# **ABSTRACT**



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# The Increase in Contract CNA Staffing in U.S. Nursing Homes and Associated Care Quality Outcomes

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January 2024

## **Background**

Higher levels of certified nursing assistant (CNA) staffing are positively associated with improved care quality outcomes for nursing home residents, but low wages and other job quality concerns drive high turnover and job vacancies within the CNA workforce. Evidence suggests that nursing homes have increased their employment of contract CNAs through staffing agencies, and this contract staffing trend accelerated during the pandemic. This trend raises significant concerns about staffing quality and continuity. This study examines the trends in contract CNA staffing from 2017 through 2022 and the impacts of contract nursing assistant staffing on care quality outcomes in recent years.

#### **Data**

We analyzed staffing data from the Payroll Based Journal (PBJ) Daily Nurse Staffing files from the Centers for Medicare and Medicaid Services (CMS), merged with facility characteristics from the LTCFocus data files from Brown University and the National Institute on Aging, and additional facility-level characteristics and resident care quality outcomes from the CMS Nursing Homes Data Archive, as well as population-adjusted state-level unemployment and COVID-19 infection rates drawn from the Bureau of Labor Statistics (BLS) and Centers for Disease Control (CDC), respectively.

#### **Methods**

We calculated the proportion of total CNA hours per resident day (HPRD) that were filled by contract CNA staffing from 2017-2022 and compared contract CNA staffing proportions by facility characteristics. Then we used regression analyses to analyze the relationships between the proportion of total CNA HPRD filled by contract CNA staffing and the CMS 5-Star Care Quality measure from 2017-2022 and specific care quality measures from 2022, controlling for facility characteristics, resident demographics and acuity, as well as state-level unemployment and COVID-19 infection rates.

### **Findings**

Prior to the start of the COVID-19 pandemic, nursing homes had been steadily increasing their use of contract CNA staffing and this trend accelerated dramatically after the onset of the pandemic — particularly in late 2020 and early 2021. Both the number of nursing homes using any contract CNA staffing and the proportion of CNA hours that nursing homes filled with contract CNA staffing increased. Using higher levels of contract CNA staffing to fill CNA HPRD in nursing homes is

statistically significantly associated with worse care quality measures for residents. This finding is true across years and profit and chain status and for both the overall 5-Star quality rating and for several more specific care quality measures. Higher levels of contract staffing are significantly associated with lower 5-Star quality ratings and with higher rates of catheters inserted and left in, UTIs, pressure ulcers, and lower percentages of residents making improvements in function, controlling for facility-level characteristics and state-level unemployment and COVID-19 infection case rates.

#### Conclusion

The dramatic increases in contract CNA staffing in recent years raise concerns for continuity of care, as we find that contract CNA staffing is associated with worse care quality outcomes for nursing home residents. The increase in contract staffing also raises further concerns about labor costs and the lack of labor protections for workers who are not directly employed by the nursing home. It is therefore crucial to increase wages and improve job quality for regularly employed CNAs in nursing homes to ensure that adequate staff can be recruited and retained to maintain continuity and quality of care. It is also increasingly urgent to improve support for both contract CNAs and regularly employed CNAs in workplaces with a mix of employee types.

# **Key Words**

Nursing home staffing, contract staffing, nursing assistants, care quality

### **Full Report**

https://healthworkforce.ucsf.edu/publications

<sup>&</sup>lt;sup>1</sup> Harrington, Charlene, Mary Ellen Dellefield, Elizabeth Halifax, Mary Louise Fleming, and Debra Bakerjan. 2020. "Appropriate Nurse Staffing Levels for U.S. Nursing Homes." *Health Services Insights* 13:1178632920934785. doi:10.1177/1178632920934785.