The epiphany came slowly. I know that is an oxymoron, but there is no better way to describe it. I was trained as a mainstream, neoclassical economist, transfixed by the discipline's combination of mathematics and real-world applications. To me, economics provided a superb set of tools for analyzing and understanding the world—thinking on the margin, opportunity costs, the fundamental theorem of welfare economics. And in the 1970s, when I was in graduate school, economics was so successful that it was extending its intellectual reach beyond the analysis of markets to the whole range of human behavior—the family, education, urban problems (such as crime and urban renewal).

It seemed obvious then that mainstream economics offered the best way to analyze the myriad of problems that were plaguing the U.S. health care sector. My colleagues and I at the Center for Health Policy Research at the American Medical Association devised all sorts of economic theories of physician and hospital behavior—even though none of us had ever actually seen the management or operations of a physician practice or a hospital. Other health economists, some with more practical experience than us, were also using neoclassical economics to explain what was going on in health care. We were following the path

blazed by the giants in the field: Kenneth Arrow (Arrow 1963), Victor Fuchs (Fuchs 1975), Mark Pauly (Pauly 1968), and Uwe Reinhardt (Reinhardt 1972).

When I moved into the consulting world, I continued to use these concepts. They certainly seemed more useful than the other strategy tools that we had. But I began to get the gnawing suspicion that the assumptions and models of mainstream economics were not all that appropriate for analyzing the financing and delivery of health care in the United States. Patients certainly did not have the usual characteristics of a consumer: They were not knowledgeable about the characteristics and benefits of the services that they were buying; they seemed disconnected from the purchase decision because their health insurance was paying for most of their care; and there was not a lot of evidence that the health care services that they received delivered sufficient value for the rapidly growing expenditure. Likewise, physicians were not acting like the profit-maximizing businesspeople that we all were hypothesizing: They were motivated by a much more complex set of goals, and many resisted viewing themselves as suppliers in a market. Finally, hospitals (at least the ones I consulted with) certainly did not fit the theory of the firm that we were taught in school.

But, as Nobel laureate Milton Friedman has argued, scientific theories do not have to be perfect; they just have to be better than the alternatives. And, in the 1970s and 1980s, there were no viable alternatives to neoclassical economics for analyzing health care. Then in 1986 I stumbled across a curious article in the premier journal in economics, *The American Economic Review*, "Fairness as a Constraint on Profit Seeking: Entitlements in the Market," by Daniel Kahneman, Jack Knetsch, and Richard Thaler (Kahneman, Knetsch, and Thaler 1986). Fairness had never been an area that had drawn much attention in mainstream economics, but the results of the authors' experiments resonated with the kinds of behavior I was seeing in health care.

As a consultant, my job was not to read and think deep thoughts about the issues of the day but to help clients solve problems. So I started to read the nascent literature in behavioral economics only casually. Then, I moved to Johns Hopkins University, to run the Business of Medicine

program and teach the medical economics courses. At first, I taught the standard material, assigning the usual microeconomics textbooks and journal articles in health economics. The students—all in health care, many of them faculty in the medical school—dutifully completed their assignments but increasingly disagreed with the assumptions and models of neoclassical health economics. As a result, I started to introduce some of the research on behavioral economics—even though none of it dealt with health care. The students responded immediately. So, I added more and more, until I had to offload most of it into a new course on behavioral economics and health care.

My new course has been a real eye-opener for me. The students, who have extensive clinical or administrative experience in health care, have been enthusiastic in applying behavioral economics to health care. Through assignments I gave them, discussions in class, and my own thinking, I began to assemble a series of what I called "anomalies" in health care—behavior that neoclassical economics could not explain or could not explain very well. (I used the term *anomalies*, in part, as a tribute to Richard Thaler, who pioneered a section with that title in *The Journal of Economic Perspectives*.) I began to realize that behavioral economics was much more useful in explaining these anomalies.

In addition, I scoured the health economics literature to see the extent to which the field had begun to apply the tenets of behavioral economics. I found only a few examples in the past decade, such as Richard Frank (Frank 2007), George Loewenstein (Loewenstein 2005), and Kevin Volpp (Volpp et al. 2008; 2011). Their excellent work has begun to encourage other health economists to explore the value of this new discipline.

I wrote this book for four purposes. First, I wanted my colleagues in health economics to appreciate the power of behavioral economics and to use it to advance the field. Second, I wanted physicians and leaders of health care institutions to recognize how their decisions are often affected by a set of biases that can derail their efforts on behalf of patients. Third, I wanted health policy makers to see how they can apply the tools of behavioral economics to improve the delivery and financing of health care. Finally, I wanted to introduce lay readers to the concepts of

behavioral economics and to help them see how these concepts applied to the challenges we face in the U.S. health care system.

It would be overconfidence bias on my part to expect that I can accomplish all four goals. In the end I will be satisfied if this book helps to start a different conversation on how to improve the state of the U.S. health care system. I welcome your thoughts.

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