



## Institution for Social and Policy Studies

ADVANCING RESEARCH • SHAPING POLICY • DEVELOPING LEADERS

Who Bears the Burden of Rising Health Care  
Spending in the US?  
Evidence from Hospital Mergers

ISPS Working Paper  
Date: 12/20/2022  
ISPS22-38

*Zack Cooper, Yale University and the NBER*  
*Stuart Craig, Yale University*  
*Lev Klarnet, Yale University*  
*Zarek Brot-Goldberg, University of Chicago*  
*Ithai Lurie, U.S. Department of Treasury*

# Who Bears the Burden of Rising Health Care Spending in the US? Evidence from Hospital Mergers\*

PRELIMINARY DRAFT — DO NOT CITE OR CIRCULATE

Zarek Brot-Goldberg, University of Chicago  
Zack Cooper, Yale University and the NBER  
Stuart Craig, Yale University  
Lev Klarnet, Yale University  
Ithai Lurie, U.S. Department of Treasury

December 2022

## Abstract

We analyze how increases in health care spending on the privately insured in the US impact labor market outcomes. We use price increases caused by horizontal hospital mergers as an instrument for local health care spending, and trace the incidence of rising health spending through the labor market using the universe of individual and business tax filings from the IRS. We find that a 10% increase in health care spending (roughly \$500 per person) lowers income by 2.7%, increases the unemployment rate by 0.7 percentage points, and lowers federal income tax receipts by 2.8%. These effects are driven by a worsening of labor market outcomes in non-health-care industries. Our results imply that workers shoulder the majority of additional health spending. The job losses we observe are concentrated among individuals in the bottom third of the income distribution. We find that the same increase in health care spending leads to 3.8 additional deaths from overdoses and suicides per 100,000 individuals each year, which implies that individuals who lose their jobs die at a rate of approximately 1 in 200.

---

\*We thank Joseph Altonji, Steven Berry, Zachary Bleemer, Anne Case, Angus Deaton, Joshua Gottlieb, Jason Hockenberry, Anders Humlum, Dmitri Koustas, Neale Mahoney, Costas Meghir, Fiona Scott Morton, Chima Ndumele, Seth Zimmerman, and seminar participants where this paper was presented for extremely valuable feedback. We benefited enormously from excellent research assistance provided by Felix Aidala, Krista Duncan, James Han, Mirko De Maria, Kelly Qiu, and Shambhavi Tiwari. This project received financial support from Arnold Ventures and the National Institute on Aging (grant P01-AG019783). We acknowledge the assistance of the Health Care Cost Institute (HCCI) and its data contributors, Aetna, Humana, and UnitedHealthcare, in providing the data analyzed in this study. HCCI had a right to review this research to guarantee we adhered to reporting requirements for the data related to patient confidentiality and the identifying of individual providers. Neither HCCI nor the data contributors could limit publication for reasons other than the violation of confidentiality requirements around patients and providers, nor could they require edits to the manuscript. The data used in this article can be accessed with permission from HCCI. The opinions expressed in this article and any errors are those of the authors alone. This research was conducted while one of the authors was an employee at the U.S. Department of the Treasury. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors and do not necessarily reflect the views or the official positions of the U.S. Department of the Treasury. Any taxpayer data used in this research was kept in a secured Treasury or IRS data repository, and all results have been reviewed to ensure that no confidential information has been disclosed.