INDEX

Note: Italicized page locators refer to exhibits.

AALL. See American Association of Labor Legislation (AALL)
AAMC. See Association of American Medical Colleges (AAMC)
AAPC. See American Academy of Professional Coders (AAPC)
AARP (American Association of Retired Persons), 251, 272
Abbott Laboratories, 359
AbbVie, 360
ACA. See Affordable Care Act (ACA)
Academic medical centers, 143
Academic societies, 182
Access to care: cost-sharing payments and, 253; fair and equitable, 2, 2, 458, 459; third-party payment and, 7
Accountable care, 212–13; benefits of, providing, 212; elements constituting, 212–13
Accountable care organizations (ACOs), 160–62, 184, 263; definition of, 161; estimated number of, in US, 162; formation of, 161; goals and aims of, 161; medical practices and, 150; shared savings and, 257
Accountants, 194
Accounting staff, 180
Accreditation: ACGME, 183; of for-profit hospitals, 138; of medical education, 47; of US hospitals, 135
Accreditation Council for Graduate Medical Education (ACGME), 183
ACHE. See American College of Healthcare Executives (ACHE)
Achieving Health Equity: A Guide for Healthcare Organizations (Institute for Healthcare Improvement), 220
ACOs. See Accountable care organizations (ACOs)
Acquisitions: ever larger provider systems and, 474; hospital chains and, 140; major healthcare, sampling of, 141
Activities of daily living (ADLs), 77, 155, 156, 158
Acupuncture, 399
Acute care services, 210
ADA. See American Dental Association (ADA)
Addicted to Reform (Merrow), 444
ADHD. See Attention deficit/hyperactivity disorder (ADHD)
ADLs. See Activities of daily living (ADLs)
Administrator in training (AIT), 194
Advanced care professionals, 210
Advanced practice professionals (APPs), 185, 186–88; clinical nurse specialists, 188; nurse practitioners, 186; overview of, 186; physician assistants, 187–88
Adverse effects: modern pharmaceuticals and, 414
Adverse events: preventable, 293; protecting consumers from, 365
Adverse selection: definition of, 254
Advertising: behavioral economics and, 486–87; direct-to-consumer, 373–75; of drugs, FDA and regulation of, 374; scams, 341

Aetna, 251, 264; merger with CVS, 140

Affordable Care Act (ACA), 54, 60–61, 256, 271; accountable care and, 212; accountable care organizations defined under, 263; “Cadillac provision” of, 60; categories of covered services under, 268; commercial healthcare insurance environment and, 267–68; controversy over individual mandate of, 61, 62, 83; deductibles in high-deductible plans under, 260; future of, 441–42; Hospital Readmissions Reduction Program established under, 438; individual insurance plans under, 258; major provisions of, 60–61, 438; managed competition and, 267; Medicaid expansion under, 60, 438, 488; Medicare Part D “donut hole” closed by, 59; new physician-owned hospital ban under, 139; nonprofit hospital requirements under, 137–38; ongoing debate over, 458; passage of, 7, 41; pre-existing conditions under, 61, 272, 442; premiums under, 61, 62; preventive services coverage under, 262; repeal attempts, 62; repeal of the individual mandate, 41, 441, 488; shared savings and, 257; uncertain outlook for, 488; voter opinions about, 428, 430, 430; young adult coverage under, 61

African Americans: life expectancy for, 220

AGB. See Amount generally billed (AGB)

Age factors: patient care and, 221; utilization patterns and, 147

Age groups: health expenditures by, 117; leading causes of death by, 217–18

Agency for Healthcare Research and Quality (AHRQ), 227, 294; Compendium of US Health Systems, health system defined by, 104–5; patient safety defined by, 287

Agent: in epidemiological model of disease, 77

Aging population: end-of-life care and, 22; US Census projections of, 19, 20; wellness and, 477–81

AHA. See American Hospital Association (AHA)

AHCA. See American Health Care Act (AHCA) of 2017

AHIMA. See American Health Information Management Association (AHIMA)

AHRQ. See Agency for Healthcare Research and Quality (AHRQ)

AICPA. See American Institute of Certified Public Accountants (AICPA)

AIDS, 40, 223

AIR. See All-inclusive rate (AIR)

AIT. See Administrator in training (AIT)

AKS. See Anti-kickback Statute (AKS)

Alaska Natives: health services for, 159

Alcmaeon of Croton, 37

Alcohol consumption: in US compared with other countries, 122

Alliance for Health Policy and Systems Research: criteria for prioritizing health problems, 124–25

All-inclusive rate (AIR), 234

Allopathic hospitals, 143, 144

Allopathic training, 182

Almshouses (or poorhouses), 36, 41, 43, 135

Alternative therapies: complementary therapies versus, 399–400

Altruism, 444

Alzheimer’s Association, 479, 480

Alzheimer’s disease: addressing, 478–80; facts and figures on, 479; sex differences and, 215, 216

Amazon, 476

Ambulance service: first commercial, 38

Ambulatory care, 148

Ambulatory long-term care services, 153

American Academy of Professional Coders (AAPC), 194

American Association of Colleges of Osteopathic Medicine, 182
American Association of Labor Legislation (AALL), 54, 55
American Association of Medical Colleges (AAMC), 22, 38
American Association of Retired Persons. See AARP
American beliefs, values, and attitudes about healthcare, 75–95; American exceptionalism, 82–83; Americans’ expectations about their healthcare system, 88; cultural competence, 83–88; defining health, 76–77; determinants of health, 78–82, 80; focus of chapter, 76; illness and disease, 77–78; manifest destiny, 82; US healthcare system and, 88–91, 93–94
American Board of Medical Specialties: specialties recognized by, 184, 184
American College of Health Care Administrators, 194
American College of Healthcare Executives (ACHE), 168, 194, 509
American Dental Association (ADA), 192
American exceptionalism, 82–83
American Health Care Act (AHCA) of 2017, 54, 61–62, 272
American Health Information Management Association (AHIMA), 194
American Hospital Association (AHA), 56, 162
American Institute of Certified Public Accountants (AICPA), 194
American Medical Association (AMA), 55; approved graduate medical education programs, 143; CPT nomenclature developed by, 256; creation of Council on Medical Education, 38, 45, 46; founding of, 47; framework for telemedicine, 332; medical service plans endorsed by, 52; opinion on direct-to-consumer marketing, 374; opposition to health insurance, 52; opposition to Wagner-Murray-Dingell Bill, 56; violation of Sherman Antitrust Act, 53; website of, 509
American Medical Group Association Foundation, 212
American National Insurance Company, 251
American Nurses Association, 484
American Pain Society, 379
American Recovery and Reinvestment Act, 335, 481
Amgen, 360
Amount generally billed (AGB), 137
Analgesics, 404
Angioplasty, 144, 262
Anthocyanins, 410
Antibiotic-resistant infections, 484–85
Antibiotic-resistant Mycobacterium tuberculosis (TB), 484
Antibiotic-resistant pathogens, 404
Antibiotics, 48, 357, 359; “Golden Age” of, 484; impact on gut flora, 414
Anti-kickback Statute (AKS), 274
Antioxidants, 410, 414
Antiseptic surgery, 38
Antivaccination movement, 91, 93
Anxiety and Depression Association of America, 228
Anxiety disorders, 227
Apothecary shops, 359
APPS. See Advanced practice professionals (APPS)
Architecture staff, 180
Ariely, Dan, 306
Aristotle, 37, 288
Artemisinin, 404, 405
Artificial intelligence: big data and, 9, 51, 196, 466–68; job replacement and, 472
Artificial organs, 326
Ascension, 377
Aspirin, 404
Assisted living communities, 156
Association of American Medical Colleges (AAMC), 182, 185
Assurant, 251
Asthma, 79
Asynchronous activities, 329
Atherosclerosis: preventing with CAM-based therapies, 409
Atrium Health, 154, 340, 475
Attention deficit/hyperactivity disorder (ADHD), 227
Attitudes about health and healthcare, 11–12; determinants of health and, 80; factors related to, 80–82, 81
Australia: healthcare system in, 107, 113–14; healthcare system performance ranking, 115; health expenditures as percentage of GDP for US and, 120
Austria: health expenditures as percentage of GDP for US and, 120
Avastin: pricing variation, US versus UK, 122, 123
Average daily census, 146
Average length of stay, 146
Baby boomers, 13, 19
Bachelor's degree in healthcare administration, 193
Bachelor’s in nursing (BSN), 186
Bacteriophages and phase therapy, 485
Balanced Budget Act of 1997 (BBA), 59, 269, 436–37
Baldrige Award, 296
Baldrige Performance Excellence Program, 296
Bank of America, 140
Barbiturates, 359
Barker, Joel, 18
Barnard, Christiaan, 39
Batch-to-batch variation: botanical drugs and, 407
Baumol, William, 342
Baumol’s Cost Disease, 342
Baylor Plan, 52
Baylor University Hospital, 38, 52, 263
BBA. See Balanced Budget Act of 1997 (BBA)
Beatles, The, 17
Becker's Hospital Review, 465
Behavioral economics, 12, 305–9, 486–88; examples of interventions, 308–9; key principles in, 306–8
Behavioral factors: health status and, 79, 80
Behavioral health, 486; digital services and, 330–31
Belgium: health expenditures as percentage of GDP for US and, 120
Beliefs about health and healthcare, 11–12; antivaccination movement and, 93; cultural, 83; determinants of health and, 80; factors related to, 80–82, 81; power of, 75
Bellevue Hospital, 41
Bencao Gangmu (or Compendium of Materia Medica), 405
Beneficiary: definition of, 252
Benefits: definition of, 252
Berkshire Hathaway, 476
Berwick, Donald, 440
Better Care Reconciliation Act of 2017, 62
Beveridge, William, 249
Beveridge model, 249, 249
Biases: health disparities and, 214
Big data: artificial intelligence and, 9, 51, 196, 466–68; definition of, 327
Bill: in healthcare policy cycle, 433, 433
Billing practices: fraud and abuse and, 273
Biological science: influence on medicine, 357
Biological sex: health status and, 21
Biological therapies, 399
Biologics Price Competition and Innovation Act of 2009, 376
Biology: determinants of health and, 80, 80
Biomedical model of health, 77
Biopharmaceutical industry: growth of, 359
Biosimilars, 375–76
Bioterrorism, 485–86
Bipartisan Policy Center, 146
Bipolar disorders, 227
Bird (avian) flu, 483
Bismarck, Otto von, 248
Bismarck and Beveridge (Bis-Bev) hybrid model, 249, 249
Bismarck model, 248–49, 249, 250
Blackmail, 340
Blackwell, Elizabeth, 38
Blood banks, 39
Blood glucose: controlling with CAM therapies, 412; plant compounds for controlling, 412, 413
Blood pressure: lowering with CAM therapies, 410–11
Bloomberg: healthcare system performance rankings of, 114
Blue Cross: creation of, 38; origins of, 52
Blue Cross Blue Shield, 264; precursor to, 263
Blue Cross Blue Shield Association, 251; website for, 509
Blue Shield: origins of, 52, 55
Blue zones: healthy aging and locations of, 478
Blue Zones Project, 478, 480
Blum’s determinants of health and well-being, 205, 206, 207, 214
Board certification, 184
Board of directors, 166
Board of nursing, 183, 187, 190
Board Source, 168
Body manipulation, 399
Bond, Thomas, 37
Borderline personality disorder (BPD), 227
Boston Training School (Massachusetts General Hospital), 190
Botanical drugs: advantages of, 407; approval of, complications related to, 407–8; definition of, 407; as potential integrative breakthrough, 406–8
Botanical Review Team (BRT), 406, 407
BPD. See Borderline personality disorder (BPD)
Brainerd, Mary, 179
Brand-name drugs, 375
Bristol-Myers Squibb, 360
British Hypertension Society, 410
British Medical Registry, 91
Bronze plan: of health insurance exchanges, 61, 268
Brooks, David, 489, 490
BRT. See Botanical Review Team (BRT)
BSN. See Bachelor’s in nursing
Bundled payments, 256
Bureau of Labor Statistics (BLS): healthcare workforce estimates, 179; projected need for nurses, 191
Burnout, 445; healthcare professions and, 3; nurses and, 191; physicians and, 185
Bush, George H. W., 40
Business services staff, 180

CAHs. See Critical access hospitals (CAHs)
Caloric intake, restricted, 478
CAM. See Complementary and alternative medicine (CAM)
CAM therapies, 409–14; controlling blood glucose, 412; improving sleep, 412–14; increasing adherence to conventional therapies, 414; lowering blood pressure, 410–11; reducing inflammation, 409–10
Camus, Albert, 423
Canada: healthcare system in, 107, 111; healthcare system performance ranking, 115; health expenditures as percentage of GDP for US and, 120; mitigation of pharmaceutical cost in, 376, 377; national health insurance in, 249
Cancer: age factors and, 221; inflammation and, 409; sex differences and, 216, 216
Cancer drugs, 371, 404
Cancer Treatment Centers of America, 138
Cannabidiol, 402
Capacity, 147
Capitation, 256
CAPP. See Council of Accountable Physician Practices (CAPP)
Cardiac catheterization, 144, 148
Cardiopulmonary resuscitation (CPR), 46
Cardiovascular disease: preventing, natural products for, 411, 411
Care: value-based versus volume-based paradigm of, 17, 17
Carnegie Foundation for the Advancement of Teaching, 46
Carolinas HealthCare System: rebranding of, 475
Case management, 266
Case managers: role of, 266
Cas9 enzyme, 364
Catholic Hospital System, 143, 196
CBO. See Congressional Budget Office (CBO)
CCMC. See Committee on the Costs of Medical Care (CCMC)
CCRCs. See Continuing care retirement communities (CCRCs)
CDC. See Centers for Disease Control and Prevention (CDC)
CDHPs. See Consumer-directed health plans (CDHPs)
Center for Drug Evaluation and Research (CDER): botanical drugs regulatory guidelines, 406; drug approval process and role of, 361; fast-track designation request performance report, 363
Centers for Disease Control and Prevention (CDC), 215, 300; bioterrorism agents classified by, 485–86; leading causes of death in US report, 408, 408; model of health and well-being, 207, 207; Morbidity and Mortality Weekly Report, 223; sleep recommendations, 412; on three waves in opioid crisis, 380, 380; website for, 119, 509
Centers for Medicare & Medicaid Services (CMS), 115, 145, 435; breadth of service provided by, 272; Office of Minority Health in Collaboration with the RAND Corporation, 215; on projected healthcare expenditures in US, 116–17; reimbursement regulations, 425; website for, 509
CER. See Comparative effectiveness research (CER)
CERN. See European Organization for Nuclear Research (CERN)
Certificate of Need programs, 264
Certification: for administrative positions in healthcare, 194; for business specialists in healthcare, 194; for nurse practitioners, 187. See also Licensing
CHAMPVA. See Civilian Health and Medical Program of the Department of Veterans Affairs (CHAMPVA)
Change: future of US healthcare and, 460, 461, 462–63; in the healthcare system, resistance to, 14; meaningful, 292; technologies and overcoming barriers to, 331–32
Charitable mission: not-for-profit hospitals and, 137
Charity Hospital (New Orleans), 41
CHCs. See Community health centers (CHCs)
Checklist Manifesto, The (Gawande), 298
Chekhov, Anton, 75
Chemistry, manufacturing and controls (CMC) data, 407
Chemotherapy: natural products with potential to treat side effects of, 414, 415
Chicken cholera cure, 38
Chikungunya, 9
Child abuse or neglect, 216
Children’s Health Insurance Program (CHIP), 54, 59, 60, 436–37; ACA and expansion of, 438; impact of, 437
China, illegal fentanyl importation from, 380
CHIP. See Children’s Health Insurance Program (CHIP)
Chiropractic, 399
CHNA. See Community health needs assessment (CHNA)
Choice: behavioral economics and, 307–8
Cholesterol-containing foods: new belief system for, 75
Christensen, Clayton, 344
Chronic care services, 210
Chronic disease: management of, 266; CAM therapies and, 400; US healthcare system and, 12
Cigarette smoking: link to lung cancer identified, 39
CIGNA, 252
Civica Rx, 377
Civilian Health and Medical Program of the Department of Veterans Affairs (CHAMPVA), 271
Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), 271
Civil War, 38; nursing profession during, 188
Claims processing: ERISA and, 58
Cleveland Clinic, 221, 472
Climate change, 8; health and, 481–82; spread of zoonoses and, 483
Clinical governance, 310
Clinical integration: achieving, 162; effective, 162–63
Clinically integrated networks, 162–63
Clinical nurse specialists (CNSs), 186; education and licensing for, 188; roles and responsibilities of, 188
Clinical positions, 180
Clinical services expenditures: growth in, 116
Clinical-staff-to-bed ratio, 147
Clinical study phases: in drug approval process, 361, 362
Clinical trials, 408, 415; botanical drugs and issues with, 407; costs related to, 405; drug approval process and, 361–62
Clinton, Bill, 58
Clinton administration: health insurance reform attempts by, 40, 54, 58–59
Clostridium difficile, 484
Cloud computing: advantages of, in health practice, 339; disadvantages of, in health practice, 339–40
CME. See Council on Medical Education (CME)
CMS. See Centers for Medicare & Medicaid Services (CMS)
CNSs. See Clinical nurse specialists (CNSs)
COBRA. See Consolidated Omnibus Reconciliation Act (COBRA)
Cocaine, 380
Code of Hammurabi, 37
Coinsurance, 254; definition of, 252; under Medicare, 259, 259; in self-funded model, 248
Collaboration, 310; interprofessional education process and, 197, 197; obstacles to, 440
Collusive agreements and behaviors: protecting against, FTC and, 367
Colonoscopies, 122, 329
Commercial healthcare insurance environment: Affordable Care Act and, 267–68
Commercial insurance, origins of, 52
Committee on the Costs of Medical Care (CCMC), 54, 55
Commonwealth Fund (CWF), 301; healthcare system performance rankings of, 114; website for, 119
Communication: in total quality management, 294
Community benefit: nonprofit hospitals and demonstration of, 138
Community health centers (CHCs), 150–51
Community health needs assessment (CHNA), 137
Community Health Systems, 138
Community hospitals, 43, 139
Community Mental Health Act of 1963, 228
Community rating, 255
Comparative effectiveness research (CER), 481
Comparing healthcare systems, US vs. other developed countries, 103–26; examples of healthcare systems around the world, 106, 107–10, 111–14; focus for chapter, 104; global health and importance to US, 124–25; healthcare systems vs. health systems, 103–6; ranking and comparing approaches, 114–15; summary of, 125–26; US healthcare system, by the numbers, 115–18; ways that US compares, 118–24
Competence: definition of, 83
Competition: among generic drug makers, 375; drug prices and, 375; managed, 267; technological advances and, 330
Complementary and alternative medicine (CAM), 133, 399–415; botanical drugs, 406–8; current regulatory situation, 405–6; focus of chapter, 400,
history and development of natural products and, 403–5; integrating into conventional healthcare, 400, 406, 408–15; major areas within, 399; natural products, 401–2, 402, 403; overview of, 399–401; ten most common approaches among adults, 401

Complementary therapies: alternative therapies versus, 399–400

Components of our healthcare system, 133–68; end-of-life and long-term care, 154–58; focus of chapter, 134; fundamental, 134; hospitals and inpatient services, 135–48; integration and modern structural forms, 159–64; organization governance, 166, 167, 168; outpatient services, 148–54; overview of, 133–35; pharmaceutical, insurance, and managed care companies, 164–65; special healthcare systems, 158–59

Concierge medical practice, 184
Confidentiality: of electronic health records, 336–37
Congressional Budget Office (CBO), 62
Congressional Committee on Taxation, 138
Conjugated pi orbitals: antioxidants and, 410
Connecticut Training School, 190
Consolidated Omnibus Reconciliation Act (COBRA), 250
Consolidation: hospital, 140; of medical and surgical specialty practices, 475

Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery (OAS CAHPS), 303–4
Consumer-directed health plans (CDHPs), 41, 53, 60, 260
Consumer Health Care Products Association, 363
Continual improvement: in total quality management, 294
Continuing care retirement communities (CCRCs), 156
Continuum of healthcare, 154, 154–55

Conventional insurance, 53
Copayments, 254; definition of, 252; drug prices and, 371
Coronary heart disease, 409
Coronavirus disease 2019 (COVID-19), 484
Corporate Directors Forum, 168
Cost: pharmaceutical pricing and, 369–78; technology and, 342–43; value as function of quality and, 16
Costco, 307
Cost control: managed care systems and, 265–66
Cost sharing: definition of, 252; utilization of healthcare and, 253.
See also Coinsurance; Copayments; Deductibles; Premiums
Cost shifting, 250
Council of Accountable Physician Practices (CAPP): accountable care findings, 212–13
Council of Teaching Hospitals, 143
Council on Medical Education (CME): creation of, 38, 46
Coventry Health Care, 252
CPR. See Cardiopulmonary resuscitation (CPR)
Crick, Francis, 39
Crimean-Congo hemorrhagic fever, 9
Criminal justice system: healthcare system and, 439, 439; siloed nature of, 439
CRISPR technology, 364
Critical access hospitals (CAHs), 145
Critical adoption point, 16–17
Critical thinking, 3, 5
Cronkite, Walter, 1
Crosby, Philip B., 294
Crossing the Quality Chasm (IOM), 40, 293, 300, 425
Culinary medicine, 480
Cultural authority, 43
Cultural competence, 83–88; definitions and scholarship related to, 83–84; in healthcare, definition of, 11; influence
of culture and language, 84–86; Kaiser Permanente’s commitment to, 87–88; limitations related to funding, 86; necessity of, 87–88
Culturally competent care, definition of, 220
Cultural misunderstanding: example of, 84–85
Culture, 75; definition of, 83; health status and, 21; influence of language and, 84–86
CVS: merger with Aetna, 140
CWF. See Commonwealth Fund (CWF)
Cyber criminals, 340
Cybersecurity, 327, 340–41; cloud computing and, 339; common cyber risks, 341; threats, 472–73
Dark Ages, 37
DARPA. See Defense Advanced Research Projects Agency (DARPA)
Dartmouth Atlas Project: on distribution of services, 233; website for, 119, 509
Dartmouth College Center of Excellence: health system defined by, 103
DASH (Dietary Approaches to Stop Hypertension) diet, 411
Data: insight gained with, 290, 290
Data analytics, 293, 325; examples of, 327–28; information technologists and, 195–96; transforming data to applications, 466–67, 467
Databases: data warehouses versus, 333
Data breaches: healthcare organization’s responsibility and, 341
Data collection: on healthcare systems, 115
Data mining: fraud detection and, 274–75
Data warehouses: definition of, 333
da Vinci, Leonardo, 439
Davis, Michael M., 193
Death(s): gender differences in causes of, 215–16, 216; leading causes of, by age group, 217–18; number of leading causes of, in US, 408, 408; opioid overdose-related, 48
Decision-making technologies, 328
Deductibles, 254; under Affordable Care Act, 61; definition of, 252; drug prices and, 371; for health insurance exchange plan levels, 268, 268; in high-deductible plans, 260; under Medicare, 258, 259; reinsurance policies and, 258; in self-funded model, 248
Deep breathing, 399
Defects: Lean and elimination of, 297
Defense Advanced Research Projects Agency (DARPA), 472
Defensive medicine, 10
Delayed gratification: Stanford marshmallow experiment and, 306–7
Dementias, 480
Deming, W. Edwards, 5, 294, 296; 14 points for management, 292; red bead experiment and, 288–90; on system of profound knowledge, 291
Deming cycle, 297, 297
Democrats: federal power preferences of, 91; voting on Medicare and Medicaid legislation, 57
Dental assistants and dental hygienists: responsibilities, training, and licensing of, 192
Dentists, 180; education and licensing for, 192
Depression, 227
Depression and Bipolar Support Alliance, 228
Determinants of health, 78–82, 80, 477
Diabetes, 306, 412
Diabetic neuropathy, 412
Diagnosis: technology-assisted, 470, 470
Diagnosis-related groups (DRGs), 60, 256
Diagnostic inflation, 93
Diagnósticos/diagnostic testing, 326, 328
Dialysis machine, 39
Diarrhea: antibiotic-associated, 414
Dickens, Charles, 5
Diet: as cornerstone of preventive medicine, 411
Dietary Supplement Health and Education Act (DSHEA), 405
Dietary supplements, 399, 406
Diet-based therapies, 399, 400, 410–11
Digital photography, 18
Dingell, John, 56
Direct-to-consumer (DTC) marketing, 373–75; AMA’s medical ethics opinion on, 374; FDA’s physician survey on, 374–75
Discounted fee-for-service payments, 255–56
Discrimination: against LGBT individuals, 219
Disease: burden of, 48–50; chronic inflammation and, 409; genetic predisposition to, 78; illness distinguished from, 77; tripartite (or epidemiological) model of, 77–78
Disproportionate Share Hospital (DSH) designation: 340B Drug Pricing Program and, 372–73
Disruptive behavior disorders, 227
Diversity, 291; benefits of, 83; necessity of cultural competence and, 87–88; social context of, 83–84
DNA editing, 364
Doctorates in healthcare administration, 193
Doctor of dental medicine (DMD) degree, 192
Doctor of dental surgery (DDS) degree, 192
Doctor of medicine (MD) degree, 182
Doctor of osteopathic medicine (DO) degree, 182
DoD. See US Department of Defense (DoD)
Doll, Sir Richard, 39
Domestic violence, 216, 219
DOs. See Osteopathic doctors (DOs)
Downsizing, of hospitals, 144–46
Downstreaming, 211
DRGs. See Diagnosis-related groups (DRGs)
Driverless cars, trolleylike scenario with, 443
Drucker, Peter, 339
Drug approval process, 361–62, 362
Drug overdoses: deaths from, 48
Drug stores, 133
DSHEA. See Dietary Supplement Health and Education Act (DSHEA)
Dsuvia, 381
Dual eligibility: for both Medicare and Medicaid, 270
Durant, Will, 288
Duration of treatment: care services defined by, 210
Duration rating, 255
Early adopters: second curve, adoption of innovation, and, 461, 462; of technology, 331
Early majority adopters: of technology, 331
Eating disorders, 227
Ebers Papyrus, 37
Ebola, 8, 9, 41, 124, 483
ECAs. See Extraordinary collection actions (ECAs)
Echocardiogram (EKG) machines, 328–29
Economic system: healthcare system and, 439, 439; siloed nature of, 439
Education: health status and, 21
Educational system: healthcare system and, 439, 439; siloed nature of, 439
Education and training: for administrative and business office staff, 194; for clinical nurse specialists, 188; for dentists, 192; for executive staff, 193; for nurse practitioners, 186–87; for nurses, 190; for physician assistants, 187; for physicians, 182–83
Effective healthcare: quality improvement policies and, 425
Efficient healthcare: quality improvement policies and, 425
e-health, 329, 330, 464
eHealth Exchange, 337
EHRs. See Electronic health records (EHRs)
EHR systems: interoperability of, 334
Einstein, Albert, 445
Einthoven, Wilhelm, 329
Elasticity: definition of, 254
Electronic communication policies, 341
Electronic consultation, 465
Electronic health records (EHRs), 327; confidentiality concerns with, 336–37; electronic medical records versus, 333; health information exchanges and, 337; incentivizing adoption of, 335–36
Electronic medical records (EMRs): electronic health records versus, 333
Electronic prescribing (e-prescribing), 327
Electron microscope, 39
Eli Lilly, 359
Emergency department (ED), 6, 7, 152–53; nondiscriminatory access to, 250; preventable visits to, 148
Emergency medical care policy: for nonprofit hospitals, 137
Emergency Medical Treatment and Active Labor Act (EMTALA), 250
Emergency rooms (ERs): freestanding, 153
Empathy: sympathy versus, 222
“Empathy: Exploring the Human Connection” (Cleveland Clinic), 221–22
Employee involvement: in total quality management, 294
Employee Retirement Income Security Act of 1974 (ERISA), 57–58, 258
Employer-based group coverage, 249–50
Employer-based health clinics, 152
Employer mandate, 62, 441
Employer-sponsored health insurance: financing of, 6; first in US, 38; fully insured group plans, 257–58
Employment: health status and, 21
EMRs. See Electronic medical records (EMRs)
EMTALA. See Emergency Medical Treatment and Active Labor Act (EMTALA)
End-of-life (EOL) care, 22, 155; hospice and palliative care, 158; improving, 480
Engineering staff, 180
Enthoven, Alain, 267
Environment: in Blum’s determinants of health and well-being model, 205, 206; in CDC model of health and well-being, 207, 207; in epidemiological model of disease, 78
Environmental disease: cost estimates of, 435
Environmental factors: health status and, 79, 79
Environmental Protection Agency (EPA): creation of, 435
Epidemics: infectious diseases related to, 8–9
Epidemiological model of disease: primary components of, 77–78
Epinephrine, 359
EPTS scores. See Estimated Post-Transplant Survival (EPTS) scores
Equality: as a healthcare issue, 19–21
Equitable access to healthcare, 2, 2, 458, 459
Equitable healthcare: quality improvement policies and, 425
ERISA. See Employee Retirement Income Security Act of 1974 (ERISA)
Errors: fraud and, 273
ERs. See Emergency rooms (ERs)
Escape Fire (Berwick), 440
Estimated Post-Transplant Survival (EPTS) scores, 459
Ethical healthcare and research: new day for, 223–26
Ethics: off-label drug use and, 366; technologies and, 331
Ethnomedicine, 401
Europe: means of pricing regulation in, 123
European Organization for Nuclear Research (CERN), 40
Evergreening: definition of, 370; limiting practice of, 371
Evidence-based medicine: early research on, 40; Mayo Clinic and, 48; preventive, integrating CAM into conventional healthcare, 408–15
Evidence-based practice-support systems, 328
Excellence: quality and, 288
Executive staff: education and training for, 193
Experience rating, 255
Extraordinary collection actions (ECAs), 137

Fabric of the Human Body, The (Vesalius), 37
FACHE. See Fellow of the American College of Healthcare Executives (FACHE)
Fact-based decisions: in total quality management, 294
Failure: ineffective process and, 289
Fair access to healthcare, 2, 2
False Claims Act, 273
Family-centered care model, 86
FAP. See Financial assistance policy (FAP)
Farrand Training School for Nurses (Detroit), 189
FASB. See Financial Accounting Standards Board (FASB)
Fast tracking of medications, 362, 363
FDA. See Food and Drug Administration (FDA)
FDA Modernization Act of 1997, 362
Federal government: health policy and, 426, 427
Federal healthcare expenditures, 272
Federal hospitals, 140
Federal Register, 434
Federal regulations, significant, 434–38
Fee-for-service payments, 255; health versus healthcare dynamic and, 106
Fee-for-service plans: flaws in, 262–63
Feigenbaum, Armand V., 294
Fellow of the American College of Healthcare Executives (FACHE), 194
Fellowships, 182–83; for administrative positions in healthcare, 194; for business specialists in healthcare, 194; for clinical nurse specialists, 188
Fentanyl, 124, 381; opioids mixed with, 380; overdose deaths involving, 380, 380
Field of Dreams (film), 7
“Fifth vital sign” campaign: origins of opioid crisis and, 379
Filovirus diseases, 9
Financial Accounting Standards Board (FASB), 194
Financial assistance policy (FAP), 137
Financing of healthcare system, 247–75; Affordable Care Act and commercial insurance, 267–75; complexity of the financing function, 275; five main funding models, 248–50, 249; focus of chapter, 248; health insurance in the US, 251–60; managed care, 261–67; overview of, 247
FIP. See International Pharmaceutical Federation (FIP)
Flavanols, 410
Flavones, 410
Flavonoids, 410
Fleming, Alexander, 38, 404, 484
Flexner, Abraham, 38, 45, 46, 47
Flexner report, 38, 46
Florence Nightingale Pledge, 189, 189
Florida Power and Light (FPL), 302
“Flow” principle, in Lean, 305
Fluphenazine, 371
Followers: development of, 344; leaders and, 193
Food and Drug Administration (FDA), 360–66, 405; biosimilars requirements, 375; Center for Drug Evaluation and Research (CDER), 361, 363, 406; drug approval process, 361–62, 362; drugs derived from natural products approved by, 404; Dsuvia approved by, 381; fast-track applications submitted to, 362; investigational new drug (IND) applications filed with, 406; mHealth technology applications and, 465; mission of, 360–61; Office of Orphan Products Development (OOPD), programs supported by, 364–65; off-label use of medicines, 365–66; origins of, 360; orphan drugs, 363–65; over-the-counter drugs, 363; OxyContin approved...
by, 379; pharmaceutical advertising
regulation and, 374; Risk Evaluation
and Mitigation Strategies, 365; Safety
and Innovation Act, 365; “totality of
evidence” approach for botanical IND
and NDA submissions, 407
Food and Drug Administration Safety
and Innovation Act (FDASIA), 362
“Food deserts,” 87
Foot, Phillipa, 442
Force Field and Well-Being Paradigms of
Health, 207
For-profit corporations: private
commercial insurance and, 251
For-profit hospital organizations,
examples of, 138
For-profit hospitals, 136, 138–39, 139,
139, 142
Fortis, 252
Fragmentation, 490; mental and
behavioral health care and, 486;
overcoming, 438–40; telemedicine
and, 466; of US healthcare system,
5–7, 14, 135, 424, 438, 490
France: healthcare system in, 107,
111–12; healthcare system
performance ranking, 115; health
expenditures as percentage of GDP
for US and, 120; pharmacies as
primary care entry point in, 151–52
Franklin, Benjamin, 37
Fraud and abuse, 272–75; common
provider fraud schemes, 273;
detecting, 274–75; federal laws
dealing with, 273–74; penalties for,
274
Free market economy, 12
Free radicals: neutralizing, 410
FTC. See Federal Trade Commission
(FTC)
Fuchs, Victor, 344
Fully insured group plans, 257–58
Fundraising campaigns for humanitarian
relief: single-person focus in, 443
Futile care, 480
Future of healthcare in the United States,
457–91; artificial intelligence and
big data, 466–68, 467; behavioral
economics, 486–88; change and,
460, 461, 462–63; climate change
and health, 481–82; comparative
effectiveness research, 481;
cybersecurity threats, 472–73; ever
larger systems of providers, 474–75;
focus of chapter, 458; fundamental
questions about, 459–60; genomics
and precision medicine, 468–70,
469, 471; the good, the bad, and
the ugly in, 457–59; maximizing,
closing thoughts on, 490–91; mental
and behavioral health, 486; new and
evolving disease threats, 482–86;
new organizational structures and
care models, 475–77; post-ACA
healthcare insurance world, 488–90;
robotics, 472; social media, 473–74;
technological advances and, 463–64;
telemedicine and related modalities,
464–66; wellness and an aging
population, 477–81
Galen, 37
Gallo, Robert, 40
Gallup, 118
Gamification, 487
Garfield, Sidney, 53
Gatekeepers: managed care systems and,
265–66
Gawande, Atul, 298, 457, 476, 477
GDP. See Gross domestic product (GDP)
Ge Hong, 405
Geiger, H. Jack, 151
Geisinger Health System, 264, 343
Gender equality, 191
Gender factors: healthcare utilization and,
81, 147; health expenditures and,
117; nursing shortage and, 191
Gene mutations, 364
Generic drugs, 375, 377
Genetic disease field: drug development
and, 364
Genetic engineering, 364
Genetics: disease and, 78–79, 79, health
status and, 21
Genetic testing, 468
Genome editing: types of, 364
Genomics, 326; precision medicine and, 468–70

Geographic rating, 255

Geography: impact on health, 10

Germany: Bismarck model in, 249, 249; healthcare system in, 106, 108, 111; healthcare system performance ranking, 115; health expenditures as percentage of GDP for US and, 120; pharmaceutical costs in, 370

Germline therapies, 364

Gilead Sciences, 359

GlaxoSmithKline, 359, 360

Global budgeting approach, to health reform, 489

Global disease: spread of, 8–9

Global Forum for Health Research, 124

Global health: importance of, to United States, 124–25

Global warming, slowing, 482

Goals for healthcare system: quality improvement policies and, 425–26

Goethe, Johann Wolfgang von, 287, 288

“Golden Age of Antibiotics,” 484

Golden Rule Insurance Company, 252

Gold plan: of health insurance exchanges, 61, 268

*Good, the Bad, and the Ugly, The* (movie), 457

Google Scholar, 402

Gottlieb, Scott, 380

Governance: clinical, 310; collaborative, 310; components of process in, 167; organization, 166, 168; for quality, 310–12, 312, 313

Governance Institute, 168

Government: American skepticism about, 90; levels of, 426–27; players in healthcare, condensed list of, 431–32; role of, in healthcare, 425–26

Government-sponsored insurance, 269–75; federal expenditures for healthcare, 272; fraud and abuse issues, 272–75; high-risk pools, 271–72; Indian Health Service, 270; Medicare and Medicaid, 269–70; TRICARE and CHAMPVA, 271; Veterans Health Administration, 270–71

Graduate medical education programs, 183

Gram-negative bacteria, 484

Great Depression, 52, 53

Great Society initiative, 269

Gretter, Lystra, 189

Grodzins, Morton, 426

Gross domestic product (GDP), 55; French healthcare expenditures as percentage of, 111; health expenditures of US and comparable Western nations as percentage of, 119–20, 120; relationship between drug prices and, 371; Singapore healthcare expenditures as percentage of, 113; US national health expenditures as percentage of, 39, 40, 41, 116

Group Health Cooperative, Washington, DC, 53

Group insurance plans: prepaid, 53

Gut microbiome: health and role of, 414

Hackers and hacking, 341, 473

*Hacking of the American Mind, The* (Lustig), 486

*Handbook of Prescriptions for Emergencies* (Ge Hong), 405

Harper Hospital Nursing School, 38

Harrison Narcotic Control Act of 1914, 378

Harvey, William, 37

Harvoni: pricing variation, US versus UK, 122

Haslanger, Sally, 83

Haven, 476–77

HCA, 377

HCAHPS. See Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

HCQIA. See Health Care Quality Improvement Act (HCQIA) of 1986

HDHPs. See High-deductible health plans (HDHPs)

Health: American beliefs, values, and attitudes about, 75–95; biomedical
model of, 77; Blum’s determinants of, 205, 206, 207; CDC model of, 207, 207; climate change and, 481–82; definitions of, 76–77, 208–9; determinants of, 78–82, 80, 477; gender and sex differences and, 215–16; impact of physical environment and geography on, 10; improving, 205, 207–8; key events and milestones in medical history and, 37–41; psychosocial models of, 77; Stokes model of, 209

Health behaviors: in US compared with other countries, 121–22

Healthcare: American beliefs, values, and attitudes about, 75–95; change and future of, 292; continuum of, 154, 154–55; federal expenditures for, 272; government players in, condensed list of, 431–32; information technology jobs in, 195; Lean in, 296–98, 302; medical care versus, 78; policy cycle in, 433, 433; political influence and, 424; role of government in, 425–26; “silied” arrangement in, 304–5; Six Sigma in, 302; as society’s barometer, 2

Healthcare administration: recommended publications relating to, 511

Healthcare administrators: knowledge about healthcare positions and, 181

Healthcare companies: largest, by revenue (2016), 165

Healthcare costs: system inefficiencies and rise in, 263. See also Healthcare expenditures

Healthcare decision making: behavioral economics and, 307–8

Healthcare delivery: future of, 424; major advances in, 50–53; new paradigm needed for, 2–3; select issues with major impact on health and, 14; within taxonomy of healthcare organization integration, 166

Healthcare development cycle: historical, 43–44, 44

Healthcare employment: total, in US, 180

Healthcare executives: roles and responsibilities of, 192–93

Healthcare expenditures: by age group and gender, 117; Medicare and Medicaid as drivers of, 435; as percentage of GDP, 39, 40, 41, 116; projected in US, through 2027, 116–17; rise in, 48, 457–58; state of residence and, 117–18; in US, CMS facts about, 116

“Healthcare fairy”: wish for, 4

Healthcare Financial Management Association (HFMA), 194

Health Care Freedom Act of 2017, 62

Healthcare information: internet and quality of, 9; transparency of, 226–27

Healthcare Information and Management Systems Society (HIMSS), 194

Healthcare leadership: as a noble profession, 5

Healthcare occupations: as proportion of jobs in US, 179

Healthcare organization integration: taxonomy of, 166

Healthcare organizations: electronic communication policies and, 341; ever larger systems of providers and, 474–75; negative exposure of, via social media, 474; patient health and well-being and role of, 208; sources of information collected by, 332–33; websites of, 509–10

Healthcare policy: Spanish flu of 1918 and impact on, 49–50; traditional focus of, 78

Health Care Quality Improvement Act (HCQIA) of 1986, 436

Healthcare reform: Americans and beliefs about, 88, 95, 490; attitudes about government and, 90–91; Clinton administration and, 40, 54, 58–59; improving, seven-step process in, 445; major obstacles to, 14–15; meaningful change and, 460, 462–63; moral dilemma at root of national debate over, 442–44; multiple attempts at, in US, 247; ongoing debate over, 458; patient engagement and, 213;
“personal choice” debate and, 83; physicians and, 181; politicization of, 8; public attitudes toward, 488–89, 489; questions related to, 23
Healthcare reform, US history of, 54–62; Affordable Care Act, 54, 60–61; American Association of Labor Legislation, 54, 55; American Health Care Act of 2017, 54, 61–62; Children’s Health Insurance Program, 54, 59; Clinton administration’s reform attempts, 54, 58–59; Committee on the Costs of Medical Care, 54, 55; Employee Retirement Income Security Act of 1974, 57–58; Hospital Survey and Construction Act, 56; Medicare and Medicaid legislation passed, 54, 57; Medicare Modernization Act, 54, 59; present challenges with, 62; Progressive Era, 54, 54; proliferation of managed care and new plan designs, 59–60; timeline of, 54; Wagner-Murray-Dingell Bill, 54, 56
Healthcare sector: jobs in, BLS estimates on, 179
Healthcare system, US, 110; aging population and, 19, 20; American beliefs about, 88–89, 89; Americans’ expectations for, 88; areas of focus in text, 1, 2, 36; chronic disease management and, 12; conundrum facing, 11; differences between those of other countries and, reasons for, 82–83; distinguishing characteristics of, 5–8, 6; division and fragmentation in, 5–7, 14, 135, 424, 438, 490; end-of-life care and, 22; equality as healthcare issue in, 19–21; information technology and, 9–10; introduction to and overview of, 1–23; leadership role of US, 22–23; legal issues with, 10–11; major obstacles to reform in, 14–15; overall purpose of, 205; “perfect storm” in, 12–13, 13; physical environment and geography, 10; physician shortages and, 22; pillars of well-being and, 439, 439; spread of global disease and, 8–9; technology and, 7; transitioning toward value in, 15–19; understanding the challenge before us, 3–5; values, attitudes, and beliefs and, 11–12; well-known problems and politicization in, 7–8. See also Components of our healthcare system; Financing of healthcare system; History and development of the US healthcare system
Healthcare system, US, by the numbers, 115–18; healthcare expenditures, facts about, 116; health expenditures by age group and gender, 117; projected healthcare expenditures (through 2027), 116–17; prominent data sources for, 115; spending not equal to positive outcomes, 118; state of residence and health expenditures, 117–18
Healthcare system, US, comparative ratings, 118–24; health behaviors compared with other countries, 121–22; health expenditures as percentage of GDP for US and comparable Western nations, 119–20, 120; outcomes compared with other countries, 121; pricing variation, 122, 122–24; rating over the past decade, 119; spending compared with other wealthy countries, 119–20; summary of important differences between US and other countries, 125–26
Healthcare systems: health systems versus, 103–6
Healthcare systems around the world, 106, 107–10, 111–14; Australia, 107, 113–14; Canada, 107, 111; comparing and ranking, approaches to, 114–15; France, 107, 111–12; Germany, 106, 108, 111; Italy, 108, 114; Japan, 108, 112; New Zealand, 109, 113; Singapore, 109, 113; Taiwan, 110, 114; United Kingdom, 110, 112
Healthcare workforce: clinical versus nonclinical positions in, 180
Health disparities, 213–15; reducing, 214; stratification of patients and, 214–15
Health inequities: eliminating, framework for, 220
Health informatics, 333
Health information: online searching for, 474
Health information exchanges (HIEs), 337, 338
Health information technology (HIT): key concerns of, 327
Health insurance, early forms of, 51–53; Blue Cross, 52; Blue Shield, 52; commercial insurance, 52; expansion of insurance, 53; Medicare and Medicaid, 52; prepaid group plans, 53; sick funds, 51–52
Health insurance carriers, in United States, 251–52
Health insurance exchanges, 61; creation of, 267; four “metal” categories of, 268, 268; introduction of, 438; managed competition and, 267; pre-existing conditions and, 272
Health insurance in the United States, 251–60; four principles of insurance, 253; healthcare financing models with and without insurance, 260, 261; health reimbursement accounts, 260; health savings accounts, 260; high-deductible plans, 260; important insurance terms, 252–53; insurance risk rating and pre-existing conditions, 255; major health insurance carriers, 251–52; methods of paying for services, 255–57; moral hazard and adverse selection, 254–55; post-ACA, 488–90; primary forces behind growing need for, 53; private commercial insurance, types of, 257–60; public versus private, 251
Health Insurance Portability and Accountability Act (HIPAA), 436; passage of, 40; privacy protections under, 336–37
Health literacy, 12; definition of, 226; measurement tools, 227; promoting, 218; transparency of, 226–27
Health Maintenance Organization (HMO) Act of 1973, 263; “dual choice” mandate of, 436; passage of, 39
Health maintenance organizations (HMOs), 53, 59, 60, 436
Health Net, 252
Health outcomes: improving, factors tied to, 21; interlocking chain for, 230, 231
Health policy: determinants of health and, 80, 80
Health policy, outlook for, 440–45; future of the Affordable Care Act, 441–42; moral dilemma in, 442–44; overview of, 440; political rhetoric and, 440–41; working toward a new approach, 444–45
Health professional shortage areas (HPSAs), 233
Health reimbursement accounts (HRAs), 60, 260
Health Resources and Services Administration (HRSA), 233
Health savings accounts (HSAs), 60, 260
Health status: factors related to, 20–21; influence of major factors on, 78–82, 79
Health systems: healthcare systems versus, 103–6; true, evolving toward, 106
Healthy Aging (Weil), 477
Heart disease: age factors and, 221; gender and, 214; genetics and, 78–79; sex differences and, 215, 216, 216
Heart failure: effective follow-up for, 438
Hepatitis C, 359; cost of drugs and, 371; treatments for, 23
Heredity: in Blum’s determinants of health and well-being model, 206, 207; in CDC model of health and well-being, 207
Heroin: opioid addiction and illegal use of, 378; overdose deaths involving, 380, 380
HFMA. See Healthcare Financial Management Association (HFMA)
HHS. See US Department of Health and Human Services (HHS)
HIEs. See Health information exchanges (HIEs)
High-deductible health plans (HDHPs), 53, 253, 260
Highmark, 252
High reliability organizations, 298, 300; characteristics of, 299; quality and safety in healthcare and, 298
High-risk pools, 271–72; definition of, 271; pre-existing conditions and, 272
Hill-Burton Act, 51, 144, 233, 434–35; passage of, 39; requirements of, 56
HIMSS. See Healthcare Information and Management Systems Society (HIMSS)
HIPAA. See Health Insurance Portability and Accountability Act (HIPAA)
HIPAA Journal, 340
Hippocrates, 37, 292
Hippocratic oath, 189
Hip replacement surgery, 7, 122
History and development of the US healthcare system, 35–62; aims of the healthcare system, 36; burden of disease, 48–50; focus of chapter, 36; healthcare reform efforts, from 1880s to the present, 54, 54–62; healthcare spending, 48; important figures in the development of the modern system, 45–48; major advances in healthcare delivery, 50–53; medicine from the late 1800s to mid-1900s, 41–44; medicine in the 1700s and 1800s, 36, 41; recent development of modern healthcare system, 35–36; time line of major milestones in, 37–41
History of Medicine Society, 46
HIT. See Health information technology (HIT)
HIV/AIDS, 23, 223, 359, 425
HIV/AIDS programs: “90-90-90” target and, 223
HMOs. See Health maintenance organizations (HMOs)
Holistic thinking, 208
Home and community-based service (HCBS) license, 194
Home health care, 152
Homelessness, 219, 222
Homeopathy, 46
Homer, 308
Homicide, 216, 219
Horizontal health systems, 104
Horizontal integration, 140, 159, 166
Hospice, 22, 158, 210, 211, 480
Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), 303, 379
Hospital Corporation of America, 138
Hospital deaths: preventable, in US, 300
Hospital metrics: important, 146–48; outcome measures, 147; public health measures, 147; utilization measures, 146–47; utilization patterns, 147–48
Hospital privileges: for physicians, 182
Hospital Readmissions Reduction Program (HRRP): goal of, 438
Hospitals, 133; accreditation of, 135; allopathic, 143, 144; categorization of, by tax status, 136–39; characteristics of, in US, 135–36; community, 43, 139; definition of, 135; downsizing of, 144–46; at end of World War II, 56; federal, 140; for-profit, 138–39, 139, 142; growth in expenditures, 116; inpatient services and, 135–48; long-term acute care, 157; minihospitals, 144–46, 475–76; multi-unit affiliation (hospital chains), 140; not-for-profit, 137–38, 139, 139, 141–42; by the numbers, in US, 139, 139; oldest in US, 41; osteopathic, 143–44; physician-owned, 138–39; proprietary, 43; public, 140; regulation of, 135;
Index

religiously affiliated, 143; rural, 140, 142–43, 144, 146; safety-net, 39; specialty, 144; state-run, 140; teaching, 143, 182, 197; urban, 140, 142–43; virtual, 476; WHO description of, 135

Hospital service plans, 52
Hospital Survey and Construction Act of 1946. See Hill-Burton Act
Host: in epidemiological model of disease, 78
House of Representatives: committees responsible for healthcare in, 433–34; Medicare and Medicaid legislation and, 57
HPSAs. See Health professional shortage areas (HPSAs)
HRAs. See Health reimbursement accounts (HRAs)
HRRP. See Hospital Readmissions Reduction Program (HRRP)
HRSA. See Health Resources and Services Administration (HRSA)
HSAs. See Health savings accounts (HSAs)
Humana, 252
Human Error (Reason), 298
Human genome, sequencing of, 40, 468–69
Human potential waste: Lean and elimination of, 298
Humira: pricing variation, US versus UK, 122
Humors, 37
Hurricane Katrina, 40
Hyperglycemia: chronic, 412
Hypertension (high blood pressure): lowering with CAM therapies, 410–11
IBM’s Watson, 10, 467–68
Ibuprofen, 404
ICF/IDs. See Intermediate care facilities for individuals with intellectual disability (ICF/IDs)
Identity theft, 340, 473
IDSs. See Integrated delivery systems (IDSs)

IFPMA. See International Federation of Pharmaceutical Manufacturers and Associations (IFPMA)

IHI. See Institute for Healthcare Improvement (IHI)

IHS. See Indian Health Service (IHS)

Ikigai, 478

Illness: disease distinguished from, 77

IM. See Integrative medicine (IM)

Imhotep, 35, 37

Implantable devices, 326

Income and social status: health status and, 20

Incrementalism, abandoning philosophy of, 460

Indemnity plans, 52, 256

Indian Health Service (IHS), 140, 159, 270

Indigenous medicine, 401

Individualized program plans (IPPs), 157

Individual mandate, 61, 62, 83; repeal of, 41, 441, 488; US Supreme Court upholds constitutionality of, 61

Individual plans, 257, 258

Industry rating, 255

Infectious diseases: burden of, 48–50; global phenomenon of, 483; international travel and, 124; pandemics, 484; related to epidemics, 8–9; zoonoses, 483

Inflammation: acute versus chronic, 409; reducing with CAM therapies, 409–10

Influenza, 48–49

Information disequilibrium, 226

Information management, 332–33

Information technologists: data analytics and, 195–96

Information technology (IT), 9–10, 195, 325; continuum of system integration, 345, 345; definition of, 327; jobs in healthcare, partial list of, 195; systems of, purpose for, 345, 345; value-based care and, 338–40

Innovation: second curve and adoption of, 15, 16 16, 17–18; stages in adoption of, 460, 461, 462; technology applications and, 343–44
Innovation Killer, The (Rabe), 290
Innovators: of technology, 331
Innovator’s Dilemma, The (Christensen), 344
Inpatient days, 146
Inpatient Prospective Payment System, 303
Inpatient services: cost of outpatient services versus cost of, 148; hospitals and, 135–48
Insight: gaining with data, 290, 290
Insomnia, 227, 413, 414
Institute for Healthcare Improvement (IHI), 440; Achieving Health Equity: A Guide for Healthcare Organizations, 220; framework for governance of health system quality, 311, 313; Triple Aim of, 1, 40, 161, 230–31, 293
Institute of Medicine (IOM): Crossing the Quality Chasm, 40, 293, 300, 425; To Err Is Human, 40, 293; infectious diseases report, 124; primary care defined by, 149; quality and safety defined by, 287
Institutionalization of healthcare: historical development of, 43–44, 43–44
Institutional review boards (IRBs), 226
Insulin, 359, 412
Insurance companies, 164
Insurance risk rating: pre-existing conditions and, 255
Insured: definition of, 252
Insurer: definition of, 252
Integrated delivery systems (IDSs), 159–60, 184; definition of, 159; medical practices and, 150; pros and cons of, 160
Integrated system: in total quality management, 294
Integrative medicine (IM), 400, 408
Intensive care units: virtual, 476
Intermediate care facilities for individuals with intellectual disability (ICF/IDs), 157
Intermountain Healthcare, 377
Internal Revenue Code: 501(c)(3) section of, 137
Internal Revenue Service (IRS): nonprofit hospitals and requirements of, 137
International Federation of Pharmaceutical Manufacturers and Associations (IFPMA): advocacy of, 368; industry information compiled by, 368–69
International healthcare systems. See Healthcare systems around the world
International Organization for Standardization (ISO): 9000 family of standards, 296
International Pharmaceutical Federation (FIP): mission of, 369
International travel, 124
Internet, 330, 331; cloud computing and, 339–40; democratization of healthcare and, 9, 474; medicalization and, 94. See also Technologies in healthcare; Technology(ies)
Interprofessional education (IPE), 309–10; definition of, 196; goals in, 309; process in, 197, 197
Interprofessional practice (IPP), 196, 197
Invasive species, 8
Inventory waste: Lean and elimination of, 298
Investigational new drug (IND) application, 406
IOM. See Institute of Medicine (IOM)
IPE. See Interprofessional education (IPE)
iPhone, 463
IPP. See Interprofessional practice (IPP)
IPPs. See Individualized program plans (IPPs)
IQVIA Institute for Human Data Science, 369
IRBs. See Institutional review boards (IRBs)
Irritable bowel syndrome, 414
Ishikawa, Kaoru, 294
Ishikawa diagram, 295
ISO. See International Organization for Standardization (ISO)
IT. See Information technology (IT)
Italy: healthcare system in, 108, 114
Japan: Bismarck model in, 249; end-of-life (EOL) care in, 480; healthcare system in, 108, 112
Japanese management concepts, 294–96
Jenner, Edward, 38, 42, 91
Jetsons, The (television show), 463
Johns Hopkins Hospital: founders of, 46, 47; opening of, 45
Johns Hopkins School of Hygiene and Public Health, 47
Johns Hopkins School of Medicine, 38
Johns Hopkins University: founding of, 45
Johns Hopkins University School of Medicine, 47; first to admit women, 46; unique contributions of, 45
Johnson, Lyndon B., 57, 150, 269
Johnson & Johnson, 359
Joint Commission, The, 145, 183, 302; hospital accreditation by, 135, 138; pain management standards, 379; website for, 509
Journal of Patient Safety, 300
JP Morgan Chase, 476
Jungle, The (Sinclair), 360
Juran, Joseph, 294
Jurassic Park (film), 292
Kaiser Family Foundation (KFF), 215, 488; voter attitudes toward healthcare study, 427–28, 428; website for, 119
Kaiser Foundation health plan (California), founding of, 53
Kaiser Permanente, 252, 264; cultural competence emphasized by, 87–88; Institute for Culturally Competent Care, 87
Kaku, Michio, 466
Kaposi’s sarcoma, 404
Kennedy, John F., 229
Kessler, David, 379
KFF. See Kaiser Family Foundation (KFF)
“Kidney donor chain,” 444
Kilmann, Thomas, 343
Kimball, Justin, 52, 263
Kitzhaber, John, 357
Knowledge management, 325; examples of, 327–28
Knowledge workers: development of, 344
Kodak: missing the second-curve paradigm shift, 17–18
Kolff, Willem Johan, 39
Laboratory services, 326
Laboratory technicians, 180
Laennec, René, 38
Laggards: adoption of technology and, 331
Lancet: antivaccination movement and retraction of article in, 91, 92
Language: influence of culture and, 84–86
Large hospital systems: for-profit, 142; nonprofit, 141–42
Larson v. United Healthcare Insurance Company, 258
Lassa fever, 9
Late adopters: second curve, adoption of innovation, and, 461, 462
Late majority adopters: of technology, 331
Lauterbur, Paul, 39
Law: bills signed into, 433, 434
Leaders: followers and, 193
Leadership: for quality, 310–12; quantum, 343, 344; technology applications and, 343–44
Lean, 293, 302; factors that inhibit success of implementation, 294, 295; “flow” principle in, 305; in healthcare, 296–98, 302
Lean Six Sigma, 293
Leapfrog Group: founding of, 296; website for, 509
Legal issues: US healthcare system and, 10–11
Length of stay (LOS): US compared with other countries, 121
Lesbian, gay, bisexual, and transgender (LGBT) community: disparities facing, 219; health concerns of, 219–20; as vulnerable population, 222
Levy, Jay, 40
Libertarian paternalism, 308
Licensed practical nurses: number of, in US, 190
Licensing: for clinical nurse specialists, 188; for dental hygienists and dental assistants, 192; for dentists, 192; for intermediate care facilities for individuals with intellectual disability, 157; for long-term care facilities, 158; for medical education, 47; for nurse practitioners, 187; for nurses, 190–91; for nursing homes and long-term care facilities, 158; for physician assistants, 188; for physicians, 38, 183–84; for skilled nursing facilities, 156
Life expectancy: for African Americans, 220; opioid crisis and decline in, 378; sex differences in, 215, 216; in US compared with other countries, 121
Lifelong learning, 11
Lifestyle: in Blum’s determinants of health and well-being model, 205, 206
Lifestyle behaviors: in CDC model of health and well-being, 207, 207
Lincoln, Abraham, 158
Li Shizhen, 405
Lisinopril, 366
Lister, Joseph, 38
Lithium, 228
Litigation: medicalization and, 94
Lloyd’s of London, 258
Local government: health policy and, 426, 427
Lomustine, 371
Longevity: sex differences in, 215, 216
“Long-tail”: pharmaceutical companies and focus on, 364
Long-term acute care hospitals (LTACHs): models of, 157
Long-term care: acute care hospitals, 157; administration, 158; ambulatory services, 153; central aim of, 155; community-based services, 156; function and independence promoted with, 155–56; intermediate care facilities for individuals with intellectual disability, 157; skilled nursing facilities, 156–57
Long-term care administrators, 193–94
Long-term care facilities, 133; licensure of, 158
LOS. See Length of stay (LOS)
Losses: pooling of risk and, 253
Lowballing, 374
LTACHs. See Long-term acute care hospitals (LTACHs)
Lung cancer, 215–16
Lustig, Robert, 486
Lydia E. Pinkham’s Vegetable Compound, 405–6
Lyme’s disease, 482
MACRA. See Medicare Access and CHIP Reauthorization Act (MACRA)
Madison, James, 42
Magnesium supplementation: sleep improvement and, 414
Magnetic resonance imaging (MRI): invention of, 39; pricing of, US versus United Kingdom, 122; utilization pattern for, US compared with other countries, 121
Maintenance staff, 180
Malaria, 78, 404, 405
Malcolm, Ian, 292
Malcolm Baldrige National Quality Improvement Act of 1987, 296
Maldistribution of healthcare services, 233
Malpractice insurance, 10
Malware, 341
Managed care, 261–67; case management and, 266; central features of, 261–62; chronic disease management and, 266; efficiencies and inefficiencies of, 265; evolution of, 263–64; gatekeepers and cost control in, 265–66; integration of quad functions, 264; rise of, in United States, 261; utilization review and tiered benefits, 266–67
Managed care companies, 164
Managed care models: proliferation of, 59–60; three forms of, 60
Managed care organizations (MCOs), 264, 267
Managed care plans, 53
Managed competition, 267
Management: struggles between medicine and, 196–97
Manifest destiny, 82
Marketing of drugs: direct-to-consumer, 373–75
Market justice theory, 14–15, 62, 94; future of healthcare policy in US and, 440; in healthcare, characteristics of, 89–90, 90; social justice theory versus, 89–90, 423
Marshmallow experiment, 306–7
Maryland Law Review, 56
Maslach Burnout Inventory, 185
Massage, 399
Mass shootings, 229
Master’s in healthcare administration (MHA), 193
Master's in nursing (MSN), 187
Maternal mortality: African American women and, 220
Maugham, W. Somerset, 4
Mayo, Charles, 47
Mayo, James, 47
Mayo, William, 47
Mayo, William Worrall, 47
Mayo brothers, 45, 46, 47–48
Mayo Clinic, 45, 47–48, 377; founding of, 47; innovations at, 47–48
MCOs. See Managed care organizations (MCOs)
MDs. See Medical doctors (MDs)
“Meals on wheels” deliveries, 156
Meaningful use: demonstrating, 335; stages of, 335, 336
Measles, mumps, and rubella (MMR) vaccine, 91, 93
Media: medicalization and, 94
Medicaid, 60, 250, 251, 268, 271, 275, 442; children with CHIP and, 437; creation of, 269, 270, 435; dual eligible population and, 270; eligibility for, 269; enactment of, 52; expansions of, under Affordable Care Act, 60, 438, 488; federal healthcare expenditures and, 272; financing of, 6, 57, 249; funding for intermediate care facilities for individuals with intellectual disability, 157; growth in spending, 116, 117; important features of, 269; legislation for establishment of, 39, 54, 57; long-term acute care hospitals and, 157; physician-owned hospitals and, 139; public attitudes toward expansion of, 488, 489; resource-based relative value scale and, 257
Medicaid beneficiaries: utilization patterns and, 147–48
Medical care: in Blum's determinants of health and well-being model, 206, 207; in CDC model of health and well-being, 207; effect of profit motive on, 138; healthcare versus, 78; important role of, 79; interlocking chain of public health, population health, and, 230, 231
Medical decision-support systems, 328
Medical device industry, 133
Medical doctors (MDs), 144
Medical education, 44; accreditation of, 47; first residency program in, 46; Flexner report on, 46; graduate programs in, 183; Mayo Clinic and, 48; reforms in, 43; William Welch’s clinical approach to, 47
Medical errors, 293, 300
Medical examining board, 183
Medical Group Management Association (MGMA), 194, 509
Medical history: key events and milestones in health and, 37–41
Medicalization, 93–94, 232
Medical Mutual of Ohio, 252
Medical practice acts, 38
Medical practice(s): dimensions of, 184; forms of, 150; physician roles within, 181; taxonomy, 150
Medical publishing, 342–43
Medical records, 47
Medical research: ethical principles established for, 39
Medical schools: accredited, 182; contributions of Johns Hopkins University School of Medicine, 45–46; first, 37; IPE/IPP
incorporated into curricula of, 197; upgrading of, 43
Medical specialties: broad range of, 183; partial list of, 184; subspecialties within, 183
Medical technology(ies), 325; constant development of, 328–29; costs and, 326; definition of, 326; examples of, 326
Medicare, 60, 110, 126, 136, 249, 250, 251, 264, 268, 271, 275, 438, 442, 476; Australian, 113; Canadian, 111; creation of, 269, 435; dual eligible population and, 270; eligibility for, 269; enactment of, 52; end-of-life care spending, 155; federal healthcare expenditures and, 272; fee schedule, 256; financing of, 6, 19, 57, 269; fraud and abuse and, federal laws dealing with, 273–74; growth in spending, 116, 117; important features of, 269; legislation and establishment of, 39, 54, 57; long-term acute care hospitals and, 157; physician-owned hospitals and, 139; preventive services and, 77; prospective payment system and, 256; public attitudes toward expansion of, 488, 489; resource-based relative value scale and, 257; Rural Health Clinic practitioners and, 234; states and expenditures per beneficiary, 118; supplement and replacement plans, 257, 258–60
Medicare Access and CHIP Reauthorization Act (MACRA), 270
Medicare Advantage (Medicare Part C), 259–60, 370; creation of, 436; provisions of, 269–70
Medicare beneficiaries: utilization patterns and, 147
“Medicare for All,” 460; difficulties related to implementing, 489–90; public attitude toward, 488, 489
Medicare Modernization Act (MMA) of 2003, 54, 59, 138–39, 370, 437
Medicare Part A, 57, 258, 259, 269
Medicare Part B, 57, 258, 259, 269
Medicare Part C. See Medicare Advantage (Medicare Part C)
Medicare Part D, 258; creation of, 59, 437; “donut hole” under, 59; enactment of, 40; pharmacy benefit managers and, 370; provisions of, 270
Medicare Prescription Drug, Improvement, and Modernization Act. See Medicare Modernization Act (MMA) of 2003
Medicare Shared Savings Program (MSSP), 161
Medicinal plants and fungi, 402, 403
Medicine: culinary, 480; defensive, 10; integrative, 400, 408; from the late 1800s to mid-1900s, 365; in the 1700s and 1800s, 36, 41; narrative, 480–81; precision, 468–70, 469, 471; socialized, 440; specialization in, 42; struggles between management and, 196–97; undue influence of pharmaceutical industry on, 378. See also Complementary and alternative medicine (CAM)
Medigap, 259, 260, 270
Meditation, 399
Melatonin: for improving sleep, 412–14; natural sources of, 413–14
Mendelian disease field: drug development and, 364
Mental health, 227–29, 486; common diagnoses, 227; description of, 227; digital services and, 330–31
Mental Health America, 228
Mental health conditions: medicalization and, 93
Mental health services: unmet need for, 229
Merck, George, 357, 358
Merck & Co., 359
Mercy Virtual, Missouri, 476
Mergers: ever larger provider systems and, 474, 475; hospital chains and, 140; major healthcare, sampling of, 141
Merrow, John, 444, 445
MERS-CoV. See Middle East respiratory system coronavirus (MERS-CoV)
Index

Metformin, 412
Methicillin-resistant Staphylococcus aureus (MRSA), 484
Metrics: hospital, 146–48; patient experience and satisfaction, 303–4; for population health, collection of, 338–39; that matter, 445
MGMA. See Medical Group Management Association (MGMA)
MHA. See Master’s in healthcare administration (MHA)
mHealth, 329, 464, 465
Microbiomes, 381
Microbiota modulation, 485
“Microbots,” 472
Middle East respiratory system coronavirus (MERS-CoV), 9
Mind–body therapies, 399
Mindfulness: definition of, 487
MindSciences, 487
Minihospitals (or microhospitals), 144–46, 475–76
Minimally invasive surgery, 144
Minority groups: health disparities within, 213–14
Misdiagnosis, 232
Mission: improving health and well-being and, 205; organization governance and, 166, 167; senior executives and, 193
MMA. See Medicare Modernization Act (MMA) of 2003
Mobile devices: personal health applications on, 465
Modern healthcare system: recent development of, 35–36, 44
Molina Healthcare, 252
Monopolistic behavior: FTC and protecting against, 367
Monopoly power: drug prices and, 371
Montagnier, Luc, 40
Moral dilemmas: healthcare reform debate and, 442–44
Moral hazard: definition of, 254; diffusion of technology and, 254–55; fee-for-service model and, 262
Morbidity: from disease in US, 48
Morbidity and Mortality Weekly Report (MMWR), 223
Morphine, 359, 381, 403, 404
Mortality: socioeconomic factors and, 220; top ten causes of death in US, 1900 and 2010, 48, 49
Motion waste: Lean and elimination of, 298
MRI. See Magnetic resonance imaging (MRI)
MRSA. See Methicillin-resistant Staphylococcus aureus (MRSA)
MSN. See Master’s in nursing (MSN)
MSSP. See Medicare Shared Savings Program (MSSP)
Multigenerational workforce, 13
Multispecialty medical practices, 184, 185
Multi-unit affiliation hospitals (hospital chains), 140
Murray, James E., 56
Naproxen, 404
Narrative medicine, 480–81
Narrow network plans (NNPs), 53
National Alliance on Mental Illness, 228
National Association of Community Health Centers, 151
National Association of Corporate Boards, 168
National Association of Long Term Care Administrator Boards, 194
National Association of State Mental Health Program Directors, 229
National Bureau of Economic Research (NBER): health system defined by, 104
National Center for Biotechnology Information, 402
National Center for Complementary and Integrative Health (NCCIH), 400
National Center for Health Statistics, 155
National Committee for Quality Assurance, 163
National Council for Behavioral Health, 229
National Council Licensure Examination (NCLEX-RN), 186
National Environmental Policy Act of 1969 (NEPA), 435
National Geographic Society, 478
National healthcare expenditures (NHE), 116, 117
National health insurance, 440
National health insurance model (NHI), 249, 249
National Health Service (NHS), United Kingdom, 110, 112
National Health Service Corps (NHSC), 233
National Health System (NHS), UK, 6, 249
National Incident Management System, 484
National Institute of Standards and Technology (NIST), 296
National Institutes of Health (NIH), 468, 470; DASH diet promoted by, 411; pioneering research by, 23; website for, 510
National Library of Medicine, 342; growing number of trials registered with, 462, 462–63; website for, 510
National Physicians’ Committee for the Extension of Medical Services, 56
National Practitioner Data Bank (NPDB), 436
Nationwide Health Information Network (NHIN), 337
Native American cultures: traditional healers in, 81
Native Americans: health services for, 159
Natural products, 399, 400, 401–6, 415; cancer prevention and, 410; for controlling blood glucose, 412; definition of, 401; historical examples of, 403–5; history and development of, 403–5; most widely used, by US adults, 402, 402; out-of-pocket spending on, 401; with potential to treat side effects of chemotherapy and radiation, 414, 415; for preventing cardiovascular disease, 411, 411; preventive care and, 409; reasons for use of, 403; regulatory situation for, 401, 405–6
Nazi Germany: medical experiments conducted by, 223, 224
NBER. See National Bureau of Economic Research (NBER)
NCCIH. See National Center for Complementary and Integrative Health (NCCIH)
NCLEX-RN. See National Council Licensure Examination (NCLEX-RN)
NDA. See New drug application (NDA)
Neisseria gonorrhoeae (gonorrhea), 484
Nemawashi, 295–96
NEPA. See National Environmental Policy Act of 1969 (NEPA)
Netherlands: healthcare system performance ranking, 115
New drug application (NDA): natural products and, 405; submission to FDA, 361
New Haven Hospital, 190
New York Training School at Bellevue Hospital, 190
New Zealand: healthcare system in, 109, 113; healthcare system performance ranking, 115
NHAs. See Nursing home administrators (NHAs)
NHE. See National healthcare expenditures (NHE)
NHI. See National health insurance expenditures (NHE)
NHI. See National health insurance model (NHI)
NHIN. See Nationwide Health Information Network (NHIN)
NHSC. See National Health Service Corps (NHSC)
Nielsen’s Strategic Health Perspectives, 212
Nightingale, Florence, 189, 190
“Nightingale schools,” 190
NIH. See National Institutes of Health (NIH)
9/11 terrorist attack, 40
Nipah virus, 9, 483
NIST. See National Institute of Standards and Technology (NIST)
Nitric oxide, 410
Nixon, Richard, 35
Nixon administration, 39
NNPs. See Narrow network plans (NNPs)
Nonclinical positions, 180
Noncompliance, 213
Nonsteroidal anti-inflammatory drugs (NSAIDs), 404
North Dakota Information Technology Department, 327
Northern Exposure (television show), 10
Norway: healthcare system performance ranking, 115
Nosocomial infections, 147, 404
Not-for-profit corporations: private commercial insurance and, 251
Not-for-profit hospitals, 136, 137–38, 139, 139, 141–42
Novartis, 360
NPDB. See National Practitioner Data Bank (NPDB)
NPs. See Nurse practitioners (NPs)
NSAIDs. See Nonsteroidal anti-inflammatory drugs (NSAIDs)
Number needed to harm (NNH), 94
Number needed to treat or test (NNT), 94
Nuremberg Code, 224–25
Nuremberg trials, 39, 224
Nurse practitioners (NPs), 186–87, 233; education for, 186–87; licensing for, 187; roles and responsibilities of, 186
Nurses, 180, 188–91, 210; Florence Nightingale Pledge for, 189, 189; harassment of, 191; licensing for, 190–91; number of, in US, 190; roles and responsibilities of, 189; turnover among, 191
Nurse’s Guide, The (Warrington), 190
Nursing: shortages, burnout, and other issues in, 191
Nursing home administrators (NHAs), 193–94
Nursing homes: licensure of, 158; services provided by, 156–57
“Nursing Process”: nursing curriculum and steps in, 190
Nursing profession: early, 38; quantum leadership and, 344
Obama, Barack, 60, 441, 468
“Obamacare.” See Affordable Care Act (ACA)
Obamacare Repeal Reconciliation Act of 2017, 62
Obesity, 80; behavioral economics and, 305–6; in United States, 121
Obsessive-compulsive disorder (OCD), 227
Occupancy rate, 146–47
OCD. See Obsessive-compulsive disorder (OCD)
Odyssey (Homer), 308
OECD. See Organisation for Economic Co-operation and Development (OECD)
OECD countries, 106; health behaviors compared between US and, 121–22; outcomes compared between US and, 121; principles distinguishing US health system from health systems of, 125–26; US healthcare spending compared with per capita spending in, 120, 120. See also Organisation for Economic Co-operation and Development (OECD)
Office of Disease Prevention and Health Promotion, 215, 219
Office of Inspector General of the US Department of Health and Human Services (HHS-OIG), 273, 274
Office of Orphan Products Development (OOPD): programs supported by, 364–65; sponsor benefits, 365
Off-label use of medicines, 365–66
Omnibus Budget Reconciliation Act of 1989: enactment of, 40
OOPD. See Office of Orphan Products Development (OOPD)
Opioid epidemic, 378–81; addressing, multifaceted approach to, 381; CDC on three waves in, 380, 380; contributing factors to, 378–80; dramatic rise in opioid addiction, 378; fentanyl and, 124; gender factors and, 215; impact on longevity for Americans, 48; pharmaceutical industry’s influence on medicine and, 378; synthetic opioids and overdose deaths, 380, 381; understanding root causes of addiction, 439
Organ donation, 459; “opting out” technique and, 309
Organic chemistry: development of pharmaceutical industry and, 359
Organisation for Economic Co-operation and Development (OECD): data collection by, 115; US healthcare system compared with nations of, 5; website for, 119
Organizational immunity to change, 331
Organization governance, 166, 168; components of process in, 167; definition of, 166; ethical functioning and, 168
“Orphan diseases”: definition of, 363
Orphan Drug Act of 1983, 364
Orphan drugs, 363–65
Osler, William, 45, 46
Osteopathic doctors (DOs), 144
Osteopathic hospitals, 143–44
Osteopathic medicine, 399
Osteopathic medicine colleges, 182
Osteopathic training, 182
Outcome measures, 147
Out-of-pocket expenses, 252; for complementary health products, 400–401; growth in, 116
Outpatient services, 135, 148–54; definition of, 148; expanding scope of, 144; primary care, 149–54; settings for provision of, 148–49
Overdiagnosis, medicalization and, 231–32
Overprocessing waste: Lean and elimination of, 298
Overproduction: Lean and elimination of, 297
Over-the-counter (OTC) drugs: FDA and approval of, 363; FDA’s drug standards and, 406
Overtreatment, medicalization and, 231–32
OxyContin: approval of, 379
Papaver somniferum: morphine extracted from, 404
Paracetamol (Tylenol), 404
Paradigms: of healthcare, new, 17; old and new, second curve, adoption of innovation and, 461, 462; power of, 15
Paradigm shifts: missed, 17–19
Parasitic diseases, 483
PAs. See Physician assistants (PAs)
Password theft, 341
Pasteur, Louis, 38
Patented Medicine Prices Review Board (PMPRB), 377
Patents: brand-name drugs, 375; extensions on drugs, evergreening strategy and, 870
Patient care, 205–34; accountable care within, 212–13; age and, 221; categories of, 209–12; duration of treatment, care services defined by, 210; ethical healthcare and research, 223–26, 224–25; focus of chapter, 206; health disparities and, 213–15; HIV/AIDS, 223; improving health and well-being, 205, 206, 207–9; key issues in, 213–16, 219–34; lesbian, gay, bisexual, and transgender health, 219–20; maldistribution of services, 233–34; mental health, 227–29; needs of vulnerable populations, 221–22; patient engagement and, 213; patient prejudice and, 232; physician burnout and, 185; public health versus population health, 230–31; race and ethnicity and, 220–21; scope and intensity of treatment, care services defined by, 210, 210–22; sex differences and, 215–16; transparency of healthcare information and health literacy, 226–27; violence and domestic violence, 216, 219
Patient-centered care model, 86
Patient-centered healthcare: quality improvement policies and, 425
Patient-centered medical homes (PCMHs), 163–64, 210, 266;
becoming, requirements for, 163; patient outcomes in, 164
Patient “dumping,” preventing, 250
Patient engagement, 213
Patient experience and satisfaction, 303–5, improved, 2; silos in healthcare and, 304–5; surveys and metrics, 303–4
Patient focus: in total quality management, 293
Patient portals, 464; definition of, 334; uses for, 334–35
Patient prejudice, 232
Patient Protection and Affordable Care Act. See Affordable Care Act (ACA)
Patient safety: AHRQ definition of, 287. See also Safety
Patient Safety and Quality Improvement Act (PSQIA) of 2005, 437
Patient safety organizations (PSOs), 437
Pay for performance, 257
Payment methodologies, 255–57; bundled payments, 256; capitation, 256; discounted fee-for-service, 255–56; fee-for-service, 255; indemnity plans, 256; pay for performance, 257; prospective fee schedules, 256; shared savings, 257; value-based payment, 257
Payment tiers: managed care organizations and, 267
Payroll taxes: financing of Medicare through, 57, 269
PBMs. See Pharmacy benefit managers (PBMs)
PCIP. See Pre-existing Condition Insurance Plan (PCIP)
PCMHs. See Patient-centered medical homes (PCMHs)
Penalties: for fraud and abuse, 274
Penicillin, 38, 357, 359, 404, 484
Pennsylvania hospital: establishment of, 37
Pensions: ERISA and protection of, 57
People with disabilities: communication issues with, 85–86
Peptic stomach ulcers, 7
Per capita cost for healthcare: controlling, 1, 2
Perfect storm: in US healthcare system, 12–13, 13
Perfect Storm, A (book and movie), 12
Per-member per-month (PMPM) payment, 256
Personal behavior: health status and, 21
Personal experiences: about health and healthcare, 81, 82
Personal freedom: American exceptionalism and, 82–83
Personal health applications, on mobile devices, 465
Personal healthcare (PHC) spending: growth in, by age group, 117; state of residence and, 117–18
Personal health information (PHI): protecting, 327
Personal health records (PHRs), 327, 334, 464–65
Pesthouses, 36, 43, 135
Pew Research Center, 94, 428
Pfizer, 359
Pharmaceutical companies, 164; ten largest, 359–60
Pharmaceutical industry in US, 133, 357–82; associations, 367–69; focus of chapter, 358; Food and Drug Administration, 360–66; future of pharmaceuticals, 381–82; medicalization and, 94; natural products and, 402; opioid crisis and, 378–81, 380, 381; origins and growth of, 358–60; overview of, 357–58; pharmaceutical pricing and cost, 369–78; pricing policies, 123–24; role of the Federal Trade Commission, 366–67
Pharmaceutical pricing and cost, 369–78; biosimilars, 375–76; direct-to-consumer marketing, 373–75; generic drugs, 375; mitigating, actions and proposals for, 376–78; monopoly power and, 371; profit motive and, 371–72; rebates and the 340B program, 372–73; undue influence
of industry on science and medicine, 378; US compared with other countries, 369–71
Pharmaceutical Research and Manufacturers of America (PhRMA): on employment in biopharmaceutical industry, 359; mission and advocacy of, 367–68
Pharmaceutical science: influence on medicine, 357
Pharmacies, 151–52
Pharmacists, 133, 180
Pharmacy benefit managers (PBMs), 133, 370, 371; profit motive and, 371; rebates and, 372
PHI. See Personal health information (PHI)
Phishing attacks, 341, 473
PHRs. See Personal health records (PHRs)
Physical activity, 478
Physical environment: health status and, 21; impact on health, 10
Physician assistants (PAs), 186, 187–88, 233; licensing for, 188; roles and responsibilities of, 187
Physician expenditures: growth in, 116
“Physician extenders,” 186
Physician-owned hospitals: concerns related to, 138–39
Physician practice accountability: CAPP research findings on, 212–13
Physicians, 133, 180, 181–85, 210; in accountable care organizations, 161; burnout and shortages of, 3, 185; dimensions of medical practice and, 184; education and training for, 182–83; FDA survey on DTC marketing and, 374–75; fellowships for, 182–83; licensing for, 38, 183–84; at Mayo Clinic, 47; professional sovereignty for, 42; projected shortage of, 22; residency training for, 182; rise of, 42; roles and responsibilities of, 181; single- and multispecialty, distribution by practice size, 184, 185; status of, in society, 35; in US, by the numbers, 182, 182
Physician Self-Referral Law (Stark law), 274
Physicians for Human Rights, 151
PID. See Provider-induced demand (PID)
Plan-do-study-act (PDSA) cycle, 297, 297
Plant antioxidants: safety record of, 410
Plant-based diet, 411, 478
Plant compounds: for controlling blood glucose, 412, 413
Platinum plan: of health insurance exchanges, 61, 268
PMPRB. See Patented Medicine Prices Review Board (PMPRB)
PNs. See Practical nurses (PNs)
Point of service (POS) plans, 53
Point of service (POS) plans, 60
Polio vaccine, 39
Political rhetoric: US health policy and, 440–41
Political system: healthcare system and, 439, 439; siloed nature of, 439
Politization: of US healthcare system, 7–8
Pollution, effect on health, 435
Polyphenols, 410
Pooling of risk: shared losses and, 253
Pool of meaning: lack of common, 440
Popper, Richard, 272
Population health management: “second curve” of medicine and, 338
Porter-O’Grady, Tim, 343
Positron beam therapy, 47–48
POS plans. See Point of service (POS) plans
Post-traumatic stress disorder (PTSD), 227
Potassium–sodium ratio: cardiovascular disease risk and, 411
PPOs. See Preferred provider organizations (PPOs)

of industry on science and medicine,
378; US compared with other
countries, 369–71
Pharmaceutical Research and
Manufacturers of America (PhRMA):
on employment in biopharmaceutical
industry, 359; mission and advocacy
of, 367–68
Pharmaceutical science: influence on
medicine, 357
Pharmacies, 151–52
Pharmacists, 133, 180
Pharmacy benefit managers (PBMs), 133,
370, 371; profit motive and, 371;
rebates and, 372
PHI. See Personal health information
(PHI)
Phishing attacks, 341, 473
PHRs. See Personal health records
(PHRs)
Physical activity, 478
Physical environment: health status and,
21; impact on health, 10
Physician assistants (PAs), 186, 187–88,
233; licensing for, 188; roles and
responsibilities of, 187
Physician expenditures: growth in, 116
“Physician extenders,” 186
Physician-owned hospitals: concerns
related to, 138–39
Physician practice accountability: CAPP
research findings on, 212–13
Physicians, 133, 180, 181–85, 210; in
accountable care organizations, 161;
burnout and shortages of, 3, 185;
dimensions of medical practice and,
184; education and training for, 182–83;
FDA survey on DTC marketing
and, 374–75; fellowships for, 182–83;
licensing for, 38, 183–84; at Mayo
Clinic, 47; professional sovereignty
for, 42; projected shortage of, 22;
residency training for, 182; rise of,
42; roles and responsibilities of, 181;
single- and multispecialty, distribution
by practice size, 184, 185; status of,
in society, 35; in US, by the numbers,
182, 182
Physician Self-Referral Law (Stark law),
274
Physicians for Human Rights, 151
PID. See Provider-induced demand (PID)
Plan-do-study-act (PDSA) cycle, 297,
297
Plant antioxidants: safety record of, 410
Plant-based diet, 411, 478
Plant compounds: for controlling blood
glucose, 412, 413
Platinum plan: of health insurance
exchanges, 61, 268
PMPRB. See Patented Medicine Prices
Review Board (PMPRB)
PNs. See Practical nurses (PNs)
Point of service (POS) plans, 53
Point of service (POS) plans, 60
Polio vaccine, 39
Political rhetoric: US health policy and,
440–41
Political system: healthcare system and,
439, 439; siloed nature of, 439
Politization: of US healthcare system,
7–8
Pollution, effect on health, 435
Polyphenols, 410
Pooling of risk: shared losses and, 253
Pool of meaning: lack of common,
440
Popper, Richard, 272
Population health: collection of metrics
for, 338–39; definition of, 230;
interlocking chain of public health,
medical care, and, 230, 231; key
activities in, 231; public health versus,
230–31
Population health management: “second
curve” of medicine and, 338
Porter-O’Grady, Tim, 343
Positron beam therapy, 47–48
POS plans. See Point of service (POS)
plans
Post-traumatic stress disorder (PTSD),
227
Potassium–sodium ratio: cardiovascular
disease risk and, 411
PPOs. See Preferred provider
organizations (PPOs)
Practical nurses (PNs): number of, in US, 190

Precision medicine, 326, 381, 469; definition of, 468; genomics and, 468–70

Precision Medicine Initiative: cohort program, 471; introduction of, 468

Predictably Irrational (Ariely), 306

Pre-existing Condition Insurance Plan (PCIP), 272

Pre-existing conditions: under Affordable Care Act, 61, 442; high-risk pools and, 272; insurance risk rating and, 255

Preferred provider organizations (PPOs), 53, 60

Prejudiced patients, 232

Premiums, 263, 264; definition of, 252; for fully insured group plans, 258; increasing, 60; managed competition and, 267; under Medicare, 259; in self-funded model, 248

Prepaid group plans, 53

Prescription drugs: accessing, high prices and, 359; costs in US compared to other countries, 369–71; direct-to-consumer marketing and, 373–75; generic, 375, 377; growth in spending for, 116; Medicare Part D and coverage for, 59, 258, 437; monopoly power and price of, 371; pricing variation for select procedures and, in US and UK, 122, 122–23; profit motive and price of, 371–72; projected price growth of, 369; switched to nonprescription status, 363

Prevention, 11; primary, 210, 210, 409; secondary, 210, 211, 409; tertiary, 210, 211, 409

Preventive healthcare, 77, 409

Preventive services: Affordable Care Act and coverage for, 262

Pricing: pharmaceutical cost and, 369–78

Pricing variation: for select procedures and drugs in US and UK, 122, 122–23; in US compared with other countries, 122–24

Primary care, 210, 210; definition of, 149; importance of, 149–50; physician shortages in, 22; three essential aspects of, 149

Primary care physicians: outnumbered by specialty physicians, 262; in US, by the numbers, 182, 182

Primary care settings, 150–54; ambulatory long-term care services, 153; community health centers, 150–51; home health care, 152; hospital emergency departments, 152–53; medical practices, 150; outpatient public health services, 153–54; pharmacies, 151–52; urgent care centers, 151

Primary prevention, 210, 210, 409

Privacy: HIPAA protections, 336–37; of personal health information, 327; of protected health information, 436; social media and, 474; telemedicine and, 466. See also Security

Private commercial health insurance: fully insured group plans, 257–58; individual plans, 257, 258; Medicare supplement and replacement plans, 257, 258–60; public insurance versus, 251; self-insured group plans, 257, 258; types of, 257–60

Private health insurance, 250

Product price control: in European countries, 123

Productivity: wages and, 342

Profit control: in European countries, 123
Profit motive: drug prices and, 371–72; medical care and effect of, 138
Progressive Era, 54, 54
Proprietary hospitals, 43
Prospective fee schedules, 256
Prostate cancer screenings: new USPSTF recommendations on, 91
Prosthetic limbs, naturally moving, 463
Protease inhibitors, 223
Protected health information (PHI): protecting, 436
Provider-induced demand (PID), 262–63
Providers of healthcare, 179–97; advanced practice professionals, 186–88; clinical nurse specialists, 188; dentists, dental hygienists, and dental assistants, 192; executive and administrative staff, 192–97; focus of chapter, 180; nurse practitioners, 186–87; nurses, 188–91; physician assistants, 187–88; physicians, 181–85
Provider systems: ever larger, 474–75
PSOs. See Patient safety organizations (PSOs)
PSQIA. See Patient Safety and Quality Improvement Act (PSQIA) of 2005
Psychosocial models of health, 77
PTSD. See Post-traumatic stress disorder (PTSD)
Publications, related to healthcare administration, 511
Public health: definition of, 230; interlocking chain of medical care, population health, and, 230, 231; measures, 147; population health versus, 230–31; Spanish flu of 1918 and impact on, 49–50; upstreaming in, 439
Public health services: outpatient, 153–54
Public hospitals, 38, 140
Public insurance: private commercial health insurance versus, 251. See also Government-sponsored insurance
PubMed, 94, 342, 402
Purchasing behavior, limited choice and, 307
Purdue Pharma: role in opioid crisis, 379
Pure Food and Drug Act of 1906, 360
Purpose, outlook and sense of, 478
QALY. See Quality-adjusted life year (QALY)
Qinghao (Artemisia extract), 405
Quad functions of healthcare: integration of, 264
Quality: balanced approach to improvement of, 313; core components of, from the patient’s perspective, 312; failed strategies in, 302; focus of chapter, 288; focus on people and, 305–10; of healthcare, 2, 2; high reliability organizations and, 298, 300; IOM definition of, 287; IOM reports on, 293; leadership and governance for, 310–12, 312, 313; personal philosophy of excellence and, 288–92; state of the art in process improvement, 293–300; STEEEP dimensions of, 311; supporting care delivery system and, 287; US compared with other countries, 301, 301–2; value as function of cost and, 16. See also Safety
Quality-adjusted life year (QALY): determining a drug’s value and, 377
Quality improvement policies: espoused in IOM’s Crossing the Quality Chasm, 425
Quantum leadership: definition of, 343; nursing profession and, 344
Quantum organizations, 343–44
Quartz watch movement: missed paradigm shift and, 18–19
Quaternary care, 210, 211
Quetiapine, 366
Quinine, 404
Rabe, Cynthia Barton, 290
Race and ethnicity: cultural competence and, 83, 86; health disparities and, 214, 220; utilization patterns and, 147
Racism, 220
Radiation: natural products with potential to treat side effects of, 414, 415
Radiology and imaging, 326, 328
RAND Center of Excellence: health system defined by, 104
RAND Corporation: cost-sharing study, 253
Ransomware, 341, 473
Rapid Estimate of Adult Literacy in Medicine (REALM) test, 227
Rare-disease treatments: incentivizing development of, 364
Rational optimization, choice and, 307
Rationing: moral dilemmas and, 444; in US healthcare system, 459–60
RBRVS. See Resource-based relative value scale (RBRVS)
RCAL. See Resource center for accessible living (RCAL)
Reactive oxygen species (ROS) molecules, 410
Readmission rates, hospital penalties for, 438
Reason, James, 298
Rebates: 340B Drug Pricing Program and, 372–73
Red bead experiment: Deming and, 288–90
Reference pricing: controlling drug costs with, 377; in European countries, 123
Reform. See Healthcare reform
Registered nurses (RNs), 136; number of, in US, 190
Registered studies: growing number of, 462, 462–63
Regulation: of CAM therapies, 401; federal, 434–38; of hospitals, 135; of natural products, 405–6
Regulation of pharmaceuticals: actions to mitigate costs, 376–78; advertising and, 374; biosimilars, issues related to, 376; drug costs and compliance with, 372; Federal Trade Commission and, 366–67; Food and Drug Administration and, 360; future of, 381–82; off-label use of medicines, 366; opioid crisis and, 379, 381
Rehabilitation facilities, 133, 135
Reimbursement: outpatient, 144, 148
Reinhardt, Uwe, 430, 441
Reinsurance policies, 258
Relative value units (RVUs), 257
Religious beliefs: about health and healthcare, 81, 81
Religiously affiliated hospitals, 143
Remote monitoring: through mobile devices and home systems, 464
REMS. See Risk Evaluation and Mitigation Strategies (REMS)
Republicans: state power preferences of, 91; Tax Cuts and Jobs Act of 2017, 62
Research: ethical, 223–26; saturation, medicalization and, 94
Residencies, 182–83
Resource allocation: health policy and, 424
Resource-based relative value scale (RBRVS): formula for, 257; wide adoption of, 257
Resource center for accessible living (RCAL), 193–94
Risk: predictability of, in large groups, 253; unpredictability of, for individuals, 253
Risk Evaluation and Mitigation Strategies (REMS), 365
Risky behaviors, 80
RNs. See Registered nurses (RNs)
Robert Wood Johnson Foundation: website for, 119, 510
Robinson, Ken, 291
Robotically assisted surgical devices, 326
Robotics, 196, 472
Roche, 359
Rogers, Everett, 331, 460
Röntgen, Wilhelm Conrad, 38
Roosevelt, Theodore, 14, 54
Root cause of problems: upstreaming and, 439
Roth, Alvin, 444
Royal Hospital (New Orleans), 41
Royal Society of Medicine (London), 46
Rural Health Clinic (RHC) program, 233, 234
Rural Health Clinic Services Act of 1977, 233
Rural hospitals, 140, 142–43, 144, 146
Russia: pharmaceutical costs in, 370
RVUs. See Relative value units (RVUs)
SaaS. See Software as a service (SaaS)
Safe harbors, referral activity and, 274
Safe healthcare: quality improvement policies and, 425
Safety: balanced approach to improvement of, 313; failed strategies in, 302; focus of chapter, 288; focus on people and, 305–10; high reliability organizations and, 298, 300; IOM definition of, 287; IOM reports on, 293; leadership and governance for, 310–12; personal philosophy of excellence and, 288–92; supporting, care delivery system and, 287; US compared with other countries, 301, 301–2. See also Patient safety; Quality
Safety and Innovation Act, 365
Safety culture: importance of, 300
Safety-net hospitals, 39
Salk, Jonas, 39
Sanoë, 359
Santayana, George, 378
SARS. See Severe acute respiratory syndrome (SARS)
Saxe, Godfrey, 430
SCHIP. See State Children’s Health Insurance Program (SCHIP)
SCHIP Balanced Budget Refinement Act of 1999, 157
Schizophrenia, 227
School-based health clinics, 152
School reform, “addiction” to, 444
Schumacher, E. F., 133
Science: undue influence of pharmaceutical industry on, 378
Science Direct, 402
Scope and intensity of treatment: care services defined by, 210, 210–11
Scutellaria baicalensis, 413
Seattle Children’s Hospital, 188
Secondary care, 210, 211
Secondary prevention, 210, 211, 409
Security: breaches in, 340; for personal health information, 327. See also Privacy
Self-care, 11, 41
Self-funded model, 248, 249
Self-insurance, 250
Self-insured group plans, 257, 258
“Self-pay-no pay,” 6. See also Uninsured population
Self-referral: gatekeeper concept and, 265–66
Senior executives, 193
Sentinel events, 147
Sertürner, Friedrich Wilhelm Adam, 359, 403
Severe acute respiratory syndrome (SARS), 9
Sex differences: in causes of death, 215–16, 216; patient care and, 215–16
Sexually transmitted diseases (STDs), 219
Sexual violence, 216
Shah, Neel, 247
Shared savings model, 257
Shareholders: for-profit hospital ownership and, 136
Sherman Antitrust Act, 53
Shortages: of nurses, 191; of physicians, 185
Shriners, 143
SHRM. See Society for Human Resource Management (SHRM)
Sick funds, 51–52, 54, 106, 108, 111
“Silo” problem: addressing, 445
Silos: breaking down, 135; in healthcare, 304–5, 438
Silver plan: of health insurance exchanges, 61, 268
“Silver Tsunami”: healthcare system and, 19
Simons, Joe, 367
Simpson, James, 38
Simpsons, The (animated series), 8
Simulation labs: robots used in, 472
Sinclair, Upton, 360
Singapore: healthcare system in, 109, 113
Single-payer system, 489, 490
Single-specialty medical practices, 184, 185
Six Sigma, 293, 302
Skilled nursing facilities (SNFs), 156–57
Skills waste: Lean and elimination of, 298
Sleep: insufficient, consequences of, 412; melatonin supplementation for, 412–14
Sleeping pills, 412
Slogans, 292
Smallpox: eradication of, 39; vaccine, 38, 42
Smart watches, 329
Smoking, 80; behavioral economics and, 305, 306; sex differences in, 216; in US compared with in other countries, 121–22
SNFs. See Skilled nursing facilities (SNFs)
Social determinants: health status and, 79, 79
Social engineering techniques, hackers and use of, 473
Socialized medicine, 440
Social justice theory, 14, 15, 62, 94–95; future of healthcare policy in US and, 440; in healthcare, characteristics of, 89–90, 90; market justice theory versus, 89–90, 423
Social media: impact on healthcare, 473–74
Social problems: complexity of, 4
Social relationships, healthy, 478
Social Security Act, 274; Medicare and Medicaid enactments and, 52; Title XIX of, 270, 435; Title XVIII of, 269, 435. See also Medicaid; Medicare Social Security Act of 1935, 55; amendments to, 56, 57
Social Security Administration, 274
Social support networks: health status and, 21
Social workers, 181
Societal issues: determinants of health and, 80, 80
Society for Academic Emergency Medicine: health defined by, 76–77
Society for Human Resource Management (SHRM), 194
Socioeconomic status: attitudes and beliefs about healthcare and, 81, 81
Software as a service (SaaS), 339
Solo practices, 184
Somatic therapies, 364
Sontag, Susan, 205
Sooner Care, 488
Spanish flu outbreak (1918): advertisement about use of masks during, 50; development of healthcare policy and delivery and, 48–50
Special interest groups, in healthcare, 433
Specialization in medicine, 42
Specialized outpatient clinics, 150
Specialty care: overutilization of, 262
Specialty hospitals, 144
Specialty physicians: in US, by the numbers, 182, 182
SSM Health, 377
Stakeholders: organization governance and, 167, 168
Stanford marshmallow experiment, 306–7
Stark law (Physician Self-Referral Law), 274
Star Trek (television episodes), 463
Star Wars (original movie), 463
State Children’s Health Insurance Program (SCHIP): federal healthcare expenditures and, 272
State government: health policy and, 426, 427
State insurance regulations: ERISA and, 58
State-run hospitals, 140
States: health expenditures and, 117–18; hospital regulation by, 136
Statistical saturation: medicalization and, 94
STDs. See Sexually transmitted diseases (STDs)
STEEEP (safe, timely, effective, efficient, equitable, and patient-centered) dimensions of quality, 311
Sterile technique, 47
St. John’s wort, 413
St. Jude’s Hospital, 143
St. Mary’s Hospital, 47
Stokes model of health, 209
Stomach ulcers, 358
Strategic management: in total quality management, 294
Strategic plan: organization governance and, 166
Stratification of patients: health disparities and, 214–15
Stroke: sex differences and, 215, 216
Studebaker Corporation, 57
Suicide, 216, 219, 486
Supercomputers, 196, 467–68
Surgical treatments and technologies, 328
Surveys: patient experience and satisfaction, 303–4
Sustainable care: new paradigm of, 3
Sweden: healthcare system performance ranking, 115
Swine flu, 483
Swing beds, 145
Switzerland: healthcare system performance ranking, 115; health expenditures as percentage of GDP for US and, 120
Sympathy: empathy versus, 222
Synchronous activities, 329
Tai chi, 399
Taiwan: healthcare system in, 110, 114
*Tale of Two Cities, A* (Dickens), 5
Talinn, Jaan, 325
Tan, Tony, 103
Tax-advantaged saving account models, 60
Tax Cuts and Jobs Act (TCJA), 62
Taxes: on high-benefit plans, 60
Tax-exempt status: rules and regulations around, 137, 138
Tax policy: Affordable Care Act provisions and, 61; tax-deductibility of fully insured group plan premiums, 258
Tax status, hospitals categorized by, 136–39; for-profit hospitals, 136, 138–39; not-for-profit hospitals, 136, 137–38
TB. See Antibiotic-resistant Mycobacterium tuberculosis (TB)
TCJA. See Tax Cuts and Jobs Act (TCJA)
TCM. See Traditional Chinese medicine (TCM)
Teaching hospitals, 182; academic medical centers and, 143; IPE/IPP incorporated into curricula of, 197
Technological imperative, 344–45
Technology-assisted diagnosis, 470, 470
Technology(ies): careful embrace of, 445; five groups and adoption of, 331; healthcare system in US and, 7; moral hazard and diffusion of, 254–55; new, approaching, 463–64; optimizing use of, 458; overreliance on, 463
Technology in healthcare, 325–45; categories of, 325; cost and, 342–43; cybersecurity, 340–41; electronic health records and electronic medical records, 333–37; focus of chapter, 326; information management, 332–33; information technology and value-based care, 338–40; innovation and leadership, 343–44; medical and information technology, 325–29; technological imperative, 344–45; telemedicine, e-health, and telehealth, 329–32
Telehealth, 329, 464, 476
Telemedicine, 146, 149, 326, 329; AMA framework for, 332; evidence and concerns related to, 465–66; implications for mental and behavioral health, 330–31; overcoming barriers to change, 331–32; overcoming limitations of geography, 330; role of, in future of US healthcare, 464
Telemonitoring, 146
Tenet Healthcare, 138
Terminally ill: hospice and palliative care for, 158
Tertiary care, 210, 211, 409
Tertiary prevention, 210, 211
Third-party payers: definition of, 247; revenue cycle and, 275
Third-party payment: access to healthcare and, 7
Thorazine (chlorpromazine), 228
Thoreau, Henry David, 222
3-D printed body parts, 463
340B Drug Pricing Program: rebates and, 372–73
Thrombocytopenia syndrome, severe fever with, 9
Thurow, Lester, 82
Ticks, 482
Tiered benefits: managed care and, 266–67
Timely healthcare: quality improvement policies and, 425
Tissue engineering/replacement, 326
To Err Is Human (IOM), 40, 293
Total quality management (TQM), 293–94, 302
Traditional Chinese medicine (TCM), 399
Traditional medicine, 401
Training. See Education and training
Transitional year residencies, 183
Transportation waste: Lean and elimination of, 297
TRICARE, 271
Trinity Health, 377
Tripartite (or epidemiological) model of disease, 77–78
Triple Aim (IHI), 1–2, 2, 40, 161, 230–31, 293
Trojans, 341
“Trolleyology”: testing practical validity of, 443–44
Trump, Donald, 61, 441
“Trumpcare.” See American Health Care Act (AHCA) of 2017
Turing Pharmaceuticals, 371
Tuskegee Institute syphilis study, 223, 224
Type II diabetes, 12
“Ulysses contract,” 308
Uncompensated care: provided through emergency department, 250
Uninsured population: American Health Care Act of 2017 and, 62; in United States, 250
Unintentional injury: age factors related to, 221
UnitedHealth Group, 252, 264
United Kingdom: healthcare system in, 110, 112; health expenditures as percentage of GDP for US and, 120; mitigation of pharmaceutical cost in, 377; National Health System in, 249; pricing variation for select procedures and drugs in US and, 122, 122–23
United Network for Organ Sharing (UNOS), 459
United States: aging population in, 19, 20; Bismarck and Beveridge (Bis-Bev) hybrid model in, 249, 249; burden of disease in, 48–50, 49; end-of-life (EOL) care in Japan versus in, 480; global health and, 124–25; global leadership of, 22–23; healthcare expenditures in, CMS facts about, 116; healthcare system of OECD nations versus healthcare system of, 5; healthcare system performance scores, 301, 301; health insurance in, 251–60; insurance coverage in, 250; lack of universal third-party healthcare coverage in, 247; leading causes of death by age group in, 217–18; level of healthcare spending in, 8; litigious population in, 10; number of deaths for leading causes, 408, 408; physicians in, by the numbers, 182, 182; pricing regulation in, controversy over, 123; projected healthcare expenditures for, 116–17; rankings for healthcare system in, 115; special healthcare systems in, 158–59; spending on chronic diseases in, 12; technological advances led by, 342; total healthcare employment in, 180. See also American beliefs, values, and attitudes about healthcare; Health care system, US; History and development of the US healthcare system
Unitrin, 252
Universal coverage: public attitudes toward, 440, 488, 490
University-based medical center, 44
University of Chicago, 193
University of Ottawa: health definitions classified by, 208
University of Pennsylvania School of Medicine, 37
UNOS. See United Network for Organ Sharing (UNOS)
Upcoding, 273
Upstreaming, 211, 439, 440
Urban hospitals, 140, 142–43
Urbanization: US healthcare system and, 42
Urgent care centers, 151
Urologists: average age of, in US, 22
US Census: aging population projections, 19
US Congress, 60, 250, 256, 433
US Constitution, 83
US Criminal Code, 274
US Department of Agriculture: Bureau of Chemistry, 360
US Department of Defense (DoD), 271
US Department of Health and Human Services (HHS), 136; “Blueprint to Lower Drug Prices and Reduce Out-of-Pocket Costs,” 367; Office of Civil Rights (OCR), 337; Office of Civil Rights, HIPAA enforcement and, 436; Office of Research on Women’s Health, 215; website for, 510
US Department of Housing and Urban Development, 156
US Department of Veterans Affairs (VA), 6, 126, 158, 270–71, 377, 466
US Pharmacopeia, 405
US Preventive Services Task Force (USPSTF), 91
US Senate: committees responsible for healthcare in, 433, 434; Medicare and Medicaid legislation and, 57
US Supreme Court: upholds constitutionality of individual mandate, 61
Utilization measures, 146–47
Utilization of healthcare: adverse selection and, 254; cost sharing and, 253; moral hazard and, 254; patterns in, 147–48
Utilization review: managed care and, 266–67
VA. See US Department of Veterans Affairs (VA)
Vaccine Act of 1813, 42
Vaccine hesitancy, 93
Vaccines, 8, 91; chicken cholera, 38; multidrug-resistant pathogens and use of, 485; polio, 39; smallpox, 38, 42
Value: cost/quality equation, 16; transitioning toward, 15–19
Value-based care: information technology and, 338–40
Value-based payment, 257
Value-based system: transition from volume-based system to, 460, 461
Values: cultural, 83; health and healthcare-related, 11–12; improving health and well-being and, 205; organization governance and, 166, 167
Vancomycin-resistant Enterococci (VRE), 484
Vanderbilt University Medical Center, 188
Vector, 78
Vegetarian diets, 411
Vertical health systems, 104
Vertical integration, 140, 159, 166
Vesalius, Andreas, 37
Veterans Health Administration (VHA), 126, 140, 158–59, 249, 270–71; “fifth vital sign” campaign supported by, 379; Office of Community Care, 271
Videoconferencing, 331
Violence, 229; domestic violence, 216, 219; in healthcare settings, 191
Virginia Mason Medical Center: Improvement process at, 302
Virtual hospitals, 476
Virtual reality for medical experiences, 463
Virtual telemedicine appointments, 464
Vision: improving health and well-being and, 205; organization governance and, 166, 167; senior executives and, 193
Vitamins and minerals, 399
Volume: reimbursement based on, 15
Volume-based system: transition to value-based system, 460, 461
Volume of service: value of service versus, 17, 17
Voters: healthcare concerns of, 429; healthcare important to, 427–28, 428, 430; opinions about government responsibility for healthcare coverage, 429
VRE. See Vancomycin-resistant Enterococci (VRE)
Vulnerable populations: definition of, 222; ethical medical research and, 225; examples of, 222; inadequate health literacy and, 227; needs of, 221–22
Wages: productivity and, 342
Wagner, Edward H., 163
Wagner, Robert F., 56
Wagner-Murray-Dingell Bill, 54, 56
Waiting periods: under Affordable Care Act, 61
Waiting time, 164
Waiting time waste: Lean and elimination of, 298
Wakefield, Andrew, 91
Wall, Monroe E., 404
Wani, Mansukh C., 404
“War on Poverty,” 150
Warrington, Joseph, 190
Waste: definition of, 297; Lean and elimination of, 297–98
Watson (IBM), 10, 467–68
Watson, James, 39
Wearable monitoring technologies, 329
Webber, Andrew Lloyd, 291
Web servers: first, 40
Weil, Andrew, 477
Welch, William, 45, 47
Well-being: Blum’s determinants of, 205, 206, 207; CDC model of, 207, 207; community involvement and, 21; definitions of, 209; gender and sex differences and, 215–16; healthcare system and pillars of, 439, 439; impact of physical environment and geography on, 10; improving, 205, 207–8; shift from healthcare to, 3
Wellness: aging population and, 477–81; American obsession with, 94
WellPoint, 252
West Nile virus, 78, 124
WHO. See World Health Organization (WHO)
Wiley, Harvey Washington, 360
Wireless brain sensors, 463
Wisconsin Health Information Exchange (WISHIN), 337
Wisdom: applying, 290–92
Women: admitted into Johns Hopkins University School of Medicine, 46; entry into the workforce, 42; healthcare and empowerment of, 19–20; healthcare utilization by, 81; heart disease and, 214; life expectancy and, 215, 216; violence against, 216, 219
Workers’ compensation, 51–52
Workforce: generational differences in, 13
Workplace: addressing conflict in, 196–97; hazards in, nurses and, 191; injuries in, 51
World Health Organization (WHO), 8, 106, 124, 215; on essential aspects of primary care, 149; founding of, 39; healthcare system performance rankings of, 114–15; health defined by, 77, 208–9; health system defined by, 105; hospitals described by, 135; list of essential medicines, 404; vaccine hesitancy ranking by, 93; website for, 119
World War I, 38, 50, 188–89
World War II, 39, 56; healthcare delivery prior to, 45; medical innovations and, 51
<table>
<thead>
<tr>
<th>Term</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xarelto: pricing variation, US versus UK</td>
<td>122</td>
</tr>
<tr>
<td>“Yentl syndrome,”</td>
<td>214</td>
</tr>
<tr>
<td>Yoga</td>
<td>399</td>
</tr>
<tr>
<td>Yong, Ed</td>
<td>399</td>
</tr>
<tr>
<td>Young adults: coverage under Affordable Care Act</td>
<td>61</td>
</tr>
<tr>
<td>Youyou, Tu</td>
<td>404, 405</td>
</tr>
<tr>
<td>“Zero-gravity thinkers,” importance of</td>
<td>290</td>
</tr>
<tr>
<td>Zika virus</td>
<td>9, 41, 124, 482</td>
</tr>
<tr>
<td>Zip code: healthcare quality relative to</td>
<td>10, 233</td>
</tr>
<tr>
<td>Zoonosis (zoonoses): definition of</td>
<td>483</td>
</tr>
<tr>
<td>examples of</td>
<td>483</td>
</tr>
<tr>
<td>Zurich Insurance Group</td>
<td>258</td>
</tr>
</tbody>
</table>