

Written Testimony

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Overview¹

In 2021, the United States (US) spent \$4.3 trillion — 18.3% of Gross Domestic Product (GDP) — on health care.² To put that number in context, Germany is the fourth largest economy in the world and had a GDP of \$4.2 trillion in 2021.³ As a result, if the US health care system was a country, in dollar terms, it would be the fourth largest country in the world with an output larger than the entirety of the German economy.

The US relies on private markets to provide health care services and administer health insurance. In part, this reliance on markets is a function of the sheer scale of the US health system. As a result, the health of the US health system is a function of the health of the markets that underpin our health system.

As I'll argue, the provider markets that underpin our health system are becoming increasingly concentrated. This rise in concentration is harmful to the public. Increasing consolidation raises provider prices (thus increasing health spending) and harms access to health care services (by increasing insurance premiums and out of pocket costs). In turn, rising health spending is putting pressure on government programs, lowering tax revenue, and leading to lower wages, job losses, and rising inequality among those with employer-sponsored insurance coverage. In short, efforts to guarantee the long-run sustainability of public insurance programs and rein in the growth of private insurance premiums cannot ignore rising consolidation and the shifting market landscape in the health care sector.

It is near universally accepted by economists that even when employers contribute to their employees' insurance premiums, these premiums and the cost of health care services are almost wholly borne by individuals and families, not by their employers or by insurers.⁴ In 2021, annual premiums for family coverage via an employer-sponsored insurance plan were \$22,221.⁵ For

¹ My thanks to Yale PhD student Genna Liu for her excellent research assistance, which aided greatly in the preparation of this testimony.

² "National Health Expenditure Data," *Centers for Medicare & Medicaid Services*, 2021, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData>.

³ "GDP (current US\$) - Germany," *The World Bank*, <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=DE>.

⁴ Gruber, Jonathan, "The Incidence of Mandated Maternity Benefits," *American Economic Review*, 1994, Vol. 84(3), pp. 622-641; Baicker, Katherine, and Amitabh Chandra, "The Labor Market Effects of Rising Health Insurance Premiums," *Journal of Labor Economics*, 2006, Vol. 24(3), pp. 609-634 ("Baicker and Chandra, 2006"); Currie, Janet, and Brigitte C. Madrian, "Health, Health Insurance and the Labor Market," in *Handbook of Labor Economics*, 1999, Vol. 3, eds. Orley Ashenfelter and David Card, pp. 3309-3416 ("Currie and Madrian, 1999"); Gaynor, Martin, "Antitrust Applied: Hospital Consolidation Concerns and Solutions," Statement Before the Committee on the Judiciary Subcommittee on Competition Policy, Antitrust, and Consumer Rights, U.S. Senate, 2021, https://www.judiciary.senate.gov/imo/media/doc/Gaynor_Senate_Judiciary_Hospital_Consolidation_May_19_2021.pdf ("Gaynor Senate Testimony").

⁵ "Employer Health Benefits 2021 Annual Survey," *Kaiser Family Foundation*, 2021, <https://www.kff.org/report-section/ehbs-2021-summary-of-findings/>.

context, a new Toyota Corolla, the 12th highest selling car in the US, costs \$21,700.⁶ In other words, the average family in the US is buying approximately a new car's worth of insurance each year, even if this purchase is obscured because their employer is purchasing insurance on their behalf.

The rising cost of health care in the US is placing a financial burden on families and the federal government.⁷ From 2000 to 2021, insurance premiums in the US rose by 215%.⁸ This increase in premiums was driven by an increase in health spending. By contrast, median earnings during this period grew by only 73%.⁹ As a result, over the last two decades, the rising cost of health care has meant that families have had less money to spend on everything from food to housing to leisure and that the price of insurance has become out of reach for many.¹⁰ And even with full insurance coverage, 44% of adults in the US in 2018 were worried about affording a medical bill and 19% reported using up all or most of their savings on health care costs.¹¹

Historically, most of the discussion of provider consolidation in the US has focused on the impact of, for example, hospital mergers on hospital prices. However, the way the US funds health care for the privately insured — the ubiquity of and tax exclusion given to employer-sponsored health insurance — means that consolidation that increases health spending is driving decreases in tax revenue, lower wages, job losses, and economic inequality. Theory neatly predicts and empirical evidence highlights that when health spending on those with employer-sponsored coverage goes up, this is paid for by workers in the form of lower wages and job losses.¹² Job losses also impact health. A literature studying the effect of, for example, factory closures highlight that individuals who lose their job have an increased risk of death within a year, often from a suicide, an accident,

⁶ See: "2023 Corolla," *Toyota*, <https://www.toyota.com/corolla>; Capparella, Joey, 2022, "Top 25 Bestselling Cars, Trucks, and SUVs of 2021," *Car and Driver*, <https://www.caranddriver.com/news/g36005989/best-selling-cars-2021/>.

⁷ Tax revenues go down when increases in premiums for employer-sponsored coverage lower wages and employment. Likewise, tax revenue goes down when rising health spending increases the tax subsidies required for health insurance plans sold on exchanges.

⁸ Family coverage. "Employer Health Benefits 2021 Annual Survey," *Kaiser Family Foundation*, 2021, <https://www.kff.org/report-section/ehbs-2021-summary-of-findings/>.

⁹ Bureau of Labor Statistics, Seasonally Adjusted Data from the Current Employment Statistics Survey, 1999-2021.

¹⁰ Tolbert, Jennifer, Patrick Drake, and Anthony Damico, "Key Facts about the Uninsured Population," *Henry J Kaiser Family Foundation*, 2022, <https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/>.

¹¹ Peterson-KFF Health System Tracker, 2020; Montero, Alex, "Americans' Challenges with Health Care Costs," *Henry J Kaiser Family Foundation*, 2022 <https://www.kff.org/health-costs/issue-brief/americans-challenges-with-health-care-costs/>; "Kaiser Family Foundation / LA Times Survey of Adults with Employer-Sponsored Health Insurance," *Henry J Kaiser Family Foundation*, September 15-October 9, 2018, <https://files.kff.org/attachment/Topline-KFF-LA-Times-Survey-of-Adults-with-Employer-Sponsored-Health-Insurance>.

¹² Gruber, Jonathan, and Alan Krueger, "The Incidence of Mandated Employer-Provided Insurance: Lessons from Workers' Compensation Insurance," *Tax Policy and the Economy*, 1991, Vol. 5, pp. 111-143; Baicker and Chandra, 2006; Gaynor Senate Testimony, Currie and Madrian, 2000.

or a drug overdose.¹³ Debt, less tax revenue, lower wages, job losses, and death: these are the consequences of provider consolidation and rising health spending in the US.¹⁴

Moreover, as recent work highlights, because insurance premiums do not vary markedly across workers, when health spending goes up, employer-sponsored health insurance discourages the hiring of non-college educated workers, since insurance premiums make up a higher share of their costs of employment.¹⁵ Indeed, Finkelstein et al., (2023) note, the scale of the effect of our employer-sponsored health insurance system on wage inequality is similar in magnitude to the measured effects of the outsourcing of jobs, robot adoption, and the decline in real minimum wage.¹⁶

Most health care services in the US are furnished by private firms. Private providers compete to deliver care to publicly and privately funded patients. Likewise, the majority of the public receives their health insurance from a private insurer via a market where insurers compete against one another. Indeed, even in publicly funded programs, like Medicare and Medicaid, more than half of the coverage is provided by private insurers. We rely on pharmaceutical firms to develop and manufacture drugs; we rely on pharmacy benefits managers (PBMs) to help firms and purchasers build formularies; we rely on private firms to distribute the vast array of medical products we consume across the country.

Ultimately, the health of the US health system is a function of the extent to which the underlying health care markets in the US are competitive. This competition disciplines the pricing of private firms and creates incentives for quality.¹⁷ Markets are not perfect. Markets can fail and all markets, particularly those for health care goods, insurance, and services, require oversight and external support to maintain competition. This oversight and support must include keeping health care markets from becoming overly concentrated, providing the information that supports market participants (e.g., quality and pricing information), and regulating parts of the market where competition will not produce efficient or equitable outcomes.

¹³ Sullivan, Daniel, and Till von Wachter, "Job Displacement and Mortality: An Analysis Using Administrative Data," *Quarterly Journal of Economics*, 2009, Vol. 124(3), pp. 1265-1306; Eliason, Marcus, and Donald Storrie, 2009, "Does Job Loss Shorten Life," *Journal of Human Resources*, Vol. 44(2), pp. 277-302; Venkataramani, Atheendar, et al., 2020, "Association Between Automotive Assembly Plant Closures and Opioid Overdose Mortality in the United States," *JAMA Internal Medicine*, Vol. 180(2), pp. 254-262.

¹⁴ Cooper, Zack, et al., "Hospital Prices Grew Substantially Faster than Physician Prices for Hospital-based Care in 2007-14," *Health Affairs*, 2019, Vol. 38(2), pp. 184-189; Cooper, Zack, et al., "Variation in Health Spending Growth for the Privately Insured From 2007 to 2014," *Health Affairs*, 2019, Vol. 38(2), pp. 230-236; Kluender, Raymond, et al., "Medical Debt in the US, 2009-2020," *JAMA*, 2021, Vol. 326(3), pp. 250-256; Case, Anne, and Angus Deaton, *Deaths of Despair and the Future of Capitalism*, 2020 ("Case and Deaton, 2020").

¹⁵ Finkelstein, Amy, et al., "The Health Wedge and Labor Market Inequality," *Brookings*, 2023, ("Finkelstein et al., 2023"); Saez, Emmanuel, and Gabriel Zucman, *The Triumph of Injustice*, 2019; Case and Deaton, 2020.

¹⁶ Finkelstein et al., 2023.

¹⁷ Gaynor, Martin, Kate Ho, and Robert J. Town, "The Industrial Organization of Health-Care Markets," *Journal of Economic Literature*, 2015, Vol. 53(2), pp. 235-284 ("Gaynor, Ho, and Town, 2015").

Markets in the health sector can function efficiently. Evidence clearly illustrates that when hospitals compete, hospitals deliver higher quality care and patients experience reductions in mortality.¹⁸ In competitive markets, the hospitals with higher prices have better outcomes and those higher prices tend to be cost effective.¹⁹ Similarly, higher quality hospitals tend to grow more over time - a signpost of a functioning market.²⁰ This same logic applies to other sectors of the health system outside of hospitals, like the market for physician services or the market for private insurance.

However, ongoing changes in health care markets over the last two decades should have the warning lights on our dashboard blinking red. The changes occurring in US hospital markets parallel changes occurring in other parts of the US health system.²¹ From 2000 to the present, there have been well over 1,000 mergers among the nation's approximately 5,000 hospitals.²² Partly as a function of this consolidation, at present, nearly 90% of US metropolitan areas have hospital markets that make them "highly concentrated" according to the 2010 Department of Justice and Federal Trade Commission Horizontal Merger Guidelines.²³ While not all mergers are harmful, evidence clearly shows that hospital mergers of neighboring facilities can raise prices (so too can so-called "cross market mergers" of hospitals in the same state).²⁴

Like hospital markets, insurance markets in the US are also generally regarded as highly concentrated.²⁵ More concentrated health insurance markets have higher premiums, and mergers

¹⁸ Cooper, Zack, et al., "Does Hospital Competition Save Lives? Evidence from the English Patient Choice Reforms," *Economic Journal*, 2011, Vol. 121, pp. F228-F260 ("Cooper, et al., 2011"); Gaynor, Martin, Rodrigo Moreno-Serra, and Carol Propper, "Death by Market Power: Reform, Competition, and Patient Outcomes in the National Health Service," *American Economic Journal: Economic Policy*, 2013, Vol. 5(4), pp. 134-166 ("Gaynor, Moreno-Serra, and Propper, 2013"); Kessler, Daniel P., and Mark B. McClellan, "Is Hospital Competition Socially Wasteful?" *Quarterly Journal of Economics*, 2000, Vol. 115(2), pp. 577-615 ("Kessler and McClellan, 2000").

¹⁹ Cooper, Zack, et al., "Do Higher-Price Hospitals Deliver Higher-Quality Care?" *NBER Working Paper 29809*, 2022 ("Cooper, et al., 2022").

²⁰ Chandra, Amitabh, et al., "Health Care Exceptionalism? Performance and Allocation in the US Health Care Sector," *American Economic Review*, 2016, Vol. 106(8), pp. 2110-2144 ("Chandra, et al., 2016").

²¹ Fulton, Brent D., "Health Care Market Concentration Trends in The United States: Evidence and Policy Responses," *Health Affairs*, 2017, Vol. 36(9), pp. 1530-1538 ("Fulton, 2017").

²² Cooper, Zack, and Martin Gaynor, "Addressing Hospital Concentration and Rising Consolidation in the United States," *1% Steps for Health Care Reform*, <https://onepercentsteps.com/policy-briefs/addressing-hospital-concentration-and-rising-consolidation-in-the-united-states/>.

²³ Fulton, 2017.

²⁴ Gowrisankaran, Gautam, Aviv Nevo, and Robert Town, "Mergers When Prices Are Negotiated: Evidence from the Hospital Industry," *American Economic Review*, 2015, Vol. 105(1), pp. 172-203 ("Gowrisankaran, Nevo, and Town, 2015"); Cooper, Zack, et al., "The Price Ain't Right? Hospital Prices and Health Spending on the Privately Insured," *Quarterly Journal of Economics*, 2019, Vol. 134(1), pp. 51-107; Dafny, Leemore, Kate Ho, and Robin S. Lee, "The Price Effects of Cross-Market Mergers: Theory and Evidence from the Hospital Industry," *RAND Journal of Economics*, 2019, Vol. 50(2), pp. 286-325; Lewis, Matthew S., and Kevin E. Pflum, "Hospital Systems and Bargaining Power: Evidence from Out-of-Market Acquisitions," *RAND Journal of Economics*, 2017, Vol. 48(3), pp. 579-610.

²⁵ "Competition in Health Insurance: A Comprehensive Study of U.S. Markets," *American Medical Association*, 2022, <https://www.ama-assn.org/system/files/competition-health-insurance-us-markets.pdf>.

of insurance companies raise premiums and lower payments to doctors.²⁶ Physician markets, while less easily observed, are also regarded as highly concentrated. Higher concentration in physician markets is also associated with higher prices, and mergers between physician practices have been found to raise prices.²⁷

US health care markets are also evolving in new and distinct ways. There is increasing vertical integration: hospitals are acquiring physician practices, insurers are acquiring physician practices, and insurers are acquiring PBMs. There is a steady increase in private capital flowing into health care markets (ranging from venture capital, to private equity, to publicly traded companies). Finally, there is the growing ubiquity of health care conglomerates: large firms like Aetna CVS Health and UnitedHealth Group that have insurance businesses, own providers, own pharmacy benefits managers, and have huge proprietary data repositories. Collectively, these large acquisitions, mergers, and new deals are appropriately giving the public, and researchers like me, pause, as we seek to understand the effects of these arrangements in the near and long term. As such, I applaud the Committee for hosting this hearing and its efforts to learn more about what drives consolidation in health care markets, as well as what might be done to keep the US health care markets functioning efficiently.

In this testimony, I will outline the major changes occurring in US health care provider markets. I will also offer some recommendations on ways to address rising concentration and thwart abuses of market power.

Learning from the Challenges and Changes in Hospital Markets

While studying the functioning of the US hospital industry is vital in its own right, understanding the impact of reductions of competition in the hospital industry in the US over the last three decades can provide important insights into the impact of competition and consolidation in the health sector more broadly. An analysis of the US hospital industry highlights how competition can drive quality and illustrates how some mergers can be harmful to patients and wider communities.

The hospital industry accounts for 5.7% of US GDP and 31.1% of health spending.²⁸ When discussing provider market power, it is important to distinguish between payments made to providers by the Medicare and Medicaid programs and payments made by commercial insurance

²⁶ Dafny, Leemore, Mark Duggan, and Subramaniam Ramanarayanan, "Paying a Premium on Your Premium? Consolidation in the US Health Insurance Industry," *American Economic Review*, 2012, Vol. 102(2), pp. 1161-1185 ("Dafny, Duggan, and Ramanarayanan, 2012").

²⁷ Koch, Thomas, and Shawn Ulrick, "Price Effects of a Merger: Evidence From a Physicians' Market," *Economic Inquiry*, 2021, Vol. 59(2), pp. 790-802; Dunn, Abe, and Adam Hale Shapiro, "Do Physicians Possess Market Power?" *Journal of Law and Economics*, 2014, Vol. 57(1), pp. 159-193 ("Dunn and Shapiro, 2014"); Koch, Thomas, Brett Wendling, and Nathan E. Wilson, "Physician Market Structure, Patient Outcomes, and Spending: An Examination of Medicare Beneficiaries," *Health Services Research*, 2018, Vol. 53(5), pp. 3549-3568 ("Koch, Wendling, and Wilson, 2018").

²⁸ National Health Expenditure Data, *Centers for Medicare & Medicaid Services*, 2021, <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata>.

plans offered by for-profit and not-for-profit insurers. At a high level, Medicare pays hospitals using regulated payments implemented by the Centers for Medicare and Medicaid Services. By contrast, for the privately insured, hospitals and insurers engage in bilateral negotiations over the prices for care for each insurance plan. The Medicaid program pays hospitals using a combination of negotiated and regulated prices.

During the 2000s, the Bureau of Labor Statistics found that hospital prices grew faster than prices in any other US industry.²⁹ Ultimately, the prices hospitals negotiate with insurers are markedly higher than the regulated prices they are paid by the Medicare program.³⁰ Commercial reimbursements have also risen much more quickly than Medicare payment rates. In the late 1990s, commercial payments to hospitals were only approximately 10% higher than Medicare reimbursements; by 2012, hospital payment rates from private insurers were 75% higher than Medicare rates.³¹ At present, it is not uncommon for hospitals to be paid 200% or more of Medicare rates.³² Here, it is vital to point out that most academic experts do not accept the idea of cost shifting - the concept that hospitals' payments from insurers are going up because of low payments from public payers.³³ Rather, the broad consensus is that the difference in the growth in prices hospitals negotiate with insurers reflects the impact of changes in providers' bargaining leverage and reductions in competition.

Economists are broadly concerned with rising market power across industries.³⁴ However, a literature dating back to the 1960s generated a conventional wisdom that questioned whether competition could function in the hospital sector and posited that non-profit hospitals would behave differently from for-profit actors and not abuse their market power should they have it. More recently, a growing body of work highlights that competition between hospitals can incentivize quality and generate efficient prices, and that non-profit hospitals often behave similarly to for-profits.³⁵ A key takeaway from this literature: for markets to function, they must not become too highly concentrated, regardless of the tax status of market participants.

As Chandra et al. (2016) note, "a classic 'signpost of competition' in manufacturing industries is that higher productivity producers are allocated greater market share at a point in time and over

²⁹ Bureau of Labor Statistics, Consumer Price Index and Producer Price Index data, <https://www.bls.gov/data/>.

³⁰ Cooper, Zack, et al., "The Price Ain't Right? Hospital Prices and Health Spending on the Privately Insured," *Quarterly Journal of Economics*, 2019, Vol. 134(1), pp. 51-107.

³¹ Selden, Thomas M., et al., "The Growing Difference between Public and Private Payment Rates for Inpatient Hospital Care," *Health Affairs*, 2015, Vol. 34(12), pp. 2147-2150.

³² Chernew, Michael E., Andrew L. Hicks, and Shivani A. Shah. "Wide State-Level Variation in Commercial Health Care Prices Suggests Uneven Impact of Price Regulation," *Health Affairs*, 2020, Vol. 39(5), pp. 791-799.

³³ Frakt, Austin B., "How Much Do Hospitals Cost Shift? A Review of the Evidence," *Milbank Quarterly*, 2011, Vol. 89(1), pp. 90-130; Glied, Sherry, "COVID-19 Overturned the Theory of Medical Cost Shifting by Hospitals," *JAMA Health Forum*, 2021, Vol. 2(6), e212128.

³⁴ Berry, Steve, Martin Gaynor, and Fiona Scott Morton, "Do Increasing Markups Matter? Lessons from Empirical Industrial Organization," *Journal of Economic Perspectives*, 2019, Vol. 33(3), pp. 44-68.

³⁵ Handel, Ben, and Kate Ho, "Industrial Organization of Health Care Markets," in *Handbook of Industrial Organization*, 2021, Vol. 5, eds. Kate Ho, Ali Hortaçsu, and Alessandro Lizzeri, pp. 521-614.

time.”³⁶ In other words, better firms grow more quickly. The authors then assess, via analyzing the Medicare program, whether higher quality hospitals have higher market share and grow more quickly. The authors find that, when using measures of both outcomes (e.g., mortality and readmissions) and process (e.g., adherence to guidelines), higher quality hospitals have greater market share and experience more growth in market share over time. They conclude that “health care may have more in common with ‘traditional’ sectors subject to market forces than often assumed.”

In Cooper et al. (2022), my coauthors and I analyze whether higher-priced hospitals deliver higher quality care - a simple test for assessing the extent to which the market for hospital care is functioning.³⁷ We have two notable findings. First, patient death rates are markedly lower at high-priced hospitals. However, this positive correlation between prices and quality is only present in hospitals in unconcentrated markets where there is scope for competition (e.g., markets with a Herfindahl Hirschman Index (HHI) of less than 4,000). By contrast, in more concentrated markets, going to a higher-priced hospital raises health spending markedly with no effect on clinical outcomes. Second, we find that high hospital prices in competitive markets appear to be cost-effective given their association with better outcomes.

Several studies find that hospitals facing more competition have better outcomes. Kessler and McClellan (2000) study outcomes for Medicare beneficiaries and observe that patients receiving care from hospitals in the most concentrated (least competitive) markets had mortality rates that are 4.4% higher than patients receiving care at hospitals in less concentrated (more competitive markets)³⁸. Likewise, Cooper et al. (2011) and Gaynor, Moreno-Serra, and Propper (2013) study the effect of a set of reforms in the English National Health Service which gave patients a choice of their provider and forced hospitals to compete.³⁹ This is a setting with regulated price that is quite analogous the markets hospitals face when offering care to Medicare beneficiaries. Both studies find that hospitals exposed to competition after these reforms lowered their mortality rates.

Consolidation in the Hospital Industry

From 1998 to 2017, as the American Hospital Association notes, there were 1,577 hospital mergers among the nation’s approximately 5,000 hospitals. There were 261 additional hospital mergers announced from 2018-2020. As Cooper et al. (2019) note, the vast majority of hospitals in the US have either been directly involved in a merger or have been a neighbor to a merger. While some of the mergers that occurred had little or no impact on competition, many of the mergers that happened were between hospitals that were close competitors. My own calculations suggest that approximately 20% of mergers between 2000 and 2020 could be classified by the

³⁶ Chandra, et al., 2016.

³⁷ Cooper, et al., 2022.

³⁸ Kessler and McClellan, 2000.

³⁹ Cooper, et al., 2011; Gaynor, Moreno-Serra, and Propper, 2013.

Department of Justice and Federal Trade Commission Horizontal Merger Guidelines as “presumed likely to enhance market power.”⁴⁰

There is now a large body of academic evidence on the impact of hospital mergers which yields four core conclusions.

- First, mergers of hospitals that are geographically proximate and are close substitutes to one another can lead to meaningful price increases.⁴¹ The literature shows that it is not uncommon for hospital mergers to generate price increases of 20% or more and, in some cases, they can generate price increases of more than 50%. Recently, two studies have found that mergers of hospitals that are not geographically proximate but share common customers can raise prices by between 10% and 20%. Of note, both non-profit hospitals and for-profit hospitals have been found to raise prices after mergers that lessen competition.⁴²
- Second, the literature suggests that most mergers either have no effect on clinical quality or have led to modest reductions in clinical quality.⁴³
- Third, the literature suggests that mergers of nearby competing hospitals tend not to reduce costs and that if there are cost reductions, it generally is not passed on to

⁴⁰ U.S. Department of Justice and Federal Trade Commission, “Horizontal Merger Guidelines,” Technical Report 2010.

⁴¹ Town, Robert, and Gregory Vistnes, “Hospital Competition in HMO Networks,” *Journal of Health Economics*, 2001, Vol. 20(5), pp. 733-752; Krishnan, Ranjani, “Market Restructuring and Pricing in the Hospital Industry,” *Journal of Health Economics*, 2001, Vol. 2, pp. 213-237; Vita, Michael G., and Seth Sacher, “The Competitive Effects of Not-for-Profit Hospital Mergers: A Case Study,” *Journal of Industrial Economics*, 2001, Vol. 49(1), pp. 63-84; Gaynor, Martin, and William B. Vogt, “Antitrust and Competition in Health Care Markets,” in *Handbook of Health Economics*, Vol. 1, eds. Anthony J. Culyer and Joseph P. Newhouse, pp. 1405-1487; Capps, Cory, David Dranove, and Mark Satterthwaite, “Competition and Market Power in Option Demand Markets,” *RAND Journal of Economics*, 2003, Vol. 34(4), pp. 737-63; Capps, Cory, and David Dranove, “Hospital Consolidation and Negotiated PPO Prices,” *Health Affairs*, 2004, Vol. 23(2), pp. 17-181; Dafny, Leemore, “Estimation and Identification of Merger Effects: An Application to Hospital Mergers,” *Journal of Law and Economics*, 2009, Vol. 52(3), pp. 523-550; Haas-Wilson, Deborah, and Christopher Garmon, “Hospital Mergers and Competitive Effects: Two Retrospective Analyses,” *International Journal of the Economics of Business*, 2011, Vol. 18(1), pp. 17-32; Tenn, Steven, “The Price Effects of Hospital Mergers: A Case Study of the Sutter-Summit Transaction,” *International Journal of the Economics of Business*, 2011, Vol. 18(1), pp. 65-82; Thompson, Aileen, “The Effect of Hospital Mergers on Inpatient Prices: A Case Study of the New Hanover-Cape Fear Transaction,” *International Journal of the Economics of Business*, 2011, Vol. 18(1), pp. 91-101; Gowrisankaran, Nevo, and Town, 2015.

⁴² Gaynor, Martin, Kate Ho, and Robert J. Town, “The Industrial Organization of Health Care Markets,” *Journal of Economic Literature*, 2015, Vol. 53(2), pp. 235-84.

⁴³ Beaulieu, Nancy D., et al., “Changes in Quality of Care After Hospital Mergers and Acquisitions,” *New England Journal of Medicine*, 2020, Vol. 382(1), pp. 51-59; Romano, Patrick, and David Balan, “A Retrospective Analysis of the Clinical Quality Effects of the Acquisition of Highland Park Hospital by Evanston Northwestern Healthcare,” *International Journal of the Economics of Business*, 2011, Vol. 18(1), pp. 45-64; Capps, Cory, “The Quality Effects of Hospital Mergers,” unpublished manuscript, 2005, Bates White LLC; Haas, Susan, Atul Gawande, and Mark E. Reynolds, “The Risks to Patient Safety from Health System Expansions,” *JAMA*, 2018, Vol. 319(17), pp. 1765-1766.

consumers.⁴⁴ By contrast, there is some evidence of 4% to 7% cost savings among mergers involving hospitals that are not competitors (and thus are deals that are less likely to raise prices).⁴⁵

- Fourth, consistent with theory, in addition to impacting product markets (e.g., the market for hospital services), mergers can give merging parties more bargaining power over their workers' wages (e.g., it gives hospitals market power in input markets). Here, recent work by Prager and Schmitt found that mergers which resulted in large increases in concentration led to 1.7 percentage points slower wage growth for nurses and pharmacy workers.⁴⁶

While my testimony is focused on the impact of market power among providers, it is worth noting that similar patterns can be observed in insurance markets. There are two peer-reviewed studies that examine the impact of insurance mergers.⁴⁷ Both studies found that premiums increased after the mergers in markets where the merging parties had the most overlap before the mergers occurred. One of these studies also found that insurance mergers led to a reduction in the payment rates to providers and, notably, did not find that these savings were passed on to consumers.⁴⁸

Physician Markets

There are approximately a million physicians in the US.⁴⁹ The market for physician services has experienced changes over the last two decades that, in many ways, parallel what happened in hospital markets.⁵⁰ During this period, physician markets have experienced horizontal mergers (e.g., two physician practices merging), vertical integration (e.g., hospitals or insurers buying physician practices), and an expansion in the share of physician practices owned by private equity (PE) firms. From 2010 to 2016, the increase in concentration in physician markets paralleled the rise in concentration among hospital markets.⁵¹ At present, approximately 40% of US markets are “highly concentrated” for primary care services. Likewise, over the last decade, the share of physicians employed by hospitals roughly doubled and reached nearly 40%.⁵²

⁴⁴ Craig, Stuart, Matthew Grennan, and Ashley Swanson, “Mergers and Marginal Costs: New Evidence on Hospital Buyer Power,” *RAND Journal of Economics*, 2021, Vol. 52(1), pp. 151-178.

⁴⁵ Schmitt, Matt, “Do Hospital Mergers Reduce Costs?” *Journal of Health Economics*, 2017, Vol. 52, pp. 74-94.

⁴⁶ Prager, Elena, and Matt Schmitt, “Employer Consolidation and Wages: Evidence from Hospitals,” *American Economic Review*, 2021, Vol. 111(2), pp. 397-427.

⁴⁷ Dafny, Duggan, and Ramanarayanan, 2012; Guardado, Jose, David Emmons, and Carol Kane, “The Price Effects of a Large Merger of Health Insurers: A Case Study of UnitedHealth-Sierra,” *Health Management, Policy and Innovation*, 2013, Vol. 1(3), pp. 16-35.

⁴⁸ Dafny et al., 2012.

⁴⁹ “Professionally Active Physicians,” *Kaiser Family Foundation*, January 2023, <https://www.kff.org/other/state-indicator/total-active-physicians/>.

⁵⁰ Fulton, 2017.

⁵¹ Fulton, 2017.

⁵² Fulton, 2017.

While both vertical and horizontal integration of physician practices could, in theory, lead to efficiency gains, the empirical evidence thus far suggests both types of transactions have raised the prices physicians negotiate with insurers and increased health spending on Medicare beneficiaries and the privately insured. For example, recently published work by economists at the FTC found that horizontal physician practice mergers led to increases of between 10% and 20% in the prices negotiated with insurers.⁵³ This finding builds on past work showing that physicians in more concentrated markets have higher prices.⁵⁴ Likewise, evidence on the effect of hospital acquisition of physician practices (e.g., vertical integration) has found that these transactions raised prices, on average, by more than 10% and led to marked increases in both public and private health spending.⁵⁵ Notably, this literature has not found that the vertical integration of hospitals and physicians has led to improvements in quality and has found that acquired physicians tend to shift their patient referrals to their new acquiring entities.⁵⁶ At present, there is little evidence on whether insurer acquisition of physician practices impacts spending. However, we should be vigilant about whether these transactions lessen competition and how they impact risk-adjustment coding, particularly in the Medicare Advantage program.

Addressing Consolidation in the Health Sector

Provider consolidation has adversely impacted the American public, lowered tax revenue, and raised health spending for the publicly and privately insured. There are, however, a number of steps that could be taken to avoid unintentionally incentivizing consolidation, strengthen antitrust enforcement laws and enforcement, promote competition in existing markets, and expand data availability and create a national claims database.

Avoiding Incentivizing Consolidation

Steps could be taken to lessen the incentive for firms to consolidate.

1. Firms might be merging to try to defray high (fixed) administrative costs. Here, for example, duplicative quality reporting requirements across Medicare and private insurers, as well as claims forms that differ across insurers, can raise administrative costs for hospitals. This in turn might encourage mergers. As the Congressional Budget Office reports, in 2020, the Centers for Medicare & Medicaid Services used more than 2,000 quality metrics

⁵³ Kock, Thomas, and Shawn Ulrick, "Price Effects of a Merger: Evidence from a Physicians' Market," *Economic Inquiry*, 2020, Vol. 59(2), pp. 790-802 ("Kock and Ulrick, 2020").

⁵⁴ Dunn and Shapiro, 2014.

⁵⁵ Cory Capps, David Dranove, and Chris Ody, "The Effect of Hospital Acquisitions of Physician Practices on Prices and Spending," *Journal of Health Economics*, 2018, 59(2), pp. 139-152.

⁵⁶ Scott, Kristin W., et al., "Changes in Hospital-Physician Affiliations in U.S. Hospitals and Their Effect on Quality of Care," *Annals of Internal Medicine*, 2018, Vol. 168(2), pp. 156-157; Kock and Ulrick, 2020; Short, Marah Noel, and Vivian Ho, "Weighing the Effects of Vertical Integration Versus Market Concentration on Hospital Quality," *Medical Care Research and Review*, 2020, Vol. 77(6), pp. 538-548; Chernew, Michael, Zack Cooper, Eugene Larsen-Hallock, and Fiona Scott Morton, "Physician Agency, Consumerism, and the Consumption of Lower-Limb MRI Scans," *Journal of Health Economics*, Vol. 76(1); Lin, Haizhen Lin, et al., "Owning the Agent: Hospital Influence on Physician Behaviors," *NBER Working Paper 28859*, 2021.

to oversee providers' performance.⁵⁷ Steps should be taken constantly to lower the administrative costs facing hospitals. Here, Harvard University Professor David Cutler has produced a detailed set of thoughtful recommendations for reducing administrative costs for hospitals, including establishing a clearinghouse for bill submission and simplifying prior authorization.⁵⁸

2. At present, the Medicare program often pays more for health care services if they are performed at hospital outpatient departments versus in a physician office. As a result, hospitals and physicians can receive higher payments and share the surplus post acquisition if the hospital buys the physician practice (e.g., they vertically integrate). Academic research and MedPAC have suggested that this lack of site neutral payments encourages vertical integration and raises public and private health spending.⁵⁹ While Congress worked to address this in 2015, more could be done to expand site neutral payments to a wider array of outpatient services across hospital outpatient departments.
3. The 340b program provides hospitals with discounted access to infused medications. The program is designed to offset the costs of delivery of these products to certain low-income populations. However, one consequence of the program is that it can allow certain hospitals with a 340b waiver to acquire these products at cheaper prices than certain physician practices. As the Congressional Budget Office and a wide range of outside experts have noted, this can unintentionally incentivize hospitals to vertically integrate with physician practices that give their patients large quantities of infused products.⁶⁰ One strategy, proposed by scholars at the Brookings Institution and the American Enterprise Institute to lower the incentives from the 340b program for providers to integrate, is to lower the scale of the 340b discounts.⁶¹

Strengthening Antitrust Enforcement Laws and Enforcement

⁵⁷ "Policy Approaches to Reduce What Commercial Insurers Pay for Hospitals' and Physicians' Services," *Congressional Budget Office*, September 2022, <https://www.cbo.gov/publication/58541>; Cutler, David, "Reducing Administrative Costs in U.S. Health Care," *The Hamilton Project*, March 10, 2020, <https://www.hamiltonproject.org/publication/policy-proposal/reducing-administrative-costs-in-u-s-health-care/> ("Cutler 2020").

⁵⁸ Cutler 2020.

⁵⁹ "Aligning Fee-for-Service Payment Rates Across Ambulatory Settings," in *Report to the Congress: Medicare and the Health Care Delivery System*, MedPac, June 2022, https://www.medpac.gov/wp-content/uploads/2022/06/Jun22_Ch6_MedPAC_Report_to_Congress_SEC.pdf; Dranove, David, and Chris Ody, "Employed for Higher Pay? How Medicare Payment Rules Affect Hospital Employment of Physicians," *American Economic Journal: Economic Policy*, 2019, Vol. 11(4), pp. 249-71.

⁶⁰ Desai, Sunita, and J. Michael McWilliams, "Consequences of the 340B Drug Pricing Program," *New England Journal of Medicine*, 2018, Vol. 378(6), pp. 539-48; "Policy Approaches to Reduce What Commercial Insurers Pay for Hospitals' and Physicians' Service," *Congressional Budget Office*, September 2022, <https://www.cbo.gov/publication/58541>; Adler, Loren, and Benedic Ippolito, "Procompetitive Health Care Reform Options for a Divided Congress," *Brookings*, 2023, <https://www.brookings.edu/essay/procompetitive-health-care-reform-options-for-a-divided-congress/> ("Adler and Ippolito, 2023").

⁶¹ Adler and Ippolito, 2023.

1. There is broad agreement from experts that the antitrust enforcement agencies are significantly underfunded, and funding for the FTC and DOJ antitrust enforcement teams should be increased.⁶² Over the last decade, merger filings have increased markedly more quickly than the agencies' enforcement budgets. Limited enforcement budgets make it challenging for the FTC to take the appropriate volume of enforcement actions, which means, in practice, that deals which do lessen competition are not being challenged. Recent legislation, for example, the Competition and Antitrust Law Enforcement Reform Act of 2021, would introduce large increases to the enforcement agencies' budgets.⁶³
2. At present, the FTC is not allowed to pursue cases for anticompetitive conduct against not-for-profit firms (FTC Act, Section 45(a)(2), Section 44). Since the majority of hospitals in the US are not-for-profit, this leaves a significant blind spot in enforcement and should be changed. Recent proposed legislation — Stop Anticompetitive Healthcare Act of 2022 — would provide the FTC with enforcement activity over these non-profit hospital actions.⁶⁴
3. At present, the Hart-Scott-Rodino (HSR) Act exempts deals with relatively small merging parties from reporting those transactions to the FTC. Academic evidence suggests that there are virtually no enforcement actions against deals under HSR thresholds because they are not observed by regulators.⁶⁵ However, in the health sector, even small mergers in local health care markets can have big local effects. My own calculations in ongoing work with Stuart Craig, Zarek Brot-Goldberg, and Lev Klarnet suggest that more than 30% of hospital mergers are under HSR reporting thresholds and so too are the majority of physician horizontal and vertical acquisitions. Actions should be taken to lower the reporting thresholds, so that the vast majority of physician and hospital mergers are visible to the enforcement agencies.⁶⁶
4. The DOJ and FTC should revise the guidelines for antitrust enforcement in the health sector. These were last issued in 1996 and the market has evolved significantly since

⁶² Gaynor Senate Testimony; Dafny, Leemore, "How Health Care Consolidation is Contributing to Higher Prices and Spending, and Reforms that Could Bolster Antitrust Enforcement and Preserve and Promote Competition in Health Care Markets," Statement Before the U.S. House Committee on the Judiciary Subcommittee on Antitrust, Commercial and Administrative Law, April 29, 2021, https://www.hbs.edu/ris/Profile%20Files/4.29.2021%20Dafny%20Oral%20Statement%20and%20Written%20Testimony%20Before%20U.S.%20House_47df362c-9f24-4ca3-a9aa-bebf5af8fa7a.pdf ("Dafny House Testimony"); Baer, Bill, et al., "Restoring Competition in the United States," *Washington Center for Equitable Growth*, 2020, <https://equitablegrowth.org/research-paper/restoring-competition-in-the-united-states/> ("Baer, et al., 2020").

⁶³ "S. 225 - Competition and Antitrust Law Enforcement Reform Act of 2021," *Congress.gov*, <https://www.congress.gov/bill/117th-congress/senate-bill/225>

⁶⁴ "H.R.9510 - Stop Anticompetitive Healthcare Act of 2022", *Congress.gov*, <https://www.congress.gov/bill/117th-congress/house-bill/9510>.

⁶⁵ Wollman, Thomas, "Stealth Consolidation: Evidence from An Amendment to the Hart-Scott-Rodino Act," *American Economic Review: Insights*, 2018, Vol. 1(1), pp. 77-94.

⁶⁶ There are detailed suggestions on ways to achieve this in Baer, et al., 2020.

then.⁶⁷ Revised guidelines that replace the withdrawn 1996 guidance could aid enforcement agencies, courts, and players in the health sector.

Both Harvard's Leemore Dafny and Carnegie Mellon's Martin Gaynor were officials at the FTC and have described additional, detailed steps in their past Congressional testimony that could be taken to strengthen antitrust enforcement laws in the US.⁶⁸ One key area where they agree (and I support) is amending the Clayton Act to make it easier for enforcement agencies to challenge anticompetitive mergers. This could include shifting language that currently requires regulators to demonstrate that a merger "substantially" lessens competition to require regulators to demonstrate that a merger "meaningfully" lessens competition. Crucially, this type of shift would allow enforcement agencies to have more tools to address serial acquisitions of small physician practice by larger firms (including hospitals and physician staffing companies), where individual transactions might not warrant individual scrutiny, but the collective series of transactions meaningfully impact a market.

Promoting Competition

1. Certificate of Need (CON) laws are state regulations that, for example, necessitate a regulator's permission for new firms to enter a health care market (e.g., to build a new hospital or outpatient facility), for facilities to purchase new equipment (e.g., MRI scanners), or for facilities to expand (e.g., to add more inpatient or outpatient beds). At present, 35 states and Washington, D.C. operate CON laws, although the scope of laws vary markedly across states.⁶⁹ Often, CON laws are a vehicle for incumbent firms to block the entry of rivals. The FTC and DOJ have put out a joint statement highlighting how CON laws tend to restrict competition in the health sector and that there is little evidence that they lower health spending.⁷⁰ The academic evidence supports the agencies' views on CON laws.⁷¹ For example, Cutler, Huckman, and Kolstad (2010) show that the repeal of CON laws in Pennsylvania led to a redistribution of surgeries to higher-quality surgeons.⁷² States should continue to either rescind CON laws or structure them in a manner that does not lessen competition. States should also focus on avoiding additional laws that also could unintentionally limit competition, including any willing provider laws, scope of practice laws, and licensing board decisions.

⁶⁷ "Statements of Antitrust Enforcement Policy in Health Care," *U.S. Department of Justice and the Federal Trade Commission*, Aug. 1996, <https://www.justice.gov/atr/page/file/1197731/download>.

⁶⁸ Gaynor Senate Testimony; Dafny House Testimony.

⁶⁹ "Certificate of Need Laws," *National Conference of State Legislators*, 2023, <https://www.ncsl.org/health/certificate-of-need-state-laws>.

⁷⁰ Joint Statement of the Federal Trade Commission and the Antitrust Division of the U.S. Department of Justice on Certificate of Need Laws and South Carolina House Bill 3250, January 11, 2016, https://www.ftc.gov/system/files/documents/advocacy_documents/joint-statement-federal-trade-commission-antitrust-division-u.s.department-justice-certificate-need-laws-south-carolina-house-bill-3250/160111ftc-doj-sclaw.pdf.

⁷¹ Gaynor, Ho, and Town, 2015; Mitchell, Matthew, "Do Certificate-of-Need Laws Limit Spending?" *Mercatus Working Paper*, George Mason University, 2016.

⁷² Cutler, David, Robert Huckman, and Jonathan Kolstad, "Input Constraints and the Efficiency of Entry: Lessons from Cardiac Surgery," *American Economic Journal: Economic Policy*, Vol. 2(1), pp. 51-76.

2. Increasingly, hospital/insurer contracts contain so-called ‘all or nothing’ provisions, ‘anti-steering’ provisions, and ‘anti-tiering’ provisions. ‘All or nothing’ provisions require that insurers include all a health system’s sites in their network if they include any one site in their network. ‘Anti-tiering’ and ‘anti-steering’ provisions can require that insurers not take steps to increase cost sharing for certain hospitals or actively steer patients away from high-cost facilities. Collectively, these types of provisions can reduce competition and raise prices. States and federal regulators should be mindful of these types of provisions and, where appropriate, strongly discourage their use or seek to take enforcement action against them for limiting competition. Likewise, Congress would be justified in exploring the possibility of banning these types of provisions in hospital/insurer contracts.

Expanding the Availability of Data and Creating a National Claims Database

1. The Hospital Price Transparency Rule and the Transparency in Coverage Rule have increased the availability of provider pricing information in the health sector. At present, however, there are concerns about hospitals’ and insurers’ compliance with reporting requirements.⁷³ Ultimately, it is vital that hospitals and other providers subject to reporting requirements adhere to the law and publicly post their data. Likewise, the data requirements could be expanded. At present, for example, the insurer data files list the prices each plan negotiates with providers. However, because the reporting requirements do not identify the volume of patients per plan or per procedure, it is extremely difficult to construct an average price per hospital. There are a handful of firms beginning to work with this data who have important insights about the ways that data reporting could be improved so that the data could be used more efficiently by patients, insurers, and providers.
2. At present, there is currently no national all-payer claims database that would allow policy-makers, market participants, and researchers to observe utilization and prices for specific services across providers. While some states have created all-payer claims databases, many have not. We need a national claims database that would offer a national perspective on spending, pricing, and utilization across all the major funders of health care services in the US. As health spending in the US approaches 20% of US GDP, a national data set should be considered an infrastructure investment akin to highways and roads that will aid market participants, further research, and help spur delivery innovations.

Again, thank you for the opportunity to testify today.

⁷³ Kona, Maanasa, and Sabrina Corlette, “Hospital And Insurer Price Transparency Rules Now In Effect But Compliance Is Still Far Away,” *Health Affairs Forefront*, September 12, 2022; “Price Transparency Impact Report,” *Turquoise Health*, October 18, 2022; Ippolito, Benedic, “Improving Competition and Transparency in Health Care Markets,” Statement Before the House Committee on Energy and Commerce Health Subcommittee, 2023, https://www.aei.org/wp-content/uploads/2023/03/Ippolito_WrittenTestimony.pdf?x91208.