

The Case for Funding:

WHAT IS
HAPPENING *to*
Pennsylvania's
Nursing Homes?

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The Case for Funding:

WHAT IS HAPPENING *to* Pennsylvania's Nursing Homes?

Executive Summary

- The aging of the population in the state suggests that the demand for long-term services and supports (LTSS) including nursing home care will increase over the coming decade. Even though the percentage of individuals aged 65 years and older residing in a nursing home has declined steadily over the last decade, in absolute numbers, there will be a need for additional beds over the coming decade, if current utilization patterns and acuity levels hold.
- Over the last decade the characteristics of nursing home residents in Pennsylvania has changed fairly dramatically. Nursing homes are now serving individuals who have particularly challenging diagnoses. For example, (1) a higher proportion of residents have severe cognitive impairment as those with lower levels of cognitive impairment are being served in the community, (2) the percentage of residents with psychiatric illness has increased significantly, and (3) there are more residents with bladder incontinence.
- Nursing home residents are coming into the homes somewhat poorer than in the past as evidenced by the fact that Medicaid as a payment source has been slowly increasing. There is a minor shift in the racial mix of homes but this is expected to change over the coming decades as racial and ethnic diversity within the older population grows.
- Even as nursing home residents are presenting with more challenging diagnoses, overall staff hours among direct care workers have remained relatively unchanged over the last ten years, while RN hours have declined slightly. Thus, even as the population has become somewhat more medically complex, total care hours have not changed much as skilled hours have declined.

- Compensation levels for the direct care workforce have remained relatively flat, increasing by only 1.9% per year over the time period examined. When adjusting for the medical CPI, however, real wages have declined an average of 5% between 2012 and 2019.
- While certain individual quality metrics have improved (e.g., declines in the prevalence of bed sores and restraint use), overall aggregated quality scores have not. In fact, deficiency scores have risen while the average Nursing Home Compare Five Star Quality Rating for Pennsylvania nursing homes has declined. Given the fact that direct care staffing hours have not changed much – although more facilities do have nurse practitioners and physician extenders – and patients are somewhat more medically complex, this is not surprising. It points to the need for further investment in staffing and training which can only come about in the context of a payment structure necessary to support it.
- The median length of stay has declined in part because those with lower levels of cognitive and physical impairment are not being treated in nursing homes at the same rate as in the past. It may also be related to the fact that those entering nursing homes are doing so at a point where they are closer to the end of their lives.
- Medicaid has been a growing source of payment for nursing home residents, constituting a rising proportion of residents and increasing number of bed days paid. On the other hand, Medicare continues to decline as a payment source, constituting a declining proportion of residents and lower average number of bed days paid. Because the latter pays more than the former, this trend has caused financial strain on nursing homes.
- As a percentage of private and semi-private room charges, Medicaid rates paid to nursing homes have been declining. To the extent that charges are a reflection of underlying costs, it is clear that, over time, reimbursements are not keeping up with costs.
- All of the data suggests a growing gap between what nursing homes require to meet the needs of residents and the level of reimbursement paid by the largest funder of service: Medicaid. Due to likely growth in demand for service and need for additional investment to keep nursing home patients safe, unless there is an increase in reimbursement rates or a change in the way that nursing homes are financed, nursing homes will be hard pressed to meet the needs of Pennsylvania’s most vulnerable residents. In light of demographic trends, the challenge will only grow over time in the absence of policy changes.

Background

Across the United States, 10,000 Baby Boomers turn 65 each day and approximately 70% of them will require long-term services and supports (LTSS) at some point in their lifetime with nearly half having significant needs for care.¹ While there is a great deal of variation in how long people need assistance, upwards of 15% will require five or more years of care. This care is extremely costly, and the largest public payer, the Medicaid program, pays most of these costs, particularly in institutional settings. In Pennsylvania, the average annual costs of care in a semi-private room in a nursing home can total \$116,800; for a private room the costs are even higher at \$124,830.² Given the extensive supportive care services provided, nursing homes play a crucial role for elders with significant LTSS needs, and in particular, those with cognitive issues like Alzheimer's disease and related dementias. Such individuals cannot be easily cared for in community settings. Despite recent challenges facing the industry, it is clear that there will always be a need for nursing homes. Moreover, Medicaid financing of such care still provides the strongest safety net for low income older adults, persons who have high-intensity LTSS needs, and consumers with exorbitant LTSS costs, many of whom have to spend down their resources to become eligible for the program.

Despite the critical role that nursing homes play in delivering LTSS to older adults and individuals under age 65 with disabilities, facilities currently face serious threats to their financial viability. This is particularly true in the context of the COVID-19 pandemic, where the costs of caring for residents in a safe way have increased significantly, even as the ability to recoup these costs from the largest payer of services, the Medicaid program, has been constrained. In fact, as pointed out in a LeadingAge Pennsylvania statistical analysis of the industry in Pennsylvania a few years ago, the cost of care has risen by 33% while Medicaid rates have only increased by 1%, resulting in an average annual loss to nursing facilities of \$17,000 per resident.³

The status quo financing of nursing homes in Pennsylvania is not sustainable. Unless the reimbursement rates paid by the Medicaid program are brought more in alignment with the costs of providing high quality care in a safe manner, providers will be unable to care for the Commonwealth's most vulnerable residents and already strained family caregivers will be that much more burdened. Moreover, Pennsylvania is one of only a handful of states whose Medicaid program does not provide reimbursement for personal care and assisted living facilities. Yet, even given the grim news of disproportionate deaths occurring in nursing homes across the country due to the pandemic, some believe the problem will dissipate once the virus is under control. Nothing could be further from the truth: the pandemic only served to highlight existing challenges resulting from an underfunded service infrastructure both in home and community-based settings and also (and especially) in nursing homes.

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¹ Department of Health and Human Services. (2015). Long-Term Services and Supports for Older Americans: Risk and Costs. ASPE, Washington, D.C. <https://aspe.hhs.gov/basic-report/long-term-services-and-supports-older-americans-risks-and-financing-research-brief>

² Genworth Cost of Care Survey. (2019). <https://www.genworth.com/aging-and-you/finances/cost-of-care.html>

³ LeadingAge Pennsylvania. (2017). Long-Term Services and Supports: Statistics and Information. A Comprehensive Statistical Analysis of Aging Services in Pennsylvania.

Purpose

The purpose of this brief is to present updated information in graphical format on key demand and supply factors affecting the performance of the nursing home industry in Pennsylvania. The information provided herein can then be extracted and used to develop a series of succinct fact-based and action-oriented infographics that can be widely distributed in meetings with legislators throughout the Commonwealth in order to make the case for funding. Our objective is to develop compelling information about the critical role that nursing homes play in the care of older and vulnerable adults in Pennsylvania, document the trends that have been affecting both the demand for and supply of nursing home care, including changes in Medicaid reimbursements, and highlight the projections over the coming years that will affect the utilization and financial viability of nursing homes in the state. We do this by presenting data from a variety of sources.

Method

In order to compile the data necessary for this analysis, the research team consulted with a number of experts in nursing home and Medicaid reimbursement policy, nursing home data availability, nursing home data reliability and consistency, and key metric construction. The team constructed an aggregate database that has historical data points at the facility, regional, and state level beginning from around 2010. Counties were divided into regions employed in implementation of Pennsylvania's Managed Long-Term Care Services and Supports initiative, including Southeast (Philadelphia area), Southwest (Pittsburgh area), Northwest, Northeast, and Lehigh/Capital. Facilities were allocated to regions based on the counties within which they are situated.⁴

The key data sources on which the subsequent analysis are based derive from the following:

1. Nursing home characteristics (Long-Term Care Focus—LTCfocus.org, PA Department of Health, Certification And Survey Provider Enhanced Reports—CASPER⁵);
2. Nursing home wage data (Bureau of Labor Statistics, CASPER);

⁴ Southeast: Bucks, Chester, Delaware, Montgomery, Philadelphia. Southwest: Allegheny, Armstrong, Beaver, Bedford, Blair, Butler, Cambria, Fayette, Greene, Indiana, Lawrence, Somerset, Washington, Westmoreland. Northwest: Cameron, Clarion, Clearfield, Crawford, Elk, Erie, Forest, Jefferson, McKean, Mercer, Potter, Venango, Warren. Northeast: Bradford, Carbon, Centre, Clinton, Columbia, Juniata, Lackawanna, Luzerne, Lycoming, Mifflin, Monroe, Montour, Northumberland, Pike, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, Wyoming. Lehigh Capital: Adams, Berks, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Lancaster, Lebanon, Lehigh, Northampton, Perry, York.

⁵ Generously made available by John Bowblis, PhD, Professor of Economics, Miami University, Ohio.

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3. Nursing home quality measures (Nursing Home Compare, CASPER);
4. Nursing home payments (PA Departments of Health and Human Services; and
5. Demographics (U.S. Census Bureau/American Community Survey, projections from the Pennsylvania State Data Center at Penn State Harrisburg).

In the graphical analyses that follow, for the most part we summarize data for the entire state and in many cases also for the two largest regions that include Philadelphia and Pittsburgh and then aggregate the three remaining regions. A more granular breakdown which includes separate trends for all five regions is also available. We organize results by subject area, and under the relevant graphs point out the important implications of the findings. We focus on what we think are the most important high-level findings; however, to the extent that more information is desired, the team has analyzed the data and generated several hundred additional discrete graphs for reference.

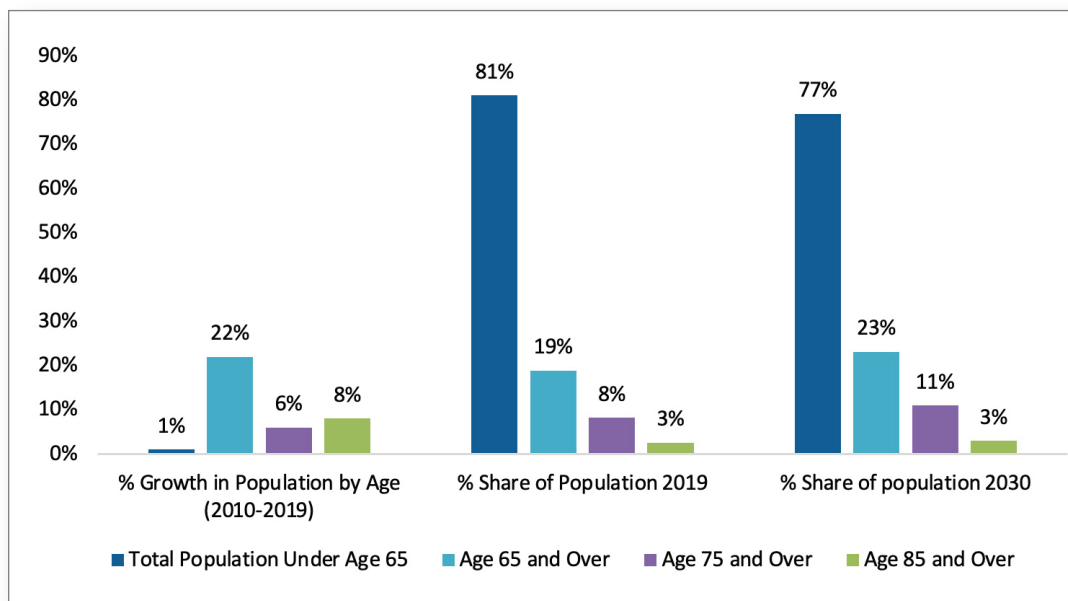
Findings

(a) Population Aging Trends

Figure 1 shows that Pennsylvania is getting older. Between 2010 and 2019, the overall population grew by only 1% whereas the number of individuals aged 65 and over grew by 22%, with most of this growth coming in the 65-74 age group. This trend is expected to accelerate so that by 2030, individuals age 65 and over will grow to represent roughly one-in-four (23%) people living in the state.

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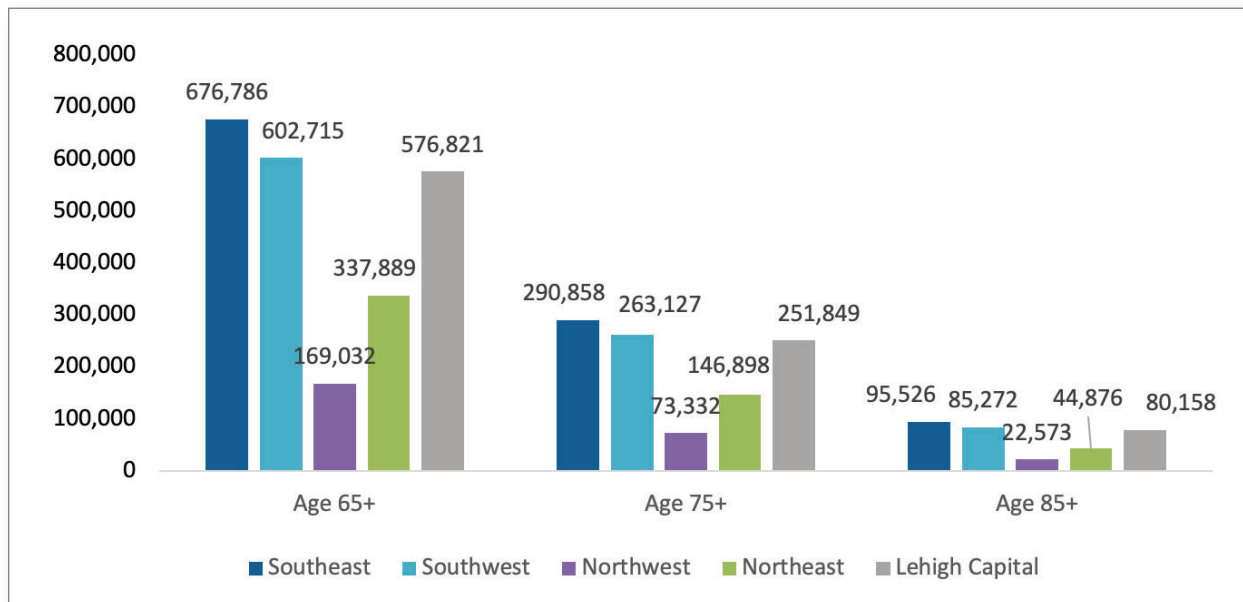
Figure 1: Population Trends in Pennsylvania by Age Group



Source: U.S. Census Bureau, 2020 and Pennsylvania State Data Center at Penn State Harrisburg.

Figure 2 shows that the distribution of the older adult population varies quite a bit by region, with the Southeast and Southwest regions accounting for about 52% of all older adults age 65 years and over.

Figure 2: Distribution of Population by Age Group and Region 2019

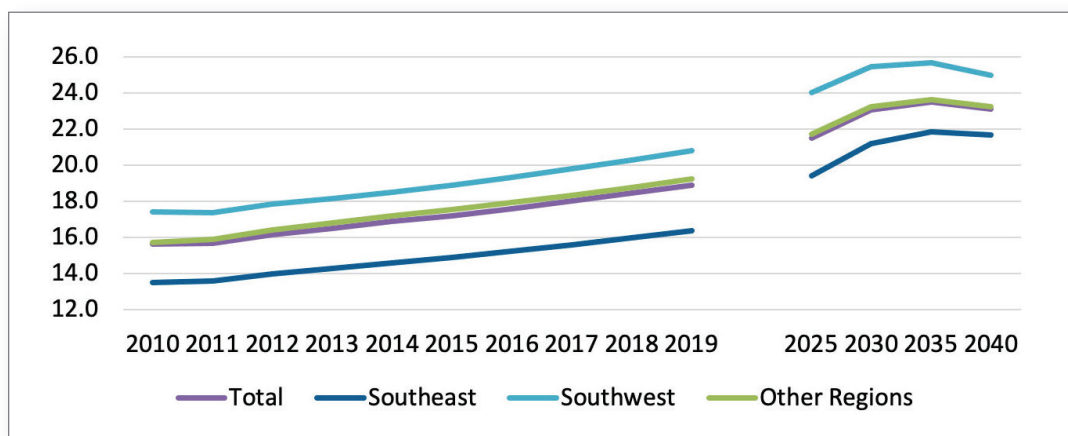


Source: U.S. Census Bureau, 2020 and Pennsylvania State Data Center at Penn State Harrisburg.

Figures 3-5 show how the percentage of the population is projected to change over the next 20 years. In these figures, we combine the three smaller regions into a single aggregated region. As shown, over the next decade the population age 75 years and over is expected to grow by 35% and the population age 85 and over by 15%. Thus, some of the fastest growth is occurring in populations that also exhibit the highest need for LTSS services in general and nursing home care in particular.

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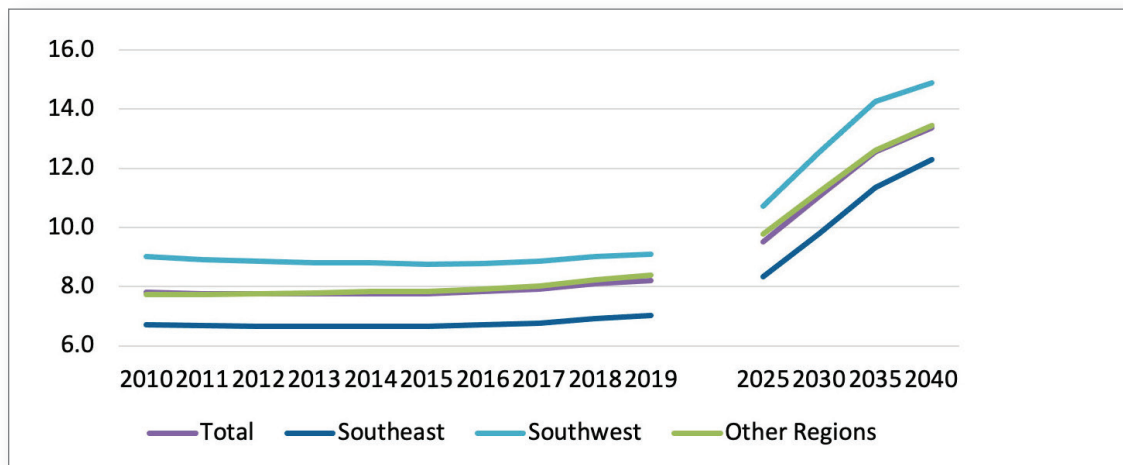
Figure 3: Percent Population 65 Years and Older



Source: U.S. Census Bureau, 2020 and Pennsylvania State Data Center at Penn State Harrisburg.

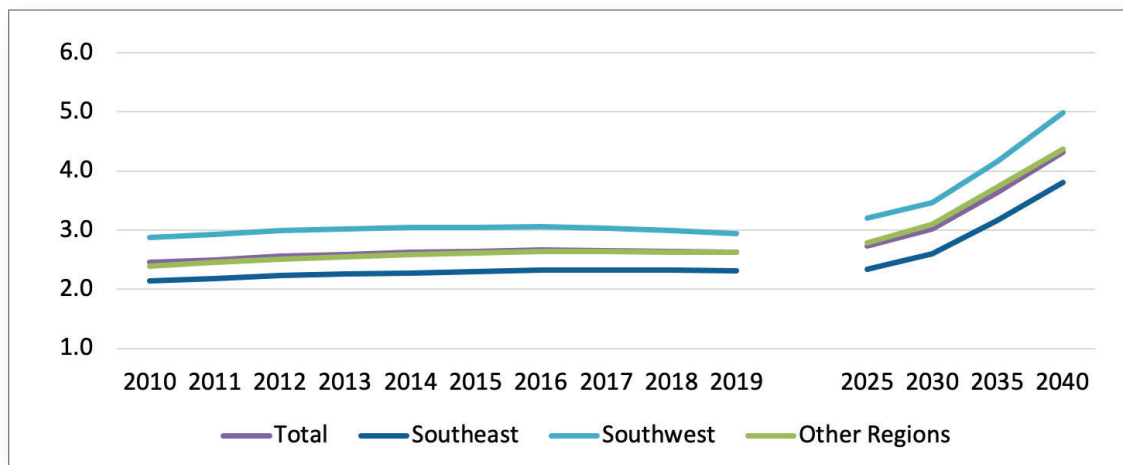


Figure 4: Percent Population 75 Years and Older



Source: U.S. Census Bureau, 2020 and Pennsylvania State Data Center at Penn State Harrisburg.

Figure 5: Percent Population 85 Years and Older



Source: U.S. Census Bureau, 2020 and Pennsylvania State Data Center at Penn State Harrisburg.

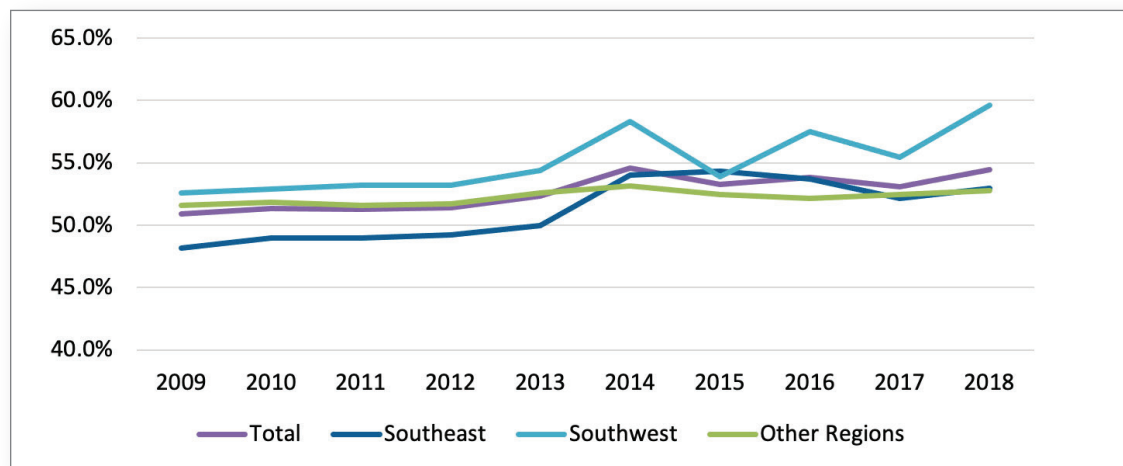
Not shown in these graphs is the fact that the population in the state is also becoming somewhat more diverse. In 2010, Whites comprised roughly 85% of the entire population, but by 2019 this had declined three percentage points to about 82%. The largest growth has been among Hispanics who now comprise roughly 8% of the population, up from about 6% in 2010. The change in composition of the underlying population in Pennsylvania has implications for the aging services infrastructure which will need to prepare to care for a more diverse mix of residents. It also has implications for the type of workforce that will be needed to provide this care.

(b) Pennsylvania's Nursing Homes

Roughly a decade ago, Pennsylvania had 713 nursing facilities in the state, and by 2018 this number had only declined slightly (2.8%) to 696 homes.⁶ A good deal of this decline occurred between 2015 and 2019 during which time 12 facilities closed.⁷ However, most of these closures occurred among smaller homes because the number of beds over the period declined by only .6% and has remained relatively stable over the decade at roughly 88,000 beds.⁸ As new data becomes available for the period including the current pandemic, it is reasonable to expect further closures, even as the potential demand for nursing home services due to population aging alone is likely to increase.

A slight majority of Pennsylvania's nursing homes during 2019-2018 have been for-profit as shown in Figures 6 and 7 below. However, there has been a noticeable but small increase in the proportion of for-profit facilities (7.0%) and corresponding decline in the proportion of non-profit facilities (-5.6%) during this time period. The proportion of nursing homes belonging to a multi-facility chain remained steady at about 57%-60% during this time period.⁹ The vast majority of Pennsylvania nursing homes – roughly 90% – are dually certified to serve both Medicare and Medicaid beneficiaries. Unlike in most other states, more than one in three nursing homes in the state is part of a continuing care retirement community.

Figure 6: Percent For Profit Ownership



Source: Analysis of CASPER data.

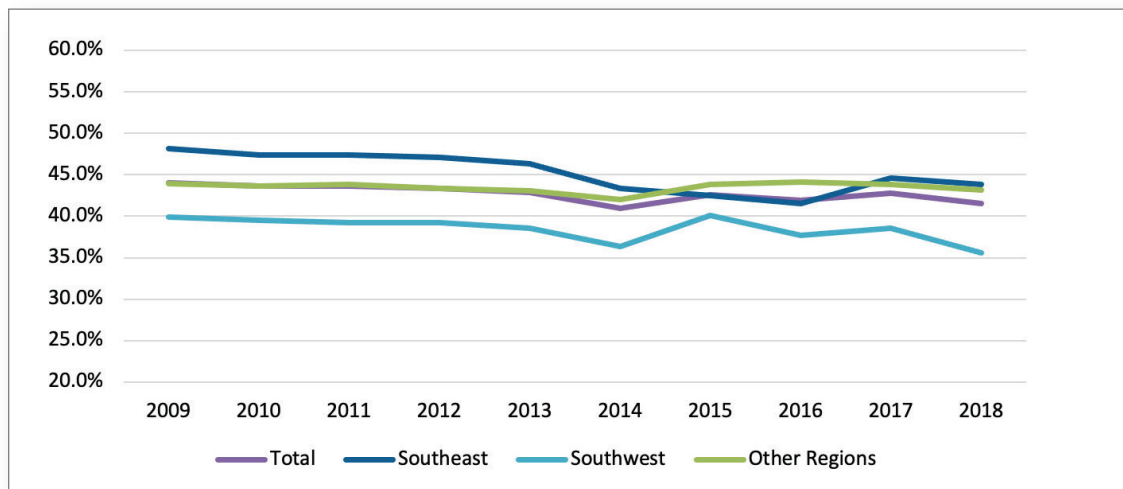
⁶ Analysis of CASPER data.

⁷ LeadingAge (2020). Nursing Home Closures and Trends: 2015-2019

⁸ Analysis of CASPER data.

⁹ Analysis of CASPER data.

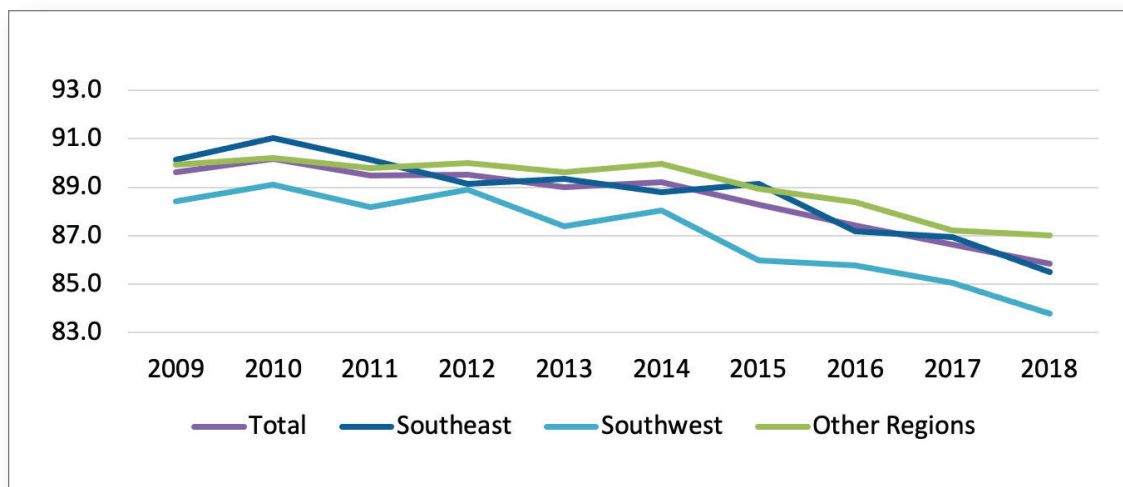
Figure 7: Percent Not-for-Profit Ownership



Source: Analysis of CASPER data.

As mentioned, there are roughly 88,000 certified nursing home beds in Pennsylvania, a figure that has only decreased slightly over the past decade. Even so, the total number of residents served has declined by 5.9%, resulting in lower occupancy levels overall. In fact, as shown in Figure 8, between 2009 and 2018, mean occupancy rates decreased from 89.6% to 85.8% – a 4.2% decline. Data for 2019 suggests occupancy rates are now at 85.6%.¹⁰

Figure 8: Mean Occupancy Rate

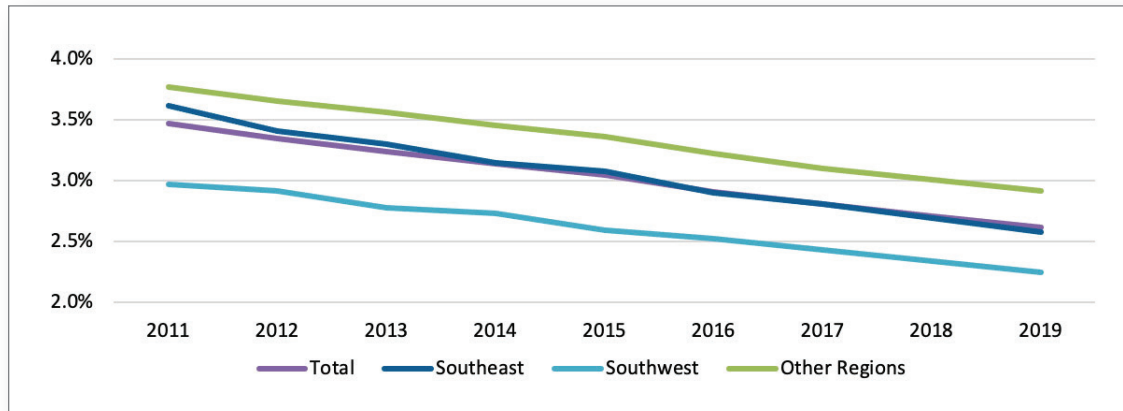


Source: Analysis of CASPER data.

¹⁰ Multiple data sources tracking occupancy rates all show a decline; although some, like the Pennsylvania nursing home reporting system, show a somewhat smaller decline over the same period – roughly a 3.0% decline.

As occupancy rates have declined, so too have prevalence rates. Figure 9 shows the prevalence rate of nursing home use among the population age 65 and over throughout the period.¹¹

Figure 9: Prevalence of Nursing Home Utilization among Population Age 65 and Over



Source: Analysis of CASPER data, U.S. Census Bureau, 2020 and Pennsylvania State Data Center at Penn State Harrisburg.

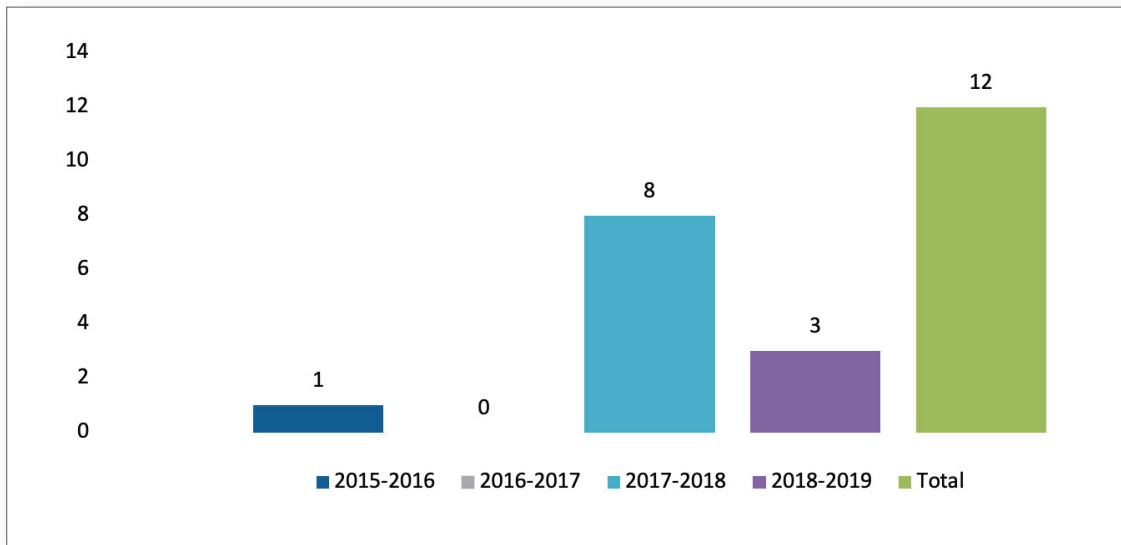
Even with this falling prevalence, however, the rapid growth in the population over age 65 in the coming decade suggests that there will be a need for additional capacity to address the needs of the aging population. If, for example, current utilization prevalence rates remain constant at about 2.6%, and the current bed-supply available to individuals over age 65 remains constant, there will be a shortfall of roughly 2,000 beds by 2025.¹² By 2030, everything held constant, beds will need to increase by an additional 7,000 across the state if current prevalence, acuity level, and age breakdown remain constant. Even if prevalence rates continue to decline due to greater investments in home- and community-based care and other housing alternatives available to older adults, there will still be a need to increase capacity over time. This is concerning given recent trends in nursing home closures in Pennsylvania as shown in Figure 10. Not shown is that one-quarter of these closures are in rural areas, thus leaving high need populations in these areas facing potential shortages in beds – something which may grow to be a more serious problem as the population ages.

There will be a shortfall of roughly 2,000 beds by 2025.¹²

¹¹ The interpretation of the prevalence rates is the percentage of the population age 65 and over residing in a nursing home on any given day over the course of a year.

¹² This assumes that acuity levels remain constant and the age breakdown – above and below age 65 – among individuals using nursing home services remains relatively unchanged.

Figure 10: Number of Nursing Home Closures in Pennsylvania, 2015-2019

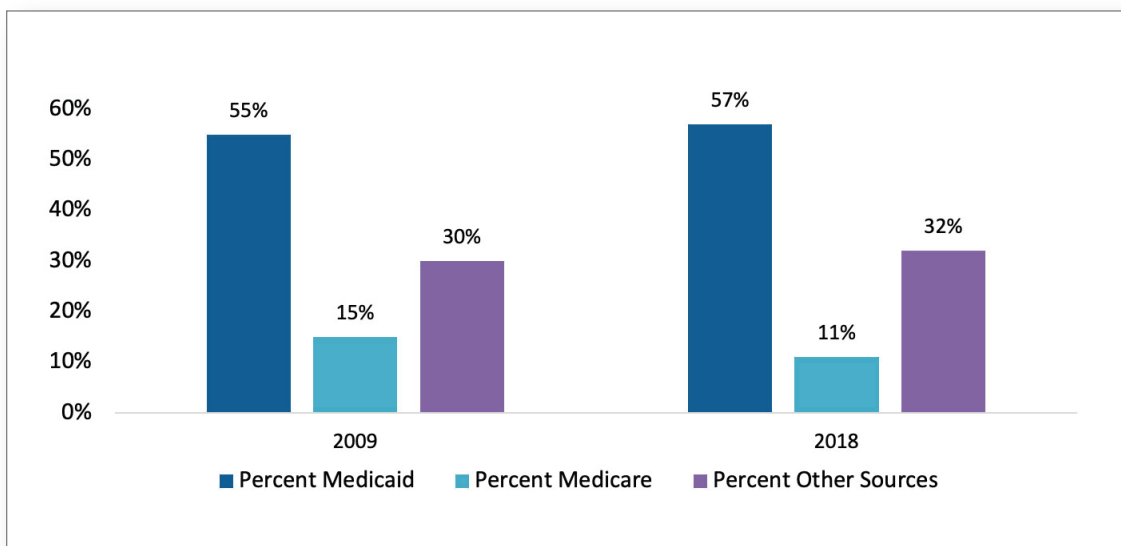


Source: LeadingAge (2020). Nursing Home Closures and Trends: 2015-2019

In order to assess the financial status of residents, we focus on how their primary payment source has changed between 2009 and 2018. The share of Medicaid as a payment source for residents has increased slightly (4.5%), whereas the Medicare share has declined by 23% – from 15% down to 11%. The data suggest that individuals accessing nursing homes have become poorer over time.

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Figure 11: Payer Sources for Nursing Home Residents 2009 - 2018



Source: Analysis of CASPER data.

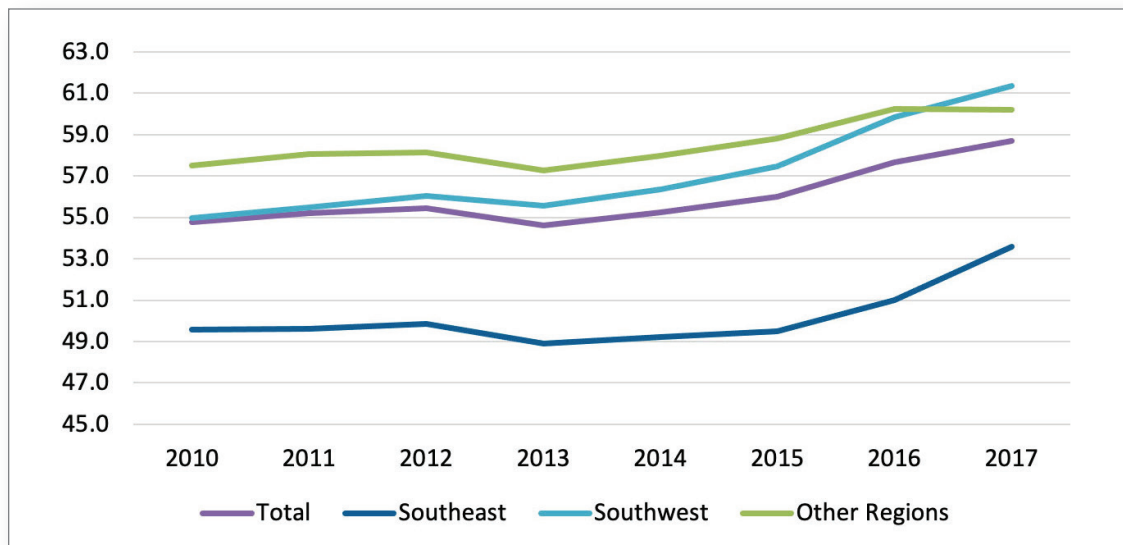
In a subsequent section, we present more detailed data on reimbursement rates over time and their relationship to reported nursing home costs. Clearly, given the differential rates paid by these two major public programs, this shift in payment source has significant implications for the financial performance of the industry.

(c) Resident Profile

In Figure 11 above we summarized how the payer sources for care have changed over the period. To further highlight this trend, Figures 12 and 13 show that the percentage of Medicaid residents has increased to 59% of all residents at the same time that those receiving Medicare have declined by 24.5% from 2010 to 2017 to 11.5%. Again, this suggests that poorer individuals are accessing services paid for by Medicaid and that a smaller number of patients are receiving post-acute services from these nursing homes paid for by Medicare.

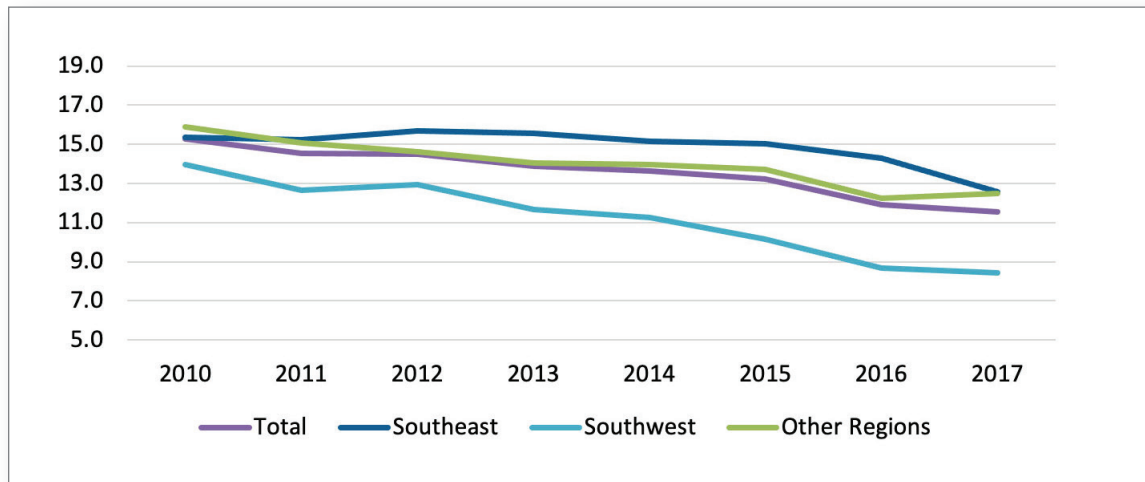
The percentage of Medicaid residents has increased to 59% of all residents at the same time that those receiving Medicare have declined by 24.5% from 2010 to 2017 to 11.5%.

Figure 12: Average Percent Medicaid Patients



Source: Analysis of Long-Term Care Focus data

Figure 13: Average Percent Medicare Residents

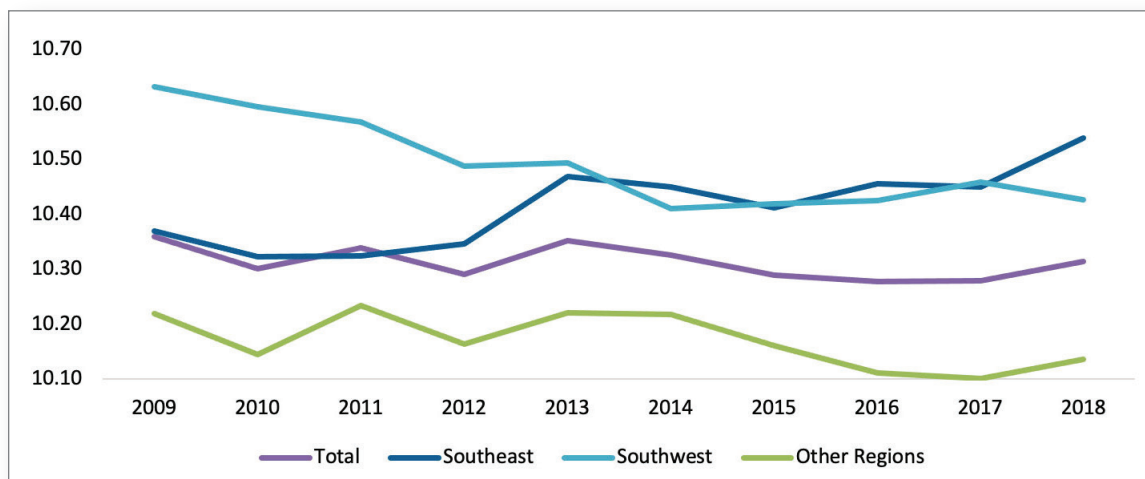


Source: Analysis of Long-Term Care Focus data

Over the past decade, the proportion of residents under age 65 has also grown: in 2011 they comprised 13% of all residents and now they comprise slightly more than 16%.¹³ There has also been a slight increase in the diversity of the nursing home population as the White resident population has declined slightly over the period from around 90% to 88%.¹⁴

While Figure 14 shows that there has been relative stability in the measure of overall acuity among residents, Figure 15 shows that between 2009 and 2018, the profile of residents with certain more complex medical conditions has changed.

Figure 14: Mean Acuity Index



Source: Analysis of CASPER data.

¹³ Analysis of Long-Term Care Focus data.

¹⁴ Analysis of Long-Term Care Focus data.

While there has been a slight decline (-4.6%) in the proportion of residents with Alzheimer’s/dementia, the percentage of individuals with psychiatric illness has skyrocketed from 21% to 32%. This 52% increase in residents with psychiatric diagnoses stems largely from the closure of inpatient psychiatric hospitals around the Commonwealth. Thus, not surprisingly, a meaningful part of this increase is attributable to individuals with schizophrenia and bipolar conditions. It also helps to explain why the proportion of residents under age 65 years has risen.

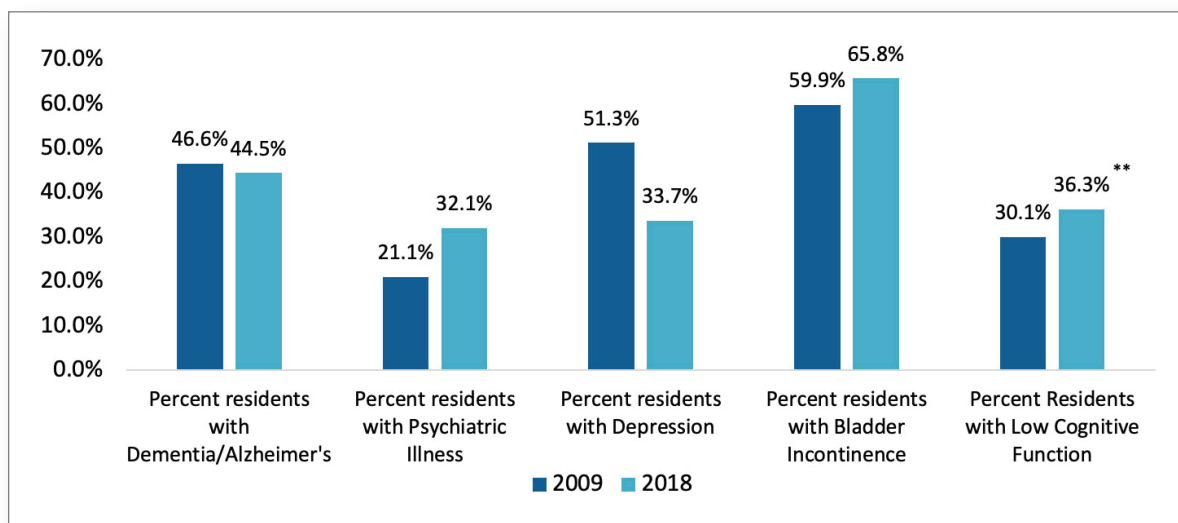
The percentage of individuals who are suffering from psychiatric illness has skyrocketed from 21% to 32%.

At the same time, and likely due to advances in pharmacological treatments, fewer residents suffer from depression. Not shown in the graph is that there has also been a 19% decline in the proportion of residents at high cognitive function and a 10% decline in individuals entering nursing homes who have moderate cognitive function, but a 14% increase in the proportion of residents with low cognitive function.¹⁵ Many individuals with less severe cognitive issues who have adequate financial resources move to assisted living because they can afford to self-pay.

While there may be a slight decrease in the number of individuals in nursing homes with cognitive issues, those who enter facilities with such issues are doing so at somewhat higher levels of severity.

These trends suggest that while there may be a slight decrease in the number of individuals in nursing homes with cognitive issues, those who enter facilities with such issues are doing so at somewhat higher levels of severity.

Figure 15: Selected Diagnoses of Residents



Source: Analysis of CASPER data.

**Data range is 2011 to 2017 for cognitive function variable and derived from LTC Focus data.

¹⁵ Analysis of Long-Term Care Focus data.

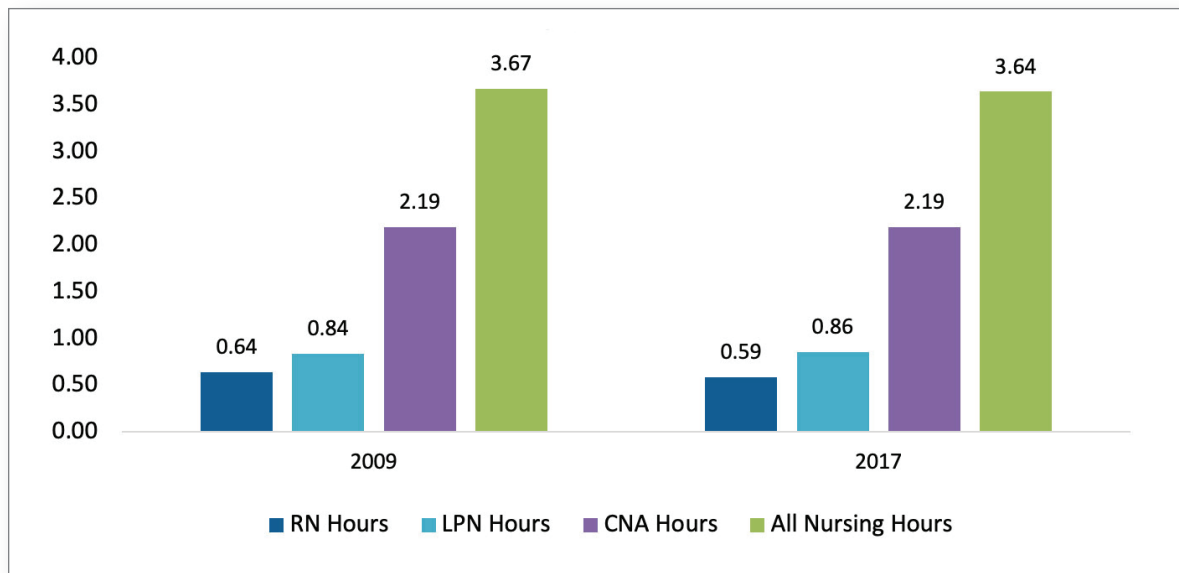
Admissions to nursing homes directly from the community have declined slightly between 2011 and 2017 (11% to 10.5%) whereas admissions directly from acute care hospitals increased slightly (85.9% to 86.2%).¹⁶ Taken together, these findings suggest that a changing and somewhat more medically complex or sicker population is being served in Pennsylvania nursing homes. It may also be related to the fact that over the period, there has been a significant decline (37%) in the percentage of hospital-based facilities – from 6.9% (2009) to 4.3% (2018).¹⁷ These findings have implications for the mix of staff needed to care for this population.

A changing and somewhat more medically complex or sicker population is being served in Pennsylvania nursing homes.

(d) Staffing Patterns and Wages

The primary direct care workers in institutional settings include registered nurses (RN), certified nursing assistants (CNA), and licensed practical nurses (LPN). Figure 16 shows how the mean hours per day for each of these direct care workers has changed between 2009 and 2017.

Figure 16: Mean Hours Per Day by Worker Type: 2009 - 2017



Source: Analysis of CASPER data.

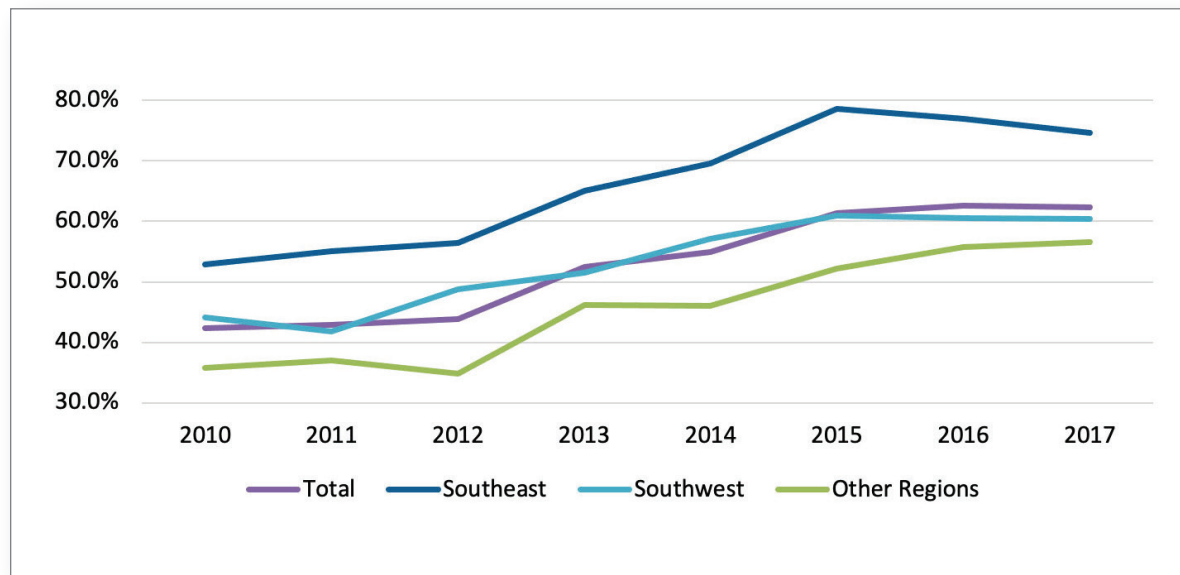
¹⁶ Analysis of Long-Term Care Focus data.

¹⁷ Analysis of CASPER data.

For the most part, there has been very little change in direct care hours over this time period, despite the increasingly demanding profile mix of residents cared for within these facilities; this likely results from the concomitant lack of real increase in the daily reimbursement rate (see Figure 26). Notably, RN hours represent a relatively small and declining percentage of total direct care hours despite the uptick in residents' skilled needs. What has changed is the percentage of facilities that have a nurse practitioner or physician extender – a 47% increase from 2010 to 2017, according to Figure 17. There is an open question, however, about whether these extenders work in the nursing homes or are just available to them under certain circumstances.

There has been very little change in direct care hours over this time period, despite the increasingly demanding profile mix of residents cared for within these facilities.

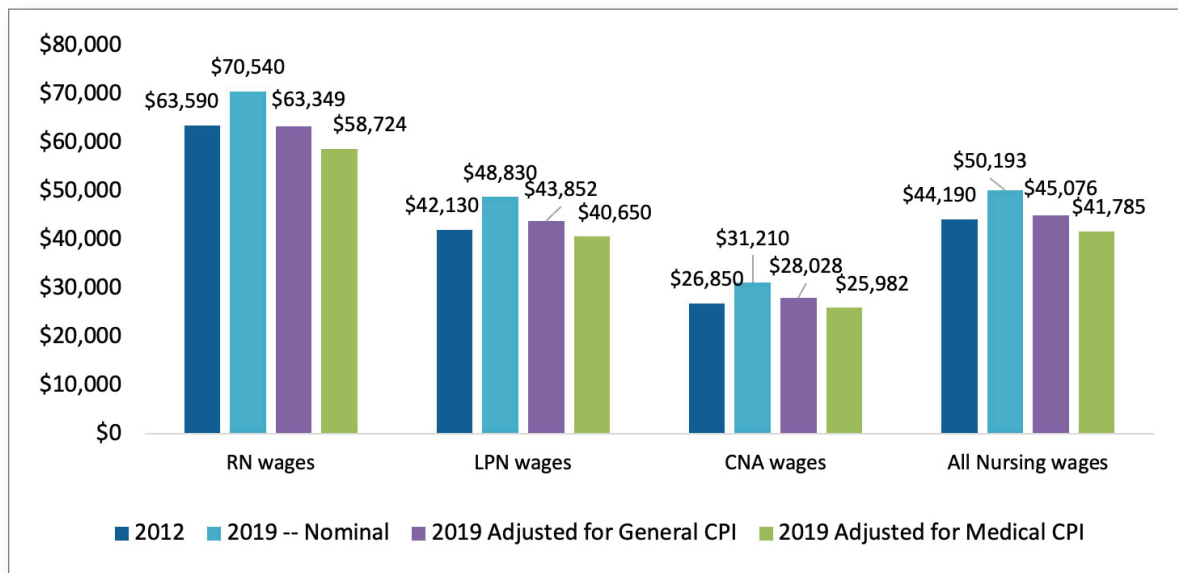
Figure 17: Percent of Facilities with Access to Nurse Practitioner or Physician Extender



Analysis of Long-Term Care Focus data.

Overall, total median nursing wages have increased by 13.6%, or roughly 1.9% per year between 2012 and 2019. Real wages, however – that is, wages adjusted for changes in the cost of living (i.e., general CPI) or the medical cost of living (i.e., medical CPI) – have remained completely flat or declined somewhat during this time period. For example, real wages based on the general CPI rose roughly .25% over the seven-year period for a total increase of roughly 2%. In contrast, wages adjusted for the medical CPI have declined by roughly .75% per year leading to an overall 5.4% decline in total median nursing wages during the period. Figure 18 below summarizes results by worker category over the period.

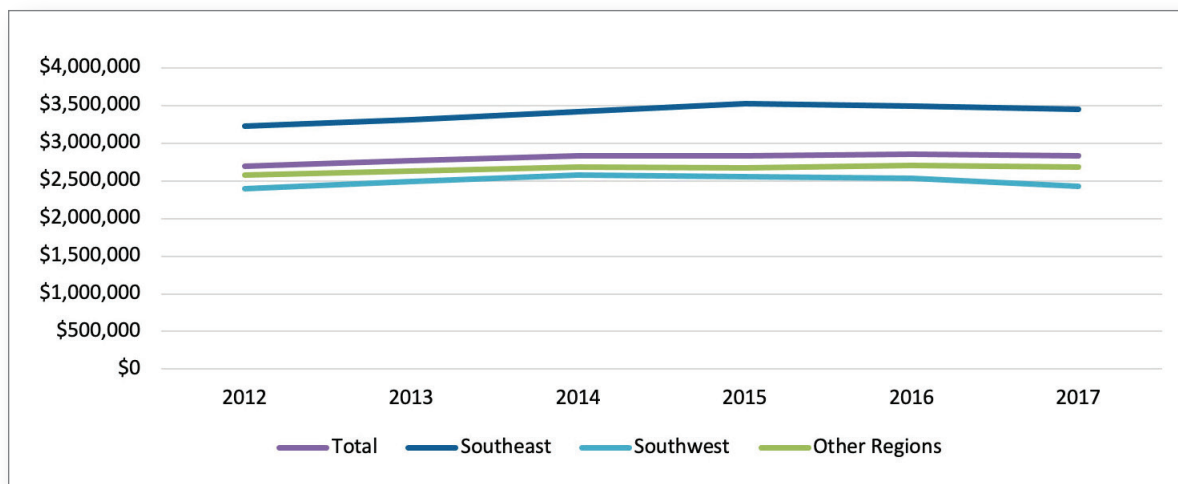
Figure 18: Median Annual Wages by Worker Type: 2012 - 2019



Analysis of U.S. Bureau of Labor statistics data; General CPI=Consumer Price Index-All Urban Consumers; Medical CPI=Consumer Price Index-Medical Care.

In Figure 19, we show that between 2012 and 2017 the total annual wages paid per facility has remained relatively flat, only increasing by 4.4% (\$2.7 to \$2.8 million) over the period. Adjusting for the CPI, however, reveals a 4.5% decline in average total wages (\$2.7 to \$2.6 million) using the general CPI, and a considerable 18.3% decline in average total wages (\$2.7 to \$2.2 million) using the medical CPI.

Figure 19: Average Total Annual Nursing Wages Per Facility



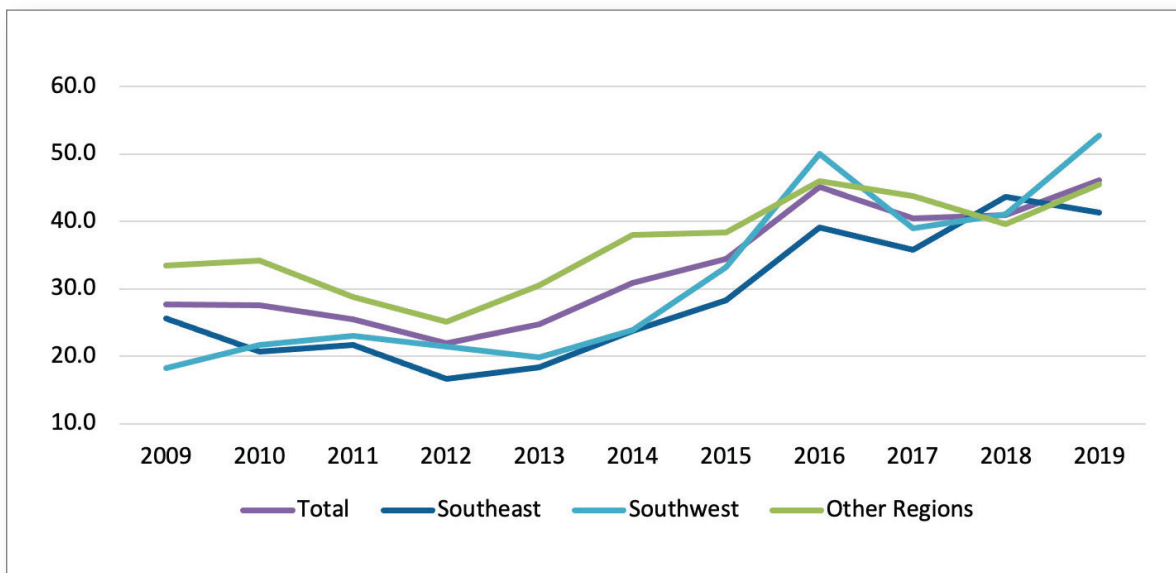
Analysis of CASPER data.

(e) Quality Metrics

There are a variety of ways that nursing homes are evaluated in terms of their overall quality level. In some cases it has to do with whether the prevalence of certain adverse outcomes has been minimized; in others, it is a combination of both input and output measures. Below we highlight a number of these measures covering the period 2009 to 2018. Per the former, there has been a decline in the percentage of residents with facility-acquired bed sores – from 3.3% in 2009 to 2.6% in 2018. As well, the percentage of residents requiring physical restraints has declined from 2.7% to .5% over the period. Per the latter, Figure 20 shows that there has been a significant increase in the weighted deficiency score over the decade – from a weighted score of roughly 27.6 to 41.0 over the period. The largest increase in scores occurred in the Southwest region.

There has been a significant increase in the weighted deficiency score of nursing homes over the decade, this indicating quality challenges.

Figure 20: Mean Weighted Deficiency Score



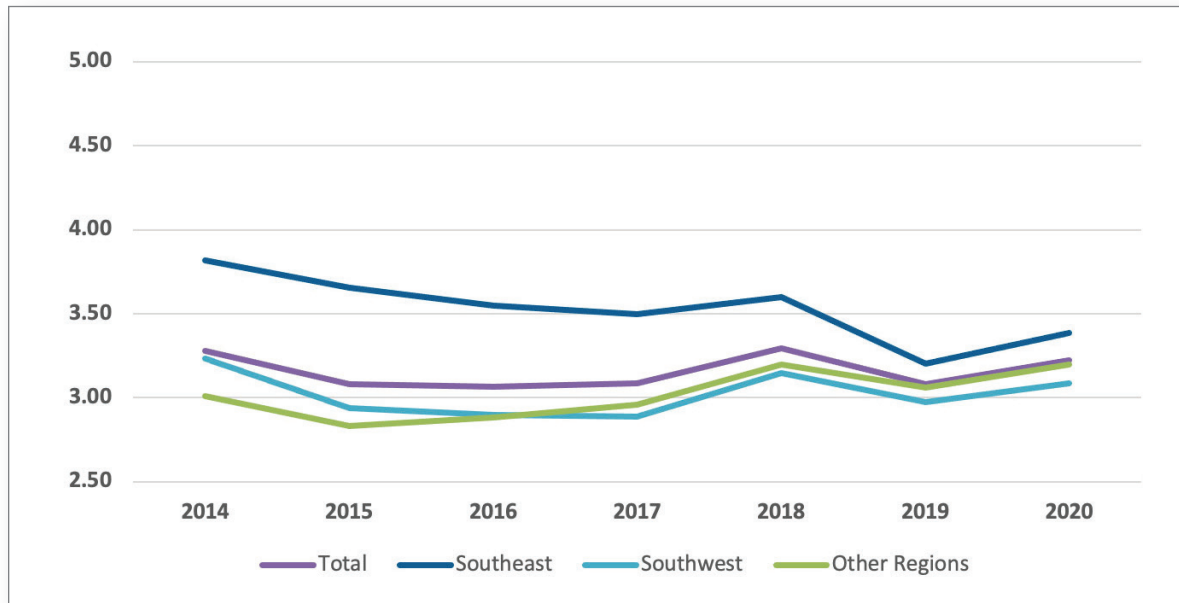
Analysis of CASPER data.

¹⁸ Analysis of CASPER data.

¹⁹ Analysis of CASPER data.

Figure 21 presents the average Five Star ratings reported in Nursing Home Compare between 2014 and 2020. In this case we present the data for all five regions, in part to demonstrate some of the high degree of variability across regions.

Figure 21: Average 5-Star Rating



Analysis of Nursing Home Compare data.

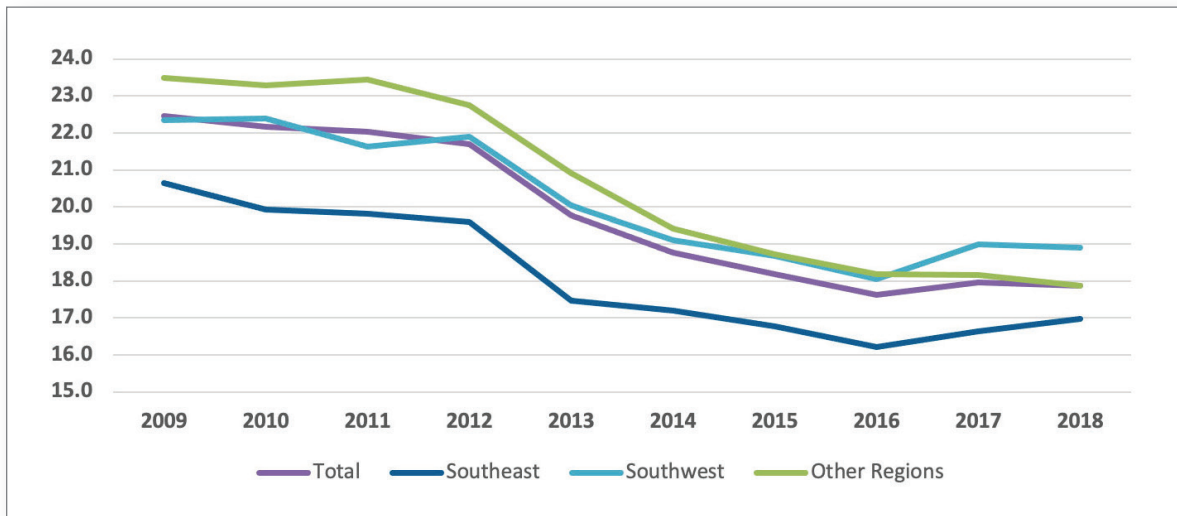
Over the period, the average value of the overall Five-Star Rating declined by 1.7% -- from 3.28 to 3.22, with the largest decline, at 11%, taking place in the Southeast. Consistent with this finding is the fact that the average number of health deficiencies between 2014 and 2020 increased from 5.2 to 8.8 per facility along with substantiated complaints from 2.4 to 5.2 per facility.²⁰

Finally, two areas that have been the focus of great effort over the last several years are the use of antipsychotic medications and the management of care transitions. Overall, Figure 22 indicates a marked decline in the mean percentage of residents on antipsychotics from 22% to 18% between 2009 and 2018. This reduction may suggest more appropriate care for typical residents, consistent with federal regulations limiting the use of antipsychotics. This limitation can, however, be problematic given the significant uptick in younger, psychiatric residents, many of whom may require such medications (Figure 15). Thus, it may be worth exploring the extent to which the requirement regarding antipsychotics use is inhibiting facilities' ability to address the care needs of their rapidly changing population.

The average number of health deficiencies between 2014 and 2020 increased from 5.2 to 8.8 per facility along with substantiated complaints from 2.4 to 5.2 per facility.

²⁰ Analysis of CASPER data.

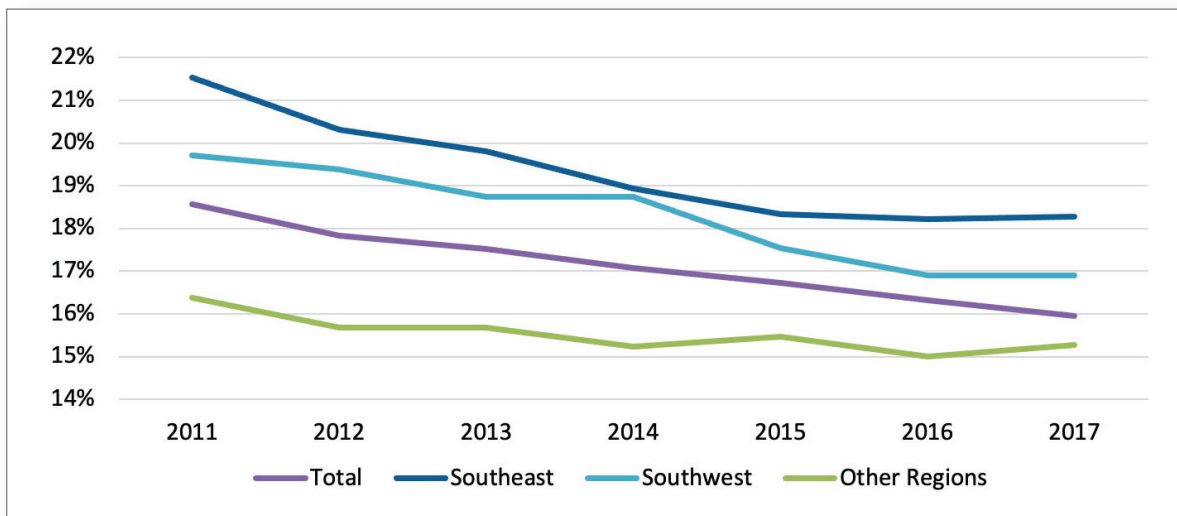
Figure 22: Mean Percentage of Residents on Antipsychotics



Analysis of Long-Term Care Focus data.

Effective transition management is reflected in readmission rates from nursing homes back to the hospital for residents who have recently had a hospitalization. As shown in Figure 23 below, the 30-day readmission rate has fallen by about 11% between 2011 and 2017.

Figure 23: Adjusted 30 Day Rehospitalization Rate



Analysis of Long-Term Care Focus data.

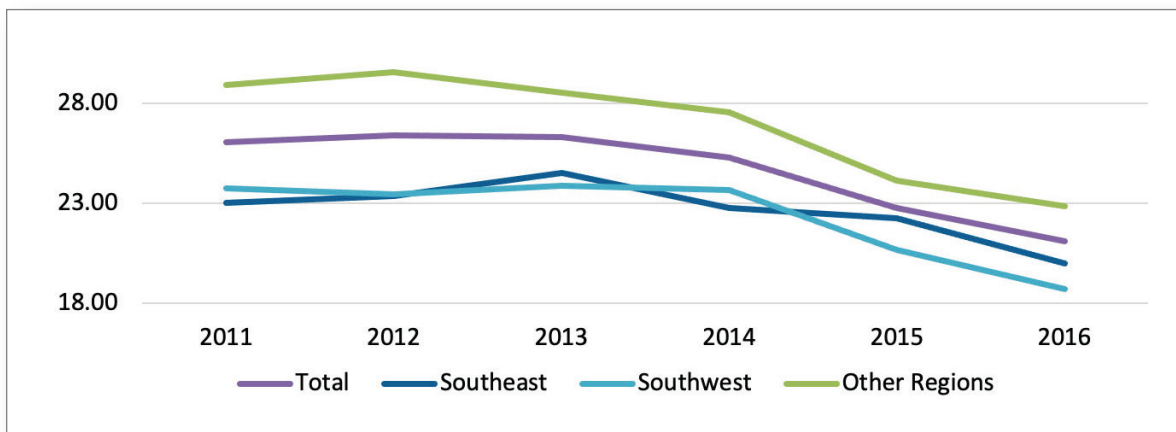
(f) Length of Stay

Previously we saw that the occupancy rate has declined noticeably, by 4.2%, between 2009 and 2018 (Figure 8). Concomitantly, mean total annual admissions per facility rose steadily from 253 to 288 between 2010 and 2018.²¹ Together, these two data points suggest that people are entering and leaving nursing homes more quickly over time. Figure 24 substantiates this expectation, indicating that the median adjusted length of stay declined by 19% between 2011 and 2016. This decline in length of stay, combined with reductions in the proportion of residents/resident days paid for by Medicare and increasing proportion of residents/resident days paid for by Medicaid (Figures 11-13 and 25), suggests that rising numbers of residents are entering nursing homes for supportive care rather than for post-acute care at higher levels of frailty and closer to the end of life.

People are entering and leaving nursing homes more quickly over time.

Rising numbers of residents are entering nursing homes for supportive care rather than for post-acute care at higher levels of frailty and closer to the end of life.

Figure 24: Adjusted Median Length of Stay



Analysis of Long-Term Care Focus data.

²¹ Analysis of Pennsylvania Nursing Home Reports.

(g) Trends in Financing of Pennsylvania Nursing Homes

Clearly the ability of Pennsylvania nursing homes to address the care challenges they face is highly dependent on whether they have sufficient funds to attract the level and type of direct care staff required, meet quality standards and regulatory guidelines, and operate in the black to attract sufficient capital to the market. Given that much of their financing derives from government sources – that is, Medicare and Medicaid – it is important to review how payer mix and payment levels have changed over the last decade or so. As is well known, nursing homes have tended to care for two broad categories of residents: (1) those with traditional long-term care needs (i.e., functional and/or cognitive impairments), and (2) those with post-acute needs. Medicaid typically pays for the former and Medicare pays for the latter. Because the rates paid by Medicare and private pay rates tend to be higher than average Medicaid rates, many nursing homes are dependent on these payments to assure that they can operate in the black. In April 2020, the published average facility reimbursement rate for Medicaid was \$205, roughly equal to what it was in 2017.²²

Figure 11 above showed that as a payment source, Medicare reimbursement has been declining. Another way to look at this is to see how the percentage of Medicare reimbursed residents has changed over the period. Figure 13 above shows that the proportion of Medicare residents has declined by 24% over the period, whereas Figure 12 shows residents for whom Medicaid is a payment source has increased by 7% – meaning that roughly 59% of all residents have Medicaid as a payment source.

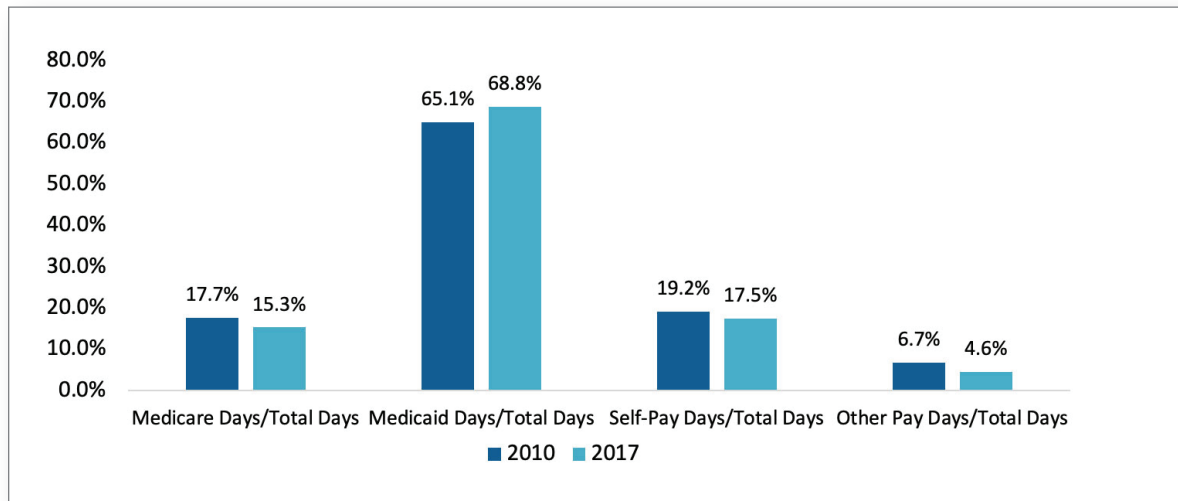
Figure 25 focuses on the concept of patient days, which is most relevant for nursing home finances because the sum of all patient day payments will approximate annual revenues. Here we present the ratio of payment days by specific source – that is, Medicare, Medicaid, self-pay and other, to total patient days for the period between 2010 and 2017. As shown, there was a decline in the ratio of patient days reimbursed by Medicare (-14%), Self-pay (-9%), and Other Sources (-31%) at the same time that Medicaid reimbursed days as a percentage of total days increased by about 6%. Pennsylvania facilities have always relied disproportionately on Medicaid. However, the decline in the average proportion of days paid for by all payers but Medicaid highlights facilities' growing reliance on Medicaid as their single largest source of revenue. The reduction in the proportion of days paid for by Medicare reflects concerted efforts on the part of Medicare Advantage plans to drive down the length of stay for Medicare days, sending in, for example, adjusters to transfer residents out of the facilities in six to seven days rather than 11 days.

59% of all residents have Medicaid as a payment source.

Pennsylvania facilities have always relied disproportionately on Medicaid.

²² Pennsylvania Department of Human Services (2020). Nursing Facility Detailed Final Rates. (April). <https://www.dhs.pa.gov/providers/Providers/Pages/Rates-Nursing%20Facilities.aspx>

Figure 25: Change in Ratio of Payment Source Days to Total Days 2010-2017

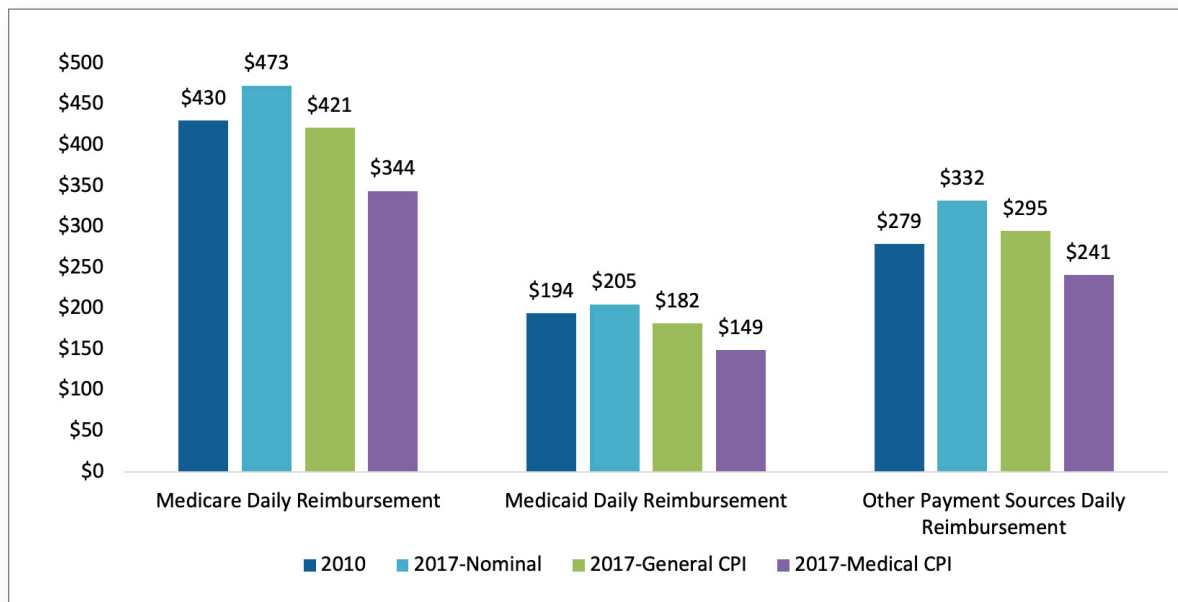


Analysis of Pennsylvania Nursing Home Reports

The fact that Medicaid has become an even more dominant payer of nursing home care over the period has significant implications for nursing home financing. Figure 26 shows the average reimbursement rate for Medicare, Medicaid, and other sources over the period. There are two trends to note. First, Medicaid has the lowest level of reimbursement over the period and second, the change in the Medicaid reimbursement rate has been lowest among major payment sources – 5.7% compared to 10% (Medicare) and 19% (other sources). Relative differences across the three payment sources remain after adjusting for inflation, but facilities face substantial declines in payment from Medicaid. Adjusting for the general CPI, Medicaid rates declined by 6.2% as compared to a 2.1% decline in Medicare rates and 5.7% increase in other sources. Adjusting for the medical CPI, Medicaid rates declined by 23.2% as compared to declines of 20.0% and 13.6% for Medicare and other sources, respectively.

Compared to other payment sources, Medicaid has the lowest level of reimbursement over the period and the increase in reimbursement rates has been much smaller – 5.7% compared to 10% (Medicare) and 19% (other sources).

Figure 26: Change in Daily Reimbursement Rates by Payer 2010-2017



Analysis of Pennsylvania Nursing Home Reports; General CPI=Consumer Price Index-All Urban Consumers; Medical CPI=Consumer Price Index-Medical Care

There have been multiple analyses showing the shortfall between Medicaid reimbursement for nursing home costs and the actual costs incurred by nursing facilities.^{23, 24, 25, 26} Figure 27 shows the relationship between Medicaid reimbursement rates and charges for the average of private and semi-private room charges across the various regions. To the extent that charges are a reflection of underlying costs, it is clear that over time, reimbursements are not keeping up with costs. Whereas in 2010 Medicaid rates represented roughly 77% of private/semi-private room charges, by 2017 this figure had fallen to 63%. Thus, over the period, there has been an 18% decline in the ratio of Medicaid daily reimbursement rates to charges for private/semi-private rooms.

Reimbursements are not keeping up with costs. Whereas in 2010 Medicaid rates represented roughly 77% of private/semi-private room charges, by 2017 this figure had fallen to 63%.

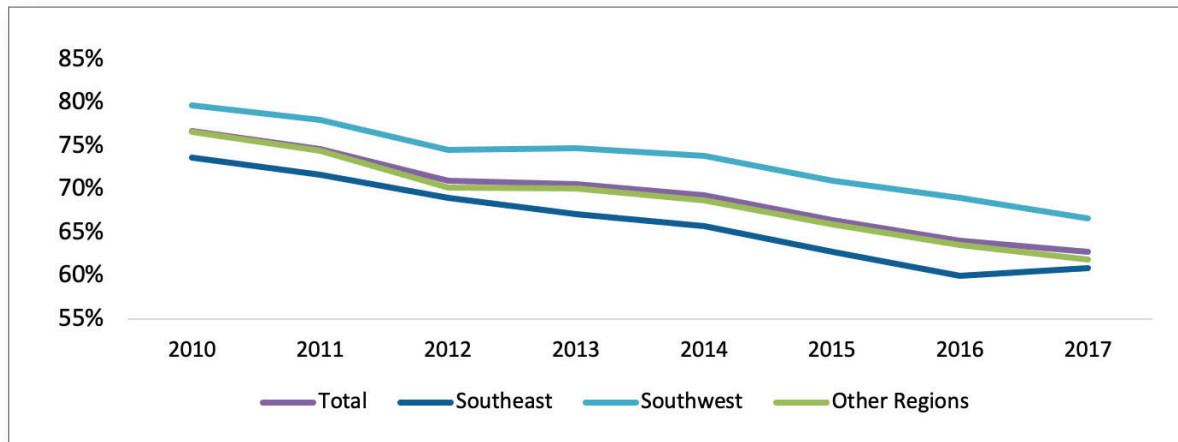
²³ A Report on Shortfalls in Medicaid Funding for Nursing Center Care (2018). Hansen Hunter & Company. PC. For the American Health Care Association.

²⁴ Pennsylvania Medicaid Funding Shortfall Analysis for Nursing Facilities (2019). Prepared by RKL LLP for LeadingAge PA.

²⁵ Skilled Nursing Facilities in Pennsylvania: Analysis of Total Profit Margins for Freestanding Facilities (2016). Avalere Health, March.

²⁶ <https://skillednursingnews.com/2019/03/as-medicaid-rates-lag-behind-costs-nursing-home-bills-skyrocket/>

Figure 27: Mean Ratio Medicaid Per Diem Rate/Average Private and Semi-Private Daily Charge



Analysis of Pennsylvania Nursing Home Reports.

Conclusion

Taken together, these findings suggest a growing gap between charges and payments due to the shift toward greater Medicaid-financed care. This growing gap between what facilities need, as reflected in charges, and the Medicaid reimbursement rate, has come at a time when nursing homes are being asked to care for an increasingly complex and frail mix of residents. The result has been increased cost shifting to individuals and families who must pay for care privately. This, in turn, has inhibited access, thus increasing caregiver burden as families care for people with cognitive impairment and physical frailties longer. It has also forced privately paying residents to draw more on their own income and assets to pay for care, thereby accelerating spend-down to Medicaid eligibility.

The growing gap between charges and payments will shift cost burdens to individuals and families and nursing homes will be hard pressed to meet the needs of Pennsylvania’s most vulnerable residents.

Nursing home services represent a critical component in Pennsylvania’s continuum of care. Unless there is an increase in reimbursement rates or a change in the way that nursing homes are financed – such as consideration of new state-based social insurance programs²⁷ – nursing homes will be hard pressed to meet the needs of Pennsylvania’s most vulnerable residents, due to likely growth in demand for service and the increasing investments required to keep nursing home patients safe. In light of demographic trends, the challenge will only grow over time in the absence of policy changes.

²⁷ Cohen, M., Tell, E. Hwang, A. Miller, EA, and Miller, M. (2020). Learning from New State Initiatives in Financing Long-Term Services and Supports. Published by the LeadingAge LTSS Center @UMass Boston. July. <https://www.ltsscenter.org/wp-content/uploads/2020/07/State-LTSS-Financing-Full-Report-July-2020.pdf>

Appendix 1: Available Figures and Date Ranges

Figures	Date Range for Data
Casper Data (Total Plus 5 Regions; Total Plus 3 Regions)	
Mean Weighted Deficiencies Score	2009-2018
Total Facilities	2009-2018
Distribution of Facilities across Regions	2009-2018
Percent Facilities in Urban Areas	2009-2018
Percent Facilities in Rural Areas	2009-2018
Total Beds	2009-2018
Distribution of Beds across Regions	2009-2018
Total Residents	2009-2018
Distribution of Residents across Regions	2009-2018
Meant Total Number of Beds	2009-2018
Mean Number of Residents	2009-2018
Mean Occupancy Rate	2009-2018
Percent Medicare Certified Only	2009-2018
Percent For-Profit Ownership	2009-2018
Percent Not-for-Profit Ownership	2009-2018
Percent Government Ownership	2009-2018
Percent Chain Affiliated	2009-2018
Percent Hospital Based	2009-2018
Percent Part of a CCRC	2009-2018
Mean Percent Medicaid Paid	2009-2018
Mean Percent Medicare Paid	2009-2018
Mean Percent Other Paid	2009-2018
Mean ADL Index Score	2009-2018
Mean Special Treatment Index	2009-2018
Mean Acuity Index	2009-2018
Mean % Residents with Dementia/Alzheimer's	2009-2018

Figures	Date Range for Data
Casper Data (Total Plus 5 Regions; Total Plus 3 Regions)	
Mean % Residents with Psychiatric Illness	2009-2018
Mean % Residents with Depression	2009-2018
Mean % Residents with Intellectual Disability	2009-2018
Mean % Residents with Bed Sores	2009-2018
Mean % Residents with Facility-acquired Bed Sores	2009-2018
Mean % Residents with Physical Restraints	2009-2018
Mean % Residents with Facility-acquired Restraints	2009-2018
Mean % Residents with Contractures	2009-2018
Mean % Residents with Facility-acquired Contractures	2009-2018
Mean % Residents with Catheters	2009-2018
Mean % Residents with Facility-acquired Catheters	2009-2018
Mean % Residents with Bladder Incontinence	2009-2018
Mean % Residents with Bowel Incontinence	2009-2018
Mean % Residents with a Rash	2009-2018
Mean % Residents with Feeding Tubes	2009-2018
Mean % Residents with Unplanned Weight Gain/Loss	2009-2018
Mean Medication Error Rate	2009-2018
Mean % Residents on Psychoactives	2009-2018
Mean % Residents on Antipsychotics	2009-2018
Mean % Residents on Antianxiety Medications	2009-2018
Mean % Residents on Antidepressants	2009-2018
Mean % Residents on Hypnotics	2009-2018
Mean % Residents on Antibiotics	2009-2018
Percent Facilities with Dementia Special Care Unit	2009-2018
Percent Facilities with Dialysis Special Care Unit	2009-2018
Percent Facilities with Head Trauma Special Care Unit	2009-2018
Percent Facilities with Hospice Special Care Unit	2009-2018

Figures	Date Range for Data
Casper Data (Total Plus 5 Regions; Total Plus 3 Regions)	
Percent Facilities with Ventilator Special Care Unit	2009-2018
Percent Facilities with Special Rehabilitation Special Care Unit	2009-2018
Percent Facilities with Any Special Care Unit Other than Dementia	2009-2018
Percent Facilities with Pharmacy Services Provided (onsite, offsite, both)	2009-2017
Percent Facilities with Therapeutic Recreational Specialty Provided	2009-2017
Percent Facilities with Other Social Services Provided	2009-2017
Percent Facilities with Mental Health Services Provided	2009-2017
Percent Physicians (MD Director, Team, or Extenders)	2009-2017
Mean RN Hours Per Resident Day	2009-2017
Mean LPN Hours Per Resident Day	2009-2017
Mean CNA Hours Per Resident Day	2009-2017
Mean Total Nurse Hours per Resident Day	2009-2017
Mean Occupational Therapists Hours Per Resident Day	2009-2017
Mean Physical Therapists Hours Per Resident Day	2009-2017
Mean Speech Pathologists Hours per Resident Day	2009-2017
Mean Professional Social Worker FTE	2009-2017
Mean Paraprofessional Social Service Staff FTE	2009-2017
Mean Professional Social Worker Hours Per Resident Day	2009-2017
Mean Paraprofessional Social Service Staff Hours Per Resident Day	2009-2017
Mean Mental Health Hours Per Resident Day	2009-2017
Mean Therapeutic Hours Per Resident Day	2009-2017
Mean Activities Staff Hours Per Resident Day	2009-2017
Mean Dieticians Hours per Resident Day	2009-2017
Mean Food Services Workers Hours Per Resident Day	2009-2017
Mean Dieticians and Food Service Workers hours Per Resident Day	2009-2017
Mean Housekeeping Hours Per Resident Day	2009-2017
Total Number of Deficiencies	2009-2018

Figures	Date Range for Data
Casper Data (Total Plus 5 Regions; Total Plus 3 Regions)	
Percent Facilities with Severe Deficiencies (I-L)	2009-2018
Percent Facilities with Actual Harm or Immediate Jeopardy (G-L)	2009-2018
Long-Term Care Focus (Total Plus 5 Regions; Total Plus 3 Regions)	
Average Number of Beds	2010-2017
Mean Average Daily Census	2011-2017
Mean Occupancy Rate	2010-2017
Percent Facilities with Alzheimer's Disease Unit	2010-2017
Percent Facilities with Any Special Care Unit	2010-2017
Average Percent Medicaid Residents	2010-2017
Average Percent Medicare Residents	2010-2017
Percent Facilities Chain Affiliated	2010-2017
Percent Facilities For Profit	2010-2017
Percent Facilities Not-for-Profit	2010-2017
Percent Facilities Hospital-Based	2010-2017
Mean Percent Residents Restrained	2010-2017
Mean Acuity Index	2010-2017
Mean Resource Utilization Group Nursing Case Mix	2011-2017
Percent Facilities with Nurse Practitioners or Physician Assistants (physician extender)	2010-2017
Mean RN Hours Per Resident Day	2010-2017
Mean LPN Hours Per Resident Day	2010-2017
Mean CNA Hours Per Resident Day	2010-2017
Mean Total Nursing Hours (RN, LPN, CNA) Hours Per Resident Day	2010-2017
Mean Percent Admissions from Acute Care Hospital	2011-2017
Mean Percent Admissions from the Community	2011-2017
Mean Average ADL Score (0-28)	2011-2017
Proportion Low Cognitive Function (Year)	2011-2017
Proportion Moderate Cognitive Function (Year)	2011-2017

Figures	Date Range for Data
Long-Term Care Focus (Total Plus 5 Regions; Total Plus 3 Regions)	
Proportion High Cognitive Function (Year)	2011-2017
Mean Percent Female Admitted (Year)	2010-2017
Mean Proportion Black (1st Thur. April)	2011-2017
Mean Proportion Hispanic (1st Thurs. April)	2011-2017
Mean Percent White (1st Thurs. April)	2011-2017
Mean Percent Under 65 (1st Thurs. April)	2011-2017
Mean % Low Cognitive Function (1st Thurs. April)	2011-2017
Mean % Moderate Cognitive Function (1st Thurs. April)	2011-2017
Mean % High Cognitive Function (1st Thurs. April)	2011-2017
Mean % Bedfast (1st Thurs. April)	2011-2017
Mean % Able to Walk (1st Thurs. April)	2011-2017
Mean % Bladder Incontinent (1st Thurs. April)	2011-2017
Mean % Bowel Incontinent (1st Thurs. April)	2011-2017
Mean % with Catheter (1st Thurs. April)	2011-2017
Mean % Congestive Heart Failure (1st Thurs. April)	2010-2016
Mean % Hypertension (1st Thurs. April)	2010-2017
Mean % Schizophrenia/Bipolar (1st Thurs. April)	2010-2017
Mean % Ventilator (1st Thurs. April)	2011-2017
Mean % with UTI (1st Thurs. April)	2010-2017
Mean % Fallen Since Admission (1st Thurs. April)	2011-2017
Mean % Obese (1st Thurs. April)	2010-2017
Mean % ADL Decline (1st Thurs. April)	2011-2017
Mean % Daily Pain (1st Thurs. April)	2011-2017
Mean % High Risk Long Stay with Pressure Ulcer (1st Thurs. April)	2011-2017
Mean % Nursing Home Days SNF Medicare Covered	2010-2016
Mean Number of Hospitalizations Per 365 Resident Days	2010-2016
Mean Observed 30 Day Re-hospitalization Rate	2011-2017

Figures	Date Range for Data
Long-Term Care Focus (Total Plus 5 Regions; Total Plus 3 Regions)	
Mean Adjusted 30 Day Re-hospitalization Rate	2011-2017
Mean Observed Successful Discharge rate	2011-2017
Mean Adjusted Successful Discharge rate	2011, 2013-2017
Mean Observed Median Length of Stay	2011-2017
Mean Adjusted Median Length of Stay	2011-2017
Mean Hospitalizations Per year	2011-2017
Nursing Home Compare (Total Plus 5 Regions; total Plus 3 Regions)	
Number of Facilities	2014-2020
Distribution of Facilities by Regions	2014-2020
Number of Certified Beds	2014-2020
Distribution of Certified Beds across Regions	2014-2020
Average Number of Residents Per Facility	2014-2020
Average Number of Beds Per Facility	2014-2020
Average Occupancy Rate	2014-2020
Percent For-Profit Facilities	2014-2020
Percent Non-Profit Facilities	2014-2020
Percent Government Facilities	2014-2020
Percent Medicare Certified Only	2014-2020
Percent Facilities Hospital-Based	2014-2020
Percent Facilities Part of a CCRC	2014-2020
Percent Facilities with No Resident or Family Council	2014-2020
Average Overall 5-Star Rating	2014-2020
Average Health Inspection 5-Star Rating	2014-2020
Average Quality Indicator 5-Star Rating	2014-2020
Average Long-Stay Quality Indicator 5-Star Rating	2019-2020
Average Short-Stay Quality Indicator 5-Star Rating	2019-2020
Average Total Nurse Staffing 5-Star Rating	2014-2020

Figures	Date Range for Data
Nursing Home Compare (Total Plus 5 Regions; total Plus 3 Regions)	
Average RN Staffing 5-Start Rating	2014-2020
Average CNA Hours Per Resident Day	2014-2020
Average LPN Hours Per Resident Day	2014-2020
Average RN Hours Per Resident Day	2014-2020
Average RN and LPN Hours Per Resident Day	2014-2020
Average Total Nurse (RN, LPN, CNA) Hours Per Resident Day	2014-2020
Average Physical Therapy Hours Per Resident Day	2014-2020
Average Total Number of Health Deficiencies (Cycle 1)	2014-2020
Average Number of Health Deficiencies from the Standard Surveys (Cycle 1)	2014-2020
Average Number of Health Deficiencies from Complaint Surveys (Cycle 1)	2014-2020
Average Health Deficiency Score (Cycle 1)	2014-2020
Average Number of Health Survey Repeat Visits (Cycle 1)	2014-2020
Average Points Associated with Health Survey Repeat Visits (Cycle 1)	2014-2020
Average Total Health Inspection Score (Cycle 1)	2014-2020
Average Total Number of Health Deficiencies (Cycle 2)	2014-2020
Average Number of Health Deficiencies from the Standard Surveys (Cycle 2)	2014-2020
Average Number of Health Deficiencies from Complaint Surveys (Cycle 2)	2014-2020
Average Health Deficiency Score (Cycle 2)	2014-2020
Average Number of Health Survey Repeat Visits (Cycle 2)	2014-2020
Average Points Associated with Health Survey Repeat Visits (Cycle 2)	2014-2020
Average Total Health Inspection Score (Cycle 2)	2014-2020
Average Total Number of Health Deficiencies (Cycle 3)	2014-2020
Average Number of Health Deficiencies from the Standard Surveys (Cycle 3)	2014-2020
Average Number of Health Deficiencies from Complaint Surveys (Cycle 3)	2014-2020
Average Health Deficiency Score (Cycle 3)	2014-2020
Average Number of Health Survey Repeat Visits (Cycle 3)	2014-2020
Average Points Associated with Health Survey Repeat Visits (Cycle 3)	2014-2020

Figures	Date Range for Data
Nursing Home Compare (Total Plus 5 Regions; total Plus 3 Regions)	
Average Total Health Inspection Score (Cycle 3)	2014-2020
Average Total Weighted Health Survey Score for Three cycles	2014-2020
Average Number of Facility-Reported Incidents	2014-2020
Average Number of Substantiated Complaints	2014-2020
Average Number of Fines	2014-2020
Average Total Amount of Fines in Dollars	2014-2020
Average Number of Payment Denials	2014-2020
Average Total Number of Penalties	2014-2020
Wages (Total Plus 5 Regions; Total Plus 3 Regions)	
Average Total Annual RN Wages Per Facility	2012-2018
Average Total Annual LPN Wages Per Facility	2012-2018
Average Total Annual CNA Wages Per Facility	2012-2018
Average Total Annual Nursing Wages Per Facility	2012-2018
RN Annual Median Wage	2012-2019
LPN Annual Median Wage	2012-2019
CNA Annual Median Wage	2012-2019
Overall Nursing Annual Median Wage	2012-2019
RN Median Hourly Wage	2012-2019
LPN Median Hourly Wage	2012-2019
CNA Median Hourly Wage	2012-2019
Overall Median Nursing Hourly Wage	2012-2019
Census/Projections (Total Plus 5 Regions; Total Plus 3 Regions)	
Total Population	2010-2019, 2025-2040
Percent Total Population by Region	2010-2019, 2025-2040
Number 65 Years and Older	2010-2019, 2025-2040
Number 75 Years and Older	2010-2019, 2025-2040
Number 85 Years and Older	2010-2019, 2025-2040

Figures	Date Range for Data
Census/Projections (Total Plus 5 Regions; Total Plus 3 Regions)	
Percent Population 65 Years and Older	2010-2019, 2025-2040
Percent Population 75 Years and Older	2010-2019, 2025-2040
Percent Population 85 Years and Older	2010-2019, 2025-2040
Total Male	2010-2019, 2025-2040
Total Female	2010-2019, 2025-2040
Percent Male	2010-2019, 2025-2040
Percent Female	2010-2019, 2025-2040
Total White (alone/only)	2010-2019
Total Black (alone/only)	2010-2019
Total Hispanic	2010-2019
Percent White (alone/only)	2010-2019
Percent Black (alone/only)	2010-2019
Percent Hispanic	2010-2019
Total White Female (alone/only)	2010-2019
Total Black Female (alone/only)	2010-2019
Total Hispanic Female	2010-2019
Percent White Female (alone/only)	2010-2019
Percent Black Female (alone/only)	2010-2019
Percent Hispanic Female	2010-2019
Total White Male (alone/only)	2010-2019
Total Black Male (alone/only)	2010-2019
Total Hispanic Male	2010-2019
Percent White Male (alone/only)	2010-2019
Percent Black Male (alone/only)	2010-2019
Percent Hispanic Male	2010-2019
Pennsylvania Nursing Home Reports (Total Plus 5 Regions; Total Plus 3 Regions)	
Mean Licensed Beds Per Nursing Home	2010-2018

Figures	Date Range for Data
Pennsylvania Nursing Home Reports (Total Plus 5 Regions; Total Plus 3 Regions)	
Mean Annual Total Patient Days Per Nursing Home	2010-2018
Mean Annual Total Bed Days Available Per Nursing Home	2010-2018
Mean Annual Occupancy Rate	2010-2018
Mean Annual Medicare Patient Days Per Nursing Home	2010-2017
Mean Ratio Annual Medicare Patient Days/Total Patient Days	2010-2017
Mean Annual Medicaid Patient Days Per Nursing Home	2010-2017
Mean Ratio Annual Medicaid Patient Days/Total Patient Days	2010-2017
Mean Annual VA Patient Days Per Nursing Homes	2010-2017
Mean Ratio Annual VA Patient Days/Total Patient Days	2010-2017
Mean Private Insurance Patient Days Per Nursing Home	2010-2017
Mean Ratio Annual Private Insurance Patient Days/Total Patient Days	2010-2017
Mean Annual Self-Pay Days Per Nursing Home	2010-2017
Mean Ratio Annual Self-Pay Patient Days/Total Patient Days	2010-2017
Mean Annual Other Payments Patient Days Per Nursing Home	2010-2017
Mean Ratio Annual Other Payment Patient Days/Total Patient Days	2010-2017
Mean Private Room Daily Charge	2010-2017
Mean Semi-Private Room Daily Charge	2010-2017
Mean Other Type of Room Daily Charge	2010-2017
Mean Medicare Per Diem Reimbursement Rate	2010-2017
Mean Medicaid Per Diem Reimbursement Rate	2010-2017
Mean VA Per Diem Reimbursement Rate	2010-2017
Mean Private Insurance Per Diem Reimbursement Rate	2010-2017
Mean Other Type of Payment Reimbursement Rate	2010-2017
Mean Ratio Medicaid Per Diem Rate/Private Room Daily Charge	2010-2017
Mean Ratio Medicaid Per Diem Rate/Semi-Private Room Daily Charge	2010-2017
Mean Ratio Medicaid Per Diem Rate/Average Private and Semi-Private Room Daily Charge	2010-2017
Mean Estimated Annual Medicare Revenue	2010-2017

Figures	Date Range for Data
Pennsylvania Nursing Home Reports (Total Plus 5 Regions; Total Plus 3 Regions)	
Mean Estimated Annual Medicaid Revenue	2010-2017
Mean Estimated Annual VA Revenue	2010-2017
Mean Estimated Annual Private Insurance Revenue	2010-2017
Mean Estimated Annual Other Type of Revenue	2010-2017
Mean Estimated Annual Self-Pay Revenue (Using Private Room Charge)	2010-2017
Mean Estimated Annual Self-Pay Revenue (Using Semi-Private Room Charge)	2010-2017
Mean Estimated Annual Self-Pay Revenue (Using Average Private and Semi-Private Room Charges)	2010-2017
Mean Estimated Annual Total Revenue	2010-2017
Mean Annual Ratio of Medicare Revenue to Total Revenue	2010-2017
Mean Annual Ratio of Medicaid Revenue to Total Revenue	2010-2017
Mean Annual Ratio of VA Revenue to Total Revenue	2010-2017
Mean Annual Ratio of Private Insurance Revenue to Total Revenue	2010-2017
Mean Annual Ratio of Other Revenue to Total Revenue	2010-2017
Mean Annual Ratio of Self-Pay Revenue to Total Revenue (Using Average Private and Semi-Private Room Charge)	2010-2017
Mean Licensed Beds Medicare (including 0s)	2010-2018
Mean Licensed Beds Medicaid (including 0s)	2010-2018
Mean Licensed Beds Medicare (excluding 0s)	2010-2018
Mean Licensed Beds Medicaid (excluding 0s)	2010-2018
Mean Ratio Medicare Beds [Including 0s]/Total Licensed Beds	2010-2018
Mean Ratio Medicaid Beds [Including 0s]/Total Licensed Beds	2010-2018
Meant Total Annual Discharges	2010-2018
Mean Total Annual Admissions	2010-2018
Mean Total Length of Stay Discharged/Deceased Residents	2010-2018
Mean Average Length of Stay Discharged/Deceased Residents	2010-2018
Mean Total Death Count	2010-2018
Mean Percent Residents Under 65 (6/30)	2010-2018

Figures	Date Range for Data
Pennsylvania Nursing Home Reports (Total Plus 5 Regions; Total Plus 3 Regions)	
Meant Percent Residents Over 65 (6/30)	2010-2018
Mean Percent Residents 65-74 (6/30)	2010-2018
Mean Percent Residents 75-84 (6/30)	2010-2018
Mean Percent Residents 75+ (6/30)	2010-2018
Mean Percent Residents 85+ (6/30)	2010-2018
Mean Percent Residents Female (6/30)	2010-2018
Mean Percent Residents Male (6/30)	2010-2018
Mean Percent Residents Female 65+ (6/30)	2010-2018
Mean Percent Residents Male 65+ (6/30)	2010-2018
Mean Percent Residents Female 75+ (6/30)	2010-2018
Mean Percent Residents Male 75+ (6/30)	2010-2018
Mean Percent Residents Female 65-74 (6/30)	2010-2018
Mean Percent Residents Male 65-74 (6/30)	2010-2018
Mean Percent Residents Female 75-84 (6/30)	2010-2018
Mean Percent Residents Male 65-84 (6/30)	2010-2018
Mean Percent Residents Female 85+ (6/30)	2010-2018
Mean Percent Residents Male 85+ (6/30)	2010-2018
Total Patient Days	2010-2018
Total Medicare Patient Days	2010-2017
Total Medicaid Patient Days	2010-2017
Total VA Patient Days	2010-2017
Total Private Insurance Patient Days	2010-2017
Total Self-Pay Patient Days	2010-2017
Total Other Payments Patient Days	2010-2017
Percent Total Patient Days Medicare	2010-2017
Percent Total Patient Days Medicaid	2010-2017
Percent Total Patient Days VA	2010-2017

Figures	Date Range for Data
Pennsylvania Nursing Home Reports (Total Plus 5 Regions; Total Plus 3 Regions)	
Percent Total Patient Days Private Insurance	2010-2017
Percent Total Patient Days Self-Pay	2010-2017
Percent total Patient Days Other Payments	2010-2017
Total Residents (6/30)	2010-2018
Total Female Residents (6/30)	2010-2018
Total Male Residents (6/30)	2010-2018
Total Female Residents 65+ (6/30)	2010-2018
Total Female Residents 75+ (6/30)	2010-2018
Total Female Residents 85+ (6/30)	2010-2018
Total Female Residents 95+ (6/30)	2010-2018
Total Male Residents 65+ (6/30)	2010-2018
Total Male Residents 75+ (6/30)	2010-2018
Total Male Residents 85+ (6/30)	2010-2018
Total Male Residents 95+ (6/30)	2010-2018
Total Residents Under 65 (6/30)	2010-2018
Total Residents 65+ (6/30)	2010-2018
Total Residents 75+ (6/30)	2010-2018
Total Residents 85+ (6/30)	2010-2018
Total Residents 95+ (6/30)	2010-2018
Percent Female Residents (6/30)	2010-2018
Percent Male Residents (6/30)	2010-2018
Percent Female Residents 65+ (6/30)	2010-2018
Percent Female Residents 75+ (6/30)	2010-2018
Percent Female Residents 85+ (6/30)	2010-2018
Percent Female Residents 95+ (6/30)	2010-2018
Percent Male Residents 65+ (6/30)	2010-2018
Percent Male Residents 75+ (6/30)	2010-2018

Figures	Date Range for Data
Pennsylvania Nursing Home Reports (Total Plus 5 Regions; Total Plus 3 Regions)	
Percent Male Residents 85+ (6/30)	2010-2018
Percent Male Residents 95+ (6/30)	2010-2018
Percent Residents Under 65 (6/30)	2010-2018
Percent Residents 65+ (6/30)	2010-2018
Percent Residents 75+ (6/30)	2010-2018
Percent Residents 85+ (6/30)	2010-2018
Percent Residents 95+ (6/30)	2010-2018
Total Medicare Revenue	2010-2017
Total Medicaid Revenue	2010-2017
Total VA Revenue	2010-2017
Total Private Insurance Revenue	2010-2017
Total Other Revenue Types	2010-2017
Total Self-Pay Revenue (Using Average Private and Semi-Private Room Charge)	2010-2017
Total Revenue	2010-2017
Percent Total Revenue Medicare	2010-2017
Percent Total Revenue Medicaid	2010-2017
Percent Total Revenue VA	2010-2017
Percent Private Insurance Revenue	2010-2017
Percent Total Revenue Other Revenue Type	2010-2017
Percent Total Revenue Self-Pay (Using Average Private and Semi-Private Room Charge)	2010-2017

The Case for Funding:

WHAT IS
HAPPENING *to*
Pennsylvania's
Nursing Homes?