JOINT COMMISSION ON HEALTH CARE

Delegate Patrick A. Hope, Chair *Senator George L. Barker, Vice Chair*

TO: JCHC Members
FROM: Kyu Kang, JCHC Associate Health Policy Analyst
DATE: October 26, 2021
RE: Nursing Facility Workforce Study – Response to October 22nd Workgroup Questions

During the October 22nd, 2021 Joint Commission on Health Care workgroup meeting on nursing facility workforce, staff reviewed findings and policy options from the JCHC study on nursing facility workforce needs in Virginia, and Members heard from agency, industry, and public stakeholders. As part of the discussion, Members requested additional information about the potential costs of implementing a nursing home staffing standard. This memo provides details on how JCHC staff estimated these costs.

Wage assumptions

Staff used 2020 nursing home wage survey data from the Department of Medical Assistance Services (DMAS) to calculate the average hourly rate that Virginia nursing homes paid for certified nurse aides (CNAs), licensed practical nurses (LPNs), and registered nurses (RNs). Costs are higher when nursing homes use temporary agency staff to fill hours. Employee wages include the cost of benefits and paid leave (Table 1).

Table 1. Average nursing home hourly wage for employees and agency staff

	Average Employee Hourly Cost	Average Agency Hourly Cost
CNA	$ 18.49	$ 31.92
LPN	$ 30.63	$ 53.09
RN	$ 42.56	$ 64.95

SOURCE: 2020 Nursing Home Wage Survey data from the Virginia Department of Medical Assistance Services.

A weighted total hourly staffing cost was calculated based on the number of hours worked by CNAs, LPNs, and RNs across all nursing homes in Virginia in 2020.

- Average Hourly Total Staffing Employee Cost = $25.24
- Average Hourly Total Staffing Agency Cost = $42.51

Cost Calculation Methodology

In order to understand the potential costs for each facility to meet a staffing standard, the following calculations were applied:

- Calculate the hours per resident day (HPRD) shortfall from the staffing standard
- Calculate the daily shortfall by multiplying the HPRD shortfall by the facility's average daily number of residents
- Calculate the annual shortfall by multiplying the facility's daily shortfall by 365 days
- Calculate the annual shortfall cost by multiplying the annual shortfall by the average hourly total staffing cost for total direct care hours, and by the average hourly RN cost for RN hours
- Calculate the annual shortfall cost covered by Medicaid by multiplying the annual shortfall cost by the facility's Medicaid participation rate

Annual shortfall costs were calculated using three different staffing scenarios:

1. Facilities bridge the shortfall using all employee hours
2. Facilities bridge the shortfall using half employee hours and half agency staff hours.
3. Facilities bridge the shortfall using all agency staff hours

Costs for each facility with a shortfall were then summed to calculate total annual costs across Virginia.

Potential cost of an across-the-board nursing home staffing standard (Option 2)

Based on August 2021 data from CMS, 26% of Virginia's certified nursing facilities (74 facilities) reported less than 3.25 total hours per resident day (HPRD). Similarly, 21% (59 facilities) reported less than 0.4 RN HPRD. These are the only facilities that would need to increase their staffing to meet a potential state requirement set at these levels.

Estimated additional hours needed to bring understaffed facilities up to baseline are:

- Annual total direct care hours: 818,377 hours across 74 facilities
- Annual RN hours: 175,532 hours across 59 facilities

Virginia receives a 50 percent match for its regular Medicaid program, so half of the Medicaid costs would come from state funds, with the other half coming from federal funds (Table 2).

Table 2. Estimated costs for an across-the-board staffing standard

	All Employees	Half Employees Half Agency	All Agency
Estimated total annual costs for staffing shortfalls			
Total direct care hours	$ 20,659,280	$ 27,723,157	$ 34,787,034
RN hours	$ 7,470,909	$ 9,435,671	$ 11,400,433
Total cost	$ 28,130,190	$ 37,158,828	$ 46,187,467
Estimated annual costs to Medicaid for staffing shortfalls			
Total direct care hours	$ 15,039,176	$ 20,181,411	$ 25,323,646
RN hours	$ 5,446,592	$ 6,878,982	$ 8,311,373
Total Medicaid cost	$ 20,485,768	$ 27,060,393	$ 33,635,019
Distribution of cost			
Federal portion of Medicaid	$ 10,242,884	$ 13,530,197	$ 16,817,509
State portion of Medicaid	$ 10,242,884	$ 13,530,197	$ 16,817,509
Facility portion of costs not covered by Medicaid	$ 7,644,422	$ 10,098,435	$ 12,552,448

SOURCE: Prepared by JCHC using hourly wage data calculated from DMAS 2020 Nursing Home Wage Survey data, Medicaid participation from 2018 Brown University LTCfocus data, and staffing data from August 2021 CMS Nursing Home Compare data.

NOTE: In facilities for which Medicaid participation rate was missing in the 2018 Brown University LTCfocus data, Medicaid participation of 60% was assumed as a default, which is approximately the statewide average for the percentage of resident days covered by Medicaid.

Potential cost of an acuity-based nursing home staffing standard (Option 3)

Based on August 2021 data from CMS, 21% of Virginia's certified nursing facilities (60 facilities) did not meet their CMS expected case-mix numbers based on their resident acuity. When looking at RN hours, 25% of facilities (72 facilities) did not meet their expected case-mix hours.

Estimated additional hours needed to bring understaffed facilities up to baseline are:

- Annual total direct care hours: 728,705 hours across 60 facilities
- Annual RN hours: 274,500 across 72 facilities

Virginia receives a 50 percent match for its regular Medicaid program, so half of the Medicaid costs would come from state funds, with the other half coming from federal funds (Table 3).

Table 3. Estimated costs for an acuity-based staffing standard

	All Employees	Half Employees Half Agency	All Agency
Estimated total annual costs for staffing shortfalls			
Total direct care hours	$ 18,395,584	$ 24,685,452	$ 30,975,319
RN hours	$ 11,683,173	$ 14,755,711	$ 17,828,250
Total cost	$ 30,078,757	$ 39,441,163	$ 48,803,569
Estimated annual costs to Medicaid for staffing shortfalls			
Total direct care hours	$ 13,257,318	$ 17,790,296	$ 22,323,273
RN hours	$ 8,143,745	$ 10,285,456	$ 12,427,166
Total Medicaid cost	$ 21,401,063	$ 28,075,751	$ 34,750,439
Distribution of cost			
Federal portion of Medicaid	$ 10,700,532	$ 14,037,876	$ 17,375,219
State portion of Medicaid	$ 10,700,532	$ 14,037,876	$ 17,375,219
Facility portion of costs not covered by Medicaid	$ 8,677,694	$ 11,365,412	$ 14,053,130

SOURCE: Prepared by JCHC using hourly wage data calculated from DMAS 2020 Nursing Home Wage Survey data, Medicaid participation from 2018 Brown University LTCfocus data, and staffing data from August 2021 CMS Nursing Home Compare data.

NOTE: In facilities for which Medicaid participation rate was missing in the 2018 Brown University LTCfocus data, Medicaid participation of 60% was assumed as a default, which is approximately the statewide average for the percentage of resident days covered by Medicaid.

Other considerations that may impact costs

Implementation of a nursing home staffing mandate, particularly given the current health care workforce shortage, could lead to increased wages for nursing staff due to increased employer demand. Additionally, facilities may rely on signing bonuses, retention bonuses, overtime bonuses, and other monetary incentives to recruit and retain staff – these potential costs have not been included in these estimates. And as these calculations were based on the minimum number of hours required across Virginia to bring all facilities up to meet a staffing standard, costs may be higher if facilities choose to staff above the standard.

Oversight of a staffing mandate would be the responsibility of VDH's Office of Licensure and Certification (OLC), which manages all nursing home licensure, state inspections, federal surveys, and complaint investigations. OLC would also require additional funding to support the administrative costs of creating, implementing, and managing a new oversight process related to a staffing standard.

Costs to bring facilities up to standard for both direct care hours and RN hours were calculated separately, which could reduce the estimates for facilities that fell short in both categories. In August 2021, there were 33-35 facilities that did not meet a potential staffing standard for either total direct care hours or RN hours. In these facilities, there is a high likelihood that increasing staffing to meet total direct care hours would allow facilities to meet their RN hours, or vice versa. This would then mean it would be less expensive for these facilities to meet the standard, leading to lower overall costs.