse: According to the American Psychiatric Association's diagnostic manual (DSM III-R), drug abuse is characterized by maladaptive patterns of psychoactive substance use that have never met the criteria for dependence for that particular class of substance. Drug abuse refers to a pattern of drug use that results in harm to the user; the user continues use despite persistent or recurrent adverse consequences. See drug dependence.

Drug addiction: See drug dependence.

Drug dependence: A disorder in which a person has impaired control of psychoactive substance use and continues use despite adverse consequences. It is characterized by compulsive behavior and the active pursuit of a lifestyle that centers around searching for, obtaining, and using the drug. According to the American Psychiatric Association, diagnosis of drug dependence is established if at least three out of nine defined symptoms have been persistent for at least one month or have occurred repeatedly over a longer period of time. The range of symptoms include inability to control use, compulsive use, continued use despite knowledge of adverse consequences, tolerance, and physical dependence. Compare drug abuse.

Dual diagnosis: Coexistence of two disorders in the same individual (e.g., drug abuse or dependence and psychiatric disorder).

Duchenne muscular dystrophy: See muscular dvstrophv (Duchenne tvpe.

Dura mater: The thickest, outermost membrane surrounding the brain and spinal cord.

Durable power of attorney: A modification of the standard power of attorney that permits an individual (the principal) to transfer specified powers to another person. The power may be broad in scope or limited. The fundamental difference between standard and durable power of attorney is that the former loses its validity when the principal becomes incompetent and is therefore not useful for people with a dementing illness. A durable power of attorney provides a means of designating a surrogate decisionmaker that survives the incompetence of the principal.

Duration of exposure: The length of time a person or test animal is exposed to a chemical. Duration of exposure is divided into four categories: acute (exposure to a chemical for less than 24 hours), subacute (exposure for 1 month or less), subchronic (exposure for 1 to 3 months), and chronic (exposure for more than 3 months). See frequencv of exposure.

Dwarfism: A general term for pathological conditions of abnormally short stature. Some types are caused by chromosome abnormalities, while othes result from disease, metabolic dysfunction (such as kidney or hormone failure), or from fetal exposure to teratogens or chronic malnutrition.

Dysentery: Severe infection of the intestine characterized by pain, intense diarrhea, and the passage of mucus and blood. If untreated, can result in life-threatening dehydration. Bacterial dysentery (shigellosis) is caused by infection with shigella bacteria, whereas amoebic dysentery is caused by infection with a protozoan parasite (Entamoeba histolytica).

Dysmenorrhea: Difficult and painful menstruation.

Early adolescence: A period encompassing the profound physical and social changes that occur with puberty, as maturation begins and social interactions become increasingly focused on sex (e.g., on members of the opposite sex). Typically takes place from ages 10 through 14. Compare middle adolescence. late adolescence. yourngер adolescents, older adolescents.

Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program: A State and federally funded, State-administered program under Medicaid that is intended to provide preventive screening exams and follow-up services for illnesses, abnormalities, and treatable conditions to Medicaid-eligible children under age 21.

Early intervention: Treatment services delivered before a problem becomes serious and/or chronic.

Eating disorders: Psychophysiological disorders characterized by disturbances in eating. Such disorders include anorexia nervosa and bulimia.

Echo planar technique: A particular type of magnetic resonance imaging in which an image is obtained from an excitation pulse.

Echocardiography: A method of imaging the heart walls and internal stuctures of the heart by the echo obtained from beams of ultrasonic waves directed through the heart wall.

Econometric techniques: A group of statistical methods used to estimate and test models of economic behavior or systems.

Economic efficiency: The state in which the greatest direct and indirect gains (benefits) are derived from the resources expended (costs) to achieve a stated objective. Compare net efficiency.

Ectopic pregnancy: A pregnancy that occurs outside the uterus, usually in a Fallopian tube. Early symptoms include severe abdominal pain and vaginal bleeding; if untreated, may lead to rupture or internal hemorrhage, and shock.

Edema: Swelling (e.g., excessive accumulation of fluid in body tissues).

Education for All Handicapped Children Act: The Education for All Handicapped Children Act (Public Law 94-142) mandates that all physically and mentally handicapped children be provided a free, appropriate education and the "related services" necessary to obtain an education. The Federal Government provides a small amount of grant money to States to help them implement this law.

Educational neglect: As defined by DHHS'S National Center on Child Abuse and Neglect, educational neglect can take several forms: permitted chronic truancy, failure to enroll a school-aged child in school, causing the child to miss school for nonlegitimate reasons, and inattention to special educational need (e.g., refusal to allow or failure to obtain recommended remedial educational services).

Educationally based preventive interventions: Preventive interventions that rely primarily on educating the target group. See health education. Compare health protection and preventive strategies.

Educationally disadvantaged: Having difficulties in learning not related to sheer exertion of effort (although motivational difficulties can also prove a disadvantage).

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. Efficacy is generally evaluated in controlled trials of an experimental therapy and a control condition. Compare to 'effectiveness."

Efficiency: See economic efficiency.

Efficient resource allocation: The allocation of resources among alternative uses so that maximum social benefits are derived from the resources.

' Ejaculation: The ejection of sperm from the body. Ejaculation occurs as a two-part spinal reflex that involves emission, when the semen moves into the urethra, and ejaculation proper, when it is propelled out of the urethra at the time of orgasm.

Elderly: Individuals over age 65.

Elective abortion: See abortion.

Electrocardiogram (EKG or ECG): A graphic tracing of the changes of electrical potential of the heart occurring during each heartbeat; usually performed with the patient supine and at rest.

Electroejaculation: Electrical stimulation of the nerve that controls ejaculation, used to obtain semen from men with spinal cord injuries.

Electrolyte: Any compound that dissociates into charged ions in solution and can conduct a current of electricity. A balance of electrolytes in body fluids is necessary for the body to function normally.

Electrolyte balance: The state in which the body has the correct amount of positively and negatively charged ions (e.g., sodium, potassium, hydrogen, magnesium, bicarbonate, phosphate, and chloride), which play important roles in regulating body processes.

Electromyography, EMG: Recording and measuring the electrical activity of muscles by means of electrodes inserted into muscle fibers, with a tracing displayed on an electromyograph. Electromyography is used to diagnose various nerve and muscle disorders, to assess progress in recovery from some forms of paralysis, and to test the effects of neurotoxic substances on humans.

Electromyographic (EMG) signals: Electrical changes that accompany muscle contraction.

Electroneurography, ENG: Recording and measuring the electrical signals generated by nerves by means of an electromyograph. Electroneurography is used in testing the effects of neurotoxic substances on humans.

Electronic fetal monitoring: The use of a device to listen to and record a fetus' heart beat during pregnancy and labor, either externally (using an ultrasound transmitter stropped to the woman's abdomen) or internally (by an electrode attached to the fetal scalp and linked to the recording device by a wire inserted through the vagina). An abnormal fetal heartbeat detected during labor may be a sign of fetal distress, caused by a lack of oxygen to the fetus.

Electrophoresis: A method of separating molecules (such as DNA fragments or proteins) from a mixture of similar molecules, based on differential movement of the molecules through an electric field. An electric current is passed through a medium containing the mixture, and each kind of molecule travels through the medium at a rate detemined by its electrical charge and size.

Electrophysiology: Measuring and recoding the electrical activity of the brain or nerve cells by means of electrodes.

Elephantiasis: A chronic condition caused by a worm infestation (filariasis); it is characterized by massive swelling of a limb, usually a leg, followed by thickening of the skin and subcutaneous tissues.

Embryo: An animal in the earliest stages of its development after conception; in humans, refers to the stages of growth from the second to the ninth week following conception. During this period cell differentiation proceeds rapidly and the brain, eyes, heart, upper and lower limbs, and other organs are formed. Compare fetus.

Embryo donation: The transfer from one woman to another of an embryo obtained by artificial insemination and lavage or, more commonly, by in vitro fertilization (IVF).

Embryo lavage: A flushing of the uterus to recover a preimplantation embryo.

Embryo transfer: The transfer of an in vitro fertilized egg from its laboratory dish into the uterus of a woman.

Embryogenesis: The process of cell growth that produces an embryo from a zygote, given the proper nutrients and time.

Emergency Temporary Standard (ETS): A standard that may be issued under section 6(c) of the Occupational Safety and Health Act (Public Law 91-596) when the Occupational Safety and Health Administration determines that workers are exposed to a "grove danger from an occupational hazard and that an emergency standard is necessary to protect them from that danger.

Emesis: Vomiting.

EMG signals: See electromvographic signals.

Emotional abuse: As defined by DHHS'S National Center on Child Abuse and Neglect, emotional abuse takes three different forms: close confinement, such as tying or binding, or other tortuous restriction of movement; verbal or emotional assault (e.g., habitual patterns of belittling, denigrating, or scapegoating); and other overtly punitive, exploitative, or abusive treatment other than those specified under other forms of abuse (e.g., deliberate withholding of food).

Emotional disorders: Mental disorders characterized by the presence of an emotional problem and considerable impairment of a person's ability to function. Such disorders include anxiety and depression.

Emotional neglect: As defined by DHHS'S National Center on Child Abuse and Neglect, emotional neglect can take several forms: inadequate nurturance and affection; chronic or extreme spouse abuse in the child's presence; encouragement or pemitting of drug or alcohol use by the child; permitting other maladaptive behavior; refusal of recommended, needed, and available psychological care; delay in psychological care; and other emotional neglect (e.g., other inattention to the child's developmental/emotional needs not classifiable under any of the above forms of emotional neglect, such as inappropriate application of expectations or restrictions).

Emotional problems: The mental health problems exhibited in the form of emotional distress (e.g., anxiety and depressive disorders); may include subjective distress. Compare behavioral problems, physical problems.

Emphysema: A disorder of the lungs characterized by an increase beyond the normal in the size of air spaces in the farthest reaches of the lung either from dilation of the alveoli (the tiny sacs in the lung where oxygen from the air and waste carbon dioxide in the blood are exchanged) or from the destruction

of their walls; causes shortness of breath and can result in respiratory and/or heart failure. Emphysema is usually caused by cigarette smoking, although other contributors include air pollution and an inherited predisposition (alpha-1-antitrypsin deficiency).

Employer mandate: A requirement imposed by the Federal Government on the States that requires employers to offer group health insurance policies and pay a significant amount of the premiums for all employees who work more than a specified number of hours per week.

Empowerment: Empowerment approaches take as a given that individuals, not just professionals, have a set of competencies, that these competencies are useful in the design and management of services, and, further, that those competencies can be even more fully developed by giving individuals additional opportunities to control their own lives. Empowerment is sometimes viewed as a health promotion strategy.

Encephalins: A peptide neurotransmitter found in the brain, spinal cord, nerve cells, and in gut epithelial cells. Encephalins bind to opiate receptors in the brain and their release into the bloodstream is thought to control levels of pain and other sensations.

Encephalitis: An inflammation of the brain, often but not always caused by a viral infection.

Encephalomyelitis: An inflammation of the brain and spinal cord that is caused by infection with any of a number of viruses.

Encephalopathy: Any of several disorder that impair the functioning of the brain.

Encopresis: A psychophysiological disorder characterized by defecation in inappropriate places.

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).

Endarterectomy: Surgical removal of the inner layer of an artery when the artery is thickened and obstructed.

Endemic: Constantly present or persistent within a given geographic area. A term used in reference to a disease or infectious agent. Compare epidemic.

Endocrine system: Organs and glands (e.g., thyroid, pituitary, parathyroid, adrenal, ovary, testes, placenta, and part of the pancreas) that secrete hormones (involved in the regulation of growth and sexual development) into the bloodstream.

Endogenous: Developing or originating within the organism or other entity, or arising from causes within the entity.

Endometrial biopsy: The microscopic examination of a sample of cells, obtained from the lining of the uterus between days 22 and 25 of a normal 28-day menstrual cycle, in order to evaluate ovulatory function.

Endometriosis: The presence of endometrial tissue (the normal uterine lining) in abnormal locations, such as the fallopian tubes, ovaries, or the peritoneal cavity. Endometriosis can interfere with nearly every phase of the reproductive cycle and is a leading contributor to infertility in women.

Endometrium: The tissue lining the uterus.

Endorphins: A group of endogenous morphine-like proteins found in the pituitary gland and hypothalamus that bind to specific opiate receptors in the brain to produce painkilling and euphoric effects; also may be involved in the body's response to stress, regulation of intestinal wall activity, influencing mood, and regulating the release of hormones (growth hormone and gonadotropin) from the pituitary. Endorphins can produce the tolerance and addiction characteristic of opiates. They occur in various forms, including alpha-, beta-, and gamma endorphins and the encephalins. The term derives from "endogenous morphine-like substances."

Endothelial cell: A type of cell forming a single layer lining the inner surfaces of the heart, blood vessels, and lymphatic vessels.

Endotoxin: A poison produced by some Gram-negative bacteria in the cellular membrane, and released only upon cell rupture or cell death. In the body, endotoxins can act as antigens, producing an immune response against them. See exotoxin.

Endpoint: The disease, condition, or adverse effect being measured in a clinical or epidemiologic study.

Enema: Infusion of a fluid via the rectum, usually for the purpose of clearing out the bowel.

Engineering controls: Methods of controlling worker exposure to certain hazardous agents by modifying the source or reducing the amount of contaminants released into the workplace. Engineering controls include process design and modification, equipment design, enclosure and isolation, and ventilation. Compare administrative controls, personal protective equipment, and work practice~.

Enteral nutrition: The intake of nutrients that undergo at least partial processing in the intestine. Strictly speaking, enteral nutrition includes normal food intake through the mouth. However, the term is often used to indicate more specifically the intake of nutrients through a tube that is passed via the throat or surgical opening (in the esophagus) leading to the stomach or the small intestine.

Enteric nervous system: The nerve network controlling the stomach and intestines.

Enterotoxigenic: Capable of producing a toxin specific for the cells of the intestine. Some strains of Escherichia coli cause disease by producing such a toxin.

Entitlement programs: Programs that provide benefits paid out automatically to all who qualify unless there is a change in underlying law (examples include Federal employee retirement benefits, Medicare, Medicaid, unemployment compensation, Aid to Families With Dependent Children).

Entomology: The scientific study of insects.

Enuresis: A psychophysiological disorder in adults characterized by involuntary bedwetting or other lack of control over urination.

Envelope antigens: Proteins that constitute the envelope or surface of a virus. Compare core antigens.

Environmental control of disease: The control of insects, other vectors of disease, or the pathogens themselves through alteration of the physical environment (to eliminate the conditions necessary for the vectors' or pathogens' survival).

Environmental hypothesis: The theory that exposure to toxic substances contributes significantly to neurological disorders such as Parkinson's disease, Alzheimer's disease, and amyotrophic lateral sclerosis (Lou Gehrig's disease).

Enzootic: The constant presence or persistence of an animal disease or infectious agent within a given geographic area. Compare endemic, epizootic.

Enzyme: A protein that acts as a catalyst in biochemical reactions in living cells.

Enzyme deficiency variants: Proteins, altered by mutation, reduce or eliminate the biological activity of certain blood enzymes. These mutations may lead to the absence of a specific gene product or the changing of a protein so that they become non-functional or abnormally unstable.

Enzyme immunoassay (EIA): An assay based on antigen-antibody interactions, which uses enzymes to measure the reaction. For example, in EIAs that are used to measure drugs in urine, a reagent that contains antibodies against a specific drug is first added to the urine specimen. A second reagent containing the specific drug attached to an enzyme is then added, and the enzyme-labeled drug combines with any remaining antibody binding sites. This binding decreases the enzyme activity. The residual enzyme activity relates directly to the concentration of drug in the specimen. The active enzyme converts another substance in the reagent, resulting in an absorbance change that is measured spectrophotometrically. See also indirect immunofluorescence assay and radioimmunoprecipitation assay.

Enzyme-linked immunosorbent assay (ELISA): A type of enzyme immunoassay for determining the amount of protein or other antigen in a given sample by means of an enzyme-catalyzed color change. ELISA testing is used to detect the presence of antibodies to HIV in human sera.

Epidemic: A sudden increase in the incidence rate of an illness affecting large numbers of people in a defined geographic area. Compare endemic, epizootic.

Epidemiological studies: Studies concerned with the relationships of various factors determining the frequency and distribution of specific diseases in a human community.

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

Epididymis: A coiled tubular structure in the male that receives sperm moving from the testis to the vas deferens. Sperm are stored and matured for a period of several weeks in the epididymis.

Epididymitis: Infection of the epididymis, usually from a sexually transmitted disease such as gonorrhea, that can impair fertility during the course of the infection and cause scarring that can partially or completely block sperm transport.

Epilepsy: Any one of a group of disorders of brain function, caused by disruption in the normal electrical activity of the brain, manifested by recurrent seizures.

Episome: A DNA molecule that may exist either as an integrated part of a chromosomal DNA molecule of the host or as an independently replicating DNA molecule (plasmid) free of the host chromosome (e.g., bacterial plasmids).

Epistasis: The interaction of genes at different loci resulting in the-masking of a character.

Epitope: A structural part of an antigen that is responsible for an antibody response against that antigen. Also called “antigenic determinant.”

Epizootic: Affecting many animals in one region simultaneously and spreading rapidly; the animal counterpart of epidemic. Compare enzootic, epidemic.

Equity fund: A fund established through additional congressional appropriations or through a set aside by the Indian Health Service of a portion of its appropriations, and distributed to benefit IHS service units identified as being deficient in resources relative to other IHS service units.

Ergonomics: The study of how humans and machines interact. In the occupational setting, one goal of ergonomics is to design the workplace to match the capabilities of workers.

Erythema: Abnormal flushing of the skin caused by dilation of blood capillaries.

Erythrocytes: Red blood cells. These cells contain hemoglobin and are adapted for the transport of oxygen in the blood.

Escherichia coli (E. coli): A species of rod-shaped, Gram-negative aerobic bacteria that inhabit the normal intestinal tract of vertebrates. Some strains cause intestinal disease and diarrhea in humans through at least three mechanisms: enterotoxigenic E. coli produces toxins that cause excessive fluid production in the intestine; enteroinvasive E. coli invades the cells of the intestinal wall; enteropathogenic E. coli produces a toxin that causes disease in infants. Many nonpathogenic strains of E. coli are used as hosts in recombinant DNA technologies and as experimental organisms in microbiological and genetics research.

Escort service: A service in which someone accompanies an individual to a medical appointment, another appointment, or an errand to provide assistance and supervision.

Essential Access Community Hospital (EACH): A newly designated type of rural hospital created by Congress in 1989 (Public Law 101-239). Limited to hospitals in only a few States, EACHS will be facilities of at least 75 beds that provide backup to Rural Primarv Care Hospitals as part of a patient referral network. Designated facilities will automatically qualify for Medicare's payment roles for Sole Community Hospitals.

Established incontinence: See incontinence.

Estrogen: A group of steroid hormones, produced mainly by the ovaries during the life of a woman from puberty to menopause, essential for normal female sexual development and for normal functioning of the reproductive system.

Ethnicity: A term used to indicate national origin (e.g., Hispanic). Most Census and health status information is available for individuals of Hispanic origin. Compare race,

Ethylene dibromide (EDB): A chemical, used as a fumigant and as a gasoline additive, that causes cancer in mice.

Etiology: The cause or origin (of disease).

Eugenics: Attempts to improve hereditary qualities through selective breeding and the elimination of harmful genes. See positive eugenics, negative eugenics, and eugenics of normalcy.

Eugenics of normalcy: Policies and programs intended to ensure that each individual has at least a minimum number of normal genes.

Eukaryote: A cell or organism with membrane-bound, structurally discrete nuclei, and well-developed cell organelles. Eukaryotes include all organisms except viruses, bacteria, and blue-green algae. Compare prokarvote.

"Evaluative and management services": Services, such as office visits, that may involve but do not depend in a major way on any medical devices.

Evoked potentials, sensory evoked potentials (EPs): Electrical signals generated by the nervous system in response to a stimulus, whether auditory (brainstem auditory evoked responses, BAERs), visual (visual evoked potentials, VEPS, which include flash evoked potentials, FEPs, and pattern reversal evoked potentials, PREPs), or somatosensory (somatosensory evoked potentials, SEPS). EPs can be measured and the measurements used to identify which senses are affected by neurotoxic substances and how they are affected. See electrophysiology.

Ex utero: Outside the uterus.

Excitotoxin: A chemical substance (kainic acid, ibotenic acid, or quinolinic acid) that, when injected into the brain, kills nerve cells by overstimulating them.

Exclusion waiver: An agreement attached to an insurance policy which eliminates a specified preexisting condition from coverage under the policy.

Exercise tolerance testing (exercise stress testing): Testing the response of the heart to exercise while observing the EKG and other physiological functions of the heart.

Exons: In genetics, DNA sequences that determine the sequence of amino acids in proteins. Exons are separated on DNA by introns, or intervening sequences, that are transcribed and later removed, or spliced out, during the production of mature mRNA in protein synthesis.

Exotic: Describing a species not originating in the place where it is found; a nonnative, introduced species.

Exotoxin: A poison excreted by some gram-negative or gram-positive organisms; composed of protein. See endotoxin.

Expenses per inpatient day: Expenses incurred for inpatient care only, derived by dividing total expenses by the number of inpatient days during a particular period (American Hospital Association definition).

Experience-rating: A method of determining group premium rates based on the actual amount of claims payments made on behalf of the group in a prior period, usually the preceding year.

Experimental group: In a randomized clinical trial, the group receiving the treatment being evaluated for safety and efficacy. The experimental treatment may be a new technology, an existing technology applied to a new problem, or an accepted treatment about whose safety or efficacy there is doubt. Compare control group.

Experimental use permit (EUP): An application to EPA by a manufacturer for permission to conduct field tests on a pesticide.

Explant culture: Living tissue taken from its original site and placed in an artificial medium for growth.

Explicit review: Review of the process of medical care using explicit criteria specified in advance. Compare implicit review.

Exposure: The accidental or intentional contact of a person or animal with a substance, such as a drug or environmental contaminant, or with a factor such as radiation. Exposure is measured by the amount of the substance or factor involved (dose), how often and for how long contact took place (frequency and duration of exposure), and the means through which contact occurred (route of exposure). See dose, duration of exposure, frequency of exposure, route of exposure.

Expression: See gene expression.

Expressivity: A term referring to the degree to which a gene is manifest in an individual. Genes for some traits (e.g., curliness of hair) may vary in the extent or seventy to which they are seen in different individuals. Genes known to be manifest in different degrees in different individuals are said to show differential or variable expressivity.

Extended-Wear Lenses: See contact lenses.

External catheterization: With regard to urinary functions, a catheter applied to the penis; requires frequent changing and may result in local skin irritations or other complications.

External controls: In a clinical trial, individuals not formally enrolled in the trial who have had an alternative treatment, with which the experimentally treated group is compared. External controls may be historical or concurrent.

External validity: A measure of the extent to which study results can be generalized to the population that is represented by individuals in the study, assuming that the characteristics of that population are accurately specified.

Extrachromosomal DNA: DNA not associated with the chromosome(s) (e.g., plasmid DNA or organelle (mitochondria or chloroplast) DNA).

Extracorporeal embryo: An embryo maintained outside the body.

Extracorporeal shock wave lithotripsy (ESWL): A technique for the disintegrating of upper urinary tract stones that uses shock waves generated outside a patient's body and does not require a surgical incision.

Extremely low birthweight: Birthweight of less than 1000 grams (2 lb. 2 oz.). See low birthweight and verv low birthweight.

F

F factor: See fertilitv factor.

Fabry disease: An X-linked (the gene is located on the X chromosome) hereditary disease of lipid metabolism. Symptoms are a particular type of skin lesion, kidney disease (the usual cause of death) and a variety of neurological and biochemical abnormalities.

Face validity: See validity.

Factor 1: See fibrinogen.

Factor II: See prothrombin.

Factor VIII concentrate: A concentrated preparation of Factor VIII that is used in the treatment of individuals with hemophilia A.

Factor VIII: See antihemophilic factor.

Fallopian tube: Either of a pair of tubes, or oviducts, that conduct the egg from the ovary to the uterus. Fertilization normally occurs within this structure. Blocked or seamed fallopian tubes are a leading source of infertility in women. Named after the Italian anatomist Gabriel Fallopius (1523-1562).

False negative: A negative test result in an individual who actually has the disease or characteristic being tested for. The patient is incorrectly diagnosed as not having a particular disease or characteristic.

False positive: In medical diagnostics, a "false positive" is a positive test result in an individual who does not have the disease or characteristic being tested for (i.e., the individual is incorrectly diagnosed as having a particular disease or characteristic).

Familial hypercholesterolemia (FH): An autosomal dominant genetic disease caused by defects in the gene encoding for the low density lipoprotein (LDL) receptor. The defects disrupt the normal control of cholesterol metabolism, leading to accumulation of LDL in arteries and the formation of plaques; manifested by high serum cholesterol levels and heart disease in early life.

Family caregiver: See caregiver.

Family consent laws: State statutes that authorize family members to make specified types of decisions (e.g., about life-sustaining medical treatments) for relatives who are incapable of making a decision. Such statutes exist in a only a few States.

Family counseling: Counseling provided to an entire family rather than solely to an individual.

Family planning: A range of services intended to help individuals plan when to have children, from counseling concerning the advisability of initiating sexual intercourse to the provision of contraceptive methods. See contraception.

Family planning programs authorized by Title X of the Public Health Service Act: Title X, established by the Family Planning Services and Population Research Act of 1970, funds public or private nonprofit entities that operate voluntary family planning projects; funds training for personnel to improve the delivery of family planning services; promotes service delivery improvement through

research; and develops and disseminates information on family planning. Contraceptives may be distributed without parental consent or notification, but the use of Title X funds for abortion as a method of family planning has been prohibited by statute and regulations. Low-income individuals are targeted as a priority group for receiving services. Although projects funded by Title X do not focus exclusively on adolescents, they are required to offer a broad range of family planning services to all who want them, including adolescents.

Family structure: Used to describe whether a family consists of children and a single parent, two parents living with their biological children), or children living with a biological parent and a stepparent.

Family support group: See caregiver support group.

Family Survival Project (FSP): An organization in San Francisco that provides public education, information and referral, care coordination, and a variety of other services for brain-impaired adults and their caregivers.

Family therapy: (in terms of children's mental health) A type of psychotherapy based on the idea that a child's problems are manifestations of disturbed interactions within a family rather than problems that lie within the child alone. Treatment heavily involves other family members as well as the child (e.g., in sessions attended by the entire family) because it is believed that a child cannot change if the family as a whole does not change.

Fatality/catastrophe inspection: An Occupational Safety and Health Administration investigation of occupational fatalities or an incident that resulted in the hospitalization of five or more employees. Compare complaint inspection, followup inspection, and programmed inspection.

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.

Fecal incontinence: Involuntary excretion of stool sufficient in frequency to be a social or health problem. See incontinence.

Fecund: Able to conceive. A characterization used by demographer to identify couples who have no known physical problem that prevents conception.

Federal recognition: Refers to the relationship between Indian tribes and the Federal Government. Federal recognition can be obtained by satisfying the criteria of the Federal Acknowledgement Process administered through the Department of Interior, by Federal statute enacted by Congress, or by court decree. Federally recognized tribes and their members are eligible for the special programs provided by the United States to Indians because of their status as Indians. See Indian tribe.

Federal Tort Claims Act (FTCA): Enacted in 1946 [28 U.S.C.A. sec. 1346(b)(Supp. 1988)], the FTCA allows an injured party to sue the United States Government.

Federally qualified HMO: An HMO that is certified as meeting the qualification requirements of the Federal Health Maintenance Act of 1973, as amended (42 U.S.C. Sec. 300e et seq.). Federally qualified HMOS must adhere to certain financial, underwriting, and rate-setting standards and provide specified medical services.

Fee-for-service payment: A method of paying for medical services in which each service performed by an individual provider beam a related charge. This charge is paid by the individual patient receiving the service or by an insurer on behalf of the patient.

Fee schedule: An exhaustive list of medical services in which each entry is associated with a specific monetary amount that represents the approved payment amount for the service under a given insurance plan. See relative value scale.

Fee screen: A limit used to determine the Medicare approved charge for a particular physician service, such as the physician's customary charge or the locality prevailing charge for the service in question.

Fee screen year: The calendar period during which a particular year's CPR limits are in effect. As of September 30, 1984, fee screen years run from October 1 through September 30 of the following calendar year, with fee screen year 1985, for example, beginning on October 1, 1984 and ending on September 30, 1985. Prior to the Deficit Reduction Act of 1984 (Public Law 98-389), fee screen years began on July 1 of a calendar year and continued through June 30 of the next year.

Femur fracture: Fracture of the thigh bone.

Feral: Refers to animals existing in the wild (e.g., an undomesticated animal), or to animals that have reverted to the wild state (e.g., a previously domesticated animal).

Fermentation: An anaerobic process of growing microorganisms for the production of various chemical or pharmaceutical compounds. Microbes are normally incubated under specific conditions in the presence of nutrients in large tanks called fermenters.

Fern test: Evaluation of fern-like pattern of dried cervical mucus for the prediction of ovulation. As ovulation approaches, more ferning can be observed.

Fertility drugs: Compounds used to treat ovulatory dysfunction. These include clomiphene citrate, human gonadotropin, bromocriptine, glucocorticoids, and progesterone.

Fertility factor: An episome capable of transferring a copy of itself from its host bacterial cell (an F+ cell) to a bacterial cell not harboring an F factor (an F- cell). When the F factor is integrated into the host chromosome (the resulting cell is called an Hfr cell), the factor is capable of mobilizing transfer of the bacterial chromosome to an F- cell.

Fertility rate: The annual number of live births per 1,000 women of child bearing age (15 to 49 years) in a defined population.

Fertilization: The penetration of an oocyte by a sperm and subsequent combining of maternal and paternal DNA during the process of sexual reproduction.

Fetal death: Stillbirth, or death in utero; the failure of the fetus to show signs of respiration, heartbeat, or definite movement of a voluntary muscle.

Fetal death rate: The ratio of fetal deaths to fetal deaths plus live births.

Fetal material: Any or all of the contents of the uterus resulting from pregnancy excluding the fetus (the placenta, fluids, and membranes).

Fetal mortality ratio: The annual number of fetal deaths in a year as a proportion of the total annual number of births (live births and fetal deaths) in the same year.

Fetal tissue: A part or organ of the fetus (e.g., the lungs or liver).

Fetoscopy: A procedure whereby the fetus is visually examined with a fiber optic instrument while still in utero.

Fetus: In humans, the embryo becomes a fetus after approximately 9 weeks in the uterus. This stage of development lasts from 9 weeks gestation until birth and is marked by the growth and specialization of organ function.

Fetus, pre-viable: A fetus that, although it may show some signs of life, has not yet reached the stage at which it is able to function as a self-sustaining whole independent of physical connection with the mother.

Fetus, viable: A fetus that has reached the stage of maintaining the coordinated operation of its component parts so that it is capable of functioning as a self-sustaining whole independently of any connection with the mother.

Fibrin: A white insoluble protein formed at the site of an injury from fibrinogen that becomes the foundation of a blood clot.

Fibrinogen: A soluble plasma protein synthesized in the liver, which is involved in blood coagulation as the precursor of fibrin. Also called "Factor I."

Fibroblast: A connective tissue cell, found in the skin.

Fibronectin: A plasma protein synthesized in the liver, which plays a variety of roles ranging from cell adhesion to enhancing the phagocytic clearance of particulate contaminants from the body.

Filaria: Parasitic nematode worms, named for their threadlike appearance.

Filariasis: A disease in humans due to infection with filarial worms, such as Wuchereria bancrofti, Brugia malayi, and Onchocerca volvulus, transmitted by insects. Adult W. bancrofti and B. malayi live in the human lymphatic system and connective tissues, where they may cause obstruction. The immature worms (microfilariae) migrate to the host's blood stream.

Fimbria: Finger-like structures, such as the fringed entrance to the fallopian tubes.

Fimbrioplasty: A surgical procedure to correct partial restriction of the fallopian tube.

Financial/benefits counseling: See benefits counseling.

Firearm: A weapon from which a shot is discharged by gunpowder. The term firearm is usually used only when referring to small arms. The term firearms includes guns (defined as portable firearms).

First dollar deductible: In the context of insurance, the amount (which may vary by type of benefit) that a beneficiary must pay each year before he or she is eligible for coverage.

Fiscal intermediary: An organization that acts as an agent and purchaser of health care insurance or health care services for insured people.

Fistula: An abnormal passage between two organs or from an internal organ to the surface of the body.

Fitness: Usually defined as cardiorespiratory or aerobic fitness, but may also include muscle strength, muscle endurance, flexibility, and low body fat.

Fixed costs: An operating expense that does not vary, at least over the short term, with the volume of services provided.

Flexible worktime: Structuring of individual work schedules so that they adapt to new, different, or changing requirements (e.g., of parents).

Fluke: The common name for a large number of species of parasitic flatworms that form the class Trematoda (also called flukeworms).

Fluoridation: The addition of a minute quantity of a fluoride (usually one part per million of fluoride ion) to drinking water supplies in order to protect growing children against dental caries. Fluoride can also be applied topically (in toothpaste and rinses).

Follicle: An enclosed cluster of cells that protects and nourishes the cells within it, such as ovaries containing ova and hair follicles containing the roots of hair.

Follicle-stimulating hormone (FSH): A hormone secreted by the anterior pituitary gland that stimulates hormone and gamete production by the testes and ovaries; given as one of several possible fertility drugs used to stimulate ovulation and increase sperm production.

Followup inspection: An inspection conducted by the Occupational Safety and Health Administration (OSHA) to verify employer abatement of a violation uncovered in a previous OSHA inspection. Compare complaint inspection, fatality/catastrophe inspection, and programmed inspection.

Fractionation: Separation into components. When used in the context of blood products, a chemical process to separate various plasma proteins. In the United States, a cold-ethanol precipitation technique is the usual method of fractionation.

Free clinic: Typically freestanding community-based health services centers that developed in the late 1960s and ealy 1970s largely in response to the needs of substance-abusing youth, many of whom were alienated from society at large and were unable or unwilling to receive medical care from traditional sources. Free clinics do not set eligibility requirements or charge fees for services provided. In general, free clinic services are provided by volunteers, with agency activities coordinated by a core of paid staff.

Freestanding facilities: Health care facilities that are not physically, administratively, or financially connected to a hospital, such as a freestanding ambulatory surgery center.

Frequency of exposure: The number of times a person or test animal is exposed to a chemical. Acute exposures are generally single exposures, whereas subacute, subchronic, and chronic exposures are repeated exposures. See duration of exposure.

Fresh frozen plasma (FFP): Plasma that has been frozen soon after collection to preserve the activity of the coagulation proteins.

Frontier counties: Counties with population densities of 6 or fewer persons per square mile.

Functional impairment: A deficit in an individual's ability to function independently. Functional impairments in elderly people are often described in terms of deficits in activities of daily living (ADLs) and instrumental activities of daily living (IADLs).

Functional incontinence: See incontinence.

Functional observational battery (FOB): A collection of noninvasive tests to evaluate sensory, motor, and autonomic dysfunction in test animals exposed to substances or whose nervous systems have been damaged. FOBS are generally used to screen for neurotoxic substances. See screening tests.

Galactosemia: An inborn error of metabolism (genetic defect of an enzyme system) found in newborn infants, characterized by the inability to convert galactose, a milk sugar, into glucose (blood sugar). Symptoms of galactosemia include an accumulation of galactose and byproducts, leading to liver damage, cataracts, mental retardation, and death if untreated. Galactosemia can be detected in the first week of life through a newborn screening test, allowing treatment to be initiated before symptoms develop.

Gamete intrafallopian transfer (GIFT): A technique of medically assisted conception in which mature oocytes are surgically removed from a woman's body and then reintroduced, together with sperm, through a catheter threaded into the Fallopian tubes, where fertilization can take place.

Gametes: Sperm and ova. Mature male or female reproductive cells (germ cells) with a haploid chromosome content (23 chromosomes in humans). Gametes of the opposite sex, when fused, lead to the formation of a new, diploid organism (a zygote).

Gametocyte: A life cycle stage of Plasmodium, the malarial agent; this stage infects mosquitoes after the mosquito bites an infected human (or other mammal), and gives rise to the sexual stage of the parasite.

Gamma globulin: A group of plasma proteins that have antibody activity and which in concentrated form may be used for passive immunization against a number of diseases and in the treatment of gamma globulin deficiency. Also called "immune globulins."

Gamma-aminobutyric acid (GABA): An amino acid derivative that acts as an inhibitory transmitter (i.e., inhibits signal transmission) in the nervous system.

Ganglion, ganglia: A group of nerve cell bodies and synapses, usually enclosed in a connective tissue sheath. Most occur outside the central nervous system, except in basal ganglia in the brain. Compare basal ganglia.

Gas chromatography/mass spectrometry (GC/MS): A method of identifying specific substances (for example, drugs), in which a gas chromatography is coupled with a mass spectrometer. The gas chromatography is used to separate individual substances by the rate they traverse the chromatography column. As these compounds exit the chromatographic column, they may, for example, be bombarded with electrons, with each substance breaking up into characteristic pieces that can be identified with the mass spectrometer. A GC/MS can be calibrated to scan for many substances in a specimen, or to monitor for only a few masses that are characteristic of a particular substance.

Gas-Permeable Lenses: See contact lenses.

Gastrostomy: A surgical opening into the stomach. A gastrostomy tube allows food to be introduced directly to the stomach, bypassing the mouth and throat. A jejunostomy tube (which connects with the top of the large intestine) may also perform this function.

Gatekeeper: An individual, such as a mail carrier or utility meter reader, who interacts with many people in the course of his or her regular activities and has been specially trained to identify isolated elderly people who may be in need of assistance. More generally, an individual who allocates and controls the use of resources for an agency that provides health care, long-term care, social, or other services.

Gatekeeper program: A type of outreach program used to identify isolated elderly people who may be in need of assistance.

Gaucher disease: An autosomal recessive genetic disorder of lipid metabolism that leads to the accumulation of a particular lipid (glucosyl ceramide) in internal organs, such as the spleen, liver, bone marrow, and lungs (and central nervous system in some forms of the disease), producing an enlarged spleen and liver and various neurological disorders. It is found with higher frequency among Ashkenazi Jews of Eastern European origin and their descendants. There are several different types, the two most common being a chronic adult form and an acute juvenile form that often leads to early death.

Gel: The semisolid jelly-like matrix used in electrophoresis to separate molecules.

Gene: A linear sequence of nucleotides in DNA that is required to synthesize proteins and regulate cell functions; the fundamental physical and functional unit of heredity.

Gene expression: The process by which the blueprint contained in a cell's DNA is converted into the structures and biochemical mechanisms present and operating in the cell; control of how active a gene is, measured by the amount of gene product (usually a protein or nucleic acid) made by the cell. See transcription and translation.

Gene family: A group of related genes exhibiting a high degree of homology in function and nucleotide base sequence.

Gene library: A collection of thousands of cloned DNA fragments in no obvious order whose position in the genome can be determined by physical mapping.

Gene pool: Referring to all the genes in a population of plants or animals.

Gene probe: A molecule of known structure and/or function used to locate and identify a specific region or nucleotide sequence of DNA; usually a single stranded fragment of complementary DNA that has been labeled with a tracer substance, such as a dye or radioactive isotope.

Gene supplementation: A technique of genetic therapy in which "new" or repaired genes are introduced into a cell by microinjection or a similar process.

Gene surgery: In molecular genetics, a laboratory procedure whereby a defective gene is excised and removed from a cell, and a normal gene substituted.

Gene therapy: See human gene therapy.

Gene transplantation: A technique of moving an entire gene from one organism into another.

General Duty Clause (OSHA): Section 5(a)(1) of the Occupational Safety and Health Act (Public Law 91-596). This section provides that "each employer shall furnish...employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." The Occupational Safety and Health Administration (OSHA) has used this clause for workplace conditions that present serious occupational hazards that are not covered by OSHA'S more detailed health and safety standards.

Generic screen: See HCFA generic quality screen.

Genetic code: The sequence of nucleotides, coded in triplets, each of which specifies a single amino acid, along the DNA that determines the sequence of amino acids in protein synthesis. This code is common to nearly all living organisms. See codon and nucleotide.

Genetic engineering: Technologies (including recombinant DNA methods) used by scientists to isolate genes from an organism, manipulate them in the laboratory, and insert them stably in another organism. See recombinant DNA and biotechnology.

Genetic marker: Any character that acts as a signpost or signal of the presence or location of a gene, chromosome, or hereditary characteristic in an individual, a population, chromosome or a DNA molecule. The phenotype of male sex, for example, is a reliable indicator of the presence of the gene for H-Y antigen, a cell surface protein found in males.

Genetic monitoring: Periodic examination of samples of employees' blood cells to evaluate whether changes in the genetic material (e.g., chromosomal damage or increased frequency of mutations) have occurred during the course of employment where there may be exposure to mutagenic agents.

Genetic screening: The search in a population for individuals with certain genetic traits known to be associated with disease in themselves or in their children. The main types of genetic screening include newborn screening (e.g., for PKU and other disorders); carrier screening (to identify couples at high risk for having children with serious genetic disease); prenatal screening (e.g., via amniocentesis for Down Syndrome); screening for disease later in life; and occupational screening (to detect certain inherited characteristics among employees or job applicants).

Genetic testing: Technologies that determine a person's genetic makeup or that identify changes (damage) in the genetic material of certain cells. As used in the workplace, it encompasses both genetic monitoring and screening.

Genetic variance: The fraction of the phenotypic variance due to differences in the genetic constitution of individuals in a population. See phenotvpic variance.

Genetically engineered cell: A cell into which new genes have been inserted.

Genetics: The scientific study of heredity; how particular qualities or traits are transmitted from parents to offspring and how these traits are expressed in individuals.

" Genome: All the genetic material contained in a single set of chromosomes (e.g., in the nucleus of a reproductive ceil).

Genomic Iibrary: A collection of clones made from a set of overlapping DNA fragments representing the entire genome of an organism. Compare gene library.

Genotype: The genetic composition of an organism, as distinguished from its physical appearance (its phenotype). For example, two individuals with the same phenotype (brown eyes) for eye color may have different genotypes for that color: one may be heterozygous, possessing one allele for brown, which is dominant, and one for blue, which is recessive, while the other individual may be homozygous, possessing two alleles for brown eyes.

Genus (pl., genera): A taxonomic category that includes groups of closely related species of plants or animals.

Geographic Practice Cost Index (GPCI): An index used by Medicare and some researchers to examine differences in physician practice costs across geographic areas. The index is based on per-unit costs.

Geriatric Research, Education, and Clinical Centers (GRECCS): Centers established at VA medical centers to provide basic and clinical research and education and training for clinicians and researchers in the field of geriatrics

Germ cell: A reproductive (egg or sperm) cell or its precursors. Compare somatic cell.

Germ line: The tissue or cell lineage that produces gametes and is used for reproductive purposes, as opposed to that tissue or those cell lineages (somatic tissue, or soma) producing the bodily structures and tissues used for functions other than reproduction. Also known as "germinal tissue."

Germinal mutations: Mutations in the DNA of reproductive cells-egg or sperm. Germinal mutations can be passed on to the offspring only if one of those particular germ cells is involved in fertilization.

Germplasm: The total genetic variability, represented by germ cells or seeds, available to a particular population of organisms.

Gestational age: The number of completed weeks elapsed between the first day of the last normal menstrual period and the date of delivery. Full term babies are born at 40 weeks gestation.

Glial cell, glia: A special connective tissue cell of the central nervous system, comprising 40 percent of the total volume of the brain and spinal cord. Glial cells are involved in nutrition of neurons, insulation (through the production of myelin), and structural support. Compare neuron. See astrocyte, microglia, oligodendrocyte, Schwann cell.

Global budgeting: A method of hospital cost containment in which participating hospitals must share a prospectively set budget. Methods for allocating funds among hospitals may vary, but the key is that the participating hospitals have an aggregate capon revenues that they will receive each year.

Globin: A class of proteins most often associated with processes of oxygen or other gas transport (e.g., hemoglobin or myoglobin).

Glomerulonephritis: Inflammation of the kidneys characterized by the inflammation of the capillary loops in the glomeruli of the kidneys. It occurs in acute, subacute and chronic forms.

Glucocorticoids: Hormones naturally produced by the cortex of the adrenal glands. Natural or synthetic glucocorticoids can influence a wide spectrum of physiologic functions, including suppression of inflammation, metabolic changes, psychological effects, blood pressure changes, and physical changes.

Glycoprotein: A protein with attached sugar groups.

Glycosylation: The attachment of a carbohydrate molecule (glycogen) to another molecule, such as a protein.

Gonad: Organs (ovary or testis) that produce reproductive cells (ova and spermatozoa) and that release hormones that control secondary sexual characteristics.

Gonadotropin: A group of hormones secreted by the anterior pituitary gland that stimulate reproductive activity of the testes and ovaries. Examples are follicle-stimulating hormone, human chorionic gonadotropin, human menopausal gonadotropin, and luteinizing hormone. These can be administered in cases of ovulatory dysfunction to directly stimulate the ovary.

Gonadotropin releasing hormone (GnRH): The hormone released from the hypothalamus that causes secretion of gonadotropin from the pituitary gland.

Gonorrhea: A sexually transmitted disease caused by the bacterium Neisseria gonorrheae. If the infection is not treated in women, it can spread to the uterus and the Fallopian tubes, causing pelvic inflammatory disease, infertility, premature delivery, acute arthritis, and disseminated gonococcal infection. In men, it can cause epididymitis and can affect semen quality.

Good Laboratory Practices (GLP): Rules adopted by FDA in 1978 requiring that all regulated parties conducting nonclinical laboratory studies keep records and permit audits of such studies. The GLP rules also contain specific provisions for animal housing, feeding, and care. In 1983, EPA issued similar GLP rules for its toxic substances and pesticides research programs.

Good manufacturing practices: Requirements regarding the manufacturing, processing, packing, storage, and other practices involving products under the jurisdiction of the Food and Drug Administration (foods and food additives, cosmetics, drugs, biologics, and medical devices).

Graduation rate: Graduation rates are calculated by dividing the number of high school graduates by the ninth grade enrollment 4 yearn earlier. Graduation rates by State are calculated by the U.S. Department of Education for public schools only because data on private high school graduates are not available by State. Compare dropout rate.

Gram-negative/positive: A classification of bacteria based on differential staining utilizing the Gram-Wiegert procedure. Primarily as a result of an organism's cell membrane structure, Gram-negative organisms stain red and Gram-positive organisms stain purple.

Granulocyte: Any cell containing granules; refers specifically to a white blood cell containing granules in its cytoplasm.

Gross and flagrant violation under Medicare: 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.

Gross patient revenue: Consists of the full amount of revenue from services rendered to patients, including payments received from or on behalf of individual patients.

Group therapy: A type of psychotherapy in which the focus is on helping individuals develop healthier ways of relating to other people (although therapy groups serve other purposes).

Guardian: A person lawfully invested with the power and charged with the duty of protecting and taking care of the property and/or person of an individual who has been judged legally incompetent. Also known as conservator.

Guardianship: A legal mechanism that involves the appointment by a court of an individual or institution (the guardian) to protect and take care of the person and/or property of a person who is found incapable of managing his or her own affairs (the ward). Also known as conservatorship.

Guillain-Barré syndrome: A rare form of peripheral nerve damage that causes weakness of the limbs. Also called acute febrile polyneuritis. The relative risk of contracting Guillain-Barré syndrome was significantly greater among people who received swine flu vaccine (killed influenza A/New Jersey/1976) during the 1976 vaccine program. Such an association has not been observed with subsequent influenza vaccines.

Gynecology: The study of diseases peculiar to women, that is, disorders of the ovaries, Fallopian tubes, uterus, vagina, and vulva, but not including disorders of the breast.

H

Haemophilus influenza b (Hib): One of six types of infection with Haemophilus influenza b, a parasitic bacterium that occurs in an encapsulated form. In children and in debilitated older adults, infection may result in destructive inflammation of the larynx, trachea, and bronchi, and may also cause subacute bacterial endocarditis and purulent meningitis. Immunization against Hib is available through inoculation with anti-Haemophilus influenza serum.

Half-life: The time required for the activity of a given quantity of radioactive material to decay to half its initial value.

Hallucination: A perception that occurs without external stimulus (e.g., auditory hallucinations (the hearing of voices)). Hallucinations are symptoms of various disorders, such as schizophrenia, dementia, or epilepsy, or may be caused by hallucinogenic drugs.

Hallucinogens: A group of heterogeneous compounds inducing heightened awareness of sensory input, often accompanied by an enhanced sense of clarity, and loss of boundaries. Also known as psychedelics.

Hamster-oocyte penetration test: A test that evaluates the ability of human sperm to penetrate an ovum by incubating sperm with hamster oocytes that have had their outer layer removed. Normal sperm will penetrate the eggs. The reliability and significance of this test are controversial.

Handicap: Inability to perform one or more life functions (e.g., eating, conversing, working) at a "typical" level, caused by the interaction of an individual's disability with the physical and social environments in which that person is functioning or expected to function. Compare disability and impairment.

Haploid: A single set of unpaired chromosomes. Reproductive cells, or gametes, have a haploid set of DNA. Fertilization of an ovum by a sperm produces a full set (diploid number) of chromosomes in the zygote.

Hard Lenses: See contact lenses.

Harvard mouse: A transgenically engineered mouse, developed at Harvard and patented in April 1988, the first animal ever to be patented. The Harvard mouse was engineered to be unusually susceptible to cancer and was developed for use in the testing of carcinogens and cancer therapies.

Hazard: A factor or exposure that may cause disease; also an adverse chance or danger of injury, loss, or acquiring disease.

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.

Head Start: A Federal program begun in 1965 that provides educational, social, nutritional, and medical services to low-income preschool children. The program is overseen by the Administration for Children, Youth and Families (DHHS), but it is administered at the local level by Head Start agencies.

Health: Most broadly, a state of optimal physical, mental, and social well-being, and not merely the absence of disease and infirmity.

Health and Safety Committees: Groups made up of both management and labor within a plant that meet to discuss and take mutual action to resolve health and safety problems.

Health care and social service professionals: Physicians, nurses, social workers, psychologists, physical therapists, speech therapists, occupational therapists, and other professionals who provide health care, health-related, and social services.

Health education: Activities aimed at influencing behavior in such a way as it is hoped will assist in the promotion of health and the prevention of disease.

Health fraud: False or unsupported claims for a medical treatment's effectiveness.

Health Hazard Evaluation (HHE): A hazard identification service provided by the National Institute of Occupational Safety and Health. After receiving a request from employees or an employer, a team of NIOSH researchers evaluate a workplace to determine the toxicity of substances or processes.

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 Manpower Shortage Areas (HMSAS): Areas, population groups, and facilities designated by the Federal Government as having shortages of health personnel. HMSAS, which are currently designated for primary care, dental, and psychiatric personnel, are determined primarily by population-to-practitioner ratios.

Health Manpower Shortage Area Placement Opportunity List (HPOL): A list of the most needy health manpower shortage areas used by the National Health Service Corps in the placement of volunteer and obligated personnel.

Health outcome: A measure of the effectiveness of preventive or treatment health services, typically in terms of patient health status, but sometimes in terms of patient satisfaction. Attributing changes in outcomes to health services requires distinguishing the effects of care from the effects of the many other factors that influence patients' health and satisfaction.

Health promotion: Most broadly, a philosophy of health or a set of activities that takes as its aim the promotion of health, not just the prevention of disease. Sometimes narrowly defined as the set of prevention efforts aimed at changing individual behavior compare health education, health protection, and preventive services.

Health protection: Strategies for health promotion and disease prevention related to environmental or regulatory measures that confer protection on large population groups.

Health services system: Traditionally, the aggregation of diagnostic and treatment services delivered by health care professionals, including physicians, physician assistants, nurses, nurse-practitioners, psychologists, and health educators.

Health status goals (of the report "Healthy People 2000"): Goals defined in terms of a reduction in death, disease, or disability (e.g., "Reduce deaths among youth aged 15 through 24 caused by motor vehicle crashes to no more than 33 per 100,000 people" [Healthy People Objective No. 9.3b]).

Helminth: Any parasitic worm.

Hemagluttination: The agglutination, or clumping, of red blood cells, which may be caused by antibodies, certain virus particles, etc.

Hematocrit: The volume occupied by the cellular elements of blood in relation to the total volume.

Hematology: The science of blood and its nature, function, and diseases.

Hematuria: The abnormal presence of blood in the urine, caused by various disorders of the urinary tract (e.g., cystitis, urethritis, prostatis, cysts, tumors, kidney or bladder stones, or glomerulonephritis).

Hemochromatosis: A pathological condition characterized by abnormal deposits of iron throughout the body; signs and symptoms include defects of the liver, glucose metabolism, and heart function.

Hemodialysis: A procedure in which wastes or impurities are removed from the blood; used in treatment of renal insufficiency or failure and of various toxic conditions. In hemodialysis, a patient's blood is shunted through a machine for diffusion and ultrafiltration, where, by diffusion and osmosis, waste products and other molecules pass through the semipermeable membrane. The blood is then returned to the patient's circulation.

Hemodialyzer: A device used to effect hemodialysis that consists of a compartment for the blood, a compartment for the dialysate, and a semi-permeable membrane separating the two. The three principal types are coil, hollow fiber, and parallel plate.

Hemoglobin: A protein found in red blood cells that serves as the primary oxygen transport vehicle in vertebrates. Hemoglobin is composed of an iron-containing molecule (heme) surrounded by four globin molecules, two each of two different types (two alpha globins and two beta globins in adults).

Hemoglobinopathies: A group of genetic disorders of hemoglobin structure and/or function. Examples are alpha thalassemia, beta thalassemia, and sickle cell anemia.

Hemolysis: The lysis, or destruction, of red blood cells.

Hemolytic transfusion reaction: An antigen-antibody reaction in the recipient of a blood transfusion. It results in the destruction of red blood cells. The reaction typically occurs when there is incompatibility between donor red blood cells and recipient plasma, usually caused by an ABO mismatch. The symptoms range from fever or chills, to chest pain, shock, and renal failure.

Hemophilia: A rare, genetic bleeding disorder distinguished by a deficiency of one or more blood coagulation factors (e.g., Factor Vlll (hemophilia A) or Factor IX (hemophilia B)) leading to prolonged bleeding following injury to spontaneous bleeding in the muscles and joints. The genes for hemophilia are recessive and are found on the X-chromosome; as a result, hemophilia is usually found in males and is most often transmitted to children by asymptomatic (carrier) females.

Hemorrhage: The escape of blood from the blood vessels, either into surrounding tissues or into the environment.

Hemorrhagic: Referring to the loss of a large amount of blood in a short period of time.

Hemorrhagic fever: A severe complication of some viral diseases that involves internal or external bleeding. Some arboviruses can cause epidemic outbreaks of hemorrhagic fever.

Hen test: See neurotoxic esterase assay.

Heparin: An anticoagulant substance occurring in various tissues (lungs, blood vessels) or produced artificially that prevents the formation of blood clots.

Hepatitis: Inflammation of the liver which maybe due to any of several causes (including viruses). See hepatitis A, hepatitis B, and non-A, non-B hepatitis.

Hepatitis A: Viral hepatitis, type A. An acute inflammation of the liver caused by infection with hepatitis A virus, which is transmitted by fecal contamination of food or water (e.g., through infected people handling food), or through parenteral infection (by contaminated needles or administration of blood products). Formerly known as "infectious hepatitis."

Hepatitis B: Viral hepatitis, type B. An acute inflammation of the liver caused by infection with hepatitis B virus, which is transmitted mainly by sexual contact, parenteral exposure (contaminated needles or administration of blood products), and from carrier mother to baby. In some cases, infection may be severe and result in prolonged illness, destruction of liver cells, cirrhosis, and death. Formerly known as "serum hepatitis."

Hepatotoxicity: Referring to a destructive or poisonous effect on the liver.

Herbal treatments: Treatments based on the therapeutic use of plant products.

Herbalist: A practitioner who prescribes plant-derived medicaments.

Herd immunity: The level of immunity that must be attained to prevent epidemics of communicable diseases in a specific population.

Herfindahl index: A measure of economic market concentration that is calculated by summing the squares of the market shares of the firms in the market. Higher values of the index indicate a greater degree of concentration and a less competitive market structure. See concentration ratio.

Heritable mutation: See mutation.

Hernia: Any abnormal protrusion of one anatomical structure through another. The most common variety is hemiation of part of the intestine through a weakness in the abdominal wall.

Heroin: An addictive psychoactive substance derived from opium. Heroin is administered mainly intravenously.

Heterozygote: An individual who has two different alleles of any one particular gene. For instance, an individual who has one copy of the gene for thalassemia at the locus for beta globin and one copy of the gene for normal beta globin is heterozygous for thalassemia.

Heterozygous: Having different alleles at a given locus. Compare homozygous.

Hierarchy of controls: The preference for using engineering controls to reduce or eliminate hazards. This preference, long a tenet of professional health and safety practice, has been followed by the Occupational Safety and Health Administration (OSHA). For example, to reduce exposures to air contaminants, OSHA requires that employers use engineering controls except when those controls are not feasible, not capable of reducing exposures to the required levels, or while they are being designed and installed.

High copy number plasmid: A plasmid present in multiple copies within a single host bacterium. Copy number (single, low and high) is dependent on both plasmid and host cell factors.

High performance liquid chromatography (HPLC): A technique used to separate a complex mixture of unknown composition by passing it through a glass column packed with a silica gel or alumina. The components of the mixture are isolated as they travel through the column at different rates. Unlike the old gravity-dependent columns, HPLC operates under pressure and has better resolution with a shorter analysis time.

High risk: At greater than normal risk of contracting a specific disease or condition.

High-mortality outliers: Providers with mortality rates that are higher than expected after adjustment for patient or other characteristics. Compare low-mortality outliers.

Hilar: Referring to the anatomic area where the bronchus, blood vessels, nerves, and lymphatics enter or leave the lung.

Hill-Burton program: A Federal program begun in 1946 to fund health facility construction in areas of need and foster coordination among health care facilities.

Hippocampus: A curved structure (in the limbic system) at the core of the brain that is important for learning, the conversion of short-to long-term memory, and the expression of emotional responses.

Hispanics: Persons who identify themselves as of Hispanic origin, or, less typically, individuals with Hispanic surnames identified by others (e.g., health care providers identifying patients in surveys) as of Hispanic origin. Hispanics can be those whose families have emigrated directly from Spain, or from Cuba, Central or South America. Persons of Hispanic origin can be of any race (white, black, American Indian); most are white.

Histocompatibility: The extent to which individuals (or their tissues) are immunologically similar, the extent to which tissue from one individual or organism is accepted or tolerated by the immune system of another individual or organism.

Histology: The study of the minute structure, composition, and function of body tissues by using special staining methods making cell structures visible under light and electron microscopy.

Historical controls: In nonrandomized clinical trials, individuals treated with a 'control treatment" outside the study proper, at some time previous to the trial, against which the experimentally treated individuals are compared.

Historical cost depreciation: An estimate of depreciation (see definition) based on the original cost of the fixed asset.

HIV: See human immunodeficiency virus.

HLA: See human leukocyte antigen.

Hollow fiber dialyzer: A dialyzer containing thousands of hollow fibers bundled within a compact cylinder. Blood flows through the semi-permeable hollow fibers while the dialysate passes outside the fibers.

Home-based (mental health) services: Crisis-oriented services, provided on an outreach basis, to work intensively with children and families in their homes. Considered the extreme on the dimensions of timeliness, accessibility, and intensity.

Home care agency: See home health agency.

Home care services: The provision of health, social, and supportive services in the home by outside organizations or individuals. Services can range from sophisticated (e.g., administering intravenous drugs) to relatively simple (providing home-delivered meals). Common, home care services include skilled nursing care, physical and occupational therapies, personal care, home health aide, homemaker, paid companion, and housekeeping services.

Home-delivered meals: Meals prepared at a central location and delivered to homebound people on a daily or less frequent basis.

Home health agency: A local organization that provides in-home services, such as skilled nursing care, physical therapy, and other health care and health-related services, as well as homemaker and other agencies that provide social and other nonmedical in-home services.

Home health aide: A person other than a physician or nurse, who provides home care services, which may include assistance with medication and exercise; personal care, such as bathing, dressing, and feeding; and homemaker services.

Home health aide: A person who is paid to provide health-related services in the home. The services provided by a home health aide may include assistance with medications and exercise, assistance with personal care (e.g., bathing, dressing, and feeding), and light household tasks. The term is sometimes used synonymously with the term homemaker, but some agencies and othes make a distinction between the two terms.

Home health care: Medical and related services provided in the home.

Home health care agency: See home health agency.

Hopelessness: The state of being without one's own home, either on one's own, with one's family, living on the street or in a shelter or other temporary situation (e.g., with relatives or friends). See runaway and thrownawav.

Homemaker: A person who is paid to provide in-home services, such as assistance with personal care (e.g., bathing, dressing, and feeding), household tasks, meal preparation, and shopping. The term is sometimes used synonymously with the term home health aide, but some agencies and others make a distinction between the two terms.

Homeopathy: A philosophy of treatment founded by Samuel Hahnemann (1755-1843), in which micro-doses of medicines are believed to stimulate the body's vital force. Some of these medicines are not known to contain even one molecule of the original compound per dose, but are considered by the homeopath to be extremely powerful. The power of these doses is enhanced by "succession" (violent shaking) performed at various stages in their preparation.

Homocystinuria (HC): A congenital disoder caused by a deficiency of one of the enzymes involved in the metabolism of the amino acid homocystine. If left untreated, homocystinuria can lead to life-threatening episodes of vascular thrombosis; most untreated survivors go on to have mental deficiency, and half of them may die in early adulthood.

Homologous sequence: DNA or RNA segments having an identical or nearly identical linear order of nucleotide base pairs

Homology: The correspondence among organisms of structures and functions derived from a common evolutionary origin (e.g., a common gene structure).

Homozygote: An individual with the same alleles responsible for a particular protein, trait, or feature. Compare heterozvgote.

Homozygous: Having identical alleles at a given genetic locus in the DNA. Compare heterozygous.

Horizontal transfer: The passage of genetic material from one organism to another via nonsexual mechanisms.

Hormone: A chemical substance that is released into the circulatory system by an endocrine gland or a specialized nerve cell that regulates that functioning in another part of the body (e.g., metabolism, growth, and the development of secondary sex characteristics, such as breasts and facial hair). Examples of such hormones include insulin, sex hormones, adrenaline, and thyroxine.

Hospice care: Medical care rendered to terminally ill patients that is intended to be palliative rather than curative.

Hospice services: Medical, nursing, counseling, and other supportive services rendered to terminally ill people and their families. Hospice care is intended to be palliative and to improve quality of life rather than to cure disease or extend life.

Hospital accreditation: See accreditation by JCAHO.

Hospital discharge abstract: See discharge abstract.

Hospital discharge planner: A person who arranges post-discharge care for hospitalized patients.

Hospital mortality rate: Number of deaths as a proportion of the total number of hospital patients or admissions. See mortality rate.

Hospital or health care district/authority: A geographic area created and controlled by a political subdivision of a State, county, or city solely for the purpose of establishing and maintaining medical care.

Hospital or health care facility cooperative/alliance: See cooperative or alliance of hospitals and other facilities.

Hospital volume: The number of particular procedures performed or conditions treated in a hospital during a given period of time. See volume.

Hospital-based geriatric assessment programs: Special hospital inpatient or outpatient programs that use a multidisciplinary team to evaluate elderly patients with complicated medical or psychiatric problems and to develop a coordinated plan of care. Some also offer other services such as medical and psychiatric treatment, and rehabilitative services. Hospital-based geriatric assessment programs include inpatient geriatric specialty units, inpatient geriatric consultation services, outpatient geriatric services, and inpatient and outpatient geropsychiatry services.

Host: 1. In parasitology, a living organism that harbors a parasite. Definitive hosts harbor the adult or sexual stage of a parasite; intermediate hosts harbor the larval or asexual stages of a parasite. 2. In recombinant DNA technology, the organism used for growth and reproduction of viruses, plasmids, or other sources of foreign DNA.

Host resistance: The ability of an organism to mount a successful immune response against disease-causing antigens.

Human chorionic gonadotropin (hCG): A hormone secreted by the placenta that maintains the corpus luteum when pregnancy occurs. This hormone can be extracted from the urine of pregnant women and can be injected to stimulate ovaries and testes in the treatment of infertility. A high amount of hCG in the urine is indicative of pregnancy.

Human gene therapy: Treatment of disease by insertion of new genetic material or permanent modification of existing genes. Gene therapy can take three forms: 1) gene addition (or insertion), in which new DNA is added without affecting the native gene; 2) gene replacement (or surgery) in which the native gene is removed before the new gene is inserted; and 3) gene modification (or modulation) in which the native gene's expression is irreversibly altered without directly altering its native structure. See gene expression.

Human Genome Project: A large scale, cooperative research and technology development effort designed to map and sequence human DNA.

Human Immunodeficiency Virus (HIV): A retrovirus that is the etiologic agent of AIDS and whose infection has been associated with depression of the immune system and various opportunistic diseases. HIV infects and disables the T4 subset of T-lymphocytes, which are key elements of the immune system. See AIDS.

Human leukocyte antigen (HLA): A series of four gene loci that code for a group of antigens present on the surface of cell membranes; important in determining the acceptance or rejection by the body of a tissue or organ transplant; successful tissue transplantation requires a minimum number of HLA differences between the donor's and recipient's tissues; individuals with identical HLA types are considered histocompatible for the purposes of organ transplantation.

Human menopausal gonadotropin (hMG): Hormone that can be extracted from the urine of menopausal women and injected to stimulate ovaries and testes.

Human serum albumin: See albumin.

Humoral immunity: Immunity associated with antibodies that circulate in the blood.

Huntington disease: A rare genetic disorder of the central nervous system, characterized by chronic progressive disorders of movement and mental deterioration culminating in dementia and premature death. The disease is transmitted as an autosomal dominant trait, but usually does not manifest itself until middle age. Previously called "Huntington's chorea."

Hybrid: An offspring of a cross between two genetically unalike individuals.

Hybridization: The combining of materials from different sources. In molecular genetics, the process of joining two single-strands of RNA or DNA together so that they become a double-stranded molecule. For hybridization to occur, the two strands must be nearly or perfectly complementary in the sequence of the nucleotide base pairs,

Hybridoma: A new cell resulting from the fusion of a particular type of immortal tumor cell line, a myeloma, with an antibody producing B lymphocyte. Cultures of such cells are capable of continuous growth and specific (i.e., monoclinal) antibody production.

Hydrocephaly: A defect marked by an unusual accumulation of spinal fluid in the ventricles of the brain. This fluid buildup causes enlargement of the head and usually retards brain development, often resulting in mental retardation and, in severe cases, early death. The condition can now be treated if diagnosed soon after birth.

Hydrogel (hydrophilic material): Highly water-absorbent, plastic material from which most soft contact lenses are made. The most commonly used of these materials is hydroxyethylmethacrylate (HEMA).

Hydrolysis: A chemical process of decomposition involving the splitting of a chemical bond and the addition of the elements of water.

Hydrophilic: Having an affinity for water (soluble in water). These substances may also be termed lipophobic, or insoluble in lipids.

Hydrophobic: Insoluble in water (or soluble in lipids).

Hydrothorax: An abnormal accumulation of watery fluid within the pleural cavity.

Hydroxyurea: An experimental drug used to promote expression of hemoglobin F genes (to replace defective beta globin genes) in patients with thalassemia or sickle-cell disease.

Hypercholesterolemia (familial): See familial hypercholesterolemia.

Hypermetropia: See hyperopia.

Hypernatremia: An abnormally high concentration of sodium ions in the blood.

Hyperopia: A defect in vision characterized by the inability of the eye to focus on near objects. Also called "farsightedness." Compare myopia.

Hyperprolactinemia: The overproduction of the pituitary hormone prolactin, which can contribute to infertility. The causes of this condition are diverse and poorly understood. It can be treated with bromocriptine.

Hypersensitivity: In immunology, a state of heightened reactivity to a previously encountered antigen; may cause mild allergy or severe anaphylactic shock.

Hypertension: Elevated pressure, usually referring to high blood pressure-a common and significant cardiovascular disorder characterized by persistently high arterial blood pressure, usually greater than 140mm Hg systolic and 90mm Hg diastolic pressure.

Hypervolemia: An abnormal increase in the volume of circulating fluid (plasma) in the body.

Hypnozoite: Forms of some species of Plasmodium, the cause of malaria, that remain dormant in liver cells, sometimes for many years, retaining their ability to activate an infection and cause acute malaria.

Hyponatremia: An abnormally low concentration of sodium ions in blood. Hyponatremia often accompanies severe diarrhea.

Hypospadias: A structural abnormality of the penis caused by an opening on the underside.

Hypotension: Abnormally low blood pressure (which is seen in shock but not necessarily indicative of it).

Hypothalamus: Part of the brain that regulates a wide variety of physiologic functions, such as water balance, feeding, sleeping, body temperature, heart rate, and blood pressure. It is part of a group of structures called the limbic system that influences sex drive, motivation, and emotional states. The hypothalamus exerts its influence through both the nervous and endocrine systems.

Hysterectomy: Surgical removal of the uterus, in some cases also including the cervix, ovaries, oviducts, and pelvic lymph nodes.

Hysterosalpingogram: An x-ray study of the female reproductive tract in which dye is injected into the uterus while x-rays are taken showing the outline of the uterus and the degree of openness of the fallopian tubes.

Hysteroscopy: Direct visualization of the interior of the uterus in order to evaluate any abnormalities that may be present. This is done by inserting a hysteroscope (a long, narrow, illuminated tube) through the cervix into the expanded uterus. Surgical procedures may also be performed using this method.

I

Iatrogenic: Unintended and detrimental effects on patients' health as a result of medical care. The term is commonly applied to secondary infections, adverse drug reactions, injuries, or complications that may occur following treatment.

Ice minus (ice-): One of several strains of bacteria that have been altered genetically to remove a functional gene coding for a protein that promotes the formation of ice crystals (an ice nucleating gene); used experimentally to inhibit frost damage to agricultural crops infected with these bacteria.

Ice plus (ice+): Bacteria with an intact, functional ice nucleating gene.

Idiopathic dementia: Disorders in which the clinical symptoms of dementia (progressive intellectual deterioration) are present without the typical abnormal findings in the brain. This kind of dementia is found in approximately 5 percent of cases.

Idiopathic: Of unknown origin; with no known cause.

Idiotype (or idiotope): An antigenic determinant specific for an individual immunoglobulin molecule; idiotypes are regions near the antigen binding site of an antibody that act as antigens themselves by stimulating the production of antibodies.

Ileostomy: A surgical procedure used in colonic bypass operations or colonic resections to create an artificial outlet for the discharge of feces into a bag attached to the skin; involves bringing a loop or end of the ileum (the end portion of the small intestine) out through an opening in the abdominal wall to the outside of the body. See also colostomy.

Illusions: The false perception of abstract information, leading to an incorrect or distorted interpretation of reality.

Immediate hypersensitivity: Immune response mediated by antibodies, characterized by hives, wheezing, and/or abrupt changes in blood pressure, and occurring within a few minutes or hours after exposure to an antigen.

Immobilized enzymes: Soluble enzymes encapsulated in an insoluble organic or inorganic matrix (such as glass) during chemical reactions, making them more stable and reusable after carrying out its catalytic functions.

Immune deficiencies: Any of a number of disorders (e.g., adenosine deaminase deficiency, purine nucleoside phosphorylase deficiency, AIDS) resulting from a failure or malfunction of the bodily defense mechanisms, or immune system.

Immune globulin: See immunoglobulin.

Immune response: A defensive reaction of the body in response to exposure to certain substances not recognized as normal body components (pathogenic microorganisms, transplanted tissue, etc.). Immune responses may involve the production of antibodies that react with antigens on the surface of the foreign substances to render them harmless, as well as a variety of physical and chemical responses from other cells of the immune system.

Immune serum: Blood serum that contains immune globulins and can be used to confer passive immunity to a variety of diseases.

Immune system: The group of organs, specialized cells, and cell products that protect the body from harmful microorganisms, contribute to allergy and hypersensitivity reactions, are involved in rejection of transplanted tissue and organs, and may play a role in the development of cancer.

Immune: Protected against disease by innate or acquired (active or passive) resistance to specific foreign or pathogenic substances or organisms.

Immunity: The condition of being immune, or being protected against disease by the actions of the immune system. Immunity may be either innate or acquired; innate immunity is present from birth, having been passed to the baby from the mother during pregnancy; acquired immunity may be active (resulting from either previous exposure to the disease-causing agent or vaccination) or passive (resulting from the injection of pre-formed antibodies derived from an individual already immune to a particular antigen). See also active immunity, acquired immunity, cell-mediated immunity, humoral immunity, passive immunity, and innate immunity.

Immunization: The deliberate introduction of an antigenic substance (vaccination, or active immunization) or antibodies (passive immunization) into an individual, with the aim of inducting immunity or resistance to disease. Compare vaccination.

Immunoassay: A type of laboratory technique in which specific antibodies are used to identify and measure biological substances (e.g., the concentration of antibodies or hormones present in a sample of serum). Different types of immunoassay include radioimmunoassays (RIAs), in which antibodies or antigens are labeled with radioactive markers, and enzvme-linked immunoabsorbent assays (ELISA) in which the antibody is linked with an enzyme.

Immunocompetence: The capacity to respond immunologically to an antigen.

Immunodiagnosis: A process used to detect and quantify antibodies or antigenic material in cells, serum, or biologic specimens, in the diagnosis of infections or other disorders.

Immunogenic: Able to cause an immune response.

Immunoglobulin: Any of a group of specific defense proteins (produced by white blood cells) that react to the presence of a foregn antigen, react more quickly to a previously encountered antigen than to a new one, and under normal circumstances, do not respond to components of its own body. They are found in the blood plasma and lymph and in other body fluids and tissues. There are five basic classes of immunoglobulins-lgA, lgD, lgE, lgG, and lgM.

Immunological privilege: The concept that part of the body (e.g., the central nervous system) is not as closely monitored by the immune system as the rest of the body and is therefore less susceptible to graft rejection.

Immunology: The scientific study of the ability of organisms to identify and attack foreign substances, to distinguish self from nonself, to form antibodies and antigen-reactive lymphocytes, and to become hypersensitive to common allergens.

Immunoscintigraphy: The use of external radioimaging techniques to locate tumors and to identify certain noncancerous diseases,

Immunosuppression: Inhibition or suppression of the immunologic response (e.g., by infection, as in AIDS, or by the administration of drugs to prevent rejection of tissue grafts or transplanted organs, or by irradiation or biochemical agents).

Immunosuppressive: Pertaining to or inducing the artificial prevention or diminution of the immune response.

Immunotherapy: Cancer treatment that produces antitumor effects primarily through the action of natural host defense mechanisms or by the administration of natural mammalian substances. Also called biotherapy and biological therapy.

Immunotoxic: Having the potential to adversely affect immune response or damage components of the immune system.

Immunotoxicant: A substance that elicits an adverse immune response or damages the immune system.

Immunotoxicity: An adverse or inappropriate change in the structure or function of the immune system after exposure to a foreign substance.

Impaired fecundity: Categorization of infertility used by demographers to describe couples who are nonsurgically sterile, or for whom it would be difficult or risky to become pregnant.

Impaired physician: A physician who does not have the ability to practice medicine with reasonable competence, skill, and safety to patients, because of physical or mental illness, including alcoholism or drug dependence.

Impairment: A physiological, anatomical, or mental loss of function caused by accident, disease, or congenital condition. An impairment may be the underlying cause of a disability. Compare disability and handicap.

Implantation: In reproduction, the process by which the fertilized egg (zygote) becomes attached to or penetrates the wall of the uterus (endometrium), where it develops during gestation.

Implicit review: Review of the process of medical care using subjective criteria. Compare explicit review.

Impotence: A male sexual dysfunction, influenced by physical or psychological factors, characterized by the inability to achieve or maintain an erection and to perform sexual intercourse.

In situ hybridization: A method to identify certain RNA or DNA segments, involving the use of radioactive-labeled probes.

In utero: Literally, "in the uterus," referring to procedures that are performed or events that take place within the uterus.

In vitro fertilization (IVF): A technique of medically assisted conception (sometimes referred to as "test tube" fertilization) in which mature oocytes are removed from a woman's ovary and fertilized with sperm in a laboratory. See embrvo transfer.

In vitro test: Experimentation using cells, tissues, or explants grown in a nutritive medium rather than using living animals or human subjects. See cell culture, tissue culture, explant culture.

In vitro: Literally, "in glass," pertaining to a biological process or reaction taking place in an artificial environment, usually a laboratory. Sometimes used to refer to the propagation of cells from multicellular organisms under controlled laboratory conditions.

In vivo fertilization: The fertilization of an egg by a sperm within a woman's body. The sperm may be introduced by artificial insemination or by coitus.

In vivo genetic transfer: The gene of a useful enzyme from one organism is recruited into a pathway of another organism via natural genetic processes such as transduction, transformation, and conjugation (facilitated by transmissible plasmids or transposons).

In vivo: Literally, "in the living," pertaining to a biological process or reaction taking place in a living organism. In biomedical research, used to describe experiments or processes in whole animals (e.g., mice, rats, humans), as opposed to those in a test tube or other experimental system.

In-home services: Health care, long-term care, social, and other services provided in the home by a home health agency or other organization or individual.

Incidence: The frequency of new occurrences of disease within a defined time interval. Incidence rate is the number of new cases of a 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 subject to the discretion of the frontline health professionals who deal with patients. Examples of incidents include patient falls, medication errors, equipment failures, and procedure or treatment errors.

Incontinence: 1) **Urinary incontinence** is an involuntary loss of urine sufficient in quantity and/or frequency to be a social or health problem. Acute **(urinary) incontinence** is characterized by the sudden onset of episodes of involuntary loss of urine, and is usually associated with an acute illness or environmental factors that impair the mental or physical ability of the patient to reach a toilet or toilet substitute on time. Established urinary incontinence is characterized by repeated episodes of involuntary loss of urine not associated with an acute condition. Leakage of urine caused by chronic impairments of either mobility or mental function, marked by the inability or unwillingness of the patient to toilet himself or herself independently and a lack of sufficient help with this task, is termed **functional incontinence.** Leakage of small amounts of urine caused by anatomic obstruction to bladder emptying or inability of the bladder to contract is called overflow **incontinence. Stress incontinence is** leakage of urine, in either small or large amounts (e.g., during pregnancy or athletic activity, as intra-abdominal pressure increases). 2) **Fecal incontinence is** the involuntary excretion of stool sufficient in frequency to be a social or health problem.

Incubation: In infectious disease, the time between infection by a disease-causing organism and the appearance of clinical symptoms of disease.

Index of Medical Underservice (IMU): The sum of the weighted values of four indicators of unmet health care needs in an area (i.e., infant mortality rate, percent of the population 65 and older, percent of the population living in poverty, and population-to-primary care physician ratio) that is used to determine its status as a Medically Underserved Area. IMU values range from O to 100, with lower scores indicating increasing medical underservice.

Indian tribes: Any Indian tribe, band, nation, group, Pueblo, rancheria, or community, including any Alaska Native village, group, regional or village corporation. A tribe may be federally recognized, State recognized, or self-recognized and/or federally terminated. In the context of the Federal-Indian relationship, tribes must be federally recognized in order to be eligible for the special programs and services provided by the United States to Indians because of their status as Indians. See Indian, Federal recognition.

Indian: Native Americans in the continental United States, and Indians, Aleuts, and Eskimos in Alaska.

Indirect immunofluorescence assay (IFA): A laboratory test to identify antibodies reactive against cellular antigens (e.g., HIV) in tissue sections, cells or bacterial samples, or cell suspensions, in which the antibody binds to a highly fluorescent compound (indicating the presence and position of the antigen when viewed under a fluorescent microscope). See also enzyme immunoassay and radioimmunoprecipitation assay.

Indirect reimbursement: A situation wherein a health care practitioner can be reimbursed for his or her services, but can only obtain such reimbursement through the employing physician or health care facility.

Individual health insurance: Health insurance that covers an individual and often members of his or her family without any association with an employer or membership group of any kind.

Individual practice association (IPA): A type of HMO whose physicians usually practice in private offices and are paid by the HMO on a fee-for-service basis. Members, however, pay the HMO for coverage through cavitation payments. Also see health maintenance organization (HMO).

Individually underwritten groups: Small employee groups that usually include no more than 50 individuals. Small group underwriting requires that individual group members provide a statement of health and evidence of insurability.

Induced abortion: See abortion.

Induced mutation: A change in the structure of DNA or the number of chromosomes caused by exposure of the DNA to a physical or chemical agent.

Indwelling catheter: A hollow, flexible tube inserted into the body to provide drainage or to administer drugs or nutrients (e.g., in the urinary system, a tube that is held in position in the bladder by a device resembling an inflated balloon).

Inert ingredient (of a pesticide): The solvent or "inactive" solid that dilutes or carries a pesticide; inert ingredients are so called because they have no effect on the targeted pest (not because they are inherently inactive). An inert ingredient as defined by EPA can, in some cases, cause adverse health effects in human beings.

Infant mortality rate: The number of deaths among children under 1 year old per 1,000 live births in a given year. The infant mortality rate is the sum of two components: the neonatal mortality rate and the postneonatal mortality rate.

Infant mortality: Death in the first year of life, including neonatal mortality (birth to one month) and postneonatal mortality (one month to one year). About 1 percent of all babies born in the United States die in the first year of life.

Infarction: Necrosis (death) of tissue, resulting from the interruption of blood supply (e.g., as in a heart attack (myocardial infarction)).

Infection: Invasion and multiplication of pathogenic organisms, with or without clinical manifestations. The most common types of infectious organisms in human beings include bacteria, viruses, protozoa, nematodes (worms), and mycoplasma.

Infertility: Inability of a couple to conceive after 12 months of intercourse without contraception.

Informal caregivers: See caregivers.

Informal services: Unpaid services provided for an impaired person by his or her relatives, friends, neighbors, or others.

Information and referral: The provision of information about and referrals to specific services and sources of funding for services in a community.

Informed consent: As applied to human research, the agreement of a person (or his or her legally authorized representative) to serve as a research subject, in full knowledge of all anticipated risks and benefits of the experiment. Informed consent requires that the researcher impart to the prospective subject any information that might influence the subject's decision to participate or not participate in the research, including an explanation of the methodology to be used, the availability of alternative therapies, and the prospective subject's freedom to withdraw from the experiment at any time, without prejudice.

Inhalant: A substance that may be taken into the body through the respiratory system.

Injunction: A prohibitive order issued by a court at the request of one party forbidding another party from committing some act.

Innate immunity: Inborn defenses against infection, including external barriers (e.g., skin, respiratory mucus, stomach acid, etc.), inflammatory response in the skin, phagocytic activity in the blood, and body substances (e.g., complement, interferon, etc.).

Innovation: In the context of medical devices, any product or product modification that substantially improves the quality or decreases the cost of a product, while introducing a technology, material, or concept not previously found in any similar product on the market. Also, something perceived to be new.

Inoculate: To introduce immune serum, vaccines of various kinds, or other antigenic (foreign) materials into an individual for preventive, curative, or experimental purposes to stimulate the immune system to produce antibodies against substances and to protect against future microorganism infection.

Inoculum: Material used for inoculation.

Inorganic: Matter generally not containing carbon (i.e., not animal or plant matter). Compare organic.

Inpatient care: Care that includes an overnight stay in a medical facility.

Insect vector: An insect that can transmit a disease-producing organism from one human or animal to another.

Insecticide: A substance capable of killing insects.

Insertion sequence (IS): One of a class of different nucleotide sequences found in bacteria that are capable of spontaneous movement from one chromosomal location to another. Chromosomal material may be mobilized during IS movement; movement may result in mutation at the original and/or new site(s) of insertion. See transposable element.

Institutional Review Board (IRB): A group established by an institution conducting medical research to assess the legal, ethical, and scientific aspects of that research on human subjects. IRB approval is required by the Department of Health and Human Services before proposals can receive Federal funding. IRBs must review research protocols on a regular basis, but not less than once a year.

Institutionalize: To incorporate an act or practice into a structured, often formal, system. Compare legitimate.

Instrumental activities of daily living (IADLs): Activities related to independent living, such as preparing meals, doing laundry, managing money, shopping for groceries, cleaning the house, cooking, using a telephone, and taking medications. Compare activities of daily living.

Insufficient-capacity criteria: Criteria specific to primary care and dental HMSA designations that signify the inability to obtain health 'services in a timely fashion (e.g., unusually long waiting times for appointments, high percentage of area practitioners not accepting new patients).

Insurance fraud: Intentional misrepresentation of the facts in order to obtain reimbursement from an insurer.

Integrated pest management (1PM): The use of a combination of biological and environmental measures to control vectors that transmit tropical diseases to humans or other animals. Also used in agriculture to control natural predators, parasites, and pest-resistant plants.

Intensive care: Hospital service units designed to meet the special needs of patients who are seriously or critically ill or who otherwise need intense and specialized nursing care.

Interim methadone: A treatment program that provides methadone and HIV counseling without additional ancillary services to IV drug users (on waiting lists), until treatment space in a comprehensive program becomes available.

Intermediacy: See Medicare intermediary.

Intermediate host: See host.

Intermittent peritoneal dialysis (IPD): A form of peritoneal dialysis involving intermittent treatment three to four times per week. Typically, the patient is dialyzed for about 12 hours on each treatment.

Internal medicine: Internal medicine in the United States differs from general and family practice mainly in not providing extensive training for pediatric and obstetric care and in providing more experience with severe and complex illness. General internal medicine differs from the subspecialties that have developed out of internal medicine (e.g., cardiology, oncology, hematology) by offering primary care, including first contact care and referrals to subspecialists when warranted.

Internal validity: 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.

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.

Internist: A practitioner of internal medicine.

Interpersonal aspects of medical care: The personal interaction-between patient and provider.

Interrater reliability: Consistency of judgments among raters or sets of inters.

Interstate commerce: Traffic, commercial trading, or the transportation of persons or property between States.

Intracervical insemination: Artificial insemination technique in which sperm are placed in or near the cervical canal of the female reproductive tract, using a syringe or a catheter, for the purpose of conception.

Intracranial hemorrhage: Bleeding in the brain.

Intraocular lens: A lens implanted in the eye to replace the natural lens removed during @tar' act surgery.

Intrapartum care: Medical care received during labor and delivery. Compare postpartum care and prenatal care.

Intraperitoneal insemination: An artificial insemination technique in which sperm are introduced into the body cavity between the uterus and the rectum, after ovulation has been induced, for the purpose of conception.

Intrarater reliability: Consistency of judgments by a single inter.

Intrauterine device (IUD): Contraceptive device inserted through the cervix into the uterine cavity.

Intrauterine insemination: Artificial insemination technique in which sperm are deposited directly in the uterine cavity.

Intravenous therapies: Nutrients, medications, or other treatments administered directly into the bloodstream (specifically, into a vein).

Intravenous: Within a vein or veins.

Intraventricular hemorrhage: Bleeding into the cerebral ventricles, small cavities within the brain that secrete and convey cerebrospinal fluid.

Introgression: The entry or introduction of a gene or genes from one population into another (most often in nature via sexual reproduction, or hybridization).

Introns: The DNA sequences interrupting the protein-coding sequences of a gene that are transcribed into mRNA, but are cut out of the message before it is translated into protein. Also called intervening sequences. Compare exons.

Invertebrate: An animal that lacks a backbone (e.g., worms, insects, and crustaceans). Invertebrates account for 90 percent of the Earth's non-plant species.

Investigational device exemption (IDE): A regulatory category and process under which the Food and Drug Administration permits limited use of an unapproved medical device in controlled settings for the purpose of collecting data on safety and effectiveness. This information may subsequently be used in support of a premarketing approval application.

Investigational New Drug (IND) application: An application submitted to FDA by any person or company for permission to conduct clinical research on an unapproved drug. If approved, the IND exempts the sponsor from the FDCA prohibition against shipping unapproved drugs in interstate commerce for the study or studies specifically described in the IND application.

Ischemia: Insufficient blood supply to meet the full physiologic needs of the tissue for oxygen (but short of the degree of Ischemla that results in necrosis), usually due to atherosclerosis, but also due to Injury to blood vessels, muscle spasm, or inefficient pumping of the heart.

Ischemic heart disease (IHD): **A spectrum of conditions caused by insufficient oxygen supply to the heart muscle, and the leading cause of death in the United States. The most common manifestations of IHD are angina, acute myocardial infarction (heart attack), and sudden death.**

Isograft: Tissue transplanted from one identical twin to another; isografts pose no problem of rejection by the identical twin who receives the graft.

Joint venture: A relationship in which two or more parties enter into a business as co-owners of a specific project(s) to share in profits and losses.

Juvenile justice facility: Includes: 1) juvenile correctional facilities (facilities that hold juveniles after adjudication and are for the purpose of long-term commitment or placement for supevision and treatment); and 2) juvenile detention facilities (facilities that are usually called juvenile detention centers or juvenile halls, and hold juveniles pending adjudication or after adjudication and awaiting disposition or placement). Both juvenile correctional and juvenile detention facilities can be public (i.e., under the direct administration and operational control of a State or local government and staffed by governmental employees) or private (i.e., either profitmaking or nonprofit and subject to governmental licensing but under the direct administration and operational control of private enterprise; private facilities may receive substantial public funding in addition to support from private sources).

Juvenile justice system: The juvenile justice system includes law enforcement officers and othes who refer delinquent and maltreated juveniles to the courts, juvenile courts which apply sanctions for delinquent offenses and oversee the execution of child protective services, juvenile detention and connectional facilities, and, less frequently, agencies that provide protective services and care (e.g., foster care) for juvenile victims of abuse and neglect. The latter agencies intersect with the child welfare or social services system. See delinquent behavior, iuvenile iustice facilities.

K

Kaposi's sarcoma: A multifocal, spreading cancer of connective tissue, principally involving the skin; it usually begins on the toes or the feet as reddish blue or brownish soft nodules and tumors. Previously seen in older men of Jewish or Mediterranean descent, Kaposi's sarcoma is now one of the opportunistic diseases occurring in AIDS patients.

Karyotype: A photomicrograph of an individual's chromosomes arranged in a standard format, showing the number, size, and shape of each chromosome.

Kegel exercises: A series of repetitive contractions of muscles of the pelvis and vaginal wall to help maintain pelvic structure and to prepare for childbirth; also used in the management of stress incontinence in females.

Keratoconus: A pathological condition of the eye in which the cornea becomes distended into a conical or nipple shape.

Kindled model: An animal model of epilepsy that is thought to be analogous to temporal lobe epilepsy in humans. See animal model.

Kinetoplastid: Characteristic structure at the base of the flagellum in certain protozoa (e.g., Leishmania spp. and Trypanosoma spp.).

Klinefelter's syndrome: A disorder in males due to a chromosome abnormality, present at birth but usually not clinically evident until puberty. The underlying abnormality is the presence of one or more extra X chromosomes in each cell (in contrast to the usual complement of sex chromosomes in males, one X and one Y). Clinical symptoms include androgen (male hormone) deficiency, infertility (due to impairment of spermatogenesis and testosterone production), gynecomastia (breast development), and in some cases, character and personality problems related to the psychosocial consequences of androgen deficiency.

L-dopa, levodopa: The precursor of the neurotransmitter dopamine. L-dopa is the standard therapy for persons with Parkinson's disease.

Labeling standard: The Hazard Communication standard of the Occupational Safety and Health Administration which requires that certain information be provided to workers about the identity of workplace chemicals and their hazards.

Laetrile: Trademark name for l-mandelonitrile-B-glucuronic acid.

Lambda: A bacteriophage that infects E. coli; used as a vector in gene cloning.

Laparoscopy: Direct visualization of organs in the abdominal cavity by means of a laparoscope (a long, narrow, illuminated instrument) introduced through a small surgical incision below the navel, used to evaluate pelvic pain, gynecologic symptoms, or infertility. Surgical procedures may also be performed using this method.

Laparotomy: Surgical incision through the abdomen.

Larvicide: A substance capable of killing insect larvae.

Late adolescence: Occurs for those individuals, typically ages 18 to the mid-20s, who, because of educational goals or other social factors, delay their entry into adult roles. Compare early adolescence, middle adolescence, younger adolescents. and older adolescence.

Latent effect: A reaction to a substance that is not immediately evident but that appears later in life; also referred to as a silent effect.

LAV (lymphadenopathy-associated virus): A retrovirus recovered from a person with lymphadenopathy (enlarged lymph nodes) who was also in a group at high risk for AIDS; renamed Human Immunodeficiency Virus (HIV) in 1986. See HTLV-III.

LC_{50}: An acute toxicity test used to screen substances for their relative toxicity. LC_{50} is the lethal concentration of a substance that causes death in 50 percent of a group of animals exposed to a test substance. Exposure may be by breathing vapor or immersion in liquid (e.g., fish in water).

LD_{50}: An indicator of the toxicity of new drugs, LD_{50} is the dose of a substance that causes death in 50 percent of a group of experimental animals exposed to a test substance. Exposure is often by ingestion.

Legal services: Assistance with legal matters, such as property disposition, transfer of assets, wills, living wills, powers of attorney, and guardianship.

Leishmania: A genus of flagellated parasitic protozoans that cause leishmaniasis.

Leishmaniasis: Any of several infections caused by Leishmania spp., transmitted by sandflies. Cutaneous leishmaniasis is a skin ulcer caused by L. mexicana (New World) or L. tropica (Old World). Mucocutaneous leishmaniasis is an ulceration of the nose and throat caused by L. braziliensis, occurring in tropical America. Visceral leishmaniasis, also called "kala-azar," is a generalized and internal disease caused by L. donovani (New and Old World).

Length of stay (LOS): The number of days a patient remains in the hospital, from admission to discharge.

Lepromatous leprosy: See leprosy.

Leprosy: A chronic, infectious, granulomatous disease of humans caused by the bacillus Mycobacterium leprae. The disease occurs almost exclusively in tropical and subtropical regions, and ranges in severity from localized, spontaneously remitting lesions (tuberculoid leprosy) to malignant lesions with progressive anesthesia, paralysis, ulceration, nutritive disturbances, gangrene, and mutilation (lepromatous leprosy). Also called "Hansen's disease."

Lesch-Nyhan syndrome: An X-linked recessive genetic disorder characterized by compulsive self-mutilation and other mental and behavioral symptoms. It is caused by a defect in the gene that produces a particular enzyme (hypoxanthine-guanine phosphoribosyl transferase) important in metabolism. In the absence of this enzyme, large amounts of uric acid accumulate in the blood, leading to gout. The causal relationship to the behavioral symptoms is not yet understood.

Lesion: A general term for any abnormal structure or loss of function in the body (e.g., a wound, infection, tumor, abscess, or chemical abnormality).

Leukemia: Cancers of the blood-forming organs, characterized by abnormal proliferation and development of leukocytes (white blood cells) and their precursors in the blood and bone marrow, and infiltration of lymph nodes, the spleen, liver, and other sites. The various forms of leukemia are classified according to the dominant cell type and course of the disease: chronic myelogenous leukemia (including myeloid, myelocytic, and granulocytic); hairy cell leukemia; chronic lymphocytic leukemia; and various types of acute leukemia.

Leukocyte: White blood cells (WBCs), including lymphocytes, monocytes, neutrophils, basophils, and eosinophils. WBCS are formed in lymph nodes and bone marrow and are present in the blood and lymphatic circulation. Their main function is to protect the body against infection and to fight infection when it occurs.

Liability: Accountability and responsibility that are enforceable by legal sanctions.

Licensure: The legal authority, exercised by the State, for a health professional to practice, for a hospital or nursing home to operate, and for companies to produce and distribute biologic products.

Life-skills training: The formal teaching of the requisite skills for surviving, living with others, and succeeding in a complex society. Life-skills training interventions emphasize the teaching of social competence, cognitive skills, and decisionmaking skills.

Life-Sustaining Treatment: Dregs, medical devices, or procedures that can extend the life of a patient who would likely die within a foreseeable, though usually uncertain, amount of time. Examples include cardiopulmonary resuscitation, mechanical ventilation, renal dialysis, nutritional support (i.e., tube or intravenous feeding), and antibiotics to fight overwhelming infections.

Lift: In the context of rehabilitation, the amount of weight a prosthesis will misc.

Limbic system: Structures in the brain that are associated with some aspects of emotion and behavior. See hippocampus, hpothalamus.

Linear attenuation of X-rays: Partial absorption and partial transmission of X-rays.

Linkage: In genetics, the physical proximity of two or more genes on the same chromosome, such that they are inherited together as a group and are unlikely to segregate independently during meiosis.

Lipid metabolism: The process by which lipid molecules (fatty acids) are synthesized and broken down in the body.

Lipids: A group of organic compounds, classified into complex lipids (e.g., fatty acids, phospholipids, cholesterol) and simple lipids (e.g., steroids). Lipids are central to a wide variety of metabolic and structural functions in the body, such as energy storage, formation of hormones and bile acids, and structure of cell membranes.

Lipophilic: Having an affinity for lipids; that is, soluble in fat-like material. These substances may also be termed hydrophobic, or insoluble in water. Many toxic substances are lipophilic, making them especially dangerous to the nervous system. See lipids.

Lipoprotein: Compounds consisting of lipids (fatty substances such as cholesterol) and proteins, the form in which lipids are transported in the blood and lymph fluid. Lipoproteins form the main structural components of cell membranes and cell organelles. They are classified as very low-density (VLD), low-density (LD), and high-density (HD).

Liposome: A structure with a lipid membrane (like that of a cell) that can be filled with specific substances and then used as a delivery vehicle to transport those substances to the interior of a target cell by fusion with the cell's own membrane, It is one of several potential delivery vehicles for use in gene therapy.

Lithotripsy: A technique using ultrasonic waves to break up calculi (stones) (e.g., kidney stones, gallstones, and upper ureteral stones) for excretion in the urine (as in extracorporeal shock wave lithotripsy) or removal via minor surgery (as in percutaneous lithotripsy).

Lithotripter: An instrument that fragments, erodes, or otherwise destroys calculi (stones) in the body.

Live birth: The birth of an infant, regardless of the duration of gestation, that exhibits any sign of life (e.g., respiration, heartbeat, umbilical pulsation, or movement of voluntary muscles). Compare fetal death.

Living will: A written declaration by a competent adult outlining his or her wishes, especially the intent to refuse life-sustaining procedures, once he or she is incompetent and death is imminent. Because these documents are frequently ambiguous, their legality may be unclear. They are not recognized in all States, and requirements and conditions vary from State to State.

Local health departments (LHDs): Municipal or county government-operated facilities providing basic personal and environmental health services.

Locus: In genetics, the position of a gene or a group of functionally-related genes on a chromosome.

Long terminal repeat (LTR): In genetics, a nucleotide sequence (at each end of a retroviral genome) that is involved in transcript initiation and regulation and contains signals for expression of the viral genome.

Long-distance caregiver: An adult child or other relative or friend of an impaired person who lives in a different locality or area of the country but still tries to function as a caregiver for the person-often by trying to locate, arrange, and monitor services for the person.

Long-Term Care Assessment and Management Program (LAMP): A program in Pennsylvania that contracts with local agencies (usually area agencies on aging) to provide case management for elderly people who are eligible for Medicaid-funded nursing home care but choose to remain at home. It is similar to Ohio's PASSPORT Program but is paid for solely with State funds.

Long-term care services: A variety of services that may be provided in a person's home, the community, or a residential or institutional setting, with the objective of maintaining and supporting a chronically ill or severely disabled individual.

Long-term care: The provision of medical, social, and personal care services on a recurring or continuing basis to people who are chronically ill, aged, disabled, or mentally retarded. Long-term care services cay be provided in hospitals, private homes, nursing homes, board and care facilities, and mental health facilities, among other settings. Services include symptomatic treatment, maintenance, and rehabilitation for patients of all ages.

Loss-control service: Service provided by insurers to client companies. Loss-control specialists visit worksites and offer advice on the prevention of property loss and wok-related injuries and illnesses.

Lost-workday case: As defined by the Occupational Safety and Health Administration and the Bureau of Labor Statistics, a work-related injury or illness that results in an employee missing time from work or that restricts the employee's work activity.

Low birthweight rate: Percentage of live births with a birthweight of 2,500 grams or less.

Low birthweight: Weight of a newborn infant that is less than 2500 grams (5 lb. 8 oz.). See also very low birthweight.

Low income: Pertaining to an individual or family that is poor or near-poor.

Lower respiratory tract infection (LRTI): See acute respiratory infections.

Luteal phase defect (LPD): Failure of the endometrial lining of the uterus to develop properly after ovulation, leading to inability of a fertilized ovum to implant; a potential cause of infertility.

Luteinizing hormone (LH): A gonadotropin hormone, secreted by the anterior pituitary gland, that stimulates the secretion of sex hormones by the ovary and the testes and is involved in the maturation of ova and spermatozoa.

Luteinizing hormone-releasing hormone (LH-RH): A hormone released by the hypothalamus that acts on the pituitary to promote secretions of gonadotropin hormones that in turn direct hormone and gamete production by the ovaries and testes.

Lymphadenopathy syndrome (LAS): A condition characterized by persistent, generalized, enlarged lymph nodes that can occur along with various types of viral and bacterial infections, leukemias, and drug reactions, but which has recently become associated most closely with HIV seropositivity (in which it is usually called "persistent, generalized lymphadenopathy"). In HIV-infected individuals, it can occur during the acute phase of initial HIV infection as well as later on during HIV-induced immunosuppression in those with imminent AIDS.

Lymphadenopathy: Enlargement of a lymph node or lymph gland.

Lymphatic drainage: The movement of fluids, molecules, foreign particles, and cells from various tissues in the body through the lymph system to the immune system; a means by which grafted cells reach the host's immune system and trigger rejection.

Lymphocytes: Specialized white blood cells involved in one type of immune response that does not depend directly on antibody attack (cell-mediated immunity). Lymphocytes originate from fetal stem cells and develop in the bone marrow. They normally comprise about 25 percent of the total white blood cell count and increase in number in response to infection. They occur in two forms: B cells and T cells.

B cells, which circulate in an immature form and secrete antibodies that are carried on their surface membranes, search out, identify, and bind with specific antigens. T cells mature in the thymus gland and differentiate into thymocytes when exposed to an antigen; they divide rapidly and produce large numbers of new T cells sensitized to that antigen.

Lymphoid organs: The principal organs of the immune system, including the thymus, bone marrow, spleen, lymph nodes, and tonsils involved in the production of lymphocytes and antibodies.

Lymphokine: A type of soluble chemical factor produced and released by sensitized T-lymphocytes on contact with a specific antigen, including interferon gamma, interleukin 1, 2, and 3, tumor necrosis factor, colony stimulating factor, B-cell growth factor, and others. Lymphokines are involved in a number of essential immunologic functions, including attracting macrophages to the site of infection and inflammation and helping to produce cellular immunity by stimulating the activity of monocytes and macrophages.

Lymphomas: Cancers of cells of the lymphoid tissue, found mainly in lymph nodes and the spleen; categorized as Hodgkin's lymphoma and various types of non-Hodgkin's lymphoma. See cancer.

Lymphosarcoma: Non-Hodgkin's lymphoma; malignant disease of lymphatic tissue excluding Hodgkin's disease.

Lyophilized: Freeze-dried.

Lyse: To damage or rupture a cell membrane, allowing the release of cell contents into the extracellular medium.

Lysosomal storage diseases: A group of genetic disorders resulting from a deficiency of specific lysosomal enzymes needed to break down glycosaminoglycans (previously called mucopolysaccharides), causing the accumulation of these substances in the lysosomes (intracellular particles responsible for breaking down chemical substances, bacteria, etc.). Clinical severity of each type of disease depends on the degree of enzyme deficiency and the tissues most affected by the accumulation, but in general, these are chronic and progressive disorders that may be life-threatening at an early age. Examples of lysosomal storage diseases include Tay Sachs, Gaucher's, Hurler's, and Niemann-Pick disease. Most disorders in this group are transmitted in an autosomal recessive inheritance pattern, although a few are X-linked.

M

Macrobiotics: A lifestyle and diet adapted from the Far East and popularized in the United States by Michio Kushi and others. Macrobiotics has also been adopted by some cancer patients, although its promoters do not consider it primarily a treatment for cancer. **The principles of the diet consist of balancing** the "yin" and 'yang" energies of foods. Different types of cancer **are** considered either yin or **yang and the macrobiotic program is adapted to the particular type of cancer and to individual traits.**

Microphage: A large, specialized immune cell that originates in the bone marrow and is involved in many stages of the immune response, including engulfing bacteria and other foreign particles.

Magnetic field gradient: A magnetic field that increases or decreases in strength in a given direction along a sample.

Magnetic resonance imaging (MRI): A diagnostic technique that produces cross-sectional images of organs and structures in the body by measuring the reaction of nuclei (typically of hydrogen protons) in magnetic fields to radiofrequency waves.

Mainstream health services: Inpatient or outpatient care in acute care hospitals and ambulatory care in private office-based physicians' offices.

Major activity: In national health interview surveys such as DHHS'S National Health Interview Survey, persons are classified in terms of the major activity usually associated with the particular age group; attending school is considered the major activity for the age group 5 to 17. Persons are not classified as having a limitation in a major activity unless one or more chronic conditions is reported as the cause of the activity limitation.

Major diagnostic category (MDC): The 23 principal divisions in the DRG (see diagnosis-related groups) Patient classification scheme. The diagnoses in **each** MDC correspond to a single **organ system or etiology and in general are associated with a particular medical specialty.**

Major medical coverage: Health insurance coverage that provides for an array of services and usually includes an annual deductible, coinsurance requirements, and maximum benefit limits. It is designed to offset heavy medical expenses resulting from catastrophic or prolonged illness by providing benefit payments of 75 to 80 percent of medical expenses above a certain base amount. By comparison, basic benefit plans usually provide first-dollar coverage but cover only a very narrow set of services (e.g., hospital, surgical).

Malaria: Any of a group of human febrile diseases caused by infection of red blood cells by protozoan parasites of the genus Plasmodium. Malaria is transmitted between people by a bite from an infected mosquito of the genus Anopheles or by blood transfusion or parenteral inoculation with infected blood. One of the most common infectious diseases worldwide, malaria is endemic in tropical areas of Central and South America, Africa, and Southeast Asia. Four species of Plasmodium cause malaria in humans: P. falciparum, P. vivax, P. malariae, and P. ovale. Once infection has occurred, it may persist in the body for years and recur periodically, resulting in chills, fever, anemia, and an enlarged spleen. The severity and manifestations of the disease largely depend on the particular infecting species (P. vivax and P. **ovale have** a persistent stage in the liver that causes relapses), the magnitude of the infection, **and the cytokines released as a result of the infection.**

Malignant: Referring to tumors that are able to invade neighboring tissue and metastasize to distant sites in the body.

Maltreatment: Physical, emotional, or educational neglect, or physical, emotional or sexual abuse, most often perpetrated by a family member.

Mammography: X-my examination of the breast, used as both a screening procedure on apparently healthy females and as a diagnostic procedure in clinical situations to detect breast @ricer.

Managerial technology: Technology used to facilitate and support the prevision of health care services but not directly associated with patient care, including administration, transportation, and communication, both within and among health care facilities.

Mandatory assignment: A requirement that a physician agrees to accept the Medicare determination of approved charges as payment in full for medical services.

Manic depression: Also called bipolar affective disorder, a mental illness whose symptoms involve abnormal mood swings cycling from a marked depression to uncontrollable feelings of elation and an expansive, euphoric mood (mania), with a return to normal behaviour between episodes. Its causes are complex and poorly **defined, but may include biologic, psychologic, interpersonal, and cultural factors, with physical illness, certain drugs, and a familial pattern as possible contributors. Treatment includes the use of antidepressive, tranquilizing, and antianxiety drugs, long term psychotherapy, and lithium treatment to prevent relapse.**

Manual wheelchair: Type of wheelchair built in the traditional chair shape with wheels instead of legs. It maybe propelled by the user% hands or feet or pushed by another person.

MAO-B, monoamine oxidase B: An enzyme, found in the liver and the nervous system, that catalyzes **the oxidation of a large variety of monoamine, substances including epinephrine, norepinephrine, and serotonin. It can also convert other chemicals to toxins that destroy substantial nigra cells, thereby producing parkinsonism. Drugs that inhibit this enzyme in brain tissue are used as a** treatment **for depression. See parkinsonism.**

Maple syrup urine disease (MSUD): A rare, autosomal recessive genetic disorder in which the enzyme necessary for the breakdown of three essential branched-chain amino acids (leucine, isoleucine, and valine) is lacking, resulting in the accumulation of these substances in the blood and urine. The disease derives its name from the characteristic odor of the urine of affected infants. Classic MSUD results in life-threatening acidemia and necrologic dysfunction in the newborn period, and is fatal if untreated or treated too late. It can be diagnosed before symptoms appear by a screening test in the first week of life. Treatment is based on rigid dietary control of these amino acids. Also called branched chain ketonuria.

Marfan syndrome: A dominantly inherited connective tissue disorder associated with a variety of musculoskeletal abnormalities, including long, thin fingers, tall stature, scoliosis, ligament laxity, cardiovascular disorder, lens dislocation, and myopia. Its potentially fatal complication is aortic dissection and rupture, with the mean age of death before age 50. Also called arachnodacytly ("spider fingeredness").

Margin of exposure: See margin of safety.

Margin of safety: Division of the NOEL or NOAEL by the current, desired, or most feasible human **exposure level.**

Marker: In genetics, an identifiable physical location on a chromosome (e.g., a restriction enzyme cutting site) whose inheritance can be followed in family and population studies or linkage analysis. Markers can be expressed regions of **DNA (genes) or some** segment of DNA with **no known coding function but whose pattern of inheritance can be determined.**

Maternal and child health (MCH) services block grant program: A Federal block grant program authorized under Title V of the Social Security Act, that supports the provision of health services to mothers and children, especially those with low income or living in areas with limited availability of health services. Funds are provided to States, which in turn may provide them to local health departments. Created by the Omnibus Budget Reconciliation Act of 1981, the MCH block grant consolidated several categorical grant programs into one block grant. The MCH block grant is administered by the Bureau of Maternal and Child Health in the Health Resources and Services Administration in DHHS.

Maternal mortality: Maternal mortality includes deaths due to complications of pregnancy, childbirth, and the puerperium (the period of 42 days following the termination of pregnancy). Causes of maternal mortality include uterine hemorrhage, toxemia, and underlying medical conditions that complicate pregnancy such as diabetes and infections (e.g., tuberculosis, syphilis).

Maternal mortality rate: The annual number of maternal deaths related to pregnancy as a proportion of the annual number of live births.

Maternity care: Prenatal care and intrapartum care; medical services from conception through labor and delivery.

Maturation: In evaluation studies, the impact on outcome of the passage of time, independent of the intervention being evaluated.

Maximum allowable concentration (MAC): The limit on atmospheric contaminants in manned spacecraft for missions of up to 7 days; set by the National Aeronautics and Space Administration.

Maximum contaminant level (MCL): An enforceable standard set by EPA for pollutants in drinking water, to be set as close as possible to the maximum contaminant level goals. See maximum contaminant level goals, recommended maximum contaminant level.

Maximum contaminant level goal (MCLG): Nonenforceable goal set by EPA for pollutants in drinking water. MCLGS for carcinogenic pollutants are set at zero; goals for noncarcinogenic pollutants are set by establishing the lowest dose at which harmful effects can be observed, compensating for uncertainties, and calculating predicted human exposure from food and air. See maximum contaminant level.

Me-too registration: A regulatory practice by which subsequent products that are identical to an initial, registered product can be registered without undergoing regulatory tests.

Measles: A highly contagious viral disease involving primarily a harassing cough with steadily mounting fever followed by the eruption of red papules on the skin. It is spread by respiratory contact, primarily airborne droplets of nasal secretions containing the virus.

Measles, mumps, rubella (MMR) vaccine: A combination vaccine composed of the three live, attenuated virus vaccines providing long term immunity against measles, mumps, and rubella; given by injection in a 2-dose schedule, usually at 15 months of age and again at school entry.

Mechanical ventilation: see assisted ventilation.

Mechanistic Toxicology: An approach to testing that focuses on the chemical processes by which a toxic effect occurs. Mechanistic toxicology testing relies heavily on physiology, biochemistry, and analytical chemistry techniques to monitor these processes.

Meconium aspiration: The inhalation of meconium (a dark, sticky substance that collects in the intestines of a fetus and forms the first stools of a newborn 1-2 days after birth), which can occur if the fetus passes meconium into the amniotic fluid before birth and then inhales it when breathing starts. In

the lungs, meconium can block air passages and possibly lead to a failure of the lungs to expand or other pulmonary dysfunction.

Medicaid: A joint Federal/State program intended to provide 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. In some States, Medicaid also pays for adult day care and in-home services such as personal care and homemaker 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. The income and assets levels are low in all States and very low in some States.

Medicaid 2176 Home and Community-Based waiver: A waiver obtained under the Medicaid 2176 Home and Community-Based Waiver program which allows States to provide a coordinated package of home and community-based services for individuals who otherwise would be at risk of nursing home placement or who are already in an institution. A State with a Medicaid 2176 waiver may use Medicaid funds to pay for services that are not ordinarily covered by Medicaid; may pay for services for some Medicaid beneficiaries and not others, so that benefits can be targeted; and may use a higher income standard to determine eligibility for the waiver program than the standard used for other Medicaid services.

Medical device: Any instrument, apparatus, or similar or related article that is intended to prevent, diagnose, mitigate, or treat disease or to affect the structure or function of the body.

Medical Illness Severity Grouping System (MEDISGRPS): A computerized data system developed by MediQual Systems, Inc., that categorizes patients' risk of dying or increased morbidity into four groups based on key physiological findings (e.g., seventy of illness upon admission to the hospital).

Medical injury: An adverse medical outcome that could be either unavoidable or avoidable, i.e., negligently induced.

Medical maintenance: in the treatment of drug abuse, an approach that calls for stable, nondrug using, socially rehabilitative methadone-maintained patients to receive their total methadone dosage from a physician at a primary care setting at intervals as far apart as 28 days.

Medical malpractice: Professional misconduct or unreasonable lack of skill by a physician or other health care provider 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 or harm 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 audit: See medical record review.

Medical record: The file of information 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 review: Review of a patient's medical record to determine how the medical provider performed.

Medical Removal Protection (MRP): A program specified by the Occupational Safety and Health Administration's lead standard. It requires removal of workers from lead-contaminated environments when their blood lead levels exceed specified levels.

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.

Medical treatment case: As defined by the Occupational Safety and Health Administration and the Bureau of Labor Statistics, a work-related injury or illness that requires medical treatment beyond first aid.

"Medically needy" people: Under Medicaid, people whose incomes are above the ceiling established by a State for Medicaid eligibility but who qualify for Medicaid because their medical expenses reduce their incomes below the Medicaid eligibility level. Not all States allow Medicaid eligibility for "medically needy" people.

Medically Underserved Areas (MUAS): Areas determined by the Federal Government to have inadequate access to health care as determined by the Index of Medical Underservice (IMU).

Medically Undersexed Populations (MUPS): Populations not meeting MUA criteria that are designated as undeserved based on unusual local conditions that may affect the area/population.

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 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. See Part A (Medicare) and Part B (Medicare).

Medicare Alzheimer's Disease Demonstration: A demonstration program, mandated by Congress in 1966, to determine the effectiveness, cost, and impact of providing comprehensive services for Medicare enrollees who have Alzheimer's disease or a related disorder.

Medicare carriers: Fiscal agents (typically Blue Shield plans or commercial insurance firms) under contract to the Health Care Financing Administration for administration of specific Medicare tasks. These tasks include computing reasonable charges under Medicare Part B, making actual payments, determining whether claims are for covered services, denying claims for noncovered services, and denying claims for unnecessary use of services.

Medicare conditions of participation: Requirements that 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.

Medicare Economic Index (MEI): The index that the Medicare program uses to set limits on physicians' prevailing charges, as specified by the Social Security Amendments of 1972 (Public Law 92-603). The MEI is based on estimates of the costs of producing physician office services and a measure of increases in earning levels in the general economy.

Medicare intermediaries: Fiscal agents (typically Blue Cross plans or commercial insurance firms) under contract to the Health Care Financing Administration for administration of specific Medicare tasks. These tasks include determining reasonable costs for covered items and services, making payments, and guarding against unnecessary use of covered services for Medicare Part A payments. Intemediaries also make payments for home health and outpatient hospital services covered under Part B.

Medicare operating margin: Revenues received by a health care provider from Medicare less the provider's operating costs covered by Medicare payments, divided by Medicare revenues and multiplied by 100. Medicare revenues and costs not covered under Medicare's prospective payment system (e.g., capital expenditures, medical education costs) are excluded.

Medicare vouchers: A proposed alternative administrative change in the Medicare program in which each eligible person would be allowed a set amount of money to purchase medical care or health insurance.

Medicare/Medicaid beneficiary: One who receives coverage for health services under Medicare or Medicaid.

Medigap insurance: Private supplementary medical insurance covering out-of-pocket expenditures (deductibles and coinsurance) of Medicare beneficiaries, but typically not covering the patient's liability for physician services not covered by assignment.

MEDLINE database: The original, largest, and most utilized database 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.

Meiosis: A type of cell division, unique to reproductive cells, by which chromosomes are duplicated and then reduced by half, giving rise to gametes each with half the chromosome number of the parent cells.

Membrane fusion: A process by which the membranes (outer walls) of two cells merge, thus creating one daughter cell from two parents. In contrast to fertilization by gametes, membrane fusion describes the joining of somatic cells. One of the most productive results of membrane fusion technologies is the formation of hybridomas, wherein an antibody producing white blood cell (leukocyte) is fused with a tumor cell to produce a daughter cell that can generate large amounts of a specific antibody for use in diagnostic and therapeutic procedures (monoclinal antibodies).

Memory: The mental power that enables one to retain and to recall events, sensations, ideas, and information. There are several different forms of memory: immediate (remembering for a few seconds), short-term (remembering for a few months), and long-term (remembering material learned from year to year).

Mendelian: In genetics, a term used to refer to a trait that follows the basic principles of inheritance described in the experiments of Gregor Mendel (1822-1884), the Austrian monk whose early research with garden peas laid the basis for modem genetics. Such traits are controlled by a single gene and follow a simple pattern of dominant or recessive inheritance. Mendel's laws include the Law of Segregation, which describes how each pair of alleles separates into different gametes, and the Law of Independent Assortment, which describes how different alleles are assorted independently of the other alleles in gametes and how the subsequent pairing of male and female gametes occurs at random.

Menopause: Cessation of the menstrual cycle, which normally occurs between 45 and 60 years of age, when the ovary is virtually depleted of oocytes, but which may also result prematurely from illness or surgical removal of the uterus or both ovaries.

Menstrual cycle: The periodic cycling of events in the uterus of females of reproductive age, beginning at menarche and ending at menopause. Under hormonal control, the endometrial layer is bled, then regrows, proliferates, is maintained for several days, and sheds again at menstruation. Ovulation occurs at midcycle when an oocyte matures in a follicle produced on the surface of the ovary, which then ruptures, releasing the oocyte into the fallopian tube. The average length of one menstrual cycle is 28 days.

Menstruation: The periodic physiological discharge of blood and mucous membrane from the uterus, recurring at approximately 4-week intervals throughout the reproductive period of the human female (i.e., from puberty to menopause).

Mental disorder: For purposes of relevant OTA reports, any of the diagnoses classified as mental disorders by the American Psychiatric Association in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III). Generally, DSM-III defines a mental disorder as a clinically significant behavioral or psychological syndrome or pattern that occurrs in an individual and that is typically associated with either a painful symptom (distress) or impairment in one or more areas of functioning (disability).

Mental disorders: See diagnosable mental disorders.

Mental health problems: See diagnosable mental disorders and subjective distress.

Mental health promotion: A broad range of efforts that seek to foster a healthy mental equilibrium and maintain emotional stability. See health promotion and compare prevention.

Mental health services: Care for the treatment of mental health problems, third-party payment for which is usually limited to diagnosable mental disorders, and not available for subjective distress without an accompanying diagnosable mental disorder.

Mental retardation: A term used for mental subnormality (i.e., a deficiency of intellectual function).

Mentoring: The practice of acting over time as a guide, tutor or coach, and sometimes as an advocate for another (typically not biologically related) person.

Merger (of health facilities): The union of two or more formerly independent institutions under a single ownership, accomplished by the complete acquisition of one institution's assets or stock by another institution.

Merit rating: See experience rating.

Merozoite: A life cycle stage of the malarial agent Plasmodium; this stage develops in the vertebrate host's liver, then enters the circulatory system and infects red blood cells.

Mesothelioma: A malignant tumor of the membrane that lines the lung and thoracic cavity, associated with prior exposure to asbestos.

Messenger RNA (mRNA): In molecular genetics, a type of RNA that transmits information from DNA to protein-synthesizing ribosomes of cells; ribonucleic acid that serves as the template for protein synthesis. It is produced by transcribing a nucleotide base sequence from DNA into a complementary sequence of RNA.

Meta-analysis: A statistical process used to pool results from a number of studies (e.g., from many small randomized clinical trials), to enable the demonstration of statistically significant differences when the results are combined.

Metabolic treatment: A non-specific term used by many unconventional practitioner to refer to a combination of unconventional approaches aimed at improving the physical and mental condition of cancer patients, sometimes including the concept of "detoxification."

Metachromatic leukodystrophy (MLD): A group of autosomal recessive genetic disorders characterized by the widespread loss of normal myelin (the protective sheath surrounding nerve cells), resulting from abnormally low activity of the enzyme aryl sulfatase A. Clinical symptoms appear in the

first 10 years of life and lead progressively to dementia, convulsions, cranial nerve abnormalities, and finally severe spasticity and death.

Metaphase: see mitosis.

Metastasis: The process by which malignant cells spread to distant body sites via the lymphatic circulation or the bloodstream; also, a secondary malignant tumor.

Methadone maintenance: Pharmacotherapy for narcotics addicts that employs a synthetic opiate, methadone, to stabilize clients and help them to function in the community. In addition to daily oral doses of methadone, methadone maintenance programs have traditionally included counseling and other support services.

Methylphenidate hydrochloride: A white crystalline powder, sold by the tradename Ritalin, used therapeutically as a mild stimulant for the central nervous system (e.g., in the treatment of attention deficit disorder in children and of narcolepsy in adults).

Metropolitan Statistical Area (MSA): As defined by the U.S. Office of Management and Budget, an MSA is a county or group of counties that includes either a city of at least 50,000 residents, or an urbanized area with at least 50,000 people that is itself part of a county or counties with at least 100,000 total residents.

Microbe: A minute living organism; the term especially applies to those minute forms of life that are capable of causing disease in animals, including bacteria, protozoa, and fungi.

Microembolus: A microscopic particle (such as a clot or other clump of cells) present in a blood vessel that obstructs the flow of blood; such particles can occur as a result of an accident or cardiovascular disease.

Microfilariae: Slender, motile prelarval forms of filarial nematodes, the parasites that cause filariasis.

Microglia: A type of glial cell in the central nervous system thought to enter the immune system and initiate graft rejection.

Microinjection: The technique of introducing very small amounts of material (DNA or RNA molecules; enzymes; cytotoxic agents) into an intact cell through a microscopic needle penetrating the cell membrane. In molecular genetics, the most commonly used technique for the insertion of genes from one animal into another, in which highly purified copies of a specific gene of interest are injected into a fertilized animal egg. The egg is then surgically implanted in a female animal's reproductive tract.

Micronuclei: Result from the exclusion of fragments of/or whole chromosomes from nuclei formed at mitosis. Their presence can be taken as an indication of the previous existence of chromosomal aberrations.

Microorganism: A minute, microscopic or submicroscopic living organism. Examples are bacteria, fungi, yeasts, mycoplasma, viruses, and protozoa.

Microsurgery: Fine, delicate surgical procedures performed with the aid of a microscope or other magnifying apparatus, used primarily in ophthalmology, otology, gynecology, urology, and neurology.

Microtrabeculum: A lattice of submicroscopic structures within cells that may serve to maintain cell shape.

Migrant health centers (MHC): Centers that provide primary health care to migrant and seasonal farm workers and their families and are part of the primary are program administered by the Federal Bureau of Health Care Deliver and Assistance.

Minimal risk: Term used to denote that the chance of harm anticipated in proposed research is no greater than that encountered in daily life or during the performance of routine physical or psychological tests.

Minimization: In randomized clinical trials, a method of patient allocation intended to minimize different distributions of prognostic factors between treatment groups without creating mutually exclusive subgroups.

Minor: A person who has not reached the age of majority, either age 18 or 19, depending on the State. Currently, the age of majority is set at age 18 in every State but Alaska, Nebraska, and Wyoming, where the age is 19.

Minor offenses: Federal Bureau of Investigation Part II offenses, which include abuse violations, weapons violations, assaults without weapons, disorderly conduct, involvement with stolen property, driving under the influence of alcohol or other drugs, and status offenses.

Minority group: See ethnic minority group.

Mitochondrion/dria: Structures in the cytoplasm of all living cells (except viruses, blue-green algae, and mature red blood cells) that provide the principal source of cellular energy, and contain enzymes involved in electron transport and in the citric acid and fatty acid cycles; contains self-replicating, extranuclear, circular DNA molecules.

Mitogenesis: The initiation of cell division, or mitosis.

Mitosis: The process of cell division involving DNA replication; results in daughter cells with the same number of chromosomes as the parent cell.

Mixed cell culture: A culture of more than one type of cell.

Mixed neuropathy: Degeneration of both sensory and motor neurons.

Modality: A method of application or use of any therapeutic agent, usually limited to physical agents.

Moderate handicaps (in infants): Disabilities that include moderate mental retardation (IQ or developmental quotient between 70 and 80).

Moderately low birthweight: Birthweight between 1,500 grams and 2,500 grams.

Molecular biology: The study of biochemical and biophysical aspects of the structure and function of DNA, proteins, and other cellular components.

Molluscicide: Any chemical agent used to kill mollusks; in the 'context of tropical diseases, snails necessary in the life cycles of schistosomes are the most important targets.

Monoclinal antibodies: Artificially produced antibodies that recognize a single, specific antigen and are produced by a clone of specialized cells, used in the diagnosis and treatment of some forms of cancer. Commercial quantities of these molecules can be produced by hybridomas. See antibodv, antigen, and hvbridoma.

Monocytes: Large mononuclear white blood cells that ingest bacteria and cell debris.

Monomer: A chemical subunit, or a type of simple molecule capable of chemically bonding with others to form a polymer (a number of monomers bonded together). Compare polymer.

Monovision: A sight difficulty with vision in one eye only.

Morbidity rate: The rate of illness in a population, calculated as the number of people ill during a time period divided by the number of people in the total population; used to refer to incidence or prevalence rates of disease.

Morbidity: The condition of being ill or otherwise afflicted with an unhealthful condition. See also new morbidities.

Morphology: The study of the physical form and structure of a specimen, plant, or whole animal.

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). See also crude mortality rate and age-adiusted mortality rate.

Morula: The solid mass of cells resembling a mulberry ("morula" in Latin) formed by the cleavage of a zygote; the stage before blastocyst.

Motor activity tests: Observation and evaluation of the movements of test animals after acute or subchronic exposures to a substance; used as a screen for neurotoxic substances. See screening tests.

Motor neuron disease: A type of neurodegenerative disease in which neurons in the central nervous system that control muscle movement are destroyed. See amyotrophic lateral sclerosis.

Motor neuron: See neuron.

MPTP, 1-methy-4-phenyl-1,2,3,6 -tetrahydropyridine: A synthetic narcotic that can cause parkinsonism in humans.

Mucopolysaccharidoses: See lsosomal storage diseases,

Multi-infarct dementia: An irreversible form of dementia resulting from many small strokes.

Multidimensional assessment: A client evaluation that focuses on many different aspects of the client's status (e.g., physical, mental, emotional, functional, financial, and social); conducted by individuals from various disciplines, usually including a physician, a nurse, and a social worker and, depending on the care setting, a physical therapist, a speech therapist, an occupational therapist, a psychologist, and various physician specialists.

Multidisciplinary team: A team composed of individuals from various disciplines that provides comprehensive client assessments, care planning, and/or treatment. Multidisciplinary teams usually include a physician, a nurse, and a social worker and, depending on the care setting, may also include a physical therapist, a speech therapist, an occupational therapist, a psychologist, and various physician specialists.

Multifactorial traits: Inheritance of traits that are not determined solely by a single gene. Multifactorial, or polygenic, traits have variable phenotypic effects that depend (for their expression) on the interaction of many genes and environmental influences (e.g., spina bifida and other neural tube defects).

Multigenic disorder: See polygenic disorders.

Multihospital system: Two or more hospitals that are owned, leased, sponsored, or contract-managed by a central organization (American Hospital Association definition).

Multiple employer trusts (METs): A method of insurance in which small employers band together and act as a large employer to create a larger risk pool, so that premiums can be lower (compared to premiums based on each employer's smaller risk pool).

Multiple myeloma: Malignant proliferation of plasma cells in the bone marrow, characterized by bone pain, renal failure, anemia, and susceptibility to bacterial infections.

Multiple sclerosis: A progressive, tippling disease of the central nervous system in which scattered patches of myelin in the brain, optic nerve, and spinal cord are destroyed, resulting in slowed nerve conduction; its cause is unknown, but may be related to an autoimmune process or an infectious agent. Clinical symptoms first appear in early adulthood and commonly include weakness, lack of coordination, speech and visual disturbances, numbness and tingling, incontinence, and paralysis.

Multiservice center: See comprehensive services for adolescents.

Mumps: An acute, viral infection that produces painful inflammation and swelling of the salivary glands in the face and neck; occurs most commonly in school-age children.

Murder and nonnegligent manslaughter: The willful (nonnegligent) killing of one human being by another. Deaths caused by negligence, attempts to kill, assaults to kill, suicides, accidental deaths, and justifiable homicides, are excluded. Justifiable homicides are limited to: 1) the killing of a felon by a law enforcement officer in the line of duty, and 2) the killing of a felon by a private citizen.

Muscular dystrophy (Duchenne type): An X-linked recessive genetic disorder of muscle metabolism characterized by a slow, progressive degeneration of muscle fibers; usually fatal in early adulthood.

Mutagen: An agent that induces chemical or physical changes in genetic material. Chemicals, viruses, and ionizing radiation can be mutagenic. Most carcinogens are mutagens, therefore many screening tests to detect carcinogens are designed to detect the mutagenic potential of the compound. Some mutagens act indirectly by requiring metabolic activation in the body before they exert their effects.

Mutagenesis: The process of inducing mutations in the genetic material of an organism.

Mutagenic: Causing increases in the mutation of genes.

Mutation rate: The number of mutations per unit of DNA (e.g., per gene, per nucleotide, per genome, etc.) occurring per unit of time (usually per cell generation).

Mutations: Any change in the base sequence of DNA, classified according to size into gene mutations (changes within a single gene, such as nucleotide substitutions) and chromosome mutations (affecting larger portions of the chromosome, or the loss or addition of an entire chromosome). Heritable mutations are changes in DNA that are passed from parent to offspring and therefore were present in the germ cells of one of the parents. See induced mutation and spontaneous mutation.

Myasthenia gravis: An acquired autoimmune disorder in which the body reacts against its own acetylcholine receptors in the synapses between nerve and muscle ceils, resulting in chronic muscle weakness, especially in the face and throat, and fatigue.

Mycobacterial diseases: A group of human and animal diseases caused by species of the bacterial genus Mycobacterium, Important human mycobacterial diseases are tuberculosis and leprosy.

Mycology: The scientific study of fungi and fungoid diseases.

Mycoplasma: The smallest free-living organisms, a genus of ultramicroscopic gram-negative organisms lacking a rigid cell wall; includes saprophytes, parasites, and pathogens (e.g., Mycocplasma pneumoniae).

Myelin sheath: Concentric layers of myelin surrounding the axons of some neurons. The myelin sheath speeds the conduction of electrical impulses. See myelin, oligodendrocyte, Schwann cell.

Myelin: A fatty substance (of which the myelin sheath surrounding axons is made) that acts as an electrical insulator which speeds the conduction of nerve impulses. Myelin is formed in the peripheral nervous system by Schwann cells and in the central nervous system by oligodendrocytes. See myelin sheath, oligodendrocyte, Schwann cell.

Myelogenous leukemia: A form of cancer characterized by uncontrolled proliferation of granulocytes; includes acute and chronic myelocytic leukemia.

Myeloma: A malignant tumor of an antibody-producing cell. In hybridoma technology, some of these tumor cells have been adapted to cell culture, and these cells contribute immortality to a hybridoma cell line. See Multiple mveloma.

Myocardial infarction: Sudden necrosis (death) of tissue in the myocardium (heart muscle) characterized by severe, unremitting chest pain, leading to arrhythmias and/or heart failure; in most cases, caused by coronary atherosclerosis (insufficient blood supply to the heart).

Myocardium: Muscle of the heart.

Myoelectric: Controlled by electromyographic (EMG) signals.

Myopathy: A disorder of the muscles characterized by wasting of muscle tissue and weakness.

Myopia: Neasightedness, caused by elongation of the eyeball or by an error in refraction so that images of distant objects are focused in front of the retina and therefore appear blurred; tends to be inherited. Also called "nearsightedness." Compare hvperopia and presbvopia.

N

Naltrexone: A pharmacologic substance that is a narcotic antagonist.

Naprapathy: A system of treatment employing manipulation of connective tissue (ligaments, muscles, and joints) and dietary measures; said to facilitate the recuperative and regenerative processes of the body.

Narcosis: Nonspecific, reversible depression of central nervous system function, marked by diminished reaction to stimuli, stupor, or unconsciousness; caused by the use of drugs with a depressant action on the nervous system, such as narcotics.

Narcotics: A class of drugs that when administered therapeutically can lessen sensibility, relieve pain, and produce sleep. The term narcotic is used interchangeably with the term opiates. In a legal context, the term narcotics is used to refer to any substance that can cause dependence.

Narcotics Anonymous: Self-help support groups for narcotics abusers patterned after the Alcoholics Anonymous approach.

Nasal lavage fluid: The fluid obtained from flushing the nasal passages with water. See bronchoalveolar lavage fluid.

National Health Interview Survey: A continuing nationwide sample survey in which data are collected through personal household interviews. Information is obtained on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, utilization of health resources, and other health topics. For individuals under age 17, information is collected from a proxy respondent, typically a parent or guardian. The survey is conducted by the National Center for Health Statistics in DHHS.

National primary drinking water regulations (NPDWRS): Enforceable standards for contaminants in drinking water set by EPA that include maximum contaminant levels or required treatment techniques, or both. See maximum contaminant level.

National Survey of Family Growth: An interview survey, conducted by the National Center for Health Statistics in DHHS, of a sample of women ages 15 to 44 living in households. The purpose of the survey is to provide national data on the demographic and social factors associated with childbearing, adoption, and maternal and child health. These factors include sexual activity, marriage, unmarried cohabitation, divorce and remarriage, contraception and sterilization, infertility, breastfeeding, pregnancy loss, low birthweight, and use of medical care for family planning, infertility, and prenatal care. Four "cycles" of the survey have been conducted, the latest in 1988.

Natural history: The course of a condition that occurs without any intervention.

Natural immunity: Species-determined inherent resistance to an infectious disease agent, eg, resistance of humans to canine distemper virus.

Natural killer cell: A type of lymphocyte that attacks cancerous or virus-infected cells without previous exposure to the antigen. Also called NK cell,

Natural selection: The process by which simpler ancestral species of animals and plants evolve into new species, based on variations among traits in populations and differential reproductive success that selects for certain of those traits; described by Charles Darwin in 1858 in On the Origin of Species.

Naturopathy: The healing of disease through natural methods, making use of physical forces such as air, light, water, heat, massage, etc.

Near-poor: Pertaining to a family with an income between 100 percent and 150 percent of the official Federal poverty level. The Federal poverty level for a family of three was $10,560 in January 1990.

Necrosis: Death of tissue.

Negative operating margin: A loss that occurs when costs of operation exceed revenues.

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

Nematodes: Elongated, cylindrical worms, many of which are parasites, including hookworm, porkworm (the worms that cause trichinosis), and filarial worms. Most infestations of nematodes are treatable with antihelmintic drugs. Also called roundworms,

Neonatal: Pertaining to the first four weeks after birth.

Neonatal intensive care: The constant and continuous care of the critically ill newborn.

Neonatal intensive care unit (NICU): A specialized hospital unit combining high technology and highly trained staff for the management and care of premature or seriously ill newborns.

Neonatal mortality: Death of an infant in the first 28 days of life.

Neonatal mortality rate: The number of deaths among infants during the first 28 days of life in a given period (usually a year) per 1000 live births in that period; also used to mean the cumulative mortality rate of liveborn infants within 28 days of age,

Neonate: A newborn infant less than 4 weeks old.

Neonatologist: A pediatrician specializing in newborn care.

Neonatology: A subspecialty of pediatrics dealing with newborn care.

Neoplasm: Uncontrolled and progressive growth of tissue, either benign or malignant; a tumor.

Nephrectomy: The surgical removal of a kidney.

Nephrolithotomy: The surgical removal of a stone from the kidney.

Nephrostomy: A surgical procedure in which an incision is made in the patient's back so that a catheter can be inserted through the skin into the kidney to allow the drainage of urine from the body.

Nephrotomy: A surgical incision into the kidney.

Nerve fiber: An axon and its surrounding myelin sheath.

Nerve growth factor, NGF: A protein that promotes axon growth in some areas of the peripheral nervous system and plays a role in the development of vertebrate sensory and autonomic systems. In

the central nervous system, it appears to protect from damage some populations of cells that synthesize acetylcholine.

Nerve root: One of a collection of nerves that are attached to and demarcate the 30 segments of the spinal cord. Nerve fibers enter and leave the spinal cord at one of the 31 nerve roots. These fibers link the peripheral and central nervous systems, bringing sensory information from the body to the spinal cord and motor information from the spinal cord to the body. See dorsal root.

Net efficiency: The difference between direct benefits and direct costs, generally in regard to regulation.

Net patient revenue: For a hospital or other health care facility, consists of gross patient revenue less deductions for contractual adjustments (amounts of patient charges not paid by insurers), bad debts, charity, and other factors.

Net total revenue: Consists of net patient revenue plus all other revenue of a hospital or other health care facility, including contributions, endowment revenue, government grants, and all other payments not attributable to patient care.

Neural grafting: The transplantation (implantation) of cells or tissue into the brain or spinal cord, including various treatment goals (such as promotion of growth or provision of needed chemicals), materials (such as adrenal medulla or fetal central nervous system tissue) and methods (such as cell suspensions or cell lines) of grafting. See cell line, cell suspension.

Neuritic plaque: Abnormal cluster of degenerating neurons, other brain cells, and protein in the areas between neurons; found in the brains of persons with Alzheimer's disease.

Neurodegenerative disorder: A class of neurological disease marked by loss of a particular population or populations of nerve cells in the central nervous system. Symptoms vary and depend on the neurons lost. See Parkinson's disease, Huntington's disease, Alzheimer's disease, and amyotrophic lateral sclerosis.

Neurodevelopmental outcome: A measure of neurological and developmental status.

Neurofibrillary tangle: Accumulation of twisted protein filaments inside nerve cells; found in the brains of persons with Alzheimer's disease.

Neuroleptic: A term used to describe any antipsychotic drug (e.g., certain tranquilizers) useful in the treatment of mental disoders, especially psychoses.

Neurological disorder: Disease of, or injury to, the central nervous system.

Neuromodulator: A substance (e.g., hormone or neurotransmitter) that alters the transmission of nerve impulses; neuromodulators can regulate the strength of signaling between a neuron and another cell without acting directly on the receiving cell, either by regulating the amount of hormone present in the synapse or its receptor-binding capabilities.

Neuron, nerve cell: The fundamental conducting cell, a highly specialized type of cell capable of being stimulated and conducting electrical impulses along its axon. The neuron is typically composed of a relatively compact cell body containing the nucleus, several short radiating processes (dendrites), and one long process (the axon) with twig-like branches along its length and at its end. Information in the form of electrical impulses travels from the cell body along these processes to other cells. Sensory neurons send information to the brain and spinal cord; motor neurons send instructions to the muscles. See axon, dendrite.

Neuronopathy: A primary damage to the nerve cell body which results in a rapid, but secondary degeneration of nerve process.

Neuropathological tests: Postmortem examination of test animals in order to determine changes in the structure and function of the nervous system as a result of exposure to a toxic substance. These tests are used to screen for toxic substances. See screening tests.

Neuropathy: Degeneration of nerve cells; a general description for any disease of the peripheral or central nervous system.

Neuropeptide: A general term for any short chain of amino acids found in the central nervous system that affects the behavior of nerve cells, whether by acting as a neurotransmitter, hormone, or neuromodulator (e.g., endorphins, enkephalins, vasopressin). See neurotmnsmitter.

Neurophysiological tests: Techniques for measuring the electrical signals, or evoked potentials, of charged ions; the measured potentials reflect the functioning of the neuron or neurons that generated them. See electrophysiology, evoked potentials.

Neurosis: Currently there is no consensus in the mental health field as to the definition of neurosis, and the category neuroses was not included in the current Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-III), although it had been included in previous editions. The term neurosis is usually used to refer to emotional disoders caused by unconscious conflict and characterized chiefly by anxiety.

Neurotic: See neurosis.

Neurotoxic esterase (NTE) assay: A procedure for measuring the inhibition of the enzyme NTE in the brain or spinal cord of hens exposed to organophosphates. The test can be used to determine the delayed effects of acute and subchronic exposures to organophosphates. See organophosphates.

Neurotoxicant, neurotoxic substance: A chemical that adversely affects the nervous system.

Neurotoxic effect: An adverse change in the structure or function of the nervous system following exposure to a toxic substance.

Neurotoxicity: The quality of exerting a destructive or poisonous effect on nerve tissue.

Neurotoxicology: Study of the effects of toxic chemicals on the nervous system, including the modes by which neurotoxic substances enter the body, the effects these substances have on the nervous system, the biochemical and physiological mechanisms through which the effects occur, the prevention of damage to the nervous system, and the treatment of neurological and psychiatric disorders caused by exposure.

Neurotransmitter: Specialized chemical messenger substances (e.g. acetylcholine, dopamine, norepinephrine, serotonin), synthesized and secreted by neurons, that transmit or modify nerve impulses from one nerve cell to another or from nerve cells to muscle fibers. Some types of neurotransmitters are released into the synaptic space between neurons, bind to the dendrites of other neurons, and initiate a message in those neurons. Others (such as endorphins and vasopressin) transmit messages to receptors on distant cells. See synapse, svnaptic space.

Neurotrophic factor: Chemical produced by some neurons and glial cells that affects the growth and development, maintenance of function, and response to injury of neurons. See trophic factor, tropic factor, and nerve growth factor.

New Drug: According to the FDA standard it is defined in part as: 'any drug...the composition of which is such that such drug is not generally recognized, among experts qualified by scientific training and experience to evaluate the safety and effectiveness of drugs, as safe and effective for use under the conditions prescribed, recommended, or suggested in the labeling thereof." (21 U.S.C. 321(P)(1)).

New morbidities: Illnesses and conditions caused by social and behavioral (rather than organismic) factors (e.g., outcomes of sex, drugs, and violence).

Newborn screening: The process of routine testing of newborn infants with the goal of identifying cases for whom medical intervention can be provided to avoid devastating effects of untreated or late treated disease, or to detect individuals who will develop serious disease later in childhood.

' Nitrogen fixation: A biological process (usually associated with microorganisms in the soil) whereby certain bacteria convert free nitrogen in the air to ammonia and other forms usable by plants and animals for growth and development.

NK cell: See natural killer cell.

No-effect levels: See NOEL, NOAEL, threshold.

No-threshold: The situation in which any dose greater than zero increases risk. Compare threshold.

NOAEL, no observed adverse effect level: That dose below which no adverse effect is observed. Compare NOEL.

Nocturnal penile tumescence (NPT): The occurrence of erections during sleep.

NOEL, no observed effect level: That dose below which no effect of any sort is observed. Compare NOAEL, threshold.

Non-A, non-8 hepatitis: A type of hepatitis (viral infection of the liver) in which both hepatitis A and hepatitis B virus infection have been excluded. Hepatitis C virus has been identified as the cause of a substantial portion of "non-A, non-B" hepatitis and is currently the major cause of post-transfusion hepatitis (since tests to screen donor units of blood for hepatitis C virus have only recently been instituted). Hepatitis C virus is also a common cause of hepatitis in needle users and accounts for 50 percent or more of sporadic, or community-acquired, cases.

Nonassigned liability: See unassigned liability.

Noncoital reproduction: Reproduction other than by sexual intercourse.

Nonconjugative plasmid: A plasmid incapable of initiating or directing the process of conjugation. See Conjugative plasmid.

Noninvasive technique: A diagnostic or therapeutic method that does not involve the penetration (by surgery or hypodermic needle) of the skin or a cavity or organ of the body to be entered.

Nonischemic heart disease: Heart disease from causes other than coronary artery disease (e.g., congenital heart disease, myocadiopathy).

Nonmaleficence: Generally associated with the maxim 'primum non nocere" from Latin, meaning above all, do no harm. In ethics, it is the principle that one has a duty not to inflict evil, harm, or risk of harm.

Nonmetropolitan Statistical Area (NonMSA): Any area not in a metropolitan statistical area.

Nonnegligent manslaughter: See murder and nonnegligent manslaughter.

"Nonprocedural service": A service, such as an office visit, that may involve, but does not depend in a major way, on a medical device.

Nonself: In immunology, cells or organs that are not recognized by an individual's immune system as being a natural constituent of that individual's body.

Nonspecific immunity: Immunity that exists from birth and that occurs without prior exposure to an antigen; also called innate immunity. Compare acquired immunity.

Nontherapeutic abortion: An induced abortion in situations other than when the woman's life is endangered by the pregnancy.

Nontherapeutic research: Studies involving human subjects designed to further scientific knowledge about a disorder or process, with no anticipated direct benefit to the subjects themselves.

Nontoxic: In general medical use, referring to treatments without adverse effects.

Nontransferable plasmid: See nonconjugative plasmid.

Norepinephrine: See catecholamine, neurotransmitter.

Normal birthweight: Birthweight of 2,500 grams (5 lb., 8 oz.) or above. Compare low birthweight.

Nosocomial infection: An infection that a patient acquires during hospitalization. The most common nosocomial infections are urinary tract infections, followed by surgical wound infections, pneumonia, and infections of the bloodstream. See iatrogenic.

Nostrum: A medicine of secret composition recommended by its preparer but usually without scientific proof of its effectiveness.

Novelty: One of the criteria used in the evaluation of patent applications. In order to be accepted on the grounds of novelty, the invention or discovery being evaluated must be new and must not have previously existed through the work of others.

Nuclear magnetic resonance: See magnetic resonance imaging.

Nucleic acid: Macromolecules composed of sequences of nucleotides that carry genetic information. There are two kinds of nucleic acids, occurring as double or single stranded molecules: DNA, which contains the coded instructions for an organism's development in the chromosomes and is transferred to daughter cells; and RNA, which helps transport, translate, and implement the DNA instructions, particularly the biosynthesis of proteins.

Nucleic acid hybridization: A laboratory technique for identifying species and strains of organisms involving the matching of either DNA or RNA (depending" on the organism) from an unknown organism with DNA or RNA from a known organism.

Nucleotide: A subunit of DNA or RNA, consisting of a nitrogenous base (adenine, guanine, thymine, cytosine, or uracil), a phosphate molecule, and a sugar molecule (deoxyribose in DNA or ribose in RNA). The linkage of thousands of these subunits forms the DNA or RNA molecule.

Nucleus: The membrane-enclosed structure in eukaryotic cells that contains the genetic material (DNA).

Nursing home preadmission screening programs: Programs to evaluate nursing home applicants and divert those who can be cared for at home.

Nursing homes: Residential care facilities that provide 24-hour supervision, nursing care, personal care, and other services.

Nutritional support: The administration of nutrients in addition to, or instead of, food that a person can or would eat in a normal manner. Nutritional support is frequently used as an all-inclusive term for both parenteral nutrition (modification of the usual diet) and enteral nutrition (intravenous administration of nutrients). It is distinct from nutritional supplements, such as vitamins, added to the diet.

Obesity: **Can be defined in different ways: 1) body mass index (BMI) (weight in kilograms divided by height in meters squared [m^2]) greater than or equal to the 95th percentile of a similar population group (usually by age); or 2) 20 percent or more over "normal" weight. More serious than overweight.**

Obstetric care: **Medical care received during pregnancy, labor and delivery, and the period immediately following birth.**

Occlusion: **In the context of the vascular system, the blocking off or obstruction of blood flow through a vessel.**

Occupancy: **Ratio of the average number of inpatients (excluding newborns) receiving care to the average number of beds in a hospital set up and staffed for use (i.e., statistical beds) during a particular reporting period (American Hospital Association definition).**

Occupational therapy: **Therapy provided to people who are physically or mentally impaired that is intended to improve functional abilities; provided by an occupational therapist.**

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.**

Odds ratio: **A measure of association closely related to relative risk; the ratio of the odds of a disease occurring in individuals exposed to the risk compared to those unexposed.**

Older adolescents: **As defined in most DHHS National Center for Health Statistics data analyses, adolescents ages 15 to 19.**

Older Americans Act: **A law enacted in 1965 that established the Federal Administration on Aging and a program of Federal grants to States for the development of a coordinated system of services for elderly people in their homes and communities. The act also required States to designate a single State agency-commonly referred to as a State unit on aging-to formulate a plan for developing the system of services envisioned in the act. The 1973 amendments to the act required each State to divide its jurisdiction into planning and service areas and to designate an area agency on aging to plan, coordinate, and arrange services for elderly people in each area.**

Oligodendrocyte: **A type of glial cell that forms myelin in the central nervous system; oligodendrocytes appear to inhibit the regrowth of damaged axons in the central nervous system. Compare Schwann cell; see glial cell, mvelin, mvelin sheath.**

Oligomenorrhea: **Scanty or infrequent menstruation, a problem found in about 20 percent of infertile women.**

Oligonucleotide: **A polymer made up of a few (generally fewer** than ten or twenty) nucleotides; a short sequence of DNA or RNA.

Oligonucleotide probe: **A short DNA sequence synthesized from a known gene or segment of a gene that can be either normal or mutant.**

Oligospermia: Scarcity of sperm in the semen.

On-Lok Senior Health Services: An organization that plans, coordinates, and provides comprehensive health care, long-term care, social, and other services for about 300 very frail and severely impaired older adults in the Chinatown-North Beach area of San Francisco.

On-off phenomenon: In Parkinson's disease, alternating periods in which the patient's motor symptoms are under control (on) or severe and uncontrolled (off); the phenomenon occurs regardless of drug dosage.

Onchocerciasis: An infection of humans with the filaria worm Onchocerca volvulus, transmitted by the bite of blood-sucking blackflies. The disease is generally characterized by skin nodules that can become fibrous and calcified. Also called "African river blindness," for the blindness that occurs when the worms invade the eye.

Oncogene: One of several known genes, found in all cells, involved in one of the steps in the transformation from normal to malignant growth. Under normal conditions, oncogenes play a role in the growth and proliferation of cells, but when activated or altered in some way (e.g., by an environmental factor) can cause a cell to become malignant. Such environmental factors include ultraviolet light, radioactivity, tobacco smoke, asbestos particles, carcinogenic chemicals, and certain viruses.

Oncogenesis: The induction or formation of tumors.

Oncologist: A physician who specializes in the treatment of cancer, usually referring to medical oncology, which is a subspecialty of internal medicine.

"One-stop shopping": A setting for health care services that delivers an entire set of comprehensive health (and, often, related) services. Currently an ideal ratherthan an actuality.

Oocyte: A cell that develops into a mature ovum or egg, formed in an ovary and present from birth.

Open enrollment: A health insurance enrollment period during which applicants need not meet any health status criteria. Open enrollment periods are characteristic of some Blue Cross/Blue Shield plans and health maintenance organizations.

Operating costs: The ongoing expense of operating a health care facility.

Opiate: A narcotic drug derived from or similar to opium, extracted from the poppy plant. Opiate drugs (e.g., morphine, heroin) bind to specific receptors on nerve cells scattered throughout the brain to reduce pain and produce euphoria. Repeated use of these agents is associated with biological tolerance and addiction. Naturally produced molecules (e.g., endorphin, encephalic) bind to the same nerve cell receptors and are called "endogenous" opiates or opioid drugs. See narcotics.

Opportunistic infection: A disease or infection caused by a microorganism that does not ordinarily cause disease but which, under certain conditions (e.g., during treatment with immunosuppressive drugs or in immunodeficiency disorders), becomes pathologic.

Opportunity cost: In economics, defined as the return available from the best alternative use of a particular resource, for example, the value of the other products that might otherwise have been produced by the resources used in the production of a particular good or service. Any single opportunity taken will have a cost in terms of an opportunity foregone.

Oral: Pertaining to the mouth, taken through or applied in the mouth as an oral medication.

Oral polio vaccine (OPV): A live, attenuated vaccine for the prevention of poliomyelitis. The vaccine is administered orally.

Oral dehydration therapy (ORT): The treatment or prevention of fluid loss (dehydration) due *to* diarrhea by a specific water solution of electrolytes and glucose (salts and sugar) taken by mouth.

Organ culture: The attempt to isolate and maintain animal or human organs in in vitro culture prior to transplantation to a suitable recipient. Long-term culture of whole organs is not generally feasible, but they can be sustained in cultures for short periods (hours or days).

Organelle: A structure in the cytoplasm of a cell that is specialized in its ultrastructure and biochemical composition to serve a particular function (e.g., mitochondria, lysosomes, centrioles, endoplasmic reticulum, chloroplasts).

Organic: Matter containing carbon (i.e., animal or plant matter). Compare inorganic.

Organic farming, organic production: Farming without the use (or with limited use) of chemical pesticides or fertilizers.

Organic solvents: Generic name for a group of simple, organic liquids that are volatile; that is, in the presence of air they change from liquids to gases, and are therefore easily inhaled.

Organoleptic: Stimulating any of the organs of sensation or susceptible to a sensory stimulus.

Organophosphates, organophosphorous pesticides: A class of pesticides with neurotoxic properties; organophosphates have also been used as nerve gases.

Organotypic culture: A type of primary tissue culture in which the structure of the original organ is maintained in vitro. This method is useful in neurotoxicity studies because the connections and spatial relations between neurons and glia can be maintained.

Ornithine transcarbamylase deficiency: An X-linked genetic disorder of the urea cycle, involving a deficiency of an enzyme (transcarbamylase). Clinical symptoms, which result from the accumulation of toxic nitrogenous compounds (e.g., ammonium and glutamine) in the blood, include chronic ammonia intoxication, mental deterioration, and liver failure. Onset usually occurs in the neonatal period, but may also present later in childhood or in adulthood. Also called "transcarbamylase deficiency."

Oropouche fever: An arboviral disease transmitted by biting midges (Culicoides spp.). Symptoms include anorexia, rash, and joint and muscle pain.

Orphan Drug Act: Public Law 97-414, which charges the U.S. Government with identifying and promoting orphan products, defined as drugs and devices for rare diseases.

Osteopathy: A system of treatment founded by Andrew Taylor Still (1828-1917) based on the theory that the body is capable of making its own remedies against disease and other toxic conditions when it is in normal structural relationship and has favorable environmental conditions and adequate nutrition. It utilizes generally accepted physical, medicinal, and surgical methods of diagnosis and therapy, while placing chief emphasis on the importance of normal body mechanics and manipulative methods of detecting and correcting faulty structure.

Out-of-pocket costs: Deductibles and copayments incurred by beneficiaries when health care services are rendered.

Outcome: See health outcome.

Outcome criteria to measure quality of care: Criteria for measuring quality that focus on the outcome of care (e.g., the patient's health and functional abilities and patient and family satisfaction). The use of outcome criteria to measure quality assumes a direct link between the process of care and the outcomes of care. Compare process criteria and structural criteria to measure gauality of care.

Outliers: See DRG outliers, high-mortality outliers, and low-mortality outliers.

Outmigration: The movement by rural residents outside their communities (particularly to urban areas) to receive health care and other services.

Outpatient care: Care that is provided in a hospital, other medical facility, or other setting that does not include an overnight stay. Sometimes limited to care provided in a hospital setting that does not involve an overnight stay. Ambulatory care is the broader category, and includes outpatient care provided in a hospital setting. Outpatient care is often used as a synonym for ambulatory care (e.g., when referring to mental health services).

Outpatient drug-free (ODF) program: A diverse group of drug abuse treatment programs operating on an outpatient basis, with emphasis on counseling.

Outpatient surgery: See ambulatorv surgery.

Outreach: An active method to identify individuals and caregivers who need assistance but are unlikely to respond to public education programs or to contact an information and referral source on their own.

Ovaries: Paired female sex glands in which ova (eggs) are produced and stored and the hormones estrogen and progesterone are produced.

Overflow incontinence: See incontinence.

Overhead costs: Includes costs to a health care facility that are not direct labor (i.e., payroll expenses), such as employee fringe benefits and other expenses indirectly related to patient care operations.

Overweight: Can be defined as body mass index (BMI) (weight in kilograms divided by height in meters squared [m^2]) greater than or equal to the 85th percentile of a similar group. Compare obesity.

Oviduct: Fallopian tube; the duct through which eggs pass from the ovary to the uterus.

Ovulation: The release of an ovum from a woman's ovary into the Fallopian tube, generally around the midpoint of the menstrual cycle, as a result of cyclic ovarian and pituitary endocrine function.

Ovulation induction: Treatment of ovulation dysfunction caused by such disorders as amenorrhea, oligomenorrhea, and luteal phase defect, using drugs that induce ovulation. These so-called fertility drugs include clomiphene citrate and gonadotropin. Ovulation induction is also used as part of the artificial insemination, in vitro fertilization, and GIFT techniques.

Ovulation prediction kits: Over-the-counter hormone monitoring kits that employ the enzyme-linked immunosorbent assay procedure to measure the midcycle increase in LH that indicates ovulation is taking place.

Ovum (pi. ova): The female egg released from the ovary at ovulation.

Ovum donor: A woman who donates an ovum or ova to another woman.

P element: A transposable DNA sequence present in the fruit fly, Drosophila, used as a vector in the artificial integration of new genes into the Drosophila genome. See transposon.

p value: In epidemiologic studies, 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; the likelihood that an observed association in a study is due to the play of chance. Also called 'Type I error" or "alpha," and commonly called the level of significance.

Packages of physician services: Groups of related physician services that have either uniform content or expected therapeutic effect, or that involve sets of alternative, commonly performed but not required services complementary to a particular major physician service.

Pain: Discomfort resulting from injury or disease. Pain can also be psychosomatic, the product of emotional stress. Pain can be induced by mechanical, thermal, electrical, or chemical stimuli, and it can be relieved by analgesic or anesthetics.

Palliative treatment: Treatment designed to provide relief from a disease or condition (e.g., to provide comfort or reduce pain), but not to cure the disease or condition.

Pandemic: Worldwide epidemic.

Parallel plate dialyzer: A dialyzer consisting of a stack of semi-permeable membranes sandwiched between support plates. Blood passes through the membranes while the dialysate passes in the opposite direction through grooves or spaces in the support plate.

Paraneuron: Cells that share a common heritage with cells in the nervous system. See chromaffin @is.

Paraplegia: Paralysis and loss of sensation from the waist down as a result of damage to the middle or lower portions of the spinal cord.

Parasite: An organism living in or on another living organism (the host organism), obtaining part or all of its nutrients from that host organism. Some types of parasites inflict little or no damage to their hosts, while others (such as tapeworms) cause various types of disease.

Parasitemia: The presence of parasites in the blood.

Parasitic disease: A disease caused by a parasite. Examples are malaria, schistosomiasis, trypanosomiasis, leishmaniasis, and filariasis.

Parasitology: The scientific study of the relationship between parasites and their hosts.

Parental consent requirement (applicable to health care of minors): A legal requirement, grounded in common law, that a parent or other guardian of a minor child must give prior consent to the delivery of medical or surgical care to that child. Courts and legislatures have carved out a variety of exceptions to this requirement and have sometimes replaced the parental consent requirement with a parental notification requirement.

Parental notification requirement (applicable to health care of minors): A legal requirement that the parents of minors be notified of the decisions of their minor children to obtain health services. Compare parental consent requirement.

Parental support (programs): Preventive interventions that better enable parents to perform any or all of the following functions in relation to their children (including adolescent children): 1) basic needs (e.g., food, shelter, education); 2) protection (e.g., of the psychological, spiritual, and cultural integrity of their children from threats from the natural and social environments); 3) guidance (in all aspects of the child's environments; and 4) advocacy.

Parenteral nutrition: The intake of nutrients (e.g., vitamins, amino acids, glucose, electrolytes) directly into the bloodstream (intravenously), circumventing the digestive tract. Strictly speaking, intramuscular administration of nutrients is also parenteral nutrition, but the term as normally used in health care implies bloodstream administration.

Paris Union Convention: A universal treaty that establishes certain basic rights for residents and nationals of its member countries to protect industrial property rights (patents, utility models, industrial designs, trademarks, service marks, trade names, indications of source and unfair competition) under the laws of other member countries. The Convention is administered by the World Intellectual Property Organization (WIPO).

Parkinson's disease: A chronic, slowly progressive degenerative disorder characterized by tremor at rest, slowness of movement and speech, rigidity, postural instability, and loss of postural reflexes. The primary pathologic abnormality is degeneration of pigmented cells in the substantial nigra in the brainstem, resulting in a loss of dopaminergic innervation of the striatum. The reason for loss of these cells is not known, but one factor may be an environmental agent. Usual onset of the disease is in the 5th decade of life. Symptomatic treatment includes the use of levodopa, among other drugs.

Parkinsonism: A group of neurological disorders with various causes (e.g., drugs, toxic chemicals, brain tumors, and recurrent head injury). Symptoms include abnormally decreased motor activity, tremor, and rigidity. The most common type of parkinsonism is Parkinson's disease. See Parkinson's disease.

Part A (Medicare): Medicare's Hospital Insurance program, which provides insurance benefits against the costs of hospital and related posthospital services for elderly and disabled beneficiaries. Part A, which is an entitlement program for those who are eligible, is available without payment of a premium, although the beneficiary is responsible for an initial deductible or copayment for some services. Those not automatically eligible for Part A may enroll in the program by paying a monthly premium.

Part B (Medicare): Medicare's Supplementary Medical Insurance program, which provides insurance benefits for medically necessary physician services, hospital outpatient services, ambulatory physical therapy and speech pathology services, comprehensive rehabilitation facility services, and various other limited ambulatory services and supplies, such as prosthetic devices and durable medical equipment. Part B also covers home health services for those Medicare beneficiaries who have Part B coverage only. Enrollment in Part B is optional and requires payment of a monthly premium. The beneficiary is also responsible for a deductible and a coinsurance payment for most covered services.

Partial hospitalization: In mental health, a planned transitional program of mental health treatment services, after psychiatric hospitalization or residential treatment, when a patient no longer needs 24-hour care. See day treatment.

Participating physician: A physician practice that has elected to provide all Medicare Part B services on an assigned basis for a year. In return for forgoing the right to bill for services on a nonassigned basis, the participating physician is listed in a directory of participating physicians available to beneficiary organizations and may receive greater increases in approved charges than nonparticipating physicians.

Pass-throughs: In a per-case payment system, pass-throughs are elements of hospital cost that are paid on the basis of incurred costs.

Passive immunity: A form of acquired immunity resulting from antibodies transmitted during pregnancy to the fetus, during lactation to a newborn infant, or artificially, by injection of antiserum from another person or animal. Passive immunity is usually short-lasting. Compare active immunity, and see immunity.

Passive smoking: Exposure of non-smokers to tobacco smoke from other people's cigarettes, pipes, and cigars. See also environmental tobacco smoke, mainstream smoke, and sidestream smoke.

PASSPORT (Pre-Admission Screening System Providing Options and Resources Today): A Medicaid 2176 waiver program in Ohio that provides case management and a range of in-home and community serices for people, including some with dementia, who are eligible for Medicaid-covered nursing home care but choose to remain at home.

Patent: A patent is a grant issued by the U.S. Government through the U.S. Patent and Trademark Office (PTO), that gives the patent owner the right to exclude all others from making, using, or selling a patented invention within the United States and its territories and possessions for the term of the patent (17 years). A patent does not grant the inventor any affirmative right to use an invention. Laws of nature, physical phenomena, and abstract ideas cannot be patented. Patents have come to be viewed by many as vital for the protection of commercial and intellectual interests in the uses and products of various biotechnology techniques. The implications of patenting living organisms are the subject of some debate.

Patent ductus arteriosus: A type of congenital heart defect, seen primarily in premature infants, caused by incomplete closure, after birth, of an opening between the pulmonary artery and the aorta. Early symptoms include enlargement of the heart (cardiomegaly), increased heart rate (tachycardia), and a specific murmur. Correction of the anomaly by surgery is possible. If untreated, the condition can lead to congestive heart failure, pulmonary vascular disease, and inflammation of the lining of the heart (infective endocarditis).

Patent infringement: The encroachment of a patent in a way that violates the personal property rights of the patent holder. The most common form of infringement is literal infringement, which occurs whenever a person without authority makes, uses, or sells any product that is covered by a patent within the United States during the term of the patent. Another less common example of infringement is the doctrine of equivalents, where the accused product or process is the equivalent of a patented invention.

Pathogen: A microorganism (e.g., a virus or bacterium) capable of producing disease.

Pathogenesis: The mode of origin and development of a disease process.

Pathogenic: Able to cause disease.

Pathogenicity: The ability of a pathogenic agent to cause disease.

Pathology: The scientific study of the cause of disease and of the associated structural and functional changes that result.

Patient dumping: Transferring an uninsured patient from a private to a public hospital for financial reasons.

Patient margin: A measure of the profitability of patient care, calculated as (patient care revenues minus total costs) divided by patient care revenues. See also net patient revenues.

Pattern of exposure: The dose, duration, frequency, and route of exposure; used in risk assessment. See dose, duration of exposure, freaqencv of exposure, and route of exposure.

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

Pelvic inflammatory disease (PID): An infection involving the endometrium, Fallopian tubes, and peritoneum, often occurring as a complication of untreated gonorrhea. Women using intrauterine contraceptive devices are also at increased risk for the disease. Bacteria that cause gonorrhea, chlamydia, or other infections can ascend from the lower genital tract through the endometrium (causing endometriosis), to the Fallopian tubes (causing salpingitis), and possibly to the ovaries (causing oophoritis), and if untreated, can result in tubal scarring, infertility, or ectopic pregnancy. Symptoms include lower abdominal pain, increased vaginal discharge, and fever.

Penetrance: In genetics, the proportion of individuals with a specific altered genotype that express the trait phenotypically (e.g., in expression of an altered protein or a clinical attribute). Complete penetrance refers to the expression of a genotype in all individuals who carry the altered genotype; incomplete penetrance refers to a case in which fewer than 100 percent of individuals who carry the altered genotype express it.

People of color: Individuals who are nonwhite (i.e., typically, not of the Caucasian race).

Peptide: A compound consisting of two or more amino acids linked together by chemical bonds. Peptides are the building blocks of proteins. Several peptides have recently been found to act as neurotransmitters.

Per-case payment: A type of hospital payment system in which the hospital is paid a specific amount for each case treated, regardless of the number and types of services or number of days of care provided. Medicare's DRG payment system for inpatient servies is a per-case payment system.

Percutaneous: Literally, "through the skin"; refers to a surgical procedure that requires only a very small incision, such as a biopsy, or aspiration of fluid beneath the skin using a needle, catheter, or syringe.

Perfluorochemical: Organic compounds in which all the hydrogen atoms have been replaced by flourine atoms and which are chemically inert.

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

Perinatal mortality: Fetal (after 28 weeks gestation) and neonatal (up to 1 week postnatal) deaths combined.

Perinatal mortality ratio: The number of late fetal and early neonatal deaths for those over 1000 grams at birth expressed as a ratio per 1000 livebirths weighing over 1000 grams at birth.

Periodontal: Having to do with the area surrounding the teeth, including the gums, the bony layers of the teeth within the gums (cementum), the periodontal membranes, and alveolar (jaw) bone.

Penorbital ultrasonography: A diagnostic technique using ultrasonic waves to examine the orbit or the socket of the eye.

Peripheral blood: Blood in the circulation remote from the heart.

Peripheral nervous system, PNS: One of the two major divisions of the nervous system, made up of the nerves and ganglia outside the brain and spinal cord. Nerves in the peripheral nervous system connect the central nervous system and sensory organs, other organs, blood vessels, glands, and muscles. Compare central nervous system.

Peristalsis: The coordinated, rhythmic serial contraction of smooth muscle that moves food through the digestive tract, bile through bile ducts, and urine through the ureters.

Peritoneal cavity: The abdominal cavity.

Peritoneal dialysis: A form of dialysis that occurs within the patient's body, rather than via an extracorporeal blood loop, as in hemodialysis. A catheter is inserted into the abdomen and then dialysate is entered through the catheter into the peritoneal cavity. The fluid is allowed to remain for varying periods of time, during which dialysis occurs across the semi-permeable peritoneal membrane. Later, the dialysate is drained out through the catheter and discarded. The procedure is performed to correct an imbalance of fluids or electrolytes in the blood or to remove drugs, toxins, or other wastes normally excreted by the kidneys.

Peritoneum: The smooth transparent serous membrane that lines the cavity of the abdomen and covers the abdominal organs,

Peritonitis: An inflammation of the peritoneum caused by bacteria or irritating substances that have gained access to the abdominal cavity by a penetrating wound or perforation of an organ in the gastrointestinal tract or reproductive tract.

Permissible exposure limit (PEL): The maximum airborne concentration of a toxic substance permitted by Occupational Safety and Health Administration standards.

Perseveration: A behavioral problem sometimes seen in individuals with dementia; the repetition of meaningless words or actions.

Personal care services: Assistance with self-care activities, including eating, dressing, bathing, getting in and out of bed, and using the toilet.

Personal emergency response system: A telephone-based system to alert others that an individual who is alone is experiencing an emergency and needs assistance.

Personal protective equipment: Equipment and clothing designed to control hazards to the worker. It includes hard hats, safety shoes, protective eyewear, protective clothing and gloves, hearing protectors, and various types of respirator, such as dust and gas masks. See administrative controls, engineering controls, and work practice controls.

Pertussis: An acute, infectious inflammatory respiratory disease of children caused by the bacterium Bordetella pertussis. The disease is characterized by explosive attacks of coughing ending in an inspiratory whoop or choking on mucus and occurs in infants and children who have not been immunized against the disease. Also known as "whooping cough."

Pessary: A device inserted into the vagina to support the bladder outlet in women with stress incontinence and to treat uterine prolapse, retrocession, or cervical incompetence during pregnancy. Also used to refer to birth control diaphragms.

Pesticide: Toxic substances, including insecticides, fungicides, rodenticides, and herbicides, developed to control pests.

Phage: See bacteriophage.

Phagocytosis: Consumption of foreign particles (e.g., bacteria) by cells which use ameboid movement to surround the particle and then ingest it.

Pharmacokinetic studies: A branch of toxicity testing that provides information about the mechanics of absorption, distribution, or excretion of drugs.

Pharmacologic treatments: Treatments based on the administration of chemical agents (other than biological chemicals).

Pharmacotherapy: The use of medication to treat a medical disease or disorder.

Phase I, II, and III drug trials: The sequence of studies in human beings required for new drug approval by the Food and Drug Administration. Phase I includes studies in a small number of relatively healthy patients or normal volunteers to determine safety and pharmacologic effects. Phase II includes controlled clinical trials to determine appropriate doses, safety, and effectiveness in a total of about 200 patients. Phase III trials are usually randomized clinical trials.

Phenotype: The outward appearance of an individual or the observable properties (e.g., anatomic, biochemical, physiologic, or behavioral) of an organism determined by the interaction of environmental factors with the individual's genetic make-up. Compare genotype.

Phenotypic variance: The variation in observable properties among genetically identical individuals, caused by the interaction of environment with genotype during development. See genetic variance.

Phenylketonuria (PKU): An autosomal recessive genetic disorder of amino acid metabolism, caused by the inability of the liver to metabolize phenylalanine to tyrosine. Clinical manifestations of the disease are caused by both the mutation and exposure to phenylalanine, an essential amino acid found in milk and other proteins. High plasma levels of phenylalanine are toxic to brain tissue; in the majority of cases, untreated or late treated PKU leads to progressive mental retardation. Early onset of treatment (involving a diet low in phenylalanine) largely prevents the irreversible brain damage, although some residual neuropsychological deficits may occur, especially with premature termination of the dietary treatment. PKU is diagnosed in the neonatal period by a simple screening test using a small sample of blood obtained by a heel prick.

Phlebotomine sandflies: Insect vectors of Leishmania spp., the agents of leishmaniasis.

Phototherapy: The treatment of diseases, such as physiologic jaundice in newborns, with ultraviolet light.

Phylogenetic: Referring to a system of classification of organisms showing genetic similarities and differences as a result of evolutionary history.

Physical (as opposed to mental): Of or related to the body, and having material existence. See physiological.

Physical abuse: Physical violence, including kicking, biting, hitting with one's fist, beating, burning or scalding, and using a weapon.

Physical mapping: In molecular genetics, the process of locating the relative position of genes on a chromosome through the analysis of genetic recombination. For the human genome, the lowest-resolution physical map is the banding pattern of each chromosome; the highest-resolution map would be the complete nucleotide sequence of the chromosomes.

Physical neglect: As defined by DHHS'S National Center on Child Abuse and Neglect, physical neglect can take seven forms: refusal to provide health care for physical problems, as recommended by a competent health care professional; delay in providing health care for a serious physical problem; desertion of a child without arranging for reasonable care and supervision (abandonment); other blatant refusals of custody, such as permanent or indefinite expulsion of a child from the home; other custody issues, such as chronically and repeatedly leaving a child with others for days or weeks at a time; inadequate supervision; and other physical neglect, such as conspicuous inattention to avoidable hazards in the home.

Physical problems: See physical and phvsiology.

Physical therapy: Rehabilitative therapy provided by a physical therapist. The therapy may include a variety of methods, such as heat, hydrotherapy, massage, exercise, and the use of mechanical devices.

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

Physician Payment Review Commission: A commission established by the Comprehensive Omnibus Budget Reconciliation Act of 1985 (COBRA, P.L. 99-272) to make recommendations to Congress and the Secretary of Health and Human Services on various issues relating to changes in physician payment under Medicare.

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

Physician: An authorized practitioner of medicine, as one graduated from a college of medicine or osteopathy and licensed by the appropriate bead.

Physiological: Having to do with organs, tissues, and cells, and the physical and chemical phenomena related to organs, tissues, and ceils.

Pick's disease: A rare, presenile dementia occurring in middle age, involving severe atrophy of the anterior portions of the frontal and temporal lobes of the brain. Clinical characteristics are similar to those of Alzeimer's disease and include neurotic behavior, a slow disintegration of intellect, personality, and emotions, and degeneration of cognitive abilities. The disorder may be genetically transmitted as a dominant trait.

Placebo: A drug or procedure with no intrinsic therapeutic value. In a randomized clinical 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 control treatment.

Placebo effect: An effect of a medical technology on patients that cannot be attributed to properties of the technology itself, but to the expectation that it will have an effect. Often considered psychologically-engendered well-being or improvement in a condition brought on by the belief of the patient that the technology itself is beneficial.

Plant breeding: The development of plants with certain desirable characteristics, such as disease resistance and improved harvestability and cold tolerance.

Plant variety: Cultivated plants that are clearly distinguishable from others by one or more characteristic, and that when reproduced retain those distinguishing characteristics. See cultivar.

Plasma: The liquid portion of blood, excluding blood cells but including a large number of dissolved substances (e.g., salts, hormones, glucose, amino acids, fats, vitamins, and wast products). Compare blood serum.

Plasma fraction: A derivative of plasma obtained by chemical processes such as alcohol precipitation. Examples are albumin and antihemophilic factor.

Plasma fractionation: The separation of blood plasma into its major protein components.

Plasma protein fraction (PPF): A product of plasma fractionation that is at least 85 percent albumin and is used interchangeably with albumin preparations.

Plasmapheresis: A method for removing or reducing the concentration of unwanted substances in the blood (such as certain antibodies, immune complexes, etc.). Involves the removal of plasma from withdrawn blood by centrifugation, reconstitution of cellular components in an isotonic solution, and reinfusion of this solution into the donor's circulation. Also called plasma exchange.

Plasmid: An extrachromosomal, circular piece of DNA found in the cytoplasm and capable of replicating and segregating independently of the host chromosome. See conjugative, cryptic, high copy number, nonconjugative, nontransferable plasmid.

Plasmodium: The genus of protozoans that cause malaria in humans and other animals.

Plateletapheresis: A procedure in which blood is withdrawn from a donor and then reinfused after the platelets have been separated and removed.

Platelets: Disk-shaped tissue, found in the blood of mammals, which responds to injury elsewhere in the body. Platelets are known for their role in blood coagulation (clotting). Also called "thrombocytes."

Pleiotropy: The production of multiple, different, and apparently unrelated manifestations by a mutation in a single gene.

Pleomorphic: A term used in microbiology to refer to bacteria that change in size and shape during their life cycle (also called "cell wall deficient" bacteria).

Pleural effusion: The abnormal accumulation of fluid between layers of the pleura (the membrane lining the lung and chest cavity) and the interstitial and air spaces of the lungs, causing compression of the lung. The condition is characterized by fever, chest pain, difficulty in breathing, and a nonproductive cough. It can occur following a variety of other disorders, including pneumonia, heart failure, cancer, or pulmonary embolism.

Pneumoconiosis: A condition characterized by the deposition of mineral dust in the lungs as a result of occupational or environmental exposure.

Pneumocystis carinii pneumonia: A protozoan pulmonary disease, normally of infants and debilitated persons, including those receiving cytotoxic drugs, immunosuppressive drugs, etc.; now one of the opportunistic diseases found in AIDS patients. Also called "interstitial plasma cell pneumonia."

Pneumonia: Any one of several types of acute or chronic inflammation of the lungs due to infection by viruses, bacteria, or other microorganisms; a common complication of other serious illnesses and a common cause of death in the United States.

Pneumonitis: inflammation of the lungs.

PNP deficiency: A genetic immunodeficiency disorder due to an abnormality in purine nucleoside metabolism, which selectively destroys lymphocytes and impairs cell-mediated immunity.

Poliomyelitis: An acute, infectious, viral disease, occurring sporadically and in epidemics. The disease is caused by three strains of poliovirus, which attack the central nervous system, leading to the selective destruction of motor neurons of the spinal cord and brain stem, followed by extensive paralysis. The disease is preventable through use of the oral polio vaccine.

Polycystic kidney disease: A group of genetic disorders characterized by multiple clusters of fluid-filled cysts that progressively destroy normal kidney tissue. It occurs in at least 2 distinct forms: a rare infantile form, transmitted as an autosomal recessive genetic trait, which leads to end stage renal disease before adolescence; and a relatively common adult form, transmitted as an autosomal dominant genetic trait, causing gradual kidney deterioration and eventually kidney failure, uremia, and death if untreated by dialysis or kidney transplant.

Polycystic ovarian disease (POD): A hormonal disorder due to an excess of androgens, resulting in the development of cysts in the ovaries and in the absence of ovulation. The disorder is characterized by scanty or absent menstruation, infertility, hirsutism, and obesity. It may be transmitted as an autosomal dominant or X-linked genetic trait. Also known as "functional ovarian hyperandrogenism."

Polydrug abuse: Substance abuse characterized by use of multiple drugs.

Polygenic: A term used to refer to a trait or characteristic that is controlled not by one gene but rather by two or more acting in concert.

Polygenic disorders: Genetic disorders resulting from the combined effect of several genes; some forms of cancer, diabetes, and heart disease can be considered polygenic. Compare sinale-acne disorders.

Polymer: A chemical substance (large molecule) formed by the joining together of many simple molecules or monomers. For instance, many vinyl chloride monomers are chemically joined to form polyvinyl chloride (PVC). Compare monomer.

Polymerase: An enzyme that assembles a number of similar or identical subunits into a macromolecule (e.g., DNA polymerase and RNA polymerase).

Polymerase chain reaction (PCR): An in vitro process, through which repeated cycling of the reaction reproduces a specific region of DNA, yielding millions of copies from the original.

Polymerization: The process of joining molecular subunits (e.g., nucleotide base pairs) together in sequence to forma larger molecule (e.g., DNA).

Polymorphism: In genetics, a single gene trait (e.g., red blood cell surface antigens) that exists in two or more alternative forms (such as types A, B, AB, and O blood). Genetic variants would be considered polymorphisms if their frequency exceeded 1 percent each, but would be considered rare mutations if they were found in less than 1 percent of the population.

Polypeptide: A sequence of amino acids joined in a chain.

Polyploid: A chromosome state in which each type of chromosome is represented more than two times in the nucleus of each cell.

Poor: Pertaining to a family with an income below 100 percent of the Federal poverty level. The Federal poverty level for a family of three was $10,560 in January 1990. Compare near-poor.

Positive eugenics: The achievement of systematic or planned genetic change to improve individuals or their offspring.

Positive operating margin: A surplus that occurs when revenues exceed costs of operation.

Positive pressure mask: Respirators in which air pressure inside the facepiece exceeds the outside air pressure.

Positron-emission tomography (PET): A scanning technique that measures the uptake of radioactively labeled substances that emit subatomic particles (positrons). PET scans provide a dynamic picture of the brain's metabolic activity, as opposed to computed tomography (CT) scans, which yield a static anatomical view of parts of the brain.

Post-coital test: Microscopic analysis of cervical mucus within a few hours of timed intercourse in order to observe and evaluate the interaction of sperm, semen, and cervical mucus. The oldest and most widely practiced post-coital test is the Sims-Huhner test.

Post-traumatic stress disorder (PTSD): An anxiety disorder involving the development of characteristic symptoms (e.g., reexperiencing the traumatic event; nightmares, hyperalertness, numbing of responsiveness to, or reduced involvement with, the external world) following a psychologically traumatic event that is generally outside the range of usual human experience (such as an airplane crash, military combat, or physical torture).

Postamendments device: Any medical device first marketed after May 1, 1976, when the Medical Device Amendments (Public Law 94-295) took effect.

Postneonatal mortality: Death between the first 28 days and the end of the first year of life. See neonatal mortality and infant mortality.

Postneonatal mortality rate: The number of infant deaths occurring between 28 days and 1 year of age in a given year per 1000 livebirths in that year.

Postpartum care: Medical services rendered to a mother immediately following a baby's delivery to the sixth week after birth. Compare intrapartum care and prenatal care.

Postsecondary education: Education that takes place beyond the high school (12th grade) level.

Potentiation: The process through which a nontoxic substance increases the toxicity of another substance.

Poverty level: See poor.

Power (of a statistical test): The probability that a specified difference between the experimental and comparison groups will be detected in the experiment.

Power alternatives: Motorized vehicles that function as power wheelchairs but do not look like typical wheelchairs; most have three wheels and resemble golf carts or motor scooters.

Pre-viable fetus: See fetus. pre-viable.

Preadmission screening: See nursing home Preadmission screening.

Preamendments device: A medical device marketed before May 1, 1976, when the Medical Device Amendments (Public Law 94-295) took effect.

Preceptorship: An arrangement whereby a student takes part of his or her training under the supervision of an active practitioner at that practitioner's worksite. For example, an office-based physician in a rural area may serve as a preceptor for a medical student, instructing the student in the various aspects of rural medical practice.

Precision: The quality of being sharply defined.

Preclinical test: Experimental testing (e.g., of drugs) on animals.

Precursor cell: An undifferentiated embryonic cell that may develop into one or another type of mature cell. See differentiation.

Predictive test: A medical test generally applied to asymptomatic individuals to provide information regarding the future occurrence of disease. Compare diagnostic test and screening test.

Predictive validity: See validity.

Predictive value: In screening and diagnostic tests, the probability that individuals with positive test results have (or will have) the condition in question or that a person with a negative result does not have (or will not have) it. A test's predictive value is determined by its sensitivity and specificity and by the prevalence of the condition for which the test is used.

Preexisting condition: A condition (such as an injury, a disease, or a physical disability) existing in an individual before an insurance policy goes into effect.

Preferred provider organization (PPO): An organized group of providers (physicians, hospitals, or other organizations) that contracts with a third party payor to offer health insurance to a group of patients who use their services. In return for the potential increase in volume of patients, the preferred providers may agree to discount their charges or to submit to enhanced utilization review.

Pregnancy rate: The number of pregnancies per 1,000 female population in a given period of time.

Preimplantation embryo: The mass of dividing cells of the zygote and the blastocyst that develop in the first 6 to 7 days after fertilization.

Premarket approval application (PMAA): A sponsor% application to the Food and Drug Administration (FDA) for approval to market a new medical device. The sponsor of the device must furnish FDA with information documenting the device's safety and effectiveness before the device may be marketed.

Premature births: Babies born between 20 and 36 weeks gestation. Also called 'preterm births."

Premium: In health insurance, a specified charge (e.g., $13.50 per month) for insurance coverage for a specific time period.

Prenatal: Occurring or formed before birth. Also called "antenatal."

Prenatal care: Medical services related to fetal, infant, and maternal health, delivered from time of conception to labor. Prenatal care and intrapartum care, when combined, are referred to as maternity care. Early prenatal care is care received in the first trimester of pregnancy. Compare intrapartum care and postpartum care.

Preovulation: The first 14 days of a woman's menstrual cycle, when estrogen levels are rising before ovulation takes place.

Prepaid group practice: A type of health maintenance organization consisting of a group practice that, in return for cavitation payments, provides or arranges comprehensive covered services for enrollees. Also see health maintenance organization (HMO).

Presbyopia: Inelasticity of the lens of the eye, which causes hyperopia (farsightedness) and vision impairment. The condition usually is age related, beginning normally around the age of 45 and continuing until about 70 years of age, when it levels off.

Presumption of risk: The probability that an existing hazard, combined with the potential for human exposure to it, creates risk. Compare risk assessment.

Preterm infant: A newborn infant whose gestational age is less than 37 completed weeks.

Prevailing charge (Medicare): See Customarv. prevailing. and reasonable (CPR) method.

Prevailing charge locality (Medicare): A particular geographic locality within which Medicare determines prevailing charges and sets payment under Part B for medical services provided by physicians and other qualifying health care practitioners. There are approximately 240 separate prevailing charge localities in the United States.

Prevalence: A measure of the number of individuals in a given population who have a specific disease or other condition at a designated time (or during a particular period). Point prevalence is the proportion of individuals in a population who have a given condition, which is measured at a particular point in time. Lifetime prevalence is a measure of individuals considered at a point in time who have ever had an illness or condition which is under study.

Prevention: See disease prevention.

Preventive Health and Health Services (PHHS) block grant: A Federal block grant program, created by the Omnibus Budget Reconciliation Act of 1981, that provides funding to States for a broad array of preventive health Services.

Preventive services: Strategies for health promotion or disease prevention that include counseling, screening, immunization, or chemoprophylactic interventions for individuals in clinical settings.

Preventive strategy: Any action taken by individuals, professionals, or governments to alter the environment, change behavior, or provide effective health care with the intention of preventing disease or injury.

Price level depreciation: An estimate of depreciation (see definition) based on the current replacement value of the fixed asset.

Primary care: Essential health care made accessible at an affordable cost, using methods that are practical, scientific, and socially acceptable; generally designed to include health education, preventive measures (such as immunizations), nutritional advice, availability of safe water and basic sanitation facilities, maternal and child health services (including family planning), treatment for common diseases and injuries, and the provision of appropriate drugs. Optimally, primary care includes the following elements: first contact care, comprehensive care, coordinated or integrated care, and care that is longitudinal over time rather than episodic. First contact care is the extent to which a patient contacts the source of care whenever he or she perceives a new need for care. Coordination of care entails a health care provider's ability to provide for continuity of information from visits to other providers (e.g., specialists and emergency facilities) as well as from earlier visits to him or herself. Longitudinality of care is the extent to which a provider serves as a source of care overtime regardless of the presence or absence of a particular type of problem.

Primary care physicians (as defined for HMSA designation purposes): Family and general practitioners, general pediatricians, obstetricians and gynecologists, and general internists.

Primary caregiver: See caregiver.

Primary infertility: Infertility in those who have never had children.

Primary prevention: A category of health and/or related interventions that aim to eliminate a disease or disordered state before it can occur. See health promotion, health protection, preventive services. Compare secondary prevention.

Primary producer: An organism (plant or micro-organism) that uses photosynthesis to convert solar energy into chemical energy that can be used by nonphotosynthetic organisms (e.g., humans).

Primitive streak: In developmental biology, the first visible sign of differentiation in the developing embryo. It is a darkened longitudinal stripe that forms at the caudal (tailward) end of the embryo, composed of a layer of ectodermal cells (which develop into skin and nervous tissue); it marks the future location of the longitudinal axis of the embryo.

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

Prior art: That which is already known or available, part of the criteria of obviousness used in evaluating patent applications.

Prior informed consent (with respect to pesticides): Agreement on the part of one government to import a pesticide banned or severely restricted by another government, in full knowledge of the reasons for that ban or restriction.

Priority groups: The ranking of designated health manpower shortage areas into four groups according to population-to-practitioner ratios and indications of high need and insufficient capacity (group 1 HMSAS indicate greatest need).

Private duty nursing: Services provided by a professional nurse to a patient who needs individual and continuous care beyond the level normally provided by a visiting nurse (in the home) or the nursing staff (of a hospital or skilled nursing facility).

Private geriatric case manager: Individual professionals (usually social workers or nurses) and others who provide client assessment, care planning, service arrangement and coordination, monitoring, and a variety of services for elderly people on a fee-for-service basis.

Private psychiatric hospital: A hospital operated privately by individuals, partnerships, corporations, or nonprofit organizations, primarily for the care of persons with serious mental disorders.

Proactive: Efforts that attempt to promote health and prevent the occrrence of health problems by changing environments rather than by merely attempting to change individual behavior through didactic attempts at persuasion.

Probe: In molecular biology, a molecule that has been tagged or labelled in some way with some tracer substance (a radioactive isotope or specific dye-absorbing compound) that is used to locate or identify a specific gene or gene product (e.g., a radioactive mRNA probe for a DNA gene, or a monoclinal antibody probe for a specific protein). See also DNA probes.

Problem behaviors (in adolescence): Those behavior that have been deemed socially unacceptable or that lead to poor health outcomes (e.g., unprotected sexual intercourse).

Procedural service: Services that are dependent in a substantial way on the use of a medical device. Contrast "nonprocedural service."

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 staff.

Process criteria to measure quality of care: Criteria for measuring quality that focus on the activities involved in providing care (e.g., care planning and medication procedures and procedures for handling difficult patient behaviors). The use of process criteria to measure quality is valid only if the processes have been linked to desired or undesired outcomes of care. Compare outcome criteria and structural criteria to measure quality.

Processes, nerve processes: Extensions of the neuron, whether axons or dendrites, along which nerve impulses travel. Compare cell body.

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. PSROS have been replaced by PROS (utilization and quality control peer review organizations). See also PRO.

Progesterone: A steroid hormone secreted by the ovary after ovulation (to prepare the inner lining of the uterus for implantation of a zygote), by the placenta during pregnancy, and in small amounts by the adrenal glands and testes. Progesterone drugs may be used to treat various menstrual disorders, infertility associated with luteal phase dysfunction, and other conditions.

Prognosis: A forecast as to the probable outcome of an attack of disease; the prospect as to recovery from a disease as indicated by the nature and symptoms of the case.

Prognostic factor: A symptom, sign, or characteristic of an individual that is known to be predictive for certain disease outcomes.

Programmed inspection: Programmed or general schedule inspections are those Occupational Safety and Health Administration inspections that are scheduled using the injury experience or compliance history of an industry. Compare compliant inscpection, fatalitv/catastrophe inspection, and follow-up inspection.

Progressive supranuclear palsy (PSP): A disorder similar to Parkinson's disease but with more widespread findings; it also differs from Parkinson's disease in that those affected lose the ability to gaze up or down and do not necessarily have a tremor. Half to two-thirds of people with PSP become demented.

Prokaryote: An organism lacking cell organelles and whose DNA is not enclosed within a membrane-bound, structurally discrete nucleus. Bacteria, viruses, and blue-green algae are prokaryotes. Compare eukaryote.

Prolactin: A hormone secreted by the anterior pituitary gland that stimulates lactation and supports gonadal function.

Proliferation: The reproduction or multiplication of similar forms of brain cells; the stage of development preceding migration and differentiation. Compare differentiation, migration.

Promoter: A region of a DNA molecule found in front of a gene (as the DNA molecule is "read" by the proper enzymes) that controls the expression of the gene,

Property offenses: According to the Federal Bureau of Investigation, serious property offenses include burglary, larceny-theft, motor vehicle theft, and arson. Minor property offenses include involvement with stolen property. Compare violent offenses.

Prophylactic antibiotic therapy: Therapy designed to ward off disease through the use of antibiotics taken before evidence of infection.

Prophylaxis: The prevention of disease and preservation of health.

PROS: See utilization and quality control peer review organizations.

Prospective hospital payment: A hospital payment method in which the amount that a hospital is paid for services is set prior to the delivery of those services; the hospital is at least partially at-risk for losses, or stands to gain from surpluses, that accrue in the payment period. Prospective payment rates may be per service, per capita, per diem, or per case rates. Medicare's DRG payment system for inpatient hospital services is a particular form of prospective payment. See also prospective pavment below and capitation financing method. Compare retrospective cost-based reimbursement.

Prospective Payment Assessment Commission (ProPAC): A commission established by the same law that created the DRG-based prospective payment system for Medicare (P.L. 98-21) that advises Congress and the Secretary of Health and Human Services on the annual update factor and on adjustments of DRG classifications and weights.

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 (cavitation). Medicare's DRG payment system for inpatient hospital services is a particular form of prospective payment. See also prospective hospital pavment above and cavitation financing method. Compare retrospective cost-based reimbursement.

Prospective study: An epidemiologic 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.

Prostatic hyperplasia: The abnormal multiplication in the number of normal cells in normal arrangement in the prostate gland.

Prosthesis: An artificial substitute for a missing body part such as an arm or a leg.

Protection factor: The ratio of measured concentrations of an airborne contaminant inside and outside the face piece of a respirator in the workplace. A measure of the effectiveness of the respirator. See respirator.

Protective services: Social and law enforcement services to prevent, eliminate, or remedy the effects of physical and emotional abuse or neglect by stabilizing family life (e.g., by strengthening parental capacity and ability to provide good child care). The provision of protective services follows a complaint or referral, frequently from a source outside the family, although it may be initiated by an adolescent him or herself.

Protein: A molecule composed of many linked amino acids in a specific sequence, which is, in turn, determined by the sequence of nucleotides in DNA in the gene coding for the particular protein. Proteins

are required for the structure, function, and regulation of the various cells, tissues, and organs in the body.

Prothrombin: An inactive plasma protein synthesized in the liver necessary for blood coagulation as the precursor of thrombin, which catalyzes the formation of the fibrin matrix in blood clots. Also called 'Factor II."

Prothrombin complex (PTC): A product of plasma fractionation consisting of Factors II, VII, IX, and X, but mostly Factor IX. Used in the treatment of hemophilia B. An "activated" form of this concentrate is used in the treatment of hemophilia A patients with inhibitor to Factor VIII. Also known as "Factor IX complex (concentrate)."

Protocol: 1) The plan or outline of a scientific experiment or treatment; or 2) refers collectively to decisionmaking guidelines, policies, and models, defined as follows: Guidelines are advisory documents, intended to assist health care providers by suggesting morally and legally acceptable approaches to the difficult questions related to the provision, withholding, or withdrawing of life-sustaining treatment. Policies are instruments of health care facility governance that are designed to ensure that essential administrative objectives are met. Policies can state fundamental principles for conduct, provide for orderly, accountable interactions between practitioners within an institution, and ensure that social expectations or legal requirements for health care are met. The hallmarks of policies are their prescriptive language, their precise assignment of responsibility for decisions, and their detailing of procedures to be followed in implementing decisions. A model protocol is an advisory document intended to assist health care institutions in developing their own policies or guidelines.

Protoplasm: A single cell or a mass of protoplasm (the substance of which cells are formed). The term usually refers to a bacterial cell or to an individual plant cell from which the cell wall has been removed preparation to cell-fusion experiments.

Protoplasm fusion: A means of achieving genetic transformation by joining two protoplasts or joining a protoplast with any of the components of another cell.

Protozoa: A phylum of single-celled microorganisms, a few of which cause disease in humans. Protozoa are the causes of malaria, leishmaniasis, and trypanosomiasis.

Provider participation (in Medicare or Medicaid): The provision of care by a physician to patients who are covered by either Medicare or Medicaid.

Provirus: The genome of an animal virus integrated into the chromosome of the host cell, and thereby replicated in all of the host's daughter cells.

Psychiatric hospitalization: Hospitalization in a specialty mental health facility or in a general hospital for purposes of mental health evaluation or treatment.

Psychoactive substance: A substance that has mood-altering abilities.

Psychodynamic therapy: Psychotherapy based on the theory that changes in cognition and emotions will be followed by changes in behavior.

Psychopharmaceutical: A term used to describe drugs that affect mental function.

Psychopharmacological therapy: Therapy involving the use of psychoactive medications such as stimulants, antidepressants, or neuroleptics.

Psychophysiological disorders: Mental health disorders that involve a disturbance in some aspect of bodily functioning usually involving a combination of mental and physical factors. Such disorders include

stereotyped movement disorders; eating disorders such as anorexia and bulimia; and urinary and fecal incontinence.

Psychosis: A general term for any major mental illness characterized by personality disorders, loss of contact with reality, and sometimes delusions or hallucinations.

Psychotropic: Exerting an effect on mental activity; the term is usually applied to drugs that affect the mental state.

Puberty: The period of becoming first capable of sexual reproduction, marked by maturing of the genital organs, development of secondary sex characteristics (e.g., breasts, pubic hair), and in humans and higher primates, the first occurrence of menstruation in the female.

Pulmonary sufactant: A substance in the lung that reduces the surface tension along the alveoli and prevents the collapse of the pulmonary air spaces and enhances elasticity of the tissue and exchange of gases in the lungs. Very premature infants may have inadequate surfactant, making them prone to breathing problems. See respiratorv distress svndrome and bronchopulmonarv dysplasia.

Pulse sequence: The pattern of radiofrequency energy used to excite protons.

Pyelolithotomy: The surgical removal of a stone from the renal pelvis.

Q

Quackery: A slang term used to describe medical treatments that are falsely described to be effective.

Quadriplegic: Paralysis of all four limbs caused by damage to the spinal cord in the neck region.

Quality assessment: Measurement and evaluation of quality of care for individuals, groups, or populations.

Quality assurance: Procedures and activities to safeguard or improve quality of care by conducting assessments, taking action to correct problems found, and following up corrective interventions.

Quality of medical care: The degree to which actions taken or not taken increase the probability of beneficial health outcomes and decrease risk and other untoward outcomes, given the existing state of medical science and art. Which elements of patient outcomes predominate depends on the patient condition. Assessment of the quality of care involves evaluation of 3 groups of indicators: 1) the structure of care, encompassing the resources and organizational arrangements in place to deliver care; 2) the process of care, referring to the activities of physicians and other health professionals engaged in providing care; and 3) outcomes of care, namely changes in patients' health status and quality of life.

Quality-adjusted life-year (QALY): In cost-effectiveness analysis, a measure of health impact used to compare the benefit or effectiveness of alternative health interventions, such as the value of an extra year of life gained through kidney transplantation versus dialysis for patients with end stage renal disease; involves some degree of arbitrary valuation and weighting of different conditions.

Race: Races can be distinguished by usually inherited physical and physiological characteristics without regard to language or culture (caucasoids, negroid, mongoloid). By Census Bureau definition, the term race is used to distinguish among peoples who are white (caucasoid), black (negroid), or Asians or Pacific Islanders or American Indians (mongoloid). See ethnicity, Hispanic, Indian.

Radioimmunoprecipitation assay (RIPA): An assay method based on antigen-antibody interactions, based on principles similar to enzyme immunoassay but using radioisotopes to measure the interactions. See also enzyme immunoassay and indirect immunofluorescence assay.

Radiotherapy: The treatment of disease by ionizing radiation.

Random allocation: In a randomized clinical trial, allocation of individuals to treatment groups such that each individual has an equal probability of being assigned to any group.

Randomized clinical trial (RCT): An experiment designed to test the safety and efficacy of a medical technology in which people are randomly allocated to experimental or control groups, and outcomes are compared.

Rate setting system: A method of payment in which a State regulatory body decides what prices a hospital, for example, may charge in a given year.

Rated premium: A premium with an added surcharge that is required by insurers to cover the additional risk associated with certain medical conditions. Rated premiums are usually 25 to 100 percent higher than the standard premium.

Rational service areas: To be proposed for health manpower shortage area (HMSA) designation, an area must be "rational" for the delivery of services based on criteria governing the size and boundaries of the area and consideration of such factors as established transportation routes and language barriers.

Readmission: Admission to a hospital within a specified period of time after a prior admission or because of complications of a prior admission.

Reagent: A substance that takes part in a chemical reaction.

Real time ultrasound (B-SCAN): A device used to measure the anatomical structure of vessels by vibrations that are of the same physical nature as sound, but with frequencies above the range of human hearing.

Reasonable and necessary (Medicare): Criteria used by the Health Care Financing Administration or Medicare contractors to determine which services are eligible for Medicare coverage. Coverage is distinguished from payment in that coverage refers to benefits available to eligible beneficiaries, and payment refers to the amount and methods of payment for coverage. The criteria used to determine whether a service is reasonable and necessary are: 1) general acceptance as safe and effective, 2) not experimental, 3) medically necessary, and 4) provided according to standards of medical practice in an appropriate setting.

Reasonable charge: See customary, prevailing, and reasonable (CPR) method and usual, customary and reasonable fees.

Recalibration (Medicare): Periodic changes in relative prices of diagnosis-related groups (DRGs), including assignment of weights to new DRGs. See DRGs.

Receptor: A protein embedded in the cell membrane to which a neurotransmitter or other molecule can bind to excite or inhibit activity of the cell. An example is the acetylcholine receptor in muscle cells.

Recessive: A genetic trait that is manifested phenotypically only when both alleles for a particular trait are present at a locus (e.g., the disease sickle cell anemia is manifest only when both copies of the gene for beta globin contain the beta^s mutation, whereas when individuals have only one copy of the beta^s gene, they do not develop the disease, but have sickle cell trait, a benign condition). X-linked traits generally act as if they were recessive in females and dominant in males. Compare dominant.

Recombinant DNA (rDNA) technology: Techniques involving the incorporation of DNA fragments, generated with the use of restriction enzymes, into a suitable host organism's DNA (a vector). The host is then grown in culture to produce clones with multiple copies of the incorporated DNA fragment. The clones containing this particular DNA fragment can then be selected and harvested. Also called genetic engineering.

Recombinant DNA: Genetic material that contains DNA from different sources that have been combined by genetic engineering methods. Rearrangement of the genes is artificially induced using enzymes to break DNA into fragments, allowing recombination in different sequences.

Recombination: In genetics, the rearrangement of genetic material within the chromosome (resulting in independent assortment of unlinked genes, crossing over of linked genes, and intragenic crossing over of nucleotides); usually applied to the process of meiosis, when the genetic material packaged into gametes is mixed and reconstituted in any number of possible combinations.

Recommended exposure limit (REL): Standard for maximum exposure of industrial workers to toxic substances, set by the National Institute of Occupational Safety and Health. Compare permissible exposure limit, threshold limit value.

Recommended maximum contaminant level (RMCL): Nonenforceable goals set by EPA for pollutants in drinking water renamed maximum contaminant level goal. See maximum contaminant level goal, maximum contaminant level.

Recovered plasma: Plasma removed from outdated blood or plasma not needed for other purposes.

Recrudescence: The reappearance of a disease or its symptoms after a period of improvement.

Recurrence: In cancer, the regrowth of tumor tissue after all evidence of it had apparently been eradicated either by surgery or other means (e.g., radiotherapy). A recurrence may occur at the site of the original tumor or elsewhere in the body, as metastatic disease.

Red blood cells: See erythrocytes.

Red book: Published by the FDA Center for Food Safety and Applied Nutrition, guidelines for toxicological testing of direct food additives and color additives used in food under the Federal Food, Drug, and Cosmetic Act.

Reduviid bug: A blood-sucking bug in the Reduviid family that is the vector of T. cruzi, the agent of Chagas' disease.

Reentry interval: The time that must elapse between application of a pesticide and the return of agricultural workers to the treated area without special protection.

Reference dose (RfD): A term used to characterize risk and derived by applying safety factors to the highest level at which a substance produces no effect. If human exposure to a substance is below the RfD, no risk is assumed to exist; if exposure exceeds the RfD, risk is assumed to exist. The term may be used interchangeably with acceptable daily intake.

Refractive disorders: Conditions of the eye in which the light-bending properties do not provide for clear focusing. Most common among these conditions are myopia (nearsightedness), hyperopia (farsightedness), and astigmatism.

Regeneration: Repair or regrowth of a cell, tissue, or structure.

Regional Alzheimer's diagnostic and assessment centers: See States' regional Alzheimer's diagnostic and assessment centers.

Regression (or remission): In relation to cancer, regression refers generally to the shrinking of a tumor by other than surgical means. A complete regression occurs when a tumor that was at one time measurable disappears completely. Partial regression describes the condition where the measurable tumor is reduced by at least 50 percent in size.

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.

Rejection, graft rejection: The destruction by the immune system of foreign tissue; specifically, destruction of foreign tissue transplanted into a recipient's body from a donor's body.

Related intervention: A preventive or other service that may enhance health (e.g., social services, vocational training, educational services, food, housing, mentoring) but is not delivered in what is traditionally considered the health services system.

Relative value scale (RVS): A list of all physician services containing a cardinal ranking of those services with respect to some conception of value, such that the difference between the numerical rankings for any two services is a measure of the difference in value between those services.

Relaxation time characteristics: In radiotherapy, the rate at which tissue hydrogen atoms, which have been excited to a higher energy state by radiofrequency energy, return to their lower energy (equilibrium) state.

Releasing factors: Peptides secreted by the hypothalamus and released into the anterior pituitary that trigger the pituitary to release a specific tropic hormone (e.g., growth hormone releasing factor).

Reliability: Refers to the reproducibility of results over repeated measurements, and relates to the lack of random error over these repeated measurements. Reliability is a prerequisite to validity. See interrater reliability and intrarater reliability.

Renal calix: One of the finger-like projections of the renal pelvis that collect filtered urine and channel it into the kidney's core.

Renal pelvis: The hollow core of the kidney.

Renal: Pertaining to the kidney.

Reovirus: Any of a group of relatively large, widely distributed, and possibly tumor-causing viruses with double-stranded RNA. Unlike retrovimses, which also contain RNA, reoviruses replicate in the cytoplasm of the cells they invade and do not produce DNA analogs to their RNA for incorporation into

the host cell's genome. The genus name "reovirus" is derived from the term respiratory enteric orphan virus, to denote both respiratory and enteric trophism and isolation of the virus in the absence of known disease. See also virus; and compare adenovirus and retrovirus.

Repeated-Dose Toxicity Test: Repeated or prolonged exposure to measure the cumulative effects of exposure to a test substance. These tests involve chronic, subchronic, or short-term exposure to a test substance.

Repetitive motion disorders: Diseases caused by repetitive movement of part of the body. Some manual poultry processing tasks, for example, may lead to a disorder of the wrist known as carpal tunnel syndrome.

Replication: 1) In genetics, the synthesis of new DNA from existing DNA. 2) In epidemiology, repeating a study, usually with a different subject population, using the same methods as the original study in order to compare results (i.e., to see whether the results reasonably match the original results).

Replicon: In genetics, a region of DNA that expands from a single origin; also, the minimum polynucleotide sequence that maybe replicated.

Reproductive health care: Can include a wide range of services related to the male or female reproductive systems, including gynecological treatment services (i.e., examination and treatment of the female reproductive organs), and preventive services related to the use of contraception (e.g., counseling, prescribing contraceptive methods, dispensing contraceptives). See also prenatal care.

Reproductive-age women: Women between and including the ages of 15 and 44 years

Reservation: The geographic area set aside by treaty or other law for a federally recognized Indian tribe, including reservations, Pueblos, rancherias, or colonies, former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlement Act (43 USC 1601 et seq.), and Indian allotments.

Reservation State: A State in which there is at least one federally recognized Indian tribe and in which the IHS therefore provides or finances health care for eligible Indians. There were 32 such States as of 1986.

Reservoir: In infectious disease, an alternate host or passive carrier or a pathogenic organism sufficient to keep the organism alive and infective. Reservoirs can be living (e.g., animals, plants) or nonliving (e.g., soil).

Residential care facility: A care setting in which the patient or client resides, such as a nursing home, a board and care facility, or a State mental hospital.

Residential treatment centers (RTCS) for emotionally disturbed children: A residential organization, not licensed as a psychiatric hospital, whose primary purpose is the provision of individually planned programs of mental health treatment services in conjunction with residential care for children and youth primarily under the age of 18.

Residual payer: (pertaining to Indian health) Refers to the Indian Health Service's position that other sources of payment available to the patient must be used first before IHS will pay for contract care services by non-lHS providers. See also alternate resources, contract services, and primary provider.

Respiration 1) In the occupational setting, an individually worn device designed to reduce the level of a toxic substance in the air breathed by a worker (e.g., dust masks, gas masks). 2) In health care, a respirator is a device to substitute for or assist with the respirations of a patient who has diffIculty with spontaneous breathing. A respirator may provide artificial respiration by exerting intermittent negative

air pressure on the chest (the iron lung), or by forcing air into the lung by positive pressure. Positive pressure devices are also referred to as ventilators, See assisted ventilation.

Respiratory arrest: Cessation of breathing.

Respiratory distress syndrome (RDS): An acute lung disorder that causes difficulty breathing and a life-threatening deficiency of oxygen in the blood. Affects premature babies (caused by a deficiency of pulmonary surfactant, a chemical normally found in the lungs that keeps the alveoli open) and adults whose lungs have been damaged by illness (e.g., pneumonia, autoimmune disease) or injury (e.g., inhalation of irritant gas). Severe RDS often requires that patients get mechanical assistance to breathe.

Respiratory gating: A technique in which image acquisition is coordinated with the breathing cycle.

Respiratory syncytial virus (RSV): The most important cause of lower respiratory disease (pneumonia and bronchiolitis) in infants and children under 2 years of age.

Respite care: The short term or intermittent provision of services to provide temporary relief for a family caring for a disabled or incapacitated individual. Respite programs include in-home companion care, in-home personal care, adult day care, or short-term stays in a nursing home, hospital, or boarding home. Such services are not always publicly or privately funded and are often difficult for caregivers to find.

Respite care services: Any shofi-term services that are intended to provide temporary relief for the primary caregiver of an impaired person. Such services may include in-home companion/sitter services, in-home personal care, adult day care, or short-term (e.g., overnight) stays in a nursing home.

Restricted-activity day: One of the following four types of days in which a person's activity is restricted: 1) a bed day, during which a person stayed in bed more than half a day because of illness or injury or was in a hospital as an inpatient; 2) a work-loss day, during which a currently employed person 18 years of age and over missed more than half a day from a job or business; 3) a school-loss day, during which a student 5- to 17-years-old missed more than half a day from the school in which he or she was currently enrolled; and 4) a cut-down day, during which a person cuts down for more than half a day on the things he or she usually does. Work-loss, school-loss, and cut-down days refer to the short-term effects of illness or injury. Bed days are a measure of both long- or short-term disability, however, because a chronically ill bedridden person and a person with a cold could both report having spent more than half a day in bed due to an illness. See restriction of activity.

Restriction enzyme recognition site: The DNA site where a specific restriction enzyme cuts the DNA molecule.

Restriction enzyme: An enzyme that has the ability to recognize specific short sequences of DNA (ranging from 4 to 12 base pairs in length) and cut or cleave the DNA where such sites occur. They are termed "restriction" enzymes because, occurring naturally in bacteria, they recognize foreign nucleic acid (e.g., the DNA of a bacterial virus as it begins to infect and destroy its host) and destroy it, thus restricting the ability of the virus to prey upon certain potential host strains. Over 400 different restriction enzymes are known, recognizing a great variety of different nucleotide base sequences. This has made possible the cutting and splicing together of nucleic acid within and between different organisms and species.

Restriction fragment length polymorphism (RFLP): The presence of two or more variants in the size of DNA fragments from a specific region of DNA that has been exposed to a particular restriction enzyme. These fragments differ in length because of a deletion or creation of a restriction enzyme recognition site. Polymorphic sequences that are responsible for RFLPs are used as markers on genetic linkage maps. See also polymorphism.

Restriction of activity: As used in the DHHS National Center for Health Statistics National Health Interview survey, ordinarily refers to a relatively short-term reduction in a person's activities below his or her normal capacity. See restricted-activity day,

Resuscitation: The return to life or consciousness of one who is apparently dead or whose respirations have ceased.

Retina: A thin layer of neural tissue lining the back of the eye where light-sensitive receptor cells are located and where images are focused.

Retinopathy of prematurity (ROP): A retinal disease affecting premature infants, particularly those weighing less than 1500 grams who have received excessive amounts of oxygen therapy during the first two weeks of life to treat respiratory distress syndrome; ROP can lead to retinal scarring, retinal detachment, and blindness.

Retro-fit controls: See add-on controls.

Retrocession: The voluntary return of a contracted program, or portion thereof, to the Federal Government pursuant to section 106(d) of the Indian Self-Determination and Education Assistance Act (Public Law 93-638). See also self-determination and 638 contract.

Retrograde cell death: The killing, due to axonal damage, of neurons located some distance away from the site of an injury in the central nervous system.

Retrograde ejaculation: Abnormal discharge of semen backward into the bladder, rather than out through the penis.

Retrograde menstruation: Menstruation that flows backwards through the Fallopian tubes into the peritoneal cavity; fragments of the endometrium shed during menstruation attach to the ovaries and other organs, which can cause endometriosis, a common cause of infertility.

Retrospective cost-based reimbursement: A payment method for health care services in which hospitals (or other providers) are paid their incurred costs of treating patients after the treatment has occurred. In this country, the term has traditionally referred to hospital payment, since other providers have generally been paid on the basis of charges instead of costs. Compare prospective pavment.

Retrospective study: A study in which data that are already available are analyzed to test a hypothesis (e.g., inferences about exposure to a possible causal factor are derived from data on subjects who already have the disease in question, compared to other subjects who do not have the disease). Compare prospective study.

Retrovirus: A type of virus that contains 2 identical single strands of RNA, not DNA, and that reproduces by making a double-stranded DNA transcription of itself in a process catalyzed by a virally-encoded enzyme known as "reverse transcriptase." The resulting DNA product may integrate into the cell genome (as a provirus) or may remain free in the nucleus (as an episome). Either way, it remains as a latent infection to be activated later (by a variety of factors) to a vim-producing form. Retroviruses are found widely in nature and are associated with a variety of diseases, including cancer, neurologic disorders, and immunodeficiency syndromes, notably AIDS. Four well-characterized retroviruses are HIV-1 and HIV-2 (major causative agents of AIDS), and HTLV-I and HTLV-II (associated with T-cell leukemia and lymphoma). See also provirus and virus; and compare adenovirus and retrovirus.

Reuptake: Process by which neurotransmitters and their metabolizes are recycled.

Reverse transcriptase: An enzyme occurring in retroviruses that produces a DNA transcript of its RNA counterpart, allowing a viral RNA genome to reproduce and integrate into cellular DNA. Also called RNA-dependent DNA polymerase. See retrovirus.

Reweighing: The adjustment of certain DRG weights to reflect changes in relative resource consumption.

RFLP: See restriction fragment length polymorphism,

Rh blood group: Genetically determined immunologic antigens (referred to as D or Rh+) on the surface of red blood cells capable of inducing intense antigenic reactions when combined with blood cells lacking those antigens (no D or Rh-). The presence or absence of an Rh factor is especially important in blood transfusions (where it is a major cause of incompatibility) and in pregnancy when the mother is Rh- and the fetus is Rh+, which, if untreated, can lead to hemolytic disease of the newborn. Also known as the Rhesus factor, since the antigens were first recognized in Rhesus monkeys. Compare ABO blood group.

Rhinitis: Inflammation of the mucous membrane of the nose, caused by viral infection or allergy.

Rhinovirus: One of many small RNA viruses that cause acute respiratory illness; responsible for 30 to 50 percent of cases of the common cold.

Ribonucleic acid: See RNA.

Ribosome: An intracellular organelle, composed of RNA and protein, where protein synthesis occurs; they appear singly, in clusters (polyribosomes), or attached to the endoplasmic reticulum.

Rickettsia: A group of rod-shaped bacteria, transmitted to humans by bites from lice, fleas, ticks, and mites, that are responsible for human diseases such as Rocky Mountain spotted fever and epidemic typhus.

Right of Priority: A right granted by the Paris Union Convention of 1970, which enables any resident or national of a country to first file a patent application in any member country and thereafter to file a patent application for the same invention in any other member country within twelve months of the original filing, thus ensuring that the subsequently filed applications enjoy the right of priority established by the first filing date.

Right-to-know laws: State and local laws requiring companies to identify the chemical names and hazards of their products to workers and the community.

Risk: 1) A measure of the probability of an adverse or unfavorable outcome and the severity of the resultant harm to the health of individuals in a defined population; associated with the use of a medical technology applied for a given medical problem under specified conditions of use. 2) The predicted or observed effects of exposures to toxic substances or harmful physical agents in the workplace, general environment, consumer products, etc. 3) In insurance, the individual or property insured against loss from hazard.

Risk assessment: The analytical process by which the nature and magnitude of risk are identified. Four steps make up a complete risk assessment: hazard identification, dose-response assessment, exposure assessment, and risk characterization. Compare risk management, presumption of risk. See risk, exposure, dose-response.

Risk classification: In insurance underwriting, the evaluation of an applicant to determine coverage on a standard or substandard basis, or not at all.

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.

Risk reduction goal (of the report "Healthy People 2000"): Defined in terms of prevalence of risks to health or behaviors known to reduce such risks (e.g., "Increase use of helmets to at least 80 percent of motorcyclists and at least 50 percent of bicyclists" [Healthy People Objective No. 9.13]).

Risk-benefit analysis: A determination of whether the risks to health and the environment of using a chemical or drug exceed the economic benefits that accrue from its use. In the case of pesticides, benefits are measured in terms of the monetary value of crop yields; in the case of drugs, benefits are measured in terms of therapeutic efficacy.

Risk-taking behavior: An activity that may involve a risk to one's health. For adolescents especially, risk-taking generally carries a negative connotation, but some risk-taking is essential to the further development of competence, and thus some risk-taking can have positive health and other benefits.

River blindness: See Onchocerciasis.

RNA (ribonucleic acid): A type of nucleic acid that carries genetic instructions and assists in the assembly of proteins. RNA is a single-stranded chain of repeating units of adenine, cytosine, guanine, and uracil. Specialized types of RNA include: messenger RNA (mRNA), which carries a transcript of a DNA sequence to be used as a template for protein synthesis; transfer RNA (tRNA), which attaches the correct amino acid to the protein chain being synthesized at a ribosome; and ribosomal RNA (rRNA), a structural constituent of ribosomes. In some viruses, RNA contains the instructions for viral replication.

RNA-RNA hybridization: See nucleic acid hybridization,

Robbery: The taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim in fear.

Rolelessness: The perception by adolescents (and many learned observers) that adolescents as a socially defined group do not have clear and useful roles to play in American society. That is, their function consists largely of being students and otherwise preparing themselves for the future, but there are few expectations for them to contribute to society while they are adolescents.

Rotavirus: Any of a group of viruses, containing double-stranded RNA in a double-shelled capsid, which are the major cause of acute gastroenteritis with diarrhea in infants and children.

Route of exposure: The means by which a person or animal comes into contact with a chemical: namely intravenous (injected into the bloodstream), inhalation (through the lungs), oral (through ingestion), and dermal (through the skin).

Rubella (German measles): An acute viral illness that causes a diffuse reddish rash and swollen lymph glands. Infection during pregnancy, especially in early stages, can cause miscarriage or congenital rubella syndrome, a potentially fatal disorder involving deafness, cataracts, mental retardation, and/or heart lesions (depending on when infection occurred in gestation). The disease is preventable through vaccination.

Runaway: A young person who is away from home at least overnight without the permission of a parent or caretaker. Compare hopelessness, thrownaway, and street kid.

Rural: As strictly defined by the U.S. Census Bureau, rural refers to places of 2,500 or fewer residents. (Census-recognized 'places" are either 1) incorporated places such as cities, boroughs, towns, and villages; or 2) closely settled population centers that are outside of urbanized areas, do not have

corporate limits, and (unless they are in Alaska and Hawaii) have a population of at least 1,000.) The term "rural" is often used to refer to nonmetropolitan statistical areas (i.e., any area not in a metropolitan statistical area, which, as defined by the U.S. Office of Management and Budget, is a county or group of counties that includes either a city of at least 50,000 residents, or an urbanized area with at least 50,000 people that is itself part of a county/counties with at least 100,000 total residents).

Rural Primary Care Hospital (RPCH): A newly designated type of rural hospital created by Congress in 1989 (Public Law 101-239). Limited to hospitals in only a few States, RPCHS will be small facilities that provide emergency and minimal inpatient care and will be eligible for special reimbursement under Medicare (also see Essential Access Communitv Hospitals).

Rural Referral Centers (RRCS): Tertiary-care rural hospitals, usually large, that serve a wide geographic area. Hospitals that qualify as RRCS must meet certain size and referral characteristics, and are eligible to receive special considerations under Medicare's prospective payment system.

S

'Safe harbor' regulations: Regulations proposed by the U.S. Department of Health and Human Services that would specify which practices of hospitals and other health care providers would not be unethical under the Medicare and Medicaid anti-kickback provisions.

Safer sex practices: Sexual practices designed to avoid actual and potential transmission of HIV infection and other sexually transmitted diseases (e.g., avoiding exchange of body fluids, use of condoms).

Safety: A judgment of the acceptability of risk in a specified situation. See also Risk.

Salmonella: A genus of bacteria that infect the small intestine, causing diarrhea by damaging the intestinal mucosa or by the action of bacterial toxins, and may also invade the surrounding tissue and infect the systemic circulation. Young children, the elderly, and people with certain disorders (e.g., sickle cell anemia, malaria, and immunodeficiency diseases) are particularly susceptible to salmonellosis. Most infections result from contamination of water or food, such as raw or undercooked animal foods. Some forms (e.g., Salmonella typhi) are particularly virulent and result in typhoid fever.

Salpingitis: Inflammation or infection of the Fallopian tubes that may be the result of genital chlamydial or other bacterial infection. Common symptoms include lower abdominal pain, cervical tenderness, and fever. If the infection spreads, complications such as tubal scarring, ectopic pregnancy, and infertility can result.

Salpingostomy: A surgical procedure, used to treat infertility, in which an opening is made in a Fallopian tube that had been occluded as a result of infection, chronic inflammation, or abscess.

Sarcoma: A cancer of connective tissue of the body (e.g., bone, blood vessels, fibrous tissue, muscle, cartilage) classified into 4 main types: osteosarcoma, chondrosarcoma, Kaposi's sarcoma, and fibrosarcoma. Compare carcinoma.

Scaling factor: Weighting disparate measures of health outcomes for cost-effectiveness analysis on the basis of value judgments concerning their relative worth.

Schedule-controlled operant behavior (SCOB): A test in which an experimental animal's response to a stimulus is reinforced on a predetermined schedule in order to produce a predictable pattern of behavior. SCOB is used to evaluate the effects of acute or chronic exposure to toxic substances on the rate and pattern of the animal's responses.

Schistosoma: The genus of parasitic worms, known as "blood flukes," that cause schistosomiasis.

Schistosomiasis: A chronic, debilitating infection in humans transmitted by one of the species of parasitic worms of the genus Schistosoma ("blood flukes"): S. mansoni, S. haematobium, or S. japonicum. Infection usually occurs via fresh water contaminated with human feces.

Schizoid: A disorder of childhood or adolescence, the essential feature of which is a defect in the capacity to form social relationships, particularly shown by a preference for being alone, self-absorption, and excessive daydreaming. The term schizoid was also used formerly to apply to individuals with

various eccentricities of communication or behavior, but they are now described as having Schizotypal Personality Disorder.

Schizophrenia: Common (and professional) usage for what is most likely a group of disorders ("schizophrenic disorders") involving delusions, hallucinations, or certain disturbances in the form of thought; deterioration from a previous level of functioning in such areas as work, social relations, and self-care; duration of at least six months; and occurring before age 45, usually in late adolescence or early adulthood.

Schizophrenic disorders: See schizophrenia.

Schizotypal Personality Disorder: Formerly referred to as schizoid, the essential feature is a personality disorder (i.e., a pervasive dysfunctional pattern of behaving) involving oddities of thought, perception, speech, and behavior that are not severe enough to meet the criteria for schizophrenia.

School-based clinics: Clinics in or near junior or senior high schools that typically offer a variety of health care services, including physical examinations, treatment for minor acute illness, preventive services, family planning, pregnancy testing, prenatal care, and screening for venereal disease.

School-linked health centers: Refers to any school health center for students (and sometimes the family members of students and/or school dropouts) that provides a wide range of medical and counseling services and is located on or near school grounds and is associated with the school. Compare comprehensive services for adolescents.

School-loss day: A day in which a student missed more than half a day from the school in which he or she was currently enrolled.

Schwann cell: A glial ceil in the peripheral nervous system that produces myelin for the myelin sheath surrounding axons. Schwann cells also support regrowth of the axons of peripheral nerves. Compare oligodendrocyte; see mvelin, mvelin sheath.

Sciatic nerve: Either of a pair of long nerves originating in the lower spinal cord (sacral plexus) that send nerve fibers to the muscles of the thigh, leg, and foot; one of the longest nerves in the body, with branches throughout the lower leg and foot.

Sclera: The elastic coating of connective tissues that covers the eye; includes the "white" of the eye.

Scope of hospital services: A structural measure of a hospital's quality of care that reflects whether the 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.

Screening test: Generally, a test used to sort out apparently well persons who probably have disease from those who probably do not. A screening test is not intended to be diagnostic. Compare diagnostic test and predictive test.

Secondary diagnosis: Any medical condition of a patient other than the principal diagnosis. See comorbidities.

Secondary infertility: Infertility in those who have previously been fertile.

Secondary prevention: An intervention that strives to shorten the course of an illness by early identification and rapid intervention.

Sedatives: Central nervous system depressants that produce relief from anxiety; includes barbiturates, metaqualone, and tranquilize.

Selection bias: In studies of health interventions, a distortion of results and the comparability of the experimental and control groups due to the tendency of people with better than average health status to seek medical care. Compare adverse selection bias.

Selective advantage: In biology, an organism's increased probability of reproduction and producing offspring, conferred by its genetic characteristics.

Selective pressure: In biology, the influence of factors extrinsic to an organism (i.e., environmental factors) on its ability to compete with other organisms for reproductive success.

Selective referral: The referral or attraction of patients to physicians and hospitals with better outcomes.

Self-insurance: Usually refers to the practice of employers, particularly large employers, of assuming the risks for the health care expenses of their employees instead of purchasing health insurance through insurance companies. Such employers often continue to contract with insurance companies or other organizations for claims processing and administrative services, as well as purchasing stop-loss insurance to limit the amount of their liability for medical claims. Similar arrangements exist in other lines of insurance (e.g., liability insurance).

Self-pay(ers): See individual health insurance.

Self-report data: An indication of a survey respondent's attitudes, knowledge, or behavior that is reported by the respondent him or herself.

Self-selection bias: The likelihood that people who seek more or less health care, or different kinds of care, have inherently different health risks from those who do not.

Semen analysis: Evaluation of the basic characteristics of sperm and semen, such as appearance, volume, liquefaction and viscosity, and sperm concentration and motility. The presence of bacterial infection and immunological disorders can also be determined by semen analysis. It is the fundamental diagnostic method used to evaluate male infertility.

Semen: A fluid of the male reproductive organs consisting of secretions from the male's seminal vesicles, prostate, and from the glands adjacent to the urethra. Semen carries sperm and is ejaculated from the urethra during orgasm.

Senior center: A community facility for elderly people. Senior centers provide various activities for elderly people, including recreational, educational, cultural, or social events. Some centers provide adult day care, congregate meals, health screening, and limited health care services.

Sensitivity analysis: In cost-effectiveness and cost-benefit analysis, an analysis of the effect of changes in key assumptions or uncertainties on the findings and outcome of the overall study.

Sensitivity: One measure of the validity (or accuracy) of a diagnostic or screening test: the percentage of all those who actually have the condition being tested for who are correctly identified as positive by the test. Operationally, it is the number of true-positive test results divided by the number of patients that actually have the disease (true-positives divided by the sum of true-positives plus false-negatives). Compare specificity.

Sensory neuron: See neuron.

Sentinel health events: Medical conditions that, by virtue of their presence or prevalence in a population, indicate a lack of access to acceptable, quality primary care services. Examples include

dehydration in infants; measles, mumps, or polio in children; and advanced breast cancer or invasive cervical cancer in adult women.

Sentinel phenotypes: A group of autosomal dominant or X-linked conditions that can occur sporadically, as a result of new germinal mutations in the parents' reproductive cells.

Sequelae: Aftereffects or secondary consequences of a disease, disorder, or injury.

Sequential design test: The comparison of treatment groups at set stages of experimentation. Further experimentation at higher doses is undertaken only if there is no significant difference between the two groups.

Serious handicap in infants: Disabilities that include severe mental retardation (IQ or developmental quotient below 70), cerebral palsy of significant degree, major seizure disorders, or blindness.

Serious offenses: Federal Bureau of Investigation Part I offenses, which include specified violent offenses (i.e., murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault) and specified property offenses (i.e., burglary, larceny-theft, motor vehicle theft, and arson).

Seroconversion: The initial development of antibodies specific to a particular agent.

Seropositive: In the context of HIV, the condition in which antibodies to the virus are found in the blood.

Seroprevalence: Prevalence based on blood tests.

Serotonin: See neurotransmitter.

Serotype: The type of a micro-organism as determined by the kinds and combinations of constituent antigens present in the cell.

Serum triglycerides: Neutral fats present in blood synthesized from carbohydrates for storage in animal adipose cells.

Serum: See blood serum.

Service system: An organizational entity that pools funds from several sources and integrates the functions of various agencies that provide services in a given geographic area. These entities are intended to create a consolidated system through which people are connected to services.

Service-connected disabilities: With respect to the eligibility criteria for VA services, disabilities that were incurred or aggravated during military service. Veterans with a service-connected disability have priority for VA services.

Severely mentally ill: A term that usually refers to individuals with a diagnosis of schizophrenia, a major affective disorder, psychosis, or a personality disorder and a recent history of psychiatric care that required more than voluntary outpatient treatment. The term is not usually used to refer to people with Alzheimer's disease or other diseases that cause dementia.

Sex chromosomes: The X and the Y chromosomes, two of the 46 chromosomes in human cells, that determine the sex of the individual. Females have two X chromosomes, while males have one X and one Y chromosome.

Sexual abuse: As defined by DHHS'S National Center on Child Abuse and Neglect, sexual abuse can take three forms: actual penile penetration; molestation with genital contact; and other unspecified acts

not known to have involved actual genital contact (e.g., fondling of breasts or buttocks, exposure), or inadequate or inappropriate supervision of a child's voluntary sexual activities.

Sexual activity rate: As typically used in the literature, the number of individuals who have ever had sexual intercourse, per some population base.

Sexual dysfunction: An alteration in sexuality (e.g., impotence, loss of libido) caused by pathophysiological, psychological, social, or behavioral reasons.

Sexually active: As typically used in the literature, sexually active denotes ever having had sexual intercourse (as opposed to currently being sexually active).

' Sexually transmitted diseases (STDS): Infectious diseases transmitted primarily by sexual contact, including syphilis, gonorrhea, chlamydia, herpes, and AIDS. Formerly (and sometimes, in law) called venereal disease.

Sham operation: An operation that the patient believes was performed, but actually was not performed, for the purpose of creating a control group for experimental measure. See also Placebo effect.

Shift nursing: Nursing provided in the home in hourly shifts (usually 8-hour shifts), as distinguished from nursing provided in visits (usually of an hour or less). See also private dutv nursing.

Shigella: A genus of pathogenic bacteria, some of which cause gastroenteritis and bacterial dysentery.

Shooting gallery: Location where drug abusers meet to inject (shoot) drugs, often sharing needles.

Short-stay hospitals: Hospitals in which the average length of stay is less than 30 days.

Short-term toxicity test: Repeated-dose toxicity test that involves exposure to a test substance over a period of 2 to 4 weeks.

Sibling species: Independent, reproductive populations that are genetically distinct from one another yet very closely related, and often difficult or impossible to distinguish by morphological or other criteria.

Sickle-cell anemia: An autosomal recessive genetic disorder of hemoglobin synthesis leading to the production of distorted and fragile red blood cells and severe, chronic anemia. Infants with sickle cell disease are at risk for overwhelming infection and sudden death in the first few years of life. In older individuals, the disease is characterized by painful episodes of vaso-occlusive crises (aggregation of misshapen red cells), joint pain, thrombosis, fever, chronic anemia, splenomegaly, lethargy, and weakness, although there is wide variability among patients. The disease is caused by a mutation in both copies of the gene for beta globin and is found with high frequency in some populations subject to malarial infections, such as people of African and Mediterranean descent. See sickle-cell trait.

Sickle-cell trait: The asymptomatic condition shown by individuals carrying the variant globin-s gene as well as the normal globin-a gene, i.e., they are heterozygous for the sickle-cell gene. Two heterozygous parents have a 25 percent risk with each pregnancy of having a child with homozvgous sickle-cell disease.

Silent effect: See latent effect.

Silicosis: A restrictive chronic disease of the respiratory system resulting from exposure to airborne silica dust.

Single gene disorder: A genetic disease caused by a single gene that shows a simple pattern of inheritance (e.g., dominant or recessive, autosomal or X-linked). Examples include Duchenne muscular dystrophy, retinoblastoma, and sickle cell disease. Also called "Mendelian disorder."

Single-vision disorder: Hyperopia (hypermetropia), myopia, and other disoders that involve only one type of vision difficulty, rather than presbyopia, which involves difficulties with near vision as well as some general visual impairment.

Sinusitis: Inflammation of one or more of the sinuses that communicate with the nasal cavity.

Sister chromatid exchange: Crossing over between the sister chromatics (two daughter strands of a duplicated chromosome) during cell division (mitosis).

Skilled nursing care: Nursing care that requires highly technical nursing skills, including care provided by nonprofessionals (such as parents) trained in such skills.

Skilled nursing facility (SNF): A facility that provides skilled nursing care (see lorm-term care). A "distinct part SNF" is a distinct unit within the hospital that provides such care (i.e., beds set up and staffed specifically for this service), is owned and operated by the hospital, and meets Medicare certification criteria.

Sliding fee scale: A schedule of discounts in charges for services based on the consumer's ability to pay, according to income and family size.

Smokeless tobacco: Tobacco that is typically chewed or held in the mouth rather than smoked. Contains nicotine, a central nervous system stimulant.

Snyder Act: The basic authorizing legislation enacted in 1921 (42 Stat. 208; 25 USC section 13) for Federal health and social services programs for Indians.

Social competence: Competence in aspects of interpersonal interaction, including: managing social transactions such as entry into social situations; ability to maintain satisfying personal and work - relationships; ability to resolve interpersonal problems so that there is both mutual satisfaction in the encounter and preservation of valued goals; ability to improvise effective plans of action in conflicted or disrupted situations; and ability to reduce stress and contain anxiety within manageable limits. The mediating factors affecting social competence that have been found to be susceptible to life-skills training include the individual's: 1) motivation (i.e., to acquire knowledge and skills to enhance social competence); 2) knowledge base (i.e., about developmentally relevant health and social concerns); and 3) social skills (e.g., communication, empathy, ability to regulate one's own behavior).

Social environment: The aggregate of social and cultural conditions that influence the life of an individual or community. Aspects of the social environment particularly important to adolescents include the adolescents' families, other adults with whom adolescents come in contact, schools, workplaces, recreational facilities, and the media.

Social health maintenance organization (S/HMO): An innovative organizational entity that offers voluntarily enrolled elderly Medicare beneficiaries a package of acute and long-term care services and operates on a capitated, prospectively fixed budget.

Social Security Disability Insurance (SSDI): A Federal social insurance program for workers who have contributed to the social security retirement program and become disabled before retirement age. Beneficiaries receive monthly cash payments.

Social services: Services provided in order to support the functioning of individuals or family units, including those services termed: 1) "supportive" or "protective" services; 2) supplementary services

such as financial assistance, respite care, home aid services (e.g., homemaker, caretaker, and parent aide services); and 3) 'substitute" services (e.g., shelter services, foster care, adoption).

Social Services Block Grant: A Federal block grant to States for social services for elderly and disabled people and others. There are no Federal requirements for specific services that must be provided, but many States use a portion of their Social Services Block Grant funds for board and care, adult day care, home health aide, homemaker, and chore services. States determine the eligibility requirements for these services and may use a means test.

Social support: Can involve the provision of any or all of: 1) supportive aid, including practical services and material benefits; 2) personal affirmation, including feedback that raises self-esteem and strengthens personal identity; and 3) supportive affect, particularly affection, caring, and nurturance. Compare parental support programs.

Socioeconomic status: A synonym for income levels, typically those of an adolescent's family of origin, because adolescents are unlikely to have their own independent sources of income. See poor. near-poor.

Soft Lenses: See contact lenses.

Sole Community Hospital (SCH): A rural hospital, usually small, that is presumed to be the only source of local inpatient hospital care to area residents by nature of their isolated location, weather conditions, travel conditions, or absence of other hospitals. Federally designated SCHS receive special considerations under Medicare's prospective payment system.

Solid tissue graft: A piece of tissue placed into the brain or spinal cord; such tissue contains more than one type of cell and therefore may be more likely than a cell suspension to provoke an immune response. See endothelial cell; compare cell suspension.

Somatic: A term used to refer to body tissues apart from reproductive (germinal) tissues.

Somatic cell: Any cell in the body except reproductive cells and their precursors.

Somoclonal variation: Genetic variation produced from the culture of plant cells from a pure breeding strain; the source of the variation is not known.

Southern blotting: A laboratory procedure for transferring DNA fragments from an agarose gel to a filter paper without changing their relative positions; used to identify specific DNA fragments and to diagnose certain disorders associated with genetic changes (e.g., hemoglobinopathies and some forms of cancer).

Spatial resolution: The ability to distinguish two adjacent structures.

Specialty chemical: A compound produced by only one company. Compare commodity chemical.

Species: A category of living things subordinate to a genus and higher than a subspecies or variety, composed of individuals with common characteristics that distinguish them from other groups of the same taxonomic level; in sexually reproducing organisms, a group of interbreeding natural populations that are genetically distinct from other such groups.

Species barrier: The idea that there is a natural reproductive barrier between species that preserves their integrity or identity.

Species complex: A group of two or more closely related species that can only be differentiated by cytogenetic analysis or cross-breeding experiments.

Species integrity: The idea that a species has integrity as a biological unit. This would have to be based on the identity of the genetic material carried by the species. However, it is not clear how a species might be defined genetically, and this issue is the subject of debate among those seeking to understand the nature of species.

Specificity: One measure of the validity (or accuracy) of a diagnostic or screening test: the percentage of all those who do not have the condition being tested for who are correctly identified as negative by the test. Operationally, it is the number of negative test results divided by the number of patients that actually have the disease (tree-negatives divided by the sum of tree-negatives plus false-positives). Compare sensitivity.

Spectrogram: Graphic depiction of the individual components of nuclear magnetic resonance signals from phosphorous-containing compounds arranged according to frequency.

Sperm: The male reproductive cell, or spermatozoon. Normal human sperm have symmetrically oval heads, stout midsections, and long tapering tails. They are produced in the testes and carried out in the semen. Sperm fertilize the female ovum during reproduction.

Sperm bank: A place in which sperm are stored by cryopreservation for future use in artificial insemination.

Sperm motility: The ability of a sperm to move normally.

Sperm washing: The dilution of a semen sample with various tissue culture media in order to separate viable sperm from the other components of semen.

Sphincter: A band of muscle fibers that constrict a passage or close a natural opening in the body (e.g., in the genito-urinary system, the ring-like band of muscular fibers around the urethra that constricts and relaxes to regulate the flow of urine).

Spin of one-half: A quantum nuclear spin number of one-half to describe the rotation of the hydrogen nucleus.

Spin-casting: A technique for manufacturing contact lenses, in which the lens material, in soft form, is placed in a cup-like mold, and the desired lens curvatures are achieved by spinning the mold at an appropriate speed.

Spina bifida: A birth defect of unknown cause that results in incomplete or improper development of the spine, usually associated with the protrusion of the spinal cord through the bony spine.

Spinal cord: The part of the central nervous system enclosed in the vertebral column extending from the medulla oblongata in the brain to the lumbar vertebrae, connecting all parts of the body with the brain; consists of 31 pairs of spinal nerves (motor and sensory nerves) arising from it and distributed to the body as the peripheral nervous system; contains a hollow core of grey matter surrounded by an outer layer of white matter, with its central cavity filled with cerebrospinal fluid. See brain, central nervous system.

Spontaneous abortion: See abortion.

Spontaneous mutation: In the absence of any known causative agent, a change in the structure of DNA or in the number of chromosomes. Also called a "background" mutation. Also see mutation.

Spontaneous regression (or remission): In cancer, the disappearance (complete regression) or diminishing by at least 50 percent in size (partial regression) of a tumor without any identifiable cause (i.e., without medical intervention).

Sporozoite: A life cycle stage of the malarial agent Plasmodium; this is the stage injected by the mosquito vector into the vertebrate host's bloodstream.

Staghom stone: A large kidney stone that fills several calices, giving it a dramatic "staghorn" appearance in X-rays.

Staging: The definition of distinct phases or periods in the course of disease. In oncology, the classification of cancer according to the size of the primary tumor, node involvement, and metastasis.

Standard Industrial Classification (SIC) codes: A categorization of data on products and companies that is used by the U.S. Department of Commerce. Establishments (plants) are assigned to SIC "industries" on the basis of their primary line of business. However, SIC data on shipments of a specific product include all shipments of the relevant product, regardless of the "industry" in which the producing establishment is classified.

Standard risk: In insurance, a person who, according to an insurer's underwriting criteria, is entitled to purchase insurance coverage without extra premium or special restriction.

Standard therapy: Medical treatment or intervention currently being used and considered to be effective based on previous evaluation or common usage.

Standards issued after rulemaking (OSHA): Health and safety standards issued by the Occupational Safety and Health Administration (OSHA) using the procedures established by section 6(b) of the Occupational Safety and Health Act (Public Law 91-596). These procedures require that OSHA provide notice of intended changes and an opportunity for public comment.

Startup standards (OSHA): The initial group of standards adopted by the Occupational Safety and Health Administration under section 6(a) of the Occupational Safety and Health Act (Public Law 91-596). These consisted of established Federal standards and consensus standards.

State and county mental hospital: A psychiatric hospital that is under the auspices of a State or a county government, or operated jointly by both a State and county government.

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 beads 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.

State Mental Health Agencies (SMHAS): Agencies under the auspices of State governments, staffed through the State, and offering mental health services to any State resident in need of mental health care. State mental health agencies may supervise State mental hospitals, CMHCS, RTCS, and/or day treatment facilities.

State unit on aging: A State agency designated under the provisions of the Older Americans Act to formulate a plan for developing the system of community services envisioned by the act and to oversee

the use of Older Americans Act funds in the State. Currently, there is a State unit on aging in each of the 50 States, the District of Columbia, and 7 territories.

States' regional Alzheimer's diagnostic and assessment centers: Regional centers established by States to provide diagnosis, a comprehensive assessment, and a plan of care for people suspected of having Alzheimer's disease or a related disorder. Some also provide services, such as medical treatment, psychiatric treatment, adult day care, caregiver education and training, and caregiver support groups, and most centers assist in locating and arranging services for their clients. Many of the centers also conduct biomedical and clinical research.

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 1 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.

Status dropout rate: See dropout rate.

Status offenses: Acts that are legal offenses solely because they are committed by a juvenile, such as running away from home and truancy.

Stem cells: Undifferentiated cells in the bone marrow with the ability both to replicate and to differentiate into specific hematopoietic (blood) cell lines.

Stenosis: A narrowing or constriction of a bodily passage or orifice.

Stereotactic surgery: A type of brain surgery; specifically, the implantation of tissue into the brain by means of a needle inserted through a small hole in the skull.

Stereotyped movement disorders: Psychophysiological disorders characterized by involuntary movements of bodily parts (i.e., tics).

Stimulants: Psychoactive substances that stimulate the central nervous system, including amphetamines, caffeine, and heroin.

Strain: A group of organisms of the same species having a distinctive quality or characteristic (biochemical, pathogenic, or other) that can be differentiated, but is not different enough to constitute a separate species. See cultivar.

Strategic planning: A rational process by which a health care organization (e.g., hospital) determines its best course of action. This involves effectively balancing community needs for health services with the organization's strengths and ability to use available resources, and producing practical plans to implement strategies that are financially feasible and acceptable to consumer needs (American Hospital Association definition).

Stratification: In randomized clinical trials, the categorization of individuals for the purpose of adjusting the groups to take into account unequal distribution of characteristics of prognostic importance. Stratifcation may be used during patient allocation, creating subgroups within which individuals are

randomized to treatments; or stratification may be applied during data analysis to statistically adjust for differences between the groups.

Street kid: A long-term runaway, thrownaway, or otherwise homeless child or adolescent who has become adept at fending for him or herself "on the street," usually by illegal activities.

Stress incontinence: See incontinence.

Striatum, corpus striatum: Part of the basal ganglia located in the cerebral hemisphere of the brain, consisting of the caudate nucleus and the lentiform nucleus; the striatum receives dopamine from cells in the substantial nigra. See substantial nigra.

Stroke: Loss of sensation, movement, or function caused by a sudden interruption of the blood supply or a leakage of blood in the brain. This can be caused by heart failure, blockage of arteries (cerebral thrombosis or cerebral embolism), or hemorrhage in the brain. This condition is often followed by permanent neurological damage and is a leading cause of death in developed countries.

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 in their absence, that providers will perform poorly. This assumption in turn raises the question whether specific structural characteristics are in fact associated with better processor outcome.

Structure-activity relationship: The relationship between a chemical's structure and the biochemical changes it induces.

Stump: The part of a limb left after amputation.

Subchronic exposure: See duration of exposure, frequency of exposure.

Subchronic toxicity test: Repeated-dose toxicity test of intermediate duration, with exposure to a test substance for 3 to 6 months.

Subcutaneous: Beneath the skin.

Subjective distress: Feelings of sadness, hopelessness, discouragement, boredom, stress, dissatisfaction, or being worn out or exhausted, that are self-reported by individuals but are not necessarily symptoms of diagnosable mental disorders

Substance: Term used for alcohol, tobacco, and illicit drugs.

Substance dependence: A mental disorder in which a person has impaired control of psychoactive substance use and continues use despite adverse consequences. It is characterized by compulsive behavior and the active pursuit of a lifestyle that centers around searching for, obtaining, and using the drug.

Substance use/abuse disorders: In children, a set of mental disorders characterized by maladaptive behavioral changes resulting from regular use of substances that affect the central nervous system. In adults, the physical or mental problems resulting from overindulgence in and dependence on a stimulant, depressant, or other chemical substance.

Substandard risk: A person that does not meet the normal health requirements of a standard health insurance policy and whose coverage is provided with a higher premium and/or exclusion waiver.

Substantial nigra: A darkly pigmented structure in the brain containing a group of neurons that use dopamine as their transmitter in a projection to the basal ganglia (a structure involved in the coordination and initiation of movement). A deficit of dopamine in this projection is characteristic of Parkinson's disease and produces its motor symptoms. See Parkinson's disease.

Substantial violation: A pattern of care over a substantial number of cases that is inappropriate, unnecessary, does not meet the recognized standard 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 violation occurred. Compare gross and flagrant violation.

Substantially equivalent device: A device first marketed after the 1976 Medical Device Amendments (Public Law 94-295) that the Food and Drug Administration has found to be similar to a device already being marketed. To be found substantially equivalent, a postamendments device need not be identical to a preamendments device, but must not differ markedly in materials, design, or energy source.

Subunit vaccine: A vaccine that contains only portions of an antigenic molecule from a pathogen. Subunit vaccines can be prepared by using recombinant DNA technology to produce all or part of the antigenic molecule or by artificial (chemical) synthesis of short peptides.

Suctioning: Aspiration of fluid by mechanical means. For example, in children with breathing difficulties, suctioning is used to remove secretions from the airway and is particularly important when the child has a tracheotomy tube (artificial airway) that could be blocked by these secretions,

Sudden Infant Death Syndrome (SIDS): The sudden and unexpected death of an apparently normal, healthy infant, usually during sleep, with no identifiable signs of illness or cause of death determined at autopsy. SIDS occurs in 1 in 300 to 350 livebirths. Multiple risk factors have been proposed, but none has yet been linked definitively with the syndrome.

Suicide: The taking of one's own life.

SuperPRO: An independent organization, working under contract to HCFA, that re-reviews a sample of the patient records evaluated by each of the 54 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.

Supplemental Security Income (SSI): A Federal income support program for low-income disabled, aged, and blind persons. Eligibility for the monthly cash payments is based on the individual's current status without regard to previous work or contributions to a trust fund. Some States supplement the Federal benefit.

Support group: See caregiver support group.

Surfactant: See pulmonarv surfactant.

Surrogate decision: A decision made on behalf of another person, in particular a person who is decisionally incapable. Court rulings and legal analysis of decisions about the use of life-sustaining technologies have identified two standards to guide surrogate decisionmaking: 1) the "best interest standard" (which requires the surrogate to make decisions from the perspective of a hypothetical reasonable person, using objective, societally shared criteria); and 2) the "substituted judgment standard" (which requires the surrogate to make decisions from the perspective of the patient, using the patient's personal values and preferences).

Surrogate decisionmakers: Persons responsible for making decisions concerning an individual's health care, lifestyle, and estate once the individual is incapable of making those decisions. A surrogate decisionmaker can be a court-appointed conservator or guardian, or someone legally designated by the individual before he or she became incompetent. De facto surrogates (often spouses or other family members) assume these powers for an incapacitated individual without being formally or legally charged to do so. The limits on the types of decisions that can be made by surrogate decisionmakers vary from State to State.

Surrogate gestational mother: A woman who gestates and carries to term an embryo to which she is not genetically related, with the intention of relinquishing the child at birth.

Surrogate mother: A woman who is artificially inseminated and carries an embryo to term, with the intention of relinquishing the child at birth.

Surveillance: In epidemiology, ongoing scrutiny of a population for the occurrence and spread of disease.

Survival sex: Engaging in sexual intercourse in exchange for food, shelter, money, or drugs.

Swing beds: Licensed acute-care beds designated by a hospital to provide either acute or long-term care services. A hospital qualifying to receive Medicare and Medicaid reimbursement for care provided to swing bed patients must be located in a rural area (as defined by the U.S. Bureau of the Census), have less than 100 acute care beds, and when applicable must have received a certificate of need for the provision of long-term care services from its State health planning and development agency.

Symbiosis: In parasitology, the living together or close association of two dissimilar organisms.

Synapse: An area across which signals are passed from the axon terminals of a neuron to the membrane of an adjacent neuron or effecter cell (e.g., muscle or gland cell). Synapses may be "chemical," using a neurotransmitter to transmit the signal across a small gap between the membranes, or "electrical," in which the neuron's cytoplasm is actually joined with that of the adjacent cell, forming a bridge or "gap junction."

Synaptic cleft or space: A narrow gap between two adjacent neurons into which neurotransmitters are secreted. See neurotransmitter.

Synaptic sprouting: A process of limited regrowth following damage to the central nervous system whereby fibers from nearby, undamaged axons form new branches and establish new synapses to replace some of the lost ones.

Synergism: Cooperative interaction of substances producing a level of activity that is greater than the sum of the activity of the substances acting separately.

Syphilis: A sexually transmitted disease caused by the bacterial agent Treponema pallidum, resulting in symptoms including chancre (primary syphilis); skin rash, malaise, anorexia, nausea (secondary syphilis); and eventually, central nervous system abnormalities and other serious problems (tertiary syphilis).

Systemic: Pertaining to or affecting the body as a whole.

T4/T8 cell ratios: The ratio of T4 lymphocytes (helper cells) to T8 lymphocytes (suppressor cells). Individuals with AIDS have a deficiency of T4 cells and a reversal of the usual ratio of T4 and T8 cells.

T cell: A lymphocyte produced in the bone marrow that matures in the thymus and is integral to cell-mediated immunity. T cells regulate the growth and differentiation of other lymphocytes and are involved in antibody production. See lvmphocvte.

T-lymphocytes: See lvmphocvtes.

T-test: An estimate of the difference between the mean values of one parameter of two treatments. This test can be useful when the number of comparisons is small, but the potential for error increases with the number of parameters compared.

Targeted motility method: An approach to quality assessment in which deaths in certain types of cases are targeted for review. Examples include deaths in primary procedures or diagnosis related groups (DRGs) with an average death rate of less than 5 percent, deaths occurring within 1 day of any procedure, and deaths in which bums are reported as a secondary diagnosis.

Tax-exempt revenue bonds: Bonds generally are evidence of a debt in which the issuer (borrower) promises to repay the bond's holder. A revenue bond is issued by a government (borrower) to taxpayers (bondholder) to raise funds in anticipation of tax receipts, and then repaid from tax revenues once they are received. Most bonds issued by governments are tax-exempt, that is, the bondholder pays no Federal income tax on interest earned.

Taxonomy: The study of naming and describing species of plants and animals and classifying them according to their presumed natural characteristics and relationships.

Tay-Sachs disease: An autosomal recessive genetic disorder of lipid metabolism resulting in developmental retardation, paralysis, dementia, blindness, and death, usually before age three. It is caused by a mutation in the gene for hexosaminidase A, an enzyme that degrades certain sphingolipids in the brain. Symptoms are caused by an accumulation of cerebral gangliosides, fatty acid and sugar molecules found in the brain and nervous tisssue. The Tay-Sachs gene is found mainly among Ashkenazic Jews of Eastern European origin.

TDR diseases: The six diseases singled out for attention by the Special Program for Research and Training in Tropical Diseases (TDR): malaria, schistosomiasis, trypanosomiasis, filariasis, leishmaniasis, and leprosy.

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

Technology: The application of organized knowledge to practical ends.

Technology assessment: In general, 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, however, the term more often is used to mean any form of policy analysis concerned with medical technology, especially the evaluation of efficacy and safety.

Technology-dependent children: Those children who use a medical technology (embodied in a medical device) that compensates for the loss of normal use of a vital body function, and who require substantial daily skilled nursing care to avoid further disability. Such care may be provided by nonprofessional caregivers, such as family members.

Technology diffusion: The diffusion or spread of a medical technology into the health care system.

Temporal subtraction: The use of digital subtraction imaging (e.g., digital subtraction angiography) to show changes in the contrast appearance of the body part or tissues (e.g., arteries) overtime.

Teratogen: Physical or chemical agents, (e.g., thalidomide, radiation, alcohol, and certain viruses) that act on the fetus in utero to cause congenital malformations.

Teratogenic: Capable of inducing the formation of developmental abnormalities in a fetus.

Terminal: In cancer prognosis, forecasting death due to the growth and progression of the cancer.

Test rule: A statement written by EPA of what chemical or chemicals in a compound must be tested by the manufacturer and how they are to be tested. Test rules are written under the Toxic Substances Control Act when it can be shown both that inadequate data on the effects of a compound exist and that testing is required to obtain such data.

Testes: Also known as the testicles, the paired male sex glands in which sperm and the steroid hormone testosterone are produced.

Testicular biopsy: The excision of a small sample of testicular tissue for microscopic evaluation.

Testosterone: A steroid hormone, or androgen, produced in the testes that affects sperm production and male sex characteristics.

Tetanus: An acute, potentially fatal disease of the central nervous system caused by infection of a wound with spores of the bacterium Clostridium tetani; these spores release a poisonous neurotoxin that causes trismus ("lockjaw"), generalized muscle spasm, arching of the back, glottal spasm, seizures, respiratory spasms, and paralysis. Short-term immunity can be derived through vaccination.

Tetramer: A molecule composed of 4 subunits (e.g., a protein such as hemoglobin composed of 4 globin chains bonded together).

Thalamus: One of 2 egg-shaped collections of nuclei located in the cerebral hemispheres in each side of the forebrain; relays sensory messages to the cerebral cortex; with all sensory paths (except the sense of smell) linked to nuclei within the thalamus, this region is probably involved in the development of conscious awareness of sensations (e.g., touch, pain, temperature).

Thalassemia: A heterogeneous group of autosomal recessive genetic disorders of hemoglobin synthesis. The thalassemias are characterized by the absence or reduced output of one or more of the globin chains of hemoglobin, resulting in small, pale red blood cells, anemia, and the accumulation of unpaired globin chains. The 4 main categories are alpha, beta, and delta-beta thalassemia, and hereditary persistence of fetal hemoglobin (HPFH). The thalassemias are found mainly in people of Mediterranean, Middle Eastern, and Asian descent.

Therapeutic community (TC): Residential treatment programs lasting approximately one year or more and characterized by a highly structured and confrontational approach. The TC philosophy views drug abuse as a reflection of personality problems and chronic deficiencies in social, educational, and marketable skills.

Therapeutic foster care: A type of mental health care optimally involving the following features: 1) placement of a child with foster parents who have specifically been recruited to work with an emotionally disturbed child or adolescent; 2) provision of special training to the foster parents to assist them in working with the child; 3) placement of only one child in each special foster home (with occasional exceptions); 4) a low staff to client ratio, thereby allowing clinical staff to work very closely with each child, with the foster parents, and with the biological parents if they are available; 5) creation of a support system among the foster parents; and 6) payment of a special stipend to the foster parents for working with the emotionally disturbed child or adolescent, and for participating in the training and other program activities. Regarded as the least restrictive of residential mental health services.

Therapeutic group care: A type of mental health care provided in homes which typically serve anywhere from 5 to 10 children or adolescents, and provide an array of therapeutic interventions and a therapeutic environment.

Therapeutic research: Studies involving human subjects that are designed to cure or palliate a disorder existing in those subjects.

Therapeutic technology: A technology that cures or relieves the symptoms of a disease or other medical condition.

Third-generation testing: A level of testing that is three times as specific as the first test introduced.

Third-party administrators (TPAs): A term originally used in the Taft-Hartley legislation of 1947 to designate an entity that is neither union nor management but administers joint labor-management welfare and pension funds. In self-insured health plans, TPAs typically provide administrative services such as medical claims processing, utilization and charges review, and data processing and reporting.

Third-party payer: Private insurers or government insurance programs that pay providers for medical care given to patients they insure, either directly or by reimbursing patients for payments they make.

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

Threshold limit value (TLV): Maximum airborne concentrations of toxic substances set as guidelines by the American Conference of Governmental Industrial Hygienists.

Threshold limit value (TLV): That concentration (by volume in air) of a hazardous substance to which the majority of industrial workers may be repeatedly exposed every day without adverse effects; set by the American Conference of Governmental Industrial Hygienists. Compare reference dose (RfD].

Threshold: In toxicology, the highest dosage at which no effect is observed. Compare no-threshold.

Thrombin: An enzyme that induces blood clotting by converting fibrinogen to fibrin. Thrombin is formed in blood from prothrombin, calcium, and thromboplastin.

Thrombocytapheresis: See plateletapheresis.

Thrombocytes: See platelets.

Thrombosis: The abnormal development of a blood clot (thrombus) inside an intact blood vessel, which can be life-threatening if it obstructs the blood supply to the brain (leading to stroke), heart (leading to myocardial infarction), or other organs (leading to tissue damage or loss of function); the presence of such clots also raises the risk that part of the clot (an embolus) may break off and travel to a dist 6Xoff an artery or vein, causing thrombophlebitis or deep vein thrombosis. Factors contributing to thrombosis

include atherosclerosis, an increase in coagulation factors, or a deficiency of anticlotting factors in the blood.

Thrownaway: A child or adolescent who has been told to leave the household, has been abandoned or deserted, or who has run away and no effort has been made to recover him or her.

Thymus: A ductless gland-like organ of the lymphatic system located in the upper chest region. As a central lymphoid organ, the thymus is necessary for the development and maintenance of immunologic competence. In infants, the development of lymphoid tissue and the immune response to foreign material occurs in the thymus. It later becomes the site for maturation and differentiation of T-Lymphocytes.

T-Wed testing: A strategy for identifying the toxicological effects of a substance by proceeding from general toxicity tests to progressively more specific and sophisticated tests.

Time-weighted average: An average, over a given (working) period of a person's exposure, as determined by sampling at given times during the period.

Tissue culture: The propagation of collections of specialized cells (e.g., fibroblasts) removed from organisms in a laboratory environment that has strict sterility, temperature, and nutrient requirements; a tool for studying physical, biochemical, and genetic factors that determine growth and development of cells, both normal and transformed (cancerous).

Tissue plasminogen activator (tPA): A clot-dissolving substance produced naturally by cells in the walls of blood vessels, acting by converting plasminogen to plasmin, which breaks down fibrin (the main component of clots); also manufactured synthetically by genetic engineering techniques; used therapeutically to remove blood clots in coronary arteries in patients with myocdial infarction, severe, progressive angina pectoris, and arterial embolism.

Titer: The lowest concentration (highest dilution) of an active substance (e.g., antibody in serum) that causes a discernible reaction with another substance; also a measurement of the concentration of a substance in a solution.

Title X: See familv plannina programs authorized bv Title X of the Public Health Service Act.

Tocodynamometry, ambulatory: A device for detecting and recoding uterine contractions, used to detect premature labor in early stages when, theoretically, technologies for stopping labor may be more effective.

Tocolytic: Stopping premature labor during pregnancy,

Tolerance level: In toxicology, the maximum permissible concentration of a toxic substance in or on food, water, or air as set by a regulatory agency. Compare action level.

Tolerance: Increasing resistance to the effects of a drug. An outstanding characteristic of opiates and amphetamines, it results in a need for increasing dosage to maintain or recapture the desired drug effect.

Tomographic scan: The X-ray image of a single cross-section of tissue from the body.

Tone lenses: See contact lenses.

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. A legal basis for compensation when property has been damaged or a person has been injured. The tort liability system determines fault and awards compensation for civil wrongs, including medical malpractice.

Total hospital margin: A measure of hospital profitability, calculated as (total revenues minus total costs) divided by total revenues. Total revenues include private contributions and public subsidies as well as patient care and other revenue.

Toxic dementia: Dementia caused by exposure to toxic substances, such as alcohol (associated with over a dozen forms of brain disease), or chronic exposure to heavy metals.

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.

Toxicity Testing: The testing of substances for poisonousness to determine the severity of adverse effects or illness and to establish conditions for their safe use.

Toxicology: The study of the harmful effects of chemical and physical agents on living systems.

Toxin: A substance, produced in some types of microorganisms, that is toxic to other living organisms. See endotoxin and exotoxin.

Trachea: The airway tube in the neck extending from the back of the mouth and nose to the bronchial tubes through which air is conveyed to the lungs.

Tracheotomy: A surgical opening into the trachea through which an indwelling tube is inserted for attachment to a mechanical ventilator.

Trachoma: A chronic, contagious disease of the eye *caused* by infection by the bacterium Clamvdia trachomatis. The disease is characterized by inflammatory granulations on the mucous membrane covering the inner surface of the eyelid and invading the cornea; if untreated, trachoma can lead to complications that cause blindness. Trachoma is a significant cause of blindness, particularly in hot, dry, areas.

Tracking: The assigning of students to a particular curricular track, usually on the basis of estimated ability.

Trait: A distinguishing feature; a characteristic or property of an individual.

Tranquilizer: An agent that quiets, calms, and reduces anxiety and tension, with some alteration of the level of consciousness. Major tranquilizers include antipsychosis drugs; minor tranquilizers include antianxiety drugs.

Tranquilizers: See sedatives.

Transcription: In genetics, the process by which RNA is formed from a DNA template during protein synthesis. Compare translation.

Transduction: The process of genetic recombination by which DNA is transferred from one cell to another using a viral vector.

Transfer Act: Legislation (42 USC sections 2001 et seq.) that transferred responsibility for Indian health care from the Bureau of Indian Affairs, in the Department of Interior, to the Public Health Service, in what is now the Department of Health and Human Services, creating the Indian Health Service in 1955.

Transfer RNA (tRNA): Any of 20 kinds of specialized RNA molecules that transfer the genetic code from messenger RNA to proteins by combining with a specific amino acid and bringing it to the ribosome where proteins are assembled.

Transferring: A plasma protein essential for the transport of iron.

Transformation: In genetics, the introduction and assimilation of DNA from one organism into another via uptake of naked DNA; in oncology, the process by which normal cells become malignant.

Transgenic animals: Animals whose DNA has been altered by adding DNA from a another animal or a human, using recombinant DNA techniques.

Transient ischemic attack: A brief interruption of blood flow due to functional constriction or actual obstruction of a blood vessel in an artery, usually in one leading to the brain or heart; causes temporary loss of vision, weakness, numbness, loss of speech or sensation, or unconsciousness; if it lasts longer than 24 hours, it is considered to be a stroke.

Transitional devices: Devices that were regulated as new drugs before enactment of the 1976 Medical Device Amendments (Public Law 94-295). Such devices are automatically classified into Class III, which requires premarket approval, but maybe reclassified into Class I or II.

Translation: The process in which the genetic code contained in the nucleotide base sequence of messenger RNA directs the synthesis of a specific order of amino acids to produce a protein. Compare transcription.

Transmissible dementia: Dementia associated with diseases caused by unusual infectious agents. Examples are Creutzfeldt-Jakob disease, Gerstmann-Strassler syndrome, and kuru.

Transmission: In infectious disease, the passage of a pathogen from one host to another host or from vector to host.

Transplantation: With respect to human organs, the transplanting of a healthy organ (e.g., kidney, cornea, liver, skin, etc.) from one person to another (or from one body part to another) to replace a diseased organ or to restore functioning.

Transposable elements: In genetics, a class of DNA molecules capable of being inserted into the chromosomes of the host organism at numerous positions, and of moving from one position to another. Speculation on the origin of these molecules suggests that they may be derived from virus-like ancestors. They have been called "parasitic" DNA.

Transposase: An enzyme involved in the movement of DNA segments from one site in the genome to another.

Transposon: A gene or a group of genes that transfer genetic instructions (e.g., by spontaneously moving from one chromosome to another and from one position to another on the same chromosome).

Transurethral: Through the urethra. Refers to treatment procedures that use instruments passed up the urinary tract, rather than through a surgical incision.

Traumatic brain injury: Injury to the brain occurring as the result of impact.

Treatment IND: A provision of the Federal Food, Drug and Cosmetic Act that allows patients with life-threatening or serious diseases to obtain certain drugs that are in late stages of clinical testing, but have not yet been approved by FDA for marketing.

Treatment: Interventions intended to cure or ameliorate the effects of a disease or condition once the condition has occurred.

Trematode: Any of a group of parasitic flatworms, including the flukes, of the phylum Platyhelminthes. Schistosomes are important human trematode parasites.

Tribal groups: See Indian tribes.

Tribal trust land: Lands held in trust for Indian tribes and administered for their benefit by the Federal Government. See also trust responsibility.

Triplet: In genetics, three consecutive nucleotide bases along a nucleic acid chain (DNA or RNA). See codon and anticodon.

Trisomy: The presence of an extra chromosome, resulting in three homologous chromosomes instead of two (e.g., Down syndrome can result from Trisomy 21, or the presence of an extra chromosome number 21 in each body ceil).

tRNA: See transfer RNA.

Trophic factor: A chemical that promotes the growth of axons and the survival of neurons.

Tropic factor: A chemical that provides a surface or substrate for axon growth and guides the axon toward its target.

Trust responsibility: The responsibility assumed by the Federal Government, by virtue of treaties, statutes and other means, legally associated with the role of trustee, to recognize, protect, and preserve tribal sovereignty and to protect; manage, develop and approve authorized transfers of interests in trust resources held by Indian tribes and Indian individuals.

Trypanosoma: A genus of slender, polymorphic, parasitic protozoans that cause trypanosomiasis.

Trypanosomiasis: Any of several diseases caused by infection with species of the genus Trypanosoma. The important human diseases are African sleeping sickness (also called African trypanosomiasis) and Chagas' disease (also called American trypanosomiasis). African sleeping sickness is caused by T. brucei rhodesiense in east Africa or T.b. gambiense in west Africa, both transmitted by the tsetse fly. Chagas' disease is caused by T. cruzi, transmitted by blood-sucking reduviid bugs.

Tsetse flies: Any of several two-winged flies of the genus Glossina that occur in Africa south of the Sahara; medically important as vectors of African trypanosomiasis.

Tubal ligation: The sterilization of a woman by tying and surgically dividing each Fallopian tube.

Tubercle bacillus: A bacillus causing tuberculosis; usually refers to Mycobacterium tuberculosis, the principal cause of human tuberculosis.

Tuberculoid leprosy: See leprosy.

Tuberculosis: A chronic infectious disease of humans and animals caused by any of several species of mycobacteria. It usually begins with lesions in the lung, but can metastasize (spread) to other parts of the body.

Tumor marker assays: Assays (e.g., immunoassay) that detect tumor-produced proteins.

Tumor: A new growth of tissue in which the multiplication of cells is uncontrolled and progressive. Also called neoplasm.

Type 1 error: See p value.

Type II error: See statistical power.

Typing and screening (T&S): Determining ABO and Rh blood groups and screening of blood for unexpected antibodies prior to transfusion.

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.

Ulcerated plaques: Breaks in the yellowish plaque formed within the intima and inner media (innermost and middle coats of the blood vessels) of large and medium-sized veins.

Ultrasound: A diagnostic and imaging technique in which high-frequency sound waves are used to build a picture of internal organs or of a fetus. Ultrasound has many uses in obstetrics to view the uterus and fetus during pregnancy, and is also used in diagnostic radiology to detect abnormalities such as gallstones, heart defects, and tumors.

Unaccredited: See accreditation by JCAHO.

Unapproved drug: A drug that has not been approved by the FDA for marketing in the United States.

Unassigned liability: The difference, if any, between a physician's actual charge for a service on an unassigned claim and the Medicare approved charge for that service.

Uncertainty factor: See safety factor.

Uncompensated care costs: Deductions from patient care revenues that are attributable to charity care and bad debts (for which the health care facility never expects to receive payment).

Unconventional Cancer Treatment: A wide variety of treatments that fall outside the bounds of mainstream medicine. Other terms used by proponents of such treatments to describe all or some of these treatments include: alternative, complementary, non-toxic, holistic, natural, and non-invasive. Those used by the sharpest of critics include: unproven, questionable, dubious, quackery, and fraudulent. The term unorthodox is used at times by both proponents and critics.

Underwriting: The process by which an insurer determines whether or not and on what basis it will accept an application for insurance.

Unprotected sexual intercourse: Sexual intercourse without precautions taken to prevent pregnancy or the transmission of AIDS or sexually transmitted diseases.

Unusually high-needs criteria: Criteria specific to the type of HMSA (i.e., primary care, dental, psychiatric) that are indicative of an unusually high need for medical care (e.g., poverty rates, population without fluoridated water supply, and high prevalence of alcoholism).

Update factor: DRG updating consists of an annual increase (or decrease) in all prices by an update factor that determines the overall generosity of the system. Inflation in the hospital sector and other factors not captured by inflation measures (known as the 'discretionary adjustment factor") are the two components of the update factor.

Upper brain: The portion of the brain between the cerebral cortex and the brain stem. See brain stem, cerebral cortex.

Upper respiratory tract infection (URTI): See acute respiratory infections.

Urban Indian programs: Programs administered by urban Indian organizations and supported with Indian Health Service funds that operate health centers and help urban Indians gain access to other programs for which they might qualify, such as Medicaid and other public assistance sources.

Uremia: The presence of excessive amounts of urea and other waste products in the blood, an abnormality that occurs during renal failure.

Ureter: One of the two tube-like structures that carry urine from the kidneys to the bladder.

Ureterolithotomy: The surgical removal of stones from the ureter.

Urethra: The tubular structure through which urine passes from the bladder out of the body; in males, also serves to transport semen.

Urinary bladder The hollow, muscular organ that collects urine from the ureters and stores it until the urine is discharged through the urethra during urination.

Urinary incontinence: An involuntary loss of urine sufficient in quantity and/or frequency to be a social or health problem. Also see incontinence for more information on the types of urinary incontinence.

Urinary tract: The organ system involved in the formation and excretion of urine; consists of the kidneys, ureters, bladder, and urethra.

Urodynamic testing: Testing that pertains to the flow and motion of urine in the urinary tract.

Usual charge: See usual, customary and reasonable charges.

Usual, customary, and reasonable charges: In private health insurance, a basis for determining payment for individual physician services. This approach was developed in the early 1980s before the introduction of Medicare, and was adapted by Medicare as the model for CPR. 'Usual" refers to the individual physician's fee profile, equivalent to Medicare's "customary" charge screen. "Customary," in this context, refers to a percentile of the pattern of charges made by physicians in a given locality (comparable to Medicare's "prevailing" charges). "Reasonable" is the lesser of the usual or customary screens.

Uterine lavage: A flushing of the uterus to recover a preimplantation embryo.

Uterine prolapse: Descension of the uterus down into the vagina, caused by weakening of the support ligaments and muscles that hold the uterus in place.

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.

V

Vaccination: The deliberate introduction of an antigenic substance (vaccine) into an individual, with the aim of producing active immunity to a disease. Compare immunization.

Vaccine: A preparation of living, attenuated, or killed bacteria or viruses, fractions thereof, or synthesized antigens identical or similar to those found in the disease-causing organisms, that is administered to produce or increase immunity to a particular disease.

Vaccinia virus: The organism that causes cowpox; its injection into humans results in immunity to the related smallpox virus.

Vaginismus: Painful, involuntary contraction or spasm of the muscles around the outer third of the vagina, interfering with sexual intercourse.

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 technology to the outcome of interest in the study subjects. 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:** 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, rather than to other factors not accounted for in the study. Internal validity is relevant to both measurement studies and studies of causal relationships.

Values history document: A document that expresses a person's wishes, values, and preferences with respect to his or her care.

Varicella: Chickenpox,

Varicocele: An abnormal twisting or dilation of the veins surrounding the spermatic cord that carries blood from the testes back to the body; a varicose vein of the testis. It occurs more commonly in the left testis. Varicocele may result in a low sperm concentration in the semen and infertility in some cases.

Vas deferens: In males, the convoluted, narrow duct that carries and stores sperm from the testis and epididymis to the seminal vesicles.

Vascular access site: Pertaining to entry into the blood vessel system.

Vascular dementia: Dementia resulting from brain damages caused by cerebral infarction, or other diseases of disorder due to the blood vessels. Vascular dementia is the second largest cause of dementia in the United States.

Vasectomy: Sterilization of a man by surgical excision of a part of the vas deferens.

Lasography: An x-ray examination of the vas deferens by injection of dye through a small incision. X-rays are taken giving an outline of the sperm transport system.

Vector: A transmission agent: 1) a carrier of disease; usage commonly refers to arthropods (e.g., mosquitoes, sandflies, ticks) or rodents; 2) in recombinant DNA technology, the DNA molecule used to introduce foreign DNA into host cells; vectors include plasmids, bacteriophages, and other forms of DNA.

Vector bionomics: The study of the habits (feeding, resting, and breeding) of vectors of disease and variations among different strains and in different locales.

Vector control technology: A technology aimed at controlling vectors (that transmit disease) or other organisms (e.g., snails) that are not true vectors but serve as intermediate hosts of human or other animal disease organisms.

Vector-borne disease: A disease transmitted by an insect or other vector (e.g., malaria, trypanosomiasis, and arboviral infections).

Venereal disease: See sexually transmitted disease.

Ventilator: An automatic cycling device used to assist in or control respiration by delivering an appropriate volume of gas to the respiratory airways. Ventilators are classified according to the manner in which the air intake phase of the respiration cycle is ended-by reaching a predetermined volume of gases, by reaching a predetermined pressure, or by reaching a prescheduled time.

Ventricle: A small cavity. Most commonly, the term is used to refer to the right and left ventricles of the heart. The left ventricle is the chamber from which blood is pumped to the aorta and then to the arteries (and therefore to the tissues of the body). The right ventricle is the chamber from which blood that has returned to the heart is pumped to the lungs to be oxygenated.

Ventricular angiogram: A radiologic image of the ventricles of the heart obtained following the injection of a contrast dye.

Ventriculography: Imaging of the ventricles of the heart.

Vertical transfer: The passage of genetic material from one organism to another through the germ line, (i.e., sexual mechanisms); in bacteria, through replication of genome and cell division.

Very low birthweight: Birthweight of less than 1,500 grams (3 lb. 5 oz.).

Viable fetus: See fetus. viable.

Vibrio cholerae: The bacterium that causes cholera.

Vinyl chloride monomer (VCM): The basic building block chemical for polyvinyl chloride plastic.

Violent offenses: According to the Federal Bureau of Investigation, serious violent offenses include murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault. Minor violent offenses include assaults without weapons and weapons violations. Compare propertv offenses.

Virology: The study of viruses and the diseases they cause; also, the isolation and identification of viruses associated with specific infection.

Virulence: The degree and severity of infection caused by a pathogen.

Virus: Any of a large group of submicroscopic agents infecting plants, animals, and bacteria and characterized by a total dependence on living cells for reproduction and by a lack of independent metabolism. A fully formed virus consists of nucleic acid (DNA or RNA) surrounded by a protein or protein and lipid coat. See also adenovirus, provirus, reovirus, and retrovirus.

Visiting nurse: A registered nurse who provides nursing care to an individual at home.

Visualization: The use of mental imagery to create positive beliefs that will activate the body's defenses against disease. In one type of visualization, patients are taught to see their cancer cells as vulnerable and disorganized, and their treatment as powerful and directed only at the cancer cells, sparing the healthy cells. They are also instructed to see their immune systems flushing away the cancer cells.

Vocational rehabilitation: In general, the process of utilizing services and assistive devices to enable a disabled individual to enter or return to gainful employment. Specifically, vocational rehabilitation refers to the programs authorized by the Rehabilitation Act of 1973, as amended, which provides Federal grants to State rehabilitation agencies to provide vocational rehabilitation services.

Voluntary protection programs (OSHA): Occupational Safety and Health Administration (OSHA) programs designed to recognize the achievements of employers and to provide additional opportunities for OSHA-employer consultation and cooperation. The three programs are called "Star," "Try," and "Praise."

Voluntary standards: Product design specifications, product and worker safety standards, and so forth, developed by companies, trade associations, and professional organizations, but which do not have the force of law.

Waiting mode: The waiting mode of health service delivery is characterized most strongly by professionals physically remaining within a service system and, indeed, waiting for clients, generally with chronic problems, to come to them. The waiting mode is distinguished from the "seeking mode" wherein professionals are usually physically operating outside the service system and seeking to intervene in **problems before they become chronic.** In practice, it is acknowledged that waiting/seeking is best thought of as a continuum, and less as a dichotomy.

Walsh-Healey Public Contracts Act: A 1936 Federal law that directed the Department of Labor to issue requirements for safe work by **Federal Government contractors and to "blacklist" contractors who did not comply with these requirements.**

Water-borne disease: A disease transmitted through contaminated water. Most diarrheal diseases can be water-borne.

Well-child care: Periodic health supervision for children, including immunization, physical examinations and other tests that screen for illness or developmental problems, health education, and parental guidance.

Wernicke-Korsakoff encephalopathy: An acute brain disorder seen in association with chronic alcohol dependence (but can also accompany other conditions); caused by a dietary deficiency in addition to an inherited abnormality of thiamine (vitamin B1) metabolism. The disorder is characterized by encephalopathy and psychosis, and is treatable by thiamine supplementation.

Wester" Blot: A laboratory technique used to detect the presence of antibodies to specific antigens. The method is often used to check the validity of the ELISA test. Electrophoresis is used to separate proteins by their molecular weights, and each protein is identified through combining with its respective antibody or antigen. For example, in Western blot testing for **HIV antibodies, the protein components of HIV are first separated electrophoretically, transferred to blots, then mixed with sera suspected of containing HIV antibodies.** The presence of antibodies to specific proteins of HIV is revealed by the combination of antibodies with their specific protein components of HIV.

White blood cells: See leukocytes.

Whole blood: Blood from which none of the elements have been removed; used for transfusion. See blood.

Whooping cough: See pertussis.

Wild-type: In genetics, the most frequently encountered phenotype in natural breeding populations.

Wilson disease: An autosomal recessive genetic disease of copper **metabolism in which copper accumulates in** the liver, is released, and is taken up by other organs, where it is toxic. **Hemolytic anemia results from copper uptake by red blood cells; tremors and dementia result from copper uptake by the brain; and impaired renal function result from copper uptake by** the kidneys. Treatment includes dietary restriction of copper and the administration of copper-binding drugs that allow it to be excreted from the body.

Withdrawal symptoms: Symptoms associated with abstinence from a drug on which a patient is physically dependent.

Work practice controls: Methods of controlling hazards that involve only changes in job procedures and housekeeping. Compare administrative controls, engineering controls, and personal Protective equipment.

Worker's compensation: State-required insurance programs that pay for medical costs and replace a portion of employees' wages lost due to work-related injury and illness.

"Wraparound services": A term used to denote a philosophy or practice of flexibly providing and funding mental health services that are designed to meet the unique needs of a particular adolescent, rather than (or in addition to) providing specified funding for particular settings or types of services (e.g., hospitals). The service package is developed by the child or adolescent's case manager and is purchased from vendors; when a service for a given child or adolescent is not available from an existing organization, funds are used to develop the service (e.g., flying in a consultant to treat a patient with schizophrenia rather than moving the patient to a hospital in another State).

X Y Z

X-linked: A term used to refer to traits found on the X chromosome. X-linked recessive traits are seen far more often in males, who have **only one X chromosome, than in females, who have two.**

, X-linked mutation: A mutation that occurs on the X-chromosome.

Xenobiotics: Pertaining to organic substances that are foreign to the body, such as drugs or poisons.

Xenodiagnosis: A technique in which an intermediate host or vector is used to diagnose the presence of parasites in humans (e.g., reduviid bugs are permitted to feed on someone suspected of having Chagas' disease, and later, the bugs are examined for the presence of Trypanosoma cruzi parasites).

Xenograft: Living tissue transplanted from one species to another (e.g., animal organs transplanted into human beings).

Yellow fever: An acute febrile disease caused by an arbovirus that is transmitted by mosquitoes. Symptoms include a high fever, jaundice, black vomit, and anuria (absence of urine excretion). **The virus that causes jungle/sylvan yellow fever is maintained in monkey reservoir hosts; urban yellow fever refers to transmission of the same virus to humans.**

Younger adolescents: As defined in most studies and data analyses, adolescents ages 10 to 14.

Zoonosis: A **disease primarily of animals that is transmissible to humans under natural conditions.**

Zygote: A fertilized egg **that results from the fusion of sperm and egg.**