



INADEQUATE NURSE STAFFING IN NORTH CAROLINA NURSING HOMES PUTS RESIDENTS AT RISK

SUMMARY: Research has consistently shown that better staffing in nursing homes leads to better quality of the care. Unfortunately, staffing data for North Carolina nursing homes indicate that few homes are staffed at the levels needed to provide good care. Understaffing is greatest for Registered Nurses (RNs) and Certified Nursing Assistants (CNAs). A variety of avenues can be used by the legislature to improve staffing and help assure good quality of care for some of the state's most vulnerable citizens.

QUESTION: *What do the Center for Medicare and Medicaid Services nursing home staffing data from the second quarter of 2018 tell us about nursing home staffing in North Carolina?*

One of the most consistent findings in studies of nursing home quality in the United States is that better direct care staffing leads to better quality of care.¹

Calculating Staffing Levels

The best estimates for staffing levels in nursing homes in North Carolina come from payroll reports compiled by the Centers for Medicare and Medicaid Services (CMS) as part of the Nursing Home Compare system.^{2,3}

Nursing home staffing levels are not based on the number of care staff working in a facility. Instead, they are based on the average number of hours care staff work each day. These are hours in which staff can provide care to a resident. Staffing levels are calculated by using the average number of hours worked each day by different types of direct care staff (e.g., RNs or aides) and the number of residents receiving care (average hours per day for care = average number of daily worked by direct care staff divided by the number of residents).³

North Carolina Nursing Homes and Minimum Staffing Levels

One can evaluate the adequacy of direct care staffing in North Carolina nursing homes by comparing those *per resident day* staffing levels with the minimum staffing levels needed for good care. These minimum staffing estimates were developed initially in a 2001 CMS study.⁴ Though the original CMS study may seem somewhat dated, its results have been validated by other studies, the most recent of which was published in 2015.^{5,6} The staffing levels provided by

these studies represent the *minimum* levels of staffing needed to provide good quality of care, a level at which bad outcomes are avoided and needed care is provided.

The original data from the CMS quality study indicated that CNA time should be at least 2.8 hours per day.⁴ Recent research from Vanderbilt, however, indicates that aide staffing should range from 2.8 to 3.6, depending on facility case-mix.⁷ The comparisons appearing in the table below uses 3.2 nursing aide hours per resident day, assuming the case-mix in NC is roughly average. This change also affects the standard for total direct care staffing, increasing it from 4.10 hours to an “adjusted” 4.50 hours per resident day.

As the table below indicates, many North Carolina nursing homes clearly staff below the estimated minimum standard for Total Direct Care Staffing (**23.3 % lower**). The same holds true for RN staffing (**53.4% lower**), a major factor in quality of care, and staffing by Certified Nurse Aides (**30.6% lower**). What also seems clear is that NC nursing homes substitute hours for LPNs or LVNs for hours from more highly trained and more expensive RNs.

The comparison of staffing *averages* raises concern. However, when one looks at the percent of NC nursing homes that are staffing at levels below the estimated minimum standards, the results are even more distressing. Over 90 percent of nursing homes in North Carolina staff below the minimum staffing standards for total direct care staff and for nurse aides (**91%** and **94%**, respectively). Two-thirds of NC homes (**66%**) staff below the minimum standard for RN hours per resident day.

NURSING HOME STAFFING IN NORTH CAROLINA IN THE 2 nd Quarter of 2018*				
Nursing Home Staffing	Total Direct Care Staffing Per Resident Day	RN Staffing Per Resident Day	LPN/LVN Staffing Per Resident Day	CNA Staffing Per Resident Day
Adjusted Minimum Staffing Standards	4.50	.75	.55	3.20
NC Staffing Averages	3.45	.35	.88	2.22
NC Staffing Averages as Percentage of Adjusted Minimum Standard	76.7%	46.6%	160%	69.4%
Percent of NC Homes Staffing Below the Adjusted Minimum Standards	91%	66%	0.0%	94%

*Based on 406 homes reporting staffing data for second quarter of 2018

CONCLUSION 1: *Using estimated minimum staffing levels, the data clearly indicate that most nursing homes in NC are **not** staffing at the levels needed to provide good care.*

North Carolina Nursing Homes and Expected Staffing Levels

One can also assess staffing levels by reviewing data on the much lower “expected staffing levels.” These data allow one to determine whether NC nursing homes staffing falls below even those significantly lower staffing levels.⁸

As background, homes in each state have reported staffing levels. Homes in each state also have a mix of residents with different levels of care needs (i.e., case-mix). To obtain the needed levels of staffing, one takes the average reported level of staffing in a state’s nursing homes and adjust that reported level by the average case-mix in the state’s nursing homes (i.e., average level of resident needs in the homes in a state). These expected staffing data were also developed as part of the information used in the Nursing Home Compare system.⁷

When one uses average expected staffing levels from 2017 to evaluate average staffing levels in in the second quarter of 2018, one finds that many NC nursing homes are staffing below expected levels. Almost three quarters (**73.6%**) of NC homes staff below the expected staffing level for RNs. Total direct care staffing in NC homes is below the expected level in over one-half (**53.4%**) of the homes.

It is important to note that expected staffing levels simply compare case-mix adjusted staffing levels in one state with case-mix adjusted staffing levels in other states. Unlike minimum staffing standards, expected staffing levels **do not** imply that they represent the levels of staffing needed to provide good care.

CONCLUSION 2: *Using expected staffing levels, the data indicate that many nursing homes in NC are **not** staffing at the level of staffing one would expect, given the case-mix or level of care needs, of residents in the nursing homes in the state.*

POLICY IMPLICATIONS OF CONCLUSIONS

Federal rules require the presence of a Registered Nurse for at least eight consecutive hours per day, with a licensed nurse on evening and night shifts. However, as of 2010, 41 states had passed legislation requiring minimum direct care staffing levels *above* the Federal requirement.⁹

Georgia and other states, for example, specify minimum requirements for the total number of hours per resident day for direct care staff. Other states, like Mississippi, vary staffing requirements by the size of the home. Yet other states, like Michigan, specify the ratio of direct care staff to residents by shift (e.g., 1caregiver per 8 residents on the day shift and 1caregiver per 12 residents on the evening shift).⁹

The policy options noted above, as well as others, offer ways in which the State Legislature of North Carolina could further supplement Federal rules to require higher staffing in levels NC nursing homes in order to better assure good quality of care for those vulnerable citizens of North Carolina who may currently, or one day, reside in the over 44,000 nursing home beds in the state.

The information presented here refers to all nursing homes and nursing home residents in the state. Behind these data are the lives and deaths of individual North Carolinians. Some frightful and chilling examples of what occurs when homes staff poorly are available in a recent issue of the *North Carolina Health News*.¹¹

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