Published in final edited form as:

J Am Med Dir Assoc. 2020 April ; 21(4): 559–561.e1. doi:10.1016/j.jamda.2019.09.014.

Evolution of the Nursing Home Industry in States With Different Certificate of Need Policies

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One of the earliest efforts to curb needless health care spending in the United States was certificate-of-need (CON) programs, which limit and manage the expansion of different health care institutions. CON programs mainly targeted nursing homes and home health industry that provide long-term care that is predominantly financed by states through Medicaid program. A large set of empirical studies documented that CON laws have been unsuccessful in limiting growth of hospital,^{1,2} nursing home,^{3,4} and home health^{5,6} spending. Despite this lack of evidence on the effectiveness of CON programs, 34 states have some form of CON programs that remained mostly unchanged over the last 3 decades. Such long-term presence of CON laws raises an important concern that CON imposes a barrier to entry and diminishes the threat of competition for incumbents that may affect the quality of care.⁷ Thus, nursing homes in states with and without CON laws may have been in 2 very different competitive atmospheres over time.

This study offers new evidence on the evolution of nursing homes in states with different competitive atmospheres by comparing the trends in the structural characteristics of nursing homes between 36 states that always had CON and 10 states that never had CON from 1992 to 2017.

Data and Methods

We used longitudinal data from the Online Survey Certification and Reporting (OSCAR) and National Conference of State Legislatures website⁸ of 44 US states from 1992 to 2017. Among 48 contiguous states, we focused on 44 states that did not change their CON policy during the study period, excluding Indiana, North Dakota, New Hampshire, and Pennsylvania because of the change in their CON policy during this period. Among the included states, 19 states had only nursing home CON, 15 states had both nursing home and home health CON, and 10 states had no CON laws in place. We examined how size (number of beds), payer mix (share of Medicare-paid patients), and staff mix (ratio of registered nurses to nurses) of nursing homes changed over time in these 3 types of states. We estimated the trends relative to their values in 1992, fitting a nursing home fixed effect regression separately for states with different types of CON laws.

Results

During the study period, an average nursing home added 6 beds in states with both nursing home and home health CON regulations, whereas an average nursing home in states without CON lost 2 beds (Figure 1 panel A). The share of Medicare-paid patients increased in both with and without CON states and reached a peak in 1997-when the Balanced Budget Act was enacted and fundamentally changed the way nursing homes were being paid by Medicare-then reversed to a decreasing trend until 2000-when the adjustment in law happened-and reversed to an increasing trend until 2010 and declined slightly afterward. However, CON states increased their share of Medicare-paid patients at a higher rate relative to no-CON states (panel B). The ratio of registered nurses to nurses declined initially until the late 2000s, with the highest decline in states with home health CON and increased afterwards-with a lower rate of increase in states with home health CONs (Panel C).

Discussion

Home health CON law, which was mainly set to influence home health industry, may have influenced the nursing home industry and nursing home size over time. This implies that barriers to entry might have provided market power for the existing nursing homes in states with home health CON. Even though CON states have increased their share of Medicare paid patients with a faster rate compared with no-CON states, they lag behind in increasing their share of registered nurses. However, having more Medicare patients, they should have more services in terms of registered nurses and the amount of care each patient receives in order to maintain their quality comparable to the nursing homes with lower share of Medicare patients. Overall, these findings demonstrate how supply-control policies influence the nursing home industry in the long run.

Conclusions and Implications

This study offers new evidence on the growth of nursing homes in states with different CON laws. Our results have important implications for the future development of the nursing home industry, and evidence from this study suggests that CON laws are altering the nursing home industry over time by creating a distinct competitive environment for nursing homes. Thus, policy makers should be most concerned about the effect of these policies on quality measures and not entirely focus on cost-reducing policies.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Fig. 1.

Trends in nursing home characteristics over time. We used a nursing home fixed effect regression of outcome onto year indicators estimated separately for states with 3 types of CON laws. We used 1992 as the base year, and the plotted values show the change in a variable relative to 1992. CON, certificate of need; HH, home health; NH, nursing home. Source: Authors' calculation based on the Online Survey Certification and Reporting file.