

Executive Summary

*An Economic Study of*  
**LONG-TERM CARE  
COSTS IN OHIO**

*Home Care and Medicaid: Solutions for Ohio*  
**2009—Update**

*An economic study by*

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*Ohio's longest serving affiliate of the  
National Association for Home Care and Hospice*

## **Executive Summary**

In 2007 our firm, under the sponsorship of the Ohio Council for Home Care, conducted the first economic study of long-term care and Medicaid spending that was specific to Ohio. The findings proved to be a valuable guide to elected officials, state and local administrators and regulators, and others concerned about the best way to provide quality care to our fellow citizens most in need.

Much has happened since that initial report, which showed conclusively that Ohio can save millions of dollars in Medicaid funding by rebalancing spending in favor of home care—the type of care preferred by the vast majority of Ohioans. Most notably, the state’s economic condition has dramatically worsened. More than ever, state and local governments need factual information in order to make wise budget decisions.

Thus, a focus of our updated study has been determining how to judge precisely where Ohio ranks among the 50 states in rebalancing Medicaid spending between home care and institutional care. It is going to prove critical for our state to find that correct balance and empirically know the financial gain of rebalancing.

When we conducted the initial study, we found that Ohio ranked 49th among the states—above only Mississippi—in terms of the percentage of Medicaid Long-Term Care spending directed to home and community based services. We strongly believe this is the correct yardstick to use because it best reflects how dollars are actually allocated and provides a clear measure going forward of progress—or regression.

Using this standard, Ohio now ranks 44th among the 50 states in terms of the percentage of Medicaid Long-Term care spending directed to home and community based services. Obviously, an improvement—but still much below the national average and far below leading states that are saving billions of dollars by rebalancing toward home and community based care.

At the time of our initial report in 2007, home health aide reimbursement rates paid by the state to providers of home and community based services had last increased in 1998 and personal and home care rates had last increased in 2000. In contrast, the state provides by law for regular revisions of nursing home reimbursement rates.

In response to this inequity, the General Assembly approved a 3% rate increase for Medicaid home care providers in both Fiscal Year 2008 and Fiscal Year 2009. Unfortunately, the second 3% rate increase for home health Medicaid reimbursement was eliminated by the Ohio Department of Jobs and Family Services (ODJFS) and it only enacted one of the 3% increases. That was a reaction to the national economic downturn and the related rapid rise in gasoline prices, which crippled transportation dependent services.

A 3% increase for the PASSPORT program was implemented in both FY 2008 and FY 2009. Rate increases were designed to help provide the infrastructure necessary for the state to increase its reliance on home and community based services, thereby generating current and future overall long-term care cost savings.

The purpose of this update is to provide additional information regarding those actions and other steps taken impacting the cost and provision of long-term care services in Ohio since 2007.

The newest study shows that in Fiscal year 2006, Ohio allocated 28.2% of its long-term care spending to home and community based care—an improvement over the 23.6% we found two years ago when looking at the latest data from Fiscal Year 2005. That slight increase accounts for the improvement in the national rankings. However, Ohio still falls far below the 40.9 % national average of Fiscal Year 2006 and well below Oregon’s leading 73.2%.

The latest analysis also found that a troubling trend uncovered in the initial report continues unchecked—the number of elderly Ohioans continues to grow and the number of Ohioans in the care-giving age category continues to decline. According to U.S. Census projections, by 2030 the percentage of the population aged 65 and older will increase from 13% to 20%. In other words, in the next 24 years, Ohio’s elderly population will increase by half again as many elderly people currently residing in the state.

The increase in the elderly population is both relative and absolute. As the number of elderly persons rises from 1.5 million to 2.4 million, the number of adults who are not elderly will shrink from 5.9 million to 5.6 million. As a result, the number of potential caregivers will decline from 3.9 per elderly person in 2000 to 2.4 caregivers per elderly person by 2030.

The largest percentage increase in elderly persons will occur in the oldest segment, 85 years old and older. These are the elderly persons most likely to need chronic care along with support services.

Labor market data shows that Ohio would need about 13,000 additional home health aides and personal care aides by 2012—just three years from now. Estimates based on the projected increase in the elderly population suggest a need for another 13,000 home health workers by 2020 and yet another by 13,000 by 2030.

To some extent, insufficient time has elapsed to permit an evaluation of changes made in the FY 2008-09 budget period. Nevertheless, new data for the years from 2005 through 2007 continue to show that:

- Nursing home care continues to be much more expensive than home and community based care. On an annual basis, the average nursing home care cost in Ohio is estimated to be \$56,000 per resident compared to estimated home care costs per recipient of \$12,000,
- By taking Oregon’s lead, the lower cost of home care would allow Ohio to save an estimated \$1.4 billion per year if 70% of the additional long-term care recipients by 2030 received home and community based care rather than nursing home care.
- The savings still would be \$728 million per year if Ohio served just 36% (near the national average) of the additional 45,000 individuals requiring long-term care in home and community based settings in 2030.
- Even greater savings would occur if home care was also expanded to serve those already in the system. The estimated savings noted earlier is based on services for those entering the system in the future.

Once additional data for 2008 and 2009 becomes available, it’s expected Ohio will show some absolute gains in reliance on home and community based services, but it is highly unlikely that Ohio’s position relative to other states will change dramatically.

Given the facts regarding Ohio's elderly population, it is absolutely essential that public officials involved in making decisions have the best available information on hand to guide them. Several organizations, including AARP, the Kaiser Foundation, the Scripps Gerontology Center at Miami University, Ohio's Area Agencies on Aging, have done some excellent work in monitoring programs and gathering data.

Public officials would be well served by having standard measurements available to clearly track such actions as the rebalancing of Medicaid so they can take steps that provide Ohioans the care they want and deserve while also addressing budget concerns. Using the percentage of Medicaid long-term care spending directed to home and community based services allows for clear and precise comparisons of dollars saved and people served on an annual basis.

The following report is organized as follows:

**Section I** shows the latest data about spending for long-term care in Ohio in 2004, 2005 and 2006. These data show that a shift in spending from nursing home care to home and community based care (HCBS) has started in a small way. Additional information places the increases in Ohio HCBS spending into context by examining changes in Ohio's ranking on Medicaid long-term care spending devoted to home and community based services.

**Section II** updates the data comparing the relative cost of home and community based care and nursing facility care. This section also discusses projections made by other agencies and groups studying these issues. This section makes clear the benefit that would be derived by having established standards of measurement related to Medicaid rebalancing and the subsequent savings.

**Section III** reprises the population projections presented in the initial report. Since the Census Bureau has not released new data since 2007, these projections are unchanged.

*—Howard Fleeter, PhD and William Driscoll*

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*Section I: Medicaid Long Term  
Care Spending By Category,  
FY2004-2007*

Table 1 below provides Ohio Medicaid long-term care (LTC) spending data for 2004, 2005 and 2006. This expenditure data is presented in 3 categories:

- spending on nursing facility care (NF)
- spending on home and community based services (HCBS)
- Spending on institutional care for mental retardation and mental health (ICF-MR & MH)

The source of this data is the State Health Facts website operated by the Kaiser Family Foundation. The data for FY06 can be found at [Statehealthfacts.org](http://Statehealthfacts.org).<sup>1</sup>

**Table 1: Summary of Ohio’s Medicaid Long-Term Care Spending By Type of Care, 2004-2006**

Medicaid LTC Spending Category	2004 Amount	2005 Amount	2006 Amount
<b>HCBS Spending</b>	\$1,111,516,740	\$1,291,448,520	\$1,564,302,229
<b>HCBS % of Total</b>	<b>21.9%</b>	<b>23.6%</b>	<b>28.2%</b>
<b>Nursing Facility Spending</b>	\$2,724,635,222	\$2,731,859,141	\$2,657,204,713
<b>NF % of Total</b>	<b>53.8%</b>	<b>49.9%</b>	<b>47.9%</b>
<b>ICF-MR &amp; MH Spending</b>	\$1,229,599,993	\$1,451,791,311	\$1,322,967,881
<b>ICF-MR &amp; MH % of Total</b>	<b>24.3%</b>	<b>26.5%</b>	<b>23.9%</b>
<b>Total Medicaid LTC Spending</b>	<b>\$5,065,751,955</b>	<b>\$5,475,098,972</b>	<b>\$5,544,474,823</b>

Source: Kaiser Family Foundation

Table 1 shows that in 2004 Home & Community Based Services (HCBS) received roughly 22% of the Medicaid Long-Term Care funds while Nursing Facilities received nearly 54% of the funds. In 2005, HCBS spending increased to 23.6% of Medicaid LTC funds while nursing facilities received only 49.9%. In 2006 this trend continued as HCBS spending increased to 28.2% of Medicaid LTC funds and nursing facilities received 47.9% of LTC funds.

<sup>1</sup>After this report was completed, Kaiser released new numbers showing Ohio’s 2007 rank among the states in HCBS expenditures at 46th instead of 44th. Kaiser’s later data may be marginally more accurate, but, for policy-making purposes, the difference between a rank of 46 and a rank of 44 does not change any conclusions in this report.

Table 2 shows the percentage changes in Medicaid LTC funds going to the different categories from 2004 to 2006.

**Table 2: Ohio Medicaid Long-Term Care Spending, Percentage Change, 2004-2006**

Medicaid LTC Spending Category	2004-2005 % Increase	2005-2006 % Increase
HCBS Spending	16.2%	21.1%
Nursing Facility Spending	0.3%	-2.7%
ICF-MR + MH Spending	18.1%	-8.9%
<b>Total Medicaid LTC Spending</b>	<b>8.1%</b>	<b>1.3%</b>

Table 2 shows that from 2004 to 2005 Total Medicaid Long Term Care spending in Ohio increased by 8.1%. However, the changes in spending patterns were not uniform for each of the Medicaid Long Term Care spending categories. Medicaid Long Term Care spending on Home and Community Based Services in Ohio increased by 16.2% from 2004 to 2005 while spending on ICF-MR and Mental Health Facilities increased by 18.1% from 2004 to 2005. In contrast, Medicaid Long Term Care spending on Nursing Facilities in Ohio increased by only 0.3% from 2004 to 2005.

Table 2 also shows that Total Medicaid Long Term Care spending in Ohio increased by 1.3% from 2005 to 2006. However, this modest increase in overall spending masks marked differences in spending changes among the categories. Medicaid Long Term Care spending on Home and Community Based Services in Ohio increased by 21.1% from 2005 to 2006. In contrast, spending on ICF-MR and Mental Health Facilities decreased by 8.9% from 2005 to 2006 and Medicaid Long Term Care spending on Nursing Facilities in Ohio decreased by 2.7% from 2005 to 2006.

Table 3 shows how Ohio’s Medicaid Long term Care spending on Home and Community Based Services compares nationally.

**Table 3: Percentage of Medicaid Long Term Care Spending on HCBS in Ohio, Oregon and National Average, 2004-2006**

	2004 HCBS %	2005 HCBS %	2006 HCBS %
<b>Oregon</b>	71.2%	76.8%	73.2%
<b>Rank Among States</b>	1st	1st	1st
<b>National Average</b>	37.3%	39.1%	40.9%
<b>Ohio</b>	21.9%	23.6%	28.2%
<b>Rank Among States</b>	48th	49th	44th

Source: Kaiser Family Foundation

The data in Table 3 show that despite an increase in the share of Medicaid long term care spending devoted to home and community based services from 2004 to 2005, Ohio’s national rank actually declined from 48th to 49th. Despite the fact that Medicaid HCBS Long Term Care funding increased by 16.2% from 2004 to 2005, Ohio still lost ground relative to other states.

Table 3 also shows that from 2005 to 2006, Ohio’s increase in its share of Medicaid LTC spending devoted to HCBS improved its ranking to 44th. Despite this improvement, Table 3 shows that Ohio’s share of Medicaid LTC spending devoted to HCBS in 2006 is still 12.7 percentage points below the national average of 40.9%. While this does represent an improvement relative to the 15.4 percentage point gap present in 2004, Ohio remains well below the national average in spending on home and community based care and is 45 percentage points below the share of HCBS spending in Oregon, the nation’s leader in this area. (The 2007 Kaiser data shows Ohio’s percentage of HCBS spending to be 27.7%, which is 12.4 percentage points below the 2007 national average of 40.1%).

Because the 2007 Medicaid Long Term Care spending data was not posted on the State Health Facts website at the time this report was completed, other sources of data for 2007 were consulted. In March 2009 AARP released the 2009 edition of “Across the States: Profiles of Long-Term Care and Independent Living.” This data shows that in 2007 Ohio spent \$1.436 billion on HCBS, Home Health, and Personal Care Medicaid LTC services and \$2.643 billion on Nursing Facility Medicaid LTC services. Medicaid Long term care spending on ICF-MR and Mental Health were not reported in the AARP report. These figures show that in 2007 Ohio devoted 35.2% of Medicaid LTC spending to home care and 64.8% to nursing facility care. (Note that this percentage is not comparable to the 2004-2006 percentages for Ohio from the Kaiser Foundation data because the AARP data does not include ICF-MR and MH spending.) According to the AARP measure, Ohio again ranks 44th nationally in resources devoted to home care in 2007. These data are summarized in Table 4 below.

**Table 4: Percentage of Medicaid Long Term Care Spending on HCBS in Ohio, New Mexico and National Average, 2004-2006**

	2007 HCBS %
<b>New Mexico</b>	80.7%
<b>Rank Among States</b>	1st
<b>National Average</b>	52.9%
<b>Ohio</b>	35.2%
<b>Rank Among States</b>	44th

Source: AARP 2009 Across the States: Profiles of Long-Term Care and Independent Living

Tables A1 through A4 in the Appendix of this report provide state-by-state comparisons of Medicaid Long Term Care spending by category in 2004, 2005, 2006 and 2007.

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## *Section II: Relative Costs of Alternative Long Term Care Settings*

In our initial 2007 report, analysis of models of care-giving for the elderly and disabled in other states, especially Oregon and Washington, suggested that Ohio could care for more elderly persons at equal or less cost by adjusting the distribution of care-giving towards more home and community based services. The analysis showed that the primary reason for the lower per recipient cost shown in the models of other states' systems of care appeared to be lower utilization of nursing homes as long term care facilities. The reason that lower utilization of nursing homes (implying higher utilization of home and community based services) saves money is that home care costs significantly less than nursing facility care. The objective of this section of the report is to quantify the comparative cost of nursing home care with home and community based care in Ohio.

Tables 5 and 6 below show two different estimates from our 2007 report of the cost of providing long term care in Ohio in alternative service settings.

Table 5 combines data on the number of people receiving home care and nursing facility care through Medicaid with Medicaid spending figures from 2003. The Medicaid spending data was derived from the AARP Policy Institute. Combining Medicaid spending data with the number of patients yields a Nursing Home cost per person of \$56,299 and a Home Health Care cost per person of \$11,834.

**Table 5: Ohio Home Health Care and Nursing Home Medicaid Costs Per Patient, 2002/2003**

Service Setting	# of Patients	2003 Medicaid Total Spending	2003 Medicaid Spending per Patient
Nursing Homes	46,968	\$2,644,261,678	\$56,299
Home Health Care	74,481	\$881,420,559	\$11,834*

Source: 2003 Medicaid spending data from "Across the States, Profiles of Long-Term Care: Ohio," prepared by the AARP Policy Institute in 2004. \*The \$11,834 Home Health Care spending per patient assumes that the number of Medicaid Home & Personal Care participants remained the same from 2002 to 2003.

Table 6 shows the results derived by analyzing Ohio Nursing Home spending data provided by ODJFS in 2006.

**Table 6: Estimate of Nursing Home Spending Based on ODJFS Data, 2003**

	# of Residents (2003)	Total Nursing Home Spending (2003)	Nursing Home Spending per Resident (2003)
Ohio Nursing Homes All Residents	79,874	\$4,500,000,000	\$56,339
Ohio Nursing Homes Medicaid Residents	53,915	\$2,650,597,557	\$49,163

Table 6 shows that analysis of data supplied by ODJFS results in a total per person nursing home cost in 2003 of \$56,339, which is very close to the figure derived in Table 5 from the AARP and Kaiser Foundation data. However, the estimated Nursing Facility cost per Medicaid Resident is significantly lower at \$49,163. This difference is almost entirely due to an estimated number of Medicaid Nursing Home residents from the ODJFS data that is almost 7,000 persons larger than the number provided in the Kaiser Foundation data (the ODJFS Total Medicaid Nursing Facility expenditure figure for 2003 is almost identical to that derived from the AARP data for 2003). The underlying reason for this discrepancy in the number of Medicaid nursing home residents from the two data sources remains unclear.

Tables 7-10 provide updated data for the years 2007 and 2008.

Table 7 below compares the cost of three different settings for receiving long-term care.

**Table 7: Costs of Alternate Long term Care Settings, 2007**

Type of Care	Assisted Living (Per Year)	Nursing Home (Per Year, Private Room)	Home Health Aide (Per Hour)
<b>2007 Cost</b>	\$34,728	\$93,562	\$19

Source: Data prepared in 2009 by AARP from MetLife Mature Market Institute surveys.

Home health aides assist with bathing, dressing, toileting and other similar activities. Home health aid visits typically last longer than an hour.

Table 8 below shows the annual cost of care provided by a home health aide for visits of varying lengths.

**Table 8: Annual Cost of Home Health Aide Visits of Varying Lengths, 2007**

Length of Daily Visit	1.5 hours every day	3 hours every day	5 hours every day	13.5 hours every day
<b>2007 Cost</b>	\$10,402.50	\$20,805	\$34,675	\$93,623

This table shows that a home health aide would need to come every day of the year for 5 hours for the cost to approximate that of assisted living and would need to visit every day for 13.5 hours for the cost to approximate that of a nursing facility. The figures above also provide a context for the \$1400 per person month cost of the PASSPORT program included in testimony by Ohio Department of Aging Director Barbara Riley to the House Finance Human Services subcommittee.<sup>2</sup> The \$1400 figure equates to a \$16,800 average annual PASSPORT cost.

<sup>2</sup>“Testimony Before the Ohio House Finance and Appropriations Human Services Sub-Committee”; Barbara E. Riley, March 5, 2009.

Table 9 below compares the FY08 cost of providing long term care to Ohio Medicaid consumers in both nursing facility and Home and Community Based Services (HCBS) settings. This data was reported in the Health Care Special Analysis section of the FY10-11 Executive Budget.

**Table 9: FY08 Ohio Medicaid Average Costs for Nursing Home and Home and Community Based Services (HCBS) Settings**

	# of FY08 Consumers	FY08 Medicaid Cost	FY08 Cost Per Person
<b>Nursing Homes</b>	54,700	\$2,543,500,000	\$46,499
<b>HCBS</b>	27,800	\$397,100,000	\$14,284
<b>Nursing Home % of Total</b>	62.3%	86.5%	
<b>HCBS % of Total</b>	33.7%	13.5%	

Source: Page D-51 of the FY2010-2011 Executive Budget (Bluebook)

Table 9 shows that in FY08 62.3% of individuals were served in nursing facilities while 33.7% were served in home and community based settings. However, because of the higher cost of nursing facilities, 86.5% of Medicaid long-term care costs in FY08 were borne by nursing facility patients. Table 9 also shows that the average nursing home cost is 3.25 times that of the average HCBS cost (\$46,500 vs. \$14,300 in round numbers). The nursing facility cost shown here is lower than the \$93,562 cost shown in Table 7 because not all of the Medicaid nursing home consumers were in a nursing facility for an entire year.

Furthermore, Table 10 below provides other data from the Ohio Department of Jobs and Family Services (ODJFS) that shows the Medicaid cost of nursing facility care in Ohio to be closer to \$60,000 per person rather than the \$46,500 shown in Table 9. The \$58,965 cost in FY08 is 4.1 times that of the HCBS per person cost shown in Table 9. It is unclear why the Medicaid nursing home cost figures differ so dramatically.

**Table 10: Number of Medicaid Eligible Individuals in Nursing facilities and Expenditures, FY06 to FY08**

Year	# of Medicaid Eligible Individuals in Nursing Facilities	Total Medicaid Nursing Facility Expenditures	Average Expenditure per Person
<b>FY06</b>	54,585	\$3,325,824,201	\$60,929
<b>FY07</b>	53,971	\$3,069,618,754	\$56,875
<b>FY08</b>	52,803	\$3,113,516,820	\$58,965

Source: ODJFS Public Assistance Monthly Reports FY06, FY07, FY08

While the data presented in Tables 5 through 10 clearly show that nursing facility care is more costly than home and community base care, the inconsistency in the figures from one year to the next and from one data source to another raises concerns. Efforts are currently underway to work with the Ohio Department of Jobs and Family Services and the Ohio Department of Aging to develop a consistent measure of the number of individuals served in different long-term care settings along with the associated costs.

Despite the inconsistency in the data presented above, it is still possible to compute estimates of the cost savings Ohio can enjoy by providing more care in home and community based settings. Both the Health Care Special Analysis in the FY10-11 Executive Budget and the testimony to the House Finance Human Services Sub-Committee by Barbara Riley contain a graph showing the percentage of long-term care patients served in nursing facilities and through home and community services in 2004. The data in this chart was prepared by the Ohio Business Roundtable using data from AARP and is summarized in Table 11 below.

**Table 11: Long-term Care Patients Served by Site of Care in 2004, Selected States**

	Oregon	Maine	Washington	U.S. Average	1st Quartile	Midwest Average	Ohio
<b>% Patients Served in Nursing Facilities</b>	25%	30%	49%	61%	61%	66%	74%
<b>% Patients Served in HCBS</b>	75%	70%	51%	39%	39%	34%	26%

Source: AARP data, Ohio Business Roundtable Analysis

Director Riley’s testimony also notes that the Business Roundtable has estimated that Ohio could save \$900 million annually if it were to achieve the national average on spending for home and community based services relative to nursing facilities and other institutional services. Not enough information was provided to replicate or fully understand how this number was arrived at.

It is possible, however, to use the data in Table 9 on the previous page to compute a simple estimate of the cost savings that Ohio could enjoy by rebalancing its provision of long-term care services. The figures in Table 9 show that 33.7% of consumers were served in a home or community based setting in FY08. Rebalancing the provision of services so that 39% of consumers would be served in the home or community setting would result in 32,175 people in HCBS settings and 50,325 in nursing homes in FY08 (39% is the 2004 national average shown in Table 11 – still the most recent data of this type available). Because Table 9 shows that it costs roughly \$32,000 less per person to provide service in the HCBS setting as compared to a nursing home, the cost savings from serving 4,375 more people at home is roughly \$140 million. The savings would be roughly twice this amount had we used the 2004 Ohio HCBS provision percentage of 26% as did the Business Roundtable. Similarly, if the FY08 U.S. average has increased to 45% served in home and community settings the cost savings are roughly \$300 million.

Thus two methods exist for assessing where Ohio stands with its HCBS programs for long-term care relative to other states or to the national average. One method relates the percentage of long-term care *spending* for HCBS in Ohio relative to the percentage of HCBS *spending* in other states and the nation as a whole. The other method relates the percentage of *persons receiving long-term care* in the HCBS setting in Ohio to the percentage in other states and the nation as a whole. The Business Roundtable appears to have used the former method. They estimated that the achievement of an average pattern of *spending* would save \$900 million per year. In contrast, the estimate in the preceding paragraph focuses on the percentage of *persons* who receive HCBS.

An attempt to adjust Ohio’s long-term care *spending* to approximate the national average would require moving roughly 27,000 from nursing home care to HCBS. Such a change in Ohio’s pattern of long-term care would save about the amount estimated by the Business Roundtable.

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*Section III: Projections of Ohio  
Population and Number of  
Nursing Home Residents,  
2000–2030*

This section presents data about the changes anticipated in Ohio’s population between 2000 and 2030. It also uses data about nursing home residents from the beginning of this period to project the number of persons who would qualify for nursing home residency in the years 2010, 2020, and 2030 assuming the continuation of current policies for long term care of elderly persons in the state. Because the underlying population projections from the US Census have not been updated, the information in this section is unchanged from the 2007 version of our report.

Table 12 shows the population estimates for persons in selected age groups over the period from 2000 through 2030.

**Table 12: Ohio Population in 2000 and Census Bureau Population Projections for 2010, 2020, and 2030 for Selected Age Groups**

	2000	2010	2020	2030
<b>Under 18</b>	2,888,339	2,744,431	2,703,516	2,640,671
<b>18 – 24</b>	1,056,544	1,093,946	991,176	981,836
<b>25 – 64</b>	5,900,500	6,150,823	5,970,902	5,570,999
<b>65 – 69</b>	402,668	457,578	628,434	631,200
<b>70 – 74</b>	387,584	358,507	509,536	594,033
<b>75 – 79</b>	325,468	288,397	337,775	471,118
<b>80 – 84</b>	215,241	235,351	230,152	338,174
<b>85+</b>	176,796	247,148	272,567	322,497
<b>Total 65+</b>	1,507,757	1,586,981	1,978,464	2,357,022
<b>Total Population</b>	<b>11,353,140</b>	<b>11,576,181</b>	<b>11,644,058</b>	<b>11,550,528</b>

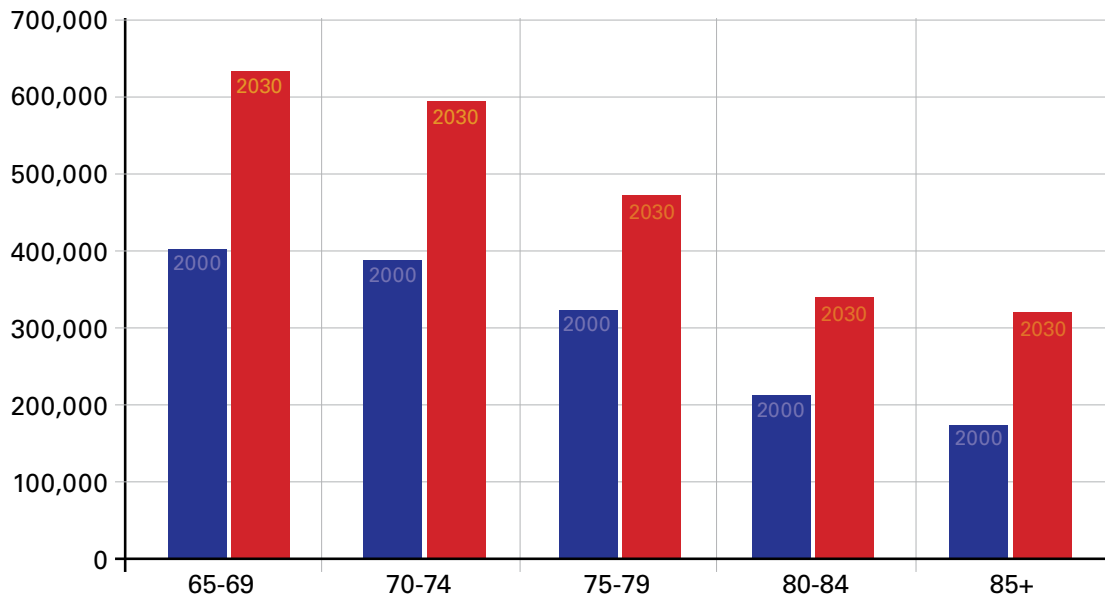
Source: US Census Bureau, Population Pyramids, 2005

The population of persons age 65 and up will increase from about 1.5 million to about 2.36 million over this period. This amounts to an increase of about 850,000 persons. In percentage terms, persons in the 65 and older age group will increase from about 13% of the population in 2000 to 20% in 2030.

These data clearly establish that the absolute number and the percentage of Ohio’s total population who are elderly will grow significantly over the 30 years covered in Table 12. This chapter will use the term “elderly” to mean persons who are 65 years of age or older.

Chart 1 summarizes the projected increases in Ohio’s elderly population by highlighting the comparison between 2000 and 2030.

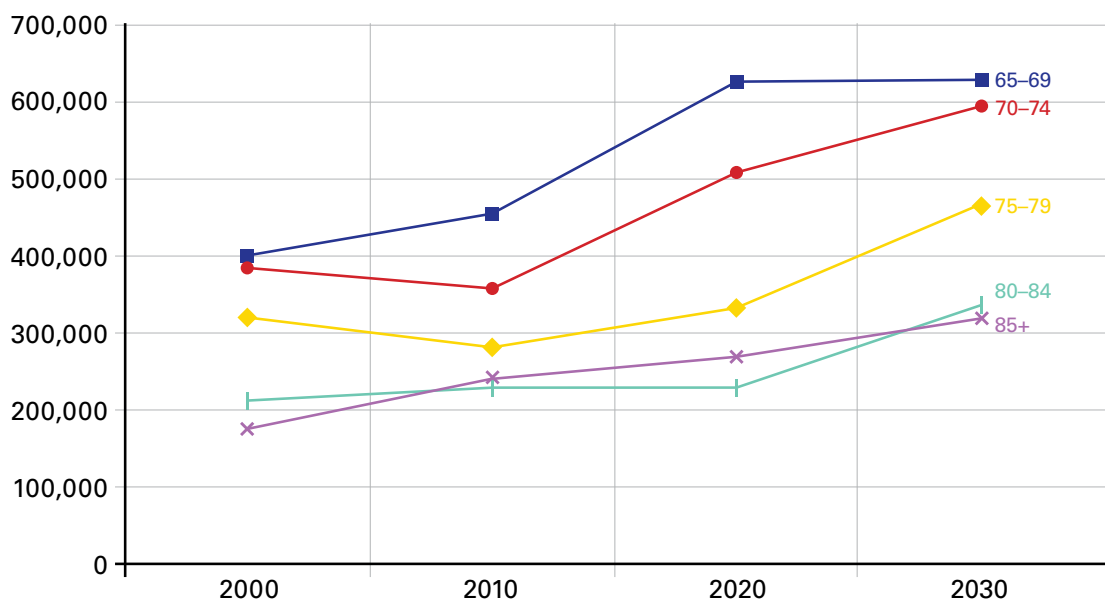
**Chart 1: Ohio Comparison of Elderly Population in 2000 and Projected Elderly Population in 2030**



As the number of elderly persons grows in Ohio, the number of persons who are not elderly grows much more slowly.

Chart 2 shows how the elderly population of the state will change between 2000 and 2030. Chart 3 follows with the perspective of the change in population among persons who are 25 through 64. This segment of the population provides the primary source of caregivers for the elderly population and for the disabled population as well.

**Chart 2: Projected Elderly Population in Ohio, 2000–2030**



**Chart 3: Ohio Projected Population of Caregivers—Age 25–64—By Gender**

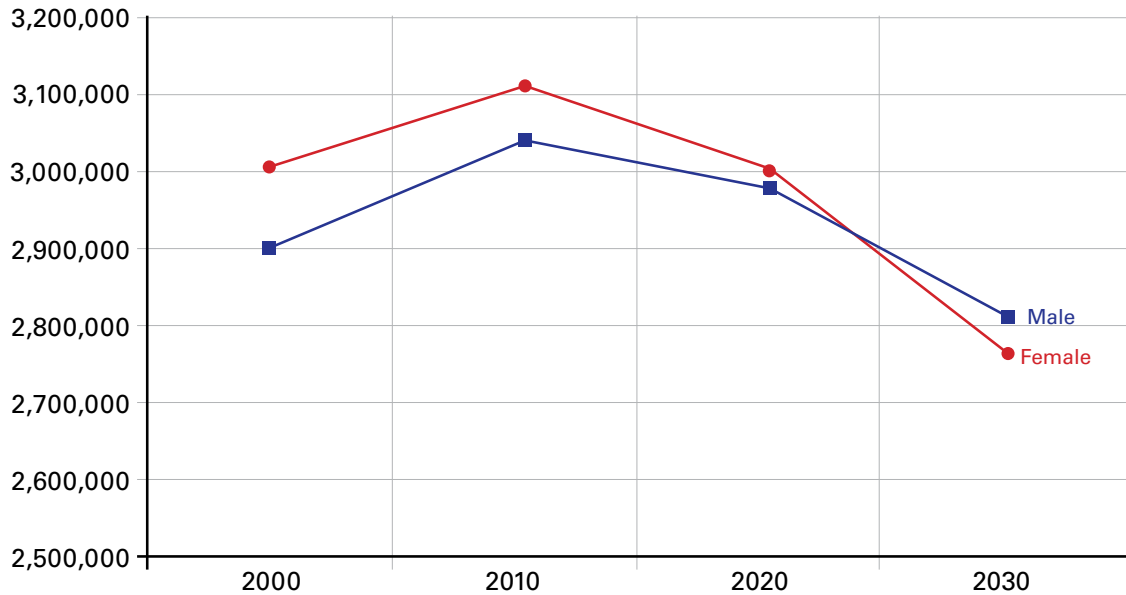


Chart 3 shows that the number of persons between 25 and 64 years of age does not only decline in relative terms as a percentage of the population. The persons in this age group will decline in absolute numbers. The projections by gender indicate that by 2030 the number of females in this age group will be fewer than the number of males. Historically, caregivers for the elderly and disabled probably have tended to include more females than males.

Chart 4 puts the data in Charts 2 and 3 together.

**Chart 4: Ratio of Projected Population of Caregivers to Projected Elderly Population in Ohio, 2000–2030**

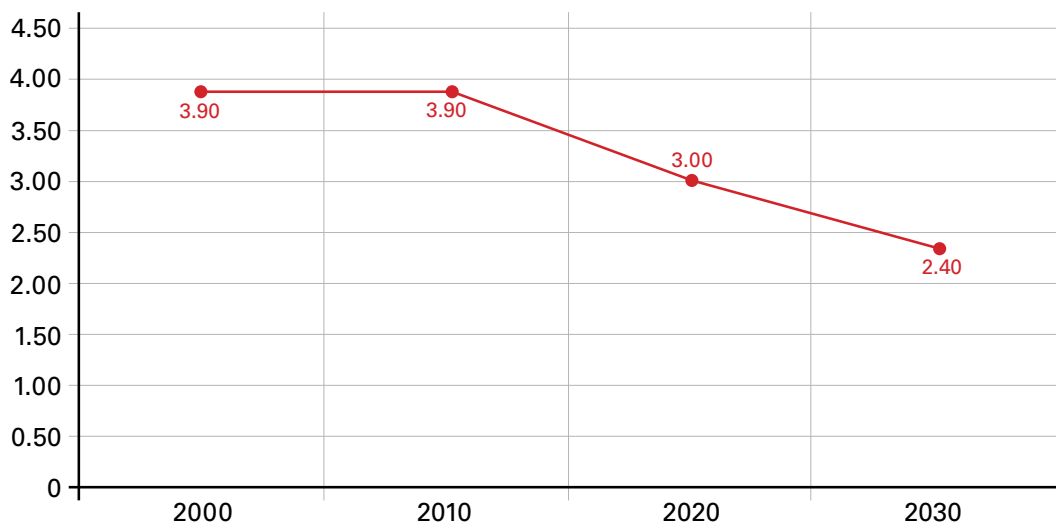


Chart 4 illustrates that the number of potential caregivers in the age 25 to 64 population will decline from 3.9 per elderly person in 2000 and 2010 to 2.4 per elderly person in 2030.

Table 13 extrapolates estimates of nursing facility residents in 2001 to project the number of nursing home residents in 2010, 2020, and 2030. These projections rely upon two assumptions. The first assumption is that there will be no systematic change in the average medical condition of a person of a given age between the present and 2030. The second assumption is that there will be no fundamental changes in the policies related to the public funding of long term care between now and 2030.

**Table 13: Projections of the Number of Nursing Facility\* Residents, 2010, 2020, and 2030**

	2001	2001 Nursing Facility Residents as a Percent of 2000 Population Age Group	2010	2020	2030
<b>18-64</b>	9,353	0.13%	9,418	9,051	8,519
<b>65-74</b>	8,417	1.07%	8,732	12,176	13,110
<b>75-84</b>	24,317	4.50%	23,569	25,557	36,418
<b>85+</b>	35,852	20.28%	50,122	55,277	65,402
<b>Total</b>	<b>77,939</b>		<b>91,841</b>	<b>102,061</b>	<b>123,449</b>

\*All nursing facilities and not certified facilities only

Source for 2001 Population: “A Ten Year Retrospective Look at Ohio’s Long Term Care System” by Shahla Mehdizadeh & Robert Applebaum; Scripps Gerontology Center, Miami University, May 2003. Projections for later years by Levin, Driscoll & Fleeter

Projections in the table resulted from computing the percentage of nursing facility residents in each age group shown in the first column. These percentages appear in the third column of the table. The multiplication of each percentage times the number of persons projected for the appropriate age group (as shown on Table 12) yielded an estimate of the number of nursing facility residents for 2010, 2020, and 2030 as displayed in the final three columns on Table 13.

For example, the 9,353 persons between the ages of 18 and 64 residing in a nursing facility in 2001 accounted for a little over one-tenth of one percent of the 5.9 million Ohio residents in this age group. The population of this group in 2010 of 6.2 million multiplied by the 0.13% factor yielded the 9,418 projected nursing facility population in 2010 for the 18 to 64 age group.

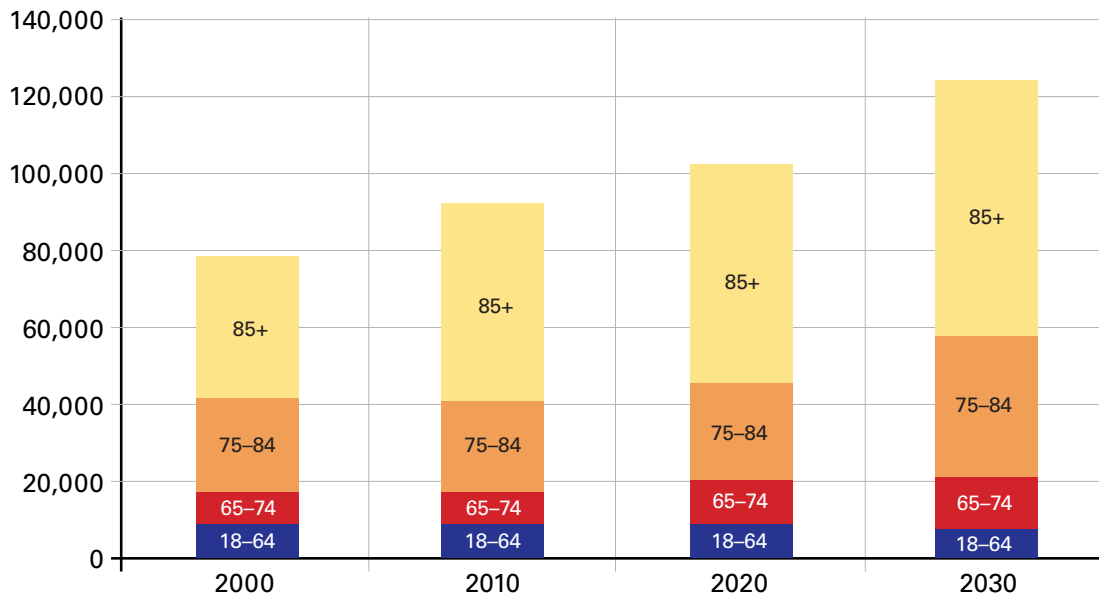
Since the table assumes a constant percentage for each age group, the number of non-elderly, i.e., disabled persons, who reside in nursing homes would decline as that segment of the population decreases over time. Such a decline would not occur if the frequency of disabilities, including developmental disabilities such as mental retardation, increased over this period. No basis existed to project such an increase in the frequency of disability. For this reason, disability remained a constant percentage by which the projection of nursing facility residents under age 65 occurred.

The number of nursing facility residents in age groups 65 and older increased for the same reason. No assumptions were made about changes in eligibility policies or criteria. Also, no assumptions altered the frequency with which elderly persons would require the kind of care provided by nursing facilities. Therefore, the increases in nursing facility residents shown on Table 13 occur solely because the oldest segments of the population will grow over this period.

If growth in the number of nursing facility residents were to occur as projected in Table 13, the number of additional residents in 2030 compared to 2000 would equal about 45,500 and the percentage increase in residents would equal about 58%.

Chart 5 shows a graphic representation of the increase in nursing facility residents by age segment of the population.

**Chart 5: Projected Nursing Facility Residents in Ohio by Age Group, 2000–2030**



Based on current ratios, it is reasonable to assume that at least half of these 45,500 additional nursing home residents will require Medicaid assistance.

# *Appendix: 2004–2007 State-by-State Data*

**Table A1: State-by-State Comparison of FY2004 Medicaid Long Term Care Spending, Ranked by Percentage of HCBS Spending**

Rank	State	HCBS %	Nursing Facility %	ICF-MR & MH %
1.	Oregon	71.2%	25.0%	3.7%
2.	New Mexico	66.7%	29.5%	3.8%
3.	Vermont	60.0%	39.6%	0.4%
4.	Alaska	58.9%	35.9%	5.2%
5.	Minnesota	57.7%	33.9%	8.3%
6.	Washington	55.1%	34.7%	10.2%
7.	Maine	54.5%	32.4%	13.0%
8.	Kansas	53.0%	37.3%	9.7%
9.	Wyoming	50.8%	34.2%	15.0%
10.	Colorado	50.6%	44.3%	5.2%
11.	Utah	46.3%	33.4%	20.3%
12.	Texas	45.1%	36.3%	18.6%
13.	New York	43.8%	37.6%	18.6%
14.	Massachusetts	43.4%	48.2%	8.4%
15.	California	42.6%	30.4%	27.0%
16.	Rhode Island	42.5%	53.4%	4.1%
17.	North Carolina	41.6%	41.0%	17.4%
18.	Idaho	40.8%	38.5%	20.7%
19.	Wisconsin	40.1%	46.9%	13.0%
20.	New Hampshire	38.5%	60.3%	1.2%
21.	Connecticut	38.3%	49.0%	12.7%
22.	Montana	38.1%	55.4%	6.5%
23.	West Virginia	38.0%	50.0%	12.0%
24.	Missouri	37.3%	46.2%	16.4%
	<b>U.S. Average</b>	<b>37.3%</b>	<b>46.0%</b>	<b>16.7%</b>
25.	Oklahoma	37.2%	45.0%	17.9%
26.	Arizona	36.9%	46.7%	16.3%
27.	South Dakota	36.8%	53.6%	9.5%
28.	Georgia	36.6%	56.6%	6.8%
29.	Hawaii	36.4%	61.1%	2.5%
30.	South Carolina	35.0%	44.3%	20.7%
31.	Maryland	34.1%	51.3%	14.6%

**Table A1: State-by-State Comparison of FY2004 Medicaid Long Term Care Spending, Ranked by Percentage of HCBS Spending (continued)**

Rank	State	HCBS %	Nursing Facility %	ICF-MR & MH %
32.	Nebraska	33.5%	52.9%	13.6%
33.	Florida	32.6%	59.0%	8.3%
34.	Iowa	32.4%	42.5%	25.1%
35.	Nevada	32.0%	47.5%	20.5%
36.	Kentucky	31.7%	54.3%	14.0%
37.	New Jersey	30.7%	47.6%	21.7%
38.	Alabama	29.9%	63.6%	6.6%
39.	Delaware	28.3%	55.6%	16.1%
40.	Virginia	27.4%	42.1%	30.5%
41.	Illinois	26.9%	47.7%	25.4%
42.	Indiana	24.7%	46.7%	28.6%
43.	Arkansas	24.6%	56.0%	19.4%
44.	Pennsylvania	24.4%	65.2%	10.4%
45.	North Dakota	23.9%	56.2%	19.9%
46.	Louisiana	23.9%	44.1%	32.0%
47.	Tennessee	23.7%	61.9%	14.4%
<b>48.</b>	<b>Ohio</b>	<b>21.9%</b>	<b>53.8%</b>	<b>24.3%</b>
49.	Michigan	20.5%	77.7%	1.8%
50.	Mississippi	14.8%	61.5%	23.8%

Source: Kaiser Family Foundation

Table A1 shows that Ohio’s 21.9% share of Medicaid Long Term Care funding directed to Home and Community Based Services ranks 48th among the 50 states in 2004. Only Michigan and Mississippi rank below Ohio. Oregon ranks first with an HCBS share of 71.2% and the national average is 37.3% of Medicaid long term care funds directed to Home and Community Based services.

Table A2 provides a state-by-state comparison of Medicaid Long Term Care spending in 2005.

**Table A2: State-by-State Comparison of FY2005 Medicaid Long Term Care Spending, Ranked by Percentage of HCBS Spending**

Rank	State	HCBS %	Nursing Facility %	ICF-MR & MH %
1.	Oregon	76.8%	18.6%	4.7%
2.	New Mexico	68.1%	28.7%	3.2%
3.	Vermont	62.2%	37.4%	0.4%
4.	Minnesota	60.8%	31.2%	8.0%
5.	Alaska	59.6%	35.1%	5.3%
6.	Washington	56.5%	35.1%	8.5%
7.	Maine	52.7%	32.3%	14.9%
8.	Wyoming	50.4%	32.5%	17.1%
9.	Kansas	50.2%	40.5%	9.3%
10.	California	49.7%	27.3%	23.0%
11.	Colorado	49.6%	44.2%	6.3%
12.	Montana	48.0%	37.7%	14.3%
13.	Texas	46.5%	35.2%	18.3%
14.	North Carolina	44.3%	38.9%	16.9%
15.	Rhode Island	44.1%	53.0%	2.9%
16.	New York	43.2%	38.4%	18.4%
17.	Wisconsin	42.9%	46.3%	10.8%
18.	Utah	42.7%	38.3%	19.0%
19.	Idaho	42.4%	36.8%	20.8%
20.	Massachusetts	40.8%	51.1%	8.1%
21.	Nevada	40.2%	42.7%	17.1%
22.	West Virginia	40.2%	48.5%	11.3%
	<b>U.S. Average</b>	<b>39.1%</b>	<b>44.4%</b>	<b>16.5%</b>
23.	Missouri	39.0%	45.5%	15.6%
24.	Arizona	38.8%	44.9%	16.3%
25.	Oklahoma	38.6%	43.9%	17.5%
26.	South Dakota	37.6%	52.4%	10.0%
27.	Connecticut	37.5%	51.3%	11.2%
28.	Hawaii	36.7%	60.8%	2.5%
29.	Nebraska	35.4%	50.3%	14.3%
30.	South Carolina	35.3%	46.6%	18.1%

**Table A2: State-by-State Comparison of FY2005 Medicaid Long Term Care Spending, Ranked by Percentage of HCBS Spending (continued)**

Rank	State	HCBS %	Nursing Facility %	ICF-MR & MH %
31.	New Hampshire	35.1%	63.8%	1.1%
32.	Iowa	34.9%	39.5%	25.6%
33.	New Jersey	34.9%	39.2%	25.9%
34.	Florida	33.6%	58.4%	8.0%
35.	Maryland	33.4%	53.0%	13.6%
36.	Georgia	32.3%	61.6%	6.1%
37.	Michigan	32.1%	66.4%	1.5%
38.	Alabama	31.1%	63.4%	5.6%
39.	Virginia	30.2%	38.8%	31.0%
40.	Kentucky	30.1%	57.4%	12.5%
41.	Illinois	29.9%	45.1%	25.0%
42.	Arkansas	27.9%	46.7%	25.4%
43.	Delaware	27.6%	51.4%	21.0%
44.	Tennessee	26.6%	54.4%	19.0%
45.	Louisiana	26.1%	44.4%	29.5%
46.	Indiana	25.3%	57.2%	17.5%
47.	North Dakota	24.7%	53.0%	22.3%
48.	Pennsylvania	23.9%	65.3%	10.8%
<b>49.</b>	<b>Ohio</b>	<b>23.6%</b>	<b>49.9%</b>	<b>26.5%</b>
50.	Mississippi	20.3%	56.6%	23.1%

Source: Kaiser Family Foundation

Table A2 shows that even though Ohio’s 2005 share of Medicaid Long Term Care funding directed to Home and Community Based Services increased from 21.9% in 2004 to 23.6% in 2005, Ohio’s rank among the 50 states actually fell from 48th in 2004 to 49th in 2005. As of 2005, only Mississippi ranks below Ohio. Oregon continues to rank first with an HCBS share of 76.8% in 2005 while the national average is 39.1% of Medicaid long term care funds directed to Home and Community Based services.

Table 6 provides a state-by-state comparison of Medicaid Long Term Care spending in

Table A3 provides a state-by-state comparison of Medicaid Long Term Care spending in 2006.

**Table A3: State-by-State Comparison of FY2006 Medicaid Long Term Care Spending, Ranked by Percentage of HCBS Spending**

Rank	State	HCBS %	Nursing Facility %	ICF-MR & MH %
1.	Oregon	73.2%	24.4%	2.5%
2.	New Mexico	67.7%	29.1%	3.2%
3.	Minnesota	62.1%	30.0%	7.9%
4.	Washington	60.8%	30.7%	8.5%
5.	Alaska	59.2%	34.8%	6.1%
6.	Kansas	58.2%	36.0%	5.8%
7.	Maine	55.3%	30.1%	14.6%
8.	California	51.7%	31.6%	16.7%
9.	Colorado	51.4%	43.8%	4.8%
10.	Wyoming	50.8%	31.1%	18.1%
11.	Wisconsin	47.7%	42.6%	9.7%
12.	Texas	46.9%	35.8%	17.3%
13.	North Carolina	46.5%	36.9%	16.7%
14.	Rhode Island	45.6%	51.3%	3.1%
15.	New York	44.9%	36.7%	18.4%
16.	Montana	44.5%	45.3%	10.2%
17.	Massachusetts	44.0%	49.6%	6.4%
18.	Idaho	43.7%	36.3%	20.0%
19.	Nevada	43.2%	38.9%	17.9%
20.	Utah	42.9%	37.8%	19.3%
21.	Missouri	42.7%	42.5%	14.7%
22.	Oklahoma	41.3%	41.6%	17.1%
23.	Arizona	41.2%	62.5%	-3.7%
	<b>US Average</b>	<b>40.9%</b>	<b>43.7%</b>	<b>15.4%</b>
24.	New Hampshire	39.5%	59.3%	1.2%
25.	South Carolina	38.4%	43.0%	18.7%
26.	West Virginia	38.2%	49.8%	12.1%
27.	South Dakota	37.9%	52.6%	9.5%
28.	Maryland	37.8%	49.9%	12.3%
29.	Iowa	37.1%	36.7%	26.1%
30.	Hawaii	37.1%	60.6%	2.3%
31.	Nebraska	36.0%	48.9%	15.1%

**Table A3: State-by-State Comparison of FY2006 Medicaid Long Term Care Spending, Ranked by Percentage of HCBS Spending (continued)**

Rank	State	HCBS %	Nursing Facility %	ICF-MR & MH %
32.	Florida	35.3%	57.1%	7.7%
33.	Michigan	34.7%	64.2%	1.2%
34.	Georgia	34.7%	59.0%	6.3%
35.	Connecticut	33.7%	52.7%	13.6%
36.	New Jersey	33.5%	46.4%	20.2%
37.	Alabama	32.0%	62.5%	5.5%
38.	Delaware	31.8%	50.3%	18.0%
39.	Kentucky	31.5%	55.6%	12.9%
40.	Virginia	29.8%	36.8%	33.4%
41.	Illinois	29.8%	45.6%	24.7%
42.	Pennsylvania	29.5%	59.8%	10.7%
43.	Louisiana	29.4%	40.4%	30.3%
<b>44.</b>	<b>Ohio</b>	<b>28.2%</b>	<b>47.9%</b>	<b>23.9%</b>
45.	Arkansas	27.9%	47.3%	24.8%
46.	Vermont	27.7%	72.3%	0.0%
47.	North Dakota	26.4%	52.8%	20.8%
48.	Tennessee	25.3%	58.4%	16.4%
49.	Indiana	22.8%	51.6%	25.6%
50.	Mississippi	17.5%	56.1%	26.4%

Source: Kaiser Family Foundation

Table A4 provides a state-by-state comparison of Medicaid Long Term Care spending in 2007. Because this data does not include Medicaid long term care spending on ICF-MR & MH services, the percentages in this table are not directly comparable to the percentages in tables 4 through 6. Not also, that according to this data, New Mexico has moved past Oregon as the national leader of the percentage of Medicaid long term care spending devoted to home care services (this is the case in the 2007 Kaiser data as well).

**Table A4: State-by-State Comparison of FY2007 Medicaid Long Term Care Spending, Ranked by Percentage of HCBS Spending (ICF-MR & MH Spending Not Included)**

Rank	State	HCBS %	Nursing Facility %
1.	New Mexico	80.7%	19.3%
2.	Oregon	74.6%	25.4%
3.	Arizona	73.2%	26.8%
4.	Washington	71.1%	28.9%
5.	California	71.1%	28.9%
6.	Minnesota	70.9%	29.1%
7.	Alaska	69.4%	30.6%
8.	Vermont	64.9%	35.1%
9.	New York	62.4%	37.6%
10.	Wyoming	61.8%	38.2%
11.	Maine	61.4%	38.6%
12.	North Carolina	60.8%	39.2%
13.	Kansas	58.5%	41.5%
14.	Nevada	57.9%	42.1%
15.	Texas	57.4%	42.6%
16.	Idaho	56.0%	44.0%
17.	Missouri	55.5%	44.5%
18.	Wisconsin	54.8%	45.2%
19.	Louisiana	54.0%	46.0%
	<b>US Average</b>	<b>52.9%</b>	<b>47.1%</b>
20.	Colorado	52.7%	47.3%
21.	Montana	51.1%	48.9%
22.	Massachusetts	50.2%	49.8%
23.	Iowa	49.4%	50.6%
24.	Oklahoma	48.6%	51.4%
25.	West Virginia	47.4%	52.6%
26.	Virginia	46.9%	53.1%
27.	Utah	46.4%	53.6%
28.	Rhode Island	46.1%	53.9%
29.	Maryland	43.7%	56.3%
30.	Nebraska	43.5%	56.5%
31.	New Jersey	42.8%	57.2%

**Table A4: State-by-State Comparison of FY2007 Medicaid Long Term Care Spending, Ranked by Percentage of HCBS Spending (ICF-MR & MH Spending Not Included) (continued)**

Rank	State	HCBS %	Nursing Facility %
32.	South Dakota	42.6%	57.4%
33.	South Carolina	41.7%	58.3%
34.	Georgia	41.4%	58.6%
35.	Illinois	41.1%	58.9%
36.	Indiana	41.1%	58.9%
37.	Hawaii	40.9%	59.1%
38.	New Hampshire	40.4%	59.6%
39.	Michigan	40.3%	59.7%
40.	Arkansas	40.2%	59.8%
41.	Connecticut	39.7%	60.3%
42.	Delaware	39.0%	61.0%
43.	Florida	37.8%	62.2%
<b>44.</b>	<b>Ohio</b>	<b>35.2%</b>	<b>64.8%</b>
45.	North Dakota	34.1%	65.9%
46.	Kentucky	34.1%	65.9%
47.	Tennessee	33.8%	66.2%
48.	Pennsylvania	31.1%	68.9%
49.	Alabama	29.1%	70.9%
50.	Mississippi	17.0%	83.0%

Source: AARP Across the States 2009