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UNDERSTANDING THE
U.S. HEALTH SERVICES
SYSTEM Fourth Edition

Phoebe Lindsey Barton
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In loving memory of
Doctors Milton and Ruth Roemer
and their seminal work on health care systems.
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<td>AAPCC</td>
<td>adjusted average per capita cost</td>
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<td>ACF</td>
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<td>ACHE</td>
<td>American College of Healthcare Executives</td>
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<td>ACS</td>
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<td>ACS</td>
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<td>ADA</td>
<td>Americans with Disabilities Act of 1990</td>
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<tr>
<td>ADL</td>
<td>activities of daily living</td>
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<tr>
<td>AFDC</td>
<td>Aid to Families with Dependent Children</td>
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<td>AHA</td>
<td>American Hospital Association</td>
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<td>AIDS</td>
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<td>ALOS</td>
<td>average length of stay</td>
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<td>American Medical Association</td>
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<td>AOA</td>
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<td>APACHE</td>
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<td>BIPA</td>
<td>Benefits Improvement and Protection Act</td>
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<td>Acronym</td>
<td>Description</td>
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<td>BLA</td>
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<td>CABG</td>
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<td>CAHPS</td>
<td>Consumer Assessment of Healthcare Providers and Systems</td>
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<td>CAM</td>
<td>complementary and alternative medicine</td>
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<td>CCMC</td>
<td>Committee on the Costs of Medical Care</td>
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<tr>
<td>CDC</td>
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<td>CDHP</td>
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<td>CER</td>
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<td>CFR</td>
<td>Code of Federal Regulations</td>
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<td>CHAMPUS</td>
<td>Civilian Health &amp; Medical Program of the Uniformed Services</td>
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<td>CHP</td>
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<td>CMS</td>
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<td>Council on Graduate Medical Education</td>
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<td>COPD</td>
<td>chronic obstructive pulmonary disease</td>
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<tr>
<td>CPOE</td>
<td>computerized physician order entry</td>
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<tr>
<td>CQI</td>
<td>continuous quality improvement</td>
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<td>CRO</td>
<td>contract research organization</td>
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<td>DGME</td>
<td>direct graduate medical education (payment)</td>
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<td>U.S. Department of Homeland Security</td>
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<td>DME</td>
<td>durable medical equipment</td>
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<td>U.S. Department of Defense</td>
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<td>DOJ</td>
<td>U.S. Department of Justice</td>
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<td>DRG</td>
<td>diagnosis-related group</td>
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<td>DSH</td>
<td>disproportionate share hospital</td>
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<td>EACH</td>
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<td>employee assistance program</td>
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<td>ECFMG</td>
<td>Educational Commission for Foreign Medical Graduates</td>
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<td>EMCRO</td>
<td>Experimental Medical Care Review Organization</td>
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<td>Emergency Maternal and Infant Child Care Program</td>
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<td>electronic medical record</td>
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<td>EPR</td>
<td>electronic patient record</td>
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<td>ESP</td>
<td>Economic Stabilization Program</td>
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<td>end-stage renal disease</td>
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<td>European Union</td>
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<td>Food, Drug, and Cosmetic Act</td>
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<td>Federal Employee Health Benefits Program</td>
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<td>flexible savings arrangement</td>
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<td>FTE</td>
<td>full-time equivalent</td>
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<td>gross domestic product</td>
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<td>GMENAC</td>
<td>Graduate Medical Education National Advisory Committee</td>
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<td>GNP</td>
<td>gross national product</td>
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<td>home- and community-based service</td>
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<td>HMO</td>
<td>health maintenance organization</td>
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<td>HPSPA</td>
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<td>health reimbursement arrangement</td>
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<td>HRSA</td>
<td>Health Resources and Services Administration</td>
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<td>Definition</td>
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<td>IADL</td>
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<td>intermediate care facility for mentally retarded</td>
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<td>IHS</td>
<td>Indian Health Service</td>
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<td>IME</td>
<td>indirect medical education (payments)</td>
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<td>IMG</td>
<td>international medical graduate</td>
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<tr>
<td>IND</td>
<td>investigational new drug</td>
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<td>IOM</td>
<td>Institute of Medicine</td>
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<tr>
<td>IPA</td>
<td>independent practice association</td>
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<td>intermittent positive pressure breathing</td>
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<tr>
<td>IRS</td>
<td>Internal Revenue Service</td>
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<td>LBO</td>
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<td>LPN</td>
<td>licensed practical nurse</td>
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<td>licensed vocational nurse</td>
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<td>managed care organization</td>
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<td>Medical Device User Fee and Modernization Act</td>
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<td>Medicare Payment Advisory Commission</td>
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<td>multiple employer trust</td>
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<td>Military Health Services System</td>
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<td>Medicare Prescription Drug Improvement and Modernization Act</td>
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<td>master of public health</td>
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<td>MRI</td>
<td>magnetic resonance imaging</td>
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<td>medical savings account</td>
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<td>metropolitan statistical area</td>
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<td>management services organization</td>
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<td>medically underserved area</td>
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<td>NCQA</td>
<td>National Committee on Quality Assurance</td>
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<td>ND</td>
<td>doctor of nursing</td>
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<td>NDA</td>
<td>new drug application</td>
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<td>Acronym</td>
<td>Full Form</td>
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<td>NHA</td>
<td>national health account</td>
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<td>national health insurance</td>
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<td>NIMBY</td>
<td>“not in my backyard”</td>
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<td>National Institute for Occupational Safety and Health</td>
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<td>NMES</td>
<td>National Medical Expenditures Survey</td>
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<td>nurse practitioner</td>
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<td>NPC</td>
<td>nonphysician clinicians</td>
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<td>NPP</td>
<td>nonphysician providers</td>
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<td>NQF</td>
<td>National Quality Forum</td>
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<td>OBRA</td>
<td>omnibus budget reconciliation act</td>
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<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<td>OTA</td>
<td>Office of Technology Assessment (in the U.S. Congress)</td>
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<td>OTC</td>
<td>over the counter</td>
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<td>P4P</td>
<td>pay for performance</td>
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<td>physician assistant</td>
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<td>PACE</td>
<td>Program of All-Inclusive Care for the Elderly</td>
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<td>PCA</td>
<td>personal care attendant</td>
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<td>PCCM</td>
<td>primary care case management (plan)</td>
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<td>PDUFA</td>
<td>Prescription Drug User Fee Act</td>
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<td>PET</td>
<td>positron-emissions tomography</td>
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<td>PGP</td>
<td>prepaid group practice</td>
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<td>PHCE</td>
<td>personal health care expenditure</td>
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<td>physician hospital organization</td>
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<td>Public Health Service</td>
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<td>Physician Payment Reform Commission</td>
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<td>PORT</td>
<td>patient outcome research team</td>
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<td>point of service (plan)</td>
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<td>producer price index</td>
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<td>preferred provider organization</td>
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<td>prospective payment system (Medicare)</td>
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<td>Prospective Payment Assessment Commission</td>
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<td>Acronym</td>
<td>Abbreviation</td>
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<td>PSN</td>
<td>provider-sponsored network</td>
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<tr>
<td>PSO</td>
<td>provider-sponsored organization</td>
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<tr>
<td>PSRO</td>
<td>professional standards review organization</td>
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<td>QALY</td>
<td>quality-adjusted life year</td>
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<tr>
<td>QIO</td>
<td>quality improvement organization</td>
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<tr>
<td>QMB</td>
<td>qualified Medicare beneficiary</td>
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<tr>
<td>RBRVS</td>
<td>resource-based relative value scale</td>
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<tr>
<td>RCT</td>
<td>randomized clinical trial (also called <em>randomized controlled trial</em>)</td>
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<td>regional medical program</td>
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<tr>
<td>RN</td>
<td>registered nurse</td>
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<td>RPCH</td>
<td>rural primary care hospital</td>
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<tr>
<td>SAMHSA</td>
<td>Substance Abuse and Mental Health Services</td>
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<td>SCH</td>
<td>sole community hospital</td>
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<td>SCHIP</td>
<td>State Child Health Insurance Plan</td>
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<td>SES</td>
<td>socioeconomic status</td>
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<tr>
<td>SFAS</td>
<td>Standard Financial Accounting Standard</td>
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<td>SHCC</td>
<td>Statewide Health Coordinating Council</td>
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<td>SHMO</td>
<td>social health maintenance organization</td>
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<td>SHPDA</td>
<td>State Health Planning and Development Agency</td>
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<td>SIP</td>
<td>sickness impact profile</td>
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<td>SMI</td>
<td>Supplemental Medical Insurance (Medicare Part B)</td>
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<td>SNF</td>
<td>skilled nursing facility</td>
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<td>SRO</td>
<td>single room only</td>
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<td>SSA</td>
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<td>SSI</td>
<td>Supplemental Security Income</td>
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<td>TA</td>
<td>technology assessment</td>
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<td>Temporary Assistance to Needy Families</td>
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<td>total quality management</td>
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<td>TRICARE</td>
<td>Health insurance program for military dependents and retirees</td>
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<tr>
<td>UCR</td>
<td>usual, customary, reasonable charge</td>
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<tr>
<td>USDHHS</td>
<td>U.S. Department of Health and Human Services</td>
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<tr>
<td>USMG</td>
<td>U.S. medical graduate</td>
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<td>Abbreviation</td>
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<td>USPHS</td>
<td>U.S. Public Health Service</td>
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<td>USUHS</td>
<td>Uniformed Services University of the Health Sciences</td>
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<td>Department of Veterans Affairs</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<td>WIC</td>
<td>Special Supplemental Nutrition Program for Women, Infants, and Children</td>
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<tr>
<td>YLL</td>
<td>years of life lost</td>
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M ay you live in interesting times” could be the blessing or the curse that attends the U.S. health services system. To the observers of or the participants in this system, the times are ever changing, often worrisome, and always interesting. The current time is no exception: a new President seeks from Congress a health plan that attempts to rebalance our values of increasing access to services, controlling the costs and expenditures for services, and improving the quality of care that is delivered. Under construction is a bill that the President anticipates will:

- Provide access to services for the 47 million people who are currently uninsured;
- Find ways to cut costs and reduce expenditures for health services before they absorb so much of the gross domestic product (GDP) that other needed services become paralyzed; and
- Increase the quality of health services by eliminating fraud and resource abuse; curbing deaths due to medication and other errors in all settings; establishing an electronic medical record for every patient to support providers in optimal decision making; and increasing efficiency and productivity in the delivery system.

For at least 20 years, national polls have indicated that the U.S. population supports access to basic health services for all. The political will, however, has not been strong enough to override powerful forces that muster to retain the status quo. Will this effort to pass and implement a national health plan be different from efforts that began in Teddy Roosevelt’s administration?

Every effort has been made to update the data used in this edition. Major sources of data—the National Health Accounts produced by the Centers for Medicare & Medicaid Services; the annual Health, United States produced by the National Center for Health Statistics; and the annual U.S. Statistical Abstract produced by the U.S. Department of Commerce—are released at different times during the year and may reflect different time
periods. This edition incorporates the most current of each of these sources. Multiple searches of the peer-reviewed literature resulted in major changes to many chapters. The managed care chapter, for example, explores the ever-changing role of managed care in the U.S. system, which continues to evolve or devolve; and new types of health insurance products are described in the health insurance chapter.

This edition of *Understanding the U.S. Health Services System* offers revisions to better support the reader’s understanding:

- All citations are now located in the master references section at the back of the book and are no longer repeated at the end of each chapter.
- Graphics are now all labeled as “Exhibit” to reduce the confusion that may have occurred when Tables and Figures had similar numbering systems.
- The glossary and the acronym list have been updated to include new terms that frequently emerge as new methods or programs enter the health services system.
- Every effort has been made to update the evidence that supports this edition. Often the evidence is merely confirmatory of earlier findings, but the update is offered so that the reader is assured that the most current findings possible are incorporated.

No book can capture every possible change that is occurring, but in this fourth edition sources continue to be provided so that readers can update their understanding of the issues discussed here. Keeping the discussion as current as possible has been aided by faculty and student readers who have offered their suggestions for strengthening the content. This input is used and is always welcomed. Special thanks are also due to research assistant Channing Tate, MSPH, for her skilled literature and Internet searches that ferreted out obscure data and information to update this edition.

Resources for the course instructor associated with this text include:

- PowerPoint versions of all the graphics included in this book. These are intended to assist the instructor, whether teaching in a classroom or online, in the development of lectures, handouts, and exams.
- An *Instructors’ Manual (IM)* that suggests how to approach each topic by offering lecture outlines. Other *IM* resources include:
  - Questions that pertain to general understanding that can serve as student study guides.
  - Suggested small group exercises to help students solidify their grasp of the material.
• Discussion questions intended to help the student put together or integrate various concepts they are learning. (These questions can also be used as exam questions.)
• A separate collection of exam questions with suggested appropriate responses, organized from the most general to the more complete response.
• A list of websites that can aid the instructor and the students and complement the text and other classroom materials.

These teaching aids are available for instructors who adopt this book. They can be obtained through the Health Administration Press website. For access information, please e-mail hap1@ache.org

Phoebe Lindsey Barton
August 2009
PART I

INTRODUCTION
INTRODUCTION TO THE U.S. HEALTH SERVICES SYSTEM

Introduction

A country’s health services system—the combination of resources, organization, financing, and management that culminates in the delivery of health services to a population—is an important, though not the sole, determinant of a population’s health status (Roemer 1991). A health services system is shaped by the country’s economic, political, and cultural values. In addition to affecting the health of its population, a country’s health services system may also be an important sector of the economy in terms of employment, research and development, and exports, such as drugs, medical devices, and other medical technologies.

Milton I. Roemer, whose extensive contributions to our understanding of these systems have brought him international renown, has identified several classes of health services systems, based on each country’s economic and political system (see Exhibit 1.1).

The health services system in the United States is a market-based system in an affluent, industrialized economy, which nevertheless lacks universal access. In this book, the discussion of the U.S. system is structured around how health services are organized and managed, how resources such as the health workforce and technology are developed and deployed, what types of economic support drive the system, and how services are delivered. Limited historical information is provided to illuminate discussions of the system’s evolution; the principal emphases, however, are on the current system, the range of proposals for changing parts or all of the current system, and the implications of these potential reforms.

This edition discusses the public health sector, including a discussion on health disparities in Chapter 3; provides additional information on the current status of and proposed changes to Medicare and Medicaid; looks at the changing role of the hospital; opens the discussion on the growing interest in complementary and alternative medicine; and examines the continuing evolution of managed care and managed care organizations.

Despite the failure to enact systemic reform, such as that proposed in the 1993 Health Security Act, incremental reforms—particularly in the way health services are financed and delivered—are rapidly changing the face of
Introduction

The U.S. health services system. A renewed focus on managing the system—including how providers order and deliver services, how patients use services, and the associated expenses to all parties—is precipitating significant and constant change. Capturing this moving target presents a major challenge. This chapter provides a model developed by Roemer for analyzing the current system, from which future changes can be assessed. Three dominant values of care in the U.S. system—access to, costs of and expenditures for, and quality—are examined.

Overview of the U.S. Health Services System

The U.S. health services system is a study in contradictions. Per capita expenditures for health services ($7,421 in 2007) are the highest of any health services system in the world, and yet as much as 20 percent of the U.S. population may not have financial access to health services at some point during a year, or for the entire year. Approximately 20 percent of the population accounts for 80 percent of all health expenditures (this is often called the “20-80 rule”) in the U.S. system. Although people are accustomed to referring to the U.S. health services system, which suggests the universal availability of a continuum

EXHIBIT 1.1

Types of National Health Systems, Classified by Economic Level and Health Systems Policies

<table>
<thead>
<tr>
<th>Economic Level (GNP per Capita)</th>
<th>Entrepreneurial and Permissive</th>
<th>Welfare-Oriented</th>
<th>Universal and Comprehensive</th>
<th>Socialist and Centrally Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affluent and Industrialized</td>
<td>United States</td>
<td>West Germany</td>
<td>Great Britain</td>
<td>Soviet Union</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Japan</td>
<td>New Zealand Norway</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>Developing and Transitional</td>
<td>Thailand</td>
<td>Brazil</td>
<td>Israel</td>
<td>Cuba</td>
</tr>
<tr>
<td></td>
<td>Philippines</td>
<td>Egypt</td>
<td>Nicaragua</td>
<td>North Korea</td>
</tr>
<tr>
<td></td>
<td>South Africa</td>
<td>Malaysia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Poor</td>
<td>Ghana</td>
<td>India</td>
<td>Sri Lanka</td>
<td>China</td>
</tr>
<tr>
<td></td>
<td>Bangladesh</td>
<td>Myanmar</td>
<td>Tanzania</td>
<td>Vietnam</td>
</tr>
<tr>
<td></td>
<td>Nepal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource Rich</td>
<td>Libya</td>
<td>Gabon</td>
<td>Kuwait</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: This exhibit is adapted from an exhibit in Roemer’s National Strategies for Health Care Organizations: A World Overview, published in 1985 by Health Administration Press.

NOTE: Changes since 1991 in political systems in Germany and the Soviet Union and perhaps other countries not reflected in Dr. Roemer’s table may affect their classification. GNP = gross national product.
Chapter 1: Introduction to the U.S. Health Services System

EXHIBIT 1.2
Continuum of Health Services

<table>
<thead>
<tr>
<th>Prenatal care/healthy birth</th>
<th>Primary disease prevention¹</th>
<th>Treatment of acute disease</th>
<th>Tertiary disease prevention²</th>
<th>Rehabilitative care</th>
<th>Palliative care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health promotion</td>
<td>Diagnosis of disease</td>
<td>Secondary disease prevention²</td>
<td>Treatment of chronic illness or disease</td>
<td>Long-term care</td>
<td></td>
</tr>
</tbody>
</table>

NOTES: 1. Primary disease prevention is preventing agents from causing disease or injury. 2. Secondary disease prevention is early detection and treatment to cure and/or control the cause of disease. 3. Tertiary disease prevention is ameliorating the seriousness of disease by decreasing disability and the dependence resulting from it.

of care from health promotion to palliative care (Exhibit 1.2), most services rendered focus on the treatment of illness and disease. For this reason, some refer to the U.S. system as a “disease treatment system” or “illness system,” rather than a health services system.

Part I of this book focuses on the nature of the U.S. health services system, addressing such questions as:

- What factors influence health status?
- What factors influence how people seek care?
- How does health services utilization affect health status?
- Who has access to health services?
- Is access to health services a right?

The Roemer Model of a Health Services System

The U.S. health services system can be analyzed from many perspectives. For example, a historical approach would examine the emergence of the health services system as the economic and political systems of the country evolved. Another approach would analyze the development of the continuum of health services. A third would consider the roles of various system participants—the patient or care seeker, the provider, the insurer or third-party payer, the public or government unit that manages the system, and the employer that provides health insurance—in shaping the system.

This book uses a systems model developed by Roemer (1984) to discuss the organization of programs and their management, the production of resources that support the system, the sources of economic support, and how
services are delivered. The system is driven by health needs or problems to produce health results or outcomes. The model provides not only a systematic way of examining any one system but also a method for comparing health services systems across the more than 149 developed countries in the world. Exhibit 1.3 displays Roemer’s five-part model of a health services system. Roemer defines a health service as an activity whose primary objective is health—its maintenance, its improvement, or, if it is failing, its recovery. Because of the complexity of the U.S. system, applying the model begins with the central component: the organization of programs.

**Organization of Health Services**

The U.S. health services system is an ever-shifting mixture of public or government sector, private sector, and voluntary or charitable services. The government’s role in health, once limited primarily to protecting the public from epidemics of infectious diseases, has expanded so that it is:
Chapter 1: Introduction to the U.S. Health Services System

1. a major payer for care through large public-sector programs such as Medicare and Medicaid;
2. a major provider of health services to special populations, such as the military and their dependents, veterans of military services, and indigenous populations; and
3. a major supporter of the education and training of many types of care providers.

The delivery of health services occurs primarily in the private sector, but the once-clear delineation of public and private sectors is becoming increasingly blurred. The voluntary sector is small but provides many services that may not be fully realized through the public or the private sectors, including a focus on the prevention or cure of specific diseases, such as heart disease and cancer, and the championing of the care needs of special populations, such as children, persons with mental illnesses, or persons living with acquired immunodeficiency syndrome (AIDS). Part II of this book addresses the organization of U.S. health services.

Management of a Health Services System

Management of the U.S. health services system, which includes planning, administration, legislation, and regulation, is addressed in Part III of this book. Although these functions occur in both the public and private sectors, the focus in Part III is on management in the public sector. Private-sector management issues are integrated into the discussion of the delivery system in which the private sector dominates. The public health system also receives special attention in Part III.

Economic Support of Health Services

Economic support for the U.S. health services system is addressed in Part IV. Three types of health services organizations—those in the public, the private, and the voluntary sectors—influence the ways in which health services are financed in the United States. How the health services system is financed dictates which populations receive care and the kinds of care they receive. From this, it is possible to deduce the populations likely to receive little or no care, because the U.S. system lacks universal coverage. The primary financing mechanisms—private and public health insurance—are examined for their effects on access to, costs of, and expenditures for care.
Production of Health Services Resources

In addition to financial support, the provision of health services requires resources, such as a trained workforce, the availability of appropriate levels of facilities in which services can be provided, biomedical research to balance the art and the science of care, and medical technology, including drugs, devices, and advances in medical and surgical procedures. Part V discusses the development and deployment of health resources in the U.S. system.

Delivery of Health Services

Four components of the Roemer model—organization, management, economic support, and resource production—all contribute to how health services are delivered, which is the focus of Part VI. The effects of managed care, broadly defined as care provided in a system that integrates the financing and delivery of health services, are also emphasized in that section.

System Values: Access, Cost and Expenditures, and Quality

Health services analysts frequently assess access to, costs of and expenditures for, and quality of care. These values of the U.S. health services system have been recognized in such legislation as the National Health Planning and Resources Development Act of 1974 (PL 93-641) and the enabling legislation for the Agency for Healthcare Research and Quality (AHRQ, formerly the Agency for Health Care Policy and Research), and they serve as the foundation for health services research. Access to health services has many dimensions, including geographic, physical, cultural, temporal, and economic. In a country that values social justice but provides neither uniform nor universal health services coverage, access is a particularly important consideration. Chapter 3 focuses on issues of access to care and their relationship to expenditures for care.

The cost of care—driven by inflation, the increased volume of services due to population demographics, health insurance coverage, and the increased intensity of services—has resulted in expenditures that in 2007 absorbed 16 percent of the gross domestic product (GDP). U.S. government expenditures for health are surpassed only by expenditures for Social Security; they significantly exceed expenditures for education, transportation, agriculture, and other government services (with the possible exception of defense, for the first time in several decades). Private expenditures for health services have shown commensurate growth, stimulating ongoing proposals for changing the ways in
which health services are financed and delivered. The effects of costs of and expenditures for health services are examined in depth in Part IV and are discussed elsewhere in this book.

As more is learned about the outcomes of health services, quality of care becomes an increasingly important consideration. The examination of quality explores such questions as:

- How effective is an intervention?
- How appropriate is a particular intervention and under what conditions?
- Do the benefits of an intervention exceed its costs?

Chapter 19 is devoted to quality-of-care issues.

Access to, costs of and expenditures for, and quality of care are often inextricably linked. Increasing access to care, as occurred through the passage of Medicare and Medicaid legislation in 1965, inexorably leads to increases in utilization, and thus to increases in the costs of and expenditures for care—both public and private. Unprecedented expenditure increases prompt decision makers to look for ways to reduce them, such as instituting controls on utilization and constraining provider payments. Increases and decreases in utilization bring quality of care into focus. Too many or too few services can compromise the quality of care, and poor quality of care can ultimately result in higher expenditures to correct the problem. Achieving a satisfactory balance among these values remains a major challenge as the U.S. health services system continues to change.

**Organization of the Book**

Roemer’s model of a health services system serves as the organizing principle for this book. Part I focuses on the needs or problems that drive the system, including access to care. Part II describes how the U.S. health services system is organized and the roles of its public and private sectors. Part III addresses the management of the system, including its planning, administrative, legislative, and regulatory functions. Part IV discusses how the system is financially supported and the significance of health insurance as the principal financing mechanism. Part V examines the production of resources essential to the successful operation of a system, including the workforce, health facilities, knowledge, and biotechnology. Part VI focuses on how these various model components result in the delivery of care. The results or outputs of this model are many and varied; Part VII addresses one way in which results are measured—by examining the quality of care that is delivered. Finally, the Epilogue broadly summarizes the current and anticipated changes in the U.S. health services system.
Data on U.S. Health Services

The complexity of the U.S. health services system is exemplified in the data that describe it. No central source for health services data exists. Lags between data collection and reporting affect the currency of the data. Data on various components of the system (e.g., resources and economic support) are collected by different agencies using different time frames. This text uses the most recent data available to describe the U.S. health services system, but the use of incomplete and sometimes fragmented data increases the potential for gaps and possible inconsistencies. Every graph and figure that could be updated with more recent data has been revised in this edition. Some graphs and figures, used with permission from the juried literature, could not be updated but have been retained if they contribute to the understanding of the concepts presented.

Aids to Understanding the Complexity of the U.S. Health Services System

A language of specialty terms and acronyms accompanies the complex U.S. health services system. Three aids are included in this text to enhance understanding of the system:

1. The key words and concepts in each chapter are listed at the chapter’s end for ready reference and review. They are also defined in the book’s glossary.
2. A lexicon of acronyms and abbreviations is provided at the beginning of the text.
3. A glossary defining the most frequently encountered terms (key words) precedes the bibliography at the end of the book.

Key Words

access to care  health service
Agency for Healthcare Research and
Quality (AHRQ) managed care
continuum of care Medicaid
costs of and expenditures for care Medicare
gross domestic product (GDP) private sector
health care outcomes public sector
health care reform universal access or universal coverage
Health Security Act of 1993 utilization of health services
voluntary sector
AN OVERVIEW OF THE U.S. HEALTH SERVICES SYSTEM AND ITS USERS

Introduction

Creating a general characterization of a health services system and the people who use it provides a context in which the component parts can be examined and better understood. This chapter provides an overview of the U.S. health services system and the demographics and health services utilization patterns of the U.S. population. Following the overview of the system, this chapter addresses such system characteristics as:

- the distinction between health and illness and disease;
- the cultural, economic, genetic, and perceived health status factors that influence care-seeking behaviors; and
- the utilization of health services by subpopulation groups.

The chapter concludes with an overview of how receiving, or not receiving, health services affects health status.

An Overview of the U.S. Health Services System

The $2.2 trillion U.S. health services system is a unique amalgam of public-, private-, and voluntary-sector programs. Elements of a health services system can be traced to the colonial and early Federalist periods. Public health programs, first organized at the local level, originated to protect the public from communicable diseases and unsanitary living conditions. One of the first public health programs was the U.S. Marine Hospital Service, established in 1798 to provide care to merchant seamen who transported goods—and sometimes diseases—from port to port.

Major forces in the development of health services in the private sector included the growing population, the population’s increasing mobility, the commensurate demand for services, and the resulting expansion of the health workforce. The provision of health services began as a private transaction between the provider and the recipient and remained primarily on that basis until
the growth of private health insurance during and immediately after World War II.

The voluntary health services sector, which often addresses issues unclaimed by either the public or private sectors, has its origins in the establishment of almshouses for the care of the indigent during the American colonial period. Almshouses were antecedents of today’s hospitals, many of which were founded by charitable organizations.

The Organizational Component

The post–World War II economy spurred the conversion of a health services cottage industry into what has been described as the medical-industrial complex (Relman 1980). Growth occurred in all components of the system. Within the organizational component, a cabinet-level department—the U.S. Department of Health, Education, and Welfare (DHEW), now the U.S. Department of Health and Human Services (HHS)—was established in 1953 to administer the nation’s health programs. Attention to the safety of food and drugs increased. The government’s role in biomedical research blossomed. Public health programs expanded to address a range of environmental health issues, to serve as the collector of vital event data (i.e., births, deaths, marriages, divorces, adoptions, and abortions), and to provide leadership on such diverse health issues as immunizations, sexually transmitted diseases, and violence.

The private sector was growing too, fueled by an increasingly industrialized economy in which employers began to offer health insurance as a benefit of employment. Demand for more health services stimulated growth in the health workforce; the establishment of additional hospitals, nursing homes, and other health facilities; and development of technology.

Filling the gaps created by the two other sectors, the voluntary sector met the challenge of well-known and new diseases by forming such organizations as the March of Dimes for polio, the American Heart Association for coronary disease, the American Lung Association for respiratory diseases, and the American Cancer Society for malignancies.

The Management Component

The growth of public-sector and private-sector programs in a market economy increased the need for program management, including the functions of planning, administration, legislation, and regulation. Planning for health services was instituted at the national level with the 1966 Comprehensive Health Planning Act (PL 89-749) and at the local level by hospital planning councils. Important health services legislation preceded World War II: the 1935 Social Security Act (SSA) (PL 74-271) included a number of titles authorizing health services for children, people with disabilities, and others. In the mid-1960s, the SSA became the umbrella for other significant health legislation, including
Chapter 2: An Overview of the U.S. Health Services System

Medicare and Medicaid. A spate of additional health legislation was authorized independently of the SSA; these programs stimulated the development of multiple regulations for their full implementation.

**The Economic Support Component**

The growth of a health services system depends on the level of economic support available to it. In 2007, 35 percent of the economic support for the U.S. system came from private health insurance, 46 percent came from the federal government in the form of tax-generated revenue and trust funds and from state revenues, 12 percent came from individual out-of-pocket payments, and 7 percent came from foundations and other charitable sources.

**The Resources Component**

Other resources, such as a workforce and facilities, are essential to a health services system. The health workforce continues to grow. Between 1960 and 1990, the supply of U.S. physicians increased 55 percent (Aiken and Salmon 1994). By the mid-1970s, the United States had doubled its capacity to train physicians in an effort to meet perceived workforce shortages (Cooper 1995; Mullan, Politzer, and Davis 1995). More than 921,904 physicians were licensed to practice in the United States in 2007 (AMA 2008). The number of nurses has remained relatively constant at about 2.4 million, yet many work settings continue to experience a nurse shortage. Growth in these and other professions has been aided by governmental support to expand educational opportunities. New professions have emerged to meet new needs: the number of billing and reimbursement specialists and business-trained administrators is growing to keep pace with the increasingly contractual nature of the U.S. health services industry.

The development of health facilities reflects the growing and changing health services system. Beginning in 1946, the growth in the number of hospitals and other kinds of health facilities was assisted by federal funds. Hospitals, until recently the hub of the system, grew in number and size until the 1980s. In the increasingly competitive era from the 1990s through 2007, however, the overall number of hospitals declined, the number of licensed beds decreased, and the development of outpatient services and facilities mushroomed to reflect the changing delivery system. Recent increases in Medicare and hospital spending for inpatient and outpatient services indicate that the hospital sector is once again growing.

**The Delivery System Component**

Much of the change in the U.S. system is occurring in delivery systems. The growth of the health services system, the increasing expenditures required to sustain it, the significant number of people without access to care, and the
projections of increased demand from an aging population are stimulating these changes. The most pervasive change has been the shift away from the fee-for-service delivery system to managed care, although the backlash against managed care that began around 1998 portends further system changes (Blen-don et al. 1998; Levit et al. 2002). Managed care, once considered the alternative delivery system, was recommended as early as 1932 in a report by the Committee on the Costs of Medical Care and has its modern origins in the 1973 Health Maintenance Organization Act, which encouraged the integration of the financing and delivery of health services to achieve more efficient and cost-effective care. Models of managed care continue to hybridize in response to dissatisfaction of providers, consumers, and payers. Accurately capturing this moving target presents a challenge for any analyst.

Achieving a health services system that provides both equity and efficiency—two competing values in U.S. society—becomes a major challenge in a market economy; the struggle to balance these values is reflected in the unevenness of the U.S. health services system. Although great strides have been made to increase the equity in access to care, many people may not have financial access to care at any given time. Most of the uninsured, who often lack financial access to care, are in the U.S. workforce or are dependents of someone who is in the U.S. workforce but has been unable, or unwilling, to secure health insurance.

**Proposed Changes to the U.S. Health Services System**

Although the U.S. health services system is the most costly and one of the most advanced in the world, recognition is growing that it is unbalanced and, in the view of some, out of control. This recognition has resulted in calls for reform from many quarters: the public, the providers, the payers for care (i.e., the government, the employer, or the individual), and politicians. Proposed wide-scale reforms have largely failed in their attempts to expand access to health services to the entire population, reduce costs of and expenditures for care, alter the incentives for provider payment, and change the ways in which health services are delivered. Health system reform, however, remains high on the agenda of the new presidential administration. President Obama has proposed substantial funding to begin the process of health services system change in his fiscal year 2010 budget.

Despite the failure to effect systemic reform, the health services system is changing significantly and continuously. Current changes that this book addresses are the:

- changing emphases on managed care and its multiple effects on the delivery system through the 1990s, and recent pressures from patients, providers, and others to effect yet another swing in the pendulum;
• recent initiatives to expand access to care, especially for expectant mothers and their children;
• continued pressures to reduce the costs of and expenditures for care;
• efforts to deal with workforce supply and distribution, including shortages in the work complement of nurses and a reorientation to primary care in the 1990s, and recent skepticism about the success of that movement; and
• movement away from the hospital as the center of the U.S. health services system to care provided in outpatient and ambulatory settings, including the development of basic clinic services within big-box retail settings.

To better understand each component and its interrelationship with the others, this chapter first considers the distinctions between health and disease, reviews ways in which health status is measured, and explores factors that affect care-seeking behavior, including population demographics. A snapshot of current patterns of health services utilization provides a basis for understanding the interactions between the design of a health services system and its users.

Distinguishing Health from Illness and Disease

The purpose of a health service is to positively affect a person’s health—its maintenance, its improvement, or its recovery. But what does health mean? The World Health Organization (WHO) defines health as not merely the absence of disease but as a state of physical, mental, and social well-being. This comprehensive definition provides a gold standard, but it is important to note that the U.S. health services system focuses largely on physical health. The First International Conference on Health Promotion, held in Ottawa, Canada, in 1986, provided another definition: health is a resource for living. What is now called the Ottawa Charter for Health Promotion identifies the fundamental conditions and resources for health as peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice, and equity (WHO 1999). Note definitions of illness and disease in the subsequent section on mortality in this chapter.

Despite the general belief that the receipt of health services is one of the major influences on health status, other factors are of equal or greater importance. Exhibit 2.1 displays some of the determinants of health, including physical and social environments; personal traits; physical, mental, and social well-being; and access to a continuum of health services.
Measuring the Health of a Population

A health provider using a range of indicators can measure an individual’s health status, or health status can be self-assessed. One standard self-assessment measure is an individual’s self-report of health status, using a scale of excellent, very good, good, fair, or poor. Many studies have documented the strong correlation between perceived and measured health status (Al-Mandhari, Hassan, and Haran 2004; LaRue et al. 1979; Wolinsky and Johnson 1992; Kaplan and Camacho 1983). Studies have also documented what seems a truism: people with perceived poorer health status are likely to use health services more often (O’Connell 1999; Anderson and Knickman 1984; Blaum, Liang, and Liu 1994).

The health status of a population can be described and measured in several ways. Common indicators used to assess and compare the health status of populations include fertility and natality, life expectancy, morbidity, disability days, years of productive life lost, and mortality. Each individual measure provides one dimension of the health status of a population; collectively, along
with other measures beyond the scope of this discussion, they indicate the
general health status of a population. Cultures may value these indicators dif-
finitely: in one culture, high fertility and natality rates may be perceived as
indicators of good health and general well-being in a population; in another
culture, these same indicators may suggest diminished health status, poverty,
or lack of population control measures.

**Fertility and Natality**

Exhibit 2.2 shows U.S. fertility rates according to live births for selected years
between 1950 and 2005. The total fertility rate has declined by nearly 44
percentage points in the 55 years represented in Exhibit 2.2. The crude birth-
rate for 2005 was 14.0 live births per thousand women, and the fertility rate
for that same year was 66.7 per thousand women (NCHS 2009).

**Life Expectancy**

Life expectancy at birth in the United States is shown in Exhibit 2.3. In this
century, life expectancy has grown significantly, and people born in 2005 have
29 (males) to 32 (females) years of additional life expectancy over the 1900
cohort. Women continue to have several more years of life expectancy per
cohort than men. Data for 2005 show that U.S. life expectancy at birth is

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**EXHIBIT 2.2**

U.S. Crude Birthrates and Fertility Rates, All Races, Select Years, 1950–2005

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SOURCE: This exhibit was created using data from *Health, United States, 2008*, published by the National Center for Health Statistics in 2009.

NOTE: Crude birthrate is live births per thousand population. The fertility rate is the total number of live births regardless of age of mother per thousand women 15–44 years of age.
Researchers are beginning to challenge the view that our longevity will continue to increase, based on prior experience. Olshansky et al. (2005) see the “threatening storm of obesity” that could, over time, reduce the expected increase in longevity. They caution that “extrapolation models fail to consider the health status of people currently alive and explicitly assume that the past can predict the future.” Debate continues over the effects of obesity on long-term health, but evidence has linked serious health consequences from diseases linked to obesity.

**Birth Weight**

Birth weight is an indicator of a population’s health, with low-birth-weight and very-low-birth-weight babies at higher risk of both immediate and long-term health problems. Exhibits 2.4 and 2.5 show the percentage of low-birth-weight and very-low-birth-weight babies, respectively, among live births for all mothers and mothers of various races for the year 2005. Black mothers are at higher risk of having both low-birth-weight and very-low-birth-weight babies. Although the proportion of low-birth-weight babies of black mothers has remained relatively stable for the past two decades, the proportion of very-low-birth-weight babies to this group of mothers has increased. (See also Exhibits 2.29 and 2.30, which depict levels of prenatal care.)
EXHIBIT 2.4
U.S. Low-Birth-Weight (<2,500 grams) Babies, by Mother’s Race or Ethnicity, 2005

EXHIBIT 2.5
U.S. Very-Low-Birth-Weight (<1,500 grams) Babies, by Mother’s Race or Ethnicity, 2005

SOURCE: This exhibit was created using data from *Health, United States, 2008*, published by the National Center for Health Statistics in 2009.
Introduction

Morbidity

One measure of morbidity (the effects of disease in a population) involves the limitations caused by chronic conditions. Exhibit 2.6 shows the percentage of the U.S. population, by age group, with activity limitations. As one may expect, the percentage reporting more severe or complete limitations increases with age. Disability days, not shown here, are another morbidity measure. Health services researchers often use quality-adjusted life years (QALYs) to measure the health status of individuals or populations. Another measure that incorporates aspects of both morbidity and mortality is the disability-adjusted life year (DALY). The loss of life from premature deaths is assessed by evaluating all deaths in a year and using them to estimate years of life lost (YLL) for each disease category. This measure has been helpful in making comparisons between and among countries (Merson, Black, and Mills 2001).

Mortality

Mortality or death rates are calculated separately for infants as an indicator of a population’s health status. Exhibit 2.7 shows mortality rates for infants (children younger than one year), neonates (younger than 28 days), early neonates (younger than 7 days), and infants in the post-neonatal period (28 to 365 days) for select years between 1950 and 2005. The total infant death rate
Chapter 2: An Overview of the U.S. Health Services System

In 2005 is 24 percent of what it was in 1950, a witness to overall increases in health status because of improved environmental and living conditions and advanced technologies to save newborns. Data for 2005 show 6.9 infant deaths per thousand live births, 4.5 neonatal deaths per thousand live births, and 2.3 deaths per live births for those younger than 7 days (NCHS 2009).

Exhibit 2.8 shows the leading causes of death and the number of deaths in 2005 for all races and both genders. Heart disease, malignant neoplasms (cancers), and cerebrovascular disease continue to be the dominant causes of death. Examining cause of death by age group, gender, and race or ethnic origin gives a better understanding of mortality in a population. Exhibits 2.9 and 2.10 show eight leading causes of death for males and females, respectively, by race and/or Hispanic origin. Heart disease is the number one cause of death for males in all but the Asian racial group, and the number one cause of death for females in all but the Asian racial group. The second leading cause of death—malignant neoplasms—remains relatively constant across both genders and all racial and ethnic groups. Real differences in rank order of causes of death across racial and ethnic groups appear among other leading causes of death, particularly deaths from lower respiratory disease. Gender differences in causes of death are particularly observable for diabetes mellitus. Note that the eighth leading cause of death differs by gender: For males it is suicide and for females, Alzheimer’s disease.
Age-adjusted death rates are also useful indicators of a population’s health status. Exhibit 2.11 shows the U.S. age-adjusted death rates for selected causes for all races for select years between 1973 and 2005.

### U.S. Health Status Compared with Other Industrialized Countries

Comparing the health status of the U.S. population with other industrialized countries puts the U.S. health status in perspective. Exhibit 2.12 compares infant mortality, life expectancy at birth, and life expectancy at age 65 for both males and females for select countries among the 24 member countries in the Organisation for Economic Co-operation and Development (OECD). In the United States, the infant mortality rate is higher than in those countries shown. Life expectancy at birth for males and females in the United States is lower than for their counterparts in the countries shown. A recent report (MacDorman and Kirmeyer 2009) points out that U.S. infant mortality rates did not increase between 2003 and 2005, which caused the United States to slip behind other developing countries whose rates continue to drop. Life ex-
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The lower health status for the United States along some of these measures is not due to lower overall spending or lower per capita spending on services. The United States allocates a greater proportion of its gross domestic product (GDP) to health than do other countries—nearly twice that of the United Kingdom and of Japan. The United States spends more than double the amount per capita on health services than do Australia, Japan, and the

### EXHIBIT 2.9
Leading Causes of Death for U.S. Males, by Race and/or Hispanic Origin, 2007

<table>
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<th>Rank</th>
<th>Malignant Neoplasms</th>
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<th>Chronic Lower Respiratory Disease</th>
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</tr>
<tr>
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</table>

<table>
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<tr>
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<table>
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<tr>
<td>NR</td>
<td>Hispanic</td>
<td>NR</td>
<td>Hispanic</td>
</tr>
</tbody>
</table>

SOURCE: This exhibit was created using data from *Health, United States, 2008*, published by the National Center for Health Statistics in 2009.

NOTE: NR = no report.

...
Although maintaining or regaining health is the purpose of a health services system, the assessment of health and the focus of many health services systems is on the deviations from health—that is, on illness and disease. *Illness* is a relative term, generally used in the lay community to represent an individual response to a set of psychological and physiological stimuli. A disease state
indicates the presence of pathology and is precisely defined by the provider community (May 1993). The extent of one’s illness or disease can be measured by a Sickness Impact Profile (SIP) or by various measures of severity of illness. The SIP assesses sickness-related dysfunction in the following areas: sleep and rest, eating, work, home management, recreation and pastimes, ambulation, mobility, body care and movement, social interaction, alertness behavior, emotional behavior, and communication (Patrick and Erickson 1993).

A number of severity of illness measures, including the Acute Physiological and Chronic Health Evaluation (APACHE), MedisGroups, Computerized Severity Index (CSI), disease staging, Patient Management Categories (PMCs), and the acuity index method, have been developed to improve the classification of hospital patients (Thomas and Ashcraft 1991). Although the severity of illness measures are useful in their own right, they have begun to be incorporated with other measures to measure burden of illness (Wilson 2004), adult and children’s inpatient hospital samples (AHRQ 2005), medical practice variation (Forthman et al. 2005), specific conditions as well as overall health (Spiegel et al. 2008), and pediatric oncology (Young-Saleme and Prevatt 2001).
Introduction

Factors That Affect Care-Seeking Behavior

People enter the health services system for a variety of reasons. The person who is ill or injured seeks treatment; the person with a chronic disease seeks regular monitoring; the pregnant woman seeks prenatal care to protect her health and that of her fetus; and the person with a terminal condition seeks relief from pain through palliative care. People also seek health services to prevent the occurrence of diseases, such as measles and influenza, and to detect and ameliorate the effects of other illnesses and diseases.

A number of factors govern care-seeking behaviors, including perceived health status, ease of access to providers, and risk factors. Perceived health status is a major reason why people seek services. People who perceive that their health status is fair or poor are much more likely to seek and use health services than those who rate their health status higher. Included in this group are the “worried well”—people whose measured health status is good but whose concerns about illness or disease result in their potential overutilization of services. Exhibit 2.13 shows the respondent-assessed health status for 2006,
focusing on the proportion of the population that rates its health status as fair or poor. Poorer health status is associated with age, gender, and race. As people age, more of them report fair or poor health status.

As is discussed in Chapter 3, the multiple dimensions of access—geographic, physical, temporal, sociocultural, and financial—also affect care-seeking behavior.

Certain genetic, behavioral, and other traits known to increase the risk of poor health are referred to as risk factors. Common risk factors that inform the study of health status include hypertension, obesity, lack of physical activity, and smoking.

**Utilization of Health Services**

The study of health services utilization reveals not only who accesses care, but also what types of care are accessed, with what frequency, and under what circumstances. The study of utilization also provides insight into costs of and expenditures for health services. Demographic factors, such as gender, age, race and ethnicity, and socioeconomic status, as well as risk factors and other variables, affect health services utilization.
Gender affects care-seeking behavior. Women, especially in their reproductive years, use more health services than do men in the same age groups. Women have a longer life expectancy than do men and as a group may use more health services. Exhibit 2.14 shows the distribution of gender in the U.S. population.

Age affects utilization of health services. Very young people may be frequent users of preventive and routine checkup services. Utilization of services increases with age, as physical and mental health deteriorates and chronic conditions progress. Exhibit 2.15 shows the age distribution of the U.S. population for 2006. Of major concern is the aging of a significant proportion of the U.S. population as baby boomers (those born between 1946 and 1964 in the post–World War II population explosion) reach older age categories and increase the demand for health services. The total population is expected to grow by 0.6 percent each year until the year 2020, but the elderly population will grow three times as much: 1.8 percent annually. The oldest old (people 85 years and older) will grow at the fastest rate of all: 2.9 percent annually over the next 30 years (USDHHS 1990). By 2029, all of the baby boomers will be age 65 years and over. As a result, the population aged 65–74 years will increase from 6 percent to 9 percent of the total population between 2005 and 2030. As the baby boomers age, the population 75 years and over will also rise from 6 percent to 9 percent of the total population by 2030 and will continue to grow to 12 percent of the total population by 2050 (NCHS 2009).
Race and Ethnicity

Race and ethnicity may affect health services utilization in several ways. Some diseases are specific to or more prevalent in certain populations—for example, Tay-Sachs in people of Ashkenazi (Central and Eastern Europe) Jewish ancestry and sickle-cell anemia in African Americans. People with these conditions are likely to use the health services system because of their particular needs for treatment. Cultural beliefs associated with race or ethnicity may also affect utilization. For example, females from some cultures may be reluctant to seek health services from male providers. People from some cultures may be reluctant to obtain organ transplants or to serve as organ donors.

In addition, the ways in which health services are provided to members of certain racial or ethnic groups may differ. Studies have documented the differences in rates of angiography, angioplasty, and coronary artery bypass grafts among racial and ethnic groups, for example, that do not appear to be directly related to physiologic differences among these groups (Carlisle, Leake, and Shapiro 1995). Recognition of the differences in utilization, some of which may be traced to differences in access to health services among special populations, has led to a national focus on reducing disparities in health status (see Chapter 3). Several sources of federal funding for program development and research, particularly the National Institutes of Health (NIH), give preference to proposals that specify how such disparities can be reduced or eliminated.
Exhibit 2.16 shows the racial and ethnic composition of the U.S. population. About 14.8 percent of the total population is of Hispanic ethnicity; Hispanic people may be of any race.

**Socioeconomic Status**

Socioeconomic status affects utilization of health services. People with limited income and financial resources, particularly the uninsured, are likely to seek fewer health services unless charges are on a sliding-scale basis or other resources are available to pay for their care. Exhibit 2.17 shows the proportion of the U.S. population, by race and ethnicity, whose family income is below the 2006 poverty threshold of $20,000 for a nonfarming family of four. The proportion of black and Hispanic families below the poverty level is more than twice that of white families. People with incomes below the poverty level are not necessarily precluded from obtaining services. Some of them may be Medicaid enrollees or may have access to other health services. Nevertheless, a higher proportion of people at lower income levels report poorer health status than other income groups and may, as a result of their socioeconomic status and other factors, be at a higher risk for health problems. People with higher educational levels, and thus typically at higher employment and income levels, are more likely to have health insurance or be able to obtain health services—particularly dental, mental health, and other preventive services—than people with lower educational levels.

**Models of Health Services Utilization**

Models to explain care-seeking behavior and the utilization of health services have been developed by Aday, Andersen, and Fleming (1980); Rosenstock
Chapter 2: An Overview of the U.S. Health Services System

(1974); and others. The health behavior model of services utilization developed by Aday, Andersen, and Fleming, shown in Exhibit 2.18, analyzes utilization in a health services system based on health policy factors, the characteristics of the population at risk, the characteristics of the services delivery system, and consumer satisfaction with health services. In the population characteristics component, predisposing characteristics include general health beliefs, attitudes, and knowledge, as well as demographics and employment status. Enabling characteristics include family income and place of residence. The model of access to care in Chapter 3 is based on this health behavior model.

The health belief model (Exhibit 2.19) suggests that utilization of health services is stimulated by one’s set of beliefs about disease and the effectiveness of a health services system in preventing and treating disease. Individual perceptions and modifying factors, such as demographic, sociopsychological, and structural variables, affect the likelihood of one’s action in seeking care and treatment.

These and other models draw attention to the complexities of analyzing utilization where some variables are explicit and measurable and others are highly specific to the individual and thus more difficult to measure.

EXHIBIT 2.17
Percentage of U.S. Persons and Families Below Poverty Level, by Select Characteristics, Select Years, 1973–2006

SOURCE: This exhibit was created using data from Health, United States, 2008, published by the National Center for Health Statistics in 2009.
Rates of Health Services Utilization

Exhibits 2.20 through 2.29 provide data on the utilization of major health services, such as physician contacts, hospital discharges, and nursing home residency. Exhibits 2.20 through 2.25 show the per capita contacts with physicians by number of visits, demographic characteristics (i.e., age, gender, race, and income), health insurance, poverty status, and site of the contact or visit (i.e., physician’s office, home visit, hospital emergency department, or hospital outpatient department). The number of physician contacts per year is related to age, health status, financial access (such as health insurance coverage), and possible nursing home or other institutionalization for the oldest age group. Nearly 37 percent of those who report fair or poor health status have ten or more home visits and visits to physicians’ offices and emergency departments per year, whereas only 10 percent of those who report their health status as good to excellent have ten or more visits per year to these providers (Exhibit 2.20). The number of physician contacts, including hospital outpatient department and hospital emergency department visits, increases with age (Exhibit 2.21).
In the “4–9 visits” category in a 12-month period, Asian and Pacific Islanders have fewer physician contacts than do the other racial and ethnic groups (Exhibit 2.22). A higher proportion of males have no visits in a 12-month period, compared with females, and a higher proportion of females have more than three visits in a 12-month period, compared with males. Health insurance status and financial status affect the number of visits. In Exhibit 2.23, persons at more than 200 percent of the federal poverty level have the lowest proportions in the “no visits” and “10+ visits” categories and the highest proportions in the “1–3 visits” and “4–9 visits” categories.

Most physician contacts occur in physicians’ offices, although some occur in hospital emergency departments and hospital outpatient departments. Exhibit 2.24 shows ambulatory care visits to physicians’ offices, hospital outpatient departments, and emergency departments by gender and race. Females have more visits to all locations than do males. Whites have more visits
**EXHIBIT 2.20**
Health Services
Home Visits and Visits to
Physicians’ Offices and
Emergency Departments
Within the Past
12 Months, by
Self-Assessed
Health Status,
2006

![Graph showing the percentage distribution of home visits and visits to physicians’ offices and emergency departments within the past 12 months by self-assessed health status, 2006.](image)

**SOURCE:** This exhibit was created using data from Health, United States, 2008, published by the National Center for Health Statistics in 2009.

**EXHIBIT 2.21**
U.S. Ambulatory Visits to Physicians’ Offices, Hospital Outpatient Departments, and Emergency Departments, by Age Group, 2006

![Graph showing the age-adjusted number of visits per capita by age group and type of facility, 2006.](image)

**NOTES:** ED = emergency department; OP = outpatient.

**SOURCE:** This exhibit was created using data from Health, United States, 2008, published by the National Center for Health Statistics in 2009.
to physicians’ offices, whereas blacks have more visits to hospital outpatient departments and emergency departments.

Exhibit 2.25 provides another perspective on visits to physicians—by type of insurance coverage (including no insurance coverage) for the population younger than 65 years. As one would expect, a higher proportion of those with health insurance have physician contact in a 12-month period than those who are uninsured.

Exhibit 2.26 shows hospital utilization by age group. One person in 13 under the age of 65 years is hospitalized each year; people 65 years and older have higher hospitalization rates due to chronic conditions and failing health. More females than males, and more blacks than whites per thousand are hospitalized each year. As is true for physician contacts, people in lower income categories have higher rates of hospitalization than do those in higher income categories.

Home health care has permitted many people with chronic illnesses and short- or long-term disabilities to avoid institutionalization by receiving health services in their homes. Until recently, home health care was the fastest growing
EXHIBIT 2.23
Health Services
Home Visits and Visits to Physicians’ Offices and Emergency Departments Within the Past 12 Months, 2006
(a) By poverty status.
(b) By health insurance status and poverty status, below age 65 years.

NOTES: FPL = federal poverty level.
SOURCE: These exhibits were created using data from Health, United States, 2008, published by the National Center for Health Statistics in 2009.

Medicare-reimbursed service. Exhibit 2.27a displays the Medicare population’s utilization, and Exhibit 2.27b displays utilization by the Medicaid population. These two public payers account for most home health care utilization, by age group and gender. More females than males use home health services, in part because of women’s greater longevity.
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EXHIBIT 2.24
Ambulatory Care Visits to Physicians' Offices, Hospital Outpatient Departments, and Emergency Departments, by Gender and Race, 2006

![Graph showing Ambulatory Care Visits per 100 Persons by Gender and Race](image)

NOTE: ED = emergency department.

SOURCE: This exhibit was created using data from *Health, United States, 2008*, published by the National Center for Health Statistics in 2009.

EXHIBIT 2.25
Health Care Home Visits and Visits to Physicians' Offices and Emergency Departments Within the Past 12 Months, by Health Insurance Status and Age, 2006

![Graph showing Percentage with Visits by Health Insurance Status](image)

SOURCE: This exhibit was created using data from *Health, United States, 2008*, published by the National Center for Health Statistics in 2009.
An estimated 3.6 percent of the population age 65 years and older is in a nursing or personal care home, although not all of them remain there for the duration of their lives (NCHS 2008). The seventh National Nursing Home Survey was conducted in 2004 and reported in 2008 by the National Center for Health Statistics (NCHS), which is within the Centers for Disease Control and Prevention (CDC). Exhibit 2.28 shows the proportion of the elderly, by age group, gender, and race, who were residents of nursing or personal care homes in 2004.

Although these aggregated data provide important encounter information, they do not provide information about the range of physician visits per person, for example, or the number of rehospitalizations included in the hospital utilization exhibit. More important, these data reflect only the usage of services; they cannot show the unmet need for services because of lack of access or other barriers faced by people who needed services but could not obtain them.

The Effects on Health Status of Receiving Health Services

Receiving health services is assumed to have an ameliorative effect on health status. For those services proven to be effective, positive outcomes are likely. Timely prenatal care, for example, is known to improve birth outcomes. Ex-
Chapter 2: An Overview of the U.S. Health Services System

Exhibit 2.29 shows the percentage of live births to mothers who began prenatal care in their first trimester of pregnancy for all mothers, white mothers, black mothers, and Hispanic-origin mothers for select years between 1970 and 2004. Exhibit 2.30 shows the percentage of mothers, by race, who either did not begin receiving care until the third trimester of their pregnancies or who received no care at all. Lower utilization of prenatal care in all trimesters of pregnancy is correlated with a lower percentage of live births.

Exhibit 2.27a
U.S. Medicare Home Health Care Patients, According to Age and Gender, 2003

Exhibit 2.27b
Medicaid Home Health Care Patients, According to Medicaid Classification and Gender, 2003

EXHIBIT 2.28
U.S. Nursing Home Residents Age 65+, by Gender and Race, 2004

![Bar chart](chart.png)

**SOURCE:** This exhibit was created using data from Health, United States, 2008, published by the National Center for Health Statistics in 2009.

EXHIBIT 2.29
Prenatal Care for U.S. Live Births, by Race and Hispanic Origin of Mother, Select Years, 1970–2004, First Trimester

![Bar chart](chart.png)

**SOURCE:** This exhibit was created using data from Health, United States, 2008, published by the National Center for Health Statistics in 2009.
Despite the significant advances in medical care, however, much remains to be learned. Long-recognized diseases, such as polio, for example, are taking on new manifestations as polio victims age. Recently identified diseases such as human immunodeficiency virus (HIV) and the Ebola virus are not yet fully understood. Little is known about the long-range effects of some interventions, and we still know too little about the patient outcomes for many therapies and treatments in current use. The number of studies of the outcomes of care is growing to expand knowledge of the effects of health services on health status.

Receiving health services may, in certain instances, have negative effects on health status. Hospitalized patients may acquire nosocomial infections as a direct result of their hospitalizations. Patients may also develop iatrogenic illnesses, such as drug interactions, as a result of the treatments they receive. Medication errors have proven to be a major cause of poor quality of care (Leape 2002).

It is important to remember that the receipt of health services is only one factor affecting health status. Roemer’s determinants-of-health model, shown in Exhibit 2.1, lists other factors, including genetic heritage, demographics, living and working environments, and the safety of the physical environment. Some posit that the overall health of a population, as well as individual health status, would be more improved by providing a guaranteed minimum

EXHIBIT 2.30
Prenatal Care for U.S. Live Births, by Race and Hispanic Origin of Mother, Select Years, 1970–2004, Third Trimester

SOURCE: This exhibit was created using data from Health, United States, 2008, published by the National Center for Health Statistics in 2009.
income than by providing more health services. The effects of lifestyle and behavior, including violent behavior, on health status—many of which are outside the domain of the health services system—must also be acknowledged.

Summary

Many factors affect the health of individuals and populations, including demographic factors (e.g., age, gender, and socioeconomic status) and access to and utilization of services. The U.S. population’s health status, as measured by crude birthrates and fertility rates, birth weight, life expectancy, morbidity, and mortality, is graphed and, where possible, compared with status reported for other countries. Two models that attempt to explain health services utilization—the health belief model and the health behavior model—are explained, and the U.S. utilization of key health services is graphed. Although appropriate health services utilization can be important in maintaining personal health, it is possible to overuse services in a way that can negatively affect health status.

Key Words

acuity index  
Acute Physiological and Chronic Health Evaluation (APACHE)  
almshouses  
baby boomer  
Committee on the Costs of Medical Care  
Comprehensive Health Planning Act  
Computerized Severity Index (CSI)  
determinants of health  
disability-adjusted life years (DALYs)  
disability days  
disease  
fee-for-service delivery system  
gross domestic product (GDP)  
health  
health behavior model  
health belief model  
health maintenance organization  
health outcomes  
health status  
hospital planning council  
iatrogenic illness  
illness  
life expectancy  
managed care  
Medicaid  
medical-industrial complex  
Medicare  
morbidity  
nosocomial infection  
Organisation for Economic Co-operation and Development (OECD)  
Patient Management Categories (PMCs)  
poverty level  
quality-adjusted life years (QALYs)  
risk factors
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ACCESS TO HEALTH SERVICES

Introduction

Until the breakup of the Soviet Union, only two major industrialized countries—South Africa and the United States—did not provide universal access to health services. Neither South Africa nor the United States has a national health system, such as Canada’s, or a national health service, such as Great Britain’s, to provide a basic set of services to their entire populations. In the free-market economy of the United States, health services are among many goods and services that individuals are generally expected to provide for themselves. Despite years of debate about whether its citizens have a right to health services, the U.S. system ensures only the right to emergency care in most hospitals under certain circumstances. Medicare beneficiaries are also entitled to inpatient hospital care, hospice services, and home health care.

This chapter discusses how people in the United States, in the absence of a national health system or service, obtain access to care and also focuses on the care seeker’s access to a provider. Issues of access among providers also exist (e.g., a generalist’s access to a specialist, or a provider’s access to backup support, rehabilitation, or long-term care services for patient referrals) but are beyond the scope of this book.

Defining Access

The term access connotes different things to health services analysts. To Penchansky and Thomas (1981), access is the measure of fit between characteristics of providers and health services, and characteristics and expectations of clients, incorporating five reasonably distinct dimensions: availability, accessibility, accommodation, affordability, and acceptability. Access may describe the entry into or use of services. Access may also be defined by factors influencing entry or use of services. For purposes of this discussion, the latter definition of access is used.

Access to care has a direct bearing on the two other important dimensions of the health services system: cost/expenditures and quality. Increasing access to health services can actually decrease unit costs in some instances but inevitably increases expenditures. Limited or no access to care can decrease
a person’s health status and quality of life, but excessive access can also be detrimental.

As Exhibit 3.1 indicates, access to care has many dimensions: geographic, physical, temporal, sociocultural, and financial. Geographic access is influenced by where the care seeker lives in relationship to where the provider practices. A full range of medical services is unlikely to be available in a coastal village in Alaska, a mountain mining town in Nevada, or a rural farming community in the Midwest, for example, even though the physician to patient ratios suggest that physician supply is adequate to serve these populations. Medical care is most likely to be found where a population base and related services to support it exist. Those who live outside such areas may have to travel considerable distances, often over difficult terrain and through imposing weather, to reach care. Transportation is a factor in geographic access. Public transportation systems do not serve all areas where people live, and private transportation may not be available to the care seeker.

Physical access to care is influenced by the care seeker’s physical mobility and mental competence in reaching a provider, as well as by the ease of access to the provider’s facility. Today’s system of health services usually requires the care seeker to go to the provider. In-home services, although growing, still do not typically include home visits by physicians for routine care. Ease of access to a provider’s facility has been assisted by the Americans with Disabilities Act of 1990, which recommends appropriate access and imposes sanctions for noncompliance. Another potential way to increase access to a provider is through the use of telemedicine and through remote monitoring.
of chronic diseases. Such mechanisms have not yet begun to reach their full potential (Barton et al. 2007).

*Temporal access* may be inhibited when, because of an inflexible work schedule, the unavailability of care for young and old dependents, or other time constraints, a care seeker is unable to obtain care during the hours it is provided. Temporal barriers may also include waiting or queue times between the request for an appointment and the provider’s availability.

Multicultural societies such as the United States also experience socio-cultural barriers to access. The provider and care seeker may speak different languages or may come from different cultures that value health services in disparate ways and have conflicting customs and beliefs. These differences may inhibit a person from seeking needed care because of the frustrations inherent in communicating or may prevent the care seeker from obtaining the full benefits of the recommended treatment because of misunderstandings.

*Financial access* to health services in the United States is largely governed by the individual’s access to health insurance coverage—either private insurance or public or social insurance. Health insurance, addressed more fully in Chapter 6, became the dominant payment mechanism for health services in the last half of the twentieth century. This trend stems from the growth of private health insurance coverage during and immediately after World War II and the establishment of public or social health insurance in the mid-1960s. In addition to private and public health insurance, financial access to health services is attained by private payment, by qualifying for government-sponsored programs, or through the provision of charity care.

Given these varying dimensions of access, what factors affect a person’s ability to access health services in the U.S. system? This question may be explored by examining the model in Exhibit 3.2. This model was adapted from one developed by the former congressional Office of Technology Assessment (OTA), based on work done by Ron Andersen, LuAnn Aday, and other researchers in the utilization of health services. Factors affecting health that may not be influenced by access to personal health services are considered briefly. Three types of factors—predisposing, need, and enabling—that potentially affect access are then examined. Finally, the potential adverse health outcomes associated with lack of access to care and unconstrained access to care are considered.

**Factors Affecting Access to Health Services**

Some factors affecting an individual’s health status may not be influenced by access to personal health services. Exhibit 3.2 identifies three such factors:
(1) individual factors, (2) the physical environment, and (3) the social environment.

Individual factors include inherited (i.e., genetic) characteristics and individual behaviors that reflect a person’s beliefs, attitudes, and values. Another individual factor, health literacy, has only recently begun to be examined. Some databases (see the statistical section on the World Health Organization’s website) note that the United States has a 100 percent literacy rate, which is seriously overstated. A person’s ability to read and understand prescription dosages and times and conditions of usage will affect the outcome of treatment. A language barrier may affect a person’s ability to comprehend the proposed treatment plan.
Physical environmental factors include air and water quality, as well as the presence or absence of disease vectors. A person’s friends and social relationships are examples of societal environmental factors that may not be influenced by access to personal health services.

**Predisposing Factors**

As shown in Exhibit 3.2, predisposing, need, and enabling factors affect potential access. These factors vary in their importance in affecting access, and they do not operate independently; rather, their effect on access is interactive.

Predisposing factors are an individual’s demographic characteristics: age, gender, education, occupation, and race/ethnicity. The two ends of the age spectrum—the young and the old—often require increased access to services. Because these age groups are often dependent on others to secure their care, access may be directly affected by their ability to get assistance in obtaining care.

Gender also influences access to care. For example, women of childbearing age are likely to access health services more frequently than their male counterparts. Gender may also affect participation in clinical research studies. Criticism was directed in the early 1990s at the National Institutes of Health (NIH) for supporting large-scale research studies that limited their investigations to male subjects, even though the studied condition affected both genders (Finnegan 1996). The NIH has made strides in correcting this imbalance.

Educational levels influence access. People with higher educational levels access health services more frequently.

A person’s occupation may affect access in several ways. First, a hazardous occupation, such as mining, puts one at greater risk for injuries and some types of illness (e.g., black lung disease), thereby requiring more frequent contact with the health services system. Second, a person’s occupation has a direct influence on income and health insurance status, two enabling factors covered later in this discussion.

Finally, a person’s race and ethnicity may affect access in several ways. Some diseases—Tay-Sachs disease or sickle-cell anemia, for example—affect only certain racial or ethnic groups. Racial and ethnic groups may also face cultural barriers or discriminatory practices that affect their ability to access health services.

**Need Factors**

A range of need factors—perceived health, interpretation of illness, and other health status measures—affect access to care. Numerous studies have shown that individuals who perceive their health status as fair or poor are more likely to access care (McCall et al. 1991; Short and Lair 1994/95), assuming they
have the financial means to do so. Patients’ understanding and interpretation of their illness affects access. Bhandari (2006) noted that the way people report their health status is directly related to their use of medical services, with those in progressively better health status categories visiting doctors less frequently, staying fewer nights in the hospital, and taking prescription medications less frequently. Health status measures, such as levels of disability and functioning, also affect access to care.

Enabling Factors

The third category of factors affecting potential access—the enabling factors—constitutes the major focus for the remainder of this section. Enabling factors include convenience, income, insurance coverage, and system characteristics. Convenience embodies temporal, geographic, and physical dimensions of access, as discussed earlier. People’s incomes directly affect their financial access and frequency of access to health services and also influence whether they have private health insurance coverage. Private and public insurance coverage is the major route of financial access to health services in the United States. Although health insurance is explored comprehensively in Chapter 6, an overview of its effects on access follows. This section concludes with a discussion of other characteristics of the U.S. health services system affecting access—principally, the availability of governmental and other programs that provide access to special populations. Following the discussion of these enabling factors, the problems of people who lack financial access to care are addressed.

Financial Access to Health Services

Private insurance and public or social insurance are first discussed as means of financial access to health services. Private payment (out-of-pocket payment) for health services is then addressed. Finally, the important role of government-sponsored programs, such as the U.S. Department of Veterans Affairs (VA) and the military system of health services, is described.

Private Health Insurance

Private health insurance is the greatest source of health insurance coverage for people younger than 65 years. Medicare, discussed in the next section, provides public or social insurance for most people age 65 years and older, as well as for people with certain types of disabilities, including end-stage renal disease (ESRD). In 2007, 67.5 percent of the population younger than 65 years reported some form of private health insurance coverage (NCHS 2009). Exhibit 3.3 shows the percentage of the population with private health insurance by age, gender, race/ethnicity, and various poverty levels. Children younger
than 18 years who are below the federal poverty level had the lowest insurance coverage rates of any of these demographic groups.

Two types of private health insurance are available in the United States: individually purchased policies, which are usually limited in coverage and relatively expensive to purchase, and insurance provided as one of the benefits of employment. Employer-sponsored health insurance is generally more comprehensive in scope because the risk of insuring is spread over a group of employees and because those in the workforce are generally healthier than those of working age who are not in the workforce and are not the dependents of an insured worker. Group insurance is thus less expensive per person.
than individual policies. In most cases, employers and employees share the cost of this insurance. Many employers are beginning to shift a greater proportion of these costs to their employees.

Individual policies are purchased by people who can afford them, those who may be self-employed, who work in industries such as mining or fishing in which insurance is difficult to obtain, or who otherwise do not have access to a group health insurance policy. Individual high-deductible policies may also be purchased by people who do not anticipate much utilization of health services but want the security of catastrophic coverage. Individual policies often impose stringent limitations for preexisting conditions. They are, however, becoming of greater interest as individuals explore new insurance products such as consumer-directed health plans (see Chapter 6).

About 61 percent of the nonelderly who have health insurance are likely to have insurance as a benefit of employment, either as the employee or as the dependent of an insured employee. Health insurance provided as a benefit of employment varies by size of firm, type of industry, the employee’s work status (full-time or part-time), and other factors. Midsize to larger firms (100 or more employees) typically offer one or more types of health insurance coverage to their full-time workers, whereas smaller firms (25 or fewer employees) may not offer health insurance as a benefit. Certain industries, such as farming, logging, floral businesses, and interior design—viewed as high risk by in-
Chapter 3: Access to Health Services

Private health insurance coverage for the nonelderly varies by race/ethnicity: a greater proportion of whites than nonwhites are insured (Exhibit 3.4). As a bridge to the next section on public health insurance, Exhibit 3.5 shows the percentage of the U.S. population that had any kind of health insurance coverage in 2007.

EXHIBIT 3.4
Private Health Insurance Obtained Through the Workplace, <65 Years Old, 2006
(a) By Age Group and Gender.
(b) By Race/Ethnicity.
(c) By Federal Poverty Level (FPL).

(a) By Age Group and Gender.

(b) By Race/Ethnicity.
**EXHIBIT 3.4**  
*Continued*

![Health Insurance Coverage, All Ages, 2007](chart.png)

**EXHIBIT 3.5**  
Health Insurance Coverage, All Ages, 2007

SOURCE: These exhibits were created using data from *Health, United States, 2008*, published by the National Center for Health Statistics in 2009.

SOURCE: This exhibit was created with data from *Statistical Abstract of the United States, 2008*, published by the U.S. Department of Commerce.
Public or Social Health Insurance

Many consider Medicare and Medicaid, two government-supported programs initiated as amendments to the Social Security Act (titles XVIII and XIX, respectively) in 1965 and implemented the following year, to be public insurance programs. Both are entitlement programs, meaning eligible persons have a legislative entitlement to all the covered services they require. Only the Medicare program really fits an insurance model and was designed to conform to the structure of private health insurance. Because the programs are so frequently compared—and confused—both are discussed in this section.

The Medicare and Medicaid programs, a legacy of President Lyndon Johnson’s Great Society, resulted from compromises following the failure to enact some form of national health insurance (Anderson 1968). Medicare was intended to provide mandatory hospitalization benefits (Part A) to qualified beneficiaries and optional physician services and outpatient coverage (Part B) to beneficiaries who could afford the monthly premium. Medicare beneficiaries initially were persons 65 years and older, which was retirement age in that era; later amendments included people with ESRD (1972) and long-term disabilities (1973).

The Medicaid program, a welfare program, was established to pay for a mandated set of health services to low-income children and their caretakers who were the recipients of, or eligible to receive, public assistance funds from the Aid to Families with Dependent Children (AFDC) program or the Supplemental Security Income (SSI) program. The Medicaid program has been amended over time to include people who have developmental disabilities (1972) and to expand eligibility to other low-income groups, including children, pregnant women, and the elderly. The Personal Responsibility and Work Opportunity Reconciliation Act (PL 104-93) of 1996 replaced the AFDC program with the Temporary Assistance for Needy Families (TANF) program.

Although the Medicare and Medicaid programs were established in the same congressional session and were intended to provide health services access to the two ends of the population spectrum—the elderly and children with their adult caretakers—the programs differ widely in their requirements for eligibility, covered benefits, financing, and proportion of the population each covers. These differences are illustrated in Exhibit 3.6 and discussed in more detail in Chapter 6.

Private Payment for Health Services

Private, out-of-pocket payment for health services is another way in which a person obtains financial access to care. Private out-of-pocket payment includes payment for all health services expenditures by uninsured people who can afford to do so. It also includes payment for health services not covered by
EXHIBIT 3.6
Comparison of Medicare and Medicaid Programs

<table>
<thead>
<tr>
<th>Eligibility</th>
<th>Medicare</th>
<th>Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 65+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disabled persons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>End-stage renal disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lou Gehrig’s disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retired railroad employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Categorical welfare (TANF, SSI)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons living with AIDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-income pregnant women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-income children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-income elderly</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financing</th>
<th>Medicare</th>
<th>Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A: Employer/employee contributions</td>
<td>50% federal funds (at minimum)</td>
<td></td>
</tr>
<tr>
<td>Copayments and deductibles</td>
<td>50% or less state funds</td>
<td></td>
</tr>
<tr>
<td>Part B: Premiums</td>
<td>Limited copayments (cost sharing)</td>
<td></td>
</tr>
<tr>
<td>Deductible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General revenue (federal funds)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part C: Medicare Advantage (formerly Medicare+Choice)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capitation payment funded by Part A Trust Fund and Part B account</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part D: Outpatient prescription drug coverage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premiums and general revenue (federal funds)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual cost sharing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Medicare</th>
<th>Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A: Hospital inpatient</td>
<td>Hospital (inpatient and outpatient)</td>
<td></td>
</tr>
<tr>
<td>Skilled nursing facility care</td>
<td>Rural health clinic</td>
<td></td>
</tr>
<tr>
<td>Home health care</td>
<td>Laboratory</td>
<td></td>
</tr>
<tr>
<td>Hospice</td>
<td>X-ray</td>
<td></td>
</tr>
<tr>
<td>Part B (optional): Physician services</td>
<td>Skilled nursing facility, age 21+</td>
<td></td>
</tr>
<tr>
<td>Outpatient services</td>
<td>Home health care</td>
<td></td>
</tr>
<tr>
<td>Part C: Medicare Advantage (formerly Medicare+Choice)</td>
<td>EPSDT</td>
<td></td>
</tr>
<tr>
<td>Part D: Outpatient prescription drug coverage</td>
<td>Physician services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family planning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nurse midwife (where permitted)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Population Covered</th>
<th>Medicare</th>
<th>Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>43.2 million persons, including 5 million persons with disabilities (2007)</td>
<td>55.6 million persons (2007)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Means Test</th>
<th>Medicare</th>
<th>Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>None required</td>
<td>Income and asset limits</td>
<td></td>
</tr>
</tbody>
</table>

* Medicaid eligibility may differ from state to state, depending on how the state redefines the linkage between welfare programs and Medicaid eligibility as a result of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996.

NOTES: TANF = Temporary Assistance to Needy Families; EPSDT = Early and Periodic Screening, Diagnosis, and Treatment Program; SSI = Supplemental Security Income.
private, public, or social health insurance and payment for the deductibles, copayments (set dollar amounts), and coinsurances (percentages of total charges) that various insurance companies require. (Premiums are not usually considered out-of-pocket payments in the calculation of the National Health Accounts.) Out-of-pocket payments constitute an important revenue source for financing health services. In 2007, 12 percent of health services revenues came from private out-of-pocket payments (see Chapter 7).

**Government-Sponsored Programs That Provide Access to Health Services**

A range of government-supported health programs provide direct access to health services for special populations. A select set of these programs, including the VA system, Department of Defense programs (including TRICARE), the Indian Health Service, and the prison health services system, are discussed in the sections that follow.

The VA health services system, established in 1921 as the U.S. Veterans Bureau (Shonick 1995) to provide inpatient, outpatient, and long-term care services to veterans with conditions connected to their military service, provides care through a system of 153 hospitals and 895 community-based outpatient clinics (U.S. Department of Veterans Affairs 2008). Some states have several VA hospitals; others, such as Alaska, have none.

VA health services facilities provide care to an important segment of the U.S. population and serve as training sites for medical students and residents. In 1972, in what was perceived as an era of physician shortages, the VA linked with other organizations to establish eight new medical schools to increase the supply of physicians.

Congress periodically questions the future of the VA system. Proposals to expand VA services to include dependents of veterans, to serve other community members, or to dismantle the VA system have been discussed at the congressional level but have not yet reached legislative status. Any potential changes to the VA system need to take into account the new population of veterans from the wars in Iraq and Afghanistan.

In 2007, the VA expended $33.8 billion for the care of veterans. Exhibit 3.7 shows the percentage distribution of these funds, half of which were expended on outpatient care.

The Department of Defense (DOD) is an important provider of health services to active military members and their dependents. The U.S. Army, Navy, and Air Force each operates its own medical services, and the DOD operates eight “tri-service” joint medical facilities. TRICARE serves more than 9.2 million beneficiaries in 63 military hospitals and 413 clinics around the world.
that are referred to as military treatment facilities (TRICARE 2008; USGAO 2005a). Contractual services are negotiated with the private sector in places where no military facilities exist. A medical school to train physicians for military service—the Uniformed Services University of the Health Sciences—was established in 1972 in the Washington, DC, area.

Military dependents and retirees, and their dependents and survivors, receive health services through TRICARE, formerly known as the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), an insurance program whose origins date back to the Emergency Maternal and Infant Child Care Program (EMIC) established in 1943 (Shonick 1995). The DOD requires considerable cost sharing of its TRICARE enrollees and uses managed care as one way to project and better manage expenditures for military dependents and retirees. The DOD FY 2007 budget for its Unified Medical Program was $42.2 billion to provide care to 89,400 military and 44,100 civilian beneficiaries (TRICARE 2008).

**Indian Health Service**

The Indian Health Service (IHS), first established as a unit of the War Department in 1802 (Shonick 1995), and now a part of the U.S. Department of Health and Human Services (HHS), provides health services to an estimated 1.5 million of the estimated 2.6 million American Indians and Alaska Natives enrolled in more than 557 tribes, villages, bands, and pueblos throughout the United States. The IHS maintains 49 hospitals and 364 health centers in a number of states for its beneficiaries, but it also contracts with the private sector to provide services to those who live outside the service areas of these facilities (IHS 2002; USGAO 2005b). Through the Indian Self-Determination and Education Assistance Act of 1975, many tribal authorities have assumed responsibility for providing health services, contracting with IHS for the funds to help them develop and implement tribal-specific health plans. Larger cities

**EXHIBIT 3.7**

VA Expenditures for Health Care, 2007

![Pie chart showing distribution of VA expenditures for health care in 2007.]

SOURCE: This exhibit was created from data from the National Health Expenditures Report for 2007, published by the Centers for Medicare & Medicaid Services in 2008.
may have an urban Indian center where services are available to American Indians who live away from their home reservations.

No group within the U.S. population has a constitutionally established right to health services. Prison inmates, however, are described by some as having the nearest thing to a constitutional right to care of any population group. This description stems from the provision of services that has resulted from inmate lawsuits claiming the right to care under the auspices of the Eighth Amendment to the U.S. Constitution, which prohibits “cruel and unusual punishment.” Exhibit 3.8 shows the distribution of the 2.2 million U.S. prisoners in 2006 by gender and by race/ethnicity.

Inmates in federal and state prison systems receive government-funded health services that vary in extent and coverage by individual facility. Prisons may have staff physicians on site, contract for physician services on an as-needed basis with nearby communities, maintain on-site clinics staffed by mid-level practitioners, provide care through the use of telemedicine, or arrange for health services in other ways. Few prisons maintain full-scale inpatient hospital facilities; they typically obtain such services from nearby communities on an as-needed basis. Dental services may also be provided according to a variety of arrangements.

Correctional facility administrators are concerned about the increasing demand and expenditures for health services because of the aging of the
prison population and because more inmates are receiving and serving longer sentences. Additional concerns include the number of inmates who are positive for human immunodeficiency virus (HIV) or have acquired immunodeficiency syndrome (AIDS), the increase in tuberculosis and other communicable diseases, the prevalence of chronic diseases in an aging population, the prevalence of mental illnesses, and other serious health problems in an incarcerated population.

Potential Adverse Outcomes Associated with Lack of Access or Unconstrained Access to Health Services

The access-to-health-services model (Exhibit 3.2) incorporates the potential adverse health outcomes associated with lack of access and excessive access. Having financial access to health services directly affects care-seeking behavior. A lack of health insurance is associated with reduced access to medical care, a lower prevalence of recommended preventive services, potentially avoidable hospitalizations, and subsequently higher mortality independent of other risk factors (Franks, Clancey, and Gold 1993). Uninsured adults and children have fewer provider visits than people with insurance. Uninsured adults use about half of the nonemergency ambulatory visits, two-thirds or fewer emergency department visits, and a much smaller fraction of inpatient hospital days—12 percent for men and 20 percent for women—than their insured counterparts. Although uninsured children appear to use emergency care on a par with insured children, they still use only 70 percent as much nonambulatory care and are only 25 percent as likely as children with insurance to enter a hospital (Spillman 1992). Children with health insurance gaps are at increased risk of having more than one care site (Kogan et al. 1995), thus jeopardizing continuity of care. They are less likely to receive medical care from a physician, even when it seems reasonably indicated, and are at risk for substantial avoidable morbidity (Stoddard, St. Peter, and Newacheck 1994).

Exhibit 3.9 shows that 52.5 percent of those without insurance for all or part of the previous 12 months postponed seeking care, and 42.4 percent went without care because of financial reasons; in contrast, only 4.1 percent of people with insurance postponed care and 3.7 percent went without care because of financial reasons. In a seminal 1992 report, the congressional OTA reported that the uninsured are more than three times as likely as those with private insurance to experience a lower utilization of services, potentially worse health services, and adverse outcomes. The OTA also reported that people with public insurance (Medicaid in particular, even though it is not an insurance program) are up to two and a half times more likely than those with pri-
private insurance to experience potentially inadequate health services and four times more likely to have an adverse outcome.

Since these seminal studies were reported, others have continued to document the effects of lack of health insurance on health status. A study by Ayanian and colleagues (2000) showed that a significantly higher proportion of those who were uninsured for more than one year could not see a physician because of the cost and had no routine checkup within the previous two years compared with those who were uninsured less than one year or who had not lost insurance. The Institute of Medicine (IOM) examined the matter and has issued reports on the problems of the uninsured in the United States. Members of an expert panel examined findings from more than 130 research studies. In the report Care Without Coverage: Too Little, Too Late, issued in May 2002, the IOM reported that adult health status changes when adults remain uninsured: adults in late middle age (especially between ages 55 and 65) and adults with low incomes are especially susceptible to deteriorating health if they never had or have lost health coverage (IOM 2002a). A study by Baker and colleagues (2002) corroborates the IOM findings: adults age 51–61 years who lost all health insurance were at increased risk of major declines in overall health and had increased risks of developing a new mobility difficulty within two years of losing their health insurance coverage. The Kaiser Family Foundation (2002), the American College of Physicians (ACP) (2004), and the Institute of Medicine (2009) all report on the health consequences of being uninsured. The uninsured receive less preventive care, are diagnosed at more advanced disease stages, and once diagnosed, tend to receive

### EXHIBIT 3.9
Reduced Access to Medical Care During the Previous 12 Months Because of Cost, by Selected Characteristics, 2006

<table>
<thead>
<tr>
<th>Percentage of Population</th>
<th>Insured Continuously All 12 Months</th>
<th>Uninsured for Any period</th>
<th>Uninsured for &gt;12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Did not get medical care due to cost</strong></td>
<td>2.1</td>
<td>19.4</td>
<td>23.0</td>
</tr>
<tr>
<td><strong>Delayed medical care due to cost</strong></td>
<td>4.1</td>
<td>26.4</td>
<td>26.1</td>
</tr>
<tr>
<td><strong>Did not get prescription drugs due to cost</strong></td>
<td>3.7</td>
<td>21.8</td>
<td>21.6</td>
</tr>
</tbody>
</table>

SOURCE: This exhibit was created using data from Health, United States, 2008, published by the National Center for Health Statistics in 2009.
fewer drugs and less surgical intervention. Uninsured children are 25 percent more likely to miss school (Kaiser 2002). The ACP report listed 15 adverse health consequences experienced by the uninsured. The IOM report concluded that health insurance is integral to individuals’ personal well-being and health.

The destabilization of the U.S. economy that became alarmingly evident in the fall of 2008 suggests that a larger proportion of the population may delay seeking care because they have lost their employer-sponsored health insurance because of unemployment or have had related events that have compromised their financial access to health services. Destabilization is not a phenomenon unique to the United States: the global economy and that of many individual countries have also been affected, and although their various health services differ, a reduction in financial resources affects every resident of a country.

Although it seems a smaller problem compared with the magnitude of the uninsured population whose access to care is limited, unconstrained access to care may also contribute to, rather than alleviate, health problems. Iatrogenic (physician-induced) illness and nosocomial (hospital-acquired) infections may occur as a result of treatment. Adverse drug interactions are more likely when a patient’s treatment by a range of providers is not coordinated. Despite their widespread use, not all therapies have been proven to be effective. Between one-quarter and one-third of care given to insured people in the United States falls in the inappropriate or equivocal area in which medical benefit does not exceed its risk (Brook 1991). In her book *Overtreated: Why Too Much Medicine Is Making Us Sicker and Poorer* Shannon Brownlee (2008) points out that Dr. David Eddy, a reputed heart surgeon and health economist, estimates that “as little as 15 percent of what doctors do is backed up by valid evidence.”

Andrew Booth, with contributions from others, provides a resource guide that analyzes 18 studies to assess what proportion of medical practice is evidence based (Booth et al. n.d.).

The evidence-based movement’s aim is to root out ineffective treatments and practices because vigorous scientific analysis does not always occur before a promising practice becomes widely disseminated. The evidence-based approach needs to be distinguished from a movement that occurred between 1987 and 1996, first called “medical futility” (Helft, Siegler, and Lantos 2002) and now referred to as “potentially ineffective care.” These terms generally refer to care offered a person with a terminal illness or devastating injury whose health status is unlikely to improve despite any heroic intervention. In such situations, patient comfort and relief from pain become the focus of treatment.
Access to Health Services for the Uninsured

An estimated 96 percent of people 65 years and older have financial access to health services through the Medicare program, and nearly 84 percent of the population younger than 65 years access health services through private health insurance, Medicaid, Medicare (for people with disabilities younger than 65 years and those with ESRD), private out-of-pocket payments, or government-sponsored programs such as the VA system (USDHHS 2002; Iglehart 2002).

How do people not covered by these programs—an estimated 16 percent of the population younger than 65 years—get health services when they need them? Who are the uninsured? Why are some people uninsured? This section addresses these questions.

People who have no health insurance, limited ability to pay out of pocket, and limited or no access to other governmental health programs may access care from public hospitals and clinics; neighborhood, community, and migrant health centers; or clinics established by charitable organizations or other volunteers that provide low-cost sliding scale fees or no-cost care. Although many of these facilities and the providers who staff them offer comprehensive care, patients may not always be able to avail themselves of it. Thus, such sites may serve as stopgaps, providing urgent or emergency outpatient care, rather than the comprehensive care a person with insured access to the system typically receives. Persons seeking care in hospital emergency departments are likely to get such care if their situations are truly emergent or may be referred to more appropriate care, in large part because hospitals participating in the Medicare program are required to provide emergency care, regardless of the patient’s ability to pay. Such patients constitute a significant economic burden to hospitals, particularly public hospitals, whose provision of charity care (also called uncompensated care or bad-debt care) may jeopardize their ability to remain financially viable.

Physicians and other providers often provide free or pro bono care to a limited number of patients. Clinics, particularly in inner-city areas, may be established as free clinics, providing basic care to all who seek their services, to the extent that their resources permit them to do so. Such clinics may be staffed by volunteer providers, with supplies and other services donated by community members or underwritten by community institutions. Helpful as these free clinics are, they cannot begin to replace a regular source of care for everyone who needs it.

Demographic Characteristics of the Uninsured

Who are the uninsured? Exhibit 3.10 shows the proportion of the population that is uninsured, by age, gender, race/ethnicity, and poverty level status. The
Exhibit 3.10
No Health Insurance Coverage Among Persons <65 Years, 2006
(a) By Age Group and Gender.
(b) By Race/Ethnicity.
(c) By Federal Poverty Level (FPL).

18- to 44-year-old age group has the highest proportion of uninsured persons. American Indians and Alaska Natives have the highest proportion of uninsured persons (38 percent), followed closely by those of Hispanic/Latino ethnicity at 35 percent. Rates of no insurance decrease with increases in income.

Reasons People Lack Health Insurance
People lack health insurance for many reasons. They may not have access to employer-sponsored health insurance because their employer does not offer it, they are not in the workforce, or they cannot afford the premiums. They may not be able to afford the premiums of an individual health insurance policy.
They may not qualify for Medicare or Medicaid or be eligible for other government-supported health programs, such as military care.

One sometimes-overlooked reason that people lack health insurance is that they decline employer-sponsored coverage. In an early study, Cooper and Schone (1997) found an 8.2 percentage point decrease in the number of workers who accepted health insurance between 1987 and 1996. They attribute this decline to a number of factors, including declining real incomes, especially among workers who are the least likely to have coverage (e.g., healthy young men in the workforce); increasing costs of insurance; rising employee contributions to health insurance premiums; and expansions in Medicaid coverage.

Bernard and Seldon (2006) found that on average, in 2001 and 2002, 11.3 million U.S. residents were uninsured despite having an offer of employment-related insurance through their jobs or that of an immediate family member. Some who declined employer-sponsored health insurance had public coverage, but 6.3 percent of adults and 7.3 percent of children eligible for employer-sponsored health insurance had no health insurance coverage during the study period. Other findings from their work include the following:

- Children in low-income families were less likely to have coverage than other children. Most children whose parents decline private coverage end up with public care, whereas the adults remain uninsured.
Decliners were more likely to report poor health but less likely to have a high-cost medical condition than those with health insurance coverage. Families declining coverage were more likely to have financial barriers to care. Families that decline employee health coverage rely heavily on public funding and uncompensated care.

**Initiatives to Expand Financial Access to Health Services**

Despite the fact that arranging for financial access to health services has largely been left to the individual, with the exception of Medicare beneficiaries who are ensured access, the public periodically expresses concern that more than one-sixth of the U.S. population has no health insurance and thus has limited access to care. Recommendations for national health insurance were introduced as early as the Roosevelt administration in 1935 (Litman and Robins 1991) and again in 1993 with the unsuccessful Health Security Act (HSA). Such proposals failed for a variety of reasons—not the least of which is the likely increase in federal expenditures needed to support them. A range of other proposals, each of which is briefly described in the sections that follow, have been offered in the last several decades, including:

- expanding the Medicare program to include other beneficiaries;
- expanding the Medicaid program to include even more of the uninsured;
- providing health insurance coverage to special populations, such as children;
- creating a single-payer system similar to that in Canada;
- reforming the health insurance industry;
- creating risk pools for the uninsurable; and
- establishing statewide health insurance programs.

At the federal level, the Medicaid program has been expanded to cover more of the uninsured (see Appendix 6.2 in Chapter 6), the State Child Health Insurance Plan (SCHIP) was established in 1997 and reauthorized as CHIP in 2009, some states have created risk pools for the uninsurable, and a number of states have established statewide health insurance programs. These changes are addressed in Chapter 6.

**Expanding Medicare**

The 1993 HSA was one of several proposals to expand eligibility to Medicare. The HSA proposed adding a Part C to Medicare that would provide coverage to many of the uninsured. Expenditure projections and a distaste for a larger governmental role in health services contributed to the defeat of this bill. A different Part C, the Medicare+Choice plan (discussed in chapters 6 and 19), was added to Title XVIII by the 1997 Balanced Budget Act and has since been replaced by the Medicare Advantage program established by the 2003 Medicare Prescription Drug Improvement and Modernization Act (MMA). Enrollment in Medicare Advantage remains relatively modest—8.2 million enrollees as of June 2007—
Chapter 3: Access to Health Services

even though some Medicare Advantage plans offer more coverage than fee-for-service Medicare may provide (Merlis 2007).

Although a broader expansion of Medicaid eligibility has been discussed at the national level, the only action on this idea is occurring at the state level. After years of grassroots development, the state of Oregon was granted a waiver from the Health Care Financing Administration (HCFA—now the Centers for Medicare & Medicaid Services [CMS]) to initiate the Oregon Health Plan, which enrolls people whose incomes are below 100 percent of the poverty level into the Medicaid program, even if they are not categorically eligible. Oregon proposed even more comprehensive coverage through its state plan, but Oregon voters rejected this expansion in the fall 2002 elections. In January 1994, the state of Tennessee replaced its Medicaid program with TennCare to cover more of the low-income uninsured. Managed care organizations and behavioral health organizations provided care to enrollees through three products: TennCare Medicaid, TennCare Standard, and TennCare Assist (TennCare 2003).

TennCare had many problems in terms of payments to specialists, enrollment, and other issues. It was replaced by CoverTN in March 2007. Its premiums are shared by the state, businesses, and employees. The program currently has 16,000 members and 6,504 businesses enrolled. New benefits that began January 1, 2009, include increasing the number of annual preventive medicine visits, adding specialist physician visits, and removing the cap on payment for diabetic medicines and supplies (Robert Wood Johnson Foundation 2008a).

The Oregon and Tennessee programs are only two examples of Medicaid expansions. A number of other states have established similar expansions or are piloting such expansions.

In 1997, Congress added Title XXI to the Social Security Act, creating the SCHIP, which provided $40 billion in matching funds to states over ten years to support health insurance coverage for children. States could choose to expand their Medicaid programs, start or augment a separate insurance program for children, or devise a hybrid of these strategies (Demkovich 1997a).

Twenty-one states chose to expand their Medicaid programs, 12 to have separate SCHIP programs, and 21 to operate combination programs. Despite slow enrollment starts in many SCHIP programs, 7 million children were enrolled in the SCHIP program in 2007 (Ryan and Mojerie 2008). Since 1997, Congress has changed how the SCHIP funds are allocated; between 2002 and 2004, states experienced a 26 percent decline in the amount of federal funds available to them (Ryan 2002). Congress and President George W. Bush disagreed about how SCHIP was to be reauthorized, so the president authorized an extension through March 2009. Congress, after President Barack Obama’s inauguration in 2009, reauthorized this legislation as CHIP.
Canada’s health services system, in which the government serves as the single payer for care, has been proposed as a model for the U.S. system to emulate. The Canadian system achieves a comparable—and some would claim a higher—health status at significantly lower per capita expenditures. The likelihood that the United States will follow Canada’s lead seems slim for several reasons. One reason is the difference in the roles of the health insurance industry in the two systems: in the United States, the health insurance industry has been a dominant influence on how the system has developed, whereas the Canadian system has no major counterpart to the U.S. industry. Additionally, the Canadian system, under considerable pressure to change because of increasing expenditures and an oversupply of physicians, imposed controls on physician training and practice sites, the availability of hospital beds, and other services in the late 1990s (though since then education slots available for nursing and medical students have been added [Canadian Institute for Health Care 2002]). In the early years of the twenty-first century, an improving economy and belt tightening by the Canadian federal government led to the development of budget surpluses. Canada, however, has been affected by the worldwide economic instability that began in the fall of 2008.

The unsuccessful 1993 HSA proposed several reforms to the health insurance industry, such as establishing uniform billing and streamlining other administrative procedures. Although Congress did not enact the sweeping reforms proposed by the HSA, incremental changes in the industry are occurring. The 1996 Health Insurance Portability and Accountability Act (HIPAA) makes it easier for insured people to retain coverage when they leave a job (portability); establishes federal insurance requirements for carriers offering coverage in the individual, small-group, and large-group markets; and imposes specific insurance reforms on self-funded health insurance plans (see Chapter 6).

Thirty-five states have established subsidized health insurance plans for people with chronic conditions or other risk factors that have made them uninsurable (Rau 2008). Health insurance from a state risk pool is likely to be limited in scope and more expensive than commercial insurance. It is less likely to cover dependents than private health insurance but may fill a crucial health insurance need for those who can afford it.

Several states have established or are considering the establishment of statewide health insurance programs. Washington’s Basic Health Plan, established in 1988, began as a three-county demonstration insurance plan for low-income residents and expanded statewide in 1993. As of June 2009, the Washington Basic Health Plan covered nearly 100,000 Washingtonians. Recent state budget cuts have
precipitated monthly premium increases for 2010 (Washington Basic Health Plan 2009). The 2006 Massachusetts legislature passed a universal insurance program that the governor signed into law. As of August 2008, more than 400,000 people had enrolled in this plan (Massachusetts Division of Health Care Policy and Finance 2009). Other states have followed suit, but some states may have to table further action until the U.S. economy recovers.

New proposals for group purchasing—association health plans, health insurance purchasing cooperatives, and multiple employer welfare arrangements—are emerging (see Chapter 6). How these proposed new products will survive in a complex market remains to be seen. Analysts suggest that these new products warrant cautious and careful consideration but are not likely to produce a significant overall reduction in premiums or an increase in insurance coverage (Hall, Wicks, and Lawlor 2001). Many of these products appear to be eclipsed by newer initiatives, including the interest in consumer-directed health plans (see Chapter 6).

**A Focus on Health Disparities**

Differences in health status occur for a variety of reasons. The determinants of health (see Chapter 2) affect each person differently. Some believe income differences are the most influential factor in differences in health status, or health disparities. Other factors that might influence disparities in health status include demographic factors, such as race/ethnicity and age.

A national focus on health disparities centers on those disparities that can be corrected through improved access or other interventions. The Healthy People 2010 objectives (and prior and subsequent versions of the objectives) aim to reduce disparities that are amenable to change (USDHHS 2000a). In 2006, the Agency for Healthcare Research and Quality summarized its findings about health disparities. Exhibit 3.11 shows the differences by racial and ethnic groups and by income in diminishing disparities. These differences clearly need to be effectively addressed if the disparities in health status and in health care are to be resolved.

This chapter has focused principally on disparities related to financial access to health services. Exhibit 3.10 is particularly telling regarding the part of the U.S. population that is uninsured.
Access to health services has several dimensions—geographic, physical, temporal, sociocultural, and financial—that can ensure or inhibit access to care. Potential access is affected by predisposing factors (age, gender, education, occupation, and race/ethnicity); need factors (perceived health, interpretation of illness, and other health status measures); and enabling factors (convenience, income, insurance coverage, and system characteristics). Of the enabling factors, financial access to care in the United States is usually predicated on insurance coverage, either private or public, or personal income (ability to make out-of-pocket expenditures for care). For those who do not have health

EXHIBIT 3.11
Summary of Agency for Healthcare Research and Quality’s (AHRQ) 2006 National Healthcare Disparities Report

For most core quality measures, Blacks (73%), Hispanics (77%), and poor people (71%) received worse quality care than their reference groups. For most measures for poor people (67%), disparities were increasing; for most measures for minorities, significant changes in disparities were not observed.

*Increasing disparities were especially prevalent in chronic disease management. Compared to their reference groups:*

- Blacks had 90% more lower extremity amputations for diabetes.
- Asians were restrained in nursing homes 46% more often.
- American Indians and Alaska Natives were hospitalized from home health care 15% more often.
- Hispanics had 63% more pediatric asthma hospitalizations.
- Poor people were 37% less likely to receive recommended diabetes care.

*All of these disparities were increasing over time. Better and improving quality, however, was also observed for at least one measure for every population.*

For most core access measures, Hispanics (83%) and poor people (100%) had worse access to care than their reference groups. Disparities were increasing for most measures for Hispanics (80%) and for poor people (100%).

Better access was only observed for Asians compared with Whites, although improving access was observed for at least one measure for every population.

*SOURCE: These data came from the 2006 National Healthcare Disparities Report published by AHRQ.*

**Summary**

Access to health services has several dimensions—geographic, physical, temporal, sociocultural, and financial—that can ensure or inhibit access to care. Potential access is affected by predisposing factors (age, gender, education, occupation, and race/ethnicity); need factors (perceived health, interpretation of illness, and other health status measures); and enabling factors (convenience, income, insurance coverage, and system characteristics). Of the enabling factors, financial access to care in the United States is usually predicated on insurance coverage, either private or public, or personal income (ability to make out-of-pocket expenditures for care). For those who do not have health
insurance, government health programs, such as those sponsored by the VA, DOD, and IHS, provide care to eligible populations. People ineligible for health insurance or these governmental health services programs may be able to access care through low-cost or no-cost clinics.

As much as 20 percent of the U.S. population may have limited or no financial access to health services in a given year. This population is at greater risk of morbidity and mortality and frequently presents on an emergency basis with poorer health status than those people who have no financial impediments to receiving care.

Major changes in health insurance, the primary health services financing mechanism in the United States, seem unlikely, given the defeat of the HSA. Instead, incremental reforms, such as those incorporated in the HIPAA of 1996, appear to be the most likely to effect change.

Notes

1. Penchansky and Thomas (1981) define the dimensions of access as follows: Availability is the relationship of the volume and type of services (and resources) to the client’s volume and type of needs. It refers to the adequacy of the supply of physicians, dentists, and other providers; facilities, such as clinics and hospitals; and specialized programs and services, such as mental health and emergency care. Accessibility is the relationship between the location of clients and healthcare facilities, taking into account client transportation resources, travel time, and cost. Accommodation is the relationship between the manner in which the supply resources are organized to accept clients (including appointment times, hours of operation, walk-in facilities, and telephone services), the client’s ability to adjust to these factors, and the client’s perceptions of their appropriateness. Affordability is the relationship between prices of services and providers’ insurance or deposit requirements to the client’s income, ability to pay, and existing health insurance. The client’s perception of worth relative to total cost is a concern here, as is the client’s knowledge of prices, total cost, and possible credit arrangements. Acceptability refers to the relationship between clients’ attitudes about the personal and practice characteristics of providers to the actual characteristics of existing providers as well as to provider attitudes about acceptable personal characteristics of clients.

2. Insurance coverage does not, however, guarantee access to care. If providers are unavailable or if they will not accept the insurance company’s payment for services, an insured person still may not have access to health services.
3. The OTA’s version of the chart, which did not include the final column on potential adverse outcomes associated with excessive access, was based on Aday, Andersen, and Fleming (1980); Weissman and Epstein (1992); Mechanic (1989); and studies reviewed for the interim report.

4. The SSI program is a federal cash assistance program for low-income aged and disabled people that has standard eligibility requirements. It was established to replace state-provided cash assistance programs to low-income and aged and disabled people.

5. The focus of this discussion is on prisoners with long-term sentences. Jail inmates who may be awaiting trial or a hearing or who are serving out a short sentence may not be eligible for other than emergency services.

### Key Words

- Aid to Families with Dependent Children (AFDC)
- Americans with Disabilities Act of 1990
- association health plans
- bad-debt care
- behavioral health organizations
- Centers for Medicare & Medicaid Services (CMS)
- charity care
- Civilian Health and Medical Program of the Uniformed Services (CHAMPUS)
- coinsurance
- copayment
- CoverTN
- Emergency Maternal and Infant Child Care Program (EMIC)
- end-stage renal disease (ESRD)
- entitlement program
- Health Care Financing Administration (HCFA)
- health disparities
- Health Insurance Portability and Accountability Act (HIPAA)
- health insurance purchasing cooperative
- health literacy
- Health Security Act (HSA) of 1993
- iatrogenic illness
- Indian Health Service (IHS)
- Indian Self-Determination and Education Assistance Act of 1975
- Institute of Medicine (IOM)
- managed care organization
- Medicaid
- Medicare (Parts A and B)
- Medicare+Choice plans
- Medicare Prescription Drug Improvement and Modernization Act (MMA)
- multiple employer welfare arrangements
- nosocomial infection
- Office of Technology Assessment (OTA)
- Oregon Health Plan
- out-of-pocket payment
- portability of health insurance
- preexisting condition
- private health insurance
- public/social health insurance
- single-payer system
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