Nursing Home Closures and Trends
June 2015 - June 2019

LeadingAge®

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Brendan Flinn, February 2020

Introduction

Over the last four years, more than 500 nursing homes closed their doors and stopped providing nursing care. Nursing homes provide critical services and supports, as well as housing, primarily to older adults. Oftentimes they serve as a key employer in the communities of which they are a part.

Closures can have negative impacts on all individuals who are connected to nursing homes: residents need to find new places to live and receive care, families often need to make arrangements for their loved ones, and former employees need to find new jobs. This can be particularly consequential in rural communities, where both aging services and employment opportunities can be limited.

To better understand why these nursing homes have closed and what the implications these closures have for aging services, LeadingAge conducted an in-depth analysis of available data.

Overall Findings

1. **More than 550 nursing homes have closed since June 2015.**

    - The number of nursing homes closing each year has increased.

    - More than half of the closures took place in nine states: Texas, Illinois, California, Ohio, Massachusetts, Wisconsin, Kansas, Nebraska, and Oklahoma.

    - Montana, Hawaii, Nebraska, Maine, and Wisconsin saw the highest percentages of nursing homes close.

2. **National nursing home average occupancy is decreasing, and many states are seeing large drops.**

    - Occupancy has decreased by almost two percentage points over four years, despite more than 550 nursing homes closing.

    - More than a dozen states have seen occupancy rates decrease by three percentage points or more.

3. **In several states, nursing home closures are concentrated in rural areas. Nationally, however, nursing homes are closing at about the same rate as urban and suburban nursing homes.**

    - In Kansas, Nebraska, Montana, and other states, most nursing home closures are in rural areas.

    - Closures of rural nursing homes can have particularly negative implications for the communities they operated in.

4. **State Medicaid programs vary in how they reimburse nursing homes—and most do not pay enough to cover the actual cost of nursing home care.**

    - Medicaid pays for more than 60% of nursing home care each year.

    - Each state has a different policy framework addressing nursing home reimbursement.

    - Underpayment for services can reach as high as $23,000 per nursing home resident per year.

Methods and Limitations

Data in this report come primarily from the Centers for Medicare and Medicaid Services' (CMS) Nursing Home Compare database. Each month, CMS publishes a dataset of nursing homes certified by Medicare and/or Medicaid that includes demographic, occupancy, quality, and other data at the facility-level. LeadingAge analyzed the June files in each of five years (2015-2019) and compared these datasets to identify which nursing homes have closed over time. If a nursing home appeared in one year's data set (e.g., 2015) and not in the years following (e.g., 2016-2019), that nursing home is assumed to have been closed for this report. If a nursing home is listed in the June 2019 dataset, it is assumed to be open. June files were selected for each year to ensure consistency across yearly datasets.

Because Nursing Home Compare includes only nursing homes certified by Medicare and/or Medicaid, this report cannot account for closures among non-certified homes. The vast majority of nursing homes, however, are certified by Medicare (98%) and/or Medicaid (95%).

Nursing Home Compare also only includes nursing homes. If a nursing home converted to another type of residential service (e.g., assisted living), there is no way of detecting that change. Thus, any nursing homes that converted entirely to another service are assumed to be closed for purposes of this report.

About a third of Life Plan Communities nationwide are reducing the number of skilled beds they maintain, with many closing their skilled nursing facilities (SNFs) altogether. If a nursing home reduced the number of certified beds and converted beds to other types of services, that nursing home would still be included in Nursing Home Compare, so long as at least some beds remained certified by Medicare and/or Medicaid.

While this report assumes accuracy in the Nursing Home Compare data, there may be lags and/or other inaccuracies in data reporting that this report is not able to account for.

Scope of the Issue: More Than 500 Nursing Homes Have Closed Since June 2015

Since June 2015, 555 nursing homes in the United States have closed their doors. This represents about 4% of the number of nursing homes in operation in June 2019 (15,527). While this may appear to be a small number at first glance, several trends within the data move in a potentially problematic direction for nursing homes, the residents they serve, and the communities in which they are located. The closure of nursing homes is on an upward trajectory.

Specifically, more than half (328) of the 555 closures have taken place since June 2017 (59%). Since June 2016, there has been a consistent increase in the number of nursing homes that have closed. June 2018-June 2019, for example, saw 60 more nursing homes closed than did the June 2017-June 2018 period, which itself saw 43 more closures than the prior 12-month period.

In other words, not only have nursing homes been closing, but more nursing homes have closed each year than the previous. **Exhibit 1** presents the number of nursing homes closed by year since June 2015.

Exhibit 1: Number of Nursing Homes Closed in the Preceding Twelve Months, June 2015-2019
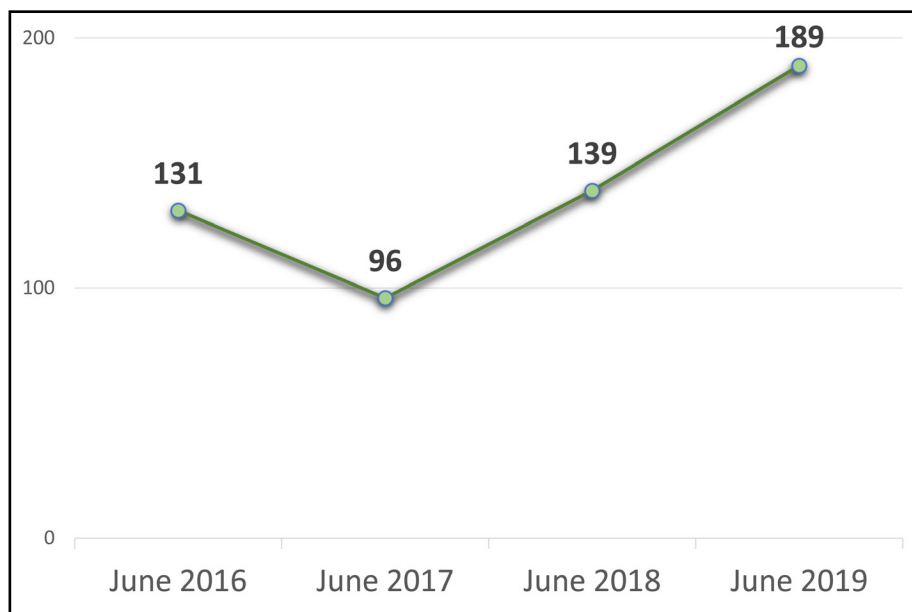
Nursing Home Closures are Clustered in Specific States

More than half of nursing home closures are concentrated in just nine states: California, Illinois, Kansas, Massachusetts, Nebraska, Ohio, Oklahoma, Texas, and Wisconsin. Each of these states saw at least 16 nursing homes close during the four years. Texas had more nursing home closures than any other state with 65, followed by Illinois with 44, and California and Ohio with 26 each.

States with the most nursing home closures are a diverse group. They range across the country geographically, have both small and large populations, as well as a mix of urban and rural area compositions. In addition, these states reflect varying political climates and state policy frameworks, both of which have implications for nursing home payment policies, state regulatory action, and other public policy that may determine whether a nursing home remains open.

In addition to these states, an additional 13 states saw between 9-15 nursing home closures over the same time span. The remaining states have seen eight or fewer nursing home closures since June 2015. One state, Alaska, saw zero closures. **Exhibit 2** has a table of states grouped by the number of nursing homes that closed in each over the four years.

The number of nursing home closures by state and by year are available in the **Appendix**. **Exhibit 3** provides a map visualization of the nursing home closure tiers.

Exhibit 2: Nursing Home Closure Tiers by State-Level Count of Nursing Home Closures, June 2015-June 2019

Tier	Number of Nursing Home Closures	Total Closed Homes (n=555)	States
One	16 or more	299	CA, IL, KS, MA, NE, OH, OK, TX, WI
Two	Between 9 and 15	153	CT, FL, IA, KY, MI, MN, MO, MT, NJ, NY, PA, TN, WA
Three	8 or fewer	103	AK, AL, AR, AZ, CO, DC, DE, GA, HI, ID, IN, LA, MD, ME, MS, NC, ND, NH, NM, NV, OR, RI, SC, SD, UT, VA, VT, WV, WY

Exhibit 3: US Map by Nursing Home Closure Tier
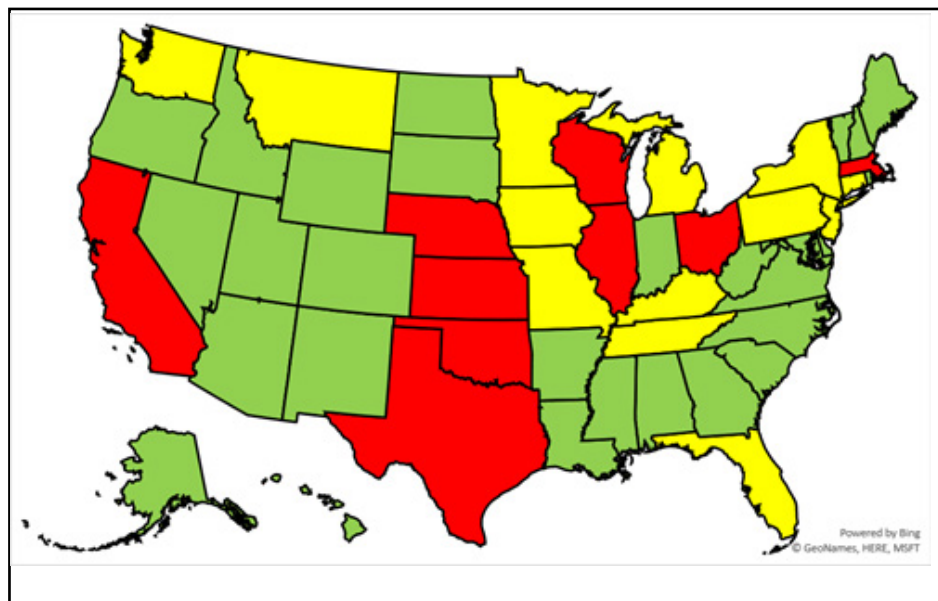
Tier One States (16+ closures): **Red**
Tier Two States (9-15 closures): **Yellow**
Tier Three States (8 or fewer): **Green**

The number of nursing homes that closed in the four years represents about 4% of the number of nursing homes open as of June 2019. Similar to variances in the count of nursing home that closed, this percentage varies widely at the state level. State percentages of closures range from 0% (no closures in Alaska) to 14% (Montana).

Although Montana (10) had fewer nursing homes close during the four years compared to Tier 1 states, it had the largest percentage of homes close (14%) because the state had a smaller number of nursing homes to begin with. Similarly, Hawaii saw just 4 nursing homes close, but just 44 nursing homes were in the state as of June 2019. Closures in these states therefore have a bigger impact on the states' landscape of aging services compared to states with a larger pool of nursing homes.

At the same time, several states with the most nursing home closures also had among the highest percentages compared to open nursing homes in June 2019, including Nebraska (11%), Wisconsin (8%), Massachusetts (8%), Illinois (6%), and Kansas (6%). The 10 states with the highest percentages of nursing home closures are listed in **Exhibit 4.**

Exhibit 4: Nursing Home Closures as a Percent of Currently Open Nursing Homes	
Montana	13.7%
Nebraska	11.3%
Hawaii	8.9%
Maine	8.5%
Wisconsin	8.0%
Massachusetts	7.5%
Washington	6.6%
Connecticut	6.5%
Illinois	6.1%
Kansas	6.0%
United States	**3.6%**

As Nursing Homes Close, National Average Occupancy Continues to Decrease

At both the national and state levels, changes in nursing home occupancy rates may be an underlying factor as to why so many nursing homes are closing. Occupancy rates are calculated by dividing the number of certified nursing home beds by the number of those beds that are filled, or occupied, by a person receiving care.

Over the last four years, occupancy has decreased despite the more than 500 closures experienced since June 2015. During that month, the national average occupancy rate was 82.3%. Through June 2016, 131 nursing homes closed. The closure of these facilities did not pre-vent the national average occupancy rate from decreasing. In fact, the national average oc-cupancy rate decreased by almost a full percentage point to 81.5%. This may seem like a small number, but it represents a decrease in occupied beds of more than 16,000 (**Exhibit 5**).

Exhibit 5: Nursing Home Occupied Beds, Certified Beds, and Occupancy Rates by Year, June 2015-June 2019

	June 2015	June 2016	June 2017	June 2018	June 2019
Occupied Beds	1,368,437	1,351,615	1,343,823	1,280,055	1,325,221
Certified Beds	1,663,277	1,659,145	1,663,436	1,659,233	1,647,841
Occupancy Rate	82.3%	81.5%	80.8%	77.1%	80.4%
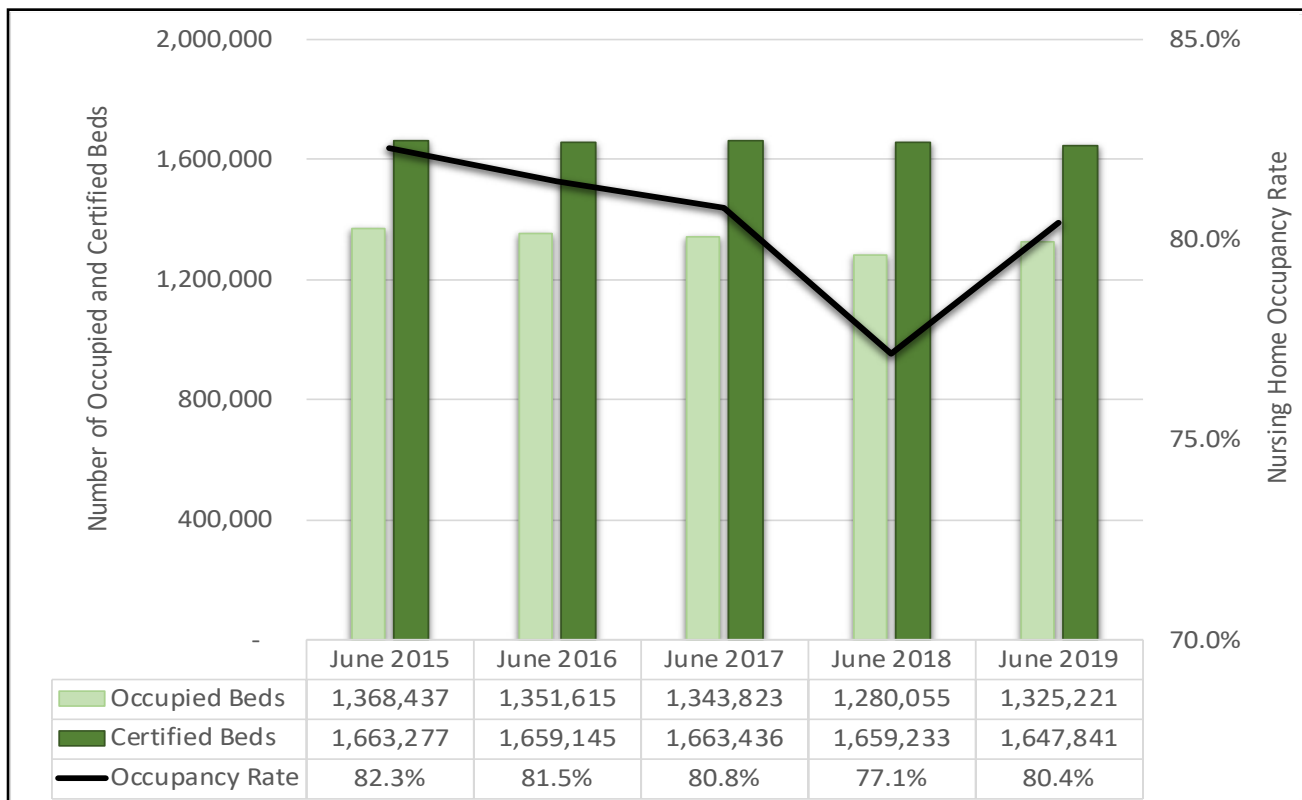
A similar trend took place from June 2016 to June 2017. That year, 96 nursing homes closed, and the national average occupancy rate decreased again to 80.8%. From June 2017 to June 2018, the national average occupancy rate plummeted to 77.1% and the number of occupied beds decreased by more than 60,000. During that 12-month period, 139 nursing homes closed. The following year, through June 2019, an additional 189 nursing homes closed, and the June 2019 national average occupancy rate stabilized close to the same level as June 2017 at 80.4%.

Despite so many nursing homes closing, the national average occupancy rate decreased by 1.9 percentage points over those four years. During that time, the number of occupied nursing home beds decreased at a rate almost triple that of decreasing certified beds. Occupied beds decreased by 43,000, while certified beds decreased by just over 15,000.

State Average Occupancy Rate Changes Vary

The national average occupancy rate provides important context to why nursing homes are closing at an increasing pace. State-level average occupancy supplements this and could help lend more clarity to why nursing homes are closing in specific states.

From June 2015 to June 2019, most (39) states experienced a decrease in average occupancy (**Exhibit 6**). Thirteen states saw sharp declines in occupancy of three percentage points or more, and two saw decreases exceeding five points (Delaware and Minnesota).

Exhibit 6: State-Level Changes to Average Nursing Home Occupancy Rates, June 2015 to June 2019

Percentage Point Change in State Average Occupancy, June 2015-June 2019	Number of States
-6.00 or more	1 (DE)
-5.00 to -5.99	1 (MN)
-4.00 to -4.99	4 (HI, NE, TN, VT)
-3.00 to -3.99	8 (IA, IL, NH, NJ, PA, SD, WA, WI)
-0.00 to -2.99	25
Increase in Occupancy Rates	11 + DC

While almost all Tier 1 states, with 16 or more nursing home closures, saw decreases in state average occupancy rates, it does not appear that having a larger decline in the average occupancy rates rate is associated with a state having more nursing homes close.

Exhibit 7: Changes in State Average Occupancy Rates, Tier 1 Closure States and States with 10 Largest Decreases in Occupancy, June 2015-June 2019

State	Percentage Point Change in Average Occupancy Rate	Change in Number of Certified Beds	Nursing Home Closure Tier	Average Occupancy Rate, June 2019
DE	-6.3	58	3	82.9%
MN	-5.1	-1,143	2	84.1%
VT	-4.5	-67	3	80.0%
NE	-4.5	-151	1	71.6%
TN	-4.2	-411	2	74.2%
HI	-4.0	215	3	86.0%
IL	-4.0	-3,881	1	73.1%
WI	-3.9	-4,150	1	76.9%
PA	-3.9	100	2	86.5%
NJ	-3.7	223	2	82.9%
OK	-2.2	-219	1	64.6%
OH	-2.2	-1,852	1	81.9%
MA	-2.0	-2,494	1	84.8%
TX	-1.2	1,923	1	69.6%
CA	-0.3	-291	1	86.2%
KS	0.3	-1,578	1	80.4%

Among the Tier 1 states, changes in state average occupancy rates range from -4.5 percentage points (Nebraska) to an increase of .03 points (Kansas). The states with the largest decreases in average occupancy rates, Delaware and Minnesota, experienced fewer nursing home closures and are in Tiers 3 and 2, respectively. Of the 10 states with the largest decreases in average occupancy rates, just three were in the top tier for the number of nursing homes closed (**Exhibit 7**). In other words, large decreases in occupancy do not necessarily correlate with having more nursing homes closed in a given state.

The number of certified beds in each state changed over time as well, providing additional context into state-level trends. Seven of the 10 states with the largest average occupancy rate decreases had 500 fewer certified beds in June 2019 compared to four years prior, and four of these states (DE, HI, NJ, PA) actually added certified beds.

On the other hand, three of these states (IL, MN, WI) closed more than 1,000 certified beds, but still saw their average occupancy rates decrease by more than three percentage points. Illinois and Wisconsin, notably, also have state average occupancy rates below 77%, more than three points lower than the national average.

States with increases in average occupancy also had varying changes in the number of certified beds. While some of these states had increases in certified bed counts (e.g., 773 in Nevada), others closed beds and saw their average occupancy rates increase. For example, New York closed more than 1,800 certified beds over the four years and its average occupancy rate increased by 0.34 percentage points to 90.4%. Oregon had the largest increase in average occupancy, increasing by 6 percentage points and closing more than 1,100 certified beds. Notably, Oregon has one of the lowest occupancy rates (67%) in the country even after increasing its rate by the largest amount.

Quality Ratings Do Not Appear Associated with Nursing Homes Closing

While one could assume that most nursing homes closures were due to providing low-quality care, the data do not support this hypothesis (**Exhibit 8**). In fact, more than 40% of nursing homes that closed over the four years had a 4- or 5-star overall quality rating from CMS, and a full 25% had a 5-star rating before they closed. By comparison, just under half (44%) of homes open in June 2019 had a star rating of 4 or 5.

Closed nursing homes were slightly more likely to have a one- or two-star rating (41% vs. 37%), but not enough to draw conclusions explaining why these nursing homes closed.

Exhibit 8: CMS Nursing Home Star Ratings by Nursing Home Closure Status		
Most Recent CMS Star Rating	**Percent of Closed Nursing Homes, June 2015-June 2019**	**Percent of Open Nursing Homes, June 2019**
1	20%	18%
2	21%	19%
3	16%	18%
4	19%	22%
5	25%	22%

Nursing Home Closures in Rural Locations Affect Specific States and Communities

Nationally, about 37% of nursing home closures since June 2015 occurred in a rural zip code.[1] This is slightly higher than the portion of currently open nursing homes, of which 33% are in rural areas, but not high enough for it to be a significant indicator of why nursing homes are closing.

Looking at the state level, however, shows a wide variance on the degree to which nursing home closures are affecting rural communities.

Almost all the nursing homes that closed in Nebraska (89%) and Kansas (85%), two states in the top tier of nursing home closures, were located in rural areas (**Exhibit 9**). Rural communities in Nebraska and Kansas lost 21 and 17 nursing homes, respectively, since June 2015.

Nursing home closures disproportionately took place in rural areas in other Tier 1 states, such as Oklahoma (69% of closures) and Texas (40%). In states with fewer nursing home closures but more rural populations, there were often higher rates of closed nursing homes in rural areas, such as Montana (80%), Iowa (62%), and Washington (56%). Similar to rural areas in Kansas and Nebraska, the rural parts of Montana and Washington saw nursing homes close at a higher rate than nationally. In both states, close to 14% of the rural nursing homes closed since June 2015.

Closed nursing homes in rural areas have particularly troubling consequences. In many urban and suburban areas, there are likely other nursing homes in proximity that could take in residents of a closing nursing home. In rural areas, however, this is not always the case.

For example, consider Choteau, MT, a rural community of about 1,700 people. Since June 2015, two nursing homes in the community closed. They were collectively certified to provide 77 nursing home beds. The closest open nursing home is now about a 30-minute drive away in Conrad, MT.

Exhibit 9: Tier 1 and 2 States by Percent of Closed Nursing Homes in Rural Areas

State	Percent of closed Nursing Homes that were in rural areas
NE	89%
KS	85%
MT	80%
MN	71%
OK	69%
IA	62%
WA	56%
MO	56%
KY	50%
NY	50%
TX	40%
CA	33%
OH	28%
WI	28%
IL	27%
PA	25%
MI	17%
TN	14%
CT	14%
MA	3%
NJ	0%
FL	0%

That nursing home is certified to provide 59 beds, 51 of which are filled. The next two closest nursing homes are more than one hour away in Great Falls and Browning, MT.

While the nursing homes in Choteau were small and had low occupancy (both were below 50% before closing), the implications for those affected could be staggering. For both the nursing aide commuting to work and the relative visiting their family member, a short trip becomes a long drive. For the resident, it means relocating to a new community and potentially seeing visitors less often due to the distance.

This situation is replicated in rural communities across the country, such as Chappell, NE, Dighton, KS, and Ritzville, WA. As more nursing homes close, similar communities will be affected.

Tax Status

A nursing home's tax status does not appear to be a major factor as to whether it remains open. About 67% of nursing homes that closed since June 2015 were for-profit enterprises, compared to about 70% of currently open nursing opens. Similarly, nonprofit organizations comprise about 26% of closed nursing homes and 24% of currently open nursing homes. Government-owned nursing homes comprise the remainder for each category (**Exhibit 10**).

Exhibit 10: Tax Status of Open and Closed Nursing Homes

Tax Status	Percent of Nursing Homes Open in June 2019	Percent of Nursing Homes Closed from June 2015-June 2019
For-profit	69.8%	66.9%
Government-owned	6.6%	7.5%
Nonprofit	23.5%	25.6%

Nursing Homes and Medicaid

Medicaid plays a significant role in nursing home financing. More than 6 in 10 nursing home residents (62%) have their services covered by Medicaid, with a state-level range of 48% (IA) to 80% (DC). States are responsible for setting Medicaid rates for nursing homes, and the policies they set on nursing homes rates can have major implications for whether a nursing home remains open.[2]

It has been well documented that Medicaid rates do not cover the cost of care. A 2018 analysis of 28 state Medicaid nursing home rates and actual costs found that the Medicaid rates reimbursed for as little as 73% of the actual cost of care, and more than half of the states included in the analysis had Medicaid rates lower than the cost of care by $16 or more per day, per resident. [3]

New York and Wisconsin, states with the largest counts and percentages of nursing homes that closed over the four years, had the largest daily rate discrepancies, with Medicaid reimbursement estimated to be $64 less than the cost of care in both states. Assuming a person stays at a nursing home for one year, this shortfall for just one resident covered by Medicaid is more than $20,000. This is unsustainable for nursing homes given the role Medicaid plays in financing this important care. [4]

At the same time, Medicaid is also a major funder for home and community-based services (HCBS), and policy changes that balance long-term services and supports (LTSS) towards more community-oriented options could be a source of some closures.

A 2019 report on state Medicaid nursing home payment policies shows that each state takes different approaches to nursing home reimbursement. [5]

The Implications of Medicaid LTSS Rebalancing

The last several years have seen significant policy change on how states invest their Medicaid LTSS dollars, and each year a higher percentage of these dollars has gone towards HCBS.

Since fiscal year (FY) 2013, the majority of Medicaid LTSS dollars have gone toward HCBS across all populations.

Medicaid LTSS dollars for older adults and people with physical disabilities (the primary nursing resident populations) have also shifted more towards HCBS, but at a slower pace than other groups. In 2010, LTSS spending for this population reached $83 billion, $52 billion of which went to nursing homes. By FY 2016, the Medicaid LTSS spending reached $104 billion, with $57 billion going to nursing homes.[6] The significant progress made towards balancing LTSS systems invariably also means that fewer Medicaid dollars are going toward nursing home care than otherwise would.

States have considerable leeway in establishing LTSS systems and offering HCBS. LeadingAge did not find any correlation between state percentage changes in Medicaid LTSS spending (institutional vs. HCBS) and closures in nursing homes. States with a high number of closures are represented both at the highest and lowest ends of such percent changes, and it does not appear that an association exists between nursing home closures and increased investment in Medicaid HCBS.

Current and Future Population Trends

The closure of nursing homes over the last four years may be reflective of market trends given the current population of older adults. With changes and increased availability of HCBS, older adults who may have otherwise gone to nursing homes are staying home. In addition, there is some indication from survey research that older adults prefer to live in their own homes and communities, particularly when they do not face a physical or cognitive impairment.

These closures, however, put the aging population at risk moving forward given the impending boom of adults aged 75+ over the next decade and beyond. From 2020-2030, the 75+ population is expected to grow by almost 40% as the Boomer generation continues to age. This population growth is highest among adults 80-84, a group expected to grow by 55% from 5.9 million in 2020 to 9.1 million in 2030 (**Exhibit 11**) [7]. Many of these older adults will need services, and many will specifically need services provided in nursing homes.
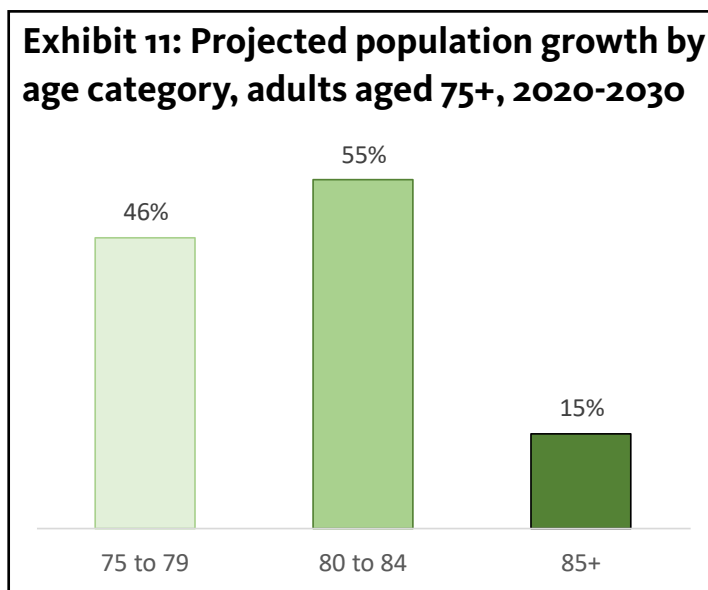
More than half (52%) of adults aged 65+ require some form of LTSS as they continue to age, and the likelihood of need for care, and level of care needed, increases with age. [8]

A 2019 survey by LeadingAge and NORC found that of adults ages 60-72 (e.g., the 75+ population of the next decade), a plurality (42%) would prefer a nursing home or similar setting to their own home in the presence of a cognitive disability, including if they are experiencing dementia/Alzheimer's disease. [9] Such consumer preference may lead to increased demand for nursing home care over time.

Without advancements in dementia care and treatment, nursing homes will be needed to provide support to adults with these diagnoses. If the trends of nursing home closures continue, there may not be the capacity to do so.

Exhibit 11: Projected population growth by age category, adults aged 75+, 2020-2030

In addition, the incoming cohort of adults aged 80+ will likely have less family support than the current population. Research from AARP has found that there is a declining number of available family caregivers for each older adult. In 2010, there were about seven potential family caregivers for each adult aged 80+. By 2030, this ratio will decrease to about four potential caregivers for each person aged 80+. This shifting population will almost certainly require more services from nursing homes and other providers like them. [10]

Discussion and Recommendations

It is not possible or advisable to look at nursing home closures as a monolithic problem or as an issue with one specific cause. Nursing home closures in states with very low average occupancy rates, for example, represent a different problem than in states with higher occupancies. In addition, rural nursing home closures, assuming no major quality concerns, likely require more specific attention and policy solutions.

Medicaid payment policies also play a role in at least some nursing home closures, particularly in those states with the lowest and/or most inadequate daily rates. In addition, it may be worth further exploring the roles of Medicaid managed care, including managed LTSS, in nursing home closures. Additional study may also be warranted focused on Medicare and nursing home closures, particularly as Medicare continues to phase in payment policies that promote home-based post-acute care.

Similarly, the role of quality and performance is almost assuredly more linked to nursing homes with lower Star Ratings compared to better-rated counterparts. However, quality is not a causal factor, as more than 40% of both closed and currently opened nursing homes have 4- or 5-star ratings. The role of quality in nursing home closure is an area deserving of further study, including as it relates to Civil Monetary Penalties (CMPs) and other fines. Considering all of these issues, LeadingAge recommends the following next steps for policymakers and nursing homes:

1. **Medicaid Rate Adequacy:** Medicaid has historically underpaid providers of all service types, including nursing homes. While many provider types can maintain a payer mix that makes up for these lower Medicaid rates, nursing homes are less able to do so and, as a result, Medicaid pays for more than 60% of nursing home care each year. This leaves nursing homes vulnerable to the consequences of low rates, including the need to close. It is time for states to revisit their rate setting processes and ensure that providers are reimbursed for the actual cost of care, including in both managed care and fee-for-service environments.

2. **Nursing Home Regulatory Review:** Nursing homes are highly regulated at the federal and often at the state levels. While many regulations ensure quality care for nursing home residents, some are costly and unnecessarily burdensome on nursing homes themselves. In addition, many current regulations are not evidence-based, and the survey and certification processes do not always return accurate and reliable findings. A 1986 report from the National Academy of Sciences concluded that "what is needed is not more regulation, but better regulation" of nursing homes. More than 30 years later, with advancements made in the regulatory framework since that report's publication, LeadingAge believes that principle is still true today. That is why LeadingAge advocates for a new study by the institution to evaluate the current long-term care survey process, the link to care outcomes, and alternative strategies to assure quality nursing home care.

3. **Critical Access Nursing Homes:** For more than 20 years, the Critical Access Hospital (CAH) program has helped support hospitals located in rural areas, including through enhanced federal funding and some regulatory flexibility. Today, more than 1,000 hospitals are designated as CAHs and meet specific criteria to receive this designation. A similar program created to support rural nursing homes could have the effect of curtailing closures in these high-need areas. Any such program should be separate from the CAH program and funding for CAHs should not be affected by a critical access nursing home program.

4. **Integrated Residential and Non-Residential Services:** The trend of nursing home closures should cause currently operating nursing homes to reconsider how they deliver aging services. In addition, nursing homes should consider the expected boom of the 65+ population, which will increase the volume of aging services needed. This will also create a new pool of potential service recipients with varying levels of need and desires for where and how they receive services. While many may be open to nursing home care, others may prefer more community-based options. This includes adult day services, PACE, and in-home services (e.g., home health). By creating robust networks of aging services that meet all sorts of people's needs, nursing homes can not only deliver an integrated network of services, but also create for themselves sustainable, diverse streams of revenue to support the services they provide.

Appendix: Nursing Home Closures by State and by Year (June 2015-June 2019)

State	2015-2016	2016-2017	2017-2018	2018-2019	Total	Closures as a Percent of July 2019 Open Nursing Homes
TX	16	14	7	28	65	5.3%
IL	22	5	8	9	44	6.1%
OH	7	7	7	15	36	3.7%
CA	16	3	8	9	36	3.0%
WI	3	6	7	13	29	8.0%
MA	3	3	11	12	29	7.5%
NE	4	4	6	10	24	11.3%
KS	9	4	5	2	20	6.0%
OK	5	1	3	7	16	5.4%
WA	1	1	6	6	14	6.6%
CT	2	4	0	8	14	6.5%
TN	5	3	6	0	14	4.4%
MN	5	2	5	2	14	3.7%
IA	2	3	5	3	13	3.0%
MI	0	4	4	4	12	2.7%
NY	3	4	3	2	12	1.9%
PA	1	0	8	3	12	1.7%
MT	3	3	3	1	10	13.7%
KY	0	1	6	3	10	3.5%
FL	3	3	2	2	10	1.4%
NJ	0	3	1	5	9	2.5%
MO	1	3	3	2	9	1.7%
ME	0	1	1	6	8	8.5%
VA	5	1	1	1	8	2.8%
AZ	0	1	4	2	7	4.8%
SC	1	1	1	4	7	3.7%
IN	0	0	0	7	7	1.3%
SD	0	2	1	3	6	5.6%
AR	1	1	2	2	6	2.6%
UT	2	0	1	2	5	5.0%
MD	1	1	2	1	5	2.2%
HI	2	1	1	0	4	8.9%
WV	2	0	2	0	4	3.2%
OR	0	0	1	3	4	3.0%
NM	0	1	1	1	3	4.1%
ID	0	1	1	1	3	3.7%

State	2015-2016	2016-2017	2017-2018	2018-2019	Total	Closures as a Percent of July 2019 Open Nursing Homes
RI	0	0	1	2	3	3.7%
AL	1	0	1	1	3	1.3%
LA	0	2	0	1	3	1.1%
GA	1	0	0	2	3	0.8%
NH	0	1	1	0	2	2.7%
MS	1	0	1	0	2	1.0%
CO	0	0	1	1	2	0.9%
NC	1	0	0	1	2	0.5%
DC	0	1	0	0	1	5.6%
VT	0	0	1	0	1	2.8%
WY	1	0	0	0	1	2.6%
DE	1	0	0	0	1	2.2%
NV	0	0	0	1	1	1.6%
ND	0	0	0	1	1	1.3%
AK	0	0	0	0	0	0.0%
United States	131	96	139	189	555	3.5%

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