1 Health Care Markets and Competition Policy

In Economics 101, we learn that competition and competitive markets provide the biggest bang for the buck. In a perfectly competitive world, scarce resources are allocated in the most efficient way; the goods and services that are valued most highly are produced in the right quantities and are priced appropriately. Perfectly competitive markets, therefore, maximize social welfare, which is the sum of consumer surplus and producer surplus. Market imperfections can impede the competitive process and introduce inefficiencies that, in time, can reduce the well-being of society. These imperfections include externalities, asymmetric information, monopoly power, and public goods. The public policy response to these market failures is to promote and preserve competition. Concerns over market imperfections are also present in the US health care sector. Departures from competition can lead to poor-quality care and cause losses in the hundreds of billions of dollars.

1.1 THE MARKETPLACE OF HEALTH CARE SPENDING

Health care services are a vital component of a functioning economy since they ensure a healthy population capable of employment and consumption. Patients want access to physicians and hospitals for day-to-day care as well as to emergency rooms in cases of medical emergencies. Pharmaceutical drug companies manufacture prescription drugs that help patients manage or postpone ill health, and various medical device manufacturers produce prosthetic limbs and artificial joints, which restore mobility. Scientists and researchers in the health care industry discover new methods and products to promote health and cure disease. Health insurers, pharmaceutical benefit

managers, and managed care organizations, among others, facilitate the transfer of these health services to patients. But such services come with costs.

The United States spent almost $4 trillion on health care in 2019, which accounts for about 18 percent of its gross domestic product (GDP).[1] This amounts to approximately $11,582 for every man, woman, and child in the United States. And spending continues to rise. In the United States, the majority of health care expenditures fall into three categories: (1) hospital care ($1.2 trillion), (2) physician or other professional services ($1 trillion), and (3) prescription drugs ($370 billion).[2]

A good deal of this spending is carried out by health insurers, who directly pay health care providers for the care offered to their policyholders. In contrast to other countries where health insurance is universal and heavily regulated by the government, the US health insurance system is fragmented, with individuals gaining access to health care coverage through private or government-sponsored insurance. In 2019, 91 percent of the US population was covered by private or government-sponsored health insurance (leaving approximately 30 million people uninsured). That same year, 50 percent of the population received private health insurance through an employer (i.e., employer-sponsored insurance), whereas 6 percent purchased private insurance in the individual market. Data suggest that private health insurers spend approximately $1.2 trillion on behalf of their policyholders. Meanwhile, government-supported Medicare and Medicaid insurance programs spend $800 billion and $614 billion, respectively. Medicare provides health care coverage to individuals over the age of 65 and those permanently disabled; Medicaid (a partnership between federal and state governments) provides health care coverage to low-income individuals who meet specific eligibility criteria. In 2019, Medicare covered 14 percent

[1] Centers for Medicare & Medicaid Services (2021b).
[2] Centers for Medicare & Medicaid Services (2021c).

of the population, whereas Medicaid covered 20 percent of the population.[3]

In 2019, the health care sector employed 22 million individuals (14 percent of total employment) in roles that range from licensed and advanced occupations working directly with patients, such as physicians and registered nurses, to those facilitating access to health care, such as hospital administrators or health insurance workers.[4] Moreover, each year approximately 36 million patients are admitted to and cared for in the approximately 6,000 hospitals in the United States, which together have a capacity of 924,000 beds.[5]

1.2 COMPETITIVE CONCERNS

In all markets, competition can be undermined on the selling side and the buying side. On the selling side, the profit-maximizing efforts of monopolists distort resource allocation and raise prices above the competitive level. Collusion among ostensible competitors to emulate the conduct of a monopolist imposes the same burden. On the buying side, a monopsonist distorts resource allocation by reducing the quantity of inputs that it buys in order to decrease the price that it pays. Somewhat counterintuitively, this leads to higher – not lower – prices for consumers. Collusion among buyers yields monopsonistic results that are equally undesirable.

The economic distortion by sellers and buyers can have enormous effects on the economy, especially in the health care sector where lives are at stake. If prices for health care services increase, insurance premiums may increase. Some patients may find themselves priced out of the health insurance market and must pay for health care on their own. Others may delay care, fail to take essential but expensive prescription drugs, or be unable to afford lifesaving treatment. The US government and, therefore, taxpayers are harmed as well through higher prices borne by Medicare and Medicaid. If, for

[3] Kaiser Family Foundation (2021). [4] Laughlin et al. (2021).
[5] American Hospital Association (2021).

example, the price increases caused by market imperfections amounted to only 10 percent, correcting those imperfections would result in savings of $380 billion as well as increases in health care accessibility for patients.

1.3 ANTITRUST POLICY

In the United States, the public policy response to anticompetitive behavior is described in two antitrust statutes that provide the statutory foundation for antitrust policy. The Sherman Act of 1890 identifies both monopolizing and collusive behavior as violations of federal competition policy. The Clayton Act of 1914 prohibits specific business behavior – including tying, price discrimination, and mergers – that tends to limit competition. The Antitrust Division of the Department of Justice (DOJ) and the Federal Trade Commission (FTC) enforce these antitrust laws. In this role, the antitrust Agencies discipline businesses and individuals for anticompetitive business practices and mergers through the prosecution of those who they suspect have violated the antitrust laws. Public enforcement by the Agencies is enhanced by private enforcement, where competitors or classes of health care consumers may file antitrust litigation in pursuit of private damages. Given the size of the health care sector, efforts that protect the competitive process, even small efforts, could result in large monetary savings for health care consumers. For example, the State of California was awarded $575 million following litigation against Sutter Health, a large hospital organization that was prosecuted for anticompetitive behavior.[6]

The US health care system is quite different from the systems of other well-developed nations, many of which are controlled by their respective governments and therefore are not defined by competition. The US system is somewhat fragmented, with health insurance coverage originating from a variety of sources, including employers, the individual private market, and government-sponsored health

[6] Waters (2020). We discuss the Sutter Health case in more detail in Chapter 18.

insurance programs including Medicare and Medicaid. Although large-scale health reform has not been achieved in the United States, under the Obama administration, the Patient Protection and Affordable Care Act (ACA) became law in 2010 and made numerous changes affecting private and public aspects of the health care system, which substantially expanded health care access and consumer spending. First, the ACA expanded Medicaid, and despite court challenges,[7] 39 states (and the District of Columbia) have adopted Medicaid expansion for individuals with incomes below 138 percent of the federal poverty level.[8] Second, the ACA created state-based health insurance marketplaces where individuals could purchase health insurance in the individual market. Eligible consumers were offered sliding-scale subsidies on health insurance premiums; additionally, a subset of those eligible were also offered subsidies on cost sharing for out-of-pocket expenses.[9] Moreover, the ACA permits young adults to stay on their parents' health insurance plans through age 26. These efforts substantially expanded access and uptake of health insurance through public and private mechanisms, contributing to increases in health care spending.[10]

1.4 PLAN OF THE BOOK

The US health care system is complex and expensive. Between 2000 and 2019, health care spending increased by more than 170 percent, from $1.4 trillion to $3.8 trillion.[11] Moreover, private (family)

[7] *National Federation of Independent Business (NFIB)* v. *Sebelius*, 567 US 519 (2012).
[8] In 2021, the federal poverty level was $26,500 for a family of four (Centers for Medicare & Medicaid Services 2021a).
[9] Eligible consumers with incomes up to 400 percent of the federal poverty level were offered sliding-scale subsidies on health insurance premiums. Those individuals with incomes up to 250 percent of the federal poverty level were also offered subsidies on cost sharing for out-of-pocket expenses.
[10] In *National Federation of Independent Business (NFIB)* v. *Sebelius*, 567 US 519 (2012), the individual mandate (with penalty) was found to be constitutional, but in 2019, Congress set the penalty for failure to purchase insurance at $0, effectively repealing the mandate. Tax Cuts and Jobs Act, H.R. 1, 115th Congress (2019).
[11] Centers for Medicare & Medicaid Services (2021b).

health insurance premiums have increased from approximately $6,000 per year in 1999 to $19,000 per year in 2018, which greatly outpaces the rate of inflation.[12] To address concerns about access to and affordability of health care, there have been calls for large-scale health care reform and major modifications to our current health care system. Some have recommended replacing the current system with some form of universal health care, which is common in other countries. In this book, however, we focus on the concerns in our existing health care system that arise from failures of competition. Anticompetitive practices lead to higher prices, reduced service availability, and reduced quality. Protecting the competitive process can ensure lower prices and improved consumer welfare, with spillovers to the entire sector. Preserving competition can also increase innovation and improve accessibility of health care services. Competitive failures can be addressed with existing antitrust laws, which can provide immediate relief for the harms from anticompetitive conduct.

In this book, we focus on five areas of antitrust concern present in our health care system: monopoly, collusion among sellers, monopsony, collusion among buyers, and mergers.

Monopoly

We cover monopoly in Part I. A monopoly exists when there is a single seller of a good or service for which there are no close substitutes. For example, a rural hospital may have no close competition and, therefore, would be a monopolist in the provision of acute care hospital services. A profit-maximizing monopolist will decrease the quantity it sells below the competitive level in order to increase prices, which causes consumers to be overcharged for their purchases.[13] Monopoly may be objectionable from a social welfare perspective, but without

[12] Claxton et al. (2018).
[13] Patients are "overcharged" in the sense that the monopoly price exceeds the competitive price.

the presence of anticompetitive behavior that violates the antitrust laws, public policy cannot remedy this problem.

The major source of monopoly power in the pharmaceutical industry is derived from patents. A patent on a pharmaceutical drug provides exclusivity for a limited period of time, usually 20 years from when the patent application was filed. If there is ample demand for the drug and no reasonably close substitutes, then the patentee will have monopoly power that it can exercise freely. Note that a patent confers a legal monopoly, but not necessarily an economic monopoly. There can be other drugs that are different but are reasonable substitutes, or, if the drug has undesirable side effects, demand may be quite limited.

Prescription drugs that are economically successful in the marketplace can have very high prices during this period of exclusivity. For example, a drug that treats hepatitis C (Sovaldi) was first introduced in 2013 at a cost of $84,000 for a 12-week supply. At the same time, patent policy promotes innovation by preventing other companies from free riding on the innovative efforts of the patent holder during the patent exclusivity period. The patent, therefore, balances the need for innovation with affordability in the postpatent period. But patent policy does create tension with the antitrust laws since competition policy is designed to promote and protect competition by limiting the formation of monopolies and cartels. Prescription drug spending in the United States is considerable, and there are many public policy proposals under consideration that would reduce prescription drug spending for insurance companies and consumers. We discuss the merits of recent policy proposals in Chapter 3.

Moreover, there are some competitive concerns that arise beyond the tension between antitrust law and patent law. For example, the patent system may be manipulated through product hopping, where a patent holder can extend the legal monopoly over its patented drug by making a simple modification to the prescribed drug (perhaps altering the dose to improve efficacy, changing the absorption rate, or switching the medication form

from tablets to capsules). The Agencies may not object to this practice if the modification confers real benefits to health care consumers. Product hopping, however, may be anticompetitive if the benefits to the patient from the simple modification are not greater than the harm to patients resulting from the delay in the entrance of cheaper generic alternatives on the market. The emergence of generic drugs after a patent expires typically leads to a reduction in prices through enhanced competition. In this way, product hopping may foreclose competition, resulting in higher prices and harm to consumers.

Another competitive concern for the Agencies involves bundled discounts. Multiproduct firms may offer bundled discounts where the amount of the discount depends on the purchase of multiple inputs. Firms that sell only a few inputs may be foreclosed if they are not able to compete with a discount that is spread over multiple products. If firms are foreclosed from the market, the remaining firms will have greater market power.

Collusion among Sellers

Collusion among sellers occurs when multiple sellers cooperate with one another to act as a single monopolist by raising prices and reducing output. In Part II, we outline the competitive consequences of collusive behavior among sellers and identify some examples where this kind of activity has occurred, including collusion among physicians and surgeons via staff privilege restrictions and collusion among pharmaceutical and medical device manufacturers. Each of these examples constitutes a violation of Section 1 of the Sherman Act.

When a seller cartel exists, consumers are harmed and social welfare decreases. We describe the harmful effects of collusion among sellers in the context of litigation alleging collusive price fixing among generic pharmaceutical manufacturers. There have also been allegations of anticompetitive agreements between generic and

branded manufacturers. In attempting to keep prices high, branded drug manufacturers have colluded with generic manufacturers by using reverse payments (i.e., bribes) to delay generic entry.

We also discuss the rising costs of insulin and the allegations of a possible conspiracy among the three manufacturers of insulin in the United States. Despite the expiration of patents on branded insulin products, insulin prices have continued to rise, suggesting that competition is not present. Finally, we analyze occupational licensing within health care professions, where members of licensed professions have used their market power to displace competition.

Collusion among sellers is a violation of Section 1 of the Sherman Act. Enforcement of the antitrust laws has important consequences for the preservation of competitive prices and other benefits that flow from unrestricted competition.

Monopsony

We cover monopsony in Part III. Monopsony exists when there is only one buyer in the market. A monopsonist reduces the quantity of inputs that it buys below the competitive level in order to depress the prices it pays for those inputs. We review the monopsony model and identify the harms to social welfare. We then introduce countervailing power, whereby a monopsonist can check the power of a monopolist, resulting in better competitive outcomes than monopoly or monopsony alone. This market structure is known as a bilateral monopoly. We explore how countervailing power can offset the monopsony power health insurers have over physician groups. If physicians were permitted to collectively bargain with health insurers over reimbursement rates, this would transform a market of monopsony to one of bilateral monopoly and would improve social welfare.

Group purchasing organizations (GPOs) also wield monopsony power. In a GPO, hospitals consolidate their purchases of essential inputs to reduce prices and transaction costs. GPOs are quite

pervasive, with over 98 percent of hospitals using GPOs for some purchases. But GPOs have been criticized for several anticompetitive concerns, including GPOs' revenue sources and possible competitive foreclosure from sole-sourced contracts. There has been some antitrust litigation in this space, and antitrust authorities will need to continue monitoring the contracting practices of GPOs.

Collusion among Buyers

In Part IV, we examine collusion among buyers in the health care setting. Collusion among buyers mirrors the anticompetitive consequences associated with the sole monopsonist. Buyers who collude can use their combined monopsony power to reduce input prices or wages below the level that would exist in the absence of the collusive behavior. We discuss three examples of collusive monopsony: First, we discuss collusion in the nurse labor market as one of many possible explanations for the persistent nurse shortage. Nurses have filed a series of class actions against hospitals that they allege have colluded in the hiring of nurses, resulting in nurse wage depression. Second, we highlight a recent class action involving collusion among the buyers of oocytes, which are eggs donated for use in assisted reproductive technology or in vitro fertilization. Collusion was accomplished through trade associations, where fertility clinics coordinated with one another to suppress compensation for egg donations. The class of donors was arguably paid less for their donated eggs than they would have been in the absence of the collusion. In both of these examples, sellers (i.e., nurses, donors) were undercompensated for their contributions (i.e., time, eggs). Finally, we examine no-poaching agreements, which have received so much attention in recent years that the Agencies issued formal guidelines in 2016 for human resource professionals to address agreements among employers to not hire another firm's employees. These agreements constitute illegal coordination among firms, even if they stop short of wage setting, and reduce wages by reducing competition for another firm's employees.