PROJECT BRIEF

UCSF University of California San Francisco

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

Lina Stepick, PhD, Laurie Hailer, M.A., M.Ed., Kezia Scales, PhD, & Laura M. Wagner, PhD, RN, FAAN

UCSF Health Workforce Research Center on Long-Term Care (UCSF HWRC)

January 2024

Background

Certified nursing assistants (CNAs) play a critical role in supporting the quality of care and quality of life for nursing home residents. They provide the vast majority of direct resident care, an essential contribution that also positions them to observe, record, and report changes in residents' conditions that may require intervention. Research has clearly shown the importance of having adequate CNA staffing to fulfill this critical role. Higher CNA staffing levels have long been associated with improved care quality outcomes for residents, while inadequate staffing levels are associated with lower quality of care and quality of life. .

Despite the importance of CNAs, nursing homes often struggle with recruiting and retaining these workers due to low wages, poor job conditions, and high workplace injury rates. These challenges contribute to high rates of turnover and job vacancies, creating a cycle of staffing shortages that negatively impact care quality. Many nursing homes have turned to contract CNAs—temporary workers hired through staffing agencies—to address these shortages. However, this reliance on contract CNAs has raised concerns about the continuity and quality of care, as research suggests that contract staffing may not lead to the same care improvements as regular staffing.

Study Aims

The study aimed to examine the trends in contract CNA staffing in U.S. nursing homes from 2017 to 2022 and to assess how these trends have impacted care quality outcomes for residents. Specifically, the research focused on three key questions:

1. How did contract CNA staffing patterns vary in relation to nursing home occupancy from 2017 through 2022?
2. How did contract CNA staffing trends vary according to nursing home characteristics, such as profit status and chain affiliation?
3. What was the relationship between contract CNA staffing levels and care quality outcomes in nursing homes?

Methods

The researchers utilized descriptive and regression analyses on data from multiple national datasets to address these questions. Key data sources included the Payroll-Based Journal (PBJ) Daily Nurse Staffing files from the Centers for Medicare & Medicaid Services (CMS) and the LTCFocus data files from Brown University and the National Institute on Aging. The study examined trends in CNA staffing, comparing

---

490 Illinois Street, Floor 7, San Francisco, CA 94143

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

2

contract and regular nursing assistant staffing hours per resident day (HPRD) across different types of nursing homes from 2017 to 2022. The researchers also analyzed the association between the proportion of contract CNA hours and various care quality measures, such as the CMS 5-Star Care Quality rating and specific indicators like catheter use, urinary tract infections (UTIs), and pressure ulcers. Regression models controlled for variables such as nursing home characteristics, resident demographics and acuity levels, and state-level unemployment and COVID-19 infection rates.

Results

The study found that contract CNAs in U.S. nursing homes had steadily increased even before the COVID-19 pandemic, significantly accelerating in 2020 and 2021. By 2022, a large proportion of nursing homes were relying on contract CNAs to fill staffing gaps, with some variations observed based on the type of nursing home. Non-profit, non-chain nursing homes used contract CNAs more than for-profit or chain-affiliated homes.

Regression analysis revealed that higher levels of contract CNA staffing were associated with worse care quality outcomes, including lower CMS 5-Star ratings and higher rates of adverse outcomes like catheter use, UTIs, and pressure ulcers. These negative associations persisted even after controlling for various factors, underscoring the potential risks of increasing reliance on contract staff in nursing homes.

Limitations and Future Directions

Data limitations for this study include the smaller sample size for the individual quality outcome measures due to inconsistent reporting and missing data, particularly when combined with the multiple control variables. Another data limitation is that the LTCFocus dataset was only available through 2020 at the time of this study.

Future lines of research could include examining relationships between contract CNA staffing and other nursing home variables, such as ownership, turnover, and closure. Examining the job trajectories of both regularly employed and contract staff to identify motivations for choosing either employment model could also be important in identifying potential workforce pipeline opportunities (e.g., converting contract CNAs to fully employed roles).

Policy Implications

The findings of this study underscore the importance of improving job conditions for regularly employed CNAs to reduce turnover and enhance care quality in nursing homes. While contract CNAs can temporarily alleviate staffing shortages, they are not a sustainable solution for ensuring high-quality care. Policymakers and nursing home administrators should focus on raising wages, improving job conditions, and providing better support for CNAs to maintain a stable and effective workforce. Moreover, given the association between contract CNA staffing and adverse care outcomes, there is an urgent need to review and regulate the use of contract staff in nursing homes. Ensuring adequate training, integration into the care team, and continuity of care are critical factors that must be addressed to protect the well-being of both residents and CNAs.

Full Report: https://healthworkforce.ucsf.edu/publications