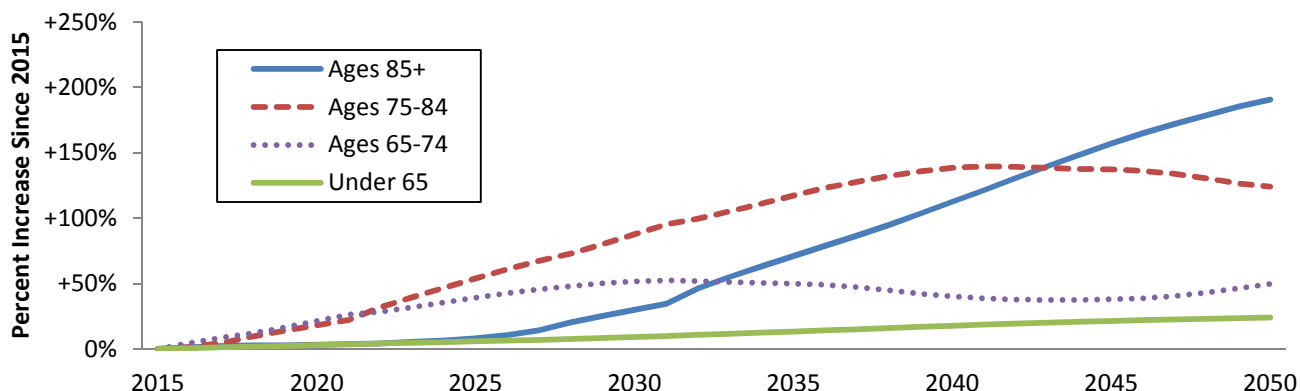


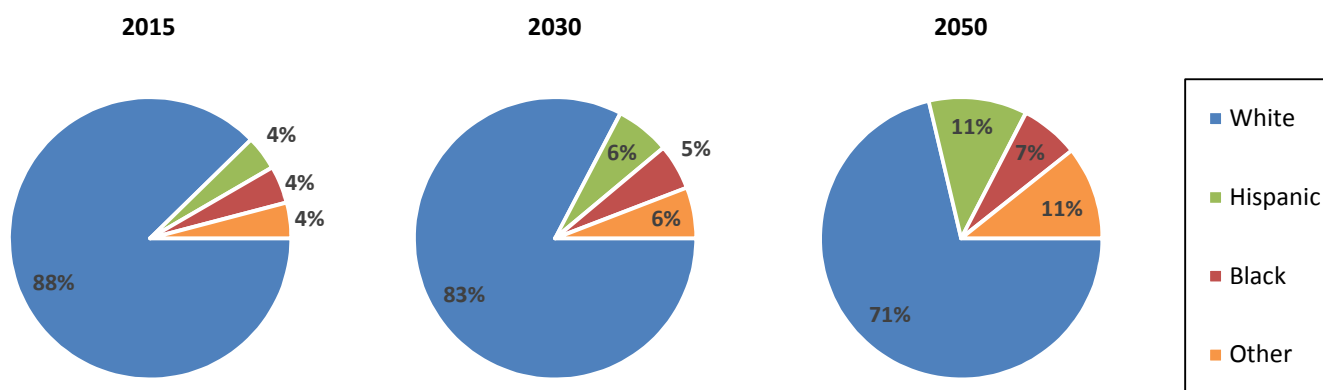
Across the States 2018: Profile of Long-Term Services and Supports in Massachusetts

Projected Population Growth in Massachusetts, by Age Group, 2015-2050



| | 2015 | | | 2030 | | | 2050 | | |
|------------------------------------|-------|------|---------|-------|------|---------|-------|------|---------|
| | State | Rank | U.S. | State | Rank | U.S. | State | Rank | U.S. |
| Population (thousands) | | | | | | | | | |
| All Ages | 6,794 | 15 | 321,419 | 7,926 | 14 | 358,380 | 9,138 | 14 | 395,882 |
| Under 65 | 5,749 | 14 | 273,658 | 6,267 | 14 | 284,013 | 7,128 | 14 | 307,819 |
| Ages 50+ | 2,460 | 13 | 110,973 | 3,001 | 14 | 134,344 | 3,762 | 14 | 160,466 |
| Ages 65+ | 1,045 | 14 | 47,761 | 1,659 | 15 | 74,367 | 2,010 | 15 | 88,062 |
| Ages 85+ | 159 | 11 | 6,287 | 206 | 15 | 9,300 | 461 | 15 | 19,385 |
| Percent of Total Population | | | | | | | | | |
| Ages 50+ | 36.2% | 16 | 34.5% | 37.9% | 23 | 37.5% | 41.2% | 16 | 40.5% |
| Ages 65+ | 15.4% | 24 | 14.9% | 20.9% | 31 | 20.8% | 22.0% | 29 | 22.2% |
| Ages 85+ | 2.3% | 10 | 2.0% | 2.6% | 25 | 2.6% | 5.0% | 27 | 4.9% |
| Percent Change from 2015 | | | | | | | | | |
| All Ages | | | | +17% | 1 | +11% | +34% | 2 | +23% |
| Under 65 | | | | +9% | 2 | +4% | +24% | 2 | +12% |
| Ages 50+ | | | | +22% | 12 | +21% | +53% | 9 | +45% |
| Ages 65+ | | | | +59% | 13 | +56% | +92% | 13 | +84% |
| Ages 85+ | | | | +30% | 41 | +48% | +191% | 28 | +208% |

Projected Diversity of the Population Ages 65+ in Massachusetts, by Year



Note: Data are ranked from highest to lowest value; this does not necessarily correspond to level of performance.

Across the States 2018: Massachusetts State Profile

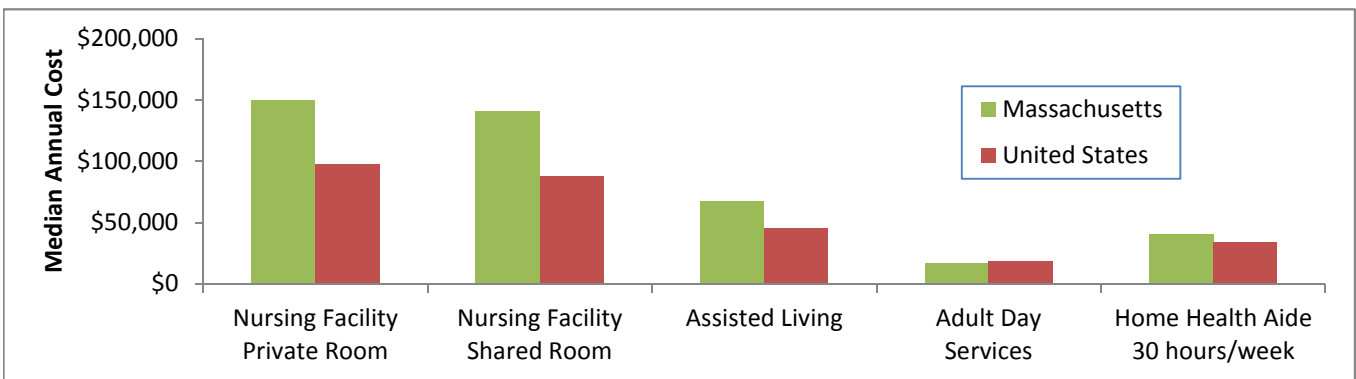
Population Characteristics

| Living Arrangements and Poverty, 2016 | Number (1,000's) | Percent | Rank | U.S. |
|---|-----------------------------|----------------|-------------|-------------|
| People ages 75+ living alone | 157 | 34.0% | 18 | 31.6% |
| People ages 65+ living in nonmetropolitan areas | 19 | 1.8% | 47 | 17.3% |
| Below poverty level ages 65+ | 88 | 8.5% | 28 | 9.2% |
| Below 250% of poverty level ages 65+ | 342 | 32% | 39 | 37% |

| Household Income, 2016 | State | Rank | U.S. |
|----------------------------------|--------------|-------------|-------------|
| Median household income ages 65+ | \$45,893 | 14 | \$42,113 |

| Disability Rates, 2016 | Number (1,000's) | Percent | Rank | U.S. |
|-------------------------------------|-----------------------------|----------------|-------------|-------------|
| People ages 65+ with disabilities | | | | |
| Self-care difficulty | 78 | 7.5% | 28 | 8.1% |
| Cognitive difficulty | 82 | 7.9% | 35 | 8.9% |
| Any disability | 331 | 32.0% | 41 | 35.0% |
| People ages 18-64 with disabilities | | | | |
| Self-care difficulty | 65 | 1.5% | 39 | 1.9% |
| Cognitive difficulty | 197 | 4.6% | 24 | 4.5% |
| Any disability | 391 | 9.0% | 41 | 10.6% |

Private Pay Costs



| Annualized Private Pay Costs by LTSS Type, 2017 | State | Rank | U.S. |
|--|--------------|-------------|-------------|
| Nursing facility, private room | \$149,650 | 4 | \$97,455 |
| Nursing facility, shared room | \$140,525 | 3 | \$87,600 |
| Assisted living | \$67,188 | 5 | \$45,000 |
| Adult day services | \$16,900 | 34 | \$18,200 |
| Home health aide (30 hours/week) | \$40,560 | 7 | \$33,540 |

| Long-Term Care Insurance, 2015 | State | Per 1,000 Ages 40+ | Rank | U.S. |
|---|--------------|-------------------------------|-------------|-------------|
| Private long-term care insurance policies in effect | 194,171 | 58 | 17 | 50 |

Note: Data are ranked from highest to lowest value; this does not necessarily correspond to level of performance.

Across the States 2018: Massachusetts State Profile

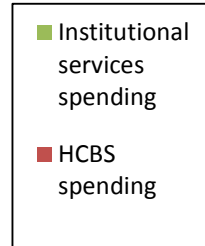
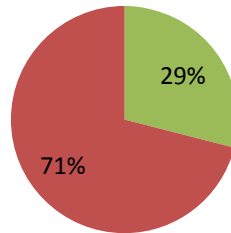
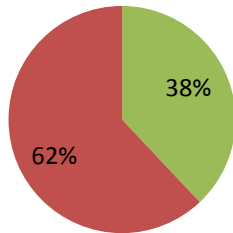
Medicaid Long Term Services and Supports

| Medicaid Spending Balance | Year | State | Rank | U.S. |
|---|----------|--------|------|-------|
| Medicaid HCBS spending as a percent of LTSS spending for older people and adults with physical disabilities | 2011 * | 45% | 11 | 38% |
| | 2016 * | 62% | 5 | 45% |
| | % change | +17.5% | 2 | +7.0% |

Medicaid LTSS Spending Balance in Massachusetts, by Population, 2016

Older People and Adults with Physical Disabilities

All Populations



| Medicaid Expenditures (Total Federal + State) | Total (millions) | Per Person | Rank | U.S. |
|---|------------------|------------|------|--------|
| Medicaid LTSS spending for older people and adults with physical disabilities, 2016 * | \$4,603 | \$674 | 3 | \$320 |
| Nursing facility spending | \$1,728 | \$253 | 12 | \$175 |
| HCBS spending | \$2,874 | \$421 | 2 | \$145 |
| Medicaid LTSS spending for all populations, 2016 * | \$7,043 | \$1,032 | 3 | \$515 |
| Institutional services spending | \$2,076 | \$304 | 16 | \$223 |
| HCBS spending | \$4,967 | \$728 | 2 | \$292 |
| State-funded HCBS expenditures for older people and adults with physical disabilities, 2014 | \$0.0 | \$0.00 | 39 | \$3.36 |

| Change in Medicaid Expenditures 2011-2016 * | % Change 2011-16 | Rank | U.S. |
|---|------------------|------|------|
| Medicaid LTSS spending for older people and adults with physical disabilities | +57% | 5 | +22% |
| Nursing facility spending | +7% | 34 | +8% |
| HCBS spending | +118% | 2 | +45% |

| Medicaid LTSS Users Ages 65+, 2013 | State | Per 1,000 Ages 65+ | Rank | U.S. |
|--------------------------------------|--------|--------------------|------|------|
| All Medicaid LTSS users ages 65+ *** | 87,490 | 89 | 1 | 47 |
| Institutional services only *** | 30,312 | 31 | 9 | 22 |
| HCBS only ** | 47,022 | 48 | 3 | 23 |
| HCBS and institutional services ** | 10,156 | 10.3 | 1 | 2.8 |

| Medicaid LTSS Users, All Ages, 2013 | State | Per 1,000 People | Rank | U.S. |
|-------------------------------------|---------|------------------|------|------|
| All Medicaid LTSS users *** | 159,658 | 23.8 | 3 | 16.4 |
| Institutional services only *** | 45,143 | 6.7 | 9 | 4.7 |
| HCBS only *** | 99,662 | 14.9 | 4 | 11.1 |
| HCBS and institutional services *** | 14,853 | 2.2 | 1 | 0.7 |

Note: Data are ranked from highest to lowest value; this does not necessarily correspond to level of performance.

* 2014 data used instead of 2016 for 4 states (AK, CA, ID, KS); base year other than 2011 for 3 states (MA, NJ, NM).

** 14 states are excluded because of missing, old, or unreliable data. The highest rank is 37.

*** 9 states are excluded because of missing, old, or unreliable data. The highest rank is 42.

Across the States 2018: Massachusetts State Profile

Family Caregivers

| | State | Per 1,000 People | Rank | U.S. |
|---|----------|------------------|------|---------|
| Number of family caregivers, 2013 | 844,000 | 126 | 27 | 127 |
| Economic value of family caregiving, 2013 (millions) | \$11,600 | \$1.73 | 3 | \$1.49 |
| Economic value per hour, 2013 | \$14.75 | | 3 | \$12.51 |
| Ratio of economic value to Medicaid HCBS spending, 2013 | 4.5 | | 38 | 6.2 |
| Caregiver Support Ratio (age 45-64 per age 80+), 2015 | 6.5 | | 36 | 7.0 |
| Caregiver Support Ratio, 2050 (projected) | 3.0 | | 19 | 2.9 |

Home and Community-Based Services

| Personal Care and Home Health Aides | State | Per 1,000 AWD * | Rank | U.S. |
|--|---------|-----------------|------|---------|
| Personal care aides, 2015 ** | 25,568 | 175 | 14 | 148 |
| Median hourly wage, 2017 | \$13.75 | | 4 | \$11.11 |
| Home health aides, 2015 ** | 20,301 | 138 | 6 | 104 |
| Median hourly wage, 2017 | \$14.30 | | 3 | \$11.16 |

| Congregate and Home Delivered Meals, 2016 | State | Per 1,000 Ages 65+ | Rank | U.S. |
|--|----------|--------------------|------|------|
| People receiving OAA congregate meals | 27,868 | 26 | 35 | 32 |
| People receiving OAA home delivered meals | 48,728 | 45 | 5 | 17 |
| Total OAA meal expenditures (thousands) | \$67,988 | \$63 | 7 | \$31 |

| Assisted Living Supply, 2014 | State | Per 1,000 Ages 75+ | Rank | U.S. |
|--|--------|--------------------|------|------|
| Assisted living and residential care units *** | 13,600 | 30 | 42 | 52 |

Nursing Facilities

| Nursing Facilities, Utilization, and Resources | State | Per 1,000 Ages 75+ | Rank | U.S. |
|---|---------|--------------------|------|---------|
| Total nursing facilities, 2016 | 409 | 0.89 | 23 | 0.76 |
| Nursing facility beds, 2016 | 46,848 | 102 | 15 | 80 |
| Nursing facility residents, 2016 | 40,003 | 87 | 12 | 65 |
| Nursing facility occupancy rate, 2016 | 85% | | 18 | 81% |
| % Change in nursing facility residents, 2011-2016 | -6.4% | | 37 | -3.9% |
| Direct care nursing hours per resident day, 2016 | 4.02 | | 29 | 4.03 |
| RN hours per resident day, 2016 | 0.86 | | 25 | 0.79 |
| Nursing assistants, 2015 ** | 23,083 | 51 | 23 | 43 |
| Median hourly wage, 2017 | \$14.92 | | 11 | \$13.23 |

| Nursing Facility Quality and Resident Characteristics | State | Rank | U.S. |
|---|-------|------|-------|
| Long-stay residents receiving an antipsychotic medication, 2017 | 17.9% | 10 | 15.5% |
| High-risk residents with pressure sores, 2017 | 4.4% | 37 | 5.6% |
| Long-stay residents with a hospital admission, 2014 | 12.6% | 38 | 17.0% |
| Nursing facility residents with low care needs, 2014 **** | 11.0% | 27 | 11.5% |
| Residents with Medicaid as primary payer, 2016 | 63% | 19 | 62% |
| Residents with Medicare as primary payer, 2016 | 11% | 36 | 14% |
| Residents with "other" as primary payer, 2016 | 26% | 16 | 25% |

Note: Data are ranked from highest to lowest value; this does not necessarily correspond to level of performance.

* Adults With Disabilities (defined as having self-care difficulty, equivalent to ADL level of disability).

** Average of three years 2014-2016.

*** Total capacity is rounded to the nearest hundred. Data not reported for two states. The highest rank is 49.

**** Data not reported for two states. The highest rank is 49.