**TITLE OF DATA REQUEST:** Nurse and Aide Staffing Levels Among Residential Care Communities that Primarily Serve Residents with a Diagnosis of Alzheimer's Disease or Other Dementias and Other Residential Care Communities, by State: United States, 2014

**DATA REQUESTER:** Fedor Zarkhin, data reporter for *The Oregonian/OregonLive*

**DATA REQUEST OVERVIEW:** This data request was submitted by Fedor Zarkhin, a data reporter for *The Oregonian/OregonLive*, on April 12, 2016. The request was received and processed by Vincent Rome with the assistance of Manisha Sengupta, Ph.D.

The requester was initially interested in the average hours per resident per day (HPRD) that registered nurses, licensed practical or vocational nurses, and aides provided care to residents in residential care communities that (1) exclusively served residents with dementia, (2) had a dementia care wing, and (3) neither exclusively served dementia residents nor had a dementia care wing. The requester was also interested in state-level estimates more specifically, and these estimates had to be reportable for the requester's home state of Oregon.

After an initial review for confidentiality and reliability of the estimates, NCHS determined that the data were not robust enough to be able to report on the state of Oregon using the requestor's original categorization of the subpopulations. As a result, NCHS tested a variety of breakouts that best met the requester's original parameters and also provided enough data to report on the majority of states, including Oregon. NCHS recommended using a breakout that was derived from a study of the adult day services sector by Anderson et al., 2014, which defined adult day services centers that had 80% or more of participants with a diagnosis of intellectual or developmental disability as "primarily serving" participants with this diagnosis. For the purposes of this data request, communities that primarily serve residents with a diagnosis of Alzheimer's disease or other dementias is based on a prevalence of 80% or more in the community.

This data request was submitted for branch review by Vincent Rome and Manisha Sengupta on August 16, 2016. Branch approval was received on September 8, 2016. Please see the tables below for the requested estimates.

**METHODS:** Data are from the residential care community survey component of the 2014 wave of the biennial National Study of Long-Term Care Providers (NSLTCP). To be eligible for the study, a residential care community must: a) be regulated by the state to provide room and board with at least two meals a day, around-the-clock on-site supervision, and help with personal care such as bathing and dressing or health-related services such as medication management; b) have four or more licensed, certified, or registered beds; c) have at least one resident currently living in the community at the time of the survey; and d) serve a predominantly adult population. The survey used a combination of probability sampling in some states and census-taking in other states.

Data analyses were performed using both Stata SE 12.1 and SAS version 9.3/SAS-callable SUDAAN version 11.0.0 statistical package. Differences among subgroups were evaluated using *t* tests. All statistical significance tests were two-sided using $p < 0.05$ as the level of significance. About 6% of cases had missing data for the number of residents with a diagnosis of Alzheimer's disease or other dementias and

were excluded from the analyses. About 3% of cases with missing data for hours per resident per day across all staff types tracked by the study—registered nurses, licensed practical or vocational nurses, aides, social workers, and activities staff—were recoded to missing. Less than 2% of cases that had missing staff data for some, but not all staff types tracked by the study, were recoded to zero. When the value of hours per resident per day for a given staff type was greater than 24, these values were coded as 24.

**DEFINITIONS:**

*Aide*—Refers to certified nursing assistants, nursing assistants, home health aides, home care aides, personal care aides, personal care assistants, and medication technicians or medication aides.

*Communities that primarily serve residents with a diagnosis of Alzheimer's disease or other dementias*—Based on a prevalence of 80% or more within the community. The methodology used to determine the cutoff for communities that primarily served residents with a diagnosis of Alzheimer's disease or other dementias was derived from a recent study by Anderson, Park, Monteleone, and Dabelko-Schoeny on adult day services centers: *Anderson, K. A., et al. (2014). "Heterogeneity within adult day services: a focus on centers that serve younger adults with intellectual and developmental disabilities."* Home Health Care Serv Q *33(2): 77-88.*

*Residential care communities*—Includes assisted living communities and other residential care communities (e.g., personal care homes, adult care homes, board care homes, and adult foster care) that meet the study eligibility criteria specified in "Methods."

*Staffing level*—The average number of staffing hours per resident per day, which is the ratio of the average number of hours providing care per resident per day for a given nursing staff type. The number of full-time equivalents (FTEs) for a given staff type for a community was converted into hours by multiplying each FTE (or fraction of FTE) for the staff type at the community by 35 hours, then dividing the total number of hours for the staff type by the number of current residents in the community, and dividing that estimate by 7 days to arrive at hours per resident day. Nursing staff hours per resident per day does not necessarily reflect the amount of care given to a specific resident. Estimates include employee and contract staff hours.

**RESULTS:**

**TABLE 1.** Mean registered nurse hours per resident per day in communities that primarily serve residents with a diagnosis of Alzheimer's disease or other dementias and communities that do not primarily serve residents with this diagnosis, by state: United States, 2014

| Mean registered nurse HPRD in residential care communities that **primarily serve (80% or more)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Mean registered nurse HPRD in residential care communities that **do not primarily serve (less than 80%)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Are the means between communities that **primarily serve** residents with a diagnosis of Alzheimer's disease or other dementias and communities that **do not primarily serve** residents with this diagnosis statistically significantly different at p<.05 level of significance? | |
|---|---|---|---|---|---|---|---|
| State Abbreviation | Mean | Standard Error | State Abbreviation | Mean | Standard Error | State Abbreviation | (YES/NO) |
| United States | 0.30 | 0.03 | United States | 0.28 | 0.02 | United States | NO |
| Alabama | 0.36 | 0.07 | Alabama | 0.14 | 0.02 | Alabama | YES |
| Alaska | 0.31 | 0.08 | Alaska | 0.34 | 0.06 | Alaska | NO |
| Arizona | - | - | Arizona | 0.28 | 0.08 | Arizona | NO |
| Arkansas | 0.03 | 0.01 | Arkansas | 0.17 | 0.03 | Arkansas | YES |
| California | - | - | California | 0.21 | 0.06 | California | NO |
| Colorado | * | * | Colorado | * | * | Colorado | * |
| Connecticut | * | * | Connecticut | * | * | Connecticut | * |
| Delaware | * | * | Delaware | * | * | Delaware | * |
| D.C. | * | * | D.C. | * | * | D.C. | * |
| Florida | * | * | Florida | * | * | Florida | * |
| Georgia | * | * | Georgia | * | * | Georgia | * |
| Hawaii | * | * | Hawaii | * | * | Hawaii | * |
| Idaho | 0.32 | 0.04 | Idaho | 0.27 | 0.02 | Idaho | NO |
| Illinois | * | * | Illinois | * | * | Illinois | * |
| Indiana | 0.51 | 0.18 | Indiana | 0.21 | 0.02 | Indiana | NO |
| Iowa | * | * | Iowa | * | * | Iowa | * |
| Kansas | * | * | Kansas | * | * | Kansas | * |
| Kentucky | 0.41 | 0.06 | Kentucky | 0.30 | 0.07 | Kentucky | NO |
| Louisiana | 0.15 | 0.10 | Louisiana | 0.01 | 0.00 | Louisiana | NO |
| Maine | 0.28 | 0.03 | Maine | 0.26 | 0.03 | Maine | NO |
| Maryland | * | * | Maryland | * | * | Maryland | * |

**TABLE 1.** Mean registered nurse hours per resident per day in communities that primarily serve residents with a diagnosis of Alzheimer's disease or other dementias and communities that do not primarily serve residents with this diagnosis, by state: United States, 2014

| Mean registered nurse HPRD in residential care communities that **primarily serve (80% or more)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Mean registered nurse HPRD in residential care communities that **do not primarily serve (less than 80%)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Are the means between communities that **primarily serve** residents with a diagnosis of Alzheimer's disease or other dementias and communities that **do not primarily serve** residents with this diagnosis statistically significantly different at p<.05 level of significance? | |
|---|---|---|---|---|---|---|---|
| State Abbreviation | Mean | Standard Error | State Abbreviation | Mean | Standard Error | State Abbreviation | (YES/NO) |
| Massachusetts | 0.32 | 0.06 | Massachusetts | 0.25 | 0.03 | Massachusetts | NO |
| Michigan | - | - | Michigan | - | - | Michigan | - |
| Minnesota | * | * | Minnesota | * | * | Minnesota | * |
| Mississippi | 0.18 | 0.09 | Mississippi | 0.20 | 0.03 | Mississippi | NO |
| Missouri | * | * | Missouri | * | * | Missouri | * |
| Montana | 0.31 | 0.05 | Montana | 0.40 | 0.05 | Montana | NO |
| Nebraska | 0.35 | 0.03 | Nebraska | 0.27 | 0.02 | Nebraska | YES |
| Nevada | 0.02 | 0.01 | Nevada | 0.11 | 0.04 | Nevada | YES |
| New Hampshire | 0.32 | 0.06 | New Hampshire | 0.30 | 0.04 | New Hampshire | NO |
| New Jersey | 0.10 | 0.01 | New Jersey | 0.22 | 0.02 | New Jersey | YES |
| New Mexico | 0.44 | 0.07 | New Mexico | 0.26 | 0.04 | New Mexico | YES |
| New York | * | * | New York | * | * | New York | * |
| North Carolina | * | * | North Carolina | * | * | North Carolina | * |
| North Dakota | 0.27 | 0.03 | North Dakota | 0.33 | 0.03 | North Dakota | NO |
| Ohio | * | * | Ohio | * | * | Ohio | * |
| Oklahoma | 0.20 | 0.03 | Oklahoma | 0.34 | 0.04 | Oklahoma | YES |
| Oregon | 0.40 | 0.09 | Oregon | 0.32 | 0.08 | Oregon | NO |
| Pennsylvania | * | * | Pennsylvania | * | * | Pennsylvania | * |
| Rhode Island | 0.42 | 0.07 | Rhode Island | 0.16 | 0.01 | Rhode Island | YES |
| South Carolina | * | * | South Carolina | * | * | South Carolina | * |
| South Dakota | * | * | South Dakota | * | * | South Dakota | * |
| Tennessee | 0.20 | 0.06 | Tennessee | 0.11 | 0.01 | Tennessee | NO |

**TABLE 1.** Mean registered nurse hours per resident per day in communities that primarily serve residents with a diagnosis of Alzheimer's disease or other dementias and communities that do not primarily serve residents with this diagnosis, by state: United States, 2014

| Mean registered nurse HPRD in residential care communities that **primarily serve (80% or more)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Mean registered nurse HPRD in residential care communities that **do not primarily serve (less than 80%)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Are the means between communities that **primarily serve** residents with a diagnosis of Alzheimer's disease or other dementias and communities that **do not primarily serve** residents with this diagnosis statistically significantly different at p<.05 level of significance? | |
|---|---|---|---|---|---|---|---|
| State Abbreviation | Mean | Standard Error | State Abbreviation | Mean | Standard Error | State Abbreviation | (YES/NO) |
| Texas | * | * | Texas | * | * | Texas | * |
| Utah | 0.57 | 0.18 | Utah | 0.26 | 0.03 | Utah | NO |
| Vermont | 0.38 | 0.03 | Vermont | 0.36 | 0.03 | Vermont | NO |
| Virginia | * | * | Virginia | * | * | Virginia | * |
| Washington State | - | - | Washington State | - | - | Washington State | - |
| West Virginia | * | * | West Virginia | * | * | West Virginia | * |
| Wisconsin | * | * | Wisconsin | * | * | Wisconsin | * |
| Wyoming | * | * | Wyoming | * | * | Wyoming | * |

*Estimate is not presented because estimate does not meet the standard of reliability or precision (the sample size is less than 30) or does not meet NCHS confidentiality standards.

-Sample size greater than 30, but relative standard error 30 or higher.

NOTES: About 21% of residential care communities in the United States in 2014 primarily served residents with a diagnosis of Alzheimer's disease or other dementias. Registered nurse hours per resident per day is presented as a ratio and can be converted to minutes by multiplying the ratio by 60 (minutes). For example, .26 registered nurse hours per resident per day is equal to 15.6 minutes (.26*60).

SOURCE: NCHS, National Study of Long-Term Care Providers, 2014.

**TABLE 2.** Mean licensed practical or vocational nurse hours per resident per day in communities that primarily serve residents with a diagnosis of Alzheimer's disease or other dementias and communities that do not primarily serve residents with this diagnosis, by state: United States, 2014

| Mean licensed practical or vocational nurse HPRD in residential care communities that **primarily serve (80% or more)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Mean licensed practical or vocational nurse HPRD in residential care communities that **do not primarily serve (less than 80%)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Are the means between communities that **primarily serve** residents with a diagnosis of Alzheimer's disease or other dementias and communities that **do not primarily serve** residents with this diagnosis statistically significantly different at p<.05 level of significance? | |
|---|---|---|---|---|---|---|---|
| State Abbreviation | Mean | Standard Error | State Abbreviation | Mean | Standard Error | State Abbreviation | (YES/NO) |
| United States | 0.16 | 0.01 | United States | 0.22 | 0.01 | United States | YES |
| Alabama | 0.67 | 0.07 | Alabama | 0.37 | 0.03 | Alabama | YES |
| Alaska | 0.04 | 0.01 | Alaska | 0.08 | 0.02 | Alaska | NO |
| Arizona | - | - | Arizona | - | - | Arizona | - |
| Arkansas | 0.25 | 0.05 | Arkansas | 0.21 | 0.02 | Arkansas | NO |
| California | - | - | California | - | - | California | - |
| Colorado | * | * | Colorado | * | * | Colorado | * |
| Connecticut | * | * | Connecticut | * | * | Connecticut | * |
| Delaware | * | * | Delaware | * | * | Delaware | * |
| D.C. | * | * | D.C. | * | * | D.C. | * |
| Florida | * | * | Florida | * | * | Florida | * |
| Georgia | * | * | Georgia | * | * | Georgia | * |
| Hawaii | * | * | Hawaii | * | * | Hawaii | * |
| Idaho | 0.20 | 0.03 | Idaho | 0.10 | 0.01 | Idaho | YES |
| Illinois | * | * | Illinois | * | * | Illinois | * |
| Indiana | 0.94 | 0.04 | Indiana | 0.62 | 0.02 | Indiana | YES |
| Iowa | * | * | Iowa | * | * | Iowa | * |
| Kansas | * | * | Kansas | * | * | Kansas | * |
| Kentucky | 0.76 | 0.12 | Kentucky | 0.46 | 0.12 | Kentucky | NO |
| Louisiana | 0.02 | 0.01 | Louisiana | 0.08 | 0.01 | Louisiana | YES |
| Maine | 0.10 | 0.02 | Maine | 0.09 | 0.01 | Maine | NO |
| Maryland | * | * | Maryland | * | * | Maryland | * |

**TABLE 2.** Mean licensed practical or vocational nurse hours per resident per day in communities that primarily serve residents with a diagnosis of Alzheimer's disease or other dementias and communities that do not primarily serve residents with this diagnosis, by state: United States, 2014

| Mean licensed practical or vocational nurse HPRD in residential care communities that **primarily serve (80% or more)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Mean licensed practical or vocational nurse HPRD in residential care communities that **do not primarily serve (less than 80%)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Are the means between communities that **primarily serve** residents with a diagnosis of Alzheimer's disease or other dementias and communities that **do not primarily serve** residents with this diagnosis statistically significantly different at p<.05 level of significance? | |
|---|---|---|---|---|---|---|---|
| State Abbreviation | Mean | Standard Error | State Abbreviation | Mean | Standard Error | State Abbreviation | (YES/NO) |
| Massachusetts | 0.31 | 0.05 | Massachusetts | 0.21 | 0.03 | Massachusetts | NO |
| Michigan | - | - | Michigan | - | - | Michigan | - |
| Minnesota | * | * | Minnesota | * | * | Minnesota | * |
| Mississippi | 0.22 | 0.08 | Mississippi | 0.48 | 0.06 | Mississippi | YES |
| Missouri | * | * | Missouri | * | * | Missouri | * |
| Montana | 0.35 | 0.07 | Montana | 0.14 | 0.02 | Montana | YES |
| Nebraska | 0.34 | 0.05 | Nebraska | 0.29 | 0.02 | Nebraska | NO |
| Nevada | 0.01 | 0.00 | Nevada | 0.02 | 0.01 | Nevada | NO |
| New Hampshire | 0.34 | 0.06 | New Hampshire | 0.38 | 0.04 | New Hampshire | NO |
| New Jersey | 0.38 | 0.05 | New Jersey | 0.32 | 0.02 | New Jersey | NO |
| New Mexico | 0.06 | 0.03 | New Mexico | 0.10 | 0.02 | New Mexico | NO |
| New York | * | * | New York | * | * | New York | * |
| North Carolina | * | * | North Carolina | * | * | North Carolina | * |
| North Dakota | 0.26 | 0.04 | North Dakota | 0.33 | 0.03 | North Dakota | NO |
| Ohio | * | * | Ohio | * | * | Ohio | * |
| Oklahoma | 0.37 | 0.12 | Oklahoma | 0.31 | 0.03 | Oklahoma | NO |
| Oregon | - | - | Oregon | - | - | Oregon | - |
| Pennsylvania | * | * | Pennsylvania | * | * | Pennsylvania | * |
| Rhode Island | 0.22 | 0.06 | Rhode Island | 0.12 | 0.01 | Rhode Island | NO |
| South Carolina | * | * | South Carolina | * | * | South Carolina | * |
| South Dakota | * | * | South Dakota | * | * | South Dakota | * |
| Tennessee | 0.65 | 0.06 | Tennessee | 0.41 | 0.02 | Tennessee | YES |

**TABLE 2.** Mean licensed practical or vocational nurse hours per resident per day in communities that primarily serve residents with a diagnosis of Alzheimer's disease or other dementias and communities that do not primarily serve residents with this diagnosis, by state: United States, 2014

| Mean licensed practical or vocational nurse HPRD in residential care communities that **primarily serve (80% or more)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Mean licensed practical or vocational nurse HPRD in residential care communities that **do not primarily serve (less than 80%)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Are the means between communities that **primarily serve** residents with a diagnosis of Alzheimer's disease or other dementias and communities that **do not primarily serve** residents with this diagnosis statistically significantly different at p<.05 level of significance? | |
|---|---|---|---|---|---|---|---|
| State Abbreviation | Mean | Standard Error | State Abbreviation | Mean | Standard Error | State Abbreviation | (YES/NO) |
| Texas | * | * | Texas | * | * | Texas | * |
| Utah | 0.05 | 0.02 | Utah | 0.03 | 0.01 | Utah | NO |
| Vermont | 0.12 | 0.06 | Vermont | 0.18 | 0.02 | Vermont | NO |
| Virginia | * | * | Virginia | * | * | Virginia | * |
| Washington State | - | - | Washington State | - | - | Washington State | - |
| West Virginia | * | * | West Virginia | * | * | West Virginia | * |
| Wisconsin | * | * | Wisconsin | * | * | Wisconsin | * |
| Wyoming | * | * | Wyoming | * | * | Wyoming | * |

*Estimate is not presented because estimate does not meet the standard of reliability or precision (the sample size is less than 30) or does not meet NCHS confidentiality standards.

-Sample size greater than 30, but relative standard error 30 or higher.

NOTES: About 21% of residential care communities in the United States in 2014 primarily served residents with a diagnosis of Alzheimer's disease or other dementias. Licensed practical or vocational nurse hours per resident per day is presented as a ratio and can be converted to minutes by multiplying the ratio by 60 (minutes). For example, .26 licensed practical or vocational nurse hours per resident per day is equal to 15.6 minutes (.26*60).

SOURCE: NCHS, National Study of Long-Term Care Providers, 2014.

**TABLE 3.** Mean aide staff hours per resident per day in communities that primarily serve residents with a diagnosis of Alzheimer's disease or other dementias and communities that do not primarily serve residents with this diagnosis, by state: United States, 2014

| Mean aide staff HPRD in residential care communities that **primarily serve (80% or more)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Mean aide staff HPRD in residential care communities that **do not primarily serve (less than 80%)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Are the means between communities that **primarily serve** residents with a diagnosis of Alzheimer's disease or other dementias and communities that **do not primarily serve** residents with this diagnosis statistically significantly different at p<.05 level of significance? | |
|---|---|---|---|---|---|---|---|
| State Abbreviation | Mean | Standard Error | State Abbreviation | Mean | Standard Error | State Abbreviation | (YES/NO) |
| United States | 3.17 | 0.17 | United States | 2.32 | 0.07 | United States | YES |
| Alabama | 3.10 | 0.36 | Alabama | 2.38 | 0.13 | Alabama | NO |
| Alaska | 3.16 | 0.19 | Alaska | 3.98 | 0.40 | Alaska | NO |
| Arizona | 2.65 | 0.40 | Arizona | 1.94 | 0.20 | Arizona | NO |
| Arkansas | 1.51 | 0.18 | Arkansas | 1.63 | 0.05 | Arkansas | NO |
| California | 3.25 | 0.52 | California | 1.73 | 0.16 | California | YES |
| Colorado | * | * | Colorado | * | * | Colorado | * |
| Connecticut | * | * | Connecticut | * | * | Connecticut | * |
| Delaware | * | * | Delaware | * | * | Delaware | * |
| D.C. | * | * | D.C. | * | * | D.C. | * |
| Florida | * | * | Florida | * | * | Florida | * |
| Georgia | * | * | Georgia | * | * | Georgia | * |
| Hawaii | * | * | Hawaii | * | * | Hawaii | * |
| Idaho | 3.09 | 0.20 | Idaho | 2.46 | 0.12 | Idaho | YES |
| Illinois | * | * | Illinois | * | * | Illinois | * |
| Indiana | 1.71 | 0.17 | Indiana | 1.20 | 0.06 | Indiana | YES |
| Iowa | * | * | Iowa | * | * | Iowa | * |
| Kansas | * | * | Kansas | * | * | Kansas | * |
| Kentucky | 2.66 | 0.34 | Kentucky | 1.99 | 0.19 | Kentucky | NO |
| Louisiana | 3.80 | 0.19 | Louisiana | 1.76 | 0.17 | Louisiana | YES |
| Maine | 3.12 | 0.30 | Maine | 2.35 | 0.08 | Maine | YES |
| Maryland | * | * | Maryland | * | * | Maryland | * |

**TABLE 3.** Mean aide staff hours per resident per day in communities that primarily serve residents with a diagnosis of Alzheimer's disease or other dementias and communities that do not primarily serve residents with this diagnosis, by state: United States, 2014

| Mean aide staff HPRD in residential care communities that **primarily serve (80% or more)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Mean aide staff HPRD in residential care communities that **do not primarily serve (less than 80%)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Are the means between communities that **primarily serve** residents with a diagnosis of Alzheimer's disease or other dementias and communities that **do not primarily serve** residents with this diagnosis statistically significantly different at p<.05 level of significance? | |
|---|---|---|---|---|---|---|---|
| State Abbreviation | Mean | Standard Error | State Abbreviation | Mean | Standard Error | State Abbreviation | (YES/NO) |
| Massachusetts | 2.98 | 0.27 | Massachusetts | 1.77 | 0.10 | Massachusetts | YES |
| Michigan | 2.87 | 0.30 | Michigan | 3.01 | 0.34 | Michigan | NO |
| Minnesota | * | * | Minnesota | * | * | Minnesota | * |
| Mississippi | 2.71 | 0.48 | Mississippi | 2.10 | 0.11 | Mississippi | NO |
| Missouri | * | * | Missouri | * | * | Missouri | * |
| Montana | 3.17 | 0.30 | Montana | 2.58 | 0.14 | Montana | NO |
| Nebraska | 4.09 | 0.33 | Nebraska | 2.00 | 0.09 | Nebraska | YES |
| Nevada | 1.57 | 0.15 | Nevada | 1.97 | 0.26 | Nevada | NO |
| New Hampshire | 2.44 | 0.25 | New Hampshire | 2.12 | 0.16 | New Hampshire | NO |
| New Jersey | 2.58 | 0.25 | New Jersey | 1.52 | 0.05 | New Jersey | YES |
| New Mexico | 3.27 | 0.30 | New Mexico | 3.26 | 0.29 | New Mexico | NO |
| New York | * | * | New York | * | * | New York | * |
| North Carolina | * | * | North Carolina | * | * | North Carolina | * |
| North Dakota | 3.75 | 0.50 | North Dakota | 2.05 | 0.10 | North Dakota | YES |
| Ohio | * | * | Ohio | * | * | Ohio | * |
| Oklahoma | 2.61 | 0.17 | Oklahoma | 2.53 | 0.15 | Oklahoma | NO |
| Oregon | 1.95 | 0.37 | Oregon | 1.93 | 0.29 | Oregon | NO |
| Pennsylvania | * | * | Pennsylvania | * | * | Pennsylvania | * |
| Rhode Island | 2.31 | 0.13 | Rhode Island | 1.34 | 0.07 | Rhode Island | YES |
| South Carolina | * | * | South Carolina | * | * | South Carolina | * |
| South Dakota | * | * | South Dakota | * | * | South Dakota | * |
| Tennessee | 2.34 | 0.22 | Tennessee | 1.85 | 0.08 | Tennessee | YES |

**TABLE 3.** Mean aide staff hours per resident per day in communities that primarily serve residents with a diagnosis of Alzheimer's disease or other dementias and communities that do not primarily serve residents with this diagnosis, by state: United States, 2014

| Mean aide staff HPRD in residential care communities that **primarily serve (80% or more)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Mean aide staff HPRD in residential care communities that **do not primarily serve (less than 80%)** residents with a diagnosis of Alzheimer's disease or other dementias | | | Are the means between communities that **primarily serve** residents with a diagnosis of Alzheimer's disease or other dementias and communities that **do not primarily serve** residents with this diagnosis statistically significantly different at p<.05 level of significance? |
| --- | --- | --- | --- | --- | --- | --- |
| State Abbreviation | Mean | Standard Error | State Abbreviation | Mean | Standard Error | State Abbreviation | (YES/NO) |
| Texas | * | * | Texas | * | * | Texas | * |
| Utah | 4.19 | 0.61 | Utah | 2.11 | 0.09 | Utah | YES |
| Vermont | 4.95 | 0.86 | Vermont | 2.21 | 0.12 | Vermont | YES |
| Virginia | * | * | Virginia | * | * | Virginia | * |
| Washington State | 2.98 | 0.36 | Washington State | 2.46 | 0.27 | Washington State | NO |
| West Virginia | * | * | West Virginia | * | * | West Virginia | * |
| Wisconsin | * | * | Wisconsin | * | * | Wisconsin | * |
| Wyoming | * | * | Wyoming | * | * | Wyoming | * |

*Estimate is not presented because estimate does not meet the standard of reliability or precision (the sample size is less than 30) or does not meet NCHS confidentiality standards.

-Sample size greater than 30, but relative standard error 30 or higher.

NOTES: About 21% of residential care communities in the United States in 2014 primarily served residents with a diagnosis of Alzheimer's disease or other dementias. Aide staff hours per resident per day is presented as a ratio and can be converted to minutes by multiplying the ratio numbers to the right of the decimal by 60 (minutes). The number to the left of the decimal represents the number of hours. For example, 1.24 hours per resident per day is equal to 1 hour and 14.4 minutes (.24*60) and 2.99 hours per resident per day is equal to 2 hours and 59.4 minutes (.99*60).

SOURCE: NCHS, National Study of Long-Term Care Providers, 2014.