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A Simultaneous Mixed-Methods Examination of Factors Influencing Intent-to-Leave Among Nursing Home Care Providers in 25 Long-Term Care Facilities

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Abstract

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Institutional Review Board Statement

The study protocol was reviewed and approved by the Abt IRB which is the IRB of record for each partner site as exempt with limited IRB review per 45CFR46.104(d) (2) (iii). All individuals participating provided informed consent. Small stipends were given to participants for completing study activities on a site-specific basis.

Disclosure

The authors declare no conflicts of interest.

Objectives: We examined nursing home care providers' (NHCPs') self-reported intent-to-leave (ITL) within 1 year and identified associated demographic, well-being, and workplace factors.

Design: We conducted a cross-sectional, mixed-methods study at a single time point via a voluntary, anonymous survey.

Setting and Participants: A convenience sample of NHCPs from 25 nursing homes associated with 7 academic partners (clusters) in the Centers for Disease Control and Prevention's Nursing Home Public Health Response Network.

Methods: The primary outcome was ITL, measured dichotomously. Participants also provided open-ended reasons for their ITL, reported demographics, reported job characteristics, and completed validated measures of burnout, resilience, and workplace incivility. We quantified overall ITL and used multilevel generalized mixed effects regression to identify independent characteristics associated with ITL. Open-ended responses were analyzed using inductive qualitative content analysis.

Results: Overall, 928 NHCPs responded to the survey (49% certified nursing assistants, 29% nurses, 8% therapists, and 13% nonclinical roles). The ITL rate was 36% (cluster average range, 25%–51%), and 35% were classified as burned out (cluster average range, 20%–56%). Most (70%) NHCPs reported experiencing at least 1 type of incivility within the previous 6 months, with 47% reporting high rates. In multivariable models, NHCPs reporting burnout had roughly 4-fold higher likelihood (adjusted odds ratio [aOR], 4.03; 95% CI, 2.79–5.82) of ITL than those without burnout, and NHCPs reporting high rates of incivility were roughly 2-fold more likely (aOR, 2.12; 95% CI, 1.38–3.26) to report ITL. NHCPs most often cited career opportunities (36%), being underpaid (35%), or burnout/exhaustion (20%) as reasons for ITL.

Conclusions and Implications: Burnout and incivility in the nursing home workplace were common and increased ITL risk, regardless of job type, duration at facility, or demographics. Interventions to reduce burnout and incivility may promote well-being and reduce NHCP attrition.

Keywords

Nurses; burnout; nursing homes; long-term care; incivility; attrition; intent-to-leave; resilience

Nursing homes in the United States are in a labor shortage crisis due to factors including an aging population, a shortage of skilled care providers, and the worst job losses of any health care sector during the COVID-19 pandemic.^{1,2} Staff shortages in nursing homes are associated with rehospitalization and emergency department visits,³ reduced resident daily functioning,⁴ and increased risk for health inspection citation,^{5,6} making nursing home staff attrition a threat to the quality and safety of residents. Although the general health care workforce reports improved working conditions in 2023 compared with 2022,⁷ recent reports indicate that nursing home workforce insecurity remains an intractable problem.¹ Identifying demographic, well-being, and workplace factors associated with intent-to-leave (ITL) among nursing home care providers (NHCPs) is vital toward addressing the shortage that threatens care quality as nursing homes recover from the COVID-19 pandemic.

Factors known to influence decisions to stay among those in the general health care workforce include job satisfaction, career development opportunities, the presence of

relational leaders, and a growth-oriented and supportive workplace culture.^{8–10} Risk factors for reporting an ITL include being younger, having worked for a shorter time, earning less, experiencing bullying or mistreatment, having a stressful work environment, reporting a lack of social support, having a chronic pain disorder, and burnout.^{11–15} At a facility level, staff turnover is associated with organizational characteristics such as staffing ratios and for-profit status.¹⁶ However, these findings are primarily based on studies conducted before and during the COVID-19 pandemic. It is vital to examine risk factors for attrition in postpandemic health care environments.

Staff turnover may be particularly problematic among NHCPs for several reasons. There is evidence that NHCPs experience higher rates of burnout than their health care peers due to high rates of occupational stress, high patient/resident acuity, poor working conditions, limited opportunities for career advancement, extreme time pressures, and alarming rates of physical and nonphysical incivility.^{17–20} Workplace incivility and mistreatment are consistently associated with burnout,^{21–23} and NHCPs are approximately 5 times as likely to report burnout if they report a recent experience of mistreatment.¹⁹ Certified nursing assistants (CNAs), who provide most of the direct, day-to-day resident care in nursing homes (eg, bathing, toiletry needs, eating), often experience lower levels of compensation, authority, and status.²⁴

Paramount to strengthening the nursing home workforce in the aftermath of the pandemic is identifying the sociodemographic, organizational, and individual well-being risk factors contributing to ITL to inform effective and scalable protective policies and interventions. Here, we used an existing nursing home network to examine rates of self-reported ITL their current job among NHCPs and to identify demographic, well-being, and workplace factors associated with ITL.

Methods

Overview

Seven academic partners (ie, clusters) coordinated recruitment of NHCPs at 3 to 5 nursing homes each through combinations of email and on-site recruitment events at a total of 29 nursing homes in the Centers for Disease Control and Prevention's Nursing Home Public Health Response Network (NHPHRN) from January to May 2024. The NHPHRN serves as a platform for conducting multiple concurrent studies in response to urgent public health priorities affecting nursing home residents and staff. Academic partners independently chose whether to participate in each study, and 7 academic clusters chose to participate in this study. The nursing homes participating were a convenience sample chosen by each academic partner based on established relationships, proximity, and capacity to allow on-site recruitment of study participants; in most cases, facilities had no formal relationship with the academic partners' health care organization. We used a simultaneous qualitative and quantitative design. Each partner recruited NHCPs for a self-administering survey that included an open-ended prompt to inform a more nuanced interpretation of the quantitative data. The quantitative survey assessed ITL, participant demographics, job characteristics (eg, job category, duration at facility), burnout, resilience, and incivility. After the ITL item, participants were prompted to provide an open-ended response explaining

their ITL response. Surveys were voluntary, participants provided informed consent, and compensation varied by study site. This study was determined to be exempt research, underwent limited institutional review board (IRB) review, and was approved by the Abt IRB (footnote to 45CFR46.104(d) (2) (iii)) and local study site IRBs (footnote to 45 C F R. part 46.101(c); 21 C F R. part 56).

Participants

Eligible NHCPs were those aged >18 years who reported having any direct resident care (eg, nursing assistants, nursing staff, licensed therapists [respiratory, occupational, and physical]) or were social workers, activities staff, or environmental services staff. Staff were excluded if they were aged <18 years or were physicians (or advanced practice providers) or reported having only intermittent resident contact (eg, administrative staff, dietitian/kitchen staff).

Self-Report Measures

Data collection for all sites used standard forms in a centralized REDCap managed by Abt Global and housed at Vanderbilt University. To assess the primary outcome of ITL, participants completed a single item (yes/no): “If possible, would you leave your current job within the next year?” To assess burnout, we administered the self-defined burnout item from the Mini-Z 2.0,^{25,26} which has demonstrated agreement with the emotional exhaustion dimension of burnout for health care providers and compares favorably with other longer measures of burnout.^{27–29} To assess resilience, we administered the Connor-Davidson Resilience Scale, which consists of 10 items with responses scored on a 5-point scale (not true at all to true nearly all of the time).³⁰ The Connor-Davidson Resilience Scale was included in our model as a continuous variable. To assess experiences of incivility, we administered the Short Negative Acts Questionnaire, a 9-item validated scale that measures the frequency of experiences with workplace incivility (eg, harassment, disruptive behaviors) over the previous 6 months.¹⁶ Likert scale responses range from 1 (never) to 5 (almost every day). In addition to the 9 items from the Short Negative Acts Questionnaire, we also included a single item from the validated Negative Acts Questionnaire-Revised that assesses experiences of violence, given the prevalence of violence and threats of violence reported by nursing home staff in previous studies.³¹ Based on the distribution of the responses, scores of 10 were considered to have experienced no incivility, scores of 11 or 12 were considered to have experienced low incivility, and scores ≥13 were considered high incivility. Finally, we collected sociodemographic data, including race/ethnicity, dependent status, sex, age, role, and years of service with the employer and in the role.

Facility Measures

Measures of facility quality and staffing characteristics were derived from the publicly available Centers for Medicare & Medicaid Services Nursing Home Care Compare dataset for July 2024.³² We analyzed the effect of 4 measures: overall 5-star quality rating, staffing subcomponent of the 5-star quality rating,³³ and 2 individual subcomponents of the 5-star quality rating (case-mix adjusted total nurse staffing hours per resident per day, and departure of ≥1 nursing home administrators in the past year).

Statistical Analysis

We used logistic regression to quantify the crude association between ITL and demographic and work characteristics. We used best subset logistic regression for variable selection and to identify the most parsimonious model based on the Akaike information criterion. Variables that were considered for selection include the following: (1) demographics (age, race, sex, and marital status); (2) work and well-being measures (job type, burnout, incivility, and resilience); and (3) facility-specific factors (average number of residents, overall facility ratings, quality ratings, staffing ratings, nursing staffing hours per resident, RN turnover, and number of administrators leaving). Multivariable generalized mixed effects logistic regression models were used to account for clustering and to identify characteristics associated with ITL. Facilities with <10 participant responses were excluded from the analysis (4 facilities were excluded).

Qualitative Analysis

Immediately after the single-item ITL question, participants were asked if they would like to elaborate. Open-ended responses were analyzed using inductive qualitative content analysis. First, 2 coders (J.S.M. and S.K.H.-A.) developed an inductive codebook by identifying and summarizing emerging themes and creating code definitions. Next, 3 coders (J.S.M., S.K.H.-A., and I.V.) refined codes and definitions as new patterns emerged, continuing until no new codes were identified (Supplementary Materials). Then, all responses were independently coded by 2 coders (S.K.H.-A. and I.V.), with discrepancies resolved by a third (J.S.M.). Responses could be coded with multiple themes (eg, underpaid and burnout/exhaustion). Finally, frequency counts and percentages were calculated separately for participants reporting an ITL or an intent-to-stay.

Results

Twenty-five facilities enrolled sufficient staff for inclusion (≥ 10 respondents), allowing 928 NHCP respondents to be included (49% CNAs, 29% nurses, 8% therapists, and 13% nonclinical roles) (Table 1). The overall percentage of staff who reported an ITL in their current job (ITL rate) was 36%, ranging from 25% to 51% among the 7 academic clusters. Thirty-five percent of NHCPs were classified as being burned out (cluster range, 20%–56%). Most (70%) NHCPs reported experiencing at least 1 type of incivility within the previous 6 months, with 23% reporting some incivility and 47% reporting high incivility rates. Frequency of incivility and source of incivility (eg, other staff, leadership, family, resident) varied by each of the 10 incivility items (Supplementary Figure 1). The most common types of incivility included the deliberate withholding of information (eg, best practices, resident preferences) necessary for the participant's job (46%) and anger or rage directed at the participant (33%), with 9% reporting at least monthly occurrences.

Lower rates of ITL were reported by older (aged 50–59 years) NHCPs compared with NHCPs aged 18 to 29 years (Table 2). In unadjusted analyses, rates of ITL were found to significantly vary by race, dependent status, and job type, but not by sex or marital status. Increased burnout, incivility, and lower resilience were all significantly associated with ITL, as was a facility 4-star overall quality rating. There was a trend for facility staffing rating

to be associated with ITL; however, the median values were similar (median 4-star facilities among both participants with ITL and those without ITL, $P = .046$) (Table 2).

Multivariate adjusted models incorporating independent predictors of ITL included burnout (adjusted odds ratio [aOR], 3.82; 95% CI, 2.61–5.59) and experiencing high rates of incivility (aOR, 2.05; 95% CI, 1.32–3.19). Job type was also a significant predictor in the model, with all nurses (registered nurses and licensed practical nurses grouped together) (aOR, 1.53; 95% CI, 1.01–2.33) and therapists (occupational, physical, and speech/language) (aOR, 2.12; 95% CI, 1.13–3.97) more likely to report ITL than CNAs. Facility staffing rating was also significantly associated with ITL, with study participants working in facilities with higher staffing star ratings reporting a higher ITL with an aOR of 1.31 for each incremental increase in star rating from a baseline of 1 (95% CI, 1.08–1.60). Race, dependent status, and resilience were no longer significantly associated with ITL in multivariate analysis. However, they are retained in the best subset model listed in Table 3.

Qualitative

The open-ended prompt generated responses from 508 participants (55%; 235 responses from participants who reported an ITL and 273 from those who reported that they did not intend to leave). The most frequent reasons mentioned by the 235 employees reporting an ITL were to pursue other career opportunities (36%), underpaid or needed better financial stability and/or benefits (35%), or because they were experiencing burnout or emotional exhaustion (20%) (Figure 1A). Other participants (6%) cited moral injury or distress related to their perceptions of low-quality care or a breach of their moral or ethical values. Less common but noteworthy reasons for ITL are related to the physical demands of the job. Although only a few participants explicitly mentioned the COVID-19 pandemic, those who did detailed the negative impact on their work and the expectations of employers that a return to prepandemic census levels would be possible without the prepandemic levels of facility support. Of the participants who said they did not intend to leave their role and answered the open-ended prompt, most (91%) used emotional or affective language, such as loving their job, or feeling confident, content, or comfortable (Figure 1B). The second most common theme was having a positive work environment with colleagues, endorsed by 23% of respondents.

Discussion

Health care workforce shortages are particularly pronounced and intractable in long-term care, where 72% of nursing homes report that their workforce remains lower than prepandemic levels despite most facilities' attempts to recruit personnel by increasing wages, bonuses, benefits, and promotion and growth opportunities.¹ By using validated measures of both positive and negative aspects of workplace well-being, and qualitative responses, this study contributes to a growing body of literature on the postpandemic health care environment. Our results highlight the importance of approaches to improving the working environment, particularly for nurses and therapists, and for younger employees.

We found that 36% of NHCPs reported that they would leave their job within a year if they could. Therapists and phlebotomists were nearly twice as likely to report ITL compared

with CNAs, even after controlling for demographics, burnout, incivility, and facility characteristics. This finding is consistent with a national study showing that therapists of mixed licensure (eg, speech therapists, occupational therapists) reported among the highest rates of burnout of US health care workers during the pandemic.³⁶ Importantly, therapists comprise only 8% of our sample and inclusion of these staff in our analysis does not affect the associations measured between ITL and other job types. Although CNAs were less likely to report an ITL than nurses or therapists, 34% of CNAs surveyed in our study reported that they would leave within the next year if they could. Previous research has documented the high levels of stress and low perceived value experienced by CNAs,³⁶ especially those working in long-term care.³⁷

Burnout had the largest association with ITL in our study, consistent with and adding to a corpus of research that consistently finds this association.^{14,15} Thirty-five percent of respondents in our study reported burnout, which is alarming given that burnout among health care workers in long-term care may be associated with higher rates of medical errors, poorer patient/resident outcomes, and lower care quality and safety.^{38,39}

Workplace incivility and mistreatment are consistently associated with burnout across licensure and professional statuses.^{21–23} It is striking, then, that even after controlling for job type, duration at facility, burnout levels, and sociodemographic variables, providers in our study who experienced high rates of incivility were more than twice as likely to report an intention to leave. In the current study, the most common types of incivility reported by NHCPs were less severe experiences, such as having information deliberately withheld, spreading rumors, or facing hostile reactions from others, but these experiences, when frequent, were associated with increased ITL. These data highlight the importance of interventions and policies that promote psychological safety, the shared belief within a team that it is safe to take interpersonal risks such as asking questions, sharing ideas, and reporting mistakes or problems.⁴⁰ Workplace incivility is also associated with nursing home cultures of abuse and neglect and is increasingly considered an indicator of quality and safety.⁴¹ Taken together, one of the most actionable and consequential findings from our study adds to accumulating data on the importance of addressing incivility and mistreatment to address provider retention.⁴²

Although self-reported resilience was associated with ITL in the univariate model, it was no longer significant in the multivariate model. This was unexpected because previous studies have found that resilience is associated with job satisfaction and is protective against burnout and ITL among health care workers.^{43–45} In our sample, self-reported resilience was less important than factors related to workplace atmosphere and well-being, such as incivility and emotional exhaustion. Of note, our qualitative findings indicate that NHCPs who reported an intent to stay in their role overwhelmingly reported positive affect in their reasoning, using language such as love and joy, and adding to a consistent body of research showing that positive emotional responses to the workplace lead to an intention to stay in health care roles.^{2,46}

The most common reasons participants reported for an ITL were to pursue other opportunities and/or to improve compensation or benefits. Notably, fewer participants

reported an ITL due to moral distress or poor climate, somewhat inconsistent with our quantitative finding that incivility was highly associated with ITL. This may reflect reporting differences, with NHCPs being less likely to report or reflect on incivility or related experiences in an open-ended format without explicit prompting. Other factors mentioned in the open-ended responses, such as the working environment, seeking better compensation, and the physical toll of the job, were cited as reasons for intending to leave, and are consistent with other studies examining attrition among nurses and CNAs in nursing homes.^{47,48} Although few participants cited the COVID-19 pandemic as a reason for staying or leaving the profession, those who did stated that their prepandemic workplace atmosphere had not returned, and cited lingering exhaustion, stress, and workforce shortages as a result. Surprisingly, the best subset regression model found that facility staffing rates were positively associated with ITL. We are unsure how to interpret this unexpected association, but caution is warranted. It is noteworthy that the median quality and staffing ratings were nearly identical between those reporting an ITL and those indicating an intention to stay.

Older NHCPs surveyed in our study were less likely to report ITL. Although this is consistent with a wealth of studies showing that younger providers are more likely to report an intention or desire to leave their job,^{49,50} caution is warranted in interpreting these findings. Open-ended responses indicate that a less common but explicitly named reason for reporting ITL was retirement, just as a common reason for reporting an intent to stay in the job was having invested in their current job and not wanting to start anew. Taken together, these responses suggest that lower rates of ITL among older NHCPs may not necessarily reflect high levels of job satisfaction. Still, they may instead reflect situational or employment factors influencing an intention to stay. In fact, there is evidence that age is not a predictor of job satisfaction among providers working in long-term care.⁵¹

This study had notable strengths, including a large sample size from diverse geographic areas, quantitative and qualitative data that enabled a richer and more comprehensive understanding, and multilevel analyses that quantified the role of incivility on ITL after controlling for burnout. However, several limitations warrant consideration. First, we measured self-reported ITL without tracking actual professional changes or attrition. Second, workplace incivility was assessed retrospectively, which may introduce bias (eg, social desirability, recall). Finally, the voluntary nature of the survey may have led to self-selection bias, and we do not have access to payroll-based staffing to report response rates that likely varied across sites and by role.

Conclusions and Implications

In this mixed-methods, cross-sectional study, over one-third of NHCPs reported an ITL their job, which was highest among nurses and therapists, and lowest among older NHCPs. Burnout and incivility were common and increased ITL risk, regardless of role, tenure, or demographics. Reducing burnout and incivility may promote well-being and help lower NHCP attrition.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Data Availability Statement

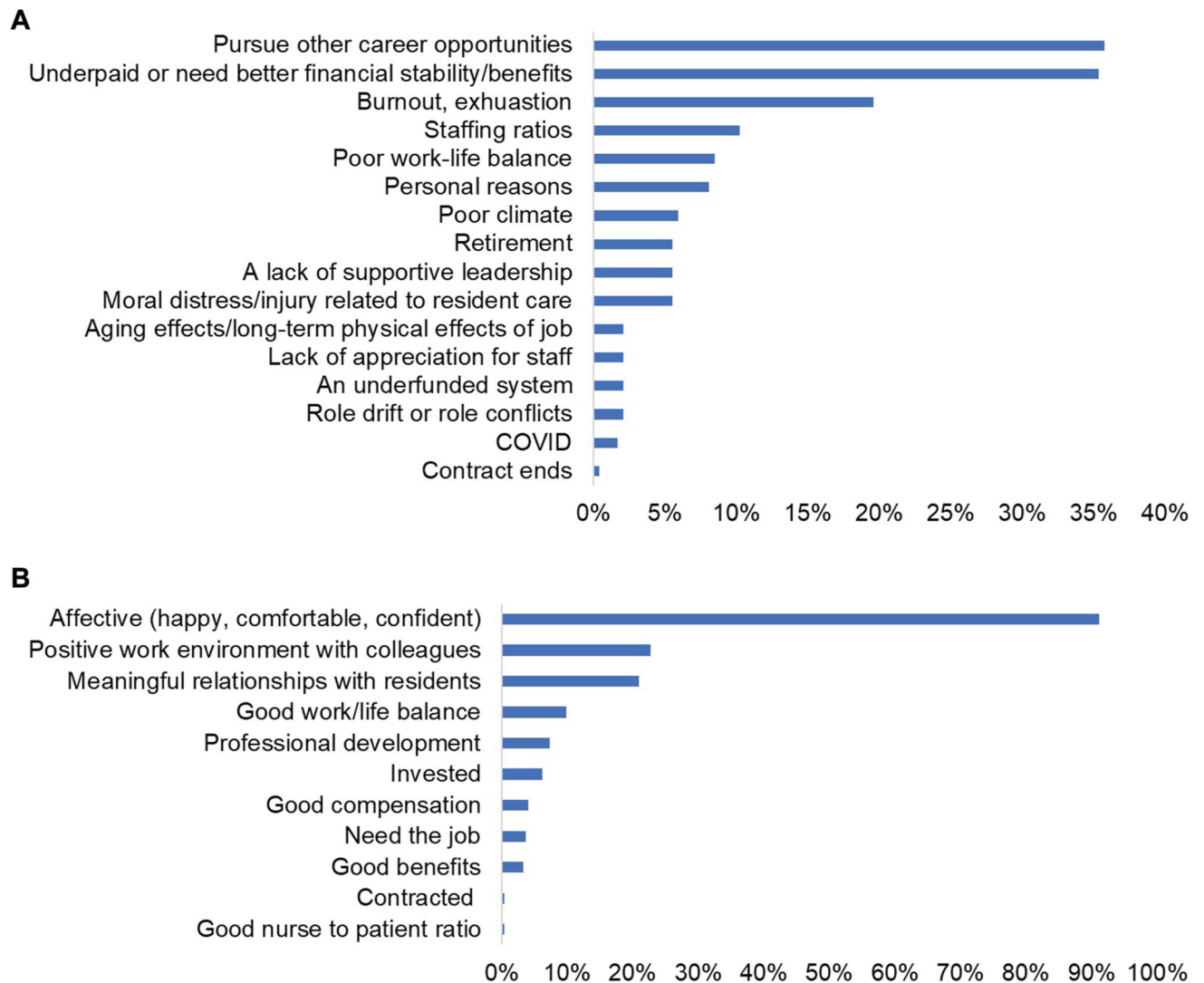
The dataset will not be available as a public dataset, being confidential, because of the sensitive nature of the survey data. Releasing the dataset publicly would potentially reduce the participation rate by nursing home staff.

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**Fig. 1.**

(A) Percentage of thematically coded responses to open-ended prompt from participants reporting that they intended to leave their job within the next year. (B) Percentage of thematically coded responses to the open-ended prompt from participants reporting that they did not intend to leave their job within the next year.

Table 1

Characteristics of the NHCP Sample (N = 928)

Staff or Facility Characteristics	Value
Age, y	231 (24.9)
<30	
30–49	438 (47.2)
≥50	259 (27.9)
Race and ethnicity	407 (45.4)
Non-Hispanic White	
Non-Hispanic Black	351 (39.1)
Hispanic	80 (8.9)
Other	59 (6.6)
Sex, female	807 (88.1)
Marital status, unmarried	319 (34.5)
Has dependents	599 (64.6)
Job category	452 (48.7)
CNA	
Nurses	267 (28.8)
Therapists, phlebotomists	81 (8.7)
Other	128 (13.8)
Time worked at facility	172 (18.6)
<6 mo	
6 mo–2 y	285 (30.9)
>2–5 y	165 (17.9)
>5 y	301 (32.6)
Intending to leave job in next year *	332 (35.8)
Burned out	293 (34.5)
Incivility	273 (30.2)
Never	
Some	206 (22.8)
High	426 (47.1)
Below minimum CMS staffing standard [†]	118 (13.6)
Administrator(s) left in past year	299 (36.2)
Resilience score	30.9 ± 5.8
Nursing home quality rating [‡]	4
Nursing home staffing rating	4

CMS, Centers for Medicare & Medicaid Services.

Values are number (%), median, or mean ± SD.

* TTL was defined by response to the following survey question: “If possible, would you leave your current job within the next year?” Nurses includes registered nurse, licensed practical nurse, and licensed vocational nurse. Therapists included occupational therapist, physical therapist, and speech/language therapist. Some incivility = 2 types of incivility occurring once, or 1 type occurring more than once in past year, high = any type occurring frequently or >2 different types at any frequency.

[†] Minimum staffing standards were defined as ≥3.48 total nurse staffing hours per resident day to reflect newly finalized CMS rules, which became effective on June 24, 2024 (<https://www.federalregister.gov/d/2024-13795>, accessed October 4, 2025). Note, this requirement was vacated by a Texas District Court in April 2025.³⁴

[‡]CMS 5-star quality measures. Published annually on Nursing Home Compare for each nursing home, there is one overall 5-star rating that is calculated for each nursing home annually. The overall 5-star rating aggregates 3 domains to rate a facility's performance overall on quality, health inspections, and staffing.³⁵

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Table 2

Characteristics of NHCP Study Population, by ITL

Staff or Facility Characteristic	ITL in Next Year		Total (N =928)	P Value*
	No (n =596)	Yes (n =332)		
Age, y				
<30	131 (22.0)	100 (30.1)	231 (24.9)	<.001
30–49	272 (45.6)	166 (50.0)	438 (47.2)	
≥50	193 (32.4)	66 (19.9)	259 (27.9)	
Race and ethnicity				
Non-Hispanic White	229 (40.0)	178 (54.9)	407 (45.4)	.002
Non-Hispanic Black	253 (44.2)	98 (30.2)	351 (39.1)	
Hispanic	53 (9.2)	27 (8.3)	80 (8.9)	
Other	38 (6.6)	21 (6.5)	59 (6.6)	
Sex, female	520 (88.6)	287 (87.2)	807 (88.1)	.83
Marital status, unmarried	210 (35.4)	109 (33.0)	319 (34.5)	.77
Has dependents	412 (69.2)	187 (56.3)	599 (64.6)	<.001
Job category				
CNA	299 (50.2)	153 (46.1)	452 (48.7)	.002
Nurses	157 (26.3)	110 (33.1)	267 (28.8)	
Therapists, phlebotomists	41 (6.9)	40 (12.0)	81 (8.7)	
Other	99 (16.6)	29 (8.7)	128 (13.8)	
Time worked at facility				
<6 mo	114 (19.2)	58 (17.6)	172 (18.6)	.06
6 mo–2 y	167 (28.2)	118 (35.8)	285 (30.9)	
>2–5 y	98 (16.5)	67 (20.3)	165 (17.9)	
>5 y	214 (36.1)	87 (26.4)	301 (32.6)	
Academic cluster				
A	49 (8.2)	33 (9.9)	82 (8.8)	.001
B	50 (8.4)	47 (14.2)	97 (10.5)	
C	178 (29.9)	59 (17.8)	237 (25.5)	
D	129 (21.6)	55 (16.6)	184 (19.8)	
E	61 (10.2)	49 (14.8)	110 (11.9)	
F	100 (16.8)	59 (17.8)	159 (17.1)	
G	29 (4.9)	30 (9.0)	59 (6.4)	

Staff or Facility Characteristic	ITL in Next Year		Total (N =928)	P Value*
	No (n =596)	Yes (n =332)		
Burned out	111 (20.7)	182 (58.3)	293 (34.5)	<.001
Incivility				
Never	218 (37.8)	55 (16.7)	273 (30.2)	<.001
Some	133 (23.1)	73 (22.2)	206 (22.8)	
High	225 (39.1)	201 (61.1)	426 (47.1)	
Resilience score	31.5 ± 5.82	29.7 ± 5.56	30.9 ± 5.79	<.001
Below minimum CMS staffing [†]	72 (12.8)	46 (15.2)	118 (13.6)	.61
Administrator left in past year	202 (37.3)	97 (34.2)	299 (36.2)	.67
Nursing home ratings				
Overall quality rating [‡]	4.00 (3.00–5.00)	4.00 (3.00–4.00)	4.00 (3.00–4.00)	.046
Staffing rating	4.00 (3.00–4.00)	4.00 (3.00–5.00)	4.00 (3.00–5.00)	.067

* P value test for the difference between those with and without ITL and were estimated using *t* tests and χ^2 tests.

[†] Minimum staffing standards were defined as ≥348 total nurse staffing hours per resident day to reflect newly finalized CMS rules, which became effective on June 24, 2024 (<https://www.federalregister.gov/d/2024-13795>, accessed October 4, 2025).

[‡] CMS 5-star Quality Measures. Published annually on Nursing Home Compare for each nursing home, there is one overall 5-star rating that is calculated for each nursing home annually. The overall 5-star rating aggregates the 3 domains on quality, health inspections, and staffing.³⁵ CMS, Centers for Medicare & Medicaid Services.

Values are number (%), mean ± SD, median (quarter 1-quarter 3), or as otherwise indicated.

Nurses include registered nurse, licensed practical nurse, and licensed vocational nurse. Therapists include occupational therapist, physical therapist, and speech/language therapist.

ITL was defined by response to the following survey question: “If possible, would you leave your current job within the next year?”

Some incivility = 2 types of incivility occurring once, or 1 type occurring more than once in past year, high = any type occurring frequently or >2 different types at any frequency.

Table 3

Association of Factors With ITL Job Among Nursing Home Staff, Multivariable Generalized Mixed Effects Model *

Staff or Facility Factor	aOR	95% CI
Age group of staff, y	Ref	
<30		
30–49	0.80	0.51–1.24
≥50	0.50 [†]	0.30–0.84
Race (self-reported)	0.99	0.64–1.55
Non-Hispanic Black		
Non-Hispanic White	Ref	
Hispanic	0.52	0.25–1.06
Other race and ethnicity	0.89	0.45–1.77
Job category	Ref	
CNA		
Nurse (RN, LPN, LVN, nurse administrator)	1.53 [†]	1.01–2.33
Therapist (OT, PT, SLT) or phlebotomists	2.12 [†]	1.13–3.97
Other job type	0.73	0.39–1.36
Well-being metric	3.82 [†]	2.61–5.59
Burned out (vs not burned out)		
Never experience incivility	Ref	
Experienced some incivility	1.48	0.90–2.44
Experienced more incivility	2.05 [†]	1.32–3.19
Resilience score	0.99	0.96–1.02
Facility staffing rating, per star increase (1–5) [‡]	1.31 [†]	1.08–1.60

LPN, licensed practical nurse; LVN, licensed vocational nurse; OT, occupational therapist; PT, physical therapist; Ref, reference; RN, registered nurse; SLT, speech/language therapist.

* Model accounted for sex, marital status, and clustering by facility by inclusion of random effects yielding an intraclass coefficient of 0.01.

[†] $P < .05$.

[‡] CMS. (2023b). Design for Care Compare Nursing Home Five-Star Quality Rating System: Technical Users' Guide. <https://www.cms.gov/medicare/provider-enrollment-and-certification/certificationandcompliance/downloads/usersguide.pdf> (accessed April 10, 2025).