PROJECT BRIEF

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Predictors of Registered Nurse Employment and Earnings in Long-Term Care

Joanne Spetz, PhD, Timothy Bates, MPP, and Laura Wagner, PhD, RN, FAAN
UCSF Health Workforce Research Center on Long-Term Care Name

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Background and Aims

Registered nurses (RNs) are integral to healthcare delivery in the United States, with approximately 4.3 million licensed RNs in 2022, the majority working in hospital settings. However, nearly 10% of RNs are employed in long-term care (LTC) settings such as nursing homes, assisted living communities, and home health agencies. LTC settings are projected to experience substantial employment growth, highlighting the need to understand factors influencing RN employment and earnings in these environments. Previous research indicates that RNs in LTC receive lower pay compared to their counterparts in hospitals. This study aims to identify demographic and human capital characteristics associated with RN employment in LTC and examine wage disparities between LTC-employed RNs and those working in other healthcare settings.

Methods

The study utilizes data from the 2022 National Sample Survey of Registered Nurses (NSSRN), which provides comprehensive information on the nursing workforce in the United States. The study population includes RNs employed in nursing as of December 31, 2021, active in patient care, and not trained as advanced practice RNs. The final sample consisted of 14,216 RNs after excluding those with extreme or missing wage data.

Study Design

The study employed a cross-sectional design analyzing NSSRN data using descriptive statistics, chi-square tests, and regression analysis. Two primary outcomes were examined: employment in LTC settings and hourly wages of RNs. LTC employment was defined based on the principal nursing position in skilled nursing facilities, nursing homes, rehabilitation facilities, long-term acute care facilities, outpatient home health, or day care services. Hourly wage was calculated as total annual earnings divided by total annual hours worked in the principal nursing position.

Demographic variables included race-ethnicity, age distribution, type of initial RN degree, country of initial RN education, years since graduation, highest education level, and previous licensure as a licensed practical/vocational nurse (LPN). Employment-related variables included employment status (employee vs. agency), position title, union representation, job changes in the past year, and Census region of employment.

Findings

The sample included 1,334 RNs employed in LTC settings, accounting for 9.4% of the total sample. RNs in LTC were older, with only 37.5% aged 44 years or younger compared to 55.7% of RNs in other settings. The racial/ethnic distribution and gender percentages were similar across LTC and

non-LTC settings. LTC-employed RNs were more likely to have completed an associate degree (61.8% vs. 45.8%) and received their initial education outside the United States (10.2% vs. 6.6%). Previous licensure as an LPN was more common among LTC-employed RNs (28.7% vs. 14.9%).

Employment patterns differed significantly, with LTC-employed RNs less likely to be directly employed (88.1% vs. 91.4%) and more likely to work via agency placement. They were less likely to hold staff/charge nurse titles and more likely to have management or other titles. Union representation was significantly lower among LTC-employed RNs (6.0% vs. 21.1%).

Logistic regression revealed that older age, previous LPN licensure, rural residence, and education outside the U.S. were positively associated with LTC employment. Higher education levels (bachelor's or master's degrees) were negatively associated with LTC employment. Linear regression indicated that LTC-employed RNs earned 9.5% less than their non-LTC counterparts, controlling for various factors. Higher education levels, agency employment, and union representation positively influenced wages, while previous LPN licensure negatively impacted earnings.

Limitations & Future Directions

The study's cross-sectional design limits the ability to infer causal relationships. Longitudinal analyses could provide deeper insights into wage trends and employment patterns over time. The NSSRN dataset did not include LPNs/LVNs, who are a significant part of the LTC workforce. Additionally, specific RN job titles were not available, potentially obscuring wage differences within LTC settings.

Future research should explore the pipeline of RNs to LTC settings, investigating factors that motivate RNs to take and remain in LTC jobs. The negative wage association for RNs with prior LPN experience warrants further examination to understand underlying causes and potential solutions to support career advancement.

Policy Implications

Competitive compensation is crucial for recruiting and retaining RNs in LTC settings. However, LTC employers face revenue constraints, with Medicaid and Medicare as dominant payers. Pay-for-performance programs could incentivize higher expenditures on RN wages by linking reimbursement rates to care quality improvements. Policymakers should consider strategies to enhance wage structures in LTC settings to attract and retain skilled RNs, ensuring high-quality care for residents.

Conclusion

The study underscores the importance of addressing low wages for RNs in LTC to support workforce stability and quality care. Further research is needed to explore the impact of wage disparities on care quality and to identify effective strategies for attracting and retaining RNs in LTC settings. Competitive compensation and supportive policies are essential for sustaining a qualified RN workforce in LTC environments.

Full Report

https://healthworkforce.ucsf.edu/bibcite/reference/2111

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