A Profile of Nursing Homes in Ohio

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BACKGROUND

With more than 2 million individuals age 65 and older Ohio ranks sixth in the size of its older population. The progress that Ohio and the nation have made in extending life expectancy is an advancement to be celebrated. The majority of older Ohioans continue to remain in their own homes or apartments in the community. However, with almost 500,000 Ohioans age 80 and over and with more than 180,000 older individuals experiencing severe disability, the need for long-term services has grown and will continue to do so in the future. Long-term services can be provided in an array of settings including the community, congregate housing, continuing care retirement communities, assisted living residences, and nursing homes.

While less than one-quarter of older Ohioans with severe disability reside in a nursing home, these individuals have very high levels of disability and many experience dementia. Nursing homes have received considerable attention nationally and in Ohio. The COVID-19 pandemic had a devastating impact on nursing home residents, accounting for one-quarter of all deaths, despite comprising well under 1% of the nation's population. The pandemic also magnified the staffing challenges faced by the nursing home industry, with one-third of Ohio's nursing homes reporting direct care staffing shortages. Additionally, the Ohio Department of Health has recorded a large increase in nursing home complaints over the last decade. In response to this array of concerns, in February of 2023, Ohio Governor DeWine issued an Executive Order establishing the Nursing Home Quality and Accountability Task Force to recommend actions to improve the quality of care and quality of life in the state's nursing homes. Given the growing interest and importance in nursing home care in Ohio, this report is designed to synthesize the array of data that describes nursing homes in Ohio.

FACILITY AND RESIDENT CHARACTERISTICS OF OHIO'S NURSING HOMES

As a large state, Ohio has the fourth highest number of nursing home beds in the nation, with only California, New York, and Texas reporting a higher supply of nursing home beds. In 2021, Ohio had 959 nursing homes with 87,300 beds (See Table 1). The majority of Ohio's nursing homes are free-standing facilities, with only six Ohio nursing homes being hospital-based. Ohio has 13 county-operated nursing homes and one in six nursing homes (154 facilities) are part of a continuing care retirement community (CCRC), which includes independent homes or apartments, assisted living, and nursing home care. The average nursing home in Ohio has slightly over 90 beds. Just under half of the industry's beds are in single occupancy rooms. CCRC are most likely to provide a private room, with more than two-thirds of nursing home beds in CCRCs private rooms. Twelve percent of Ohio's facilities have all private rooms, with one in four

CCRC's having 100% private rooms. Four in ten facilities have less than 25% of their beds classified as private rooms.

The majority of Ohio's nursing homes (79%) are operated by for-profit organizations. One in five nursing homes are operated by a not-for-profit organization and 2% are operated by a public entity. Most of these publicly operated nursing homes are operated as county nursing homes. Six in ten (63%) of Ohio nursing homes are part of a multi-facility chain. Just over 70% of Ohio nursing homes are located in urban areas and one-third of nursing homes have a designated memory care unit or the entire facility is devoted to memory care.

Table 1. Description of Ohio's Nursing Home Industry

Characteristic	Overall	County	Hospital	CCRC*
Number of facilities	959	13	6	154
Number of certified beds (12/31/21)	87,323	1,106	250	13,106
Beds per facility	91	85	42	85
Proportion private rooms (%)	47	50	64	67
100% Private rooms	12	9	33	26
< 25% Private rooms	37	27	0	13
Part of a CCRC (%)	16.1	-	-	100
Ownership (%)				
For-profit	78.9	0.0	16.7	42.5
Not-for-profit	19.4	0.0	67.7	57.5
Public	1.7	100	16.7	0.0
Part of multi-facility chain (%)	63.9			
Urban location (%)	72.4	27.3	50.0	78.4
Distinct memory care Facility/unit (%)	34	45.4	0.0	40.0

Sources: 2021 Biennial Survey of Long-Term Care Facilities, Nursing Home Compare Archives Data
*Continuing Care Retirement Community (CCRC)

While the number of nursing homes in Ohio has remained relatively stable over the last two decades, there has been an increase in the number of nursing homes that are changing ownership. Table 2 reports the estimated proportion of Ohio nursing homes that changed ownership in each year from 2017 to 2021. Over the five-year period, at least 2% of Ohio nursing homes underwent an ownership change, with the greatest proportion changing hands in 2018. In 2018, HCR ManorCare declared bankruptcy, which resulted in a number of their nursing homes having new ownership. Ohio had a slightly higher proportion of nursing homes change ownership over the 2017 to 2021 time period (3.1% vs. 2.3%) when compared to the nation overall.

Table 2. Change in Ownership, Ohio and the Nation: 2017-2021 (%)						
	2017	2018	2019	2020	2021	2017-2021 Mean
Ohio	2.2	6.3	3.1	2.0	2.1	3.1
Nation	3.2	2.5	2.6	1.4	1.7	2.3

Source: Nursing Home Compare Archive data.

The services and resources available to residents in nursing homes are reported in Table 3. Six in ten nursing homes offer at least one home and community-based service, such as adult day care, home delivered meals, transportation or home care. Seven in ten reported providing telehealth options for their residents. Four in ten medical directors report being certified by the American Medical Directors Association (AMDA). Seven in ten nursing homes provide in-house non-emergency transportation to residents. Almost three-quarters (73%) of nursing homes participate in Ohio's integrated care demonstration, MyCare.

Table 3. Nursing Home Services, 2021 (%)				
Characteristic	**Overall**	**County**	**Hospital**	**CCRC***
Offer HCBS services	62	73	40	71
Residents use telehealth	70	82	50	68
Facility has an infection preventionist	98	91	100	99
Medical director certified by AMDA	42			
Facility provides in-house transportation to residents	72			
Participate in MyCare program	73	64	50	73

Source: 2021 Biennial Survey of Long-Term Care Facilities
*Continuing Care Retirement Community (CCRC)

Nursing homes serve two types of individuals, those staying a short time, typically recovering from an acute care stay in the hospital, and those who are long stay residents, defined as 100 days or longer. For long stay residents with a private room, the private pay daily rate in 2021 was $287 and the semi-private rate was $256 (See Table 4). Many long stay residents require support from Ohio's Medicaid program because of the high cost associated with nursing home care and the very small proportion of Ohioans with private long-term care insurance (4%). Medicaid payments to nursing homes in 2021 averaged $226 per day. Short stay residents are supported by private insurance ($336 per day), Medicare fee-for-service ($506 per day), Medicare Advantage ($400 per day), and Medicare MyCare ($449 per day).

Table 4. Nursing Home Payment Rates, 2019 and 2021 (Dollars)				
Characteristic	**Overall**	**County**	**Hospital**	**CCRC***
Private pay (private room)				
2021	291	250	405	326
2019	278	231	-	-
Private pay (semi-private room)				
2021	256	222	-	285
2019	245	211	-	-
Medicaid rate				
2021	226	209	195	-
2019	202	190	-	-
Private insurance				
2021	338	316	454	376
2019	317	319	-	-
Medicare fee-for-service				
2021	511	455	513	500
2019	481	449	-	-
Medicare advantage				
2021	405	382	521	409
2019	388	386	-	-
Medicare MyCare				
2021	458	479	-	443
2019	428	443	-	-

Source: 2021 Biennial Survey of Long-Term Care Facilities, Ohio Department of Medicaid, Medicaid Rates
*Continuing Care Retirement Community (CCRC)

In looking at the characteristics of Ohio's nursing home residents there are several findings that need to be highlighted. The high number of admissions from the acute care setting is noteworthy, with more than 84% of all nursing home admits coming from the hospital (See Table 5). The majority of these individuals are using nursing homes for a short-stay rehabilitation visit (typically less than 30 days) most often reimbursed by Medicare. This shift has occurred over the last two decades for two major reasons. First, Medicare changed its hospital reimbursement system to prospectively paying for hospital care based on diagnosis, resulting in a shorter length of stay for Medicare recipients. This increased referrals to nursing homes and home health agencies. The higher Medicare payment rates were attractive to nursing home providers, resulting in the industry making the shift to short-term patients. The expansion of both assisted living and home care options also placed pressure on nursing home occupancy rates, again incentivizing facilities to market to short-stay patients.

Table 5. Nursing Home Admission Sources, 2020	
Admitted from	**% of Admissions**
Acute care hospital	84.4
Community	7.2
Nursing home	5.2
Inpatient rehabilitation facility	0.8
Long-Term care hospital	0.8
Other	1.6

Source: Nursing Home Minimum Data Set, 2020

Shifting to the long-stay residents, defined as those individuals residing in a facility for 100 days or more, we find high levels of disability in this population (Table 6). On average the long-stay residents had more than four limitations related to activity of daily living, such as needing assistance with bathing, dressing and getting out of bed. For example, nine in ten residents needed assistance with bathing and four in five residents needed assistance with dressing and getting to the bathroom. The average Ohio nursing home resident has slightly fewer physical needs than the national average. More than half of long-stay residents have some form of dementia and more than one-quarter are reported to have serious mental illness. Serious mental illness is more prevalent in Ohio nursing home residents than the nation.

Table 6. Characteristics of the Long-Stay Nursing Home Residents, 2020		
Demographics	**Ohio**	**Nation**
Average age	76.5	77.6
Limitations in activities of daily living		
Average number of limitations (out of 6)	4.3	4.5
Low care (%)	18.8	16.0
Needing assistance with personal hygiene (%)	79.5	82.2
Needing assistance with mobility (%)	78.4	80.1
Needing assistance with dressing (%)	80.4	84.3
Needing assistance with eating (%)	22.6	28.9
Needing assistance with toileting (%)	79.3	81.7
Needing assistance with bathing (%)	87.3	89.0
Diagnoses		
Alzheimer's disease and related dementias (%)	51.8	52.9
Serious mental illness (%)	27.4	21.7
Parkinson's disease (%)	6.1	6.4
Traumatic brain injury (%)	2.0	1.7
Paralysis (Hemi-, Para-, Quadriplegia) (%)	13.3	13.7

Source: Nursing Home Minimum Data Set, 2020

ADMISSION AND OCCUPANCY TRENDS

The landscape of Ohio's nursing home industry has changed dramatically over the last 30 years. The traditional nursing home had been viewed as the final step in the progression of care for individuals with long-term disability. A well-known 1970's book entitled *Last Home for the Aged*, described the idea that once a person went to a nursing home, they lived there for the remainder of their life. However, as shown in Table 5, the vast majority of admissions to Ohio nursing homes now come from the acute care hospital setting for a short rehabilitation stay in the majority of instances.

Ohio and the nation overall have experienced a shift in how long-term services are provided, with many more individuals with severe disability using home and community-based care options. As a result, Ohio had fewer nursing home beds in 2021 than it did in 1992 (86,129 vs. 91,530) despite having 100,000 more individuals age 85 older today (See Table 7). Almost all of Ohio's nursing home beds are dually licensed/certified for Medicaid and Medicare. While the number of beds dropped, Ohio nursing homes experienced a substantial (193%) increase in admissions from 1992 to 2019. These changes were largely driven by an increase in Medicare admissions from hospitals, rising from 30,360 in 1992 to 151,270 in 2019. The thirty-year admissions trend, however, was impacted by the COVID-19 pandemic. The number of overall admissions between 2019 and 2021 dropped by 19% from 213,830 to 172,300. This change was largely drive by a 27,400 reduction in Medicare admissions. During the height of the pandemic, elective surgeries, such as knee and hip replacements were limited and even when surgical procedures were reinstated, an increasing number of individuals chose home health care rehabilitation options.

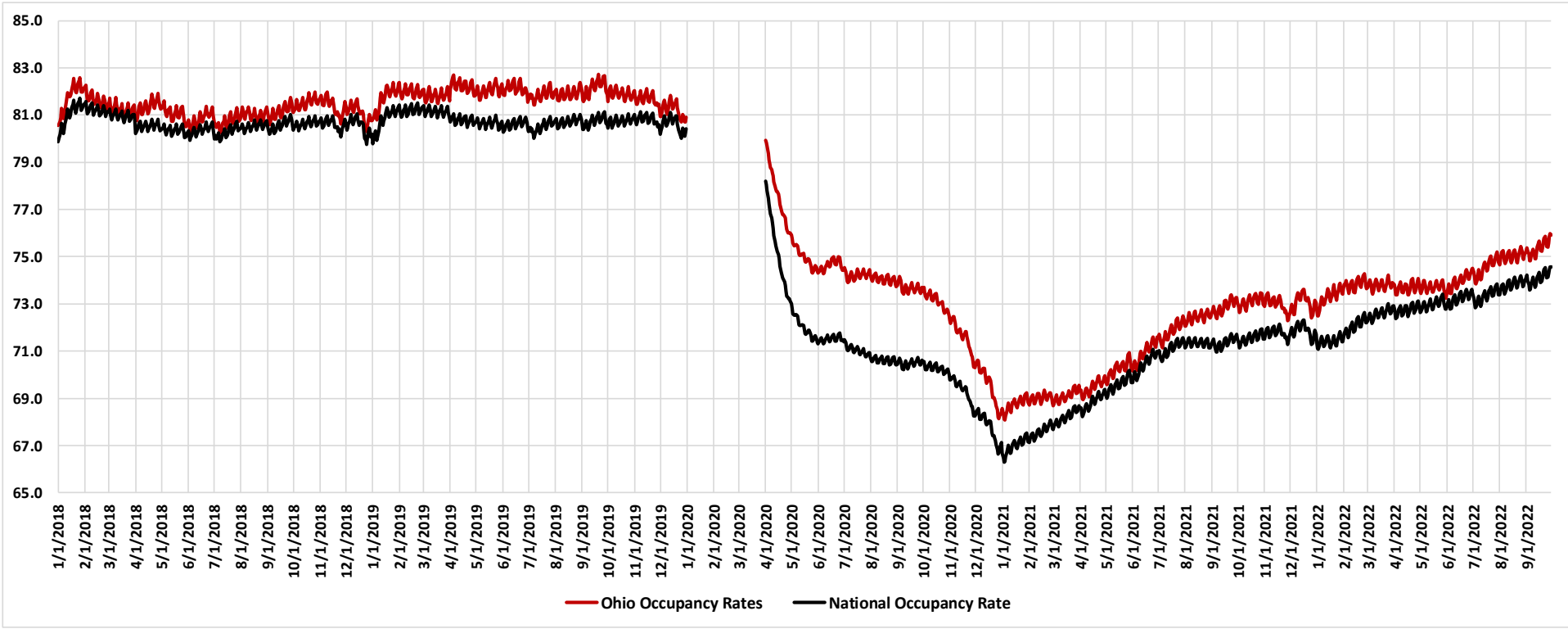
The historical review of industry changes from 1992 to today demonstrates a consistent drop in occupancy rates, which again were profoundly impacted by the pandemic. Reflecting the expansion of home and community-based care options, including the dramatic growth of assisted living residences, nursing home occupancy rates dropped from 92% in 1992 to 80% in 2019, with these changes unrelated to the pandemic. In 2021 Ohio's occupancy rates dropped sharply to 71.5%, the largest two year drop in the 30 years of our study time period.

Over the last five years, Ohio's nursing home occupancy patterns mirror the nation (See Figure 1). As noted previously, occupancy rates have been slowly but consistently dropping over the past two decades as a result of an expansion of assisted living and home care options, but the COVID-19 pandemic had a dramatic effect on occupancy rates. In 2018 and 2019, Ohio's occupancy rates were around 82%. By January 2021, at the heart of the pandemic and prior to the vaccine, Ohio's occupancy rates dropped to 68%. The national numbers dropped even further to below 67%. By September of 2022 Ohio's rates had risen to just over 75%.

Table 7. Ohio Nursing Home Admissions, Discharges, and Occupancy Rates, 1992-2021											
	1992	**1999**	**2001**	**2005**	**2009**	**2011**	**2013**	**2015**	**2017**	**2019**	**2021**
Number of nursing home beds											
Total beds in service	91,531	95,701	94,231	91,274	93,209	94,710	92,787	91,503	90,464	88,793	86,129
Medicaid certified	80,211	93,077	87,634	87,090	90,876	90,724	89,063	88,479	88,016	87,626	84,033
Number of admissions											
Total	70,879	149,838	149,905	190,150	197,233	207,148	218,992	211,338	206,636	213,833	172,300
Medicaid resident	17,968	28,150	24,442	34,432	27,040	31,212	36,859	35,182	35,647	40,728	35,944
Medicare resident	30,359	78,856	90,693	116,810	109,315	148,426	144,959	146,756	147,194	151,267	123,862
Occupancy rate (%)											
Total	91.9	83.5	83.2	86.4	84.7	83.2	83.9	84.7	81.0	80.0	71.8
Medicaid resident	67.4	55.4	58.5	58.8	55.4	54.9	54.3	54.3	53.6	52.2	46.5

Source: SNF Medicaid Cost Report, Nursing Home Compare Archives Data, Scrips Long-Term Care Facilities Biennial Survey

Figure 1. Nursing Home Occupancy Rates, Ohio and the Nation, 2018 to 2022



Source: Payroll-Based Journal (PBJ) Data from 2018 to Q3 2022

DIRECT CARE NURSING STAFF IN OHIO

Nursing homes require an interdisciplinary team to adequately care for nursing home residents, with one of the most important members of this team being the direct care nursing staff. Direct care nursing staff include registered nurses (RNs), licensed practical nurses (LPNs), and certified nurse aides (CNAs). In Ohio, CNAs are referred to as state-tested nurse aides. Nursing staff are the primary providers of direct care delivered to nursing home residents, and researchers have consistently identified these staff members as a critical component in achieving nursing home quality. Tables 8-13 and Figure 2 provide data on direct care nursing staff levels in Ohio nursing homes.

The most common measure used to track the amount of nursing staff devoted to resident care is hours per resident day (HPRD). To calculate HPRD, the total amount of hours of staff time in a day is divided by the number of residents. Theoretically, this is the average number of hours of nursing staff time that is devoted by nursing staff to directly or indirectly caring for residents. Higher values of HPRD indicate that there are more hours available to care for residents, and is often referred to as having a higher nursing staff level.

Table 8 shows the average nursing staff level in HPRD from the Payroll-Based Journal (PBJ) data for CNAs, direct care nursing staff, and total nursing staff which includes nursing staff primarily assigned to direct care and administrative duties. For the three quarters of 2022 in which data are available, Ohio averaged 2.01 HPRD for CNAs, which was lower than the national average of 2.22 HPRD. Moreover, CNA staffing levels in Ohio dropped 5% from 2018. Ohio's direct care nursing staff level was 3.28 HPRD in 2022, compared to 3.46 HPRD nationally. While the decline in average staffing levels for nursing staff assigned to direct care between 2018 and 2022 occurred across the nation, the drop was larger in Ohio (3.8% vs. 2.8%). This pattern was also found for total nursing staff, which includes RNs and LPNs with administrative duties.

Table 8. Nursing Staff Levels in Ohio and the Nation: 2018 to 2022 (Median)						
Nursing staff type (Group)	**2018**	**2019**	**2020**	**2021**	**2022 (Q1-Q3)**	**% Change (2018-2022)**
Certified nurse aides						
Ohio	2.12	2.08	2.10	2.03	2.01	-5.2%
Nation	2.32	2.30	2.35	2.26	2.22	-4.3%
Direct care nursing staff						
Ohio	3.41	3.36	3.44	3.34	3.28	-3.8%
Nation	3.56	3.55	3.68	3.55	3.46	-2.8%
Total nursing staff						
Ohio	3.71	3.66	3.76	3.66	3.59	-3.2%
Nation	3.85	3.84	3.99	3.86	3.75	-2.3%

Source: Payroll-Based Journal (PBJ) data from 2018 to Q3 2022. Notes**:** Staffing levels are measured in hours per resident day. Direct care staffing includes all nursing staff (RNs, LPNs, and CNAs) assigned to direct care only. Total nursing staff includes all nursing staff assigned to direct care and administrative duties.

To study nursing staff levels in more depth, Table 9 compares the nursing staff levels for RNs, LPNs, CNAs, direct care nursing staff, and total nursing staff level in Ohio to neighboring states in 2021. Ohio's CNA staffing level of 2.01 HPRD is below all of the neighboring state averages. Nursing staff levels for RNs were also lower for Ohio then the five neighboring states reviewed. Ohio uses a higher number of LPNs then the nation overall and all of neighboring states. Ohio's direct care staffing and total nursing staff levels are below the national numbers and below all of the neighboring states, except Indiana. The total nursing staff levels are a key component of the CMS's Five-Star Rating System and these lower nursing staff levels result in Ohio having lower staffing star and overall star ratings than other states.

Table 9. Nursing Staff Levels in Ohio and Neighboring States, 2021					
	Nursing Staff Level in Hours Per Resident Day (Median)				
State	Registered nurses	Licensed practical nurses	Certified nurse aides	Direct care nursing staff	Total nursing staff
Nation	0.70	0.91	2.26	3.55	3.86
Ohio	0.66	0.94	2.03	3.34	3.66
Indiana	0.68	0.87	2.07	3.27	3.62
Kentucky	0.70	0.89	2.24	3.44	3.82
Michigan	0.80	0.90	2.22	3.60	3.93
Pennsylvania	0.84	0.89	2.06	3.50	3.79
West Virginia	0.66	0.95	2.17	3.50	3.79

Source: Payroll-Based Journal (PBJ) data, 2021, Notes**:** Staffing levels are reported for Ohio nursing homes with a fiscal year end date in 2021. The data were restricted facilities with full-year cost reports and reported PBJ data for all days in 2021. Registered nurse and licensed practical nursing staff hours per resident include staff assigned to direct care and administrative duties. Total nursing staff includes nursing staff assigned to direct care and administrative duties.

To supplement the nursing staff levels from the PBJ data, information regarding nursing staff was obtained from the 2021 Ohio Biennial Survey of Long-Term Care Facilities. Using the number of nursing staff members and residents in the facility, a resident-to-staff ratio was calculated. The resident-to-staff ratio reflects the number of residents that are cared for by one staff member. Lower numbers indicate caring for fewer residents, theoretically meaning the staff member can devote more time to each resident. The resident-to-staff ratio was calculated for direct care nursing staff for the day, evening, and overnight shifts.

As shown in Table 10, nursing homes have their lowest resident-to-staff ratios and the greatest proportion of staff time devoted to the day shift. Among CNAs, 38% are on the day shift, resulting in an average resident-to-staff ratio of 10-to-1. The evening shift had a slight increase in the CNAs resident-to-staff ratio to 11-to-1 and the overnight shift had a ratio of 14-to-1. LPNs resident-to-staff ratios averaged 27-to-1 on the day shift, 30-to-1 on the evening shift, and 34-to-1 on the overnight shift. Almost half of all RNs that are assigned to direct care are on the day shift. The average nursing home had 44 residents to each RN on the day shift, 56-to-1 on the evening shift, and 60-to-1 on the night shift. While not shown, it there was significant variation in resident-to-staff ratios across nursing homes.

Table 10. Resident-to-Staff Ratios by Shift in Ohio, 2021		
Nursing staff (Shift)	**Resident-to-Staff ratio (Mean)**	**Proportion of nursing staff type on shift (%)**
Certified nurse aides		
Day shift	10 to 1	38
Evening shift	11 to 1	34
Overnight shift	14 to 1	27
Licensed practical nurses		
Day shift	27 to 1	38
Evening shift	30 to 1	33
Overnight shift	34 to 1	29
Registered nurses		
Day shift	44 to 1	47
Evening shift	56 to 1	29
Overnight shift	60 to 1	24

Sources: Payroll-Based Journal (PBJ) data and the 2021 Biennial Survey of Long-Term Care Facilities

The staffing challenges nursing homes face are well known. Even prior to the pandemic, the nursing home industry faced shortages of nurses and certified nurse aides. The COVID-19 pandemic has only exacerbated these problems. In response, nursing homes have reported an increase in the use of temporary workers from staffing agencies to supplement their current directly employed nursing staff workers. As shown in Table 11, the increase has been considerable. In 2018, 14% of Ohio nursing homes reported using temporary agency staff to supplement their CNAs. In 2022, that proportion had grown to 40%, similar to the national trend. For LPNs, fewer than 10% of Ohio nursing homes used agency staff in 2018, but this grew to 33% in 2022, generally in line with the national trend. Fewer than 4% of Ohio nursing homes used temporary agency RNs in 2018, but this grew to 17% by 2022.

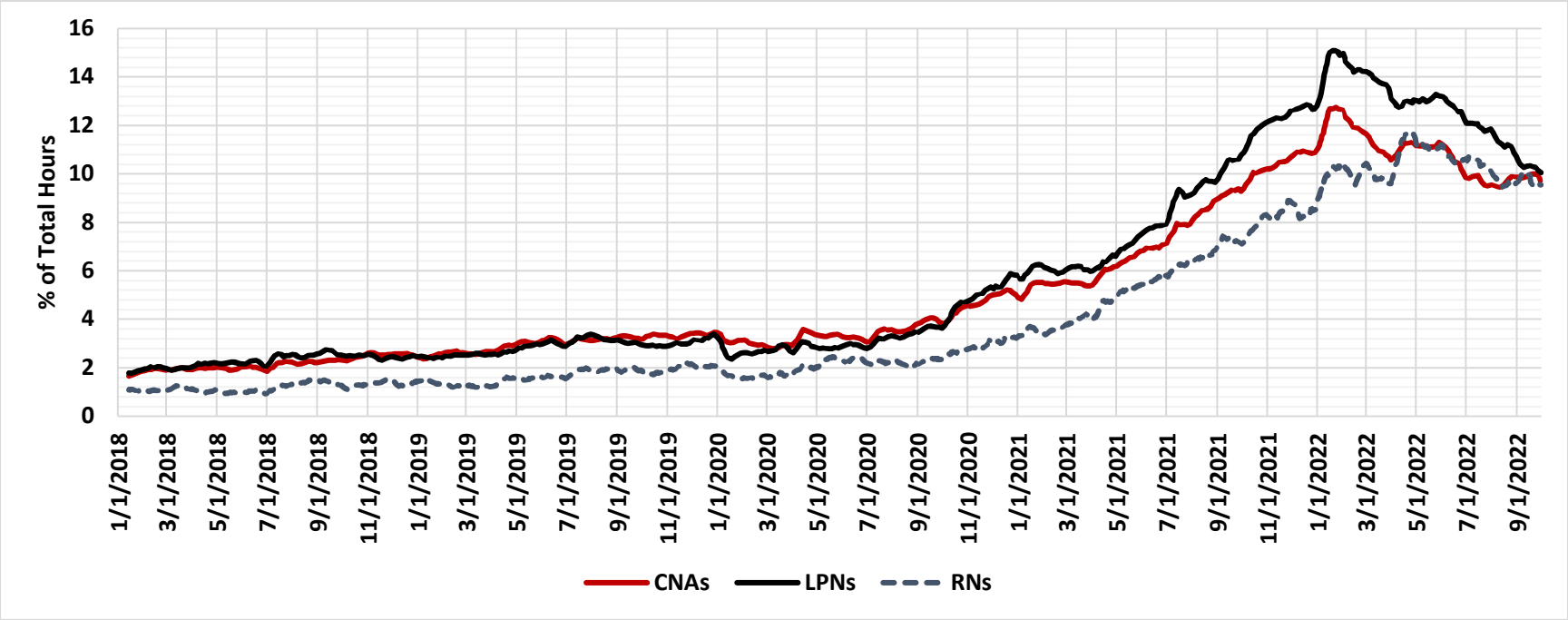
Table 11. Use of Agency Staff by Ohio and the Nation, 2018 to 2022 (% of Facilities)					
Nursing staffing type (Group)	**2018**	**2019**	**2020**	**2021**	**2022 (Q1-Q3)**
Certified nurse aides					
Ohio	13.7	17.3	19.2	31.1	39.7
Nation	14.9	17.6	20.0	30.2	40.0
Licensed practical nurses					
Ohio	9.5	11.3	12.3	23.6	32.5
Nation	11.5	12.8	14.3	22.6	31.7
Registered nurses					
Ohio	3.6	4.6	5.4	11.1	16.5
Nation	6.7	7.5	8.7	12.3	17.5

Source: Payroll-Based Journal (PBJ) data, 2018-Q3 2022

The growth in the use of agency staff in terms of number of hours of care provided are shown in Figure 2. In 2018, about 2% of direct care nursing staff hours were provided by agency staff. In 2019, agency staff accounted for approximately 3% of CNA and LPN hours and under 2% for RNs. However, by December of 2021, agency staff accounted for about 13% of CNA hours, 15% of LPN hours, and 10% of RNs hours. In 2022, the use of agency staff has stabilized, with the proportion of hours coming from agency declining, but still well above pre-pandemic levels.

The nursing staff shortages and need for the industry to respond to these challenges impacted the facility cost for direct care workers. Table 12 shows the median labor cost per hour in 2017, 2019, and 2021. The labor cost per hour include the wage rate paid to works plus the additional costs of fringe benefits paid by the facility. Among nursing staff directly employed by the facility, labor costs per hour increased by 29% for CNAs, 24% for LPNs, and 21% for RNs. The labor costs for temporary agency staff increased at a higher rate for CNAs (41%) and LPNs (32%) than workers directly employed by the facility. Additionally, the labor costs of using agency staff are significantly higher. For example, in 2021, the median labor cost of a CNA directly employed by a nursing home was $19.28, but is was 70% higher at $32.73 if the nursing home relied on a staffing agency to fill that same shift.

Figure 2. Proportion of Direct Care Nursing Staff Hours Provided by Agency Staff, 2018 to 2022



Note. Proportion of nursing staff hours provided by agency staff (14-day moving average) sourced from the PBJ data.

Table 12. Hourly Nursing Staff Labor Cost in Ohio, 2017-2021 (Median)				
	Hourly labor cost (dollars)			% Change
	2017	2019	2021	(2017-2021)
Directly employed nursing staff				
Registered nurses	32.16	34.59	39.02	21.3
Licensed practical nurses	24.74	26.61	30.64	23.8
Certified nurse aides	14.91	16.32	19.28	29.3
Agency nursing staff				
Registered nurses	49.26	50.04	59.92	21.6
Licensed practical nurses	37.00	40.00	48.83	32.0
Certified nurse aides	23.28	25.61	32.73	40.5

Source: Medicare Cost Reports (CMS-2540-10).
Notes. Median hourly labor cost includes wages and benefits (e.g., health insurance) for freestanding nursing homes with a full-year Medicare Cost Report. The year represents the fiscal year end date of the Medicare Cost Report.

As we noted in Table 4 there was $60 a day difference between the private pay per diem rate and the Medicaid payment rate. This suggest that nursing homes that are more heavily reliant on Medicaid to financially support residents will have fewer financial resources available to operate the nursing home. In Table 13, nursing homes are divided into four groups based on their proportion of resident days paid by Medicaid, also known as Medicaid payer-mix. Those nursing homes that serve the highest proportion of Medicaid residents (81% or more) have the lowest nursing staff levels measured in HPRD. For example, nursing homes with the highest Medicaid payer-mix had 3.01 HPRD of direct care nursing staff compared to 3.76 HPRD for those with the lowest proportion of Medicaid. These differences were particularly pronounced for RNs (0.48 HPRD vs. 0.85 HPRD for the highest vs. lowest proportion Medicaid) and CNAs (1.85 HPRD vs. 2.28 HPRD). The staffing levels of LPNs showed much less variation across Medicaid payer-mix.

Table 13. Nursing Staff Levels by Medicaid Resident Days in Ohio, 2021					
	Staffing Level in Hours Per Resident Day (Median)				
Medicaid resident days	Registered nurses	Licensed practical nurses	Certified nurse aides	Direct care nursing staff	Total nursing staff
0%-50%	0.85	1.04	2.28	3.76	4.17
51%-65%	0.66	0.94	2.07	3.36	3.67
66%-80%	0.57	0.94	1.92	3.15	3.43
81%-100%	0.48	0.94	1.85	3.01	3.27

Source: Medicaid Cost Reports and Payroll-Based Journaling Data, 2021.
Notes. Staffing levels are reported for Ohio nursing homes with a fiscal year end date in 2021. The data were restricted facilities with full-year cost reports and reported PBJ data for all days in 2021. Registered nurse and licensed practical nursing staff hours per resident include staff assigned to direct care and administrative duties. Total nursing staff includes nursing staff assigned to direct care and administrative duties.

Retention and Recruitment Strategies

Workforce challenges have been a long-standing concern for the nursing home industry, but the pandemic brought workforce problems to a crisis state across the nation. Throughout the pandemic more than one-third of Ohio's nursing homes reported direct care staff shortages. Reports from facility administrators, residents, and staff have identified challenges with both recruiting and retaining direct care workers in long-term services. Data from the 2021 Ohio Biennial Survey of Long-Term Care Facilities on retention rates found that 64% of full-time CNAs were still on the job after one year. These rates were 69% for LPNs and 67% for RNs (data not shown). Furthermore, the nursing homes were asked to rate the seriousness of their retention problems for nursing staff on a 10-point scale (1= low to 10 = very serious) and the average nursing home rated retention as 7.3 for CNAs, and 6.4 for LPNs and RNs (data not shown).

Another way to measure nursing home workforce stability is the turnover rate. Turnover rates measure the number of workers who left the facility in the past 12 months as a proportion of the number of workers employed at the facility. Table 14 reports the 12-month turnover rates for total nursing staff (i.e., CNAs, LPNs, and RNs) and RNs for 2021. Turnover rates for total nursing staff was 58% in Ohio compared to 53% nationally. The RN turnover rate in Ohio was 56% compared to 52% nationally. Additionally, Ohio had the highest turnover rates among neighboring states for both turnover measures.

Table 14. Nursing Staff Turnover Rates in Ohio and Neighboring States, 2021 (Median)		
State	**Total nursing staff (%)**	**RN nursing staff (%)**
Nation	52.9	51.6
Ohio	57.8	56.1
Indiana	57.1	53.1
Kentucky	56.5	50.1
Michigan	50.9	47.2
Pennsylvania	50.4	47.7
West Virginia	54.2	44.5

Source: Nursing Home Compare Archive Data
Notes. Values for each state are reported based on PBJ from Q1-Q4 of 2021. Total nursing staff and RN turnover rates are defined as the percentage of nursing staff that left the nursing home over a twelve-month period. Both measures include nursing staff providing direct care and those assigned to administrative duties.

To learn more about how Ohio nursing homes are addressing staff turnover and retention issues, Table 15 reports the strategies used to retain and hopefully reduce turnover among CNAs. These strategies were classified into financial and workplace environment incentives. For financial strategies, most nursing homes reporting offering health insurance and paid vacation, but administrators reported only one-third of CNAs enrolled in the nursing home's health insurance plan. Eight in ten offered extra pay for shift differentials, and seven in ten provided sick leave and tuition reimbursement. Half or more offered an array of bonuses for areas such as initial hiring, longevity, attendance, merit, and extra training. Workplace environment strategies are practices that empower CNAs, give CNAs more voice, and potentially improve the workplace culture in order to retain the CNAs currently employed. Among workplace environment strategies, four in five nursing homes used consistent assignment of CNAs to residents, promoted staff flexibility, had CNAs work together to cover time off, and offered recognition programs for staff. Less common approaches included involving CNAs in care plan meetings (40%) and in quality improvement efforts (42%), managing staff scheduling (29%), and including CNAs in the interview process for new employees (14%). One in ten nursing homes reported that the CNAs were unionized and almost half of administrators reported knowing all of their CNAs by name, which can also affect CNA retention.

Table 15. Strategies Utilized to Retain Certified Nurse Aides in Ohio, 2021		
Strategy		**(%)**
Financial strategies for retention		
Offer health insurance		99.0
Offer 401K or other retirement plan		81.4
Paid sick leave		73.8
Provide paid vacation		93.9
Offer tuition reimbursement		71.6
Offer career ladders		55.4
Provide longevity wage increases		57.9
Provide merit wage increases		63.2
Offer bonuses for attendance		57.3
Extra pay for shift differential		86.5
Offer hiring bonus after time on the job		63.9
Offer bonuses, raises, for completing extra training		47.8
Offer other work perks (e.g., free meals)		55.6
Offer financial assistance (e.g., gas cards, help with car repair)		23.2
Workplace environment strategies for retention		
CNAs are consistently assigned to the same group of residents		81.2
Staff scheduling is managed by staff teams		29.6
Staff work together to cover shifts		80.7
CNAs participate on quality improvement teams		41.5
CNAs participate in resident care planning meetings		49.2
Staff are cross-trained to perform tasks outside their regular duties		58.5
CNAs are informed within one day when a resident's care plan is changed		51.2
Offer scheduling flexibility		81.0
Offer employee recognition programs		81.4
CNAs participate in interviews of direct care applicants		13.8
CNAs choose which residents they care for		9.9
Residents participate on hiring teams for selecting new staff		5.4
Other Factors Related to Retention		
Facilities with unionized CNAs		10.3
Administrator knows CNAs by name	All	45.7
	Many	14.8
	Most	28.7
	More than half	14.8

Source: 2021 Biennial Survey of Long-Term Care Facilities

Low retention rates of direct care nursing staff result in nursing homes having to hire staff on a continuous basis. This challenge has gotten more difficult as a result of the pandemic. In the 2021 Ohio Biennial Survey of Long-Term Care Facilities, nursing homes reported that recruitment of nursing staff was a serious problem, rating it 7.9 on a 10-point scale (1 = not serious to 10=most serious) for CNAs and LPNs, and an 8.4 for RNs (data not shown).

To understand how nursing homes attract direct care nursing staff, Table 16 reports the strategies that nursing homes reported to recruit CNAs. Some CNA recruitment strategies were almost universal across facilities. For example, almost all nursing homes used on-line platforms, and most offered staff referral or hiring bonuses, and participated in job fairs or developed partnerships with community colleges or vocational schools. Three-quarters of nursing homes reported offering tuition reimbursement and flexible scheduling to attract employees. As an example of the tremendous challenges faced by facilities, to boost recruitment three in ten nursing homes suspended drug screening and offered same day pay.

Table 16. Facility Recruitment Strategies for Certified Nurse Aides in Ohio, 2021

Strategy	(%)
Work with online platforms (e.g., Monster, Indeed)	98.6
Work with employment agencies	50.6
Participate in job fairs	83.7
Partner with community colleges and/or vocational schools	85.8
Offer staff referrals bonuses	91.7
Offer bonuses to new employees	80.1
Offer tuition reimbursement	73.1
Offer flexible scheduling	76.9
Provide same-day pay	36.9
Stopped or do not require drug testing	30.3

Source: 2021 Biennial Survey of Long-Term Care Facilities

Even though nursing homes are actively seeking to hire and retain nursing staff, there are times when the facility may have a shortage of workers on a particular shift or for a few days. Nursing homes use a number of strategies to address these shortages (Table 17). The strategies used by nursing homes when they were short staffed were similar for CNAs and LPNs. However, nursing homes were less likely to share RNs with their residential care facility when there was a shortage. This is likely due to the small number of RNs in RCFs. Almost all nursing homes reported asking staff to pick up additional hours and offered financial incentives. Just over nine in ten nursing homes limited admissions when they had a shortage of workers. Limiting admissions has consequences for both short and long-stay nursing home residents. For short-stay residents, this could have meant additional days in the hospital when they could have

been cared for in a lower cost setting. For long-stay residents, this means they may have had to select a nursing home that had an available bed, rather than the nursing home preferred by the resident and family.

Table 17. Strategies Used When Short Staffed in Ohio, 2021 (%)			
Strategy	**CNAs**	**LPNs**	**RNs**
Ask existing staff to pick up additional hours (e.g., double shift)	100.0	99.2	97.3
Offer financial incentives (e.g., bonuses, shift differentials)	99.1	99.1	97.7
Share staff with affiliated residential care facility (RCF)	91.7	92.2	76.2
Share staff with an affiliated nursing home (NH)	94.8	95.6	91.2
Limit admissions	94.3	96.2	93.2
Use own “on-call” staff	85.9	96.0	96.0

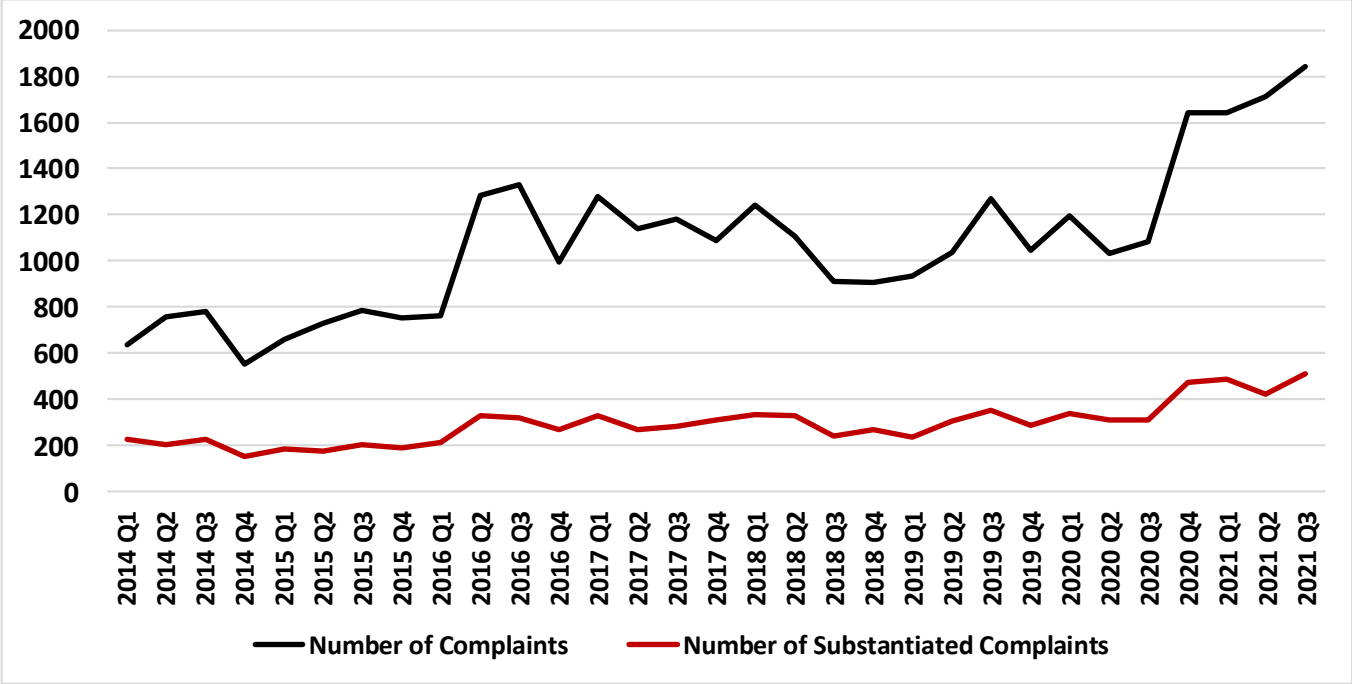
Source: 2021 Biennial Survey of Long-Term Care Facilities

Quality Measures of Ohio’s Nursing Homes

Nursing Home quality is multi-dimensional and there are a number of measures that can be used to assess quality. One measure of quality comes from the Ohio Department of Health (ODH). The ODH is responsible for recertification surveys that are required to occur every 9 to 15 months, in which inspectors evaluate whether the nursing home is in compliance with federal and state nursing home regulations. ODH is also required to receive formal complaints from residents, family, staff, and other stakeholders. Nursing home complaints can provide valuable information about nursing home quality because they originate from residents and other individuals that are concerned about day-to-day care. In Ohio, a complaint is formally received by the ODH, after which, ODH has a certain number of days to conduct a complaint survey depending on the nature of the complaint. During this complaint survey, the inspection team will determine if the allegations in the complaint are substantiated, and whether the nursing home should receive a deficiency citation for not substantially complying with federal and state nursing home regulations.

Figure 3 reports the number of complaints and substantiated complaints received and processed by ODH from 2014 through the third quarter of 2021 on a quarterly basis. There is a clear upward trend in the number of complaints Ohio received over the last 8 years. From 2014 to early 2016, ODH received and processed about 712 complaints per quarter, of which, about 27% or 194 per quarter were substantiated. Ohio saw a large increase in the number of complaints per quarter beginning in 2016. From the middle of 2016 to middle of 2020, there were on average 1,114 complaints per quarter, of which 27% (or 300 per quarter) were substantiated. In the fourth quarter of 2020, Ohio saw another jump in complaints, reaching an average of 1,710 complaints per quarter with 27.6% of complaints (or 472 per quarter) being substantiated.

Figure 3. The Number of Complaints and Substantiated Complaints in Ohio, 2014 to Q3 2021



Source: ASPEN Complaints/Incidents Tracking System (ACTS)

While Figure 3 clearly shows an uptick in the number of complaints in Ohio, it is important to examine these results in a national context. Table 18 reports the number of complaints per nursing home, the number of substantiated complaints per nursing home, and the proportion of complaints that were substantiated for Ohio, the nation, and neighboring states for complaints filed in 2019 and 2020. While all states are required to follow the same federal guidelines around complaints, the ease of filing a complaint, the threshold used to determine if a complaint is substantiated, and how complaints were processed during the pandemic differed across states. In 2019, the average number of complaints in Ohio was 4.5 per nursing home, compared to 7.0 for the nation. Compared to neighboring states, Ohio was near the middle. By 2020, the average number of complaints per nursing home in Ohio was 5.2, which is below the national average of 7.4. Ohio nursing homes receive fewer complaints per facility than Michigan (12.6), Pennsylvania (5.5), and Indiana (5.2), but more than Kentucky (3.0) and West Virginia (0.3). For both 2019 and 2020, Ohio had fewer substantiated complaints than the nation (1.2 vs. 2.3 in 2019 and 1.5 vs. 2.5 in 2020). The proportion of complaints substantiated in Ohio was 27% in 2019 and 29% in 2020. This was lower than the national average in 2020 (33%) and matched the national average in 2020. There is wide variation in the substantiation rate across neighboring states.

Table 18. Complaints in Ohio and Neighboring States, 2019 and 2020 (Number)						
	2019			2020		
	Complaints per nursing home	Substantiated complaints per nursing home	% Complaints substantiated	Complaints per nursing home	Substantiated complaints per nursing home	% Complaints substantiated
Nation	7.0	2.3	33.2	7.4	2.1	28.5
Ohio	4.5	1.2	27.4	5.2	1.5	28.8
Indiana	4.5	3.4	75.3	5.4	3.7	68.3
Kentucky	3.5	0.7	20.8	3.0	0.6	18.5
Michigan	13.4	2.7	19.9	12.6	6.3	50.0
Pennsylvania	5.5	2.3	41.4	5.5	1.5	27.4
West Virginia	1.3	0.5	42.4	0.3	0.0	12.1

Source: ASPEN Complaints/Incidents Tracking System (ACTS)

Another set of quality measures that is incorporated into the Five-Star Quality Reporting System by the Centers for Medicare and Medicaid Services (CMS) are indicators of quality of care collected on a quarterly basis from administrative data on nursing home residents. These administrative datasets are the Minimum Data Set and medical claims data. Table 19 reports the average quality scores reported by nursing homes in 2021 for Ohio nursing homes compared to the nation and neighboring states. The quality measures reported are broken into short and long-stay quality measures and are the quality measures CMS uses to calculate a nursing home's Quality Star Rating.

There are four short-stay quality measures. Ohio is comparable to the nation on the use of antipsychotic medications, better in terms of improving resident functioning, but worse in terms of rehospitalizations and use of the emergency room. Compared to neighboring states, Ohio generally had better scores on the percent that improved in functioning, but ranked at the bottom on rehospitalizations. The other two short-stay indicators were mixed, with some neighboring states having higher and some lower scores.

A review of the nine long-stay quality indicators shows that Ohio compares favorably to the nation on six of the nine measures, and was exactly the same as the nation on another. Ohio fared worse than the national average in two indicator areas, long-stay residents needing activities of daily living (ADL) assistance and long-stay residents with falls with serious injury.

In comparison to the neighboring states, Ohio compares favorably, with some variation by individual quality measures.

Table 19. Quality Measures Used in CMS' Quality Star Rating, Ohio and Neighboring States, 2021							
Quality Measure	**Nation**	**Ohio**	**Indiana**	**Kentucky**	**Michigan**	**Penn-sylvania**	**West Virginia**
Short-stay quality measures							
% rehospitalized	22.1	23.1	21.5	22.4	22.6	21.0	21.3
% with an emergency department visit	11.1	12.0	11.3	13.8	10.8	8.9	13.1
% newly received antipsychotic medications	1.8	1.9	1.8	2.3	1.5	1.6	2.0
% with improvements in functioning	73.9	74.5	73.4	72.0	76.6	72..2	71.8
Long-stay quality measures							
# hospitalizations per 1000 long-stay resident days	1.5	1.4	1.5	1.6	1.5	1.3	1.5
# outpatient emergency department visits per 1000 long stay resident days	0.9	0.9	1.0	1.2	0.8	0.6	1.1
% whose need for ADL assistance has increased	14.8	15.2	16.2	15.6	12.4	15.3	16.8
% with a catheter inserted and left in bladder	1.5	1.1	1.0	1.5	1.6	1.3	165
% with urinary tract infection	2.4	1.8	2.0	2.7	2.4	1.9	3.9
% with one or more falls with major injury	3.4	3.7	3.9	3.9	2.9	3.4	4.4
% receiving antipsychotic medication	14.5	13.3	13.3	16.1	13.0	15.5	16.3
% whose ability to move independently worsened	19.8	18.5	17.5	21.9	19.7	23.7	25.3
% high-risk residents with pressure ulcers	8.2	7.8	7.7	9.2	8.9	7.7	8.9

Source: Nursing Home Compare Archive Data, 2021.

CMS' Five-Star Quality Rating System summarized quality information related to three domains, (1) health inspections, (2) quality measures reported in Table 19, and (3) nursing staff levels reported in Table 13. These three domains are used to calculate an overall star rating. A final quality analysis presents the overall star rating, health inspection star rating, and quality star rating by Medicaid payer-mix (See Table 20). Medicaid payer-mix is measured as the proportion of resident days paid for by Medicaid. Data from 2021 found that low Medicaid nursing homes had an overall star rating of 4 out of 5 stars, while the nursing homes that are the most reliant on Medicaid (81-100% of resident days) had 2 out of 5 stars. This pattern of lower star ratings as the proportion of Medicaid increased was also identified for the Health Inspection Star Rating. Low Medicaid nursing homes averaged 3.5 stars compared to 2.0 for high Medicaid nursing homes. Quality star ratings, which are based on data collected by the facility and medical claims data, showed little variation across Medicaid payer-mix.

Table 20. Average Star Ratings by Medicaid Resident Days in Ohio, 2021

Medicaid Resident Days	Overall Star Rating	Health Inspection Star Rating	Quality Measures Star Rating
0%-50%	4.0	3.5	4.0
51%-65%	3.3	3.0	3.9
66%-80%	2.7	2.5	3.7
81%-100%	2.1	2.0	3.8

Sources: Medicare Cost Reports and Nursing Home Compare Archive Data

Memory Care

More than half of nursing home residents in Ohio have dementia and there is considerable interest in facilities or units that are designated as memory care. As shown earlier in Table 1, 34% of Ohio nursing homes reported being a dedicated memory care facility or having a dedicated memory care unit. Of the nursing homes reporting having a memory care facility/unit, one in four facilities are entirely designated as memory care, while the remaining 75% have a designated unit (data not shown).

To better understand memory care facility/units in Ohio's nursing homes, Table 21 describes the number of beds, payment rates, and characteristics associated with memory care facilities and units. In 2021, there were 11,212 beds in dedicated memory care facilities or units, representing 13% of all licensed nursing home beds in the state. Memory care facility/unit occupancy was 77% in 2021, above the 72% overall occupancy rate in the state at the same time. Facilities report charging an average of $152 per day over their non-memory care unit rates for a private room, and $135 per day for a semi-private room. Most nursing homes will admit individuals without advanced dementia and six in ten nursing homes require a physician recommendation for admission. In looking at memory care facility/unit characteristics, nine in ten report having a locked unit, use consistent assignment of staff to the unit, and have written

procedures to address resident elopement. Three-quarters report a secure outdoor area and elopement alarms. Only about half of nursing homes consistently assign the same nursing staff to the same residents within the memory care facility/unit.

Table 21. Description of Dedicated Memory Care Facilities and Units in Ohio, 2021

Characteristics	Number or Percent
Number of memory care beds	11,212
Proportion of licensed beds in the state (%)	12.8
Number of residents in memory care	8,607
Statewide memory care occupancy rate (%)	76.7
Additional private pay payment per day for memory care ($)	
Private room	$152
Semi-private room	$134
Admission criteria (%)	
Facility only takes individuals with advanced dementia	8.2
Physician recommendation required for admission	58.0
Characteristics of the memory care facility/unit (%)	
Individualized therapeutic recreation plan	68.7
Written procedures to follow in the event of resident elopement	92.8
Visual cues or landmarks in the physical environment to assist with wayfinding	72.5
Environmental triggers are used	68.3
Display (or encouraging residents to display) meaningful objects in resident/patient personal areas	82.8
Consistent nursing staff assigned to memory care unit	92.8
Consistent nursing staff assigned for each resident within memory care unit	50.4
Higher staffing levels within memory care	55.0
Locked unit	88.2
Secured outdoor area	77.5
Room/unit alarms	50.4
Elopement alarms	73.7
Strength-based vs. deficit-based approaches	35.9

Source: 2021 Biennial Survey of Long-Term Care Facilities

Nursing home residents in memory care have high levels of cognitive impairment and it is important to assure that staff in memory care facilities/units are adequately trained and residents are monitored. Table 22 reports the information regarding training and monitoring in memory care facilities/units. More than half of the nursing homes reported requiring specialized memory care training prior to beginning to work in the unit, and a similar proportion require additional training in the first 14 days. Eight in ten require ongoing continuing education. Nursing homes also conduct monitoring from the facility's medical director. Four in ten nursing homes reported the medial director monitors psychotropic medications at least weekly and half report monitoring on a monthly basis. Sixty-five percent report monitoring behavioral symptoms at least weekly and 30% at least monthly.

Table 22. Training and Monitoring in Ohio's Memory Care Facilities/Units, 2021

Characteristics	(%)
Nursing staff training requirements	
Required special memory care training to start work on unit	56.4
Special training is required in first 14-days	53.8
Requires continuing education and training on best practices	84.2
Frequency of medical director monitoring of psychotropic medications	
At least 2-3 times per week	11.1
Weekly	32.4
Monthly	48.5
Quarterly	7.6
No monitoring is done by medical director	0.4
Frequency of medical director monitoring of behavioral symptoms	
At least 2-3 times per week	19.5
Weekly	44.8
Monthly	29.5
Quarterly	4.6
No monitoring done by medical director or other physicians	1.5

Source: 2021 Biennial Survey of Long-Term Care Facilities

Table 23 reports the resident-to-staff ratios in Ohio's memory care facilities/units. A resident-to-staff ratio is the number of residents cared for by each nursing staff worker, and lower numbers are associated with better staffing. For CNAs, the resident-to-staff ratio was 13 residents to each CNA on the day shift, 14 residents to each CNA on the evening shift, and 17 residents per CNAs on the overnight shift. Over the course of a typical day, 37% of the CNA time was on the day shift and 29% was on the overnight shift. For LPNs, the resident-to-staff ratio averaged 27 or 28 residents to each LPN on all three shifts. RNs are most common on the day shift (42%) with 34 residents to each RN. Nursing homes averaged 44 residents to each RN on the evening shift and 47 residents to each RN on the overnight shift. Comparing these results to Table 10 which

report resident-to-staff ratios for the entire facility, resident-to-staff ratios were generally higher for CNAs on the memory care unit, but lower for LPNs and RNs. This suggests that memory care is staffed in a different manner.

Table 23. Resident-to-Staff Ratios in Ohio's Memory Care Facilities/Units, 2021

Nursing Staff (Shifts)	Resident-to-Staff Ratio Average	Proportion of Nursing Staff Type on Shift (%)
Certified nurse aides		
Day shift	13 to 1	37
Evening shift	14 to 1	34
Overnight shift	17 to 1	29
Licensed practical nurses		
Day shift	27 to 1	34
Evening shift	27 to 1	34
Overnight shift	28 to 1	31
Registered nurses		
Day shift	34 to 1	42
Evening shift	44 to 1	25
Overnight shift	47 to 1	33

Source: 2021 Biennial Survey of Long-Term Care Facilities

Special Focus Topics: Telehealth, Infection Prevention, and Transportation

Two of the by-products of the pandemic have been the expansion of telehealth and the greater emphasis on infection prevention. Additionally, prior to the survey launch interviews with administrators identified transportation as a growing concern. In the 2021 Ohio Biennial Survey of Long-Term Care Facilities, nursing homes were asked a series of questions regarding these three topics.

As reported in Table 3, 70% of Ohio nursing homes reported using telehealth with their residents. Prior to the pandemic, only 26% of nursing homes used telehealth with their residents (data not shown). Table 24 reports the characteristics of telehealth use among Ohio nursing homes. Most telehealth visits (84%) were conducted via video and nine in ten nursing homes bring the telehealth technology to the resident's room. Telehealth is most commonly used for visits with other medical providers (71%), behavioral or mental health professionals (55%), or the resident's personal physician or one chosen by the resident's family (42%). Telehealth visits with the nursing home's medical director or physician designee was reported for 28% of nursing homes using telehealth. RNs and LPNs are the most involved with scheduling, setting up the telehealth technology, and participating in the telehealth visit, relative to CNAs and family members.

Table 24. Characteristics of Telehealth Use in Ohio, 2021	
	(%)
Telehealth method used	
Telephone (audio only)	11.1
Video	83.5
Other method	5.4
Location of telehealth visit	
Residents go to a dedicated room	4.3
Telehealth is brought to the resident's room	93.9
Other location	1.9
How telehealth is used	
Resident's personal physician or physician chosen by resident/family	41.5
Facility's medical director or other physician designee	27.6
Other medical physician telehealth provider	71.1
Behavioral or mental health professional	54.6
Evaluation by therapist (speech, physical, occupational therapy)	15.8
Therapy visit (by speech, physical, occupational therapist)	9.9
Emergency department	2.1
Scheduling a Telehealth Visit Involves:	
Registered nurse	17.7
Licensed practical nurses	36.7
Certified nurse aides	2.9
Family/other	42.4
Telehealth visit technical assistance involves:	
Registered nurse	17.4
Licensed practical nurses	37.5
Certified nurse aides	4.9
Family/Other	40.0
Participates in the telehealth visit (e.g., blood pressure check)	
Registered nurse	23.2
Licensed practical nurses	59.6
Certified nurse aides	3.0
Family/other	14.3

Source: 2021 Biennial Survey of Long-Term Care Facilities

The barriers to using telehealth are reported in Table 25. The two biggest barriers (identified as substantial barriers) were resident resistance to telehealth (19%) and residents having a hard time participating due to cognitive or physical impairment (25%). Areas not seen as a barrier were ownership, privacy, and legal concerns.

Table 25. Barriers to Using Telehealth in Ohio, 2021

	Barrier Levels (%)			
Barrier	**Not a Barrier**	**Somewhat**	**Moderate**	**Substantial**
Hard to find physicians offering telehealth	51.9	25.6	14.7	7.8
Residents don't want telehealth	32.8	26.5	21.5	19.1
Residents have a hard time participating (cognitive/physical imitations)	21.1	30.3	24.3	24.4
Family members resistant to telehealth	47.5	25.7	16.4	10.5
Internet bandwidth	63.1	19.0	10.9	7.0
Privacy and legal concerns regarding personal health information (i.e., HIPAA)	73.2	14.1	9.7	3.0
Lack of access to proper technology or equipment	69.4	15.9	9.5	5.3
Lack of reimbursement to the facility for technology and equipment	65.8	15.4	10.9	7.9
Lack of facility staff to support telehealth	50.1	23.9	16.1	9.8
Lack of reimbursement to the facility for staff to assist residents	59.0	18.2	12.6	10.2
Ownership/management of facility resistant to telehealth	85.8	6.5	6.0	1.6

Source: 2021 Biennial Survey of Long-Term Care Facilities

The pandemic also heightened the attention paid to infection prevention in nursing homes. As shown in Table 3, almost all nursing homes (98%) had an infection preventionist (IP). Table 26 reports descriptive characteristics regarding the IP in Ohio nursing homes. One in five nursing homes have an IP with a primary title of being an infection preventionist. More than half (55%) of IPs are either the Director or Assistant Director of Nursing, about 4% are Minimum Data Set (MDS) Nurses, and 12% are either a charge nurse, unit manager, or a nurse with another administrative role. Over three-

quarters of IPs are trained as a registered nurse, with most other IPs being a licensed practical nurse. Almost all IPs received specialized training. The average IP spends about 17.2 hours (42% of time) on infection prevention tasks.

Table 26. Characteristics of Ohio's Infection Preventionists, 2021	
Characteristics	**Percentage/ Number**
Infection preventionists primary position	
Infection preventionist	20.8
Director or assistant director of nursing	55.0
MDS nurses	3.6
Charge/unit nurse or other administrative role	11.7
Direct care registered nurse or licensed practical nurse	2.4
Other	6.6
Primary professional background of infection preventionist	
Registered nurse	76.4
Licensed practical nurse	20.9
Medical training	0.1
Other	2.5
Infection Preventionist Receives Special Training	97.2
Hours per week infection prevention spends on:	
Infection prevention tasks	17.1 (42%)
All other task	23.3 (58%)

Source: 2021 Biennial Survey of Long-Term Care Facilities

Due to concerns raised by nursing homes, a final area examined focused on access and quality of non-emergency transportation. Transportation was identified as a serious problem by nursing homes across the state (See Table 27). Almost half of nursing homes in the state rated access to transportation for Medicaid residents as a very serious or serious problem, and another 20% rated it as a moderately serious problem. The quality of transportation services was also a major concern with more than four in ten (44%) citing this as a very serious or serious problem for Medicaid residents. Four in ten nursing homes identified Medicaid reimbursement as a very serious or serious problem in the transportation area. Access (48%) and quality of transportation (47%) was more likely to be rated as very serious or serious problem for the MyCare program than traditional Medicaid. The challenges associated with transportation are not limited to the Medicaid and MyCare program, as one in three nursing homes report access (36%) and quality (33%) of transportation as a very serious or serious problem for private pay residents. As a response to these challenges seven in ten facilities (72%) reported providing some transportation in-house, with most nursing homes having a full-time dedicated employee (46%) as compared to a part time employee (32%) (data not

shown). Additionally, a small proportion of nursing homes (5%) are providing their own emergency transportation in response to the current challenges (data not shown).

Table 27. Access and Quality of Transportation in Ohio Nursing Homes

	Problem Rating (%)			
Type of Problem	**Not a Problem**	**Somewhat**	**Moderate**	**Severe/ Very Severe**
Medicaid Fee-For-Services residents				
Access	20	14	19	47
Quality of transportation	23	15	18	44
Reimbursement	26	16	16	43
MyCare residents				
Access	22	12	19	48
Quality of transportation	24	13	17	47
Reimbursement	29	17	17	37
Private-Pay residents				
Access	31	17	17	36
Quality of transportation	36	16	16	33

Source: 2021 Biennial Survey of Long-Term Care Facilities

CONCLUSION

As a state with the fourth largest number of nursing home beds in the nation, Ohio invests a substantial amount of resources in nursing home care. The COVID-19 pandemic has had a major impact on nursing home residents, families, staff, operations, and ownership. Challenges with ensuring an adequate workforce, while a national problem, have had a big impact on Ohio facilities. Ohio's overall star rating is below the national average, largely because Ohio nursing homes have lower nursing staff levels than other states, including many neighboring states. Other elements of quality, such as complaints and quality indicators appear comparable to the nation, but have room for improvement. As the state recovers from the pandemic it will need to first respond to the workforce challenges and then to the remaining quality areas, which both Ohio and the nation face.