

---

**Could This Job Get Any More Complicated?  
Providing Long-Term Care in an Ever-Changing  
World  
OHCA Winter Conference 2024**

**Bob Applebaum  
Scripps Gerontology Center**



MIAMI UNIVERSITY

---

**“The Times They Are a Changin’”**

- The changes now being experienced in the long-term care are dramatic (but we are not alone– law, health care, education, manufacturing, journalism, technology– you name it)
- Good News– More individuals making it to old age, should mean busy times for aging services
- Bad news– More competition than ever before. Growth of numbers and funding means a shift in system structure

- Organizations can fail because of **bad products**:
- White Star Lines (Titanic)-- Sharper Image, when their lead product the Ionic Breeze Air Purifier added ozone to the home air supply
- Or **bad ideas**- The Harley Davidson perfume line, Cosmo , Yogurt, Thirsty Dog's flavored bottled water for pets
- But organizations also fail with quality products, because the **world changes and they do not** (Kodak, Blockbuster, Motorola cell phone, Blackberry)

## What Does This Mean for LTC Management?

- It is critical to have good information to avoid the quality pit fall
- The Good to Great Companies profiled by Jim Collins– underperformed the market in a subsequent analysis
- The search for quality never stops



## Ohio Population Changes 2010-2040

Population	2010* (%)	2020** (%)	2030** (%)	2040** (%)	Percent Change 2010-2020	Percent Change 2020-2030	Percent Change 2020-2040
Overall	11,536,504	11,799,448	11,694,796	11,425,531	2.3	-9	-3.2
60+	1,853,017 (16.1)	2,855,985 (2,937,707)*** (24.2)	2,937,042 (25.1)	2,717,015 (23.8)	54.1	2.8	-4.9
65+	1,622,005 (14.1)	2,047,720 (2,118,737)*** (17.4)	2,275,493 (19.5)	2,120,160 (18.6)	26.1	11.1	3.5
85+	230,419 (2.0)	232,883 (249,494)*** (2.0)	213,788 (1.8)	261,400 (2.3)	1.1	-8.2	12.2 (had been 30)

\*US Decennial Census, 2010, 2010 [www.census.gov](http://www.census.gov)

\*\*Ohio Development Services Agency (ODSA), Office of Research, <https://development.ohio.gov/about-us/research>

\*\*\* Original Scripps projection Pre-COVID 19



## Moderate and Severe Rates of Disability by Age, Gender

Age Classification	Male		Male	Female
	Male Moderate	Female Moderate	Male Severe	Female Severe
65-69	7.8	11.0	4.5	5.6
70-74	8.6	11.3	6.5	6.0
75-79	10.7	11.9	7.8	10.2
80-84	13.1	12.2	13.8	15.9
85+	6.9	10.8	24.7	42.0



## Estimates of Moderately and Severely Disabled Older Adults between 2020 and 2050

	2020		2030		2040		2050	
	Moderate	Severe	Moderate	Severe	Moderate	Severe	Moderate	Severe
65 and over	210,599 (9.9)	219,982 (10.4)	236,393 (10.4)	236,441 (10.4)	221,735 (10.5)	245,123 (11.6)	202,428 (10.3)	234,666 (12.0)
85 and over	21,994 (8.8)	83,973 (33.7)	20,368 (9.5)	77,885 (36.4)	24,703 (9.5)	94,324 (36.1)	21,678 (7.5)	103,647 (35.9)

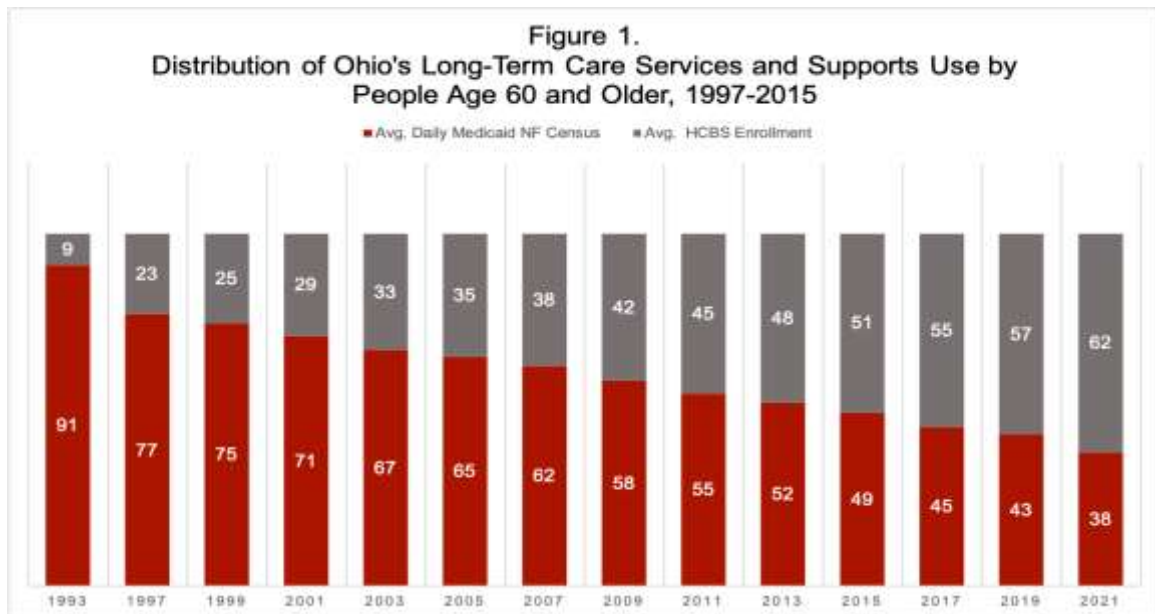


## Disability and Alzheimer's Disease and Related Dementias (ADRD) Characteristics

Disability and Dementia 65+ population	Ohio (2020)	Breakdown of LTSS Use
Disability and ADRD	Estimated number	Percent
Severe (2 or more ADL impairments, 24 hour supervision, dementia) –	219,982	44% Family or Private Home care services 17% in NF 26% HCBS waiver 12% RCF 1% Other (PACE, Ohio prisons, group homes)
ADRD – breakdown by community/nursing home	268,176	
ADRD Nursing Home	31,676 (11.8%)	

Dhana, K. Beck, T., et al. (2023). Prevalence of Alzheimer's disease dementia in the 50 US states and 3142 counties: A population estimate using the 2020 bridged-race postcensal from the National Center for Health Statistics. Alzheimer's and Dementia.. <https://doi.org/10.1002/alz.13081>

LTCFocus Public Use Data sponsored by the National Institute on Aging (P01 AG02296) through a cooperative agreement with the Brown University School of Public Health. Available at [www.ltcfocus.org](http://www.ltcfocus.org). <https://doi.org/10.26300/h9a2-2c26>



## Ohio's Residential Care Facilities (2021)

	RCFs
Number of Facilities ( <b>1993 less than 250</b> )	791 (today over 830)
Total Licensed RCF Beds	67,403
Total Licensed RCF Units ( <b>1993, 12,000</b> )	50,124
Average number of RCF Beds	85
Average number of RCF Units	63
For-profit Ownership	73%
Not-for-profit Ownership	27%
Considered Assisted Living	94%
Participate in AL Medicaid Waiver Program	43%
Average Monthly Rate	\$4,803

<b>Table 6. Occupancy Rates in Ohio's Residential Care Facilities, 2013-2021</b>					
	<b>2013</b>	<b>2015</b>	<b>2017</b>	<b>2019</b>	<b>2021</b>
<b>Number of Facilities</b>	606	655	708	759	791
<b>Number of Units</b>	33,182	35,979	40,450	45,931	50,124
<b>Unit Occupancy</b>	87.8	88.9	85.3	81.3	72.1

## Description of Ohio's Nursing Homes: 2021

<b>Characteristic</b>	<b>Overall</b>	<b>County</b>	<b>Hospital</b>	<b>CCRC</b>
Number of facilities ( <b>today, down by 30</b> )	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 (%)	<b>47</b>	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	<b>78.9</b>	0.0	16.7	42.5
Not-for-profit	<b>19.4</b>	0.0	67.7	57.5
Public	<b>1.7</b>	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 Unit (%)	<b>34.0</b>	45.4	0.0	40.0

Source: 2021 Biennial Survey of Long-Term Care Facilities, Nursing Home Compare Archives Data.

## Nursing Home Rates: 2021

Characteristic	Rate (\$)
Private Pay (Private Room)	291
Private Pay (Semi-Private Room)	256
Medicaid Rate	226
Private Insurance	338
Medicare Fee-for-Service	511
Medicare Advantage	405
Medicare MyCare	458

Source: 2021 Biennial Survey of Long-Term Care Facilities, Ohio Department of Medicaid, Medicaid Rates.



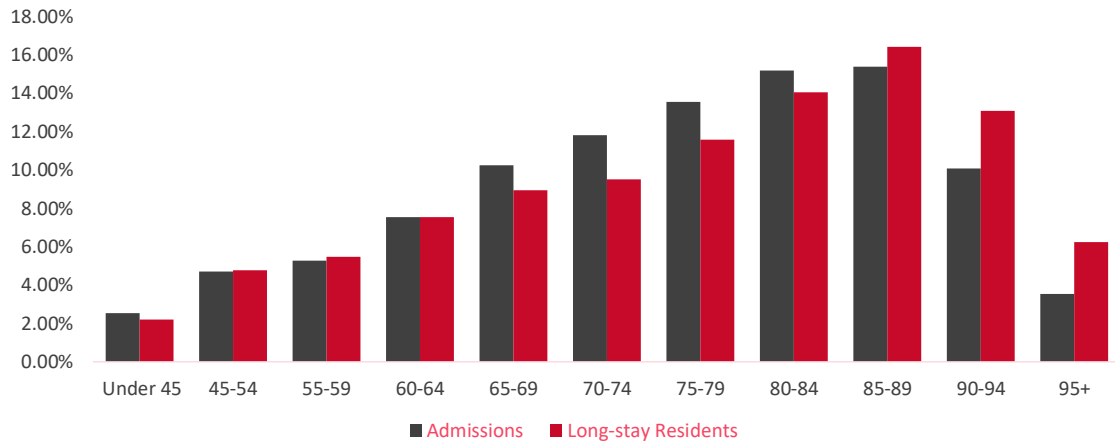
## Nursing Home Admission Sources: 2020

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: 2020 MDS assessments.



## Age Distribution



Source: 2017 MDS admission and quarterly/annual assessments



## Characteristics of Long-Stay 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: 2020 MDS assessments.



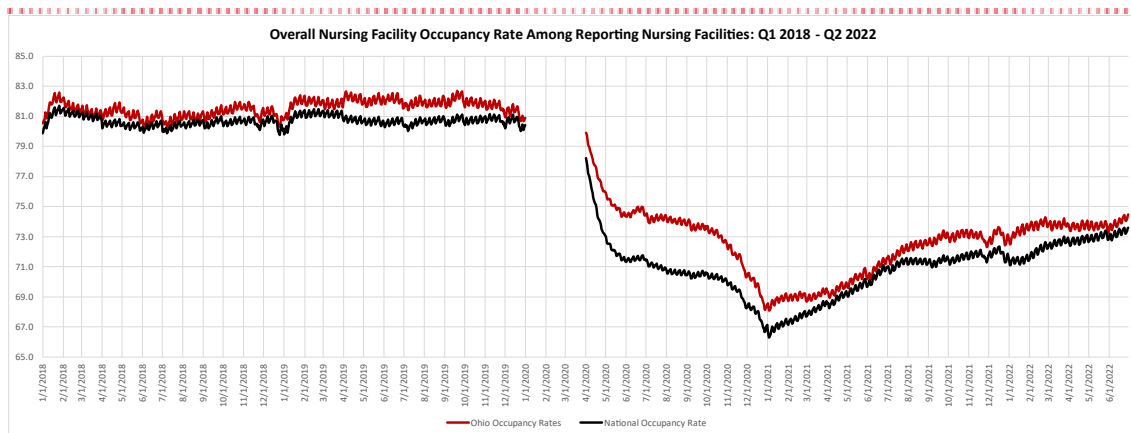
## Beds, Admissions and Occupancy: 1992-2021

	1992	1999	2009	2015	2019	2021
<b>Total # of Beds in Service</b>	91,531	95,701	93,209	91,503	88,793	86,129
<b>Total # of Admissions</b>	70,879	149,838	197,233	211,338	213,833	172,300
<b># of Medicare Admissions</b>	30,359	78,856	109,315	146,756	151,267	123,862
<b>Occupancy Rate</b>	91.9	83.5	84.7	84.7	80.0	71.8

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



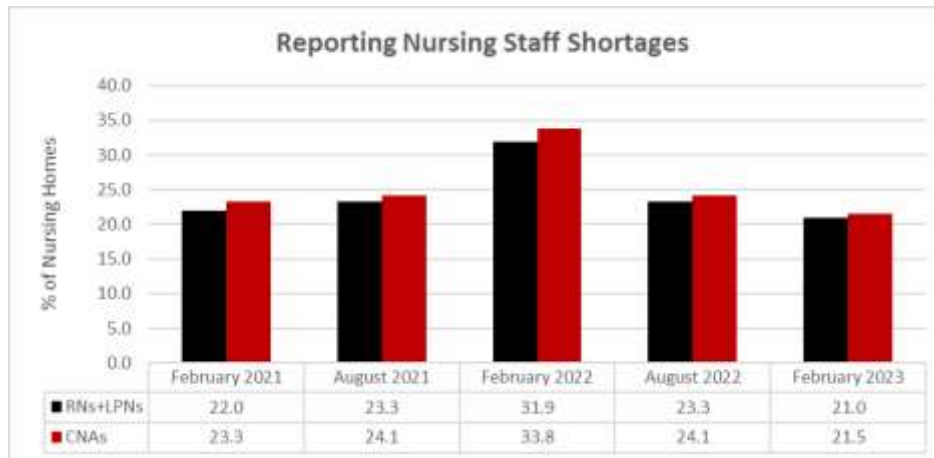
## Daily Occupancy Rates are Down



Source: Calculated from number of residents per PBJ data and number of beds per NH Compare Archive data.  
 Notes: The number of facilities reporting data change on a quarterly basis.



## Nursing Staff Shortages: Nationally



Source: AARP COVID-19 Dashboard.

Available at: <https://www.aarp.org/ppi/issues/caregiving/info-2020/nursing-home-covid-states.html>



## Median Nursing Staff Levels (HPRD): 2018-2022

Nursing Staff Type (Group)	2018	2019	2020	2021	2022 (Q1-Q3)	% Change (2018-2022)
<b>Certified Nurse Aides</b>						
Ohio	<b>2.12</b>	2.08	2.10	2.03	<b>2.01</b>	<b>-5.2%</b>
Nation	<b>2.32</b>	2.30	2.35	2.26	<b>2.22</b>	<b>-4.3%</b>
<b>Direct Care Nursing Staff</b>						
Ohio	<b>3.41</b>	3.36	3.44	3.34	<b>3.28</b>	<b>-3.8%</b>
Nation	<b>3.56</b>	3.55	3.68	3.55	<b>3.46</b>	<b>-2.8%</b>
<b>Total Nursing Staff</b>						
Ohio	<b>3.71</b>	3.66	3.76	3.66	<b>3.59</b>	<b>-3.2%</b>
Nation	<b>3.85</b>	3.84	3.99	3.86	<b>3.75</b>	<b>-2.3%</b>

Source: PBJ Data.



## Median Nursing Staff Levels (HPRD): 2021

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	<b>0.68</b>	0.87	<b>2.07</b>	3.27	3.62
Kentucky	<b>0.70</b>	0.89	<b>2.24</b>	<b>3.44</b>	<b>3.82</b>
Michigan	<b>0.80</b>	0.90	<b>2.22</b>	<b>3.60</b>	<b>3.93</b>
Pennsylvania	<b>0.84</b>	0.89	<b>2.06</b>	<b>3.50</b>	<b>3.79</b>
West Virginia	0.66	<b>0.95</b>	<b>2.17</b>	<b>3.50</b>	<b>3.79</b>

Source: PBJ Data.



## Ohio Resident-to-Staff Ratios by Shift: 2021

Nursing Staff (Shift)	Resident-to-Staff Ratio (Mean)	Proportion of Nursing Staff Type on Shift (%)
<b>Certified Nurse Aides</b>		
Day Shift	10 to 1	38
Evening Shift	11 to 1	34
Overnight Shift	14 to 1	27
<b>Licensed Practical Nurses</b>		
Day Shift	27 to 1	38
Evening Shift	30 to 1	33
Overnight Shift	34 to 1	29
<b>Registered Nurses</b>		
Day Shift	44 to 1	47
Evening Shift	56 to 1	29
Overnight Shift	60 to 1	24

Source: 2021 Biennial Survey of Long-Term Care Facilities



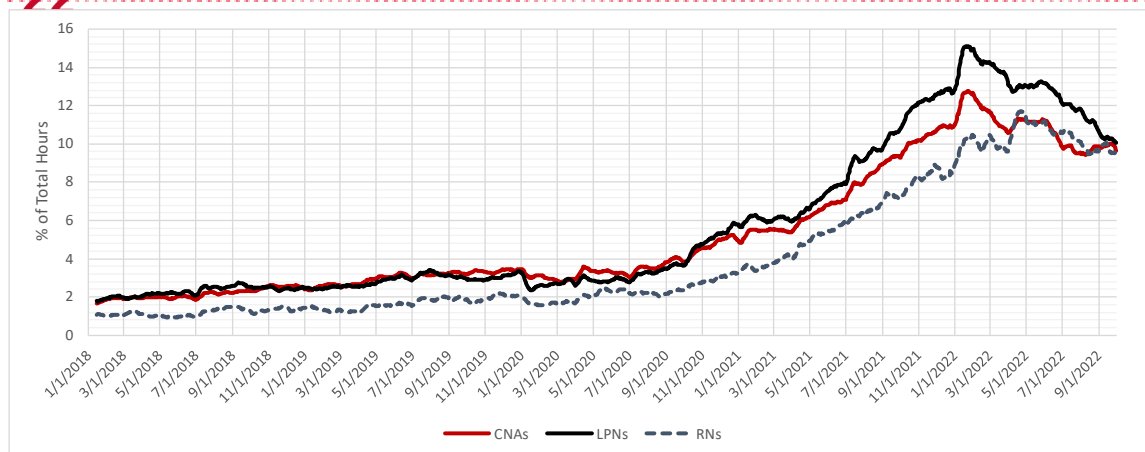
## Use of Any Agency Staff: 2018-2022

Nursing Staffing Type (Group)	2018	2019	2020	2021	2022 (Q1-Q3)
<b>Certified Nurse Aides</b>					
Ohio	13.7	17.3	19.2	31.1	39.7
Nation	14.9	17.6	20.0	30.2	40.0
<b>Licensed Practical Nurses</b>					
Ohio	9.5	11.3	12.3	23.6	32.5
Nation	11.5	12.8	14.3	22.6	31.7
<b>Registered Nurses</b>					
Ohio	3.6	4.6	5.4	11.1	16.5
Nation	6.7	7.5	8.7	12.3	17.5

Source: PBJ Data



## Proportion of Hours Staffed by Agency: 2018-22



Source: PBJ Data



## Ohio Hourly Wage Cost: 2017-2021

	Hourly Labor Cost (dollars)			% Change
	2017	2019	2021	(2017-2021)
<b>Directly Employed Nursing Staff</b>				
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
<b>Agency Nursing Staff</b>				
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



## Ohio Median Staffing Levels by Medicaid: 2021

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: Medicare Cost Reports and PBJ Data



## Median Turnover Rates: 2021

State	Total Nursing Staff (%)	Registered Nurse 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



## Federal Proposal vs. Ohio's Regulations

### Federal Proposal:

- RNs: 0.55 HPRD minimum
- CNAs: 2.45 HPRD minimum
- Total Nursing Staff: 3.48 HPRD minimum (under consideration)

### Ohio's Current Regulations:

- Sufficient number of nursing staff "to meet the needs of the residents in an appropriate and timely manner."
- Direct care nursing staff: 2.50 HPRD minimum



## Nursing Homes Meeting Proposed Standards

0.55 HPRD of Registered Nurses (% meeting)	51%	50%
2.45 HPRD of Certified Nurse Aides (% meeting)	28%	12%
Both Standards (% meeting both)	19%	10%

Source: August 2023 NH Compare Archive data



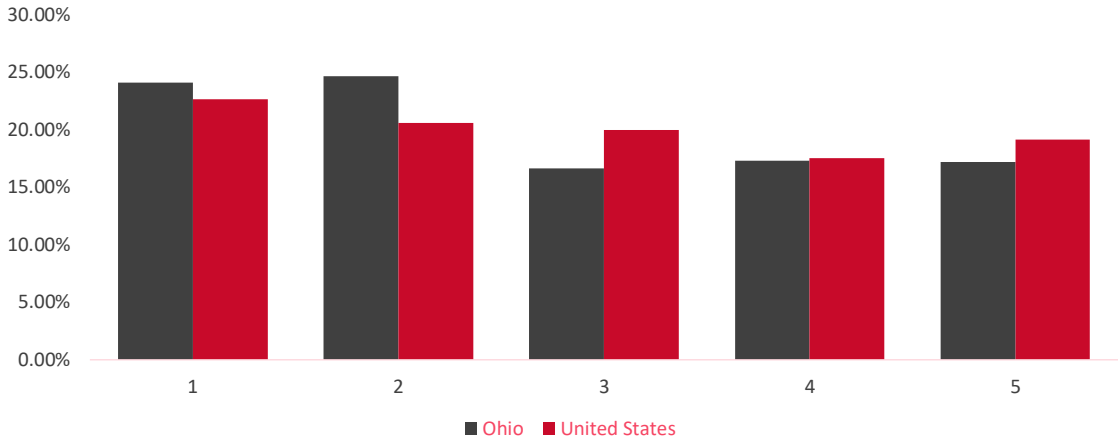
## Ohio NHs Meeting Proposed Standards

<b>Ownership</b>			
For-profit	46%	6%	5%
Not-for-profit	67%	38%	31%
Government	62%	38%	31%
<b>Medicaid Payer-mix</b>			
0-59%	73%	24%	20%
60-74%	48%	9%	7%
<b>75-84%</b>	39%	<b>5%</b>	<b>3%</b>
<b>85%+</b>	25%	<b>4%</b>	<b>3%</b>

Source: August 2023 NH Compare Archive data



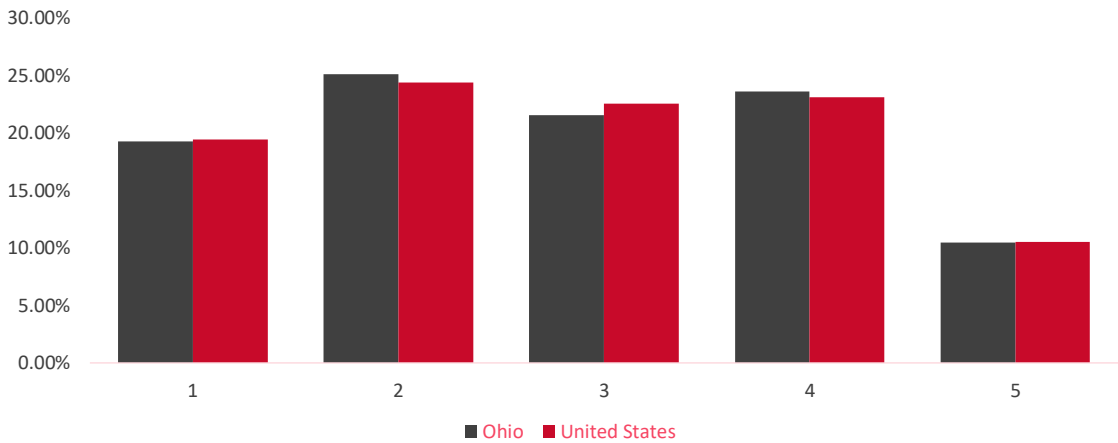
## Overall Star Rating (1/2023)



Source: Nursing Home Compare Archive Data (9/2019)



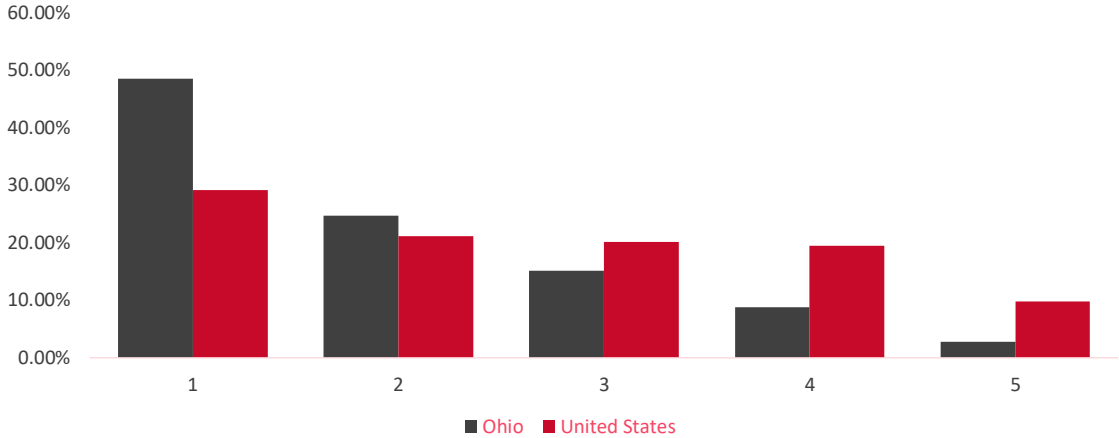
## Health Inspection Rating (1/2023)



Source: Nursing Home Compare Archive Data (9/2019)



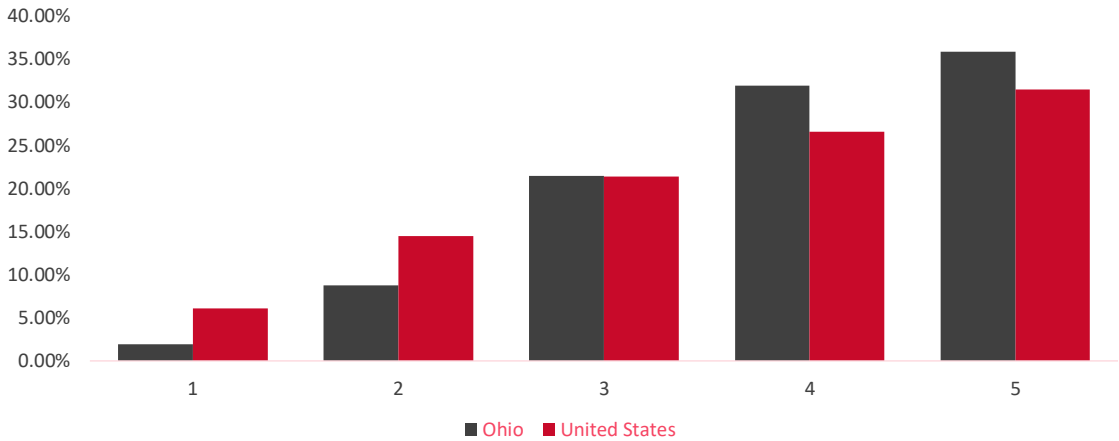
# Staffing Rating (1/2023)



Source: Nursing Home Compare Archive Data (9/2019)



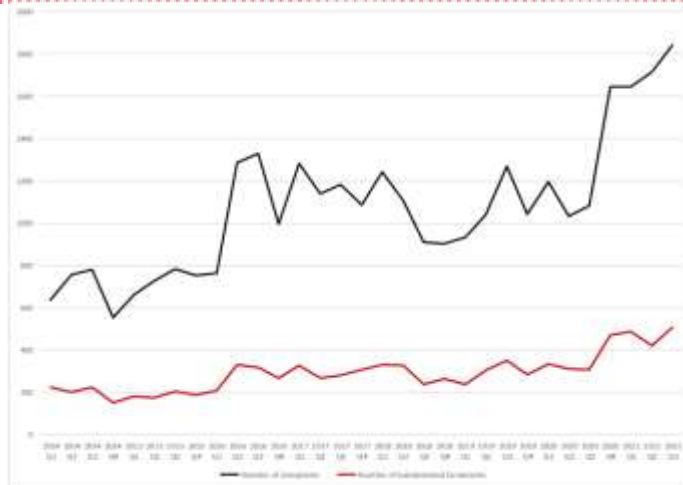
# Quality Measure Rating (1/2023)



Source: Nursing Home Compare Archive Data (9/2019)



## Number of Complaints in Ohio: 2014-Q3 2021



Source: ASPEN Complaints/Incidents Tracking System (ACTS)



## Complaints: Ohio Compared to Neighbors

	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	<b>3.4</b>	75.3	5.4	3.7	68.3
Kentucky	3.5	0.7	20.8	3.0	0.6	18.5
Michigan	<b>13.4</b>	<b>2.7</b>	19.9	12.6	6.3	50.0
Pennsylvania	<b>5.5</b>	<b>2.3</b>	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)



## Future Issues

---

Demographic trends will create opportunity over the next ten years...

- » Increase demand for long-term care services
- » Experimentation with different long-term care service delivery models

But opportunities are not without challenges...

- » Federal and state budget constraints—especially Medicaid, also Medicare
- » Workforce quality and quantity, both direct care and management
- » New and expanded models of financing, such as Medicare Advantage
- » Continued shift in consumer wants and expectations
- » Using technology without negatively impacting quality
- » Changing the model in a very difficult to change system

