

# Research

Community Integration of People with  
Intellectual and Developmental Disabilities: A  
National Longitudinal Analysis



**Community Integration of People with Intellectual and  
Developmental Disabilities: A National Longitudinal Analysis**

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### Abstract

**Background:** Medicaid Home and Community Based Services (HCBS) 1915(c) waivers are the largest providers of long-term supports and services (LTSS) for people with intellectual and developmental disabilities (IDD) in the United States. National and longitudinal analyses of HCBS 1915(c) waivers for people with IDD are critical because of changes in the fiscal landscape, the variability produced by states ability to flexibly customize their programs, and the significant changes required by the HCBS final settings rule.

**Objective/Hypothesis.** The aim of this study was to determine spending allocations and state priorities for LTSS for people with IDD through Medicaid HCBS waivers over a five-year period (fiscal year 2011 to fiscal year 2015).

**Methods.** Medicaid HCBS 1915(c) waivers for people with IDD from fiscal year (FY) 2011 to FY 2015 were analyzed to determine total projected spending, unduplicated participants, and average spending per participant across fiscal years and states. Over 10,000 services from the five years were also analyzed to determine service priorities.

**Results.** This longitudinal analysis of HCBS IDD waiver allocation revealed large fluctuation across five years in terms of total participants, total spending, and average spending per participant. Trends also revealed a shifting away from residential habilitation settings towards supports for living in one's own home.

**Conclusions.** When revising waivers to meet the Final Settings Rule, states should utilize our findings to determine areas of need and how to best apply limited funding.

**Keywords:** Medicaid Home and Community Based Services waivers; intellectual and developmental disabilities; community living; long term services and supports; public policy

## **Community Integration of People with Intellectual and Developmental Disabilities: A National Longitudinal Analysis**

Medicaid is responsible for the majority of government funding (federal, state, and local) for people with intellectual and developmental disabilities (IDD) in the United States<sup>1</sup>. Medicaid Home and Community Based Services (HCBS) 1915(c) waivers in particular are the largest provider of long-term services and supports (LTSS) for people with IDD<sup>1</sup>. HCBS waivers were originally developed in 1981 as an alternative to intermediate care facilities for individuals with intellectual disabilities (ICF/IIDs) by allowing states to ‘waive’ some of the main provisions of the Social Security Act: state-wideness, comparability, and income and resource rules<sup>2</sup>. As such, states are able to develop customized programs tailored to underserved populations that would typically require institutional based care, such as people with IDD. States are given the flexibility to determine their waivers’ target groups, services, participant direction, provider qualifications, health and welfare strategies, and cost-effective delivery systems<sup>3</sup>.

Because of the preferences of people with IDD, the cost-effectiveness of HCBS waivers, and the improved outcomes associated with community living, HCBS waiver funding surpassed ICF/IID funding in 2000<sup>1, 4-7</sup>. In FY 2010 states projected spending \$23.5 billion on HCBS waivers for approximately 515,000 people with IDD.<sup>8</sup> However, Rizzolo, Friedman, Lulinski, and Braddock’s<sup>8</sup> analysis of FY 2010 waivers also revealed large variability across states and services, with vast differences in total projected spending, unduplicated participants, and spending per participant. Rizzolo et al.<sup>8</sup> concluded “with the increased utilization of the HCBS Waivers to support individuals with IDD, there is a great need to better understand the variability of services provided through this funding” (p. 19); indicating the need for longitudinal analyses of HCBS waivers.

In addition to the complex variability found by Rizzolo et al.<sup>8</sup>, there have also been a number of critical changes to the fiscal landscape since FY 2010 because of recovery from the 2007-2009 Great Recession<sup>9</sup>. For example, inflation changed significantly from 2009 (-6.4%) to 2014 (2.6%)<sup>1</sup>. Since FY 2010 the Centers for Medicare and Medicaid Services (CMS) have also passed a number of rule and regulation changes directly applicable to HCBS waivers. The most significant of which is the new HCBS 1915(c) final settings rule (CMS 2249-F/2296-F) which was raised in 2009 and officially implemented in 2014<sup>10, 11</sup>. Significantly, the final rule shifts “away from defining home and community-based settings by ‘what they are not,’ and toward defining them by the nature and quality of participants’ experiences” (p. 2)<sup>11</sup>. As a result, the final settings rule “establish[ed] a more outcome-oriented definition of home and community-based settings, rather than one based solely on a setting’s location, geography, or physical characteristics” (p. 2)<sup>11</sup>. As such, attention is drawn to community integration in new ways, with a move away from segregated services and settings. For example, the rule specifies that people with disabilities must interact with community members without disabilities that are not paid staff. The final settings rule also requires person-centered planning with LTSS directed by individuals’ goals and preferences. These new requirements could significantly impact how states provide their services. As such, the rule also requires state HCBS programs develop thorough transition plans to ensure all settings are truly community based.<sup>10, 11</sup>

National and longitudinal analyses of HCBS 1915(c) waivers for people with IDD are critical because of the significant changes required by the final settings rule, changes in the fiscal landscape, the variability produced by states ability to flexibly customize their programs. Therefore, the aim of this study was to determine spending allocations and state priorities for LTSS for people with IDD through Medicaid HCBS waivers over a five-year period. To do so,

Medicaid HCBS 1915(c) waivers for people with IDD from fiscal year (FY) 2011 to FY 2015 were analyzed to determine total projected spending, unduplicated participants, and average spending per participant across fiscal years and states. Over 10,000 services from the five years were also analyzed to determine service priorities.

## Methods

Medicaid HCBS 1915(c) waivers were obtained from the Centers for Medicare and Medicaid Services (CMS) Medicaid.gov website every year over a period of approximately five years. In 2012 we collected data for FY 2011, 2013 for FY 2012, 2014 for FY 2013, 2015 for FY 2014, and 2016 for FY 2015. The first step in data collection was the exclusion of all waivers that were not 1915(c). Next, waivers whose target populations were not people with IDD (developmental disabilities (DD), intellectual disabilities (ID), and autism spectrum disorder (ASD)) were excluded. No age limitations were imposed. Waivers that were pending, terminated, or inactive were then excluded. Next, waivers that did not include the target FY were excluded from the analysis; most commonly this was the state FY but sometimes the calendar year or the federal FY were used. The term FY is used for consistency. This process resulted in the collection of 93 waivers for FY 2011, 93 for FY 2012, 99 for FY 2013, 110 for FY 2014, and 111 for FY 2015.

Waiver data were then utilized to determine waiver utilization across states and fiscal years, including projected spending, unduplicated participants, and average projected spending per participant. All expenditure data was adjusted for inflation using the ‘The State and Local Government Sub-Index of The Gross Domestic Product (GDP) Government Consumption Expenditure’ and Gross Domestic Product data.<sup>12, 13</sup>

Information about service planning and delivery was also utilized to organize waivers into a taxonomy mirroring Rizzolo et al.’s<sup>8</sup> FY 2010 HCBS IDD waiver taxonomy, which was developed based on an analysis of over 1,300 HCBS IDD waiver services. Doing so was necessary to determine what types of services categories were being provided as well as service priorities in terms of funding allocation.

## Results

From FY 2011 to FY 2015, HCBS waivers served an average of 563,116 unduplicated participants per year, with the average state projecting to serve 12,784 participants a year (see Table 1). Across the five years there was an average overall growth of 1.9% in unduplicated participants. Appendix A details change across states.

Over the five years, \$161.6 billion was projected for HCBS IDD waivers. Across FY 2011 to FY 2015 inflation adjusted total spending decreased by an average of 1.1%. The average state projected to spend \$606.7 million a year (Appendix A). The average adjusted spending per capita from FY 2011 to FY 2015 was \$111.88 per year. Across the five years, spending per capita increased on average of 0.2%.

Fiscal effort is a metric to determine “state’s commitment to IDD services after controlling for state wealth. Fiscal effort is theoretically based on the competitive struggle for government funding described by Key (1949) and Wildavsky (1974) as the essence of politics” (p. 14)<sup>1</sup>. Fiscal effort is calculated by dividing the state’s total projected waiver spending (FY 2015) by the state’s total personal income (FY 2015). Total personal income is

the income received by, or on behalf of, all persons from all sources: from participation as laborers in production, from owning a home or business, from the ownership of financial assets, and from government and business in the form of transfers. It includes income from domestic sources as well as the rest of world. It does not include realized or unrealized capital gains or losses.<sup>14</sup>

The average adjusted fiscal effort from FY 2011 to FY 2015 was \$2.45 a year (Table 1). Across the five fiscal years there was an average of 1.0% decrease in fiscal effort (inflation adjusted).



There was an overall decrease of 0.6% on average across FY 2011 to FY 2015 in average spending per participant, with the average spending of \$49,002 per participant per year (Table 1; Appendix A).

### **Service Taxonomy**

Over 10,000 services were reviewed and sorted into themes according to an updated version of Rizzolo et al.'s<sup>8</sup> FY 2010 HCBS IDD taxonomy: residential habilitation; individual goods and services; prevocational; transportation; self-advocacy training; day habilitation; community transition supports; respite; health and professional services (crisis, dental, clinical and therapeutic services, nursing and home health); supports to live in one's own home (companion, homemaker, chore, personal assistance, supported living); care coordination; adult day health; specialized medical and assistive technologies; recreation and leisure; financial support services; family training and counseling (family training and counseling, family supports); and supported employment.

Across all five years the most funding was projected for residential habilitation services. A total of \$64.2 billion was projected for residential habilitation services over the five years; on average \$12.8 billion was projected for residential habilitation a year. The second and third largest services across all five years were day habilitation and 'supports to live in one's own home' (companion, homemaker, supported living, personal assistant, and chore). The rest of the services were projected to receive less than \$5 billion each, or less than 3% of spending each, over the five years (Table 2).

In addition to comparing total projected spending by service, we compared change in the proportion of spending the service categories made up across the five years (Figure 1). Supports for living in one's own home had the largest average proportional increase across the five years

and day habilitation services the largest average proportional decrease. Moreover, the most significant proportional change in any one-year was for day habilitation services which decreased 19.2% between FY 2011 and FY 2012.

### Discussion

An average of approximately 563,000 people with IDD received HCBS 1915(c) waiver services each year between FY 2011 and FY 2015. Across FY 2011 and FY 2015 there was a slight increase in participants, with a growth rate of 1.9% on average. Yet, across the five years there was also a slight decrease (1.1%) in spending on average, with an average of \$26.9 billion being projected per year. There was also a slight increase in spending per capita (0.2%) and decrease in fiscal effort (1.0%) across the five years.

The average spending per participant decreased by approximately 1% across the five years. While the average spending per participant was \$49,002, the largest drop was found between FY 2014 and FY 2015, dropping approximately \$2,100. From the bounds of our data we have no way to tell why there was such a significant drop in average spending per participant. It may be that states are drawing more attention to support waivers rather than traditional comprehensive waivers. Comprehensive waivers include a range of supports including residential habilitation while support waivers rely on unpaid natural supports. While the former can reduce costs significantly, they can also be problematic because of an increased burden on family members<sup>8, 15</sup>.

Just three services – residential habitation, day habilitation, and supports for living in one's own home – comprised over 82% of total funding across the five years. Across the five years, residential and day habilitation services consistently received the most funding. However, projected spending for both services reduced on average across the five years. Meanwhile, supports for living in one's own home grew. Although residential habilitation is still funded at a significantly higher rate than supports for living in one's own home, these trends suggest a shift in funding to supports provided in the apartment or family homes of people with IDD and away

from facility based supports (e.g., provider agency, group home, foster care). This shift, along with the overall reduction in day habilitation services funding may reflect the preference of people with IDD. Moreover, these changes are likely also reflect ideals included in the new CMS final settings rule. One of the largest requirements is that states must provide community opportunities that are *meaningful*<sup>10</sup>. They must also interact with people without disabilities other than those who are paid staff<sup>10</sup>. States may be redesigning or terminating their day habilitation services, for example, because these services have traditionally been provided in segregated settings. Future research should examine states' motivation for the restructuring of funding in more depth.

We also found vast changes across states, both when comparing different states and comparing the states' own utilization against previous years. For example, New Mexico's funding increased approximately 30% on average across the five years. Meanwhile, New York's dropped approximately 24% across the five years. Some of these differences may be due to contextual state factors, such as geography, state income, population makeup, or cost of living; our inability to control for these factors should be both interpreted as a limitation and a fruitful avenue for future research. Moreover, as CMS does not require states to justify their decisions, for the most part we are not able to determine why there was such significant growth or cuts across the states. However, in the case of New York, this dramatic change is largely accounted for by New York's termination of two IDD waivers (Care at Home IV and VI waivers) in FY 2015, and a missing FY 2015 waiver (OPWDD waiver), which was not available to CMS. Four waivers were unavailable for FY 2015<sup>1</sup>, six for FY 2013<sup>2</sup>, and nine for FY 2012<sup>3</sup>. Although

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<sup>1</sup> New Mexico Mi Via-ICF/MR, New York NYS OPWDD Comprehensive, Utah Autism, Washington Individual and Family Services

<sup>2</sup> Alaska Adults w/Developmental Disabilities, Connecticut Individual and Family Support, Connecticut Employment and Day Supports, Hawaii HCBS for People w/DD, LA Residential Options Waiver, Minnesota DD

several attempts were made to obtain these waivers through CMS and state IDD agencies we were not able to acquire them. One of the reasons for this is because some of these waivers were being revamped to comply with the CMS settings rule and thus not currently available.

Another limitation that must be considered when interpreting our findings is that HCBS waivers are state projections made to the federal government rather than utilization data.

However, they are reasonably accurate proxies of utilization because of their basis on previous years' utilization data<sup>8</sup>. Moreover, Rizzolo et al.'s<sup>8</sup> analysis found waiver projections similar to previous expenditure analyses by Braddock et al.<sup>1</sup>

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<sup>3</sup> California HCBS Waiver for Californians w/DD, Connecticut Individual and Family Support, Indiana Community Integration and Habilitation, Louisiana New Opportunities Waiver, North Carolina Comprehensive Waiver, North Carolina Supports Waiver, Pennsylvania Consolidated Waiver, Pennsylvania Person/Family Directed Support

### **Conclusion**

Our longitudinal analysis of HCBS waivers for people with IDD revealed large fluctuation across the board – unduplicated participants, total projected spending, and average spending per participant. There were not only large differences across fiscal years, but also across states, even with spending per capita and fiscal effort where factors size as population and personal income were controlled. As states reevaluate and revamp their waiver programs in accordance with the 2019 deadline to meet the requirements of the CMS final settings rule (CMS 2249-F/2296-F)<sup>10</sup>, states should look to our longitudinal analysis to determine how to best utilize the limited funding available to them, especially as they improve areas of need.

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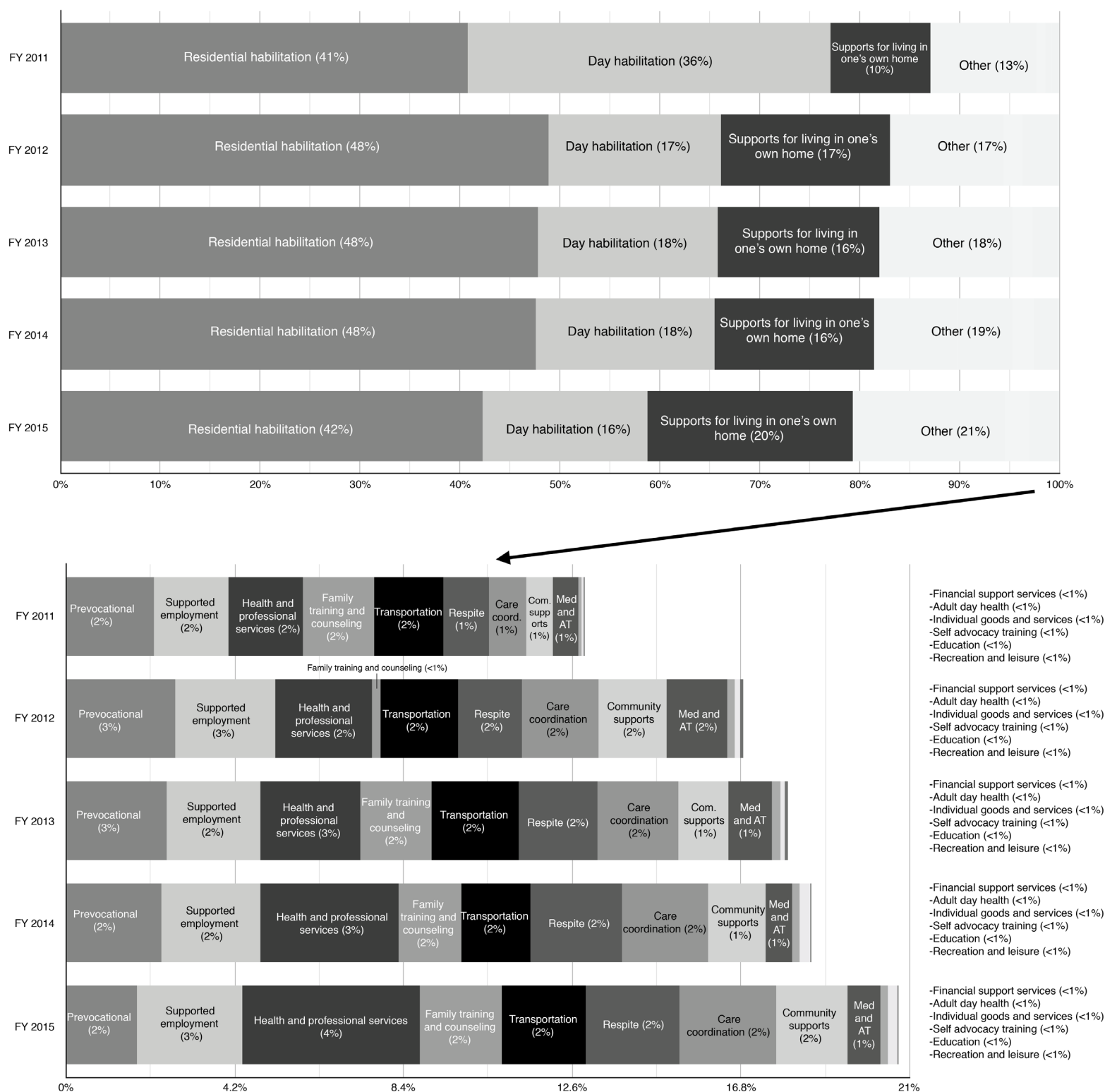


Figure 1. Service categories by year.



Table 1

*Service Allocation From Fiscal Year 2011 to 2015*

|         | Unduplicated<br>participants | Total projected<br>spending<br>(billion) | Average spending<br>per capita | Average<br>fiscal<br>effort | Average<br>spending per<br>participant |
|---------|------------------------------|--|--------------------------------|-----------------------------|--|
| FY 2011 | 539,241                      | \$27.9                                   | \$110.22                       | \$2.55                      | \$49,576                               |
| FY 2012 | 411,739                      | \$21.9                                   | \$106.60                       | \$2.32                      | \$48,740                               |
| FY 2013 | 605,623                      | \$28.9                                   | \$112.52                       | \$2.48                      | \$50,436                               |
| FY 2014 | 677,420                      | \$31.7                                   | \$119.07                       | \$2.55                      | \$49,180                               |
| FY 2015 | 629,694                      | \$25.6                                   | \$112.00                       | \$2.35                      | \$47,075                               |

*Note.* All expenditures have been adjusted for inflation

Table 2  
*Spending by Category: FY 2011 to FY 2015*

|   | Total<br>spending<br>(millions) | Average<br>spending<br>(millions) | Average<br>change |
|---|---------------------------------|-----------------------------------|-------------------|
| Residential habilitation                                  | \$64,227.19                     | \$12,845.44                       | -3.0%             |
| Day habilitation  | \$31,198.29                     | \$6,239.66                        | -11.9%            |
| Supports for living in one's own home                     | \$22,083.17                     | \$4,416.63                        | 5.4%              |
| Health and professional services                          | \$4,103.88                      | \$820.78                          | 7.3%              |
| Supported employment                                      | \$3,299.02                      | \$659.8                           | 0.7%              |
| Prevocational   | \$3,271.77                      | \$654.35                          | -6.2%             |
| Transportation  | \$2,728.72                      | \$545.74                          | -1.0%             |
| Care coordination   | \$2,616.03                      | \$523.21                          | 8.4%              |
| Respite   | \$2,615.1                       | \$523.02                          | 5.0%              |
| Family services   | \$2,166.38                      | \$433.28                          | -0.3%             |
| Community transition supports                             | \$1,858.71                      | \$371.74                          | 8.6%              |
| Specialized medical equipment and<br>assistive technology | \$1,289.52                      | \$257.9                           | -0.4%             |
| Financial support services                                | \$230.73                        | \$46.15                           | 7.3%              |
| Adult day health  | \$226.68                        | \$45.34                           | 12.5%             |
| Individual goods and services                             | \$72.19                         | \$14.44                           | 1.3%              |
| Self advocacy training                                    | \$12.21                         | \$2.44                            | -7.1%             |
| Education   | \$2.55                          | \$.51                             | -8.0%             |
| Recreation and leisure                                    | \$1.23                          | \$.25                             | -6.7%             |

*Note.* All expenditure data are inflation adjusted.

## Appendix A

*Home and Community Based Services Waivers for People with Intellectual and Developmental Disabilities by State: FY 2011 to FY 2015*

| State                | Participants |                |             | Total projected spending |                |             | Spending per capita |                |             | Fiscal effort |                |             | Average spending per participant |                |             |
|----------------------|--------------|----------------|-------------|--------------------------|----------------|-------------|---------------------|----------------|-------------|---------------|----------------|-------------|----------------------------------|----------------|-------------|
|                      | Average      | Average change | Change rank | Average (millions)       | Average change | Change rank | Average             | Average change | Change rank | Average       | Average change | Change rank | Average                          | Average change | Change rank |
| Alabama              | 5,829        | 0.0%           | 37          | \$295.01                 | 0.9%           | 28          | \$61.07             | 0.7%           | 27          | \$1.66        | -0.6%          | 28          | \$50,610                         | 0.7%           | 11          |
| Alaska*              | 1,864        | 5.4%           | 11          | \$140.93                 | 5.0%           | 9           | \$191.41            | 4.9%           | 8           | \$3.57        | 3.7%           | 8           | \$75,563                         | -0.3%          | 18          |
| Arkansas             | 3,448        | -23.2%         | 47          | \$171.35                 | -21.7%         | 47          | \$26.14             | -21.0%         | 47          | \$0.71        | -21.8%         | 47          | \$44,935                         | -5.6%          | 43          |
| California*          | 102,500      | 2.4%           | 23          | \$2,672.24               | 1.6%           | 22          | \$69.37             | 1.1%           | 22          | \$1.42        | -1.1%          | 32          | \$26,108                         | -0.5%          | 24          |
| Colorado             | 9,034        | 2.5%           | 22          | \$371.29                 | 0.3%           | 34          | \$70.37             | -0.5%          | 35          | \$1.49        | -2.1%          | 38          | \$41,326                         | -1.7%          | 33          |
| Connecticut*         | 7,078        | 8.9%           | 6           | \$702.5                  | 7.5%           | 7           | \$195.50            | 7.5%           | 7           | \$3.07        | 6.2%           | 7           | \$107,825                        | -1.3%          | 29          |
| Delaware             | 1,052        | 1.4%           | 31          | \$108.92                 | -0.5%          | 38          | \$117.59            | -1.0%          | 38          | \$2.59        | -2.1%          | 39          | \$103,696                        | -1.6%          | 31          |
| District of Columbia | 1,707        | -0.5%          | 41          | \$178.55                 | 0.9%           | 27          | \$275.86            | -0.1%          | 34          | \$3.99        | -0.9%          | 29          | \$104,781                        | 1.1%           | 8           |
| Florida              | 12,499       | 25.0%          | 3           | \$319.97                 | 24.7%          | 3           | \$15.96             | 24.6%          | 2           | \$0.37        | 24.6%          | 2           | \$21,657                         | 4.6%           | 3           |
| Georgia              | 14,414       | 8.7%           | 7           | \$409.78                 | 18.6%          | 4           | \$40.76             | 18.2%          | 4           | \$1.06        | 17.0%          | 4           | \$26,754                         | 9.6%           | 1           |
| Hawaii*              | 3,253        | 2.3%           | 24          | \$147.47                 | 3.0%           | 14          | \$103.41            | 2.6%           | 14          | \$2.21        | 0.7%           | 18          | \$45,327                         | 0.3%           | 13          |
| Idaho                | 5,661        | 8.5%           | 8           | \$163.8                  | 4.3%           | 11          | \$101.16            | 3.8%           | 11          | \$2.83        | 2.4%           | 10          | \$29,612                         | -3.4%          | 38          |
| Illinois             | 19,143       | 2.6%           | 21          | \$582.48                 | 2.2%           | 17          | \$45.24             | 2.2%           | 17          | \$0.97        | 0.9%           | 17          | \$30,439                         | -0.3%          | 20          |
| Indiana*             | 14,562       | 5.3%           | 12          | \$535.6                  | 1.0%           | 25          | \$81.47             | 0.8%           | 25          | \$2.11        | -0.2%          | 24          | \$34,399                         | -3.8%          | 41          |
| Iowa                 | 13,647       | 1.2%           | 33          | \$475.07                 | 0.8%           | 32          | \$153.54            | 0.6%           | 28          | \$3.50        | -0.3%          | 26          | \$34,794                         | -0.3%          | 19          |
| Kansas               | 9,110        | 1.5%           | 30          | \$352.01                 | 1.3%           | 24          | \$121.65            | 1.1%           | 23          | \$2.75        | 0.1%           | 19          | \$38,643                         | -0.2%          | 17          |
| Kentucky             | 8,201        | 15.5%          | 5           | \$397.46                 | 7.8%           | 6           | \$90.28             | 7.6%           | 6           | \$2.45        | 6.2%           | 6           | \$60,834                         | -7.2%          | 45          |
| Louisiana*           | 11,813       | 0.0%           | 39          | \$504.94                 | -1.6%          | 40          | \$109.15            | -1.8%          | 40          | \$2.67        | -2.8%          | 40          | \$39,368                         | -2.1%          | 37          |
| Maine                | 3,227        | 5.2%           | 13          | \$313.09                 | 0.8%           | 29          | \$235.57            | 0.8%           | 26          | \$5.87        | -0.3%          | 25          | \$99,210                         | -3.5%          | 39          |
| Maryland             | 15,545       | 2.0%           | 26          | \$854.63                 | 0.8%           | 30          | \$144.09            | 0.5%           | 29          | \$2.69        | -0.5%          | 27          | \$55,070                         | -1.0%          | 27          |
| Massachusetts        | 13,449       | 1.7%           | 29          | \$1,111.77               | 1.6%           | 20          | \$165.74            | 1.3%           | 21          | \$2.88        | -0.2%          | 22          | \$82,678                         | 0.0%           | 15          |
| Michigan             | 8,732        | 0.0%           | 37          | \$477.55                 | 1.9%           | 19          | \$48.14             | 1.9%           | 19          | \$1.16        | -0.2%          | 23          | \$54,690                         | 1.0%           | 9           |
| Minnesota*           | 16,519       | 1.7%           | 28          | \$1,201.26               | 4.5%           | 10          | \$221.39            | 4.2%           | 9           | \$4.62        | 2.6%           | 9           | \$72,871                         | 1.4%           | 7           |

Appendix A

*Home and Community Based Services Waivers for People with Intellectual and Developmental Disabilities by State: FY 2011 to FY 2015*

| State           | Participants |                |             | Total projected spending |                |             | Spending per capita |                |             | Fiscal effort |                |             | Average spending per participant |                |             |
|-----------------|--------------|----------------|-------------|--------------------------|----------------|-------------|---------------------|----------------|-------------|---------------|----------------|-------------|----------------------------------|----------------|-------------|
|                 | Average      | Average change | Change rank | Average (millions)       | Average change | Change rank | Average             | Average change | Change rank | Average       | Average change | Change rank | Average                          | Average change | Change rank |
| Mississippi     | 2,640        | -0.5%          | 42          | \$68.82                  | 3.3%           | 13          | \$23.03             | 3.2%           | 13          | \$0.68        | 1.9%           | 13          | \$26,309                         | 3.0%           | 4           |
| Missouri        | 11,652       | 7.0%           | 9           | \$512.05                 | 1.6%           | 21          | \$84.69             | 1.5%           | 20          | \$2.09        | 0.0%           | 20          | \$45,470                         | -4.3%          | 42          |
| Montana         | 2,801        | 0.5%           | 34          | \$101.9                  | -0.1%          | 36          | \$100.44            | -0.5%          | 36          | \$2.56        | -1.9%          | 37          | \$36,394                         | -0.5%          | 23          |
| Nebraska        | 5,683        | 2.0%           | 27          | \$184.26                 | 1.4%           | 23          | \$98.54             | 1.1%           | 24          | \$2.13        | -0.1%          | 21          | \$32,438                         | -0.5%          | 22          |
| Nevada          | 2,175        | -1.3%          | 43          | \$107.26                 | -1.7%          | 41          | \$38.40             | -2.5%          | 41          | \$0.97        | -3.9%          | 41          | \$49,273                         | -0.3%          | 21          |
| New Hampshire   | 4,464        | 2.2%           | 25          | \$212.55                 | 0.3%           | 35          | \$160.33            | 0.2%           | 32          | \$3.08        | -1.2%          | 33          | \$47,751                         | -1.4%          | 30          |
| New Mexico*     | 1,935        | 26.0%          | 1           | \$131.61                 | 29.6%          | 1           | \$63.11             | 29.6%          | 1           | \$1.68        | 28.8%          | 1           | \$51,221                         | 7.0%           | 2           |
| New Jersey      | 13,797       | 2.9%           | 18          | \$822.04                 | 2.7%           | 15          | \$92.61             | 2.5%           | 16          | \$1.69        | 1.7%           | 14          | \$59,593                         | -0.1%          | 16          |
| New York*       | 62,441       | -23.6%         | 48          | \$5,170.33               | -23.7%         | 48          | \$263.19            | -23.8%         | 48          | \$4.91        | -24.7%         | 48          | \$75,013                         | -6.2%          | 44          |
| North Carolina* | 17,719       | 17.6%          | 4           | \$890.01                 | 18.3%          | 5           | \$89.79             | 17.8%          | 5           | \$2.30        | 16.1%          | 5           | \$50,120                         | 0.4%           | 12          |
| North Dakota    | 4,637        | 2.7%           | 20          | \$150.2                  | 5.0%           | 8           | \$207.38            | 3.8%           | 10          | \$3.87        | 2.2%           | 11          | \$32,253                         | 1.9%           | 5           |
| Ohio            | 31,856       | 5.0%           | 14          | \$1,369.31               | 0.5%           | 33          | \$118.28            | 0.4%           | 31          | \$2.88        | -1.0%          | 30          | \$45,417                         | -3.6%          | 40          |
| Oklahoma        | 6,769        | -5.3%          | 44          | \$343.79                 | -5.1%          | 43          | \$89.46             | -5.5%          | 43          | \$2.15        | -7.1%          | 43          | \$51,032                         | 0.1%           | 14          |
| Oregon          | 18,752       | 5.4%           | 10          | \$385.28                 | -12.7%         | 44          | \$98.44             | -13.1%         | 44          | \$2.52        | -14.6%         | 44          | \$23,691                         | -12.5%         | 48          |
| Pennsylvania*   | 26,489       | 3.8%           | 15          | \$1,590.93               | 2.2%           | 18          | \$124.46            | 2.2%           | 18          | \$2.66        | 1.3%           | 16          | \$53,995                         | -0.8%          | 26          |
| South Carolina  | 10,309       | -10.8%         | 45          | \$347.71                 | -16.6%         | 45          | \$73.09             | -17.1%         | 45          | \$2.05        | -18.1%         | 45          | \$31,078                         | -8.4%          | 47          |
| South Dakota    | 3,778        | 0.3%           | 36          | \$125.67                 | -0.5%          | 39          | \$149.14            | -1.0%          | 39          | \$3.33        | -1.3%          | 34          | \$33,234                         | -0.7%          | 25          |
| Tennessee       | 8,270        | 3.5%           | 16          | \$642.21                 | 0.8%           | 31          | \$98.79             | 0.4%           | 30          | \$2.49        | -1.1%          | 31          | \$78,489                         | -2.1%          | 36          |
| Texas           | 31,549       | 3.3%           | 17          | \$1,193.8                | 0.9%           | 26          | \$44.98             | 0.0%           | 33          | \$1.02        | -1.5%          | 35          | \$38,049                         | -1.9%          | 34          |
| Utah*           | 4,622        | -0.4%          | 40          | \$175.01                 | -3.5%          | 42          | \$59.42             | -4.3%          | 42          | \$1.58        | -6.0%          | 42          | \$37,858                         | -2.1%          | 35          |
| Virginia        | 11,064       | 2.7%           | 19          | \$635.58                 | 3.6%           | 12          | \$76.90             | 3.2%           | 12          | \$1.54        | 2.1%           | 12          | \$57,400                         | 0.7%           | 10          |
| Washington*     | 5,296        | 25.2%          | 2           | \$229.55                 | 24.9%          | 2           | \$32.26             | 24.4%          | 3           | \$0.64        | 23.3%          | 3           | \$46,460                         | -1.2%          | 28          |
| West Virginia   | 4,534        | 0.4%           | 35          | \$320.98                 | 2.5%           | 16          | \$173.40            | 2.5%           | 15          | \$4.87        | 1.5%           | 15          | \$70,746                         | 1.6%           | 6           |
| Wisconsin       | 21,694       | -12.8%         | 46          | \$930.1                  | -17.2%         | 46          | \$162.10            | -17.3%         | 46          | \$3.80        | -18.4%         | 46          | \$38,997                         | -8.0%          | 46          |

Appendix A

*Home and Community Based Services Waivers for People with Intellectual and Developmental Disabilities by State: FY 2011 to FY 2015*

| State   | Participants |                |             | Total projected spending |                |             | Spending per capita |                |             | Fiscal effort |                |             | Average spending per participant |                |             |
|---------|--------------|----------------|-------------|--------------------------|----------------|-------------|---------------------|----------------|-------------|---------------|----------------|-------------|----------------------------------|----------------|-------------|
|         | Average      | Average change | Change rank | Average (millions)       | Average change | Change rank | Average             | Average change | Change rank | Average       | Average change | Change rank | Average                          | Average change | Change rank |
| Wyoming | 2,006        | 1.4%           | 32          | \$89.12                  | -0.5%          | 37          | \$154.05            | -0.9%          | 37          | \$2.96        | -1.9%          | 36          | \$41,315                         | -1.7%          | 32          |

*Note.* All expenditure data are inflation adjusted. \* = some waivers were missing from CMS; see limitations.