EXECUTIVE SUMMARY

Who Pays for Rising Health Care Prices? Evidence from Hospital Mergers

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Over the past two decades, health care spending in the United States has surged, nearly doubling in real terms from \$2.5 trillion in 2000 to \$4.5 trillion in 2023. One of the primary drivers of the growth has been the sharp increase in the price of health care goods and services. Notably, the hospital industry, which accounts for approximately 30% of all health care spending, has experienced more price growth than *any* other sector of the economy.

Across the economy, rising prices often reflect improvements in service quality. However, in the US health care sector, price hikes are frequently the result of industry tactics — such as mergers and acquisitions, surprise medical billing, upcoding, and patent hopping — that enrich providers with no benefit for patients.

This money does not come from thin air; someone must pay for the gains that hospitals receive. So, who bears the cost of rising health care prices in the US health care industry?

In most markets, when the prices for goods and services go up, these price increases are absorbed directly by customers — patients, in the health care setting. However, most patients in the US are insured, and so when the price of hospital care rises by 10% for a \$20,000 hospitalization, little of this comes out of the patient's pocket. Instead, the bulk of that \$2,000 price increase will be paid by the patient's insurer. Insurers, however, do not simply absorb these costs themselves. Insurers, like any other company, will respond to cost increases by

changing the prices they charge to their customers. This ability to "pass through" costs to another party means that those who ultimately pay for rising health care prices may be surprisingly far removed from the patients who are being treated and the insurers who write the checks to providers.

Insurers' customers are American employers. In the US, the majority of working-age adults obtain their health insurance through their employers. This system of employer-sponsored insurance creates a direct link between what happens in the health care sector and labor market opportunities for workers outside the health care sector.

To quantify who pays for rising health care prices, our new research combines data on health care prices and utilization for millions of privately-insured Americans from the Health Care Cost Institute, data on health insurance premiums for thousands of employers from the US Department of Labor, and data from the Internal Revenue Service covering every income tax return filed in the US. We use these data to trace out how an increase in health care prices – such as a \$2,000 increase on a \$20,000 hospital bill – flows through to health spending, insurance premiums, employer payrolls, income and unemployment in counties, and the tax revenue collected by the federal government.

To analyze the effect of rising prices, we study the consequences of hospital mergers in the US. From 2000 to 2020, there were over 1,000 hospital mergers among the approximately 5,000 US hospitals. In past work, we showed that roughly 20% of hospital mergers during this period were likely, according to the DOJ/FTC Merger Guidelines, to increase prices by lessening competition. We have found that these mergers led to average price increases of 5%.

Our analyses of who pays for rising health care prices in the US are striking and deeply concerning. We show that dysfunction in the US health care industry is ultimately paid for by American workers. We find that increases in health care spending result in one-for-one increases in insurance premiums. These increases in premiums are then passed through to employees in the form of payroll cuts. We find that a 1% increase in health care prices lowers payroll at employers outside the health sector by approximately 0.4%.

Rather than cutting wages, employers respond to increases in insurance premiums by cutting the number of workers they employ. That is, they lay off workers. In counties where health care prices have increased, there is a corresponding decrease

in income and a rise in unemployment rates. Ultimately, middle-income workers are the ones who end up losing their job and failing to find new employment.

The harm from rising health care prices isn't limited to job losses and reductions in income. When workers lose their jobs, the government often steps in to provide unemployment insurance. Therefore, we also find that when health care prices increase by 1%, unemployment insurance payments from the government also rise. At the same time, when income goes down, so too does tax revenue – we observe that a 1% increase in health care prices reduces the federal income tax revenue collected by 0.4%.

Finally, our work connects to a distressing and frustratingly consistent literature that finds job losses and layoffs can lead to substantial increases in selfharm, overdoses, and death. Consistent with this literature, we find that mortality from suicides and overdoses increases in areas that experienced the largest increases in health care prices. Our results suggest that approximately 1 in 140 of the individuals who lose their job when health spending rises die within a year. Moreover, the effect we observe are similar in scale to other academic work analyzing the frequency with which individuals who lose their employment suffer premature mortality.

The hospital mergers we study are one of many significant factors driving up health care spending. We use our estimates to measure the scale of the damage hospital mergers do to local economies. We find that a hospital merger that raises prices by 5% would result in \$32 million in lost wages, 203 job losses, a \$6.8 million reduction in federal tax revenue, and a death from suicide or overdose of a worker outside the health sector. A year of hospital mergers that the FTC could have flagged as likely to raise prices by lessening competition but did not block would result in \$400 million in lost wages, 2,543 job losses, \$85 million in forgone federal income tax revenue, and 12 to 25 deaths.