Chapter 1

The Promise and Disappointment of U.S. Medical Care

FOLLOWING PUBLICATION of the influential Flexner Report on medical education in 1910,¹ the United States built on a foundation of science a health care system that, by the end of the 20th century, was the envy of the world. A visible symbol of that accomplishment is the astonishing number of health-related Nobel Prizes won by American physicians and other scientists. Since 1950, of the 133 prize winners in medicine and physiology, well over half have been either Americans or scientists who trained or worked in the United States.²

Indeed, modern medicine is one of the unnamed wonders of the contemporary world. But it is more than a collection of impressive intellectual achievements. It has made a huge difference in the lives of many ordinary people in the United States and throughout the world. New treatments developed over the past one hundred years cure previously fatal acute illnesses. Even when the impact has not been to improve mortality rates, patients often recover much more quickly and with much less disruption of their daily lives and reduction of household income than in earlier times. Moreover, many chronic conditions that once were tantamount to a death sentence can now be managed effectively so that people who have them can carry on relatively normal lives.

It is no exaggeration to say that new drugs, new medical devices, and new surgical procedures have changed the face of illness to the point that we no longer need to fear many diseases that once evoked only the grimmest of images for the future. Following are some examples.

From the time of the Black Death, which is estimated to have killed onethird of the population of 14th-century Europe, until the advent of antibiotics, there was no good antidote to the effects of deadly microbes. Before

the development of antibiotics, infections were major killers. "[U]ntil 1936, pneumonia was the No. I cause of death in the United States, and amputation was sometimes the only cure for infected wounds."3 Penicillin, one of the first antibiotic drugs, discovered in 1928 by Sir Alexander Fleming, kills harmful bacteria that cause illness and infection in humans. In the early 1940s, two researchers discovered how to make it in powdered form and helped mass produce it in time to curtail the risk of infection leading to amputation of damaged limbs or even death on the front lines of World War II. + After the war, penicillin and other antibiotics were used widely to fight infection in the civilian population, dramatically reducing the harmful effects of many infectious diseases and contributing to the upward kink in life expectancy in America in the latter half of the 20th century.5

With people living longer, partly as a result of "wonder drugs" such as penicillin, illnesses associated with age have become increasingly important, leading to other new treatments. Among the most common—and most frightening—conditions that primarily afflict older Americans are cardiovascular events, including heart attacks (myocardial infarction) and strokes, both of which usually result from hardened or blocked arteries. Blood pressure measures how clear and flexible arteries are and is a direct assessment of their ability to handle the pressures of blood flow. Higher blood pressure indicates that a patient is having trouble maintaining adequate blood flow through arteries that probably are constricted. For that reason, doctors want to measure blood pressure frequently in patients at higher risk (say, above age fifty) and to lower it with medications in order to reduce the risk of heart attack.

Take Janet, a fifty-five-year-old female with high blood pressure unknowingly at risk of a heart attack. She experienced extreme fatigue and indigestion and, later, nausea and vomiting, and she felt faint. Janet went to the emergency room of a nearby hospital, and though she was almost sent home for not displaying a classic sign of a heart attack (chest pain), the attending physician decided to run more tests. An old technology, the electrocardiogram, showed no acute abnormalities, but the ER doctor's suspicions were raised when a serum troponin blood test suggested that Janet had microscopic amounts of heart muscle damage.

Partly because of the potential for false positive results from the blood test, a cardiologist was called in to make a more definitive diagnosis. Following an examination, the cardiologist suggested immediate catheterization. This technique involves inserting a thin plastic tube (catheter) into an artery or vein in an arm or leg and advancing it into the chambers of the heart or into the coronary arteries. In Janet's case, it revealed an important blocked artery that the cardiologist was able to treat by angioplasty, a procedure in which a balloon is used to open a blockage in a coronary artery narrowed by atherosclerosis. He placed a small hole in Janet's femoral artery (near her

groin) where, after dye was injected to document the blockage, a thin wire was passed through the blockage. Then, a small balloon was passed over the wire into the blockage and inflated to open the artery. Next, a separate catheter was deployed, leaving behind a spring-loaded stent in the part of the artery that had been expanded by the balloon. The metal struts of the stent significantly reduce the chance that the now-dilated artery will close again.

After her procedure, Janet was placed on aspirin and clopidogrel, an oral antiplatelet agent used in the treatment of coronary artery disease, both of which help to prevent her arteries from becoming blocked again by "sticky" blood platelets. Her physician told her that she had chronically high blood pressure, hypertension, which likely led to her fatigue and feeling faint as well as to the risk of a heart attack. He prescribed a statin drug to lower her cholesterol, another risk factor associated with constricted arteries, and an Angiotensin-Converting-Enzyme (ACE) inhibitor to stabilize the internal environment of her arteries.

Higher-resolution imaging, better drugs, minimally invasive catheterization procedures, and advanced devices are all facets of the modern practice of medicine that benefited Janet. Her condition was caught relatively early and as a result, she recovered fairly quickly from her procedures and resumed her normal life sooner than she would have even a generation ago. It is no exaggeration to say that her life was saved by what not so long ago was the cutting edge of medical research and clinical progress.

Janet's story tells of a modern medical success. For another example, consider the story of Bill, a patient who was held by medical care at the brink of life for months, though ultimately he succumbed to his disease.

Following CT scans and biopsies, Bill was diagnosed with metastatic kidney cancer. After standard drug treatment and chemotherapy, Bill underwent a radical nephrectomy to remove his right kidney and right adrenal gland, along with four lymph nodes infected by cancerous cell growths. The pain after surgery was hard to control, and heavy narcotics were necessary to keep it at bay. For some time, the surgery and medication gave Bill a life that resembled the years before he was diagnosed.

Unfortunately, Bill's cancer resurfaced and was spreading to other organs. Liver surgery was necessary only months after his nephrectomy. The surgery was deemed successful, but Bill's doctors told him that his cancer had metastasized too much, and surgery was no longer a viable option. He was given six months. Bill's family was devastated, though solace was found in the fact that the newest drugs, procedures, and therapies had all been used to help extend Bill's life for almost three years. Although for many cancer patients, full remission is a happy ending to their bouts with cancer, for Bill and his family, it was enough that his life was extended beyond what many could have dreamed possible just a generation ago.

The Importance of Primary Care

The value of modern medicine is not demonstrated only by dramatic tales of surgery and specialty care, which occur many times every day with patients like Bill and Janet. Ordinary primary care also provides enormous, measurable benefits to the people who are able to access it. Barbara Starfield, a distinguished physician-researcher at Johns Hopkins University Medical School, has taught us a lot about primary care. As she defines it, it is the gateway to the wonders of modern medicine. Indeed, in its ideal form, it embodies much of what we want our medical care system to be.

First among primary care's four defining characteristics is first-contact care. It is the entry point into the larger system of care, which "implies accessibility to and use of services for each new problem or new episode of a problem for which people seek health care."6 A well-functioning primary care practice must not only be accessible but also seem accessible to patients who want to use it. The way we can know how well a medical care system is doing on that score is by measuring how services are actually used.

Longitudinality, which implies the presence of a single "regular source of care and its use over time," is the second component of primary care. The third characteristic, comprehensiveness, means that practitioners and facilities must be able to provide or arrange for all types of needed services, even those not available efficiently on site. Finally, the fourth element is coordination or integration, by which Starfield means some form of continuity connecting one episode with another. It can be provided directly by specific primary care physicians and other clinicians, or through the use of accessible medical records, or both. While primary care in this conceptualization would, almost by definition, ensure that people would be able to get their health care needs taken care of to the extent that science and the art of medical practice make that possible, the reality is somewhat less positive—at least in the United States. We will learn much more about that in the next three chapters.

The Disappointment of Medical Care in the United States

So although in theory the explosion of private and public-sector health insurance in the 1960s brought access to the benefits of American medicine to almost everyone, it turns out that many people in the United States do not have easy or regular access to primary care in Starfield's terms—even when they are able to visit a physician in an examining room. In fact, the situation has become so bad in some places and for some groups that now, early in the 21st century, we are in real danger of destroying the impressive achievements that help to define the American medical care system.

Among the key objectives of this book are identifying some of the obstacles to achieving real primary care and then planning ways to overcome them.

Consider this: an uninsured thirty-eight-year-old Texas woman with insulindependent diabetes "mixed occasional doctor visits with clumsy efforts to selfmanage [her condition] . . . , getting sicker all the while." Because \$120 physician visits were usually beyond her reach, she visited her doctor only occasionally, her health deteriorated, and this married mother of four was forced to give up her job. (Neither her job nor her husband's job as a truck driver provided them with insurance.) One result was that she was "rushed almost monthly" to a hospital emergency room, eventually totaling weeks in intensive care and causing the hospital to provide almost \$200,000 of uncompensated care. The hospital "solved" its financial problem by offering her regular, outpatient care at no charge—so that it would not need to absorb the much higher costs associated with emergency and inpatient care. As a result, the woman's diabetes is now managed effectively, and the hospital cut "nearly in half" its bad debt related to her care. The New York Times quoted one close observer of the health care system who called the hospital "visionary" for taking this action, but who also likened it to "sticking fingers in the dikes" while noting that finding ways to avoid the uninsured is the more common approach taken by community hospitals.8 Hospitals that do provide uncompensated care to uninsured people pass on as much of that cost as they can to those who do pay, contributing to the rise in insurance rates that, in turn, causes some employers or their employees to drop insurance.

In this one example, we find evidence of most of the critical issues afflicting the health care system: although scientific advances make it possible for patients with any number of chronic conditions, including diabetes, to manage their health and carry on most normal activities, the growing numbers of people with those illnesses need care regularly to keep their conditions under control. Yet many of them have no insurance to pay for that care, and because they tend to get less care than they need, the quality of their interactions with the medical care system declines and so do their benefits. For them, it is almost as if the scientific breakthroughs never occurred.

However, it is not just that people do not get the routine care they need. Because hospitals and other providers of care are unpaid for some of what they do, they increasingly lack the funds to maintain their facilities, equipment, and skills or to invest in the innovations for which American medicine is justly renowned. In addition, they often perform under great pressure, generated not just by the clinical implications of treating serious illness but also by inadequate systems for managing care and insufficient or outmoded resources of various kinds. These too often combine to produce rushed interactions with patients and inadequate attention to detail. As a result, many professionals and health care organizations do not perform

up to their potential, avoidable errors occur, and instead of being helped, patients sometimes are made worse off by the care they receive.

The Importance of Health Insurance

The bottom line is that failure to solve these interrelated problems perpetuates the vicious cycle. Central to the solution is the simple statement that everyone needs to have comprehensive health insurance. There are three key reasons: first is the obvious one that it provides financial access to the care they need and thus removes what is arguably the main barrier to access to that care. Second, universal health insurance coverage means that the individuals and institutions responsible for their care—whether doctors, nurses, hospitals, or others—will be paid for every patient they treat. As a result, they will have the funds they need not only to provide good service to individual patients but also to upgrade their resources continually. And third, the combination means that per capita expenditures will be lower than if we continue to tolerate high—and growing—rates of uninsurance.

People without insurance get sicker because they don't get the care they need. Many eventually require emergency services and hospitalization, which might have been avoided if they took care of their condition earlier. And much of the care they get goes uncompensated, causing hospitals to raise their rates, insurers to raise premiums, employers and employees to drop coverage, and medical institutions to decline service.

The tendency for many Americans who can recite health-care-related problems they have experienced personally or that they know about from others is to want to correct each error and ensure that that particular problem does not occur again. That is our tradition—to tackle problems, one at a time, taking small steps, moving forward incrementally until the sum of an extended period of steady progress is large enough to be noticed and measured.

As I will show in the pages that follow, however, that approach is no longer adequate to the scale of the problems we face. A more dramatic strategy is needed to accomplish the goal of saving the medical care system so that we can rely on it to take care of us when we need it.

Because it is no longer enough to approach the problems one by one, we need not only to understand their causes but also to have a good idea of what we would like the reformed system to look like at the end of the improvement process. I will get to the causes in due course, but we can begin to define a well-functioning system here.

Following reform, the most beneficial condition for the society, not to mention individual Americans, would be for everyone to have access to the care they need to keep them healthy, return them to health when neces-

sary, and help them manage their chronic conditions. In addition, Barbara Starfield's conceptualization of primary care would become a reality for everyone. Sufficient services would be available so that everyone can actually avail themselves of the ones they need. And these services should be of reliably good quality. The reformed system should avoid any features that discourage people from seeking appropriate care from the most appropriate, usually least expensive, source at the most appropriate time. At the same time, it should avoid other characteristics that encourage providers to reject some patients or that discourage them from providing the care they believe their patients really need. Finally, patients should get services they need but not ones they don't need, and providers should be efficient in delivering those services so that we don't waste money. We should want all these conditions to be in place not only because individuals would benefit, but for two other reasons as well: one is that a healthy populace is good for the society and the economy, and the other is that without the stability and predictability these achievements imply, the service delivery subsystem will deteriorate; indeed, its erosion has already begun, and it is becoming increasingly unreliable, as I will show in Chapter 4.

To achieve this end state, the following are needed:

· Everyone must have comprehensive health insurance. There are two main reasons. First, because health care is so important both for individuals and for the society, everyone should have financial access to those benefits. There is no good justification for any other outcome. And this is the case even though actual use of services is determined by more than the ability to pay for care. (Other factors include the local availability of services; transportation; baby-sitting; other nonfinancial barriers to utilization; and beliefs about the value of health care, among others. More about them in Chapter 5.)

Second, universal coverage is the single most important step needed to arrest the deterioration of the health care delivery subsystem. Among other reasons, a stable program of universal coverage will permit providers to count on a reliable source of income no matter where they locate. Therefore they will be able to open offices in any area that has potential patients (because residents will have a means of payment) but that does not have enough providers to meet their needs now (in part, because in the current system, payment is too uncertain or too low).

- · Everyone should be able to sign up with a personal primary care physician and to use care when it is needed.
- · The reformed system should eliminate doubt as to whether a needed service will be covered. Providers should know that if they exercise

their best clinical judgment in serving their patients, they will be reasonably compensated for their work. Retroactive denials of payment, which encourage providers to withhold even needed care from patients of some payers, must end.

- Costs—from insurance premiums, patient cost-sharing arrangements, and utilization—must be kept under control. There are two important reasons: first, out-of-pocket costs they cannot afford tend to discourage individuals from seeking the care they need. And second, total expenditures that climb too high force cutbacks in the services that are covered and make insurance too expensive for many to afford.
- System-generated obstacles to good-quality, safe care must be eliminated,° and opportunities to improve quality by building teams and coordinated care and by taking advantage of information technology must be maximized.

Although the vision reflected in these five points is a representation of my own values, I believe most Americans would support it. And, anticipating the recommendations to come later, those who have other views should be asked to defend them, as I will defend these in the chapters that follow.

The evidence is clear, both from stories like the one about the Texas woman with diabetes and from careful aggregate research, yet we have been ignoring the obvious: the U.S. health care system is broken—it is producing a multitude of outcomes we do not want. Instead of dealing with the problems we face—and about which there is very visible evidence—we tend to act like the frog who enjoyed being in the water on the stove as it got progressively warmer until, as it approached the boiling point, it was too late for him to get out. Will we respond in time to signs about the worsening state of the U.S. health care system? Several Institute of Medicine reports over the past ten years have called attention to the alarming trend revealed by study after study that demonstrated the erosion of safe, high-quality care. At the same time, many middle-class Americans have been losing their access to medical care because so many firms have either dropped health insurance coverage for their workers or made it more expensive than their employees can afford. A by-product of these trends is that many provider organizations that might be inclined to invest in improving quality have less income with which to do so.

Again, however, few to date have drawn the clear conclusion from the accumulating evidence: tinkering with it, as we are accustomed to doing and many still advocate, cannot fix the broken system. Here is a case in point: for forty years, scholars have written that information technology (IT) can help doctors improve quality, avoid errors, increase efficiency and productivity,

and, in the process, transform the health care system for the better. Despite enormous interest in these innovations, however, disappointingly few physicians use electronic health records, which many believe are the central element of the potential IT revolution.10 IT simply has not diffused throughout the health care system. A key reason for this fact—although there are others as well—is that incentives in our current system actually make it rational for most medical practices, especially the relatively small ones that provide care for most of the population, to not purchase IT.

IT systems are expensive, both to buy and for ongoing technical support; they result in lower productivity for cash-strapped practices at least for many months; and since existing IT products vary a lot in their capabilities, it is not always clear which ones can add value to a practice. But perhaps even more important is the fact that, regardless of the expense, whatever benefits IT does produce accrue to others. First among these are the insurers, which would benefit from lower costs, fewer errors, less duplication of services, and less paper. For the medical practice that must find the cash to pay for IT, moreover, even if it solidifies its reputation for quality and innovation, IT does not result in additional practice revenues from attracting either more patients or higher fees. If anything, it reduces income by eliminating nolonger-needed, often duplicate, services. And finally, incremental adjustments, such as giving tax breaks to medical practices that adopt IT systems, may lower acquisition costs but will not change the basic conditions for those practices. So is it any wonder that IT has not spread more widely through the system!

What to Expect in This Book

Now is the time to come to the aid of the failing American health care system. We need both to think creatively, "outside the box," about the health system as a whole 11-not just its components, as we usually do-and to have the determination to see the change process through to completion. The goal is not simply to improve access to care for individuals. It is nothing less than to save the health care delivery system itself.

In this book, I present key elements for reform of the health care system (Chapter 8) and include the outline of a political strategy that can bring it to fruition (Chapters 10 and 11). The first step is to recognize that the current system does not and cannot do the job. A system of private insurance based on employment will always leave many people uninsured, and the number of uninsured will grow as the cost of covering them rises faster than the economy as a whole. Moreover, as a number of authors have written, the "business case" for quality is often missing. 12 That is, given current conditions, the hospitals and physician practices that must make the large financial

investments required to enhance safety and quality might not even be able to cover their costs. Because all they and others can do is tinker at the edges, the quality problems, too, persist.

Finally, it is worth noting that many books have appeared already about reforming the health care system. The number is large and growing. Why do we need another one? How is this one different?

First, the sad fact is that although the problems have confronted the U.S. health care system for decades, we have not yet solved them. Some of the books and articles still to come might just hit on the missing idea needed finally to get the job done. In this context, it is okay even if some books overlap in their data, descriptions, or proposals because they will help build consensus in the public. Further, each will present its argument in a distinctive manner. Readers unpersuaded by one formulation may find another's reasoning or perspective compelling, and the combination may provide additional insights and perspectives.

Each book is written from the point of view of specific individuals. These include, among others, physicians concerned about freeing up practitioners to take good care of patients as they were trained to do;13 physicianmanagers who want new financial incentives that will allow them and others to create effective health care organizations that not only will provide good care but also will succeed in a competitive market;14 academics-economists, sociologists, political scientists—who provide insights informed by their disciplines; 15 and reporters who tell heart-rending stories about ways in which the insurance system, the delivery system, or both have failed to serve good people in need of care.16

The point of view I will take is of the public interest. I am not a physician, a manager, or a journalist. My academic field is the health care system, how it operates and what it produces, and my concern is with the system as a whole and how well it serves the public now and in the future.

In addition, this book does several other things that most do not. One is it that, after detailing the problems, it examines their underlying causes in more comprehensive detail than is typical.

Also, while the book includes the familiar indicators of persistent problems (high rates of spending, large numbers of uninsured, problems with quality of care, among others), it adds an understanding of the dynamic forces—some, economic, some, clinical, still others, sociological—that have produced those and other problems. My recommendations flow from the composite analysis.

Having said that, however, I am mindful of the warning of Victor Fuchs, who wondered about the relative inability of his fellow health economists to influence the outcome of policy debates. 17 Economics has well-developed theories about the functioning of markets in general, which some apply to the health care system, 18 and health economists have conducted thousands of empirical studies over the years, which have added to our knowledge about ways in which health insurance and the health care system actually function.

Because of their many contributions, therefore, I was somewhat surprised to read of his concern. Indeed, from my perspective, health economists appear to have dominated much of the conversation about health policy issues over the past thirty years. One reason, of course, is the prominence of the expenditure and cost dimensions of system problems in the national discussion. Another may result from the perception that their theory, especially of markets, appears to non-economists to be so strong that it has become part of the conventional wisdom. Indeed, some of its appeal for Americans may be that it fits so easily with the stereotypical picture of the quintessential American man as rugged individualist. As a result, the process of extolling the market's virtues has tended to negate or undermine alternative policy choices, making it harder to adopt other proposals. Moreover, because their research tends to be quantitative, they express their results in numbers, which gives an air of precision that may not always be fully deserved.

In pursuing the question of why economists have not been more influential on policy matters, Fuchs discovered disagreements among economists that appeared at first glance to be about factual matters but on further consideration were found actually to mask different value preferences. It turns out that economists are as influenced by values as the rest of us, especially when they are uncertain about the impact or magnitude of empirical effects. When they agreed on the evidence, he found greater consensus among health economists about policy choices. The importance of this observation follows from the recognition that public policy incorporates assumptions, not just about the effects of various conditions or factors on desired or undesired outcomes but also about what is important in society—that is, values. And, despite the availability of so many empirical studies, much remains uncertain about the probable effects of many policy choices.

Nonetheless, if we can agree on the need for action, the fact is that consensus on the underlying facts will help to focus the discussion regarding what actions to take even though, alas, they will be based in part on values. One of my goals, therefore, is to present evidence about which there is widespread agreement in the hope of both strengthening the resolve for action and narrowing the range of reasonable policy alternatives. In taking this approach, I am building not only on Fuchs's insights, but also on advice attributed to the late Senator Daniel Patrick Moynihan, a sociologist as well as a distinguished public servant, to the effect that "Everyone is entitled to his own opinion, but not to his own set of facts." Providing the facts and insisting they not be ignored, I believe, can help to promote consensus on key elements, thus reducing the areas of controversy.

Finally, one of the three main sections in this book will be about the political dimension of reform. Other books tend to focus on defining problems, and many include sections on what they think the nature of the reforms should be. Few, if any, who propose reforms also discuss the politics of the matter, even though a number of political scientists have contributed important health policy studies. Yet it is a dimension that we ignore at our peril, given that all of the proposals—even those that would want to free up the market—require public policy decisions which in our system of government need the agreement of the Congress and the president. Moreover, one does not need to be a professional student of American government to know that a variety of groups benefit financially from the current system and will resist changes that will threaten those benefits. And those groups tend to have the resources to make themselves heard by decision makers. They are the proverbial "special interests." Somehow, their expected resistance must be overcome in service of the greater interest of the public and the society. Toward the end of the book, therefore, I will consider what will be needed to accomplish that daunting task.

My approach, which is intended to be both comprehensive and analytic, attempts to build on the lessons gained from past reform efforts with the goal of helping to make reform a reality. My hope is that others will build and implement an effective strategy based on the insights I will provide.