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Abstract

34 US states currently have Certificate of Need (CON) laws, which require health care providers to prove their “economic necessity” to a state board before they can legally open or expand. While dozens of articles have evaluated the effect of CON on hospitals and consumers, no published article has evaluated its effect on health care workers. Economists expect entry barriers such as CON to reduce the number of firms and so to reduce employment. The effect of this reduced competition on wages, however, is theoretically ambiguous: the lower number of required workers and the increased bargaining power of firms relative to workers pushes wages down, but the increased bargaining power of firms relative to consumers increases rents, which may be shared with workers to push wages up. The American Health Planning Association provides data on CON laws themselves, noting which states had CON in a given year and which types of health providers are covered by the law in each state. Labor market data come primarily from the Current Population Survey, supplemented by administrative data. The main empirical strategy is a difference-in-difference analysis of CON repeals. I find that CON reduces overall health sector employment by 0.45%, but does not significantly affect wages.

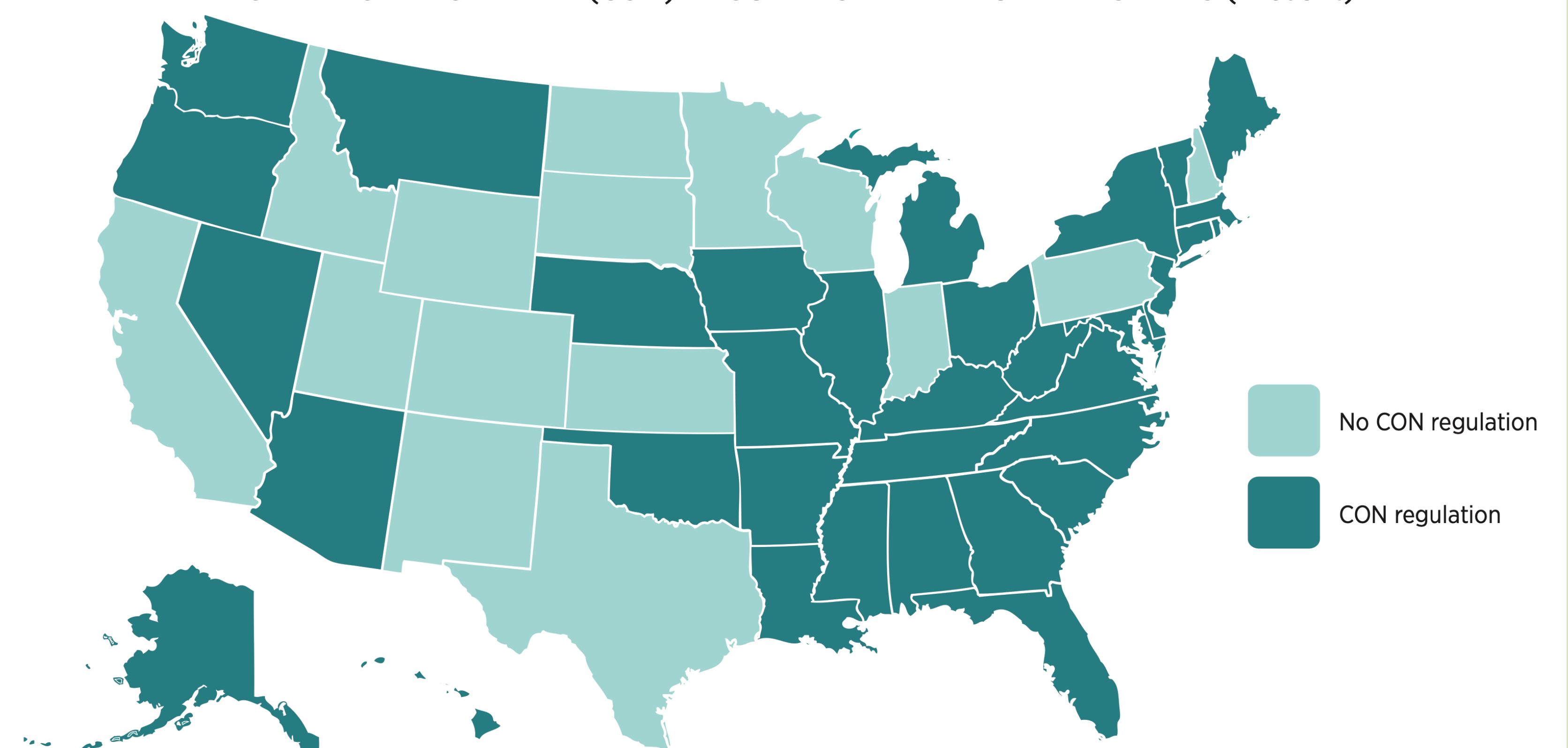
Background

A growing recent literature in economics has studied how the concentration of employers (often called “monopsony”, although there is generally more than one employer even in concentrated markets) affects labor market outcomes such as employment and wages. For instance, Arnold (2021) finds that “local concentration depresses wages by about 4-5 percent relative to a fully competitive benchmark”, and Phillipon (2019) and Webber (2020) argue that growing labor market concentration could be responsible for slow overall wage growth.

Several recent articles have assessed how hospital competition in particular affects the wages of hospital employees. Prager and Schmitt (2021) find that hospital mergers reduce wages of those with industry-specific skills (think nurses, not janitors) 4-7% when they cause a large increase in concentration.

The effect of CON laws on health care capacity, cost, access, and quality has been studied extensively. Conover and Bailey (2020) provide a systematic review of the literature through 2010 (90 articles), and Bailey (2021) reviews additional work through 2020. Bailey and Hamami (2019) test whether the wages of health care workers change how CON affects overall health spending. Zinn (1994) and Fayissa et al. (2020) study how nursing home CON affects quality and find that it leads to a substitution on RNs for less-trained workers. However, there appears to be no previous work testing how CON affects the wages or employment of health care workers in general.

CERTIFICATE-OF-NEED (CON) REGULATION IN THE UNITED STATES (Present)



Source: Mercatus Center at George Mason University

Methods

I turn to the data to quantify the magnitude and direction of these effects, providing the first estimates of how CON affects health care workers. The American Health Planning Association provides data on CON laws themselves, noting which states had CON in a given year and which types of health providers are covered by the law in each state. Labor market data come primarily from the 1980-2019 Current Population Survey. The main empirical strategy is a difference-in-difference analysis of CON repeals.

Following a 1974 federal push that threatened to withhold Medicare funds, every state had adopted CON programs by the mid-1980's. But the federal government then switched from pushing states to adopt CON laws to pushing states to repeal them, considering CON “anti-competitive” rather than “cost-reducing”. Unlike with the push to adopt CON, the federal government has only used words, and not funding threats, to convince states to repeal. Therefore only 16 states have done so thus far, most recently New Hampshire in 2016. My main difference-in-difference strategy compares employment and wages for health care workers in repeal states to workers in other sectors and to states that maintained CON, using regressions of the form:

$$\text{Wages}_{ist} = \alpha_0 + \beta_1 * \text{HealthCareWorker}_{ist} + \beta_2 * \text{CON}_{st} + \beta_3 * \text{HealthCareWorker}_{ist} * \text{CON}_{st} + \beta_4 * \text{Controls}_{ist} + \varepsilon_{ist}$$

	InHourlyWage	Employment
CON	-.0054	-.0045***
	(.0137)	(.0007)
N	3,223,034	5,442,425

Results of OLS regression with robust standard errors clustered by state. Controls (omitted for space) include age, sex, race, ethnicity, education, union status, marital status, and state.

Future Plans

The future full version of this paper will add:

- Breakdowns of wage and employment effects by specific occupations and industry subsectors
- Tests for lagged and/or heterogeneous effects of CON (different states target different types of health care facilities and equipment with their laws)
- Modern dif-in-dif robustness checks (parallel trends, staggered adoption)
- Additional Datasets (CPS has a long time series but only surveys a relatively small fraction of health care workers each year)

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