

Fourth Edition

Basics of the U.S. Health Care System

Nancy J. Niles



Fourth Edition

Basics of the U.S. Health Care System

Nancy J. Niles, PhD, MS, MBA, MPH

Associate Professor, Rollins College, Winter Park, Florida



JONES & BARTLETT
LEARNING



World Headquarters

Jones & Bartlett Learning
5 Wall Street
Burlington, MA 01803
978-443-5000
info@jblearning.com
www.jblearning.com

Jones & Bartlett Learning books and products are available through most bookstores and online booksellers. To contact Jones & Bartlett Learning directly, call 800-832-0034, fax 978-443-8000, or visit our website, www.jblearning.com.

Substantial discounts on bulk quantities of Jones & Bartlett Learning publications are available to corporations, professional associations, and other qualified organizations. For details and specific discount information, contact the special sales department at Jones & Bartlett Learning via the above contact information or send an email to specialsales@jblearning.com.

Copyright © 2021 by Jones & Bartlett Learning, LLC, an Ascend Learning Company

All rights reserved. No part of the material protected by this copyright may be reproduced or utilized in any form, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from the copyright owner.

The content, statements, views, and opinions herein are the sole expression of the respective authors and not that of Jones & Bartlett Learning, LLC. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not constitute or imply its endorsement or recommendation by Jones & Bartlett Learning, LLC and such reference shall not be used for advertising or product endorsement purposes. All trademarks displayed are the trademarks of the parties noted herein. *Basics of the U.S. Health Care System, Fourth Edition* is an independent publication and has not been authorized, sponsored, or otherwise approved by the owners of the trademarks or service marks referenced in this product.

There may be images in this book that feature models; these models do not necessarily endorse, represent, or participate in the activities represented in the images. Any screenshots in this product are for educational and instructive purposes only. Any individuals and scenarios featured in the case studies throughout this product may be real or fictitious but are used for instructional purposes only.

This publication is designed to provide accurate and authoritative information in regard to the Subject Matter covered. It is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional service. If legal advice or other expert assistance is required, the service of a competent professional person should be sought.

16808-2

Production Credits

VP, Product Management: Amanda Martin
Director of Product Management: Cathy Esperti
Product Manager: Danielle Bessette
Product Assistant: Tess Sackmann
Project Specialist: Nora Menzi
Senior Marketing Manager: Susanne Walker
Production Services Manager: Colleen Lamy
Manufacturing and Inventory Control Supervisor: Amy Bacus
Composition and Project Management: codeMantra U.S. LLC

Cover Design: Michael O'Donnell
Text Design: Michael O'Donnell
Senior Media Development Editor: Shannon Sheehan
Rights Specialist: Maria Leon Maimone
Cover Image (Title Page, Part Opener, Chapter Opener):
© rawpixel.com/Pexels, © fanjianhua/Moment/Getty Images,
© EVG photos/Pexels
Printing and Binding: LSC Communications
Cover Printing: LSC Communications

Library of Congress Cataloging-in-Publication Data

Library of Congress Cataloging-in-Publication Data unavailable at time of printing.

LCCN: 2019910998

6048

Printed in the United States of America

23 22 21 20 19 10 9 8 7 6 5 4 3 2 1



Brief Contents

About the Author	x
Acknowledgments	xi
Preface	xii
Chapter 1	History and Overview of the U.S. Healthcare System..... 1
Chapter 2	Current Operations of the U.S. Healthcare System 31
Chapter 3	Government’s Role in U.S. Health Care..... 65
Chapter 4	Public Health’s Role in Health Care..... 87
Chapter 5	Inpatient and Outpatient Services 121
Chapter 6	Long-Term Care Services 147
Chapter 7	Careers in the Health Industry 167
Chapter 8	Healthcare Payors and Financing 191
Chapter 9	Managed Care Impact on Healthcare Delivery 225
Chapter 10	Information Technology Impact on Health Care 247
Chapter 11	Healthcare Law 273
Chapter 12	Healthcare Ethics 305
Chapter 13	Mental Health Issues 337
Chapter 14	Analysis of the U.S. Healthcare System 367
Glossary	399
Index	423



Contents

About the Author	x
Acknowledgments	xi
Preface	xii

Chapter 1 History and Overview of the U.S. Healthcare System **1**

Introduction	1
Consumer Perspective on Health Care	3
What Is Health?	3
What Is Health Literacy?	3
Determinants of Health	3
Primary, Secondary, Tertiary, and Quaternary Prevention	3
Milestones of Medicine and Medical Education	7
Milestones of Medicine and Nursing Education	9
Milestones of the Hospital System	10
Milestones of Public Health	11
Milestones of the Health Insurance System	13
Current System Operations	14
Government's Participation in Health Care	14
Private and Public Health Insurance Participation in Health Care	15
Assessing Your Healthcare System Using the Iron Triangle	15
Conclusion	15
Vocabulary	16
References	16
Notes	19
Student Activities	20

Chapter 2 Current Operations of the U.S. Healthcare System **31**

Introduction	31
Overview of the Current System Update	32
Major Stakeholders in the Healthcare Industry	32
Consumers	32
Employers	32
Hospitals	33

Nursing and Residential Care Facilities	33
Physicians and Other Healthcare Practitioners	34
Home Healthcare Services	34
Outpatient Care Centers and Ambulatory Healthcare Services	34
Laboratories	34
Third Party Payers	34
Government	34
Insurance Companies	34
Educational and Training Organizations	35
Research Organizations	35
Professional Associations	35
Pharmaceutical Companies	35
Stakeholders' Environment	36
Working Conditions	36
Projected Outlook for Employment	36
Healthcare Statistics	36
U.S. Healthcare Utilization Statistics	36
U.S. Demographics and Healthcare	36
Healthcare Expenditures	36
Healthcare Payers	36
U.S. and International Comparison of Health Statistics	37
OECD Summary of Countries' Health Status	37
Conclusion	50
Vocabulary	50
References	51
Notes	52
Student Activities	53

Chapter 3 Government's Role in U.S. Health Care **65**

Introduction	65
History of the Role of Government in Health Care	66
U.S. Government Agencies	66
Important Federal Government Agencies	66
State Health Departments' Role in Health Care	71
Local Health Departments' Role in Health Care	71
Conclusion	72

Vocabulary	72
References	73
Notes.....	74
Student Activities.....	75

Chapter 4 Public Health's Role in Health Care 87

Introduction.....	87
What Is Health?.....	88
Origins of Public Health.....	90
What Is Public Health?	90
Overview of the Public Health System.....	90
The Epidemiology Triangle.....	91
Epidemiologic Surveillance	91
Environmental Health	92
Emergency Preparedness.....	92
Federal Response	92
September 11, 2001, Terrorist Attack Impact on Public Health	93
State and Local Response to Disasters.....	94
State and Local Health Departments Planning in Emergency Preparedness.....	94
Incident Command System and Public Health.....	95
Bioterrorism	95
Workplace Violence and Safety	95
Active Shooter Situation	96
EPA Homeland Security Research.....	96
Public Health Functions and Administration.....	96
Accreditation of Public Health Departments.....	96
National Association of Local Boards of Health.....	96
Influence of the IOM Reports on Public Health Functions	98
Healthy People Reports.....	98
Public Health Infrastructure.....	99
Government Contributions to Public Health.....	99
Medical Reserve Corps (MRC)	100
Nongovernmental Public Health Activities.....	100
Public Health Education and Health Promotion ...	101
Health Promotion Activities	101
Public Health Education Campaign.....	102
Public Health Education Evaluation.....	102
Social Marketing Activities	102
Social Media Marketing	103
Collaboration of Public Health and Private Medicine	103

Recent Collaboration of Public Health and Private Medicine	104
Opioid Epidemic.....	104
Increase in Measles Cases	104
Conclusion	104
Vocabulary	105
References	105
Notes.....	108
Student Activities.....	109

Chapter 5 Inpatient and Outpatient Services..... 121

Introduction.....	121
History of Hospitals.....	122
Hospital Types by Ownership	123
Hospital Types by Specialty	123
Other Hospital Classifications	123
Hospital Governance	124
Hospital Licensure, Certification, and Accreditation.....	125
International Organization for Standardization.....	125
Patient Rights.....	125
Current Status of Hospitals.....	125
Quality Improvement Processes.....	126
Leapfrog Group	127
Outpatient Services.....	127
Physician Offices.....	127
Hospital Emergency Services.....	127
Hospital-Based Outpatient Clinics	127
Urgent and Emergent Care Centers	127
Ambulatory Surgery Centers	128
Home Health Agencies.....	128
Employee Assistance Programs.....	129
Other Health Services.....	129
Respite Care	129
Hospice.....	129
Adult Day Services Centers.....	130
Senior Centers	130
Women's Health Centers	130
Meals on Wheels Association of America	130
Planned Parenthood of America.....	131
American Red Cross.....	131
Doctors Without Borders	131
Remote Area Medical Volunteer Corps.....	131
Telehealth	131

Conclusion	132
Vocabulary	132
References	133
Notes.....	135
Student Activities.....	136

Chapter 6 Long-Term Care Services 147

Introduction.....	147
History of Long-Term Care	148
Nursing Home Services, 1935–1968.....	148
Development of Community-Based Services.....	148
2010 Healthcare Reform	149
Types of Long-Term Care Services.....	149
How to Pay for Long-Term Care Services	149
Long-Term Care Insurance	150
Older Americans Act Programs	150
Annuities	150
Life Insurance	151
Current Trends in Long-Term Care.....	151
Continuing Care Retirement Communities (CCRCs)	151
The Green House Project.....	151
Village Movement.....	152
Long-Term Care Financial Crisis.....	152
Long-Term Care, Supports, and Services	
Competency Model	152
Conclusion	153
Vocabulary	153
References	153
Notes.....	155
Student Activities.....	156

Chapter 7 Careers in the Health Industry ... 167

Introduction.....	167
Physician Education	168
Hospitalists	169
Types of Health Professionals.....	169
Types of Nurses.....	169
Certified Nursing Assistants or Aides.....	171
Other Independent Healthcare Professionals.....	171
Allied Health Professionals	172
Art Therapist.....	173
Anesthesiologist Assistant.....	173
Other Allied Health Professionals (Non-CAAHEP Accredited)	175

Conclusion	176
Vocabulary	177
References	177
Notes.....	179
Student Activities.....	180

Chapter 8 Healthcare Payors and Financing 191

Introduction.....	191
Healthcare Spending by Service Type	192
Overview	192
Healthcare Spending by Sources of Funds	193
Private Health Insurance	193
Medicare.....	193
Medicaid.....	193
Health Insurance as a Payer for Healthcare Services	193
Types of Health Insurance	194
Cost Sharing of Health Services	194
Types of Health Insurance Policies.....	195
Types of Health Insurance Plans.....	195
Samaritan Ministries	196
Patient-Centered Medical Home (PCMH)	196
The ACA of 2010.....	196
Discussion of Major Mandates	196
Health Insurance Marketplaces	197
ACA's Legal Issues	198
Discussion of Revenue Provisions.....	201
Discussion of Strengthening Quality Affordable Care	201
Legal Issues Related to the ACA.....	202
Public Financing of Healthcare Services.....	203
Medicare.....	203
Medicaid.....	204
Children's Health Insurance Program	204
Program of All-Inclusive Care for the Elderly	204
Worker's Compensation.....	205
Other Prospective Reimbursement Methods	205
Reimbursement Methods of Private Health Insurance Plans.....	206
Governmental Reimbursement Methods for Healthcare Services.....	207
International Classification of Diseases (ICD) 9th Revision to ICD 10th	207
Healthcare Financial Management.....	208

Funds Disbursement.....	209
Conclusion	209
Vocabulary	210
References	210
Notes.....	212
Student Activities.....	213

Chapter 9 Managed Care Impact on Healthcare Delivery 225

Introduction.....	225
History of Managed Care	226
Legislative Influence on Managed Care Development.....	227
Managed Care Characteristics	227
Different Types of Managed Care Models.....	227
The MCO Payment Plan.....	228
Cost-Control Measures of MCOs	228
Restriction on Provider Choice	228
Gatekeeper	228
Services Review.....	228
Medicare and Medicaid Managed Care	229
Medicare Managed Care or Medicare Part C	229
Medicaid Managed Care	229
Assessment of Managed Care Models.....	230
National Committee on Quality Assurance	230
Health Plan Employer Data and Information Set	230
Managed Care Accreditation.....	230
Issues with Managed Care Operations	231
Challenges to Managed Care	231
Conclusion	232
Vocabulary	232
References	233
Notes.....	234
Student Activities.....	235

Chapter 10 Information Technology Impact on Health Care 247

Introduction.....	247
History of IT in the Healthcare Industry.....	248
Electronic Health Records (EHRs).....	249
History.....	249
Incentives to Use EHRs: Meaningful Use	249
Benefits of EHRs.....	250
Barriers to EHR Implementation.....	250

Artificial Intelligence.....	251
Clinical Decision Support Systems (CDSSs)	251
Computerized Physician Order Entry (CPOE).....	252
Pharmacy Benefit Managers (PBMs).....	252
Drug–Drug Interactions (DDIs).....	253
Health Information Exchanges (HIEs) and Regional Health Information Organizations (RHIOs).....	253
Blockchain Technology	253
IBM Watson.....	253
Telehealth	253
Telemedicine	254
Avera eCARE.....	254
Chief Information Officer (CIO)/Chief Technology Officer (CTO).....	255
Council for Affordable Quality Health Care (CAQH)	255
Other Applications	255
Enterprise Data Warehouses (EDWs).....	255
Radio Frequency Identification (RFID)	256
Applied Health Information Technology	256
The PhreesiaPad	256
Patient Point (Formerly Healthy Advice Network).....	256
MelaFind Optical Scanner	256
Robotic Checkups.....	256
Sapien Heart Valve	257
Acuson P10.....	257
Piccolo Xpress Chemistry Analyzer	257
The Importance of HIT.....	257
Conclusion	257
Vocabulary	258
References	258
Notes.....	260
Student Activities.....	261

Chapter 11 Healthcare Law 273

Introduction.....	273
Basic Concepts of Healthcare Law.....	273
Tort Reform.....	274
The Legal Relationship Between the Provider and Consumer	275
How Does a Relationship with a Provider End?	276
Healthcare-Related Legislation.....	276
Healthcare Consumer Laws	276

Antitrust Laws	277
Informed Consent	278
Patient Bill of Rights	279
Healthcare Fraud	279
Medicare Fraud Strike Force	279
Ethics in Patient Referral Act of 1989	281
Employment-Related Legislation	281
Title VII of the Civil Rights Act of 1964	281
Civil Rights Act of 1991	282
Age Discrimination in Employment Act (ADEA) of 1967	282
Older Workers Benefit Protection Act of 1990	282
Rehabilitation Act of 1973	282
Equal Pay Act of 1963	283
Executive Orders 11246 (1965), 11375 (1967), and 11478 (1969)	283
Pregnancy Discrimination Act of 1978	283
Americans with Disabilities Act of 1990 (ADA)	283
Role of Equal Employment Opportunity Commission (EEOC)	284
Occupational Safety and Health Act of 1970 (OSHA)	284
Immigration Reform and Control Act of 1988 (IRCA)	285
Other Employment-Related Legislation	285
Consumer Credit Protection Act (Title III) of 1968	285
Drug-Free Workplace Act of 1988	285
Worker Adjustment and Retraining Notification Act of 1989 (WARN)	285
Employee Retirement Income Security Act of 1974 (ERISA)	285
Consolidated Omnibus Budget Reconciliation Act of 1986 (COBRA)	285
Health Insurance Portability and Accountability Act of 1996 (HIPAA)	286
Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH)	286
Family and Medical Leave Act of 1993 (FMLA)	286
Mental Health Parity Act of 1996	287
Genetic Information Nondiscrimination Act of 2008	287
Lilly Ledbetter Fair Pay Act of 2009 (FPA)	287
Patient Protection and Affordable Care Act or Affordable Care Act of 2010	287
Conclusion	288
Vocabulary	289
References	290
Notes	292
Student Activities	293

Chapter 12 Healthcare Ethics 305

Introduction	305
Healthcare Stakeholder Management Model	306
Basic Concepts of Organizational Ethics in the Healthcare Workplace	306
Healthcare Codes of Organizational Ethics	307
How to Develop a Code of Organizational Ethics	307
Workplace Bullying	307
Ethics and the Doctor–Patient Relationship	309
Physician–Patient Relationship Model	310
Pharmaceutical Marketing to Physicians	311
Decision Model for Healthcare Dilemmas	312
Application of the Decision-Making Model	312
Ethics and Public Health	313
Ethics and Research	314
Bioethical Issues	314
Designer or Donor Babies	314
Cloning	314
Genetic Testing	315
Euthanasia: Treating the Terminally Ill	315
Advance Directives	317
Human Organ Transplantation	317
Conclusion	319
Vocabulary	320
References	320
Notes	323
Student Activities	324

Chapter 13 Mental Health Issues 337

Introduction	337
History of U.S. Mental Health Care	338
Background of Mental Health Services	339
Mental Health Professionals	339
Mental Health Commitment Law	340
Managed Care Behavioral Organizations	340
Who Are the Mentally Ill?	341
Family and Caregivers	341
Special Populations	342
Children and Adolescents	342
Elderly and Mental Health	343
Mental Health and Culture, Race, and Ethnicity	343
LGBTQ	343
African Americans	344
Latino Community	344

Asian Americans	344	Healthcare Expenditures	371
American Indians and Alaskan Natives	344	Healthcare Payers	371
Women and Mental Health	345	Information Technology (IT)	372
Homeless People and Mental Health	345	Clinical Decision Support Systems (CDSSs)	372
Mental Health Issues and Disasters, Trauma, and Loss	345	Healthcare Law	373
Mental Health Impact of Terrorist Attacks and Natural Disasters	345	Healthcare Ethics	373
Mental Health and Veterans	346	Mental Health	374
Mass Shooter Events	346	Trends in Health Care	375
Embedded Behavioral Health (EBH)	346	Complementary and Alternative Medicine	375
Managed Behavioral Health Care	346	Nursing Home Trends	375
National Institute of Mental Health (NIMH)	347	Value-Based Purchasing	376
B4Stage4	347	Patient-Centered Medical Home (PCMH)	376
The Virginia Tech Massacre: A Case Study of the Mental Health System	348	Accountable Care Organizations	377
Alternative Approaches to Mental Health Care ...	348	Health Information Technology	377
Culturally Based Healing Arts	349	Telehealth	377
Relaxation and Stress Reduction Techniques	349	Telemedicine	377
Technology-Based Applications	349	Radio Frequency Identification (RFID)	377
ADA of 1990 and Mental Health	349	Drugstore Clinics	378
Conclusion	350	Care Managers and Patient Navigators	378
Vocabulary	350	Cultural Competency	378
References	351	International Healthcare Systems	379
Notes	353	Universal Healthcare Concepts	379
Student Activities	354	Japan	379
Chapter 14 Analysis of the U.S. Healthcare System 367		France	380
Introduction	367	Switzerland	380
Highlights of the U.S. Healthcare System	368	Local Government Healthcare Reform	381
Government's Role in Health Care	368	Massachusetts Universal Healthcare Program	381
Public Health	369	Healthy San Francisco (HSF) Program	382
Hospital and Outpatient Services	370	Lessons to Be Learned from Other Healthcare Systems	382
Healthcare Industry Statistics	370	Conclusion	383
Healthcare Personnel	370	Vocabulary	383
U.S. Healthcare Utilization Statistics	371	References	384
U.S. Demographics and Health Care	371	Notes	386
		Student Activities	387
		Glossary	399
		Index	423



About the Author

Nancy J. Niles, PhD, MS, MBA, MPH, is in her 15th year of full-time undergraduate teaching. She is in her fifth year of teaching undergraduate and graduate healthcare management and administration courses at Rollins College in Winter Park, Florida. Prior to Rollins College, she taught 8 years of undergraduate business and healthcare management classes in the AACSB-accredited School of Management at Lander University in Greenwood, South Carolina, having spent 4 years teaching in the Department of Business Administration at Concord University in Athens, West Virginia. She became very interested in health issues as a result of spending two tours with the U.S. Peace Corps in Senegal, West Africa. She focused on

community assessment and development, obtaining funding for business and health-related projects. Her professional experience also includes directing the New York State lead poisoning prevention program and managing a small business development center in Myrtle Beach, South Carolina.

Her graduate education has focused on health policy and management. She received a Master of Public Health from the Tulane School of Public Health in New Orleans, Louisiana, a master of management with a healthcare administration emphasis, and a master of business administration from the University of Maryland University College, and a doctorate from the University of Illinois at Urbana-Champaign in health policy.



Acknowledgments

My mother, Joyce Robinson, continues to amaze me with her energy, and I applaud her for her important work as a guardian ad litem for children in South Carolina. They are lucky to have her.

I would like to thank my husband, Donnie Niles, the love of my life, for his continued love and support.

I would also like to thank Danielle Bessette and Tess Sackmann at Jones & Bartlett Learning for their support. I really enjoy writing textbooks for Jones & Bartlett Learning because of people like them. I deeply appreciate the editorial support of Gayathri Umashankaran, project manager, and the editorial staff from codeMantra.



Preface

There are some major changes to this textbook. In Chapter 1, I included a milestones table on nursing education which was long overdue. I merged Chapter 2, the Affordable Care Act (ACA), with Chapter 8, Healthcare Payors and Financing. I also included a new Chapter 6 on Long-Term Care Services. As our life expectancy increases, information on long-term care is needed. As always, a major goal of any of the editions to this textbook is to provide updated data. The Organisation for Economic Cooperation and Development (OECD) data has been updated including data dashboards on risk factors of health. I continue to review and update the student activities. There are chapter quizzes, ebook quizzes, and ample midterm and final exams. The following is a summary of each chapter.

► Chapter 1

It is important as a healthcare consumer to understand the history of the U.S. healthcare delivery system, how it operates today, who participates in the system, what legal and ethical issues arise as a result of the system, and what problems continue to plague the healthcare system. We are all consumers of health care. Yet, in many instances, we are ignorant of what we are actually purchasing. If we were going to spend \$1000 on an appliance or a flat-screen television, many of us would research the product to determine whether what we are purchasing is the best product for us. This same concept should be applied to purchasing healthcare services.

Despite U.S. healthcare expenditures, disease rates in the United States remain higher than those of many other developed countries because the United States has an expensive system that is available to only those who can afford it. A recent Gallup survey indicates that over 55% of Americans are greatly concerned about the availability of the rising cost of health care, which marks the fifth year in a row that this issue is ranked or tied first with concerns (Jones, 2018). Because the United States does not have universal health coverage,

there are more health disparities across the nation. Persons living in poverty are more likely to be in poor health and less likely to use the healthcare system compared to those with incomes above the poverty line. If the United States offered universal health coverage, the per capita expenditures would be more evenly distributed and likely more effective. The major problem for the United States is that healthcare insurance is a major determinant of access to health care. Although there has been a decrease in the number of uninsured in the United States as a result of the individual mandate to purchase health insurance by the ACA, there is still limited access to routine health care. The infant mortality rate is often used to compare the health status of nations worldwide. Although our healthcare expenditures are very high, our infant mortality rates rank higher than those of many countries. Racial disparities in disease and death rates continue to be a concern. Both private and public participants in the U.S. health delivery system need to increase their collaboration to focus on health education aimed to reduce the prevalence of obesity and disease. Leaders need to continue to assess our healthcare system using the Iron Triangle to ensure that there is a balance between access, cost, and quality.

Increasing healthcare consumer awareness will protect you in both the personal and the professional aspects of your life. You may decide to pursue a career in health care either as a provider or as an administrator. You may also decide to manage a business where you will have the responsibility of providing health care to your employees. And finally, from a personal standpoint, you should have the knowledge from a consumer point of view, so that you can make informed decisions about what matters most—your health. The federal government agrees with this philosophy. The ACA's health insurance marketplaces provide cost and service data, so that consumers can determine what is the best healthcare insurance to purchase and what services they will be receiving for that purchase. Recently, the Centers for Medicare and Medicaid Services (CMS) used its claim data to publish the hospital costs of the 100 most common treatments nationwide.

The purpose of this effort is to provide data to consumers regarding healthcare costs because the costs vary considerably across the United States. This effort may also encourage pricing competition of healthcare services. The U.S. Department of Health and Human Services is providing funding to states to increase their healthcare pricing transparency.

Despite U.S. healthcare expenditures, disease rates in the United States remain higher than those of many other developed countries because the United States has an expensive system that is available to only those who can afford it. Findings from a recent MetLife annual survey indicate that healthcare costs are worrying employees and their employers. Over 60% of employees are worried they will not be able to pay out-of-pocket expenses not covered by insurance. Employers are increasing the cost sharing of their employees for healthcare benefits because of the cost increases. Because the United States does not have universal health coverage, there are more health disparities across the nation. Persons living in poverty are more likely to be in poor health and less likely to use the healthcare system compared to those with incomes above the poverty line. If the United States offered universal health coverage, the per capita expenditures would be more evenly distributed and likely more effective. The major problem for the United States is that healthcare insurance is a major determinant of access to health care. Although there has been a decrease in the number of uninsured in the United States as a result of the individual mandate to purchase health insurance by the ACA, there is still limited access to routine healthcare statistics. The infant mortality rate is often used to compare the health status of nations worldwide. Although our healthcare expenditures are very high, our infant mortality rates rank higher than those of many countries. Racial disparities in disease and death rates continue to be a concern. The United States has more work to do regarding this issue. Both private and public participants in the U.S. health delivery system need to increase their collaboration to reduce these disease rates. Leaders need to continue to assess our healthcare system using the Iron Triangle to ensure that there is a balance between access, cost, and quality. This chapter provides an overview of the different U.S. healthcare system components.

New to Chapter: The chapter has expanded to include a discussion about health literacy. I have also included a table of milestones of nursing education and a discussion of a new prevention category—quaternary prevention.

Chapter 2

The one commonality with all of the world's healthcare systems is that they all have consumers or users of their systems. Systems were developed to provide a service to their citizens. However, the U.S. healthcare system, unlike many other systems in the world, does not provide healthcare access to all of its citizens. It is a very complex system that is comprised of many public and private components. Healthcare expenditures comprise approximately 17.9% of the gross domestic product (GDP). Health care is very expensive, and most citizens do not have the money to pay for health care themselves. Individuals rely on health insurance to pay a large portion of their healthcare costs. Health insurance is predominantly offered by employers. The government believes this is the result of the universal mandate for individual health insurance coverage. However, with the recent federal ruling stating that the universal mandate is unconstitutional, it is expected that the uninsured rate may increase.

In the United States, in order to provide healthcare services, there are several stakeholders or interested entities that participate in the industry. There are providers, of course, that consist of trained professionals, such as physicians, nurses, dentists, and chiropractors. There are also inpatient and outpatient facilities; the payers, such as the insurance companies, the government, and self-pay individuals; and the suppliers of products, such as pharmaceutical companies, medical equipment companies, and research and educational facilities. Each component plays an integral role in the healthcare industry. These different components further emphasize the complexity of the U.S. system. The current operations of the delivery system and utilization statistics will be discussed in depth in this chapter. An international comparison of the U.S. healthcare system and select country systems will also be discussed in this chapter, which provides another aspect of analyzing the U.S. healthcare system.

The U.S. healthcare system is a complicated system comprised of both public and private resources. Health care is available to those who have health insurance or who are entitled to health care through a public program. One can think of the healthcare system as several concentric circles that surround the most important stakeholders in the center circle—the healthcare consumers and providers. Immediately surrounding this relationship are payors of services—health insurance companies and governmental programs, such as Medicare and Medicaid, healthcare facilities, pharmaceutical companies, and laboratories,

all of which provide services to consumers to ensure that they receive quality health care, as well as support providers to ensure that they provide quality health care. The next circle consists of peripheral stakeholders that do not have an immediate impact on the main relationship but are still important to the industry. These consist of the professional associations, the research organizations, and the medical and training facilities. This figure emphasizes the number of institutions and personnel that provide direct and indirect care to healthcare consumers.

It is important to assess the system from an international perspective. Comparing different statistics from the OECD is valuable to assess the health of the United States. Despite the amount of money spent on health care in the United States, the United States ranked lower on many measures than other countries that spend less on their healthcare systems. These statistics may point to the fact that there is a combination of influencing factors, such as the effectiveness of countries' healthcare systems and different determinants of health, and that many of the OECD countries have universal healthcare systems that increase access to healthcare services.

New to Chapter: All data have been updated. I have also included four new OECD data dashboards on health status, impact of smoking and alcohol use on health, access to health care, and healthcare resources. Other new tables include the percentage of generalists and specialist physicians, doctor visits missed due to cost, prescriptions drugs missed due to cost, and long-term care beds available.

► Chapter 3

During the Depression and World War II, the United States had no funds to start a universal healthcare program—an issue that had been discussed for years. As a result, a private-sector system was developed that did not provide healthcare services to all citizens. However, the government's role in providing healthcare coverage evolved as a regulatory body to ensure that the elderly and poor were able to receive health care. The passage of the **Social Security Act of 1935** and the establishment of the Medicaid and Medicare programs in 1965 mandated the government's increased role in providing healthcare coverage. Also, the State Children's Health Insurance Program (SCHIP), now the Children's Health Insurance Program (CHIP), established in 1997 and reauthorized by the ACA through 2019, continues to expand the

government's role in children's health care. The laws require states, upon enactment, to maintain current income eligibility levels for CHIP through September 30, 2019 (CHIP, 2018). In addition to the reauthorization of the CHIP program, the ACA increased governmental interaction with the healthcare system by developing several of the governmental initiatives that focus on increasing the ability of individuals to make informed decisions about their health care.

In these instances, the government increased accessibility to health care as well as provided financing for health care to certain targeted populations. This chapter will focus on the different roles the federal, state, and local governments play in the U.S. healthcare system. This chapter will also highlight different governmental programs and regulations that focus on monitoring how health care is provided.

The government plays an important role in the quality of the U.S. healthcare system. The federal government provides funding for state and local governmental programs. Federal healthcare regulations are implemented and enforced at the state and local levels. Funding is primarily distributed from the federal government to the state government, which then allocates funding to local health departments. Local health departments provide the majority of services for their constituents. More local health departments are working with local organizations, such as schools and physicians, to increase their ability to provide education and prevention services.

The Department of Homeland Security (DHS) and Federal Emergency Management Agency (FEMA) now play an integral role in the management and oversight of catastrophic events, such as natural disasters, earthquakes, floods, pandemic diseases, and bioterrorism. The DHS and FEMA are also involved in managing school and workplace violence incidents, which have become more commonplace in society. The DHS and FEMA collaborate closely with the Centers for Disease Control and Prevention (CDC) to ensure that both the state and local health departments have a crisis management plan in place for these events. These attacks are often horrific and frightening with a tremendous loss of life, and as a result, the state and local health departments need to be more prepared to deal with catastrophic events. They are required to develop plans and be trained to deal effectively with many of these catastrophic issues.

New to Chapter: I have reviewed and updated all government agency information. I have also included the Environmental Protection Agency because of the issues with environmental health.

► Chapter 4

There are two important definitions of public health. In 1920, **public health** was defined by Charles Winslow as the science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for the sanitation of the environment, control of community infections, and education of individuals regarding hygiene to ensure a standard of living for health maintenance (Winslow, 1920). Sixty years later, the **Institute of Medicine (IOM)**, in its 1988 *Future of Public Health* report, defined public health as an organized community effort to address public health by applying scientific and technical knowledge to promote health (IOM, 1988). Both definitions point to broad community efforts to promote health activities to protect the population's health status. The ACA is also emphasizing the importance of prevention and wellness. The establishment of the Prevention and Public Health Fund (PPHF) has supported several community-based public health programs. It is the first mandatory funding stream for improving public health. For 2017 activities, the PPHF has awarded \$931 million to federal agencies, including the CDC, Administration for Community Living (ACL), and Substance Abuse and Mental Health Services Administration (SAMSHA), to develop programs to address several public health issues, such as youth suicide, lead poisoning prevention, and stroke prevention (HHS, 2019).

The development of public health is important to note as part of the basics of the U.S. healthcare system because its development was separate from the development of private medical practices. Public health specialists view health from a collectivist and preventative care viewpoint: to protect as many citizens as possible from health issues and to provide strategies to prevent health issues from occurring. The definitions cited in the previous paragraph emphasize this viewpoint. Public health concepts were in stark contrast to traditional medicine, which focused on the relationship between a provider and a patient. Private practitioners held an individualistic viewpoint—people more often would be paying for their services from their health insurance or from their own pockets. Physicians would be providing their patients guidance on how to cure their diseases, not preventing disease, although there is now more collaboration between public health and traditional medicine. This chapter will discuss the concept of health and healthcare delivery and the role of public health in delivering health care. The concepts of primary, secondary, tertiary, and quaternary

prevention and the role of public health in those delivery activities will be highlighted. Discussion will also focus on the origins of public health, the major role epidemiology plays in public health, the role of public health in disasters, and core public health activities.

New to Chapter: I have included a figure of the *Healthy People 2020* report on Social Determinants of Health. I have updated the prevention activities to include the category of quaternary prevention. I have included a section on organizational risk factors for workplace violence and the Department of Homeland Security's recommendations for action during an active shooter situation and a section on social marketing and social media marketing.

► Chapter 5

Historically, the U.S. healthcare industry was based on the provision of inpatient services provided by hospitals and outpatient services provided by physicians. As our healthcare system evolved, hospitals became the mainstay of the healthcare system, offering primarily inpatient with limited outpatient services. Over the last two centuries, hospitals have evolved from serving the poor and homeless to providing the latest medical technology in order to serve the seriously ill and injured (Shi & Singh, 2008). Although their original focus was inpatient services, as a result of cost containment and consumer preferences, more outpatient services are now being offered by hospitals. Hospitals can be classified by who owns them, length of stay, and type of services provided. Inpatient services typically focus on acute care, which includes secondary, tertiary, and quaternary care levels that most likely require inpatient care. Inpatient care is very expensive and, throughout the years, has been targeted for cost-containment measures. Hospitals have begun offering more outpatient services because they do not require an overnight stay and are less financially taxing on the healthcare system. The percentage of the U.S. GDP that consisted of healthcare expenditures continues to increase, and consequently, more cost-containment measures have evolved. Outpatient services have become more prevalent for that reason and because outpatient services are preferred by consumers. Technological advances in health care have allowed for more healthcare services to be performed as outpatient services.

The healthcare industry has recognized that outpatient services are a cost-effective method of providing quality health care and has, therefore, evolved into providing quality outpatient care. This type of service

is the preferred method of receiving health care by many consumers (CDC, 2018b). However, as medicine has evolved and more procedures, such as surgeries, can be performed on an outpatient basis, different types of outpatient care have evolved. As discussed previously, there are more outpatient surgical centers, imaging centers, urgent and emergent care centers, and other services that used to be offered on an inpatient basis. There will continue to be an increase in outpatient services being offered. Technology will increase the quality and the efficiency of health care for consumers. Telemedicine has become a more widely used model for health care because of continued advances in technology. The implementation of patient electronic health record systems nationwide will be the impetus for the development of more electronic healthcare services.

New to Chapter: All data have been updated.

► Chapter 6 (New Chapter)

According to the Department of Health and Human Services, long-term care services include a broad range of health, personal care, and supportive services that meet the needs of older people and other adults whose capacity for self-care is limited because of a chronic illness; injury; physical, cognitive, or mental disability; or other health-related condition. People with intellectual and developmental disabilities need long-term care services. Most long-term care is not medical care but rather assistance with the basic personal tasks of everyday life. These tasks are sometimes called activities of daily living (ADLs) and include bathing, dressing, eating, and going to the bathroom. Long-term care services also provide assistance for instrumental activities of daily living (IADLs), such as housework, money management, taking medications, grocery or clothes shopping, pet care, and using the telephone. Individuals may need these services for years. In general, long-term care services usually are provided by unpaid caregivers—family and friends—in home and community-based settings. Over the last 20 years, the shift of institutional long-term care provision has been toward community and home-based settings as a result of the **Olmstead decision**. The Supreme Court's Olmstead decision found that the Americans with Disabilities Act violated the rights of persons with disabilities by keeping them institutionalized, thereby increasing the need for community-based services.

As life expectancy increases, individuals will require long-term care services, which already comprise a significant percentage of national healthcare

expenditures paid for by Medicaid. The Commission on Long-Term Care, created by the American Taxpayer Relief Act of 2012, issued a report in 2013 that indicated there needs to be a coordinated program in place that focuses on long-term care services for individuals across the United States, and the Commission recommended funding for a system to be developed. As of this writing, long-term care services vary based on state priorities. In general, healthcare experts recognize the need for creating innovative ways to deliver long-term care services. A component of this type of innovation is the long-term care navigator. This service can assist individuals and their families with researching the different types of long-term care services provided by the state, reviewing their financial support for long-term care services, researching the types of long-term care facilities in their local area, and assisting them with the transition to a long-term care provider.

► Chapter 7

The health industry is one of the largest employers in the United States and employs more than 13% of the U.S. workforce. Because of the aging of our population, the Bureau of Labor Statistics (BLS) indicates that the health industry will generate nearly 2.5 million new jobs by 2026 (BLS, 2018a). When one thinks of healthcare providers, one automatically thinks of physicians and nurses. However, the healthcare industry is composed of many different health services professionals, such as dentists, optometrists, psychologists, chiropractors, podiatrists, nonphysician practitioners (NPPs), administrators, and allied health professionals. Allied health professionals, who represent nearly 60% of the healthcare workforce, provide a range of essential healthcare services that complement the services provided by physicians and nurses.

Health care can occur in varied settings. Many physicians have their own practices, but they may also work in hospitals, mental health facilities, managed care organizations, or community health centers. They may also hold government positions, teach at a university, or be employed by an insurance company. Health professionals, in general, may work at many different for-profit and not-for-profit organizations. It is the responsibility of the human resources (HR) department to be aware of the different types of healthcare jobs in the industry. When employees transfer within an organization or decide to change their healthcare career goals, their main resource is the HR department. This chapter will provide a description of the

diverse types of healthcare jobs, their educational requirements, job responsibilities, median annual salaries, and their roles in the healthcare system.

This chapter will provide an overview of the different types of employees in the healthcare industry. Some of these positions require many years of education; however, others can be achieved through 1- to 2-year education programs. There are more than 200 occupations and professions among the more than 14 million healthcare workers in the United States. The healthcare industry will continue to progress as the U.S. trends in demographics, disease, and public health patterns change and as cost and efficiency issues, insurance issues, technological influences, and economic factors continue to evolve. More occupations and professions will develop as a result of these trends.

The major trend that will affect the healthcare industry is the aging of the U.S. population. The BLS predicts that half of the next decade's fastest growing jobs will be in the healthcare industry. Physician extenders and allied healthcare professionals will continue to play an increasing role in the provision of health care. There were several career choices discussed in this chapter that may provide an opportunity for an existing employee to work in another department or organization. Organizations may provide education reimbursement for quality employees in return for an extended employment contract.

New to Chapter: All labor statistics have been updated. Included is a table of generalists and specialists. Included are different allied health professionals. The new health navigator position is discussed.

► Chapter 8 (New Title: Healthcare Payors and Financing)

The percentage of the U.S. GDP devoted to healthcare expenditures has increased in recent decades. According to 2016 statistics, the United States spent \$3.3 trillion or \$10,739 per person on healthcare expenditures or 17.9% of its GDP. The CMS predicts annual healthcare costs will be \$4.64 trillion by 2024, which represents nearly 20% of the U.S. GDP (CMS, 2018a). The increase in healthcare spending can be attributed to three causes: (1) When prices increase in an economy overall, the cost of medical care will increase and, even when prices are adjusted for inflation, medical prices have increased. (2) As life expectancy increases

in the United States, more individuals will require more medical care for chronic diseases, which means there will be more healthcare expenses. (3) As healthcare technology and research provide for more sophisticated and more expensive procedures, there will be an increase in healthcare expenses. In 2016, health expenditures were as follows: for hospital care, 32.4%; for nursing care and continuing care retirement communities, 4.9%; for physician and clinical services, 19.9%; and for prescription drugs, 9.8%. Unlike countries that have universal healthcare systems, payment of healthcare services in the United States is derived from (1) **out-of-pocket payments** or **cost sharing** from patients who pay entirely or partially for services rendered; (2) health insurance plans, such as indemnity plans or managed care organizations; (3) public or governmental funding, such as Medicare, Medicaid, and other governmental programs; and (4) health savings accounts (HSAs) and consumer-driven health plans, such as health reimbursement accounts (HRAs). Much of the burden of healthcare expenditures has been borne by private sources—employers and their health insurance programs. Individuals may continue to pay their health insurance premiums through the Consolidated Omnibus Budget Reconciliation Act (COBRA) once they are unemployed, but most individuals cannot afford to pay the expensive premiums.

To understand the complexity of the U.S. healthcare system, this chapter will provide a breakdown of U.S. healthcare spending by source of funds, and the major private and public sources of funding for these expenditures. It is important to reemphasize that there are three parties involved in providing health care: the provider, the patient, and the fiscal intermediary, such as a health insurance company or the government. Therefore, also included in the chapter is a description of how healthcare providers are reimbursed for their services and how reimbursement rates were developed for both private and public funds. There is also an in-depth section on the ACA of 2010, the landmark healthcare reform legislation that is patient-centered, focusing on affordable and quality health care.

New to Chapter: All data have been updated. I eliminated the ACA as a separate chapter and integrated it into this chapter. I replaced the Bundled Payments Initiative table with a CMS Innovation models table, and I added a table on CMS Quality Payment Program Models. I also included a discussion of chronic disease prevention and how to improve public health and transparency and integrity as it relates to healthcare expenditures.

► Chapter 9

Managed care is a healthcare delivery system organized to manage cost, utilization, and quality. Managed care refers to the cost management of healthcare services by controlling who the consumer sees and how much the service costs. Managed care organizations (MCOs) were introduced 40 years ago but became more entrenched in the healthcare system when the Health Maintenance Organization (HMO) Act of 1973 was signed into law by President Richard Nixon. Healthcare costs were spiraling out of control during that period. Encouraging the increase in the development of HMOs, the first widely used managed care model would help to control the healthcare costs. MCOs' integration of the financial industry with the medical service industry resulted in controlling the reimbursement rate of services, which allowed MCOs more control over the health insurance portion of health care. Physicians were initially resistant to managed care models because they were threatened by loss of income. As the number of managed care models increased, physicians realized they had to accept this new form of healthcare delivery and if they participated in a managed care organization, it was guaranteed income. Managed care health plans have become a standard option for consumers. Medicare Part C, which is commonly called Medicare Advantage, offers managed care options to their enrollees. Medicaid managed care provides for the delivery of Medicaid health benefits and additional services through contracted arrangements between state Medicaid agencies and MCOs that accept a set payment per member per month (capitation) for these services. Many employers offer managed care plans to their employees.

Physicians have also had problems with timely reimbursement from MCOs. There were issues with fraudulent reimbursement rates of out-of-network services, which resulted in members paying exorbitant out-of-pocket expenses. However, the American Medical Association has developed tools to assist physicians with managed care contracting and reimbursement processes. The ACA mandate that insurance companies must spend 80%–85% of their premium revenues on quality care or be penalized with fines, give rebates to their members, or both is an incentive for MCOs to provide quality and affordable care. As health care continues to focus on providing quality care and cost reduction, having a database, such as Health Plan Employer Data and Information Set (HEDIS), can provide important information to both the healthcare providers and the consumers. This chapter will discuss the evolution of managed

care and why it developed, the different types of managed care, the MCO assessment measures used for cost control, issues regarding managed care, and how managed care has impacted the delivery of healthcare services.

New to Chapter: The data have been updated.

► Chapter 10

The general term “informatics” refers to the science of computer application to data in different industries. Health or medical informatics is the science of computer application that supports clinical and research data in different areas of health care. It is a methodology of how the healthcare industry thinks about patients and how their treatments are defined and evolved. Health informatics is used in the healthcare industry in four ways: financial tracking to ensure that billing is appropriate, clinical compliance to ensure that patients are receiving appropriate care in a timely manner, quality improvement to assess patient health outcomes, and patient satisfaction. Health information systems are systems that store, transmit, collect, and retrieve these data. The goal of health information technology (HIT) is to manage the health data that can be used by patients–consumers, insurance companies, healthcare providers, healthcare administrators, and any stakeholder that has an interest in health care.

HIT impacts every aspect of the healthcare industry. All of the stakeholders in the healthcare industry use HIT. Information technology (IT) has had a tremendous impact on the healthcare industry because it allows faster documentation of every transaction. When an industry focuses on saving lives, it is important that every activity has a written document that describes the activity. Computerization of documentation has increased the management efficiency and accuracy of healthcare data. The main goal of HIT is the national implementation of an electronic patient record. This is the foundation of many IT systems because it will enable different systems to share patient information, which will increase the quality and efficiency of health care. This chapter will discuss the history of IT, different applications of IT health care, and the status of electronic health records and barriers for its national implementation.

The healthcare industry has lagged behind other industries utilizing IT as a form of communicating important data. Despite that fact, there have been specific applications developed for HIT, such as e-prescribing, telemedicine, ehealth, and specific applied technologies, such as the PatientPoint,

MelaFind optical scanner, the Phreesia Pad, Sapien heart valve, robotic checkups, Accuson P10, and the Piccolo xpress, which were discussed in this chapter. Healthcare organizations have recognized the importance of IT and have hired CIOs and CTOs to manage their data. However, healthcare consumers need to embrace an electronic patient record, which is the basis for the Microsoft Health Vault. This will enable patients to be treated effectively and efficiently nationally. The patient health record can be integrated into the electronic health records that are being utilized nationwide. Having the ability to access a patient's health information could assist in reducing medical errors. As a consumer, utilizing a tool like HealthVault could provide an opportunity to consolidate all medical information electronically; so, if there are any medical problems, the information will be readily available. The major IT issue in health care is the need to establish the interoperability of electronic health records (EHRs) systems nationwide. Establishing health information exchanges (HIEs) and regional health information organizations (RHIOs) is the foundation of interoperability in a geographic area. This communication between systems will enable patients to be treated more quickly because there will be immediate access to their most current medical information. Although the federal government has indicated this communication between systems is necessary to ensure the full success of the EHR system, progress continues.

New to Chapter: All data have been updated, including meaningful use. Included is a discussion on mobile health, HIEs and RHIOs, Blockchain technology, and IBM Watson. Also expanded is the section on telemedicine.

► Chapter 11

To be an effective healthcare manager, it is important to understand basic legal principles that influence the work environment, including the legal relationship between the organization and the consumer—the healthcare provider and the patient, and the employer and the employee. As both a healthcare manager and healthcare consumer, it is imperative that you are familiar with the different federal and state laws that impact the healthcare organization. It is also important that the managers understand the differences between civil and criminal law and the penalties that may be imposed for breaking those laws. Federal and state laws have been enacted and policies have been implemented to protect both the healthcare provider and the healthcare consumer. New laws have been passed

and older laws have been amended to reflect needed changes regarding health care, to continue to protect participants from both a patient and an employee or employer perspective.

The basic concepts of law, both civil and criminal healthcare law, tort reform, employment-related legislation, safety in the workplace, and the legal relationship between the provider and the patient will be discussed in this chapter. I have included some examples of LGBT-related claims that U.S. Equal Employment Opportunity Commission (EEOC) views as unlawful sex discrimination.

New to chapter: All data have been updated. I expanded tort reform discussion and Emergency Medical Treatment and Active Labor Act (EMTALA) discussion. I included a definition of affirmative action plan and also an expansion of the Americans with Disabilities Act (ADA) definition. I updated the information on ACA legal issues.

► Chapter 12

Legal standards are the minimal standard of action established for individuals in a society. Ethical standards are considered one level above a legal action because individuals make a choice based on what is the “right thing to do,” not what is required by law. There are many interpretations of the concept of ethics. Ethics has been interpreted as the moral foundation for standards of conduct. The concept of ethical standards applies to actions that are hoped for and expected by individuals. Actions may be considered legal but not ethical. There are many definitions of ethics, but, basically, ethics is concerned with what are right and wrong choices as perceived by society and individuals.

The concept of ethics is tightly woven throughout the healthcare industry. It has dated back to Hippocrates, the father of medicine, in the fourth century BC, and evolved into the Hippocratic Oath, which is the foundation for the ethical guidelines for patient treatment by physicians. In 1847, the American Medical Association (AMA) published a *Code of Medical Ethics* that provided guidelines for the physician-provider relationship, emphasizing the duty to treat a patient. To this day, physicians' actions have followed the code of ethics that demands the “duty to treat.”

Applying the concept of ethics to the healthcare industry has created two areas of ethics: medical ethics and bioethics. Medical ethics focuses on the decisions that healthcare providers make concerning medical treatment of patients. Euthanasia or physician-assisted

suicide would be an example of a medical ethics topic. Advance directives are orders that patients give to providers to ensure that if they are terminally ill and incompetent to make a decision, certain measures will not be taken to prolong that patient's life. If advance directives are not provided, the ethical decision of when to withdraw treatment may be placed on the family and provider. These issues are legally defined, although there are ethical ramifications surrounding these decisions.

This chapter will focus primarily on bioethics. This field of study is concerned with the ethical implications of certain biologic and medical procedures and technologies, such as cloning; alternative reproductive methods, such as *in vitro* fertilization; organ transplants; genetic engineering; and care of the terminally ill. Additionally, the rapid advances in medicine in these areas raised questions about the influence of technology on the field of medicine.

It is important to understand the impact of ethics in different aspects of providing health care. Ethical dilemmas in health care are situations that test a provider's belief and what the provider should do professionally. Ethical dilemmas are often a conflict between personal and professional ethics. A healthcare ethical dilemma is a problem, situation, or opportunity that requires an individual, such as a healthcare provider, or an organization, such as a managed care practice, to choose an action that could be unethical. A decision-making model is presented that can help resolve ethical dilemmas in the healthcare field. This chapter will discuss ethical theories, codes of healthcare conduct, informed consent, confidentiality, special populations, research ethics, ethics in public health, end-of-life decisions, genetic testing and profiling, and biomedical ethics, which focuses on technology use and health care.

New to Chapter: All data have been updated. Workplace bullying is included in this chapter because of its violations of organizational ethics and their code of conducts.

► Chapter 13

According to the World Health Organization, mental wellness or mental health is an integral and essential component of health. It is a state of well-being in which an individual can cope with normal stressors, can work productively, and is able to make a contribution to his or her community. Mental health behavioral disorders can be caused by biological, psychological, and personality factors. Approximately 75% of suicides occur in low- and middle-income countries and about half

of mental disorders begin before the age of 14 (World Health Organization, 2018). Mental disorders are the leading cause of disability in the United States. Mental illnesses can impact individuals of any age, race, religion, or income. In 2016, nearly one in five adults live with a mental illness. There are two broad categories of mental illness: Any Mental Illness (AMI), which is a mental, behavioral, or emotional disorder, and All Mental Illness and Serious Mental Illness (SMI), which is also a mental, behavioral, or emotional disorder but it impacts the patients' manner of functioning in daily life. The prevalence of AMI is higher among women. Young adults (18–25 years) had the highest prevalence of AMI (22%) compared to those 50 years of age and older (14.5%). In 2016, 64.8% of adults with SMI received treatment. Mental health treatment is defined as inpatient or outpatient counseling or treatment with prescription medications. Although mental health is a disease that requires medical care, its characteristics set it apart from traditional medical care. U.S. Surgeon General David Satcher released a landmark report in 1999 on mental health and illness, *Mental Health: A Report of the Surgeon General*. The Surgeon General's report on mental health defines mental disorders as conditions that alter thinking processes, moods, or behavior and result in dysfunction or stress. The condition can be psychological or biological in nature. The most common conditions include phobias, which are excessive fear of objects or activities; substance abuse; and affective disorders, which are emotional states, such as depression. Severe mental illness includes schizophrenia, major depression, and psychosis. Obsessive-compulsive disorders (OCD), intellectual disabilities, Alzheimer's disease, and dementia are also considered mentally disabling conditions. According to the report, mental health ranks second to heart disease as a limitation on health and productivity (U.S. Public Health Service, 1999). People who have mental disorders often exhibit feelings of anxiety or may have hallucinations or feelings of sadness or fear that can limit normal functioning in their daily life. Because the causes or etiologies of mental health disorders are less defined and less understood compared to traditional medical problems, interventions are less developed than in other areas of medicine. This chapter will discuss the following topics: the history of the U.S. mental health-care system, a background of healthcare professionals, mental healthcare law, insurance coverage for mental health, barriers to mental health care, the populations at risk for mental disorders, the types of mental health disorders as classified by the American Psychiatric Association's **Diagnostic and Statistical Manual**

of Mental Disorders (DSM), liability issues associated with mental health care, an analysis of the mental healthcare system, and guidelines and recommendations to improve U.S. mental health care.

New to Chapter: All data have been updated. I included a section on B4Stage4, which is a proactive philosophy to treat mental health issues.

► Chapter 14

The U.S. healthcare system continues to evolve. Technology will increase its impact on health care. Consumers have more information to make healthcare decisions because of health information technology. There are now opportunities to use mobile health devices to self-monitor, and access care via telemedicine and other virtual consultations. There are now drugstore clinics that operate nationally which provide an alternative to urgent care centers. Providers can provide more quality care from access to clinical decision support systems and the nationwide increase of patient EHR systems.

Long-term care needs will increase as we live longer. The Green House Project is an exciting initiative that may transform how long-term care will be implemented. As our population becomes grayer, more citizens will want to live as independently as possible for a longer period of time, and the Green House Project is an excellent template for achieving this goal.

All of these initiatives are exciting for the healthcare consumer. There are also now trained healthcare workers called patient navigators who provide assistance to patients regarding the healthcare system. This type of system provides an opportunity to increase the patient's health literacy.

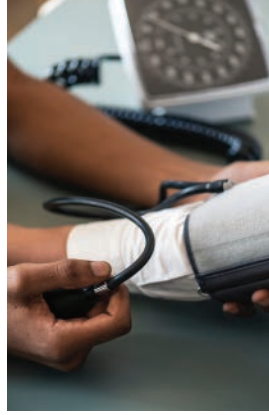
The ACA has provided many incentives to improve the quality of and access to the U.S. healthcare system. The Center for Medicaid and Medicare Innovation has

over 40 demonstration projects that focus on different types of financing models that are based on the performance of healthcare providers.

The discussion concerning different countries' healthcare systems indicates that all countries have problems with their healthcare systems. Establishing a universal healthcare system in the United States may not be the answer. There are aspects of each of these programs that could be integrated into the U.S. system. There are a surprising number of similarities. The major differences are in the area of the control the government places on pharmaceutical prices and health insurers. Some governments limit drug manufacturers' and insurers' profitability in order to increase healthcare access to their citizens. The main difference between Japan, Switzerland, France, and the United States is in the willingness of individuals to pay more, so that all citizens can receive health care. That collectivistic attitude does not prevail in the United States and would be difficult to institute. However, the mandates for both business and individuals to purchase health insurance coverage through the establishment of state health insurance marketplaces should improve the overall health of the United States.

This chapter will compare the U.S. healthcare system and the healthcare systems of other countries. This chapter will also discuss trends that impact the U.S. healthcare system, including the increased use of technology providing health care, complementary and alternative medicine use, new nursing home models, accountable care organizations, and the universal-healthcare-coverage programs in Massachusetts and San Francisco, California. The ACA will also be briefly discussed because of its major impact on the U.S. healthcare system.

New to Chapter: All data have been updated. There are new healthcare trends discussed. Discussions of cultural competency and cultural awareness is presented.



CHAPTER 1

History and Overview of the U.S. Healthcare System

LEARNING OBJECTIVES

The student will be able to:

- Describe the five milestones of medicine and medical education, the hospital system, public health, and health insurance.
- Explain the differences between primary, secondary, tertiary, and quaternary prevention.
- Explain the concept of the iron triangle as it applies to health care.
- Discuss the importance of health literacy to health consumers.

DID YOU KNOW THAT?

- When the practice of medicine first began, tradesmen such as barbers practiced medicine. They often used the same razor to cut hair as to perform surgery.
- In 2017, the United States spent 17.9% of the gross domestic product on healthcare spending, which is the highest in the world.
- The United States is the only major country that does not have universal healthcare coverage.
- In 2002, the Joint Commission issued hospital standards requiring them to inform their patients if their results were not consistent with typical care results.

► Introduction

It is important as healthcare consumers to understand the history of the U.S. healthcare delivery system, how it operates today, who participates in the system, what legal and ethical issues arise as a result of the system,

and what problems continue to plague the healthcare system. We are all consumers of health care. Yet, in many instances, we are ignorant of what we are actually purchasing. If we were going to spend \$1000 on an appliance or a flat-screen television, many of us would research the product to determine if what we

are purchasing is the best product for us. This same concept should be applied to purchasing healthcare services.

Increasing healthcare consumer awareness will protect you in both the personal and the professional aspects of your life. You may decide to pursue a career in health care either as a provider or as an administrator. You may also decide to manage a business where you will have the responsibility of providing health care to your employees. And last, from a personal standpoint, you should have the knowledge from a consumer point of view, so you can make informed decisions about what matters most—your health. The federal government agrees with this philosophy.

As the U.S. population's life expectancy continues to lengthen—increasing the **"graying" of the population**—the United States will be confronted with more chronic health issues because, as we age, more chronic health conditions develop. The U.S. healthcare system is one of the most expensive systems in the world. According to 2017 statistics, the United States spent \$3.3 trillion or \$10,328 per person on healthcare expenditures or 17.9% of its gross domestic product. The **gross domestic product (GDP)** is the total finished products or services that are produced in a country within a year. These statistics mean that nearly 18% of all of the products made within the borders of the United States within a year are health care related. In 2016, health expenditures for hospital care were 32.4%, for nursing care and continuing care retirement communities 4.9%, for physician and clinical services 19.9%, and for prescription medications 9.8% (CDC, 2019). The **Patient Protection and Affordable Care Act of 2010 (PPACA)**, more commonly called the **Affordable Care Act (ACA)**, attempted to increase access to affordable health care. One of the mandates of the Act is the establishment of electronic health insurance marketplaces, which provides opportunities for consumers to search for affordable health insurance plans. There is also a mandate that individuals who do not have health insurance can purchase a health insurance plan if they can afford it or pay a fine. Both of these mandates have decreased the number of uninsured in the United States. However, with the change in administration and the recent federal judge ruling that the individual mandate of the ACA is not constitutional, it is unclear what impact these events will have on the ACA and ultimately healthcare coverage nationally.

According to the U.S. Census Bureau 2017 estimates, the national health insurance uninsured rate is nearly 29 million people or 8.8% of the population. These rates vary by states and are impacted by

whether the state has expanded their Medicaid programs coverage. Texas and Oklahoma have the highest uninsured rates, with Massachusetts having the lowest uninsured rate. Hawaii, Iowa, Rhode Island, Vermont, and Minnesota have rates under 5%. In general, these rates have been attributed to the insurance mandate of the ACA. Between 2010 and 2018, the uninsured rate dropped from 16% to 8.8% of the U.S. population (Keith, 2018). The Institute of Medicine's (IOM) (1999), now National Academy of Medicine (NAM), report indicated that between 44,000 and 100,000 citizens die each year as a result of medical errors in U.S. hospitals. These data have received scrutiny over the past decades; some research studies indicate a higher rate and other studies indicate a lower rate (Shojania & Woods, 2017). One death due to a medical error is one too many.

Although U.S. healthcare costs are very high, the United States does not offer healthcare coverage as a right of citizenship. The United States is the only major country that does not offer a **universal healthcare program**, which means access to all citizens. Many of these systems are typically run by the federal government, have centralized health policy agencies, and are financed through different forms of taxation, and payment of healthcare services is by a single payer—the government (Shi & Singh, 2019). France and the United Kingdom have been discussed as possible models for the United States to follow to improve access to health care, but these programs have problems and may not be the ultimate solution for the United States. However, because the United States does not offer any type of universal healthcare coverage, many citizens who are not eligible for government-sponsored programs are expected to provide the service for themselves by purchasing health insurance or the actual health services that are considered out-of-pocket expenses. Many citizens cannot afford these options, resulting in not going to a healthcare provider for routine medical care. The ACA's health insurance marketplaces provide cost and service data, so consumers can determine what is the best healthcare insurance to purchase and what services they will receive for that purchase. Recently, the **Centers for Medicare and Medicaid Services (CMS)** used its claim data to publish the hospital costs of the 100 most common treatments nationwide. The purpose of this effort is to provide data to consumers regarding healthcare costs because the costs vary considerably across the United States. This effort may also encourage pricing competition of healthcare services. The U.S. Department of Health and Human Services provides funding to states to increase their healthcare pricing transparency (Bird, 2013).

► Consumer Perspective on Health Care

What Is Health?

The World Health Organization (WHO) defines **health** as the state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (WHO, 1942). IOM defines health as a state of well-being and the capability to function in the face of changing circumstances. It is a positive concept emphasizing social and personal resources as well as physical capabilities (IOM, 1997). According to the Society for Academic Emergency Medicine (SAEM), health is a state of physical and mental well-being that facilitates the achievement of individual and societal goals (SAEM, 1992). The Robert Wood Johnson Foundation's definition focuses on longevity and quality of life. They believe that being healthy provides an opportunity for everyone to strive and thrive (What is health, 2018). All of these definitions focus on the impact an individual's health status has on his or her quality of life.

What Is Health Literacy?

Title V of the ACA defines **health literacy** as the degree to which an individual has the ability to obtain and absorb basic health information to make the best health decision for themselves (CDC, 2019). Individual health literacy is impacted by culture, the complexity of the health system, the ability of the health consumer to navigate these systems, and communication by the healthcare providers. It is important that healthcare professionals, both medical and public health, clearly communicate to their patients what they need to accomplish to be healthy by increasing their health literacy levels (Health literacy basics, 2019). In 2010, the Department of Health and Human Services created a National Action Plan to Improve Health Literacy. The plan is based on the principles that (1) everyone has the right to health information that helps them make informed decisions and (2) health services should be delivered in ways that are understandable and beneficial to health, longevity, and quality of life. The plan targets both the health consumers as well as healthcare organizations and healthcare providers to ensure that the healthcare message is clear to their consumers (DHHS, 2019).

Determinants of Health

Health has several determinants or influences that impact the status of an individual's health. The individual lifestyle factors, such as exercise, diet, and sexual activity, are direct determinants of a person's health.

Within the immediate environment of an individual, there are social and community networks—external influences on health. In addition to the **social and community networks**, there are general **macroenvironmental conditions** of socioeconomic, cultural, and environmental conditions that impact health, such as education, work environment, living and working conditions, healthcare services, food production, job status, water and sanitation, and housing. These determinants of health can result in **health disparities** if these conditions are not optimal, such as safe housing and work environment or educational opportunities, which are disadvantages to achieving optimal health. When conditions exist for everyone to have a fair opportunity to be as healthy as possible, **health equity** exists. Health equity is the result of removing restrictions, such as poverty and discrimination, and providing a healthy environment, quality education, and access to health care (What is health, 2018). These **determinants of health** tie into the activities of the U.S. healthcare delivery system which can impact an individual's health. These activities are often categorized as primary, secondary, tertiary, and quaternary prevention (Determinants of Health, 2019). These concepts are vital to understanding the U.S. healthcare system because different components of the healthcare system focus on different areas of health, which often results in lack of coordination between these different components.

Primary, Secondary, Tertiary, and Quaternary Prevention

According to the *American Heritage Dictionary* (2001), prevention is defined as “slowing down or stopping the course of an event.” **Primary prevention** avoids the development of a disease. Promotion activities, such as health education, are primary prevention. Other examples include smoking cessation programs, immunization programs, and educational programs for pregnancy and employee safety. State health departments often develop targeted, large education campaigns regarding a specific health issue in their area. **Secondary prevention** activities focus on early disease detection, which prevents progression of the disease. Screening programs, such as high blood pressure testing, are examples of secondary prevention activities. Colonoscopies and mammograms are also examples of secondary prevention activities. Many local health departments implement secondary prevention activities. Tertiary prevention reduces the impact of an already established disease by minimizing disease-related complications. **Tertiary prevention** focuses on rehabilitation and monitoring of diseased individuals. A person with high blood pressure who

is taking blood pressure medication is an example of tertiary prevention. A physician who writes a prescription for that blood pressure medication to control high blood pressure is an example of tertiary prevention. **Quaternary prevention**, a recent concept, focuses on mitigating unnecessary efforts on interventions that do not work and providing care that is medically acceptable (Less is more medicine, 2019). Traditional medicine focuses on tertiary prevention, although more primary care providers are encouraging and educating their patients on healthy behaviors, which falls under primary and secondary prevention (Centers for Disease Control and Prevention [CDC], 2007).

We, as healthcare consumers, would like to receive primary prevention to prevent disease. We would like to participate in secondary prevention activities, such as screening for cholesterol or blood pressure, because it helps us manage any health problems we may be experiencing and reduces the potential impact of a disease. And, we would like to also visit our physicians for tertiary and/or quaternary measures for evaluative

purposes, so, if we do have a disease, it can be managed by taking a prescribed medication or receiving some other type of treatment. From our perspective, these four areas of health should be better coordinated for the healthcare consumer, so the United States will have a healthier population.

In order to understand the current healthcare delivery system and its issues, it is important to learn the history of the development of the U.S. healthcare system. Four major sectors of our healthcare system that have impacted our current system of operations will be discussed in this chapter: (1) the history of practicing medicine and the development of medical education, (2) the development of the hospital system, (3) the history of **public health**, and (4) the history of health insurance. In **TABLES 1-1–1-5**, several important milestones are listed by date and illustrate the historic highlights of each system component. The list is by no means exhaustive but provides an introduction to how each sector has evolved as part of the U.S. healthcare system.

TABLE 1-1 Milestones of Medicine and Medical Education, 1700–2015

■ 1700s: Training and apprenticeship under one physician was common until hospitals were founded in the mid-1700s. In 1765, the first medical school was established at the University of Pennsylvania.
■ 1800s: Medical training was provided through internships with existing physicians who often were poorly trained themselves. In the United States, there were only four medical schools, which graduated only a handful of students. There were no formal tuition and no mandatory testing.
■ 1847: The American Medical Association (AMA) was established as a membership organization for physicians. It did not become significant and effective until the 1900s when it organized its physician members by county and state medical societies. The AMA wanted to ensure that these local societies were protecting physicians' financial well-being. It also began to focus on standardizing the medical education curricula.
■ 1900s–1930s: The medical profession was represented by general or family practitioners who operated in solo practices. A small percentage of physicians were women. Total expenditures for medical care were less than 4% of the GDP.
■ 1904: The AMA created the Council on Medical Education to establish standards for medical education.
■ 1910: Formal medical education was attributed to Abraham Flexner, who wrote an evaluation of medical schools in the United States and Canada, indicating that many schools were substandard. The Flexner Report led to standardized admissions testing for students called the Medical College Admission Test (MCAT), which is still used as part of the admissions process today.
■ 1930s: The healthcare industry was dominated by male physicians and hospitals. Relationships between patients and physicians were sacred. Payments for physician care were personal (out of pocket).
■ 1940s–1960s: When group health insurance was offered, the relationship between patient and physician changed because of third-party payers (insurance). In the 1950s, federal grants supported medical school operations and teaching hospitals. In the 1960s, the Regional Medical Programs provided research grants and emphasized service innovation and provider networking. As a result of the Medicare and Medicaid enactment in 1965, the responsibilities of teaching faculty also included clinical responsibilities.

- 1970s–1990s: Patient care dollars surpassed research dollars as the largest source of medical school funding. During the 1980s, third-party payers reimbursed academic medical centers with no restrictions. In the 1990s with the advent of managed care, reimbursement was restricted.
- 2016: The AMA collaborated with medical schools nationally to advance medical school curricula by creating innovative courses.
- 2017: As a result of the opioid epidemic, medical schools are actively developing curricula that specifically teach ways to manage patient pain management.

TABLE 1-2 Milestones of Nursing Education

1798: A New York physician developed lectures for nursing education for maternity patients.

1854: Florence Nightingale, a British nurse, established the Nightingale Principles for nursing education for British nurses.

1861–Civil War: 20,000 nurses provided care, which encouraged more nursing education programs.

1869: The first nursing class graduated from the Women's Hospital of Pennsylvania school.

1873: Three nursing programs in New York, Massachusetts, and Connecticut based on the Nightingale Principles began operations and became the foundation of nursing education in the United States.

1890s: Nurses organized professional associations, which later became the American Nurses Association. State nursing associations organized licensing systems.

1914: World War I: 23,000 nurses provided care. There was critical demand for specialty nurses.

1920–1930s: As more hospitals were built, nurses were relied on to provide patient care.

1939: World War II: 78,000 nurses continued to provide care.

1948: The Carnegie Foundation's The Brown Report recommended that nursing schools be placed in academic settings rather than hospitals.

1960: 172 college-based nursing programs were operating.

1970s: Nurse Practice Act allowed nurses to diagnose and prescribe medication.

1990: The Department of Health and Human Services studied the nursing shortage.

2003–2008: Studies indicated patient outcomes improved when nursing staff held a Bachelor of Science in Nursing (BSN).

2010: The IOM issued a report called "The Future of Nursing," indicating that 80% of the nursing workforce should hold a BSN and should be leaders in health care.

2012: Many employers were providing incentives for nurses to return to school to receive their BSN.

2014: In response to the IOM report, the *Nurses on Boards Coalition* was created to assist nurses in becoming pivotal leaders in the healthcare industry.

TABLE 1-3 Milestones of the Hospital and Healthcare Systems, 1820–2016

- 1820s: Almshouses or poorhouses, the precursor of hospitals, were developed to serve primarily poor people. They provided food and shelter to the poor and consequently treated the ill. Pesthouses, operated by local governments, were used to quarantine people who had contagious diseases, such as cholera. The first hospitals were built around areas such as New York City, Philadelphia, and Boston, and were used often as a refuge for the poor. Dispensaries or pharmacies were established to provide free care to those who could not afford to pay and dispense medications to ambulatory patients.
- 1850s: A hospital system was finally developed but hospital conditions were deplorable because of unskilled providers. Hospitals were owned primarily by the physicians who practiced in them.
- 1890s: Patients went to hospitals because they had no choice. More cohesiveness developed among providers because they had to rely on each other for referrals and access to hospitals, which gave them more professional power.
- 1920s: The development of medical technological advances increased the quality of medical training and specialization and the economic development of the United States. The establishment of hospitals became the symbol of the institutionalization of health care. In 1929, President Coolidge signed the Narcotic Control Act, which provided funding for the construction of hospitals for patients with drug addictions.
- 1930s–1940s: Once physician-owned hospitals were now owned by church groups, larger facilities, and local, state, and federal government.
- 1970–1980: The first Patient Bill of Rights was introduced to protect healthcare consumer representation in hospital care. In 1974, the National Health Planning and Resources Development Act required states to have certificate of need (CON) laws to qualify for federal funding.
- 1980–1990: According to the American Hospital Association (AHA), 87% of hospitals were offering ambulatory surgery. In 1985, the Emergency Medical Treatment and Active Labor Act (EMTALA) was enacted, which required hospitals to screen and stabilize individuals coming into emergency rooms, regardless of the consumers' ability to pay.
- 1990–2000s: As a result of the Balanced Budget Act cuts of 1997, the federal government authorized an outpatient Medicare reimbursement system.
- 1996: The medical specialty of hospitalists, who provide care once a patient is hospitalized, was created.
- 2002: The Joint Commission on the Accreditation of Healthcare Organizations (now The Joint Commission) issued standards to increase consumer awareness by requiring hospitals to inform patients if their healthcare results were not consistent with typical results.
- 2002: The CMS partnered with the Agency for Healthcare Research and Quality (AHRQ) to develop and test the HCAHPS (Hospital Consumer Assessment of Healthcare, Providers and Systems Survey). Also known as the CAHPS survey, the HCAHPS is a 32-item survey for measuring patients' perception of their hospital experience.
- 2007: The Institute for Health Improvement launched the Triple Aim, which focuses on three goals: improving patient satisfaction, reducing health costs, and improving public health.
- 2011: In 1974, a federal law was passed that required all states to have CON laws to ensure the state approved any capital expenditures associated with the construction and expansion of hospitals and medical facilities. The act was repealed in 1987, but as of 2014, 35 states still have some type of CON mechanism.
- 2011: The ACA created the Centers for Medicare and Medicaid Services' Innovation Center for the purpose of testing "innovative payment and service delivery models to reduce program expenditures ... while preserving or enhancing the quality of care" for those individuals who receive Medicare, Medicaid, or Children's Health Insurance Program (CHIP) benefits.
- 2015: The Centers for Medicare and Medicaid Services posted its final rule that reduces Medicare payments to hospitals that have exceeded readmission limits of Medicare patients within 30 days.
- 2017: The American Hospital Association and its members have developed a Hospitals Against Violence initiative that targets youth and workplace violence, and human trafficking.

TABLE 1-4 Milestones in Public Health, 1700–2015

- 1700–1800: The United States was experiencing strong industrial growth. Long work hours in unsanitary conditions resulted in massive disease outbreaks. U.S. public health practices targeted reducing **epidemics** or large patterns of disease in a population. Some of the first public health departments were established in urban areas as a result of these epidemics.
- 1800–1900: Three very important events occurred. In 1842, Britain's Edwin Chadwick produced the Report on the Sanitary Conditions of the Labouring Population of Great Britain, which is considered one of the most important documents of public health. This report stimulated a similar U.S. survey. In 1854, Britain's John Snow performed an analysis that determined contaminated water in London was the cause of a cholera epidemic. This discovery established a link between the environment and disease. In 1850, Lemuel Shattuck, based on Chadwick's report and Snow's activities, developed a state public health law that became the foundation for public health activities.
- 1900–1950: In 1920, Charles Winslow defined public health as a focus of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts.
- During this period, most states had public health departments that focused on sanitary inspections, disease control, and health education. Throughout the years, **public health functions** included child immunization programs, health screenings in schools, community health services, substance abuse programs, and sexually transmitted disease control.
- In 1923, a vaccine for diphtheria and whooping cough was developed. In 1928, Alexander Fleming discovered penicillin. In 1946, the **National Mental Health Act (NMHA)** provided funding for research, prevention, and treatment of mental illness.
- 1950–1980: In 1950, cigarette smoke was identified as a cause of lung cancer.
- In 1952, Dr. Jonas Salk developed the polio vaccine.
- The **Poison Prevention Packaging Act of 1970** was enacted to prevent children from accidentally ingesting substances. Childproof caps were developed for use on all medications. In 1980, the eradication of smallpox was announced.
- 1980–1990: The first recognized cases of AIDS occurred in the United States in the early 1980s.
- 1988: The IOM Report defined *public health* as organized community efforts to address the public interest in health by applying scientific and technical knowledge and to promote health. The first Healthy People Report (1987) was published and recommended it as a national prevention strategy.
- 1990–2000: In 1997, Oregon voters approved a referendum that allowed physicians to assist terminally ill, mentally competent patients to commit suicide. From 1998 to 2006, 292 patients exercised their rights under the law.
- 2000s: The second Healthy People Report was published in 2000. The terrorist attack on the United States on September 11, 2001 impacted and expanded the role of public health. The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 provided grants to hospitals and public health organizations to prepare for bioterrorism as a result of September 11, 2001.
- 2010: The ACA was passed. Its major goal was to improve the nation's public health level. The third Healthy People Report was published.
- 2015: There has been a nationwide increase of children who have not received vaccines due to parents' beliefs that vaccines unsafe. As a result, there have been measles outbreaks throughout the nation even though measles was considered eradicated decades ago.
- 2017: The Center for Disease Control and Prevention received \$475 million for opioid overdose prevention to support state efforts.

Milestones of Medicine and Medical Education

The early practice of medicine did not require a major course of study, training, board examinations, and

licensing, as is required today. During this period, anyone who had the inclination to set up a physician practice could do so; oftentimes, clergy were also medical providers, as were tradesmen, such as barbers. The red and white striped poles outside barber

TABLE 1-5 Milestones of the U.S. Health Insurance System, 1800–2015

- 1800–1900: Insurance was purchased by individuals in the same way one would purchase car insurance. In 1847, the Massachusetts Health Insurance Co. of Boston was the first insurer to issue “sickness insurance.” In 1853, a French mutual aid society established a prepaid hospital care plan in San Francisco, California. This plan resembles the modern health maintenance organization (HMO).
- 1900–1920: In 1913, the International Ladies Garment Workers began the first union-provided medical services. The National Convention of Insurance Commissioners drafted the first model for regulation of the health insurance industry.
- 1920s: The blueprint for health insurance was established in 1929 when J. F. Kimball began a hospital insurance plan for schoolteachers at Baylor University Hospital in Texas. This initiative became the model for Blue Cross plans nationally. The Blue Cross plans were nonprofit and covered only hospital charges so as not to infringe on private physicians’ income.
- 1930s: There were discussions regarding the development of a national health insurance program. However, the AMA opposed the move (Raffel & Raffel, 1994). With the Depression and U.S. participation in World War II, funding required for this type of program was not available. In 1935, President Roosevelt signed the **Social Security Act (SSA)**, which created “old age insurance” to help those of retirement age. In 1936, Vassar College, in New York, was the first college to establish a medical insurance group policy for students.
- 1940s–1950s: The War Labor Board froze wages, forcing employers to offer health insurance to attract potential employees. In 1947, the Blue Cross Commission was established to create a national network of doctors. By 1950, 57% of the population had hospital insurance.
- 1965: President Johnson signed the Medicare and Medicaid programs into law.
- 1970s–1980s: President Nixon signed the HMO Act, which was the predecessor of managed care. In 1982, Medicare proposed paying for hospice or end-of-life care. In 1982, diagnosis-related groups (DRGs) and prospective-payment guidelines were developed to control insurance reimbursement costs. In 1985, the Consolidated Omnibus Budget Reconciliation Act (COBRA) required employers to offer partially subsidized health coverage to terminated employees.
- 1990–2000: President Clinton’s Health Security Act proposed a universal healthcare coverage plan, which was never passed. In 1993, the **Family Medical Leave Act (FMLA)** was enacted, which allowed employees up to 12 weeks of unpaid leave because of family illness. In 1996, the Health Insurance Portability and Accountability Act (HIPAA) was enacted, making it easier to carry health insurance when changing employment. It also increased the confidentiality of patient information. In 1997, the Balanced Budget Act (BBA) was enacted to control the growth of Medicare spending. It also established the State Children’s Health Insurance Program (SCHIP).
- 2000: The SCHIP, now known as the Children’s Health Insurance Program (CHIP), was implemented.
- 2000: The Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act provided some relief from the BBA by providing across-the-board program increases.
- 2003: The Medicare Prescription Drug, Improvement, and Modernization Act was passed, which created Medicare Part D prescription plans for the elderly.
- 2006: Massachusetts mandated that all state residents have health insurance by 2009.
- 2009: President Obama signed the **American Recovery and Reinvestment Act (ARRA)**, which protected health coverage for the unemployed by providing a 65% subsidy for COBRA coverage to make the premiums more affordable.
- 2010: The ACA was signed into law, making it illegal for insurance companies to rescind insurance on their sick beneficiaries. Consumers can also appeal coverage claim denials by the insurance companies.

- 2013: As of October 1, 2013, individuals could buy qualified health benefits plans from the Health Insurance Marketplaces. If an employer does not offer insurance, effective 2015, consumers can purchase it from the federal Health Insurance Marketplace. The federal government provided states with funding to expand their Medicaid programs to increase preventive services.
- 2015: The CMS posted its final rule that reduces Medicare payments to hospitals that readmit Medicare patients within 30 days after discharge. This rule is an attempt to focus hospital initiatives on quality care.
- 2018: On November 1, 2018, CMS finalized its rule for the 2019 Physician Fee Schedule and the Quality Payment Program, which will promote access to telemedicine services.
- In 2018, a federal judge ruled that the ACA's individual mandate to purchase health insurance is unconstitutional.

shops represented blood and bandages because the barbers were often also surgeons. They used the same blades to cut hair and perform surgery (Starr, 1982). Because there were no restrictions, competition was intense. In most cases, physicians did not possess any technical expertise; they relied mainly on common sense to make diagnoses (Stevens, 1971). During this period, there was no health insurance, so consumers decided when they would visit a physician and paid for their visits out of their own pockets. Often, physicians treated their patients in the patients' homes. During the late 1800s, the medical profession became more cohesive as more technically advanced services were delivered to patients. The establishment of the **American Medical Association (AMA)** in 1847 as a professional membership organization for physicians was a driving force for the concept of private practice in medicine. The AMA was also responsible for standardizing medical education. In working with the American Medical Association of Colleges, medical schools are developing curricula that focuses on managing patient pain management issues (AMA, 2019a; Goodman & Musgrave, 1992).

In the early history of medical education, physicians gradually established large numbers of medical schools because they were inexpensive to operate, increased their prestige, and enhanced their income. Medical schools only required four or more physicians, a classroom, some discussion rooms, and legal authority to confer degrees. Physicians received the students' tuitions directly and operated the school from this influx of money. Many physicians would affiliate with established colleges to confer degrees. Because there were no entry restrictions, as more students entered medical schools, the existing internship program with physicians was dissolved and the Doctor of Medicine (MD) became the standard (Vault Career Intelligence, 2019). Although there were major issues with the quality of education provided because

of the lack of educational requirements, medical school education became the gold standard for practicing medicine (Sultz & Young, 2006). In 1910, the publication of the **Flexner Report**, which evaluated medical schools in Canada and the United States, was responsible for forcing medical schools to develop curricula and admission testing. These standards are still in existence today.

When the Medicare and Medicaid programs were enacted in 1965, Congress recognized that the federal government needed to support medical education, which resulted in ongoing federal funding to teaching hospitals to maintain medical resident programs. The responsibilities of teaching now included clinical duties. During the 1970s–1990s, patient care dollars exceeded research funding as the largest source of medical school support. Academic medical centers would be reimbursed without question by third-party payers. However, with the advent of managed care in the 1990s, reimbursement restrictions were implemented (Rich et al., 2002). With the passage of the ACA, which increased the need for primary care providers, more medical schools are focusing on primary care curriculum initiatives (AAMAC, 2016). The AMA has been collaborating with medical schools nationwide to advance medical school curricula by creating innovative courses that include technology, a discussion of health reform, healthcare systems thinking and ways to address patient pain management (AMA, 2019c).

► Milestones of Medicine and Nursing Education

According to *A Timeline of Nursing Education* (2016), formal nursing education is approximately 150 years old. In the mid-1800s, physicians trained women to perform menial tasks for them. Because nurses held a

low position in society, most of the sick were cared for by family members. However, in 1854, Florence Nightingale, the mother of Nursing, a British nurse, established the Nightingale Principles, which was the foundation for nursing education. In 1860, the Nightingale Training School for Nurses was started in England and became known as the reason modern nursing exists today. During the Civil War (1861) and World Wars I and II, thousands of nurses provided critical care, which encouraged the development of more nursing education programs. In 1873, based on the Nightingale Principles, three nursing programs were established in Massachusetts, New York, and Connecticut hospitals. There continued to be recommendations that nursing education should be college based.

By 1900, there were 400 hospital-based nursing programs. Unfortunately, there was no standardization of the programs. Finally, in 1909, a college-based nursing program was established in Minnesota, which awarded the first baccalaureate program. The 1923 Goldman Report and the 1948 Brown Report indicated the need for standardization of nursing programs and their placement in a university setting. This is similar to the Flexner Report recommendations for medical school standardization for physicians. By 1960, there were 172 college-based nursing programs, which included both community college and 4-year programs. Currently, the associate degree in Nursing is typically offered by community colleges. Many of those students continue their education to receive a BSN degree to increase their career choices (Niles, 2019).

With the passage of the Nurse Practice Act of 1964, which allowed nurses to diagnose and prescribe medications, the role of nurses in society continued to elevate. However, there continued to be recommendations that nurses should be trained to receive a BSN. Studies from 2003 to 2008 indicated that patient outcomes were more positive when a BSN-trained nurse was involved in their care. These recommendations continue to be relevant in 2019. Many employers prefer BSN-trained nurses. The Nurses on Board Coalition was created in 2014 as a result of the IOM report that indicated more nurses should be leaders with pivotal decision-making opportunities. This Coalition assists in placing nurses in leadership positions (Nurses on Boards Coalition, 2019).

► Milestones of the Hospital System

In the early 19th century, **almshouses** or **poorhouses** were established to serve the indigent. They provided

shelter while treating illness. Government-operated **pesthouses** segregated people who might otherwise spread their diseases. The framework of these institutions set up the conception of the hospital. Initially, wealthy people did not want to go to hospitals because the conditions were deplorable and the providers were not skilled, so hospitals, which were first built in urban areas, were used by the poor. During this period, many of the hospitals were owned by the physicians who practiced in them (Rosen, 1983).

In the early 20th century, with the establishment of a more standardized medical education, hospitals became more accepted across socioeconomic classes and became the symbol of medicine. With the establishment of the AMA, which protected the interests of providers, the physicians' reputation increased. During the 1930s and 1940s, the ownership of the hospitals changed from physician owned to church related and government operated (Starr, 1982).

In 1973, the first **Patient Bill of Rights** was established to protect healthcare consumers in hospitals. In 1974, a federal law was passed that required all states to have **certificate of need (CON)** laws to ensure the state-approved capital expenditures associated with hospital and medical facility construction and expansion. The Act was repealed in 1987, but as of 2016, over 35 states still have some type of CON mechanism (National Conference of State Legislatures [NCSL], 2018). The concept of CON was important because it encouraged state planning to ensure their medical system was based on need. In 1985, the **Emergency Medical Treatment and Active Labor Act (EMTALA)** was enacted to ensure that consumers were not refused emergency treatment. During this period, inpatient hospital use was typical; however, by the 1980s, many hospitals were offering outpatient or ambulatory surgery that continues into the 21st century. The BBA of 1997 authorized outpatient Medicare reimbursement to support these cost-saving measures. **Hospitalists**, created in 1996, are providers who focus exclusively on the care of patients when they are hospitalized. Creation of this new type of provider recognized the need of providing quality hospital care (American Hospital Association [AHA], 2016; Sultz & Young, 2006). In 2002, the Joint Commission on the Accreditation of Healthcare Organizations (now **The Joint Commission**) issued standards to increase consumer awareness by requiring hospitals to inform patients if their outcomes were not consistent with typical results (AHA, 2013). The CMS partnered with the AHRQ to develop and test the HCAHPS (also known as the CAHPS survey). The HCAHPS is a 32-item survey for measuring patients' perception of their hospital experience. In May 2005, the National

Quality Forum (NQF), an organization established to standardize healthcare quality measurement and reporting, formally endorsed the CAHPS® Hospital Survey. The NQF endorsement represents the consensus of many healthcare providers, consumer groups, professional associations, purchasers, federal agencies, and research and quality organizations. Since 2008, it has been nationally recognized as a standardized measurement for hospital comparisons (HCAHPS Fact Sheet, 2018).

In 2007, the Institute for Health Improvement launched the **Triple Aim**, which focused on the three goals of patient satisfaction, improving public health, and reducing healthcare costs (American Hospital Association, 2015).

In 2011, the ACA created the Centers for Medicare and Medicaid (CMS) Innovation Center for the purpose of developing innovative care and payment models. Section 3025 of the ACA required the establishment of a Hospital Readmissions Reduction Program (HRRP). In 2015, the CMS also posted its final rule that reduces Medicare payments to hospitals that readmit Medicare patients within 30 days. This rule is an attempt to focus hospital initiatives on quality care (Rau, 2015). As a result of this rule, many hospitals are focusing on the concept of quality improvement processes and performance-driven planning to ensure that these readmissions do not occur. In addition to this quality performance program, effective 2019, the 21st Century Cures Act requires CMS to assess penalties on hospitals if their performance is not consistent with other hospitals that treat patients who are both Medicaid and Medicare eligible. In 2017, The American Hospital Association and its members have developed a Hospitals Against Violence initiative that targets youth and workplace violence, and human trafficking (AHA, 2019).

Hospitals are the foundation of our healthcare system. As our health insurance system evolved, the first type of health insurance was hospital insurance. As society's health needs increased, expansion of different medical facilities increased. There was more focus on ambulatory or outpatient services because first, we, as consumers, prefer outpatient services; and second, it is more cost effective. Although hospitals are still an integral part of our healthcare delivery system, the method of their delivery has changed. More hospitals have recognized the trend of outpatient services and have integrated those types of services in their delivery.

► Milestones of Public Health

The development of public health is noteworthy because the process was separate from the

development of private medical practices. Physicians were worried that government health departments could regulate how they practiced medicine, which could limit their income. Public health specialists also approached health from a collectivistic and preventive care viewpoint—to protect as many people as possible from health problems and to provide strategies to prevent health problems from occurring. Private practitioners held an individualistic viewpoint—citizens more often would be paying for physician services from their health insurance or from their own pockets and physicians would be providing them guidance on how to cure their diseases, not prevent them. The two contrasting viewpoints still exist today, but there have been efforts to coordinate and collaborate on additional traditional and public health activities.

From the 1700s to the 1800s, the concept of public health was born. In their reports, Edwin Chadwick, Dr. John Snow, and Lemuel Shattuck demonstrated a relationship between the environment and disease (Chadwick, 1842; Turnock, 1997). As a result of their work, public health laws were enacted and, by the 1900s, public health departments were focused on the environment and its relationship to disease outbreaks.

Disease control and health education were also integral components of public health departments. In 1916, the Johns Hopkins University, one of the most prestigious universities in the world, established the first public health school (Duke University Library, 2019). Winslow's definition of public health focuses on the prevention of disease, while the IOM defines public health as the organized community effort to protect the public by applying scientific knowledge (IOM, 1988; Winslow, 1920). These definitions are exemplified by the development of several vaccines for whooping cough, polio, smallpox, diphtheria, and the discovery of penicillin. All of these efforts focus on the protection of the public from disease.

The three most important public health achievements are (1) the recognition by the U.S. Surgeon General that tobacco use is a health hazard, (2) the development of many vaccines that have eradicated some diseases and controlled the number of childhood diseases that exist, and (3) the development of early detection programs for high blood pressure and heart attacks as well as smoking cessation programs, which have dramatically reduced the number of deaths in this country (Shi & Johnson, 2014).

Assessment, policy development, and assurance—core functions of public health—were developed based on the 1988 report, *The Future of Public Health*, which indicated that there was an attrition of public health activities in protecting the community (IOM, 1988). There were poor collaboration between public

health and private medicine, no strong mission statement, weak leadership, and politicized decision-making. **Assessment** was recommended because it focused on the systematic continuous data collection of health issues, which would ensure that public health agencies were vigilant in protecting the public (IOM, 1988; Turnock, 1997). **Policy development** should also include planning at all health levels, not just federally. Federal agencies should support local health planning (IOM, 1988). **Assurance** focuses on evaluating any processes that have been put in place to ensure that the programs are being implemented appropriately. These core functions will ensure that public health remains focused on the community, has programs in place that are effective, and has an evaluation process in place to ensure that the programs do work (Turnock, 1997).

The **Healthy People 2000** report, which started in 1987, was created to implement a new national prevention strategy with three goals: increase life expectancy, reduce health disparities, and increase access to preventive services. Also, three categories of health promotion, health prevention, and preventive services were identified, and surveillance activities were emphasized. *Healthy People 2000* provided a vision to reduce preventable disabilities and death. Target objectives were set to measure progress (CDC, 2019).

The **Healthy People 2010** report was released in 2000. The report contained a health promotion and disease prevention focus to identify preventable threats to public health and to set goals to reduce the threats. Nearly 500 objectives within 28 focus areas were developed. Focus areas ranged from access to care, food safety, education, and environmental health, to tobacco and substance abuse. An important component of *Healthy People 2010* is the development of an infrastructure to ensure public health services are provided. Infrastructure includes skilled labor, information technology, organizations, and research. In 2010, **Healthy People 2020** was released. It contains 1200 objectives that focus on 42 topic areas. According to the **Centers for Disease Control and Prevention (CDC)**, a smaller set of *Healthy People 2020* objectives, called leading health indicators (LHIs), have been targeted to communicate high-priority health issues. The goals are to attain high-quality, longer lives free of preventable disease, disability, injury, and premature death; achieve health equity, eliminate disparities, and improve the health of all groups; create social and physical environments that promote good health for all; and promote quality of life, healthy development, and healthy behaviors across all life stages. There are several new

topic areas, including dementias, blood disorders, and blood safety, health-related quality of life, sleep health, healthcare-associated infections, and lesbian, gay, bisexual, and transgender health. The CDC is currently planning for *Healthy Report 2030* (CDC, 2019; Healthy People Reports 2020, 2019). The goals for all of these reports are consistent with the definitions of public health in both Winslow's and the IOM's reports. It is important to mention the impact on the scope of public health responsibilities of the terrorist attack on the United States on September 11, 2001; the anthrax attacks; the outbreak of global diseases, such as severe acute respiratory syndrome (SARS); Ebola; the Zika virus; and the U.S. natural disaster of Hurricane Katrina. As a result of these major events, public health has expanded its area of responsibility. The terms "bioterrorism" and "disaster preparedness" have more frequently appeared in public health literature and have become part of strategic planning. The **Public Health Security and Bioterrorism Preparedness and Response Act of 2002** provided grants to hospitals and public health organizations to prepare for bioterrorism as a result of September 11, 2001 (CDC, 2019).

There have been measles outbreaks throughout the world even though measles was considered eradicated decades ago. In the United States, the number of measles cases has increased six-fold between 2017 and 2018, reaching nearly 800 cases, although the national measles vaccine rate is 90%. Although claims about health risks from vaccines have been unproven, there are parents who are reluctant to vaccinate their children. Therefore, more education is needed to increase the number of children who will receive a measles vaccine (Welch, 2019).

The opioid epidemic began in the 1990s when the pharmaceutical companies assured physicians these pain relief medications were not habit forming which naturally increased the number of prescriptions for these medications. In 2010, there was an increase in the illegal opioid, heroin use, because it was easier to obtain. Deaths from heroin use between 2002 and 2013 increased by 286%. Over 75% of heroin users also abused opioid prescriptions. In 2013, there was an increase in opioid deaths because of the increased use of fentanyl which is a synthetic heroin. The Centers for Disease Control and Prevention has issued guidelines on prescribing medications for chronic pain (History of the opioid epidemic, 2019).

Public health is challenged by its very success because the public now takes public health measures for granted: Several successful vaccines targeted almost all childhood diseases, tobacco use

has decreased significantly, accident prevention has increased, there are safer workplaces because of the Occupational Safety and Health Administration (OSHA), fluoride is added to the public water supply, and there is decreased mortality from heart attacks (Turnock, 1997). When major events like the Ebola crisis or *Escherichia coli* outbreaks occur or man-made events such as mass shootings or natural disasters happen, people immediately think that public health will automatically control these problems. The public may not realize how much effort, dedication, funding, and research are required to protect them.

► Milestones of the Health Insurance System

There are two key concepts in **group insurance**: “risk is transferred from the individual to the group and the group shares the cost of any covered losses incurred by its member” (Buchbinder & Shanks, 2007). Like life insurance or homeowner’s insurance, **health insurance** was developed to provide protection should a covered individual experience an event that requires health care. In 1847, a Boston insurance company offered sickness insurance to consumers (Starr, 1982).

During the 19th century, large employers, such as coal mining and railroad companies, offered medical services to their employees by providing company doctors. Fees were taken from their pay to cover the service. In 1913, the International Ladies Garment Workers union began providing health insurance, which was negotiated as part of the contract (Duke University Library, 2019). During this period, there were several proposals for a national health insurance program, but the efforts failed. The AMA was worried that any national health insurance would impact the financial security of its providers. The AMA persuaded the federal government to support private insurance efforts (Raffel & Raffel, 1994).

In 1929, a group hospital insurance plan was offered to teachers at a hospital in Texas. This became the foundation of the nonprofit Blue Cross plans. To placate the AMA, Blue Cross initially offered only hospital insurance in order to avoid infringement of physicians’ incomes (Blue Cross Blue Shield Association [BCBS], 2019; Starr, 1982). In 1935, the SSA was enacted; Social Security was considered “old age” insurance. During this period, there was continued discussion of a national health insurance program. But, because of the Depression and World War II,

there was no funding for this program. The federal government felt that the SSA was a sufficient program to protect consumers. These events were a catalyst for the development of a health insurance program that included private participation. Although a universal health coverage program was proposed during President Clinton’s administration in the 1990s, it was never passed. In 2009, there was a major public outcry at regional town hall meetings opposing any type of government universal healthcare coverage. In 2006, Massachusetts proposed mandatory health coverage for all residents, so it may be that universal health coverage would be a state-level initiative (Shi & Singh, 2019).

By the 1950s, nearly 60% of the population had hospital insurance (AHA, 2007). Disability insurance was attached to Social Security. In the 1960s, President Johnson signed into law **Medicare** and **Medicaid**, which assist elderly, disabled, and indigent individuals. President Nixon established the HMO, which focused on cost-effective measures for health delivery. Also, in the 1980s, DRGs and prospective payment guidelines were established to provide guidelines for treatment. These DRGs were attached to appropriate insurance reimbursement categories for treatment. The **Consolidated Omnibus Budget Reconciliation Act (COBRA)** was passed to provide health insurance protection if individuals change jobs. In 1993, FMLA was passed to protect an employee if there is a family illness. An employee can receive up to 12 weeks of unpaid leave and maintain his or her health insurance coverage during this period. The **Uniformed Services Employment and Reemployment Rights Act (USERRA)**, enacted in 1994, entitles individuals who leave for military service to return to their job. In 1996, the **Health Insurance Portability and Accountability Act (HIPAA)** was passed to provide stricter confidentiality regarding the health information of individuals. The BBA of 1997 required massive program reductions for Medicare and authorized Medicare reimbursement for outpatient services (CMS, 2018).

At the start of the 21st century, cost, access, and quality continue to be issues for U.S. health care. Employers continue to play an integral role in health insurance coverage. The largest public coverage program is Medicare, which covers 55 million people. In 2014, Medicare benefit payments totaled nearly \$600 billion (Facts on Medicare, 2015). The SCHIP, renamed CHIP, was implemented to ensure that children who are not Medicare eligible receive health care. The Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act provided some

relief from the BBA of 1997 by restoring some funding to these consumer programs. In 2003, a consumer law, the **Medicare Prescription Drug, Improvement, and Modernization Act**, created a major overhaul of the Medicare system (CMS, 2018). The Act created Medicare Part D, a prescription drug plan that became effective in 2006 and provides different prescription programs to the elderly, based on their prescription needs. In 2014, approximately \$6 billion in Medicare benefits was spent on Medicare Part D (Facts on Medicare, 2015). The Act also renamed the Medicare cost plans to Medicare Advantage, which is a type of managed care program. Medicare contracts with private health insurance programs to provide services. This program, called Medicare Part C, provides both Medicare Parts A and B benefits. In 2014, approximately \$24 billion in Medicare benefit dollars were spent on the Medicare Part C plan (Facts on Medicare, 2015). In 2008, the **National Defense Authorization Act** expanded FMLA to permit families of military service members to take a leave of absence if the spouse, parent, or child was called to active military service. The 2010 ACA required individuals to purchase health insurance by 2014. In June 2018, a federal judge ruled this mandate unconstitutional, so this ruling could have an impact on the ACA overall. Despite this ruling, individuals continue to sign up for insurance through the health marketplace programs. In 2018, approximately 11.8 million have enrolled in the marketplace exchange programs, with 27% categorized as new members (CMS, 2019a).

► Current System Operations

Government's Participation in Health Care

The U.S. government plays an important role in healthcare delivery. In the United States, three governmental levels participate in the healthcare system: federal, state, and local. The federal government provides a range of regulatory and funding mechanisms, including Medicare and Medicaid, established in 1965 as federally funded programs to provide health access to the elderly (65 years or older) and the poor, respectively. Over the years, these programs have expanded to include individuals with disabilities. They also have developed programs for military personnel and veterans and their dependents.

Federal law, specifically EMTALA, ensures access to emergency services regardless of ability to pay (Regenstein, Mead, & Lara, 2007). The federal

government determines a national healthcare budget, sets reimbursement rates, and also formulates standards for providers for eligible Medicare and Medicaid patients (Barton, 2003). The state level is responsible for regulatory and funding mechanisms but also provides healthcare programs as dictated by the federal government. The local or county level of government is responsible for implementing programs dictated by both the federal and the state levels.

The United States has several federal health regulatory agencies, including the **CDC** for public health, the **Food and Drug Administration (FDA)** for pharmaceutical controls, and the **Centers for Medicare & Medicaid Services (CMS)** for the indigent, disabled, and the elderly. The Joint Commission is a private organization that focuses on healthcare organizations' oversight, and the **Agency for Healthcare Research and Quality (AHRQ)** is the primary federal source for the quality delivery of health services. The **Center for Mental Health Services (CMHS)**, in partnership with state health departments, leads national efforts to assess mental health delivery services. Although the federal government is to be commended because of the many agencies that focus on major healthcare issues, with multiple organizations there is often duplication of effort and miscommunication that result in inefficiencies (SAMHSA, 2019). However, several regulations exist to protect patient rights. One of the first pieces of legislation was the **Sherman Antitrust Act of 1890** and ensuing legislation, which ensures fair competition in the marketplace for patients by prohibiting monopolies (Niles, 2019). Regulations such as HIPAA protect patient information; COBRA gives workers and families the right to continue healthcare coverage if they lose their job; the **Newborns' and Mothers' Health Protection Act (NMHPA)** of 1996 prevents health insurance companies from discharging a mother and child too early from the hospital; the **Women's Health and Cancer Rights Act (WHCRA)** of 1998 prevents discrimination against women who have cancer; the **Mental Health Parity Act (MHPA)** of 1996 and its 2008 amendment require health insurance companies to provide fair coverage for mental health conditions; the **Genetic Information Nondiscrimination Act of 2008** prohibits U.S. insurance companies and employers from discriminating based on genetic test results; the **Lilly Ledbetter Fair Pay Act of 2009** provides protection for unlawful employment practices related to compensation discrimination; and finally, the **ACA of 2010** focuses on increasing access to health care, improving the quality of healthcare delivery, and increasing

the number of individuals who have health insurance. All of these regulations are considered **social regulations** because they were enacted to protect the health-care consumer.

Private and Public Health Insurance Participation in Health Care

The majority of individuals in the United States have private insurance. In 2017, nearly 9% or 29 million did not have health insurance at some point during the year. In 2017, private health insurance, such as Blue Cross, covered 67.2% of individuals who had health insurance compared to 32.7% who had government coverage, such as Medicare or Medicaid. Employer-based coverage included 56% of the private health insurance coverage, followed by Medicaid (19.3%), Medicare (17.2%), individual purchase coverage (16%), and military coverage (4.8%) (Berchick, Hood, & Barnett, 2018).

The different providers are an integral part of the medical care system and need to coordinate their care with the layers of the U.S. government. In order to ensure access to health care, communication is vital between public and private components of healthcare delivery.

▶ Assessing Your Healthcare System Using the Iron Triangle

Many healthcare systems are evaluated using the **Iron Triangle of Health Care**—a concept that focuses on the balance of three factors: quality, cost, and accessibility to health care (**FIGURE 1-1**). This concept was created in 1994 by Dr. William Kissick (1994). If one factor is emphasized, such as cost reduction, it may create an inequality of quality and access because costs are being cut. Because lack of access is a problem

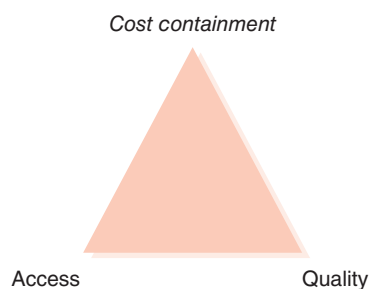


FIGURE 1-1 The Iron Triangle of Health Care

Reproduced from Kissick, W. (1994). *Medicine's dilemmas*. New Haven and New London, CT: Yale University Press. Reprinted by permission.

in the United States, healthcare systems may focus on increasing access, which could increase costs. In order to assess the success of a healthcare delivery, it is vital that consumers analyze the balance between cost, access, and quality. Are you receiving quality care from your provider? Do you have easy access to your healthcare system? Is it costly to receive health care? Although the Iron Triangle is used by many experts in analyzing large healthcare delivery systems, as a healthcare consumer, you can also evaluate your healthcare delivery system by using the Iron Triangle. An effective healthcare system should have a balance between the three components.

▶ Conclusion

Despite U.S. healthcare expenditures, disease rates in the United States remain higher than those of many other developed countries because the United States has an expensive system that is available to only those who can afford it (Regenstein, Mead, & Lara, 2007). A recent Gallup survey indicates that over 55% of Americans are greatly concerned about the availability of the rising cost of health care, which marks the fifth year in a row that this issue is ranked or tied first with concerns (Jones, 2018). Because the United States does not have universal health coverage, there are more health disparities across the nation. Persons living in poverty are more likely to be in poor health and less likely to use the healthcare system compared to those with incomes above the poverty line. If the United States offered universal health coverage, the per capita expenditures would be more evenly distributed and likely more effective. The major problem for the United States is that healthcare insurance is a major determinant of access to health care. Although there has been a decrease in the number of uninsured in the United States as a result of the individual mandate to purchase health insurance by the ACA, there is still limited access to routine health care. The infant mortality rate is often used to compare the health status of nations worldwide. Although our healthcare expenditures are very high, our infant mortality rates rank higher than those of many countries. Racial disparities in disease and death rates continue to be a concern. Both private and public participants in the U.S. health delivery system need to increase their collaboration to focus on health education aimed to reduce the prevalence of obesity, disease and health literacy. Leaders need to continue to assess our healthcare system using the Iron Triangle to ensure there is a balance between access, cost, and quality.

Wrap-Up

Vocabulary

Agency for Healthcare Research and Quality (AHRQ)	Graying of the population	Patient Bill of Rights
Almshouses	Gross domestic product (GDP)	Patient Protection and Affordable Care Act of 2010 (PPACA or ACA)
American Medical Association (AMA)	Group insurance	Pesthouses
American Recovery and Reinvestment Act (ARRA)	Health	Poison Prevention Packaging Act of 1970
Assessment	Health disparities	Policy development
Assurance	Health equity	Poorhouses
Center for Mental Health Services (CMHS)	Health insurance	Primary prevention
Centers for Disease Control and Prevention (CDC)	Health Insurance Portability and Accountability Act (HIPAA)	Public health
Centers for Medicare and Medicaid Services (CMS)	Health literacy	Public health functions
Certificate of need (CON)	Healthy People reports (2000, 2010, 2020)	Public Health Security and Bioterrorism Preparedness and Response Act of 2002
Consolidated Omnibus Budget Reconciliation Act (COBRA)	Hospitalists	Quaternary prevention
Constitutional factors	Iron Triangle of Health Care	Secondary prevention
Cost sharing	Joint Commission	Sherman Antitrust Act of 1890
Determinants of health	Lilly Ledbetter Fair Pay Act of 2009	Social and community networks
Emergency Medical Treatment and Active Labor Act (EMTALA)	Macroeconomic conditions	Social regulations
Employer health insurance	Medicaid	Social Security Act (SSA)
Epidemics	Medicare	Tertiary prevention
Family Medical Leave Act (FMLA)	Medicare Prescription Drug, Improvement, and Modernization Act	Triple Aim
Flexner Report	Mental Health Parity Act (MHPA)	Uniformed Services Employment and Reemployment Rights Act (USERRA)
Food and Drug Administration (FDA)	National Defense Authorization Act	Universal healthcare program
Genetic Information Nondiscrimination Act of 2008	National Mental Health Act (NMHA)	Voluntary health insurance
	Newborns' and Mothers' Health Protection Act (NMHPA)	Women's Health and Cancer Rights Act (WHCRA)
	Nurse	
	Out-of-pocket payments or expenses	

References

- A timeline of nursing education. (2016). Retrieved from <https://www.americansentinel.edu/blog/2016/09/06/a-timeline-of-nursing-education/>
- American Heritage Dictionary. (4th ed.). (2001). New York, NY: Bantam Dell.
- American Hospital Association. (2007). Community accountability and transparency: Helping hospitals better serve their communities. Retrieved from <http://www.aha.org/aha/content/2007/pdf/07accountability.pdf>
- American Hospital Association. (2015). Issue brief: Zeroing in on the triple aim. Retrieved from <https://www.aha.org/guidereports/2015-05-04-issue-brief-zeroing-triple-aim>
- American Hospital Association. (2019). Hospitals against violence. Retrieved from <https://www.aha.org/websites/2017-12-17-hospitals-against-violence-news>
- American Medical Association. (2019a). Our history. Retrieved from <http://www.ama-assn.org/ama/pub/about-ama/our-history.shtml>
- American Medical Association. (2019b). Reports of council on medical service. Retrieved from <http://www.ama-assn.org/ama1/pub/upload/mm/38/i05cmspdf.pdf>
- American Medical Association. (2019c). AMA advances initiative to create medical school of the future. Retrieved from <https://www.ama-assn.org/press-center/press-releases/ama-advances-initiative-create-medical-school-future>

- Barton, P. (2003). *Understanding the U.S. health services system*. Chicago, IL: Health Administration Press.
- Berchick, E., Hood, E., & Barnett, J. (2018). Health insurance coverage in the United States: 2017. Retrieved from <https://www.census.gov/content/dam/Census/library/publications/2018/demo/p60-264.pdf>
- Bird, J. (2013). CMS releases hospital price ranges of 100 most common treatments. Retrieved from <http://www.fiercehealthfinance.com/story/cms-releases-hospital-price-comparison-data/2013-05-08>
- Blue Cross Blue Shield Association. (2018). Blue beginnings. Retrieved from <http://www.bcbs.com/about/history/blue-beginnings.html>
- Buchbinder, S., & Shanks, N. (2007). *Introduction to health care management*. Sudbury, MA: Jones and Bartlett Publishers.
- Centers for Disease Control and Prevention. (2007). Skin cancer module: Practice exercises. Retrieved from <http://www.cdc.gov/excite/skincancer/mod13.htm>
- Centers for Disease Control and Prevention (CDC). (2019). Health expenditures. Retrieved from <https://www.cdc.gov/nchs/fastats/health-expenditures.htm>
- Centers for Medicare and Medicaid Services (CMS). (2018). HIPAA: General information. Retrieved from http://www.cms.hhs.gov/HIPAAgenInfo/01_Overview.asp
- CMS. (2019a). Health insurance exchanges 2018 open enrollment final report. Retrieved from <https://www.cms.gov/newsroom/fact-sheets/health-insurance-exchanges-2018-open-enrollment-period-final-report>
- Chadwick, E. (1842). *The sanitary conditions of the labouring class*. London: W. Clowes.
- Department of Health and Human Services. (2019). National action plan on health literacy. Retrieved from <https://health.gov/communication/initiatives/health-literacy-action-plan.asp>
- Determinants of health. (2019). Assess. Retrieved from <http://healthypeople.gov/2020/implement/assess.aspx>
- DHHS. (2019). Health literacy action plan. Retrieved from <https://www.healthypeople.gov/2020/tools-resources/evidence-based-resource/national-action-plan-improve-health-literacy>
- Duke University Library. (2019). Medicine and Madison Avenue.-Timeline. Retrieved from <http://library.duke.edu/digitalcollections/mma/timeline.html>
- Facts on Medicare spending and financing. (2015). Retrieved from <http://kff.org/search/?s=Facts+on+Medicare+spending+and+financing+>
- Goodman, J. C., & Musgrave, G. L. (1992). *Patient power: Solving America's health care crisis*. Washington, DC: CATO Institute.
- HCAHPS Fact Sheet. (2018). Retrieved from <http://www.hcahpsonline.org/Facts.aspx>
- Health literacy basics. (2019). Retrieved from <https://health.gov/communication/literacy/quickguide/factsbasic.htm>
- Healthy People Reports 2020. (2019). Topics & objectives. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives>
- History of the opioid epidemic. (2019). Retrieved from <https://www.poisson.org/articles/opioid-epidemic-history-and-prescribing-patterns-182>
- Institute of Medicine (IOM). (1997). *Improving health in the community*. Washington, DC: National Academies Press.
- IOM. (1988). *The future of public health* (pp. 1–5). Washington, DC: National Academies Press.
- Jones, J. (2018, March 26). U.S. concerns about healthcare, high energy, unemployment low. Retrieved from <https://news.gallup.com/poll/231533/concerns-healthcare-high-energy-unemployment-low.aspx>
- Keith, K. (2018). Two new federal surveys show stable uninsured rates. Retrieved from <https://www.healthaffairs.org/doi/10.1377/hblog20180913.896261/full/>
- Kissick, W. (1994). *Medicine's dilemmas*. New Haven and New London, CT: Yale University Press.
- Less is more medicine. (2019). Retrieved from <http://www.lessismoremedicine.com>
- National Conference of State Legislatures. (2018). Certificate of need: State health laws and programs. Retrieved from <http://www.ncsl.org/issues-research/health/con-certificate-of-need-state-laws.aspx>
- Niles, N. (2019). *Basic concepts of health care human resource management* (pp. 145–146). Burlington, MA: Jones & Bartlett Learning.
- Nurses on Boards Coalition. (2019). Retrieved from <https://www.nursesonboardscoalition.org/about/>
- Raffel, M. W., & Raffel, N. K. (1994). *The U.S. health system: Origins and functions* (4th ed.). Albany, NY: Delmar Publishers.
- Rau, J. (2015). 1,700 hospitals with quality bonuses from Medicare, but most will never collect. Retrieved from <http://khn.org/news/1700-hospitals-win-quality-bonuses-from-medicare-but-most-will-never-collect/>
- Regenstein, M., Mead, M., & Lara, A. (2007). The heart of the matter: The relationship between communities, cardiovascular services and racial and ethnic gaps in care. *Managed Care Interface*, 20, 22–28.
- Rich, E., Lebow, M., Srinivasan, M., Parish, D., Wollinscroft, J., Fein, O., & Blaser, R. (2002). Medicare financing of graduate medical education. *Journal of General Internal Medicine*, 17(4), 283–292.
- Rosen, G. (1983). *The structure of American medical practice 1875–1941*. Philadelphia, PA: University of Pennsylvania Press.
- Shi, L., & Johnson, J. (2014). *Novick and Morrow's Public health administration* (3rd ed., pp. 1–75). Sudbury, MA: Jones & Bartlett Learning.
- Shi, L., & Singh, D. (2019). *Essentials of the U.S. health care system* (5th ed., pp. 131–141). Burlington, MA: Jones & Bartlett Learning
- Shojania, K., & Woods, K. (2017). *British Medical Journal*, 26, 423–428. Retrieved from <http://qualitysafety.bmj.com/content/26/5/423>
- Society for Academic Medicine (SAEM) ethics committee. (1992). An ethical foundation for health care: An emergency medicine perspective. *Annals of Emergency Medicine*, 21(11), 1381–13817.
- Starr, P. (1982). *The social transformation of American medicine*. Cambridge, MA: Basic Books.
- Stevens, R. (1971). *American medicine and the public interest*. New Haven, CT: Yale University Press.
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2019). Center for Mental Health Services. Retrieved from <https://www.samhsa.gov/about-us/who-we-are/offices-centers/cmhs>
- Sultz, H., & Young, K. (2006). *Health care USA: Understanding its organization and delivery* (5th ed.). Sudbury, MA: Jones and Bartlett Publishers.

- Turnock, J. (1997). *Public health and how it works*. Gaithersburg, MD: Aspen Publishers, Inc.
- Vault Career Intelligence. (2019). Home page. Retrieved from <http://www.vault.com/wps/portal/usa>
- Welch, A. (2019). Alarming surge in measles cases in 98 countries, UNICEF says. Retrieved from <https://www.cbsnews.com/news/measles-alarming-surge-in-outbreaks-in-98-countries/?ftag=MSF0951a18>
- What is health? (2018). Retrieved from <http://www.countyhealthrankings.org/what-is-health>
- Winslow, C. E. A. (1920). *The untilled fields of public health* (pp. 30–35). New York, NY: Health Service, New York Chapter of the American Red Cross.
- World Health Organization. (1942). Retrieved from <http://www.who.int/about/definition/en/print.html>

► **Notes**

▶ Student Activity 1-1

In Your Own Words

Based on this chapter, please provide a definition of the following vocabulary words in your own words. DO NOT RECITE the text definition.

Group insurance:

Gross domestic product (GDP):

Pesthouses:

Voluntary health insurance:

Public health functions:

Primary prevention:

Secondary prevention:

Tertiary prevention:

Quaternary prevention:

▶ Student Activity 1-2

Complete the following case scenarios based on the information provided in the chapter. Your answer must be **IN YOUR OWN WORDS**.

Real-Life Applications: Case Scenario One

Your mother knows that you are taking classes for your healthcare management degree. She just returned from a physician checkup, and she was confused by the terminology they were using at the office. They mentioned several activities related to primary, secondary, tertiary, and quaternary prevention.

Activity

Define each of the terms and provide examples of these types of prevention.

Responses

[illegible]

Case Scenario Two

You have recently heard the term “health literacy,” and you are curious about how that applies to you as a consumer of health care.

Activity

Perform an Internet research regarding the concept of health literacy and how it applies to healthcare consumers. Provide examples to your classmates about how to be literate in health care.

Responses

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Case Scenario Three

One of your friends had a very serious medical emergency and had to go to the hospital for treatment. She was very upset because on her arrival at the hospital, she was asked to provide her insurance card, which she did not have, and she was quickly transferred to another hospital. You had learned there is a law that makes this type of treatment by a hospital illegal. However, before sharing your opinion with your friend, you wanted to learn more about this law and whether it applied to her situation.

Activity

Perform an Internet research on public health regulations and write a report on whether you think the Emergency Medical Treatment and Active Labor Act (EMTALA) was applicable in this situation.

Responses

Case Scenario Four

As a public health student, you are interested in different public health initiatives the CDC has put forth over the years and whether they have been successful. You continue to hear the term “Healthy People reports.” You are interested in the results of these reports.

Activity

Visit the CDC website and write a report on the Healthy People initiatives and whether or not you think they are successful initiatives.

Responses

[illegible]

▶ Student Activity 1-3

Internet Exercises

Write your answers in the space provided.

- Visit each of the websites listed here.
- Name the organization.
- Locate their mission statement or statement of purpose on their website.
- Provide an overview of the organization's activities.
- How do these organizations participate in the U.S. healthcare system?

Websites

<http://www.ama-assn.org>

Organization Name:

Mission Statement:

Overview of Activities:

Importance of Organization to U.S. Health Care:

<http://www.cdc.gov>

Organization Name:

Mission Statement:

Overview of Activities:

Importance of Organization to U.S. Health Care:

<http://www.cms.hhs.gov>

Organization Name:

Mission Statement:

Overview of Activities:

Importance of Organization to U.S. Health Care:

<http://www.hhs.gov>

Organization Name:

Mission Statement:

Overview of Activities:
