

Research Statement

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I am an applied microeconomist who specializes in health and labor economics. My research focuses on two main themes: (1) analyzing the role of healthcare institutions in the local economy, with an emphasis on rural and underrepresented areas, and (2) evaluating how access to healthcare and social status impact individual behavior and health outcomes. My projects are policy-focused and often motivated by current events or deep issues related to economic and health inequality. Methodologically, my work combines natural experiments and rich data with modern econometric and spatial estimation techniques. Below, I summarize my current research projects and future research interests.

“Rural Hospital Closures and Local Economic Decline” (Job Market Paper)

In my job market paper, I evaluate how negative local labor shocks and amenity losses affect rural communities. Most of the rural United States has experienced declining economic activity and negative population growth over the last several decades. Considering the important implications for the overall well-being of rural residents, understanding the causes of rural decline is critical. Previous work highlights labor sorting and technological advancements in urban areas as explanations of this phenomenon. Much less research analyzes shocks in rural areas and their impact on residents' quality of life. To help address this gap in the literature, I estimate the causal impact of rural hospital closures on local labor markets using county level data of all hospital closures in the U.S. between 2003 and 2017. Unlike other major employers in rural areas, such as manufacturing plants, hospitals are a unique industry that produce both high- and low-skilled jobs and serve as an important contributor to residents' location preferences. Thus, hospital closures can impact rural communities through both local labor demand *and* supply channels.

The analysis begins with a difference-in-differences approach that exploits variation in hospital closures over time and space. I document flat pre-trends, consistent with theories that emphasize operating inefficiency, management practices, and government reimbursement rates as the main causes of closure. The results indicate closures have an adverse and sustained impact on local labor markets, populations, and housing markets. The effects are largest when a county loses its only hospital and in counties where closing hospitals make up a larger component of the local labor market. The analysis also reveals hospital closures decrease employment in the non-hospital sector, a change in workers that explains 40 percent of the total employment loss. Importantly, the estimates are robust to a wide range of checks designed to address endogeneity concerns, such as forward-looking behavior among hospital owners. To characterize the significance of the adverse effects, I develop a spatial equilibrium model that includes various agents in a local economy. Consistent with population flows in rural areas, the framework integrates heterogeneous households, where older residents face higher moving costs than younger workers. Hospital closures are treated as exogenous, shift demand for labor and housing, and impact household utility through changes in earnings, consumption, and amenities. Incorporating the reduced-form results and parameter estimates borrowed from previous research, analysis of the model reveals that rural

hospital closures lead to significant reductions in welfare that is internalized by workers, older residents who out of the labor force, and landowners.

“Did the ACA Medicaid Expansion Save Lives?”, with Mark Borgschulte (Revisions Requested at Journal of Health Economics)

Together with Mark Borgschulte, I investigate the relationship between access to health insurance through Medicaid and adult mortality using restricted-access microdata for all deaths in the U.S. between 2000 to 2017. Recent studies have shown that Medicaid reduces financial risk to beneficiaries while also increasing access to healthcare services. Far less evidence links Medicaid access to long-run improvements in health and mortality. We compare post-expansion changes in mortality between counties in states which did and did not expand Medicaid in 2014 following passage of the Affordable Care Act (ACA). To account for pre-existing differences between counties and improve the efficiency of our estimation, we use propensity-score reweighting in combination with model selection techniques from machine learning. Specifically, we use a double-lasso method to specify the propensity-score model, choosing economic, demographic, and political characteristics which predict mortality and/or the decision to expand Medicaid. This technique proves effective at constructing a balanced treatment and control group. We find counties in expansion states experienced a significant reduction in all-cause mortality among adults ages 20 to 64 years of age equaling 11.36 deaths per 100,000 individuals, a 3.6 percent decrease. Our estimate is largely driven by reductions in causes of death likely to be influenced by access to health care and equates to one life saved per 310 newly covered individuals. To further explore the robustness of our main findings, we re-estimate our model using the early-2000s Medicaid expansions in Arizona, New York, and Maine. The comparison of effects reveals that per-beneficiary ACA-Medicaid mortality improvements are very similar to the corresponding effects found when applying our model to these earlier reforms. Finally, a cost-benefit analysis shows that the improvement in welfare due to fewer deaths may offset the entire net-of-transfers expenditure associated with the expansion.

“Access to Health Care and Criminal Behavior: Short-Run Evidence from the ACA Medicaid Expansions,” (Revisions Requested at Journal of Policy Analysis and Management)

In addition to studying mortality, my work also focuses on the relationship between access to health insurance and individual behavior. In this paper, I investigate the causal impact of health insurance and crime following state decisions to expand Medicaid coverage in 2014 after the passage of the ACA. High uninsured rates and criminal behavior have been persistent challenges facing the U.S. Both issues impose heavy burdens on individuals and communities. Statistics, however, indicate that these issues are closely related. In fact, many of the newly eligible individuals for Medicaid are adults at high risk for committing a crime. Using difference-in-differences and synthetic control models, my findings reveal that states that chose to expand Medicaid to a wider range of low-income adults experienced significant reductions in annual reported crime by 3.3 percent relative to non-expansion states. This effect is driven by reductions in both violent and property crime. Within expansion states, results show crime reductions to be

larger in counties with higher pre-expansion uninsured levels, i.e. in places where the expansion is predicted to have the largest impact. Likely mechanisms that explain the findings include increases in healthcare utilization and reductions in financial burdens, two factors that can mitigate criminal behavior. Overall, the estimated decrease in reported crime amounts to an annual cost savings of approximately \$13 billion.

“Run For Your Life? The Effect of Close Elections on the Life Expectancy of Politicians,” with Mark Borgschulte (Accepted at Journal of Economic Behavior and Organization)

This paper analyzes the relationship between social status, occupation, and health. Although increased social status is thought to have largely positive effects on health, the possibility of physical and psychological costs of working in leadership positions may offset or even dominate the benefits for some individuals. Despite theories that address these competing effects, empirical evidence is limited and has mainly focused on heads of state. In joint work with Mark Borgschulte, I provide new insights to this literature. Specifically, we investigate the causal effect of election to political office on longevity, using a regression discontinuity model applied to a newly collected dataset on winning and losing candidates for the offices of US governor and senator, as well as House representatives standing for re-election. The dataset we build includes the dates of birth and death and some biographical details on 100 percent of winning candidates and over 96 percent of losing candidates in US history who fall within three percent of the margin of victory. Contrary to previous work on heads of state, we find that candidates who narrowly win election experience an increase in natural life expectancy relative to losers by over one year, on average. The finding of longer life is notably larger for winners who ran for office after the 19th century, with estimates of two to three years of life gained across the three offices, and three to four years gained among governors and senators. We also examine the role of job and candidate characteristics that may proxy for exposure to stress. Across all our measures, we find no evidence that links stress experienced in office to the observed patterns of life expectancy. We do, however, find evidence of a gain in life expectancy from governing larger states, consistent with elevation to a more prestigious position leading to a longer life. Our findings suggest that if there is an important role for stress in explaining the lifespans of heads of state, the effects do not generalize to other officeholders.

Future Research

My future research agenda closely follows the themes of the projects summarized above, particularly my job market paper. Specifically, I plan to further explore the importance of hospitals in relation to local economies and health outcomes. First, more work is needed to understand the extent to which spillovers created by rural hospital closures are dispersed across space. Closures can presumably, for example, create spillovers in neighboring counties. These spillovers may be positive, if the neighboring counties absorb employment losses from counties that experience a closure, or negative, if a closing hospital was also a contributing industry to the neighboring local economy. Understanding the diffusion of spillovers and their relation to the distribution of nearby hospitals is an interesting research project to explore. Second, the rich data I analyze for my job market paper makes it possible to also investigate how different types of hospital transactions, such as mergers and consolidations, impact local communities. Like closures, hospital mergers

and consolidations are a rising trend in the United States, particularly in rural areas. The extent to which these transactions impact local economies and health outcomes of residents, however, is unclear.

Third, I plan to explore how rural hospital closures and the loss of obstetric services in rural areas impact non-adult health, such as rates of newborn morbidity and mortality. Access to general service and obstetric care in rural communities is critical to ensuring good child health outcomes. Previous work has largely focused on how hospital closures affect adult health and mortality. Understanding how loss of healthcare services affects non-adult health remains an important area of research. Finally, I plan to investigate whether rural hospital closures are a socially efficient consequence of the operating market or if interventions to keep hospitals open, such as government bailouts, are warranted. Research that has examined whether hospital closures improve social welfare offer mixed findings. Based on the findings of my job market paper, to fully account for all welfare changes due to rural hospital closures, an analysis should ideally incorporate not just the cost-savings of closing a hospital and corresponding patient health outcomes, but also local economic impacts as well.