

Purple Solutions

*A Bipartisan Roadmap to
Better Healthcare in America*

Coauthored and edited by
Daniel Sem

Contents

Acknowledgments ix

Disclaimer xi

Introduction xiii

SECTION 1

Where Are We Now? The Good and the Bad

- 1 Why Healthcare in America Is More Expensive Than It Needs to Be 3
Daniel Sem
- 2 Technological Innovation and the Supply Side of Healthcare 33
Robert Graboyes

SECTION 2

Empowering Patients, Providers, and Payers: Consumerization, Transparency, and Competition in Healthcare

- 3 Created (Un)equal: Legislating Quality in Healthcare 47
Greg Watchmaker, MD
- 4 Do We Want a *Medical-Industrial Complex* or a *Healthcare Delivery System* That Empowers Patients? 61
Katie Nemitz and Daniel Sem
- 5 Consolidation in Healthcare: A Case Report on the U.S. Medical-Industrial Complex 83
Barbara L. McAneny, MD
- 6 Direct Care: Empowering Patients 109
David Balat, Stephen Pickett, and Elizabeth O'Connor
- 7 Reforming Healthcare Licensure for the Twenty-First Century 118
Murray S. Feldstein, MD
- 8 Purchasing Healthcare as a Consumer: When Does It Make Sense, and How Do I Know If I'm Getting a Better Deal? 131
Eric Haberichter
- 9 Lessons from the Grassroots for National Healthcare Reform 147
John Torinus
- 10 A Retail Revolution: Consumerizing Healthcare in America's Drugstores 154
Daniel Sem
- 11 Purple Solutions to Decrease Healthcare Costs and Increase Patient Empowerment 165
Daniel Sem

SECTION 3**Drug Prices**

- 12 Should Drugs Ever Be Expensive? Drug Discovery and Development, Pricing, and Market Forces 177
Catherine Bodnar and Daniel Sem
- 13 Problems in the Pharmaceutical Supply Chain: From Pharma to PBM to Pharmacy— Who Is to Blame, and Where Is the Money Going? 191
Daniel Sem
- 14 Pitfalls of Price Transparency in Healthcare—Especially for Pharmaceuticals 201
Robert Graboyes
- 15 The Orphan Drug Act: A 30-Year Perspective on Lifesaving FDA Regulations 213
Anne Marie Finley
- 16 How Outdated FDA Overregulation Is Limiting Patient Access to the Next Generation of Treatments 219
Naomi Lopez-Bauman and Christina Sandefur
- 17 Purple Solutions for Controlling Drug Prices 229
Daniel Sem

SECTION 4**A Healthcare Safety Net**

- 18 America Already Offers Universal Healthcare, the Most Expensive Way Possible 247
Daniel Sem
- 19 The Economist Perspective on a Healthcare Safety Net 252
Tyler Watts
- 20 A Safety Net Health Insurance Proposal: Back to the Future With the Wisconsin Health Plan of 2005—a Review 266
Curt Gielow
- 21 Reforming America's Health Insurance System: YoungMedicare 295
David Riemer
- 22 Safety Net Alternatives for Providers and Employers 328
James J. Tarasovitch and Charles P. Stevens
- 23 Purple Solutions for the Needed Safety Net 343
Daniel Sem

References 351

About the Authors 387

Index 391

Introduction

I should tell you that I began writing this book while I was teaching in Shanghai, China, in mid-December of 2019, just as (unbeknownst to me) the coronavirus pandemic initiated. China, an autocratic society, dealt effectively with the epidemic; but as a society, the country has little freedom, suffers from human rights violations and, while capitalistic, is ironically also socialist. As I write this, the jury is still out as to whether the United States, a country that rightfully values freedom, liberty, and human dignity, will deal as efficiently with the pandemic. What we do know is that another Asian country, Singapore—whose healthcare system delivers quality care at 2.5% GDP versus the United States' 18%—set a shining example of success in controlling Covid-19 and is discussed in this book as an example of how creatively implemented market forces can be channeled toward positive ends. So is the better solution to effective healthcare socialism or market forces? What, if anything, can be learned from other countries, and what should be uniquely American? Well, if you are curious, please read on.

This book is about finding bipartisan, or *Purple* (i.e., red and blue) solutions to healthcare problems in the United States. It begins with the premise that the best healthcare reform—and likely the only viable healthcare reform, from a political perspective—will require Democrats and Republicans to roll up their sleeves and compromise to find the best path. Hard to imagine, I know. Our country seems irreparably polarized, as are most of us—even within our respective families.

I come from a family of five, and we all shared a father who was a staunch Republican—albeit not a fan of some of our current political theatrics. Ever since my father passed away in November of 2016, the five of us have gathered every November in Florida for family-bonding time and to remember Dad. This last November, after sharing my plans for this book, I discovered that we are as divided as any American family. About half of us generally vote on the Red side, and the other half on the Blue side. As the fifth child of a (loving) father with strong and sometimes polarizing political views, my role in life has evolved into being the peacemaker and the person looking for reasonable and compromise solutions. Such was the nature of our family discussion in Florida last November. I mostly listened as my siblings debated in sometimes heated ways the benefits of essentially single-payer

healthcare versus free markets. Where do I stand? I try to stand for reasonable compromise, for Purple solutions. While I confess I have somewhat libertarian leanings at times, in practice I end up voting pragmatically, almost as often for Democrats as Republicans. So, I suppose, I stand in the middle. In our polarized political world, that probably means I may be in the minority. Please hear me out.

I am certain that you—the reader—are equally familiar with this heated political debate about healthcare in America, and perhaps you have strong opinions. In writing this book, when I speak in the *first person* to “you” (*second person*), I am speaking directly to *you* as a healthcare consumer. I suspect that you may believe that our healthcare delivery system is broken, and that the cost is too high for what you get in terms of medical outcomes. You probably feel the increasing pain of paying more and more out of pocket for your healthcare, through high deductibles and co-pays, and you likely feel powerless to do anything about it. As a country, we spend \$3 trillion per year for healthcare, and per person we spend around \$10,000 per year (see chapter 1), with the total cost such that 20 cents of every dollar we earn in the economy is going to healthcare. This is more than any other developed country.

So, what is the solution? Those on the Red side of the political aisle may say “repeal and replace” the Affordable Care Act (also known as Obamacare) and let market forces sort things out, because only a free market can address all the moving pieces of the healthcare market and set prices to reasonable and accurate values. Advocates for a free market solution would silence skeptics by saying *the current system we have does not function like a free market yet and should be given a chance to truly compete*. Those on the Blue side of the aisle may say that the market is cold and heartless and does not apply to something like healthcare. So, they say, we need a simpler single-payer system paid for by the government, like Canada has. On one end of that spectrum is “Medicare for All,” fully government sponsored, which would expand what some view as an already-successful Medicare program. The more moderate camp on the Blue side may suggest we keep private insurance companies and private provider options while also expanding a form of Medicare. So, which side of the political aisle has the correct solution to America’s healthcare dilemma? Or is it possible the best solution(s) would be a compromise between both proposals, which I will call Purple solutions.

While our politicians are more polarized than ever before, I would like to believe that the average American citizen is more reasonable and

open-minded. Is that true? I'm not sure. We did elect our leaders, so perhaps we are also just as polarized? I hope not. Only *we*—as citizens, consumers, everyday folk—can drive the kind of change and compromise that is needed to create a healthcare system that actually works and reflects what is good about America. That is the purpose of this book. It is a call to action. Maybe even, in the words of John Torinus, a call for a grassroots healthcare revolution. It is a roadmap to assist American consumers as they search for and discuss intelligent and informed solutions to healthcare that are not all Red or all Blue but are more likely to be Purple solutions.

This brings me to the central thesis of this book. I truly do believe that each side of the political aisle brings some value to the healthcare reform debate. In fact, we need both sides to balance the other and offer solutions to the blind spots that each may have.

I believe we need some sort of competitive market to foster innovation and produce realistic pricing and value in what everyone agrees is an incredibly complex system of services. This is the topic of section 2 of this book, which is on the Red side of the discussion. I also believe we need some sort of safety net to protect the poor as well as all of us against catastrophic events, like an expensive cancer treatment, infusion therapy, or even costly end-of-life care. With regard to the latter, a majority of those in nursing homes end up on Medicaid, which can only happen when you reach poverty level (i.e., all your assets have been depleted by our healthcare system). That is not a good way to end one's life with dignity. This safety net discussion is the topic of section 4 of this book, which is on the Blue side of the debate. Section 1 of the book provides an introduction to the current state of healthcare in America, and section 3 provides an overview of high drug prices.

So where do we point an accusing finger for the creation of our dysfunctional healthcare system in America? It is likely true that for the most part those in government and those in the medical provider world sincerely want to help patients and provide quality, accessible healthcare. They likely have good intentions. But there are dysfunctional incentives in our system, and there are also those who are gaming the system for financial gain. Is it big government or big corporations at fault? Perhaps both. Too much concentrated power and decision-making in government or large corporations is equally bad. We need power and decision-making in the hands of patients and the providers (e.g., physicians, nurses) who directly help them and are on the frontlines of healthcare delivery. This book presents a case for Purple solutions that aim to empower the consumers of healthcare (the patients)

and the providers (physicians, nurses, and the like), rather than big government or big corporations, with the clear goal of providing more accessible, higher-quality, and more affordable healthcare. Unfortunately, there is no powerful lobby group for this goal.

Finally, what was the inspiration for this book and the source of information for it? It is a product of the *Rx Think Tank* (RxThinkTank.org). In full disclosure, a fraction of the profits from this book will go to support the activities of the Rx Think Tank, whose mission is “to increase Quality, Access, and Affordability of healthcare for all, in a patient-centered and consumer-driven healthcare delivery model.” The Rx Think Tank at Concordia University has held *Healthcare Economics Summits* for four years, hosting discussions with the brightest minds in healthcare policy, from physicians to hospital CEOs to healthcare delivery entrepreneurs to those in the pharmaceutical supply chain, to state and federal politicians. The content of this book is informed by those speakers, as well as discussions with the hundreds of Rx Think Tank members, attendees, and panelists who have participated in these summits over the years, along with research into the healthcare policy literature. While this book is largely my writing, based on research and insights from these many scholars and practitioners, there are also many guest-expert-authored chapters. For these chapters, I typically provide a preface that provides context, and there is a brief biography of each author at the end of the book. Many of these guest authors are of differing political views and might be opposed to what other authors have submitted and written; but the goal of this book is to provide a diversity of perspectives. I attempt to provide a common thread and coherence between, before, and after chapters. And at the end of each section, a roadmap for compromise—*Purple solutions*—is also presented, so that we can have better-informed, intelligent, and respectful conversations about healthcare in America.

You may wonder if I am qualified to write and edit a book on this topic? Probably no more than a lot of other people. I do have a PhD, MBA, and a JD degree, so you would think I might know a thing or two about law, regulations, pharmaceutical science, business, and healthcare. I even started several biotech companies, and now I serve as a dean and professor of business, with a passion for healthcare policy. But I am finding there is far more that I do not know than what I do. I learned this lesson especially when I decided to take on this project, asking, “What is wrong with healthcare in America, and how do we fix it?”

Healthcare administrators often say “healthcare is complicated,” then they go on to use complicated terminology only they understand, like ICD-10

codes, CPT codes, reimbursements, chargemasters, risk pools, capitation, value-based care, stop loss insurance, population health, EHRs, RVUs, and of course they reference the giant tome we call the Affordable Care Act, which few people have ever read. These administrators get paid big salaries to use these terms and to master their small siloed piece of this large healthcare system. No degrees helped me understand this healthcare system. I just talked to a lot of smart people working in the field, outside the field, and even some looking to disrupt and change the field. I have to confess that last group was the most fun. This book is an attempt to summarize the gems of those conversations as well as some relevant healthcare policy and medical-business literature.

When we are told that “healthcare is complicated,” we often throw up our hands and say, “I’m just glad someone else smart is handling this.” Please don’t do that. Healthcare is not so complicated that we can’t discuss how it all works at a high level and identify the problems. The last time somebody told me something was complicated, and they talked fast with a lot of confusing words and asked me to trust them, I found out they were embezzling money. Sometimes I wonder if healthcare is like that. This book is an attempt to explain healthcare in America, and I am certain it is not so complicated that you can’t understand it. Read this book cover to cover, or just use it as a reference and move between chapters depending on what interests you. I have tremendous respect for the intellect of Americans, even if our politicians do not speak to us as if we are intelligent. Let’s rise above their low expectations and characterization of us and push them to find effective bipartisan solutions to America’s broken healthcare system.

I am looking forward to my family discussions this next November, and then for all of us to vote our consciences for what we think makes the most sense for healthcare reform. I hope we elect politicians who can rise above the current political theatrics and dysfunction, with the courage to reach across the aisle to find ways to fix healthcare in America, using truly bipartisan Purple solutions that work.

SECTION 1

**Where Are We Now?
The Good and the Bad**

CHAPTER 1

Why Healthcare in America Is More Expensive Than It Needs to Be

DANIEL SEM

This chapter provides an introduction and a broad overview of the history of healthcare and insurance in America and how and why it is so expensive compared to other countries. The chapter is really a foundation for the rest of the book, which includes a wide range of guest authors who are experts and leaders in their fields and who go deeper into different aspects of the issues that I present in this chapter. Guest authors in subsequent chapters sometimes take differing views on the problems and solutions to healthcare cost and access problems, but that is the goal of this book—to explore a range of bipartisan, Purple solutions.

Who Pays for Healthcare in America?

Before addressing the cost of healthcare, we should consider first how we pay for healthcare in America because that affects the cost. Although *price* is probably the more accurate term because price is what you or some surrogate acting on your behalf pays, irrespective of what it actually costs. You might say that your employer, your insurance company, or the government pays for your healthcare, and then you contribute something in the form of a co-pay and deductible. You, of course, also pay insurance premiums. Well, actually, you are paying for all of it, either directly or indirectly. Right now, \$18 of every \$100 you earn at your job goes to healthcare, while in many other countries that have better health outcomes the amount is much less (typically half) per person. So, the real problem with healthcare in America is not who pays for it (you, your company, the government, or your insurance) but the actual cost. Ultimately, though, you are paying no matter what. If the cost keeps increasing without justification, you pay. As a result of inflated prices, which may or may not be the result of increased real costs, others who are part of what has been referred to as the Medical-Industrial Complex benefit (see chapters 4 and 5) (Relman, 1980). How did we get to this state of affairs, and why is it this way? To address this question, let us briefly review the history of healthcare delivery and insurance in America

over the last 100 years. After that, we will return to this topic of cost (and the price you must pay), which is the real and more significant problem.

The History and Role of Healthcare Insurance

The way we deliver and pay for healthcare in the United States has changed a lot over time. So has the cost. Going back only as far as 1960, we spent a modest 5% of gross domestic product (GDP), or \$146 per person on healthcare, versus 18% of GDP and \$10,739 per person now (Amadeo, 2020). How was this paid then and now? There was a time at the beginning of the twentieth century when people paid cash for healthcare and did not rely on insurance. So it all started with us paying for healthcare directly, and healthcare was not that expensive (less than 5% of GDP). I am not suggesting we should return to those days, but it is interesting to note and remind ourselves that *healthcare and access to healthcare is not the same as insurance*. News flash: You actually can get (typically lower cost) healthcare without using insurance! This is called *self-pay* or *direct pay* healthcare, and it is a growing trend among consumers who cannot afford high co-pays and deductibles, even with Affordable Care Act (ACA) plans (Parnell, 2014). As healthcare consumers, we typically assume that the only way to get healthcare is with insurance and that access to good healthcare is synonymous with access to good insurance. That, after all, is what the ACA is all about. It is about making sure that everyone has insurance, not necessarily about making sure everyone has access to good healthcare. But these are different concepts, even if you do not see that yet. Please bear with me on this, as a central thesis of this chapter is that how we *do* insurance, by letting surrogates act on our behalf, is at the root of why healthcare is so expensive in America.

What Is Insurance?

It seems simple enough—the insurance company, our surrogate—reimburses us for medical expenses. This is for everything from routine checkups to emergency room (ER) visits, to open-heart surgery to infusion therapy for cancer. But how does most insurance, outside of healthcare, work? Think of your car or home insurance. If you totaled your car or your home was destroyed in a fire, insurance pays to help you recover from these rare but catastrophic and financially devastating events. For more routine problems, like a dead battery or alternator in your car, or a broken water heater in your home, you pay for those directly with cash or credit. Healthcare insurance is not like that. It is not like insurance at all. We expect healthcare insurance to pay for everything, even routine doctor visits that would cost less than \$100 if we paid cash but will be billed at much higher prices if we

use insurance. But then why do we care as long as it is reimbursed, right? That is a problem that I will get to later, but for now suffice to say that the prices charged to insurance companies are highly inflated and do not likely reflect actual costs, so you do not ever want to pay those prices. And yet you typically probably do pay those inflated prices as you work toward hitting your deductible if you use insurance. On the positive side, though, you think that everything is largely free for you after that deductible. Many of us go on a healthcare spending spree at the end of the year after we have hit our deductibles—and why not? Of course, now that we have increasingly large deductibles and co-pays, we are actually starting to care and would like to avoid these large price tags for doctor and especially ER visits altogether. Interestingly and surprisingly, the co-pays or deductibles that we pay are typically larger than if we used a self-pay approach, but we do not do that because we believe that it is not possible to not use insurance and instead pay directly since we wrongly believe that all healthcare *must* be “purchased” using insurance. The point is, healthcare insurance is not insurance in the way we typically think of insurance, and we have become so accustomed to this idea that we as healthcare consumers are paralyzed in the absence of insurance, even when the most logical thing to do is to not use it. Unfortunately, the healthcare system is not currently set up to let us easily purchase without insurance, often forcing us to pay the inflated prices that providers charge insurance companies and not telling us, up front, what things would cost if we did want to pay cash. That is changing now. This phenomenon, and the potential solution of paying directly and only using insurance for expensive needs, is the central thesis of a 2013 book by David Goldhill entitled *Catastrophic Care*. Goldhill argues that we would be better off treating healthcare insurance like other forms of insurance and paying for routine healthcare needs using cash, perhaps from health savings accounts (HSAs) paid for by employers and others. This leverages market forces to control cost and makes the patient the real customer rather than some disinterested surrogate (government or insurance company). Goldhill is probably in large part correct, but I am getting ahead of myself. Back to the history of healthcare delivery and insurance in America.

The History of Healthcare Insurance

During World War II, President Franklin Delano Roosevelt (FDR) passed the Stabilization Act (1942) as part of his wartime effort to control inflation by freezing wages, salaries, and prices. To deal with a labor shortage, companies needed to find creative ways to attract employees, and since they could not offer increased wages or salaries, they offered benefits in the form

About the Authors

David Balat is the director of the Right on Healthcare initiative with the Texas Public Policy Foundation. He is a former congressional candidate in the 2nd congressional district in Texas and a seasoned hospital executive with more than 20 years of healthcare industry leadership and executive management experience, with special expertise in healthcare finance.

Catherine Bodnar was a research associate and is currently an MBA student at Concordia University and a medical student at Medical College of Wisconsin. She has interests at the interface of science, medicine, and business.

Murray S. Feldstein, MD, is currently a Visiting Fellow for Health Care Policy at the Goldwater Institute in Phoenix. Dr. Feldstein started his urology practice in Flagstaff, Arizona, in 1974 and practiced there until 2000. He then joined Mayo Clinic Arizona as a urologic consultant and engaged in clinical, educational, and research activities. Retiring in 2015 as an assistant professor of urology, he remains on the emeritus staff. Dr. Feldstein was also twice elected to the Flagstaff City Council and served as vice-mayor for two years.

Anne Marie Finley, MS, RAC, is a former policymaker with 25 years of experience at the Food and Drug Administration (FDA), the Department of Health and Human Services (HHS), and Congress. She served in the administration of President George H. W. Bush as special assistant for Legislative and Public Affairs in the Office of the Commissioner, U.S. FDA. More recently, she served as vice president of Government Relations and Public Policy at Celgene, and VP of Regulatory Policy at GE Healthcare. In 2014, she was named a top 50 Thought Leader in Orphan Drugs and Rare Diseases. Currently, she is president of Biotech Policy Group LLC, a healthcare government relations and regulatory policy consulting firm.

Curt Gielow holds an undergraduate degree in pharmacy, a graduate degree in healthcare administration from the Washington University School of Medicine, and an honorary doctorate from Concordia University in Ann Arbor, Michigan. He was the founding dean of the Concordia University School of Pharmacy and served 13 years in elected office as a local alderman, mayor, and Wisconsin State representative. A Republican, Gielow is the 2005 coauthor, with Representative Jon Richards (D), of the Wisconsin Health Plan, a bipartisan attempt to create a universal healthcare plan that failed consideration in the Wisconsin state legislature during his tenure.

Robert Graboyes is a senior research fellow and healthcare scholar at the Mercatus Center at George Mason University. Author of *Fortress and Frontier in American Health Care*, his work asks, “How can we make healthcare as innovative in the next 30 years as information technology was in the past 30?” Previously, he was the healthcare adviser for the National Federation of Independent Business, economics professor at the University of Richmond, and regional economist/director of education at the Federal Reserve Bank of Richmond.

Eric Haberichter is a serial healthtech entrepreneur with 25 years of medical imaging and health business experience, specializing in market-based healthcare solutions for providers, self-insured employers, and those looking for quality-assured, high-value alternatives. Haberichter is CEO and cofounder of Access HealthNet, which develops episodic case rates (i.e., procedural bundles) for employers, health plans, and providers. Previously, he cofounded Smart Choice MRI, which brought affordable and transparently priced MRIs, at less than \$700, to Wisconsin.

Naomi Lopez-Bauman is the director of healthcare policy at the Goldwater Institute. Previously, she served as the director of research and the director of health policy at the Illinois Policy Institute. Before that she worked as an entitlements policy analyst at the Cato Institute. She also served as special policy adviser to the state of Michigan’s Secchia Commission, which provided recommendations for state government reform. A frequent media guest and public speaker, Lopez-Bauman has authored hundreds of studies, opinion articles, and commentaries.

Barbara L. McAneny, MD, FASCO, MACP, is a board-certified medical oncologist/hematologist from Albuquerque, New Mexico. She draws on her personal experience from the oncology medical practice group she founded in 1987, and as managing partner, since 1999, of the New Mexico Cancer Center, which she built as the first physician-owned multidisciplinary cancer center in the state. She became the 173rd president of the American Medical Association in June 2018. *Modern Healthcare* ranked Dr. McAneny no. 5 on its list of most influential clinical executives for 2019.

Katie Nemitz is a doctoral student at Concordia University Wisconsin, and is passionate about healthcare, healthcare quality, and healthcare transformation. She started her career as a registered nurse and discovered that while patients were getting care, there were many opportunities to deliver both better care and a better patient experience, while keeping in mind that those providing the care need to be considered as well. After finishing her doctorate, she hopes to continue writing, researching, teaching, and working as a consultant to healthcare organizations trying to change the way they deliver healthcare.

Elizabeth O’Connor is originally from Long Island, New York. As an undergraduate, she attended Manhattan College, where she studied government, international studies, and economics. Following her undergraduate career, Elizabeth chose to attend the Bush School of Government and Public Service at Texas A&M University for a master of public service and administration. There, she focused

her studies on public policy analysis and public management in a state government context. While at the Bush School, she had the opportunity to spend a summer in Wales at the Wales Centre for Public Policy as a visiting fellow.

Stephen Pickett is a healthcare economist for the Right on Healthcare Initiative at the Texas Public Policy Foundation. Prior to joining the foundation in October 2019, Stephen worked in the health insurance industry. There, he primarily researched the relationship between different insurance products and healthcare utilization and outcomes, as well as alternative provider reimbursement strategies. His research during graduate school focused on the impacts of the Affordable Care Act's marketplaces on Texans and how providers change their behavior when alternative payment models are introduced. Stephen is a native Texan. He received his BBA in business fellows and mathematics in 2013 from Baylor University and his PhD and MA in economics in 2018 from Rice University.

David Riemer, JD, has worked closely with both Democrats and Republicans to create path-breaking public policy at the state level and influence national policy. A graduate of Harvard College and Harvard Law School, Riemer held administrative, legal, and policymaking positions with the mayor of Milwaukee, two governors of Wisconsin, and the late Senator Edward Kennedy's health subcommittee. He was the policy expert who worked with Curt Gielow to draft the bipartisan legislation presented in chapter 20, which would have created universal healthcare in Wisconsin. Active in politics as both an adviser and candidate, Riemer has focused for the last decade on advocacy and writing that aim to reshape the role of government in ensuring economic security, equal opportunity, and an effective market economy.

Christina Sandefur, JD, is the executive vice president of the Goldwater Institute. Sandefur develops policies and litigates cases advancing healthcare freedom, free enterprise, private property rights, free speech, and taxpayer rights. She is a co-drafter of the 41-state Right to Try initiative, now federal law, which protects terminally ill patients' right to try safe investigational treatments that have been prescribed by their physician but are not yet FDA approved for market. Sandefur is a frequent guest on national television and radio programs, has provided expert legal testimony to various legislative committees, and is a frequent speaker at conferences.

Daniel Sem, PhD, MBA, JD, received his PhD in biochemistry from the University of Wisconsin–Madison and his MBA and JD degrees from Marquette University. Currently, he is dean and professor of business, professor of pharmaceutical sciences, and director of technology transfer at Concordia University in Wisconsin. He also serves as director of the Rx Think Tank, focused on healthcare policy reform. Dr. Sem has 25 years of experience in healthcare innovation and 10 issued patents and has published over 60 papers. Previously, he cofounded four drug discovery and development companies (Triad, AviMed, Estrigenix, and Retham) and one social venture (Bridge to Cures). Triad was voted one of the top 10 biotech startups in the United States in 2001 by Drug Discovery Today, and licensed drug leads to Novartis. Dr. Sem's passion is leading healthcare

innovation and policy initiatives with the goal of achieving better healthcare outcomes for patients, whether through development of new medicines or new ways to deliver healthcare.

Charles P. Stevens, JD, is an employee benefits attorney and a partner in the Milwaukee, Wisconsin, office of the law firm of Michael Best & Friedrich, LLP. He represents employers and benefits plans in court and is an expert at fixing problems in healthcare benefits plans. He counsels on Affordable Care Act compliance and has litigated before the U.S. Court of Appeals. He was named a “Leader in the Field” by Chambers USA.

James J. Tarasovitch, CPA, is regional chief financial officer for the south market of Ascension Wisconsin. As one of the leading nonprofit and Catholic health systems in the United States, Ascension is committed to delivering compassionate, personalized care to all, with special attention to persons living in poverty and those most vulnerable. Before joining Ascension, Tarasovitch was the regional CFO for Mayo Clinic Health System Minnesota and the CFO for Bradford Regional Health System. He is also an adjunct faculty member at Concordia University Wisconsin.

John Torinus is former CEO and now chairman of Serigraph Inc., a manufacturing company with about 550 employees. The company and its coworkers spend about \$6 million per year on healthcare. He has written two books with a company perspective on healthcare reform and cost containment and how to provide better care: *The Grassroots Health Care Revolution* and *The Company That Saved Health Care*.

Greg Watchmaker, MD, is a graduate of Washington University School of Medicine and a practicing hand surgeon at the Milwaukee Hand Center. His outcomes research in carpal tunnel syndrome received the top editorial honors by the *Journal of Hand Surgery* in 2020 for the most impactful published work in the field of hand surgery. Though a practicing surgeon, Dr. Watchmaker started his education in the field of computer science, developing financial software for UW-Madison in the 1980s and later heading a team that developed medical software to map abnormal heart rhythms during open-heart surgery. He has developed applications used to facilitate quality reporting between hospitals and the federal government and, more recently, patient-facing web-based outcomes assessment tools.

Tyler Watts, PhD, is an assistant professor of economics at Ferris State University and an adjunct faculty member at Concordia University. Previously, he was an assistant professor of economics at Ball State University and a visiting assistant professor of economics at Grand Valley State University. Watts earned his PhD in economics at George Mason University in 2010 and a master of finance from Colorado State University–Global Campus in 2019. While at George Mason, he was a Mercatus Center PhD Fellow. His research has appeared in the *Eastern Economic Journal*, *Independent Review*, *Review of Austrian Economics*, and *Journal of Private Enterprise*.

Index

Page numbers followed by *f* or *t* indicate a figure or table

- academic medical centers and research, 105
Access HealthNet, 19
accountable care organizations (ACOs):
 bundled payments, EMRs, and, 97–98;
 Chicago-area hospitals, 249; comparison
 with COME HOME project, 91, 97–98;
 creation of, 53–54; description, 97–98;
 Medical-Industrial Complex and, 98;
 medical paternalism and, 59; participa-
 tion requirements, 53–54; risk factors,
 97–98. *See also* Next Generation
 Accountable Care Organization
 (NGACO) model
Act for the Relief of Sick and Disabled Seamen,
 An, 47–48
Actimmune, exorbitant cost of, 178
acute myocardial infarction, 49
Adams, John, 47–48
administrators of healthcare: “administrative
 waste” data, 54; CMS and, 55; commu-
 nity hospital expenses for, 53; complex
 roles of, 48, 52–53; complicated
 terminology of, xvi–xvii; direct primary
 care and, 114; efforts made by reduce
 tasks and red tape, 37; Executive Order
 13813 and, 58–59; growth-rate of, 84, 84*f*,
 94, 101; and Hospital Readmissions
 Reduction Program, 49; need for
 transparency, 77; SCIP and, 52;
 technology-related decisions, 57; types
 of decisions made by, 12, 16
Affordable Care Act (ACA). *See* Patient
 Protection and Affordable Care Act
AIDS, 184
Akashi Therapeutics, 217
Alexion, 215
AliveCor Kardia, medical device, 39
alternative medical practitioners, 119, 121,
 123, 289
alternative payment models (APMs), 69–70
Amazon: disruptive innovation by, 75,
 163–164; impact on consumers, 241;
 online grocery purchasing from, 240;
 “Pill Pack,” 163
ambulatory payment categories (CMS), 86
ambulatory surgery centers (ASCs), 103
American Association of Labor Legislation
 (AALL), 62–63
American Association of Patients and
 Providers, 8
American College of Emergency Physicians,
 247–248
American College of Physicians, 114
American College of Private Physicians, 26
American Federation of Labor, 63
American Hospital Association, 14
American Medical Association (AMA):
 Current Procedural Terminology (CPT)
 manual, 58; founding of, 119; opposition
 to CVS-Aetna merger, 95–96; origin and
 initial goal, 119–121; political successes,
 121; role in improving medical
 education, 120–121, 128; work with
 American Association of Labor
 Legislation, 63
American Patients First blueprint: as
 Blueish-Purple solution, 233; Trump’s
 proposal of, 186, 194, 197, 231–232
American Reinvestment and Recovery Act
 (ARRA, 2009), 56
American Society for Aesthetic Plastic
 Surgery, 20
AmerisourceBergen Corp., 196
Amgen, 215
amyotrophic lateral sclerosis (ALS), 219–220
Android phones, 164, 240
Annals of Internal Medicine (White House
 healthcare advisers), 53

- anticompetitive behavior: consolidation and, 14, 16, 78; FTC's role in limiting, 170; by hospitals, 12, 93; leakage and, 21; Medical-Industrial Complex and, 167–168; need for consumer revolution against, 32; and pharmaceutical supply chain, 196–197; at St. Luke's Health System, Saltzer physician practice, 80*t*; vertical, horizontal mergers and, 71, 157–158
- antisense oligonucleotide (ASO) therapy, 220
- antitrust laws: anticompetitive behavior by hospitals, 93; Denmark's oligopolistic market example, 202–203; FTC investigations, 81*t*; need for better enforcement, 78; potential violations, 71, 80*t*; 340B pricing scam, 90–93
- Apple Watch apps, 39
- Ascension, Catholic hospital system, 43
- Ascension SE Wisconsin Hospital-St. Joseph campus, 329–330
- Ascension Wisconsin, 329–330
- Association of American Physicians and Surgeons (AAPS), 8
- asynchronous consultations, 37
- ataxia-telangiectasia, 217
- Aurora (Wisconsin healthcare system), merger with Advocate (Illinois healthcare system), 70–71
- Australia: healthcare spending data, 14
- Average Sales Price (ASP), 102
- Azar, Alex, II, 6
- Badger Care, 267, 271, 273–274, 277, 290, 293–294
- bankruptcies: due to drug costs, 233; due to premiums, 61, 75–77, 83–84, 132–133, 267, 295, 313, 316, 333–334, 345
- Bellina, Matthew, 224–225, 2220
- Berkshire Hathaway
- Berwick, D. M., 312–313
- Biden, Joe, 28
- BIO (biotechnology trade organization), 192, 234–236
- biologics-based drugs, 195–196
- BioMarin, 215
- Biosimilar Action Plan, 232
- bipartisan cooperation, 33
- block grant system, 248, 332–333
- Blue Button 2.0 initiative, 60
- Blue Cross/Blue Shield (BCBS) plans, 89
- Boice, Nicole, 217–218
- bundled payments (price bundling), 19, 67–68, 68*f*, 97–98, 143–145, 148–149, 168
- Bureau of Health Insurance. *See* Centers for Medicare and Medicaid
- Bush, George W., 56; Executive Order 13335, 56
- Buttigieg, Pete, 15
- Calendar Test, 33, 36–37, 39, 41
- Canada: healthcare spending data, 14; individual prescription drug spending (2014), 229; insurance plans, 9–10; medical tourism industry, 30; price controls, purchasing drugs from, 231–233; single-payer system, xiv, 178
- cancer treatment, xv, 75, 171, 333
- Cannon, Michael, 263
- Capretta, J., 208
- Cardinal Health, Inc., 196
- Casalino, L. P., 54
- Castleman disease, 217
- Catastrophic Care* (Goldhill), 5
- catastrophic care insurance, 4–5, 8, 172, 257, 328, 333–334, 341, 343–346, 383–384
- Celgene, 215
- Cellscope, diagnostic device, 39
- Center for Drug Development (Tufts University), 215–216
- Center for Medicare and Medicaid Innovation (CMMI), 90–91
- Centers for Disease Control (CDC): Oncology Care Model, 91, 97–98; role in creating Surgical Care Improvement Program, 50
- Centers for Medicare and Medicaid (CMS): ambulatory payment categories, 86; CBO's killing of rebate rules, 194; creation of, 64; effort at taming spending growth, 48; implementation of Average Sales Price for drug purchases, 102; management of Department of Health and Human Services, 6; mandated patient quality outcomes, 66; MyHealthEData and Blue Button 2.0 initiatives, 60; price transparency and,

- 14, 23–24, 31; programs created by, 49;
 role in creating Surgical Care
 Improvement Program, 50; unintended
 regulations consequences, 49–50
- certificate of need (CON) requirements, 40
- chargemasters: creation/origin of, 134;
 described, 22; inflation of prices by, 8, 13,
 19; strategies for avoiding, 24–26
- charity care: ACA, preexisting conditions,
 and, 331; removing obstacles to, 42; 340B
 discount program and, 91–92
- chemotherapy, 86, 88–89, 91–93, 102, 222
- China: government-sponsored care, 29–30;
 onset of coronavirus pandemic, xiii;
 onset of free markets and capitalism in, 20
- chiropractic, 119, 121, 123, 289
- choice consumers, health care choice,
 131–146; cost-related issues, 131–132
- Christensen, Clay, 163
- chronic obstructive pulmonary disease
 (COPD), 49
- Ciaccia, Antonio, 193, 198–200, 239
- Cochrane, John, 36
- cold war arms race, 252–253
- COME HOME project, 91, 97–98
- commercial insurance, 63, 86, 87–88
- Commission on Cancer, 90
- Common Drug Review (CDR, Canada), 178
- CommonWealth Magazine*, 6–7
- communication standards, creation of, 57–58
- Company That Solved Healthcare, The*
 (Torinus), 17, 19
- competency-based medical provider
 licensure, 126–128
- compliance regulatory requirements,
 domains, 53–54
- Concierge Choice Physicians, 26
- concierge medicine. *See* direct pay (direct
 primary care) (DPC)
- Conditions of Participation rules (Medicare),
 48
- Congress: bipartisanship and, 33; drug costs
 and, 152–153; Federal Food, Drug, and
 Cosmetic Act passage, 221; hospital
 system reorganization, 48; Orphan Drug
 Act passage, 213; role in approving
 custom treatment for ALS, 220
- Congressional Budget Office (CBO), 194
- Consolidated Omnibus Budget
 Reconciliation Act (COBRA, 1985, 2019),
 88, 101
- consolidation in healthcare, 83–108;
 Executive Order 13813 and, 58–59;
 HMOs and, 7; hospitals, hospital costs,
 and, 13–14; impact on prices, 89–90;
 Medical-Industrial Complex and, 16,
 69–70, 77, 83–108; need for unraveling
 consolidation, 100–101; New Mexico
 Cancer Center, case study, 88–93; and
 pay-to-play, pay for performance
 programs, 52–54; vertical, in the
 pharmaceutical supply chain, 95–96;
 work stress and, 70
- Constitution (United States): Commerce
 Clause, 314; individual rights protec-
 tions, 227–228; justification of free
 markets, 232
- consultations, asynchronous, 37
- consumer-facing price transparency tool, 18f
- consumerization revolution: necessary
 components for success, 162–163; at
 Walgreens, 155–161; at Wal-mart, 161–162
- consumers. *See* patient-consumers
- cookie-cutter (industrialized) vs. personal-
 ized (concierge) care, 68–70
- co-pays, 3, 5, 13–16, 21–24, 87, 95–96, 98, 107,
 117, 152, 158, 161–162, 169–172
- coronavirus pandemic (2020), xiii, 14, 31, 118,
 156–157, 162, 219
- cosmetic procedures (direct primary care),
 116
- cost-sharing, employers and employees, 151
- cost-shifting: cost transparency and, 101–102;
 description, 15, 166; insurance
 companies and, 107; Medicare and,
 85–86; skimming, 316, 317; skimping,
 316, 317; sticking, 316, 317; 340B system
 and, 194; types of, 316–317; use of, by
 hospitals, 27, 103, 248
- costs of healthcare. *See* cost-sharing,
 employers and employees; cost-shifting;
 economics; patients-consumers,
 components of healthcare costs;
 payment to healthcare organizations;
 price bundling; price controls; price
 transparency

- Covid-19, coronavirus pandemic, xiii, 14, 17, 31, 118, 154, 156, 162, 219
- cross-state licensure for telemedicine, 128–129
- Current Procedural Terminology (CPT) manual (AMA), 58
- CVS (Caremark pharmacy chain): healthcare services at, 8, 17, 25–26, 155; merger with Aetna, 71–72, 95–96, 196; offer to buy lower margin pharmacies, 198–199; vertical consolidation and, 106; work with Ohio Medicaid, 198
- Danzon, P. M., 209
- Daraprim, exorbitant cost of, 178
- “Dark Side of Quality, The” (Sibert), 51
- decision-making: CMS and, 55; by government, 15, 59, 165–166; human skill and, 138; influence of Medicare, Medicaid on, 110; need for, by patient-consumers and providers, 15–16, 59; by patient-consumers, 15–16, 59, 156; by physicians, providers, 15–16, 59, 165–166; SCIP and, 52
- Declaration of Independence, 47
- Deegan Winters, Amanda, 161–162
- Democratic Party: sponsorship of the Affordable Care Act, 34; views on health insurance, xiv. *See also* Patient Protection and Affordable Care Act
- Denmark: oligopolistic market example, 202–203
- dental practitioners, 123–124; dental therapists, 123–125; direct dental care, 116–117; partnerships with large providers, 157
- Desai, S., 208
- diabetes: A1c test, outcome measure, 66; behavioral components, 47, 68–69; electronic patient tracking, 249; me-too drugs, 184f; specialized treatment needs for, 68; U.S. spending on, 99
- digitalization of medicine, 56
- DiMasi, J., 207
- direct and indirect remuneration (DIR) fees, 95
- direct dental care, 116–117
- direct pay (direct primary care) (DPC), 23–26, 28–31; access fees, 241; advantages of, 24, 68–69; attraction of, to physicians, 114–115; availability of low-cost options, 155; benefits to patients, 112–114; comparison with cookie-cutter (industrialized) solutions, 68–70; comparison with third-party payers, 112, 114–115; cosmetic procedures, eye surgery, 116; cost factors, 24, 72; description, 25, 40–41; health savings accounts and, 172, 264, 343–344, 349; high-deductible health plans and, 111–113; medication purchases, 239–240, 244; options in Canada, 10, 29; out of network options, 343–344; patient empowerment and, 167, 170–171; physician access, 78; price transparency and, 23, 113, 115, 116; related websites, resources, 23–26, 28–31; related websites and resources, 26; resources, 8, 26; role of patients in, 110–111; as supplemental option, 29–30; supplemental options, 29–30; trend growth, 4; types of, 115–117; U.S. practitioner data, 111
- direct pharmaceutical care, 116
- direct primary care. *See* direct pay (direct primary care) (DPC)
- DirectRX, n.s. (direct pharmaceutical company), 116
- direct surgical centers, 115–116
- DIR fees. *See* direct and indirect remuneration (DIR) fees
- disruptive innovation, 163–164
- Doctor on Demand, 38
- Dodd-Frank Wall Street Reform and Consumer Protection, 234
- Doyle, John, 234–235
- Draver syndrome, 217
- drug approval system: breakdown of, 220; FDA pathway, 220–223; orphan drugs, 214; Right to Try law and, 220–221
- drug costs, 177–190; alternative to price controls, 233–234; Average Sales Price (ASP) for purchases, 102; biologics-based drugs, 195–196; in Canada, 9; Congress, Trump administration, and, 152–153;

- consolidation and, 95, 106; co-pays, deductibles, and, 107; cost factors, 179–182, 186–190; decision-making in choosing, 156; demand factors, 182–185; EU drug price referencing, 186; exorbitant prices, 178; hindered access to lower-cost drugs, 96–97; in hospitals, 91; importing drugs from Canada, 231–233; incentives for favoring drugs, 152; justifiability of, 190; market distortions and branded drugs, 195–196; monopoly-based price gauging, 229; need for rationing, spending limits, 243–244; oligopolistic market characteristics, 202–203; orphan drugs and, 215–216; patient outrage over, 230; pharmacy benefit managers and, 94–98; price elasticity, 182, 182*f*; pricing, 185–189; purple solutions for controlling, 229–244; purple solutions for decreasing, 165–174; rare disease dilemma and, 230, 241–243; reimbursement rejections, 178; research and development spending, 106, 171, 179–181, 192–196, 200, 202; rising costs, 94–98, 177; role of patients in rising costs, 180; Sanders and Trump on, 177; supply chain to pharmacy considerations, 193; 340B program and, 91–93, 92; value-based pricing, 197–198, 234–236. *See also* pharmacy benefit managers
- drugstores (U.S.). *See* pharmacies
- Duchenne muscular dystrophy, 217
- economics: alternative payment models, 69–70; bundled payments (price bundling), 67–68, 68*f*; 97–98, 143–145, 148–149; costs, price transparency, markets, 13–26; cost-shifting by providers, 15, 23, 27, 85–86, 102–104, 107, 166–167, 194, 248, 316; dangers of complete governmental control, 129–130; economists description of prices, 255; of EHR software use, 57; evidence-based cost controls, 101–102, 122; fee-for-service reimbursement, 117; free market advocacy, xiv, 11, 19–20, 26–27, 30–31; Friedman on spending, 255–260, 256*f*; healthcare choices of consumers, 131–144; healthcare GDP data, 4, 35; of HMOs, 7; impact of consolidation on prices, 89–90; impact of embrace of initiatives by hospitals, physicians, 52–53; importing drugs from Canada, 231–233; International Price Index, 231–232; and Medical-Industrial Complex, 16, 166; need for cost transparency, 101–102; need for real prices, 20–22; opportunity costs of government programs, 253; payment to healthcare organizations, 67–68; price bundling, 23, 145; scarcity concept in, 252; spending incentives, 255–260; Stabilization Act and, 5–6; tacit collusion in price transparency, 202–206, 208–210; U.S. consumer spending on food data, 253–254; U.S., chronic disease management cost data, 99; value-based pricing, 197–198, 234–236
- Eisenhower, Dwight D.: concerns for costs of government spending, 252–253; opposition to socialized medicine, 64
- electronic health record (EHR) software: benefit of portability of, 162; interoperability requirements of, 74; medication-related “best practice alerts,” 69; requirements of, 55–57
- electronic medical records (EMRs), 12, 96; access by healthcare coordinators, 249–250; benefit of portability of, 162; coordination of care, employment, and, 98; Health Insurance Portability and Accountability Act and, 250; tracking of diabetes patients, 249; value-based care, ACOs, and, 97–98
- email consultations, 37
- Emanuel, E. J., 208
- Emergency Medical Treatment and Labor Act (EMTALA), 26–27, 247–248
- emergency rooms (ERs), 247–249
- emergency services, in hospitals, 102–103
- Employee Retirement Income Security Act (ERISA), 64

- employer-sponsored insurance plans:
 annual/lifetime limits issues, 339;
 chargemasters and, 134; cost-sharing
 with employees, 151; decoupling
 insurance from employment, 101; direct
 primary care and, 112–113; ERISA and,
 64; family-related deductible data, 8;
 health savings accounts and, 263;
 high-deductible plans, 7–8; impact of
 third-party payers, 110; links to
 healthcare insurance, 6, 63; pharmacy
 benefit managers and, 196; portability
 issues, 334; post-World War II onset, 63,
 87; premium cost concerns, 258; price
 transparency and, 13, 208; self-
 insurance, for employers, 150–151; state
 regulations, 64; strategies for controlling
 costs, 149–152; struggles of, 84; U.S., 2017
 spending distribution, 260f; wage
 stagnation and, 11; YoungMedicare and,
 314. *See also* Wisconsin 2005 Assembly
 Bill (AB) 1140
- Employer's Survey (Millman, 2019), 131–132
- Employment Retirement Income Security
 Act (ERISA), 64
- empowerment of consumers (patients),
 xv–xvi, 14, 17, 58–60
- EMTALA. *See* Emergency Medical Treatment
 and Labor Act
- England: drug reimbursement rejection,
 178
- Envoy Therapeutics, 217
- EpiPen, exorbitant cost of, 178
- European Medicines Agency (EMA), 187
- European Union: drug price referencing, 186;
 drug reimbursement rejection, 178;
 healthcare spending data, 14; insurance
 plans, 9
- evidence-based cost controls, 101–102, 122
- Executive Order 13335 (Bush), Incentives for
 the Use of Health Information
 Technology and Establishing the
 Position of the National Health
 Information Technology Coordinator, 56
- Executive Order 13771 (Trump), 54
- Exigence Neurosciences, 217
- Express Scripts, 196
- eye surgery (direct primary care), 116
- Federal Food, Drug, and Cosmetic Act (1938),
 221
- Federal Reserve, 236
- Federal Trade Commission (FTC): antitrust,
 past mergers lawsuits, 81f; blocking of
 mergers, 71; need for oversight by, 167;
 “Price Transparency or TMI?” blog
 entry, 207; role in limiting anticompeti-
 tive behavior, 170
- fee-for-service reimbursement, 117
- fetal medicine specialists, 38
- financial incentives, 55–56, 59, 73, 249, 333,
 335
- Finkelstein, A., 50
- Flexner, Abraham, 120–122
- Flexner report, 120–122
- Food and Drug Administrations (FDA):
 aging regulatory bureaucracy, 221–223;
 consequences of outdated overregula-
 tion, 219–228; drug approval regula-
 tions, 205; human clinical trials
 compliance, 191; intervention in
 value-based pricing, 236; orphan drug
 approvals, 214; pathway for drug
 approval, 220–223; Patient-Focused
 Drug Development initiative, 217
- food industry spending data (U.S., 2019),
 253–254
- Forbes, Steve, 20
- free market advocacy, xiv, 11, 19–20, 26–27,
 30–31
- free market economics, xiv, 11
- Friedman, Milton, 170, 255–260, 256f
- Garthwaite, C., 206
- GDP (gross domestic product) data, 4, 35
- Genentech, 215
- Genzyme, 215
- geographic price cost indicators (GPCIs,
 Medicare), 86
- Germany: healthcare spending data, 14;
 insurance plans, 10; supplementary plan
 options, 29
- Gielow, Curt. *See* Wisconsin 2005 Assembly
 Bill (AB) 1140
- Global Genes, 217–218
- Goldhill, David, 5, 208
- Goldwater Institute, 224

- good intent, 13, 47–50, 52, 119
- Goodman, John, 265
- Gorke, J., 208
- government/government regulations: as
 alternative to price controls, 233–234;
 combined with self-regulation of the
 pharmaceutical industry, 236–238;
 consolidation trend, 70; decision-making
 and, 15; economic impact of, 67; Health
 Insurance Portability and Accountability
 Act, 32; implications to the healthcare
 industry, 73–74; limitations of, 68, 70;
 opportunity costs of, 253; organizational
 strategies for solvency, 74; Purple
 Solution requirements for, 170–171;
 purpose of, 165–166; reimbursement
 driven market and, 16–17; role in
 establishing Patient Bill of Rights, 60,
 168–169, 171; sponsorship of National
 YoungMedicare Corporation, 314–315
- government-regulated, reimbursement
 driven market, 16–17
- Grabowski, H. G., 207
- Grassroots Healthcare Revolution, The*
 (Torinus), 17–18
- Great Recession (2008), 234
- Greenwood, Jim, 235
- Haberichter, Eric, 19
- Hackbarth, A. D., 312–313
- Hansen, R., 207
- Haven, 163
- Hayek, Friedrich, 26–27, 251f, 346
- Hayutin, Marc, 225
- Heal app, 158
- Healthcare Bluebook, software app, 23–24, 25f
- healthcare charities, private, 259
- healthcare costs: bundled pricing options, 19,
 168; consumer-facing price transparency
 tool, 18f; consumer price-shopping,
 23–24; contributing factors, 13–14;
 estimates of U.S. waste in spending, 311f;
 free market advocacy, xiv, 11, 19–20,
 26–27, 30–31; global comparisons, 14;
 government-regulated, reimbursement
 driven market, 16–17; high-deductible
 plans, 8, 13, 19, 23, 25, 109, 156, 171, 343,
 349; need for real prices, 20–22; price
 bundling, 23, 145; transparent market-
 driven vs. reimbursement-driven
 markets, 17; transparent pricing, 17–20;
 U.S., 2017, spending data, 13–16
- healthcare data “bill of rights,” 60, 168–169, 171
- Healthcare Economics Summits (Concordia
 University), xvi, 155–156, 193, 197–198
- Healthcare Effectiveness Data and
 Information Set (HEDIS), 320–321,
 323–325
- healthcare insurance: comparison shopping
 for services, 137–139; costs/price
 transparency/markets, 13–26; coupling
 with employment, 63; decoupling
 employment from, 101; employer-
 sponsored plans, 8, 16, 154, 260f, 314, 339;
 free market advocates and, 11–12; history
 and role of, 4–10; incentive issues, U.S.,
 11–13; insurance, defined, 4–5; in Japan,
 9; premium-related bankruptcies, 61,
 75–77, 83–84, 132–133, 267, 295, 313, 316,
 333–334, 345; third-party complications
 of, 257–258. *See also* HMOs; Medicaid;
 Medicare; private healthcare insurance;
 TRICARE
- healthcare licensure, 118–130
- healthcare navigators: description, 19;
 empowerment of consumers, 24; growth
 of, 239; need for, 147–148; role in guiding
 healthcare decision-making, 16, 76,
 239–240
- healthcare providers: anticompetitive tools
 used by, 12; bundling payment method,
 143–145; chargemaster rates and, 22;
 CMS regulations and, 49; concierge
 medicine and, 111–116; consolidation of,
 7; demand vs. supply-side reforms, 34;
 electronic health records and, 162;
 expanding scope of practice for, 123;
 financial risks for, 53; healthcare
 licensure and, 119, 123–129; impact of
 third-party payers, 110; in-network, 21,
 140, 142; insurance companies and, 94;
 insurance companies contract with,
 138–139; limited choices for, 6;
 “meaningful use” adoption for
 incentives, 56; Medical-Industrial
 Complex and, 61, 64–79, 166; Medicare/

- healthcare (*continued*)
 Medicaid negotiated contracts with, 11–12; out-of-network, 22, 72, 140, 301; out-of-network providers, 22, 72, 140, 301; price transparency and, 26, 31; primary care providers, 109–114, 122–123, 167, 171, 250; recommended supply-side innovations, 41–42; referral leakage, 21; safety net alternatives for, 328–342; software used by, 58; supply and demand laws, 122–123; in Switzerland, the Netherlands, 9; telemedicine and, 38, 158
- healthcare safety net. *See* safety net (healthcare safety net)
- healthcare system: bundled payments, 67–68, 68*f*, 97–98; efforts at avoiding leakage, 21; Relman's article on consolidation, 7; role of CMS leadership, 55
- healthcare system (United States): CMS mandated patient quality outcomes, 66; compliance regulatory requirements, domains, 53–54; consolidation, 83–108; co-pays/deductibles, 5; current model, 65–67; current U.S. challenges, 330–333; demand vs. supply-side reforms, 34–35; dysfunctional nature of, xv, 33; economic factors, 3–4; functions of hospitals, 102–105; future directions, 75–78; global performance rankings data, 62; healthcare wastes data, 35; historical background, 62–65; historical overview, 3–32; horizontal and vertical integration, 70–72; importance of payment options, 34; laws of supply and demand, 122–123; meeting regulations and staying solvent, 74; as mix of competitive, oligopolistic markets, 203; 100 year evolution of, 61; payment to organizations, 67–68; population health subset focus, 66–67; Purple Solution requirements for, 170–171; regulation requirements, 54–5554; strategies for getting past related tropes, 35–36; U.S. citizens' desire requirements of, 74–75
- Health Insurance Portability and Accountability Act (HIPAA), 32, 58, 250
- Health Insurance Purchasing Accounts, 274, 276, 279–282, 306–307, 315, 318
- health savings accounts (HSAs), 5, 11, 266, 270, 273, 275, 285; description, 263–265; direct pay (primary care) healthcare and, 172, 264, 343–344, 349; role of health navigators, 240; as solution for out-of-pocket expenses, 172–173, 238–239; use in Singapore, 10; for “voucherizing” the healthcare safety net, 263
- HealthTech, 249
- Healthy Competition* (Cannon and Tanner), 263–264
- heart failure, 41, 49–50, 57
- HEDIS. *See* Healthcare Effectiveness Data and Information Set
- herbalists, 119
- hereditary hemorrhagic telangiectasia, 217
- Hermstad, Alex and Jaci, 219–220
- high-deductible health plans (HDHPs), 8, 13, 19, 23, 25, 109, 111–113, 156, 171, 343, 349
- HIPAA. *See* Health Insurance Portability and Accountability Act
- hip replacement, 67–68
- hip replacement surgery, 67–68
- HMO Act (U.S., 1973), 6, 64
- HMOs (health maintenance organizations): creation of, 64; economic factors, 7; up and down popularity of, 6–7
- homeopaths, 119, 121
- Hoover Institution, Stanford University, 36
- horizontal integration, within the healthcare industry, 70–72
- Hospital Insurance Trust Fund, 85
- Hospital Outpatient Prospective Payment System (HOPPS), Medicare Part B, 85
- hospitals: admissions and revenue growth strategy, 88; anticompetitive behavior by, 12, 93; centralized care for rare and specialized functions, 103; compliance regulatory requirements, 53–54; consumer cost variables, 136–137; EHR use and, 57; emergency departments (EDs), 103; emergency services in, 102–103; EMTALA and, 249; functions of, 102–105; implication of Medicare quality initiatives, 51–52; Institutional Review

- Boards, 223; insulin-related federal guidelines, 51–52; managing multisystem disease patients, 104–105; readmission rates, 49–50, 57, 139; safety nets and, 328–332, 336, 339–342; surgeries, operating rooms (ORs), 103–104
- Hospitals Readmission Reduction Program (HRRP), 49
- Hunger Task Force, 329–330
- hybrid healthcare system: Biden's and Buttigieg's recommendation for, 28; logic for having one, 31; need for, 10; public and private options, 173–174, 333–334
- IBM Watson computer, 39
- Incentives for the Use of Health Information Technology and Establishing the Position of the National Health Information Technology Coordinator (Executive Order 13335, Bush), 56
- India: government-sponsored care, 29–30
- individualized (personalized) medicine, 31–32, 219, 221, 226–228
- industrialized (cookie-cutter) solutions, 68–70
- infant mortality, 35–36, 38, 297
- information technology, 31, 35, 37–38, 56–57
- in-network providers, 21, 140, 142
- innovations in supply-side reforms: direct primary care (DPC) business model, 40–41; elimination of certificate of need (CON) requirements, 40; intelligent machines, 39–40; medical drones, 40; nonphysician practitioners, 41; removing obstacles to charity care, 42; solving of Narayana riddles, 42–43; training of military spouses, 42; use of telemedicine, 37–39; welcoming of international medical graduates, 41–42
- Institute of Medicine (IOM), 35
- Institutional Review Boards (IRBs), 223
- insulin: exorbitant cost of, 178; NightScout and, 39–40; related federal hospital guidelines, 51–52
- insurance, defined, 4–5
- integration, horizontal and vertical, within the healthcare system, 70–72
- Intellimedix, 217
- International Classification of Disease (ICD), 58
- International Price Index, 231–232
- International Standards Organization (ISO), 236
- iPhones, 164, 240
- Japan: healthcare insurance in, 9; healthcare spending data, 14
- Jenkins, J., 208
- Johnson, Lyndon B., 6, 64
- Johnson & Johnson, 215
- joint replacement surgery, 67–68
- Journal of Thoracic and Cardiovascular Surgery*, 52
- JPMorgan
- Kefauver-Harris Drug Amendments (Federal Food, Drug and Cosmetic Act), 221
- King, Steve, 220
- knee replacement surgery, 67–68
- Landrum, Carroll, 42
- LASIK eye surgery, 116
- legislation, 47–60; bipartisan cooperation and, 33; good intentions in, 47–48; increasing costs and inefficiency, 47. *See also* specific legislation
- Lewin Group, 266–269
- licensure healthcare licensure: background information, 118; Calendar test and, 41; competency-based, 126–128; efforts to add more providers, 119–; expanding scope of practice regulations, 123–124; Flexner report and, 120–122; historical background, 119–122; individual state medical licensure, 125; need for reforms, 119; need for telemedicine cross-state licensure, 128–129; role of the government, 129; state-based innovations, 129; telemedicine constraints, 38–39
- Lyme disease, 132–133
- Lysogene, 217
- May, Theresa, 332
- McKesson Corporation, 196
- McLinn, Jordan, 224
- MDSave, 8
- MDVIP, 26

- Meaningful Use program, 74
- Medicaid: ACA expansion of, 65; benefits of expansion, 34; creation of, 6, 48, 64; growth of, 75; impact of consolidation, 84; influence on decision-making, 110; Meaningful Use program, 74; prenegotiation of contracts, 11–12; spending data, 13–15; state-level limited, fixed budgets, 248–249; as third-party payer, 110; under-reimbursements, 20
- medical drones, 40
- Medical Home Network, 249–250
- Medical-Industrial Complex (MIC), 3, 7; anticompetitive behavior by, 167–168; case report on consolidation in healthcare, 83–108; creation/growth of, 7, 88, 94–105, 166–167; description, 75; healthcare delivery system, patient empowerment, and, 61–82; healthcare navigators role in consumer decision-making, 147–148; increasing economic, political power of, 166; independent practice alternative, 93; need for moving away from, 98; vs. personal care, specialized practitioners, 76–77; resistance to change, 163; role in healthcare decision-making, 16; value-based care and, 97; vertical and horizontal integration, 96–97
- Medical Licensing Exam (U.S.), 125
- medical paternalism, 59
- medical tourism, 30, 30*f*
- Medicare: age limitations of, 65; benefit problem, 300–302; conversion factors for payments, 102; cost-control problem, 302–304; cost-shifting, 15; coverage determination, 48; creation of, 6, 48, 64, 85; geographic price cost indicators (GPCIs), 86; hospital readmission rates, 49–50, 57, 139; implications of quality initiatives, 51–52; influence on decision-making, 110; Merit-Based Incentive Payment System, 74; payment problem, 304–305; post-2001 cumulative updates, 87*f*; prenegotiation of contracts, 11–12; relative value units (RVUs), 12; rules/organizations created by, 48; site of service differential, 86, 88, 101–102; spending data, 13–15; as third-party payer, 110; under-reimbursements, 20
- Medicare, Part A (hospital insurance), 6, 85
- Medicare, Part B (medical insurance), 6, 85
- Medicare, Part D (prescription drugs), 6
- Medicare Access and CHIP Reauthorization Act (MACRA), 48
- Medicare Advantage program, 91, 232
- Medicare for All, 295; Buttigieg’s proposal for, 15, 28; complaints about, 34; description, xiv; economic feasibility concerns, 28; integration with YoungMedicare, 306; medicine coverage and, 189; need for a safety net, 28; possibilities and consequences, 347–348; reasons for and against, 299–305; role in 2020 presidential election, 331; Sanders proposal for, 15; variants of, 27–28. *See also* YoungMedicare
- “Medicare for All,” xiv
- Medicare for All Who Want It proposal (Buttigieg), 28
- Medicare Physician Group Practice (PGP) project, 53
- Medicare Prescription Drug Improvement and Modernization Act (U.S., 2003), 6
- Medicare Stars program, 73–74
- Medicare Sustainable Growth Rate, 86
- Medigap insurance, 85, 260*f*
- mergers within the healthcare industry: past and possible antitrust, 80*t*; physicians with larger organizations, 69–71; 2020 data, 79*t*; vertical vs. horizontal integration, 70–72
- Merit-Based Incentive Payment System (MIPS), 74
- methicillin-resistant *Staphylococcus aureus* (MRSA), 183
- Mexico: government-sponsored care, 29–30
- MHN Connect software, 249
- military spouses, training of, 42
- MJRLE (major joint replacement of the lower extremity), 68*f*
- Mongiello, Frank, 224
- monopoly-based price gauging, 229
- mortality rates, 41, 49–50, 57

- Mother Teresa, 43
 Musgrave, F. W., 207–208
 Myalept, exorbitant cost of, 178
 MyHealthEData initiative, 60
- Narayana riddles, 42–43
 National Average Drug Acquisition Cost (NADAC), 199
 National Bureau of Economic Research, 7
 National Center for Advancing Translational Sciences (NCATS), 215; support for orphan drugs, 215
 National Committee for Quality Assurance (NCQA)-certified Community Oncology Medical Home, 90–91
 National Health Service (United Kingdom), 185, 332
 National Institutes of Health (NIH), 215
 National Organization for Rare Disorders (NORD), 216
 National Young Medicare Corporation (NYMC), 314–315
 Navitas Health Solution, 193, 238
 Netherlands: private insurance in, 9
 New Mexico Cancer Center, case study, 88–93
 Next Generation Accountable Care Organization (NGACO) model, 54–55
 NightScout, diagnostic device, 39–40
 Nixon, Richard, 6
 “n-of-1” treatment (single person trial), 219–220
 nonphysician practitioners: expanding scope of practice for, 41
 Norway insurance plans, 9
 Novartis, 215
 nurse practitioners (NPs), 37, 41, 122–124, 127–128, 141, 149, 161–163, 170, 211
- Oakley, Caitlin, 14
 Obamacare. *See* Affordable Care Act (ACA); Patient Protection and Affordable Care Act
 Obamacare (Affordable Care Act), xiv
 Office of the National Coordinator for Health Information Technology (ONC), 57
 Ohio Assembly’s Joint Medicaid Oversight Committee (2020), 199
- Ohio Bureau of Workers’ Compensation program, 200
 Ohio Pharmacists Association, 193, 198
 oligopoly of providers: characteristics in competitive markets, 202; characteristics in healthcare system, 207–208; description, 204–205; hospitals, 207; insurance, 208; medical professions, 207; pharmaceuticals, 207–208; transition from monopolies, 183; *White v. R. M. Packer Co., Inc.* court case, 206
 Oncology Care Model (CMS), 91, 97–98
 online prescriptions, 37
 on-site clinics, 149, 150, 154, 161, 165, 171
 optometrists, 119, 123–124, 211
 OptumRx (United Health), 196, 198, 200
 Orphan Drug Act (ODA, 1983): description, 213–214, 338–339; entrepreneurialism and, 217–218; patient advocacy and, 215, 216, 217–218; trade association opposition to, 215
 orphan drugs (for rare diseases): description, 192, 200; drug companies development of, 215; drug pricing and, 215–216; government regulations, laws, 216–217; market exclusivity of, 213–214; National Organization for Rare Disorders report, 216; patient advocacy for, 214, 216–218; post-1983 approval rates, 214; rare disease dilemma and, 230; research and development challenges, 215–216; 21st Century Cures Act and, 217
 osteopathy, 119, 121, 123
 out-of-pocket costs, 8, 18f, 30, 89, 103, 113, 132, 135, 140, 142, 155–156, 172, 186, 208, 257, 260f, 272
 over-the-counter drugs, 156
- Pacific Research Institute, 194
 Parks, Joshua, 186–187
 Patent and Trademark Office (PTO), 234, 236–238
 patents, for pharmaceuticals, 179–183, 190–192, 195, 200
 patient advocacy, for orphan drugs, 214, 216–218
 Patient Bill of Rights, 60, 168–169, 171

- patient-consumers: in Canada, 9; choice frustration of, 6; CMS mandated outcomes for, 66; comparison shopping for services, 137–139; components of healthcare costs, 135–136; components of shopping for coverage, 23–24, 136–137, 139–143; cost-sharing with employers, 151; decision-making by, 16; displeasure at wait times, prices, 16; empowerment of, xv–xvi, 14, 17, 58–60, 167–168, 201; free market advocates and, 11; health care choice, 131–146; healthcare navigators empowerment of, 24; hospital-related cost variables, 136–137, 136*t*; need for revolution against anticompetitive behavior, 32; Purple Solution requirements for, 170–171; resources for helping, 8; role in rising drug costs, 180; self-pay/direct pay healthcare, 4; in Singapore, 10; surprise billing of medical costs, 201, 212; transparency pricing and, 17–19
- Patient-Focused Drug Development (PFDD) initiative (FDA), 217
- Patient Protection and Affordable Care Act (2010), xiv, xvii, 7–8; *Annals of Internal Medicine* on reforms of, 53; “bronze” family plan cost, 132, 161; Calendar Test and, 36; charity care, preexisting conditions and, 331; encouragement of not-for-profit insurance companies, 101; expansion of Medicaid, 65; expensive treatment issues, 338–339; high deductible plans, 8; Hospitals Readmission Reduction Program, 49; impact of not rejecting preexisting conditions, 330–331; impact on premiums, 148; increased administrative complexities of, 53; post-ACA healthcare crisis scenario, 339–340; Republican repeal-and-replace proposals, 34; 340B program, 106, 194, 196–197, 238; Trump administration’s effort at repealing, 328–329
- Patient Right to Know Prices Act, 239
- Patient Right to Know the Lowest Price Act, 239
- patients-consumers, costs of healthcare: bankruptcies due to premiums, 61, 75–77, 83–84, 132–133, 267, 295, 313, 316, 333–334, 345; bundled payments (price bundling), 67–68, 68*f*, 97–98, 143–145, 148–149; chargemasters and, 134; components of shopping for coverage, 23–24, 136–137, 139–146; co-pays, 3, 5, 13–16, 21–24, 87, 95–96, 98, 107, 117, 152, 158, 161–162, 169–172; cost-related components, 135–136; cost-sharing with employers, 151; cost-shifting by providers, 15, 23, 27, 85–86, 102–104, 107, 166–167, 194, 248, 316; double digit inflation, late 1970s, early 1980s, 148; Employer’s Survey (Millman, 2019), 131–132; hospital-related variables, 136–137, 136*t*; issues related to, 131–132; medical care-related costs, 133; out-of-pocket costs, 8, 18*f*, 30, 89, 103, 113, 132, 135, 140, 142, 155–156, 172, 186, 208, 257, 260*f*, 272; price negotiations, 166; price transparency and, 137–138; reimbursement wars, 134–135; role of consumers, 135–136; surprise billing, 201, 212
- payment to healthcare organizations, 67–68; alternative payment models, 69–70; bundled payments, 67–68, 68*f*, 97–98; Medicare payments, 67; MJRLE bundled payments option, 68*f*; RVU-based financial incentives for, 73, 167, 335
- PBMs. *See* pharmacy benefit managers
- personalized (individualized) medicine, 31–32, 219, 221, 226–228
- Pfizer Pharmaceuticals, 183, 193, 215, 234–235
- “Pharma Bro” (Martin Shkreli), 178
- pharmaceutical companies: biologics-based drugs, 195–196; market distortions and branded drugs, 195–196; from pharmacy benefit managers to pharmacies, 198–200; research, drugs, prices, transparency, and, 105–107; supply chain to pharmacy cost considerations, 193–195; wholesalers and pharmacy benefit managers, 196–198
- Pharmaceutical Pricing Auditor (PPA), 236

- Pharmaceutical Research and Manufacturers of America (PhRMA), 192, 234
- pharmaceuticals, price transparency pitfalls, 201–212
- pharmaceutical supply chain, 191–200; anticompetitive behavior, 196; patents and, 179–183, 190–192, 195, 200; pricing arbitrage, 191, 200, 230, 238–239; research and development costs, 106, 171, 179–181, 192–196, 200, 202; vertical consolidation, 95–96
- pharmacies: direct pharmacies, 116; pharmacy benefit managers and, 95, 196, 198–200; retail pharmacies, 154–156, 163
- pharmacists, 37, 41, 95, 116, 123–124, 170, 180, 211, 232, 239, 244
- pharmacy benefit managers (PBMs), 94–98, 106; administration of prior authorization process, 95; DIR fees and, 95; drug costs and, 94–98; incentives for favoring drugs, 152; Medical-Industrial Complex and, 107; Navitas Health Solution as, 193; questionable need for, 96; role in consolidating with insurance companies, 106; role of, 95; Trump’s proposal to end rebates to, 238. *See also* CVS; Express Scripts; OptumRx; OptumRX
- Phelan-McDermid syndrome, 217
- PHIPA (private health insurance purchasing arrangement), 268, 270–273
- PhRMA. *See* Pharmaceutical Research and Manufacturers of America
- physical therapists, 123
- physician assistants (PAs), 37, 41, 122, 141, 149, 162, 211
- Physician Fee Schedule (PFS), 85–86, 89, 99, 102
- physicians: attraction to direct primary care, 114–115; Calendar Test and, 37; competence for licensure, 125–128; disgruntlement of, 6–7; embrace of quality initiatives, 52; financial incentives and, 55–56, 59, 73, 249, 333, 335; healthcare costs contributions, 13–14; outside-of-network referral limitations, 167; penalization for referring out, 12–13; real-time text services for, 49; reasons for merging with healthcare organizations, 69–71; referring out issues, 21; RVU-based financial incentives for, 73, 167, 335; telemedicine and, 31, 37–39; time spent on federal reporting requirements, 54. *See also* direct pay (direct primary care) (DPC)
- plastic surgery, 20, 116
- pneumonia, 41, 49, 104
- Pompe disease, 217
- Popovian, Robert, 193–194
- population health subset focus, 66–67
- preexisting conditions, 330–331, 334, 336, 338
- pregnant mothers, telemedicine and, 38
- Premier Private Physicians, 26
- price bundling, 23, 145
- price controls: alternatives to, 233–238; arbitrage, 238; bipartisan advocacy for, 186, 200, 238; current federal proposals, 239; government regulations as alternative to, 233–234; impact on lifesaving medicines, 181; impact on risk-taking, 190; limited Congressional passage of, 152, 194; need for rationing, spending limits, 243–244; purchasing from Canada and, 232–233; spread pricing, 190, 197, 199–200, 230, 238–239; supply chain waste, 230, 238
- PricePain, 8
- price transparency: benefits to sellers, 202; CMS rules on, 14, 17, 23; in competitive markets, 203; and consumer healthcare costs, 137–138; description, 137–139; development of consumer-facing tool, 18f; as direct primary care feature, 113, 115, 116; in drug supply chain, 192; Executive Order 13813 and, 58–59; federal mandating laws, 203; impact on high prices, 16, 26; impact on medical marketplace, 117; mandatory transparency, 202–204, 208–209, 212; oligopolistic market characteristics, 202; pharmaceutical industry lack of, 230; pitfalls in healthcare and pharmaceuticals, 201–212; regulatory capture and, 203, 209; tacit collusion and, 202–206, 208–210; voluntary transparency, 202–203; at Walgreens, 159f

- “Price Transparency or TMI?” blog entry (FTC), 207
- pricing arbitrage, in pharmaceutical supply chain, 191, 200, 230, 238–239
- private healthcare insurance, 6; Affordable Care Act and, 7–8; in Canada, 9, 28; catastrophic insurance plan and, 333; chagemasters and, 140; Democrat Party suggestions, xiv; HSA-based private insurance, 264; Medicare for All and, 16; in the Netherlands, 9; post-World War II onset, 6, 63; in Singapore, 10; supplemental option, 243; in Switzerland, 9, 29; in the United Kingdom, 29; U.S. 2017 spending data, 257, 260f; Wisconsin Health Plan and, 268, 348–349
- private health insurance purchasing arrangement (PHIPA), 268, 270–273
- Professional Standards Review Organizations (PSROs), 48
- ProHealth Care, 17, 18f, 25f
- psychologists, 38, 123, 211
- Publix, 164
- quality: CMS mandated patient outcomes, 66; embrace of initiatives by hospitals, physicians, 52–53; Medicare initiatives, 51–52; negative consequences of government management, 50–51; Sibert’s article on, 51
- Quality Improvement Organizations (QIOs), 48
- rare disease dilemma, 230, 241–243; bioethical considerations, 242–243; description, 230, 241–242; safety net considerations, 340–341
- Reagan, Ronald, 26–27, 247
- “Reducing Regulation and Controlling Regulatory Costs” (Executive Order 13771), 54
- reforms (healthcare system reforms): Calendar Test and, 33, 36–37, 39, 41; demand vs. supply-side, 34–35. *See also* reforms (healthcare system reforms)
- regulatory capture, 203, 209
- reimbursement wars, 134–135
- relationship-based care benefits, 150
- relative value units (RVUs): forward-looking alternative to, 77; as incentives for physicians, providers, 73, 167, 335; Medicare and, 12
- relative value units (RVUs)-based financial incentives, 73
- Relman, Arnold, 7
- REMICIDE (Infliximab), anti-arthritis drug, 195–196
- remote monitoring, 31, 37, 39
- Republican Party: ACA repeal-and-replace proposals, 34; view of Affordable Care Act, xiv
- research and development: American Patients First and, 231–232; drug costs spending, 106, 171, 179–181, 192–196, 200, 202; funding at private companies, 195; need for determining present spending, 106; patent-based monopolies and, 192; payback for investments in, 236; post-drug approval costs, 207; rare disease dilemma, 241–242; waste and unjustified spending, 230
- Richards, Jon. *See* Wisconsin 2005 Assembly Bill (AB) 1140
- Rierner, David. *See* Wisconsin 2005 Assembly Bill (AB) 1140; YoungMedicare proposal
- Right to Try Act (Trickett Wendler, Frank Mongiello, Jordan McLinn, and Matthew Bellina Right to Try Act of 2018), 214–228; description, 224; hope given by, 224–225; impact of, 220; legal arguments in favor of, 227–228; limitations on availability, 221; patient-related processes, 226; personalized medicine and, 219, 221, 226–228; relation to research, 228
- Rite Aid, 164
- Road to Serfdom, The* (Hayek), 27
- Robson, Chet, 155–157
- Rockefeller Foundation for Research, 120
- Roosevelt, Franklin Delano, 5–6, 63
- Roosevelt, Theodore, 62
- Rx Think Tank (Concordia University), xvi

- Rx Think Tank Healthcare Economic Summit (2019, Remedium eXchange), 193
- Ryan White HIV clinics, 91–92
- safety net (healthcare safety net): alternatives for employers and providers, 328–342; catastrophic care insurance, 4–5, 8, 172, 257, 328, 333–334, 341, 343–346; description, 26–27; economist perspective on, 252–265; and EMTALA, 26–27; failed Purple Solution efforts, 7; Hayek’s vision for, 26–27, 251; high-deductible plans as, 113; hospitals and, 328–332, 336, 339–342; hybrid system, Biden proposal, 31; long term American desire for, 65; Medical Home Network and, 250; Medicare for All and, 27; need for, 28–29; for poor and vulnerable people, 346–347; principles for effectiveness and efficiency, 262; purple solutions for, 343–350; for rare and expensive conditions, 340–341; universal system potential, 29
- Sanders, Bernie, 15, 29, 177
- Sanfilippo syndrome, 217
- Securities and Exchange Commission (SEC), 234
- self-insurance, for employers, 150–151
- self-pay (direct pay) healthcare. *See* direct pay (direct primary care) (DPC)
- self-regulation of the pharmaceutical industry, 234–236; combined with the threat of government regulation, 236–238
- Senate Health and Human Services Committee, 208
- Shetty, Devi, 43
- Shkreli, Martin (“Pharma Bro”), 178
- Shrank, W. H., 54
- Sibert, Karen, 51
- SimpleCare (American Association of Patients and Providers), 8
- Singapore: Covid-19 control success, xiii; healthcare system, xiii, 10–11, 14, 28, 172, 343; insurance plans, 10
- site of service differential, 86, 88, 101–102
- skimming, cost-shifting, 316, 317
- skimping, cost-shifting, 316, 317
- Small Business Times* (August 5, 2005), 267, 268
- socialized medicine, 63–64
- Social Security Act (1935), 63
- Social Security Amendments (1965), 48, 64
- spending incentives, 255–260; Category I spending, 170, 255–257, 259–260, 263–266, 347, 349; Category II spending, 256, 258; Category III spending, 256–258, 260, 263; Category IV spending, 256, 258–260; comparison of categories, 257*t*; distribution by payer, U.S., 2017, 260*f*; Friedman on, 255–260, 256*t*
- spread pricing, 190, 197, 199–200, 230, 238–239
- St. Jude Children’s Research Hospital, 259
- Stabilization Act (U.S., 1942), 5–6
- state medical licensure, 125
- State of Health Care supplement (*Small Business Times*) (2005), 267
- sticking, cost-shifting, 316, 317
- supply and demand, in the medical marketplace, 118, 122–123, 185
- supply chain waste, 230, 238
- supply-side focus (in healthcare reforms), 34–35; arguments in favor of, 34–35; Calendar Test and, 36–37; innovations, public policies, 37–43
- surgeries and operating rooms (ORs), 103–104
- Surgery Center of Oklahoma, 115
- surgical and specialty care (direct primary care), 115
- “Surgical Care Improvement Measure for Postoperative Glucose Control Should Not Be Used as a Measure of Quality after Cardiac Surgery” (article), 52
- Surgical Care Improvement Program (SCIP), 50–51
- surprise billing of medical costs, 201, 212
- Sweden: insurance plans, 9
- Switzerland: healthcare spending data, 14; private healthcare insurance, 9; supplementary plan options, 29

- tacit collusion, in price transparency, 202–206, 204–206, 208–210
- Tanner, Michael, 263
- Target, 164
- technology: digitalization of medicine, 56; electronic health record software, 55–57; Healthcare Bluebook, software app, 23–24, 25f; “hospital at home,” 31–32; information technology, 31, 35, 37–38, 56–57; medical drones, 40; personalized medicine, 31–32, 219, 221, 226–228; supply-side focus and, 35; wearable technologies, 31, 164
- telemedicine: availability at Walgreens, 159f; categories of, 37; consumer empowerment and, 17; description, applications, benefits, 31, 37–38; economic factors, 37; licensure constraints, 38–39; MDLIVE app, 158; Medical Home Network use of, 249; MHN Connect software, 249; need for cross-state licensure, 128–129; obstacles to, 38–39; supply-side innovations and, 37–39; value to non-English speakers, 38
- telepsychologists, 38
- Texas Free Market Surgery center, 115
- text services for physicians, 49
- Texture Health, 249
- thalidomide, 222
- Thierer, Adam, 40
- third-party payment (payers): comparison with direct primary care, 112, 114–115; frustrations caused by, 110–111; impact of, 110; types of, 110
- 340B program, 106, 196–197, 238; description, 194; drug costs and, 92; Office of Pharmacy Affairs, 92; original intent of, 93; use and abuse of, 90–93
- Tong, Ian, 38
- Torinus, John, 17–19
- transparency: consumer-facing price transparency tool, 17–19, 18f; costs, markets, and, 13–26; need for, from administrators, 77; pharmaceutical companies, research, drug prices, and, 105–107; of prices, and CMS, 14, 23–24, 31
- TRICARE, 6, 266–267
- tropes, related to American healthcare, 35–36
- Truman, Harry, 63
- Trump, Donald (and administration): allowance of drug importation from Canada, 231; American Patients First proposal, 186, 197, 231–232; drug costs and, 152–153, 231–232; effort to repeal the ACA, 328–329; Executive Order 13771, 54; on the out of control drug costs, 177; proposal to eliminate drug rebates, 197; proposal to end rebates to PBMs, 238; response to coronavirus pandemic, 156; signing of Right to Try Act, 224; transparency rules proposals, 14
- tuberculosis, 184
- Tufts University, Center for Drug Development, 215–216
- 21st Century Cures Act (2016), 217
- Uber, 32, 163
- Ultragenyx, 215
- United Kingdom: insurance plans, 9; National Health Service, 185, 332; supplementary plan options, 29
- United States (U.S.): challenges of universal health plan implementation, 332–333; characterization as “the last of free pricing,” 186; chronic disease management cost data, 99; citizens’ desires from healthcare system, 74–75; coupling of health insurance with employment, 63; Emergency Medical Treatment and Labor Act, 26–27; employment-health insurance link, 63; exorbitant drug costs, 178–179; food industry spending data (2019), 253–254; healthcare policy challenges, 330–333; healthcare system’s future directions, 75–78; HMOs, 6–7, 11; household income averages, 132; insurance incentive issues, 11–13; medical-expense related bankruptcies, 83–84; Medical Licensing Exam, 125; political debates about insurance, 10–11; self-pay (direct pay) healthcare, 256–257; shortage of healthcare providers, 41–42; third-party payers, 110; 2017, healthcare spending data, 13–16; use of medical drones, 40

- United States (U.S.), Patent and Trademark Office, 192
- United States (U.S.) Census Bureau, 147–148
- United States (U.S.) Department of Agriculture, 226
- United States (U.S.) Department of Health and Human Services (HHS), 6, 14, 58, 206, 233
- universal healthcare: ACA and, 7–8; emergency rooms and, 247–249; EMTALA as a form of, 26–27, 247–248; free markets and, 30–31; global comparison, 30–31, 30*f*; global implementation variances, 9–10; need for economic feasibility of, 15–16; present American expensive model, 247–251; private option supplementation, 172–173
- value-based pricing, 197–198, 234–236
- Van Lieshout, Jim, 193, 197–198
- Verma, Seema (CMS director): directorship of the CMS, 6; launch of the Patients Over Paperwork initiative, 54–55; on Obamacare premiums, 148
- vertical consolidation in the pharmaceutical supply chain, 95–96
- vertical integration, within the healthcare industry, 70–72
- Veterans' Health Administration (VHA), 258–259
- videoconferencing, 37
- vouchers: food, 346; HSA, 347–348; school, 174, 263
- Walgreens: community-based healthcare services at, 8, 17, 25–26, 160*f*; consumerization revolution at, 155–161; coronavirus pandemic and, 156–157; digital and telehealth solutions at, 159*f*; Heal app, 158; location data, 156; MDLIVE app, 158; partnership and services portal, 157*f*; partnership with Microsoft, 164
- Walmart: healthcare services at, 8, 17, 25–26, 155; primary care plans for, 8; “Super Centers,” 161; “Walmart Health” services, 161–162
- Warren, Elizabeth, 29
- wearable devices, 31, 164
- Wendler, Trickett, 224
- WIC (Women, Infants, and Children) program, 329–330
- Wisconsin, Ascension SE Wisconsin Hospital-St. Joseph campus, 329–330
- Wisconsin 2005 Assembly Bill (AB) 1140, 7, 266–294
- Wisconsin Family Health Survey, 266
- Wisconsin Health Plan (WHP). *See* Wisconsin 2005 Assembly Bill (AB) 1140
- Women, Infants, and Children (WIC) program, 329–330
- Yeltsin, Boris, 173, 173*f*
- YoungMedicare proposal, 295–327; absence of arrears (COB), 313–314; absence of billing, 313; administrative front of, 312–314; collateral benefits, 316–318; coordination of benefits (COB), 314; core aim of, 310; high standards of quality in all Plans, 309; impact of basic market forces on, 307–308; impact on the private sector, 317; improvements on/resemblance to Medicare, 28; incentive front of, 312; inducements to users to spend, 309; organization and finance, 314–315; price signals in, 302, 319–327; proposed components of, 306; range of people covered, 315; resemblance to Biden's proposal, 28; simpler explanation of benefits, 313; simpler program benefit manuals, 313
- YoungMedicare proposal, price signals, 319–327; assumptions of, 319; combined cost axis and quality axis, 322–327; cost axis, 320; Green Square Plans, 322; HEDIS and, 320–321, 323, 325; premium bids, 323*f*, 324*f*, 326*f*, 327*f*; quality axis, 320–321; quality rating, 323*f*, 324*f*, 326*f*, 327*f*; Red Square Plans, 322; Yellow Square Plans, 322, 323