

## Implications of State Methods for Offering Personal Assistance Services

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**M**any people prefer to receive long-term care services in the community, which may be less costly than institutional care. Despite these preferences, state long-term care systems tend to be biased toward institutional care because Medicaid programs are required to provide institutional but not home- and community-based long-term care. Medicaid programs have several important options to help make community-based long-term services and supports more available, but these options have yet to address fully the structural bias of state Medicaid programs. In this issue brief, we explore the implications of different state methods for providing one type of home- and community-based long-term care service—personal assistance. In particular, we focus on the rates of personal assistance use and the overall balance of states' long-term care spending.

### Introduction

The Medicaid program has a long history of federal initiatives to encourage states to make community-based long-term services and supports more accessible to Medicaid enrollees who are frail or have disabilities. These efforts began with the establishment of the section 1915(c) waiver program in 1981. This program allows states to target home- and community-based services (HCBS) to select populations or regions. The Centers for Medicare & Medicaid Services (CMS) has complemented this waiver program with infrastructure transformation grants and Real Choice Systems Change grants to help states address large structural and organizational issues that impede HCBS provision; however, these grants focus on setting the stage for change and the initial implementation steps of a rebalancing strategy. In 2007, the Money Follows the Person (MFP) demonstration grant program established another financial mechanism that states could use to work on rebalancing their long-term care programs toward HCBS rather than care in institutional settings. While most states have adopted MFP, it is still too early to know the extent to which states are able

### About This Series

The MAX Medicaid policy issue brief series highlights the essential role MAX data can play in analyzing the Medicaid program. MAX is a set of annual, person-level data files on Medicaid eligibility, service utilization, and payments that are derived from state reporting of Medicaid eligibility and claims data into the Medicaid Statistical Information System (MSIS). MAX is an enhanced, research-friendly version of MSIS that includes final adjudicated claims based on the date of service, and data that have undergone additional quality checks and corrections. CMS produces MAX specifically for research purposes. For more information about MAX, please visit: <http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/MAX-GeneralInformation.html>.

to use it to make HCBS more accessible to more people. More recently, federal legislation and CMS have made it easier for states to provide HCBS as part of their state plans: (1) the 1915(i) option provides states with flexibility in offering HCBS as state plan services while limiting access to these services to select subgroups of enrollees, (2) the 1915(j) option allows states to offer self-directed care as a state plan service, and (3) the Community First Choice Option provides states with another avenue for offering personal assistance as a state plan service. However, few states have taken up these recent options to make HCBS more available to Medicaid enrollees, despite people's desire for community-based long-term care.

States' reluctance to offer HCBS via their state plans likely stems from the perceived costs of offering these services outside of the 1915(c) waiver program. State plan services are typically available to all Medicaid enrollees who need them, whereas states can restrict access to a subset of enrollees

when the services are only available through a 1915(c) waiver. To assess the implications for states when these services are offered as part of a state plan, we examined personal assistance services, which states may offer either through their state plans or via 1915(c) waivers. Many individuals who need long-term services and supports use personal assistance services to help them with routine activities of daily living, such as bathing, dressing, and transferring in and out of chairs or the bed. In this issue brief, we compare state-level measures of service utilization and expenditures for personal assistance services in states that offer these services through a state plan versus through 1915(c) waivers alone.

## Methods

### Approach to the Analysis

Most of this issue brief focuses on personal assistance services and is based on analyses of Medicaid Analytic eXtract (MAX) data from 2008 and 2009. MAX files are designed for research purposes. At the person level, these data include demographic information about enrollees as well as summary information on annual service utilization and Medicaid expenditures. The files also include claims-level data for the full array of Medicaid services that can be aggregated at the person or state levels. The MAX data are based on state-reported information from the Medicaid Statistical Information System (MSIS). The person-level nature of the MAX data makes them particularly well suited for examinations of the effects of policy decisions on specific populations within the Medicaid program.

We limited our analysis of MAX data to fee-for-service claims for full-benefit enrollees. We did not include managed care encounter data because these data were only available for a limited number of states. We also excluded enrollees who were eligible only for a very limited set of Medicaid benefits (Medicare-Medicaid enrollees only receiving coverage for Medicare premiums and cost sharing as well as other enrollees eligible only for emergency services, pregnancy-related services, family-planning services, premium assistance, or prescription drug benefits). To determine the proportion of long-term care funds spent on HCBS, we relied on data from CMS Form 64 reports as updated and reported by Eiken et al. (2010). States use CMS Form 64 to report all Medicaid expenditures to CMS and we used these data rather than the expenditure information in the MAX claims because the CMS Form 64 data are available for all states and include managed care expenditures. While these state-reported data contain information about all Medicaid expenditures, they do not provide person-level detail.<sup>1</sup>

## Identifying Personal Assistance Services

To identify personal assistance services as accurately as possible, we used an HCBS taxonomy specifically developed for the MSIS/MAX data. This taxonomy provides definitions for a list of HCBS and standardizes the reporting of services between states. The taxonomy relies on a combination of service codes, MSIS types of service, and reported places of service to identify different types of HCBS, including personal assistance.

### State Categories and Exclusions

Our analysis of the MAX data excludes 25 states and the District of Columbia. The development of the HCBS taxonomy relied on an analysis of claims for waiver services. When the taxonomy was applied to state-plan services in an exploratory analysis, it was found that these services may be incompletely identified by the taxonomy in these states. To ensure the accuracy of the analysis, we decided to only include states that used national service codes for personal assistance services. We therefore excluded 13 states that used a large number of state-specific service codes.<sup>2</sup> Ten additional states and the District of Columbia were excluded because MAX 2009 data were not available or key data elements were not of sufficient quality.<sup>3</sup> Finally, we excluded two states because they had large managed care programs that covered long-term care services, and enrollees who received personal assistance through the fee-for-service system were unlikely to be a representative sample of users in the state.<sup>4</sup>

States were divided into three categories for this analysis. The first category consists of states that offer personal assistance services through a state plan option, regardless of whether the state also offers these services through a waiver.<sup>5</sup> The second category includes those states that offer personal assistance services through waivers alone.<sup>6</sup> The final category contains two states that offer Medicaid long-term care services via global 1115 waivers.<sup>7</sup> Although both of these states are sometimes considered to provide personal assistance services through their state plans, we separated them from the rest due to the unique nature of these global 1115 waivers. Both waivers were designed to rebalance the long-term care systems in these states toward HCBS. The waivers allow these states to provide long-term care services more flexibly than in other state plan states, but the services provided are subject to a federal matching cap. Because only two states are included in this group, we do not provide an in-depth analysis of differences between it and the other groups in the analysis.

Our analysis focuses on the median values of the measures among each group of states. Using the median ensured that large states and outliers did not have a disproportionate impact on our results. In the majority of analyses, the mean and the median qualitatively provide the same results.

## Definitions of MAX Variables

### *Long-Term Care*

Long-term care can be divided into HCBS and institutional care. Our definition of HCBS includes (1) any 1915(c) waiver service; (2) any non-waiver personal assistance, private duty nursing, adult day, residential care, or rehabilitation for the aged or disabled service; and (3) a non-waiver home health service received for three or more consecutive months.<sup>8</sup> Personal assistance users were those who received any personal assistance service during the year. HCBS users included anyone who received HCBS or was enrolled in a 1915(c) waiver. Long-term care services included any of the above HCBS as well as services received in nursing facilities, intermediate care facilities for the intellectually disabled, mental hospitals for the aged, and inpatient psychiatric facilities for those under age 21. New long-term care users were those who received long-term care in 2009 but not in 2008, while established long-term care users were those who received long-term care in both years.

### *Population Categories and Medicare-Medicaid Enrollment Status*

As noted previously, our analysis only includes enrollees eligible for the full range of Medicaid benefits. We did not restrict the analysis to enrollees eligible on the basis of age or disability because enrollees in other eligibility categories may also need personal assistance services. Because states do not always convert enrollees into the “aged” category when they turn 65, we did not rely on basis-of-eligibility groups for our analysis. Instead, we classified individuals over age 65 as of December 31, 2009, as elderly. Among those classified as having developmental disabilities were individuals with enrollment in a 1915(c) waiver for intellectual or developmental disabilities or a 1915(c) waiver for those with autism/autism spectrum disorder. This category also included individuals who received services in an intermediate care facility for the intellectually disabled. We considered individuals to have a severe mental illness if they (1) had enrollment in a 1915(c) waiver for people with mental illness or serious emotional disturbance or (2) received services in an inpatient psychiatric facility for those under age 21 or at a mental hospital for the aged. Finally, all individuals who did not fall into one of the above categories but were eligible for Medicaid on the basis of disability were classified as people with physical disabilities. Only full-benefit Medicare-Medicaid enrollees were considered to be dually eligible for Medicare and Medicaid.<sup>9</sup>

## Findings

### Users of Personal Assistance Services

Those who use personal assistance services reflect the populations that both need and are able to access these services (Table 1). The proportion of full-benefit Medicaid enrollees who use personal assistance services increases with age, and ranges from 0.4 percent among those who are under age 19 to 13.0 percent among those 85 and older. Among the population groups examined, full-benefit enrollees with developmental disabilities access this service in the greatest proportion, with 19.0 percent receiving personal assistance services. This is about 50 percent greater than the proportion found among the elderly (12.6 percent). Among full-benefit enrollees with physical disabilities, this number is 5.6 percent, and among individuals with a severe mental illness it is 2.7 percent. In contrast, only 0.1 percent of full-benefit non-elderly individuals with no indication of a disability in the MAX data use personal assistance services (data not shown). Finally, use of personal assistance services is over 12 times more common among full-benefit Medicare-Medicaid enrollees (10.1 percent) than it is among similar Medicaid-only enrollees (0.8 percent).

### Personal Assistance Use Among Full-Benefit Medicaid Enrollees and HCBS Users

One measure of access to personal assistance services is the proportion of a state’s full-benefit Medicaid enrollees who receive them. Table 1 shows this proportion by various demographics and the different mechanisms states use to offer personal assistance. States that offer personal assistance services through their state plans have approximately double the proportion of full-benefit Medicaid enrollees utilizing personal assistance services (2.7 percent) when compared to states that offer these services through waivers alone (1.3 percent). This ratio is relatively consistent regardless of gender, age, or Medicare-Medicaid enrollment status. However, it is not consistent across the population categories we examined. Among both the elderly and people with physical disabilities, use of personal assistance services is higher in states that offer them through a state plan versus in states that offer them through waivers alone. However, the opposite is true among individuals with developmental disabilities, and the proportions are roughly comparable in the two types of states among individuals with severe mental illness.

Use of personal assistance among HCBS users is another measure of access to these services in a state and partly reflects the extent to which personal assistance is a common service among all community-based long-term services and supports. The median proportion of HCBS users who receive personal

**Table 1. Users of Personal Assistance Services Among Full-Benefit Medicaid Enrollees**

State	All Full-Benefit Enrollees			States Offering PAS Through Waivers Only			States Offering PAS Through State Plans			Global 1115 Waiver States		
	# of PAS Recipients	# of Enrollees	%	# of PAS Recipients	# of Enrollees	%	# of PAS Recipients	# of Enrollees	%	# of PAS Recipients	# of Enrollees	%
<b>All Full-Benefit Enrollees</b>	<b>585,232</b>	<b>28,909,776</b>	<b>2.0</b>	<b>177,323</b>	<b>13,555,395</b>	<b>1.3</b>	<b>401,793</b>	<b>14,972,007</b>	<b>2.7</b>	<b>6,116</b>	<b>382,374</b>	<b>1.6</b>
<b>Gender</b>												
Female	368,626	16,337,226	2.3	111,248	7,760,257	1.4	254,337	8,363,228	3.0	3,041	213,741	1.4
Male	216,598	12,553,445	1.7	66,075	5,789,053	1.1	147,448	6,595,759	2.2	3,075	168,633	1.8
<b>Age</b>												
0–18	67,876	16,979,836	0.4	17,027	7,782,373	0.2	47,497	9,026,907	0.5	3,352	170,556	2.0
19–44	82,817	6,839,353	1.2	34,418	3,420,249	1.0	47,807	3,300,205	1.4	592	118,899	0.5
45–64	161,181	2,916,478	5.5	50,363	1,393,753	3.6	109,923	1,465,368	7.5	895	57,357	1.6
65–84	201,542	1,622,507	12.4	54,960	712,303	7.7	145,681	887,022	16.4	901	23,182	3.9
85+	71,816	551,444	13.0	20,555	246,608	8.3	50,885	292,456	17.4	376	12,380	3.0
<b>Population Category</b>												
Elderly <sup>a</sup>	273,358	2,173,951	12.6	75,515	958,911	7.9	196,566	1,179,478	16.7	1,277	35,562	3.6
People with physical disabilities <sup>b</sup>	244,219	4,332,556	5.6	68,739	2,103,920	3.3	172,135	2,171,941	7.9	3,345	56,695	5.9
People with developmental disabilities <sup>c</sup>	48,644	256,185	19.0	28,256	144,845	19.5	20,047	107,873	18.6	341	3,467	9.8
People with severe mental illness <sup>d</sup>	1,387	52,061	2.7	634	23,532	2.7	729	28,138	2.6	24	391	6.1
<b>Medicare-Medicaid Enrollment Status</b>												
Medicare and Medicaid	355,981	3,534,719	10.1	120,411	1,642,793	7.3	233,563	1,834,054	12.7	2,007	57,872	3.5
Medicaid only	207,193	25,254,236	0.8	55,676	11,862,104	0.5	147,409	13,070,617	1.1	4,108	321,515	1.3

Source: Mathematica analysis of 2009 MAX data from 25 states.

PAS = Personal assistance services.

<sup>a</sup> People over age 65 as of December 31, 2009.

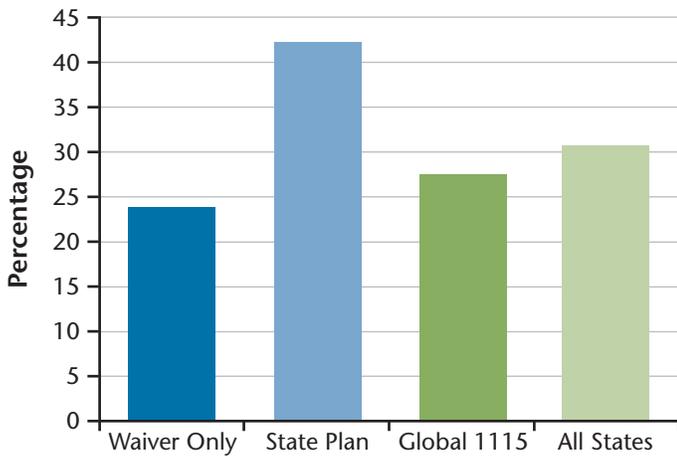
<sup>b</sup> People who did not fall into one of the other population categories but were eligible for Medicaid on the basis of disability.

<sup>c</sup> People (1) with enrollment in a 1915(c) waiver for those with intellectual or developmental disabilities or a 1915(c) waiver for those with autism/autism spectrum disorder or (2) who received services in an intermediate care facility for the intellectually disabled.

<sup>d</sup> People (1) with enrollment in a 1915(c) waiver for people with mental illness or serious emotional disturbance or (2) who received services in an inpatient psychiatric facility for those under age 21 or at a mental hospital for the aged.

assistance services is 76 percent higher among states that offer personal assistance services through a state plan than in those that offer it through waivers alone (42.2 vs. 24.0 percent, Figure 1). Among states that offer these services through a state plan, the largest proportion of HCBS users receiving personal assistance is 90.4 percent in North Carolina (data not shown). Among the states that offer these services through waivers alone, Pennsylvania has the largest proportion, at 48.4 percent (data not shown).

**Figure 1. Median Percentage of HCBS Users Receiving Personal Assistance Services, by State Method for Offering Personal Assistance Services**

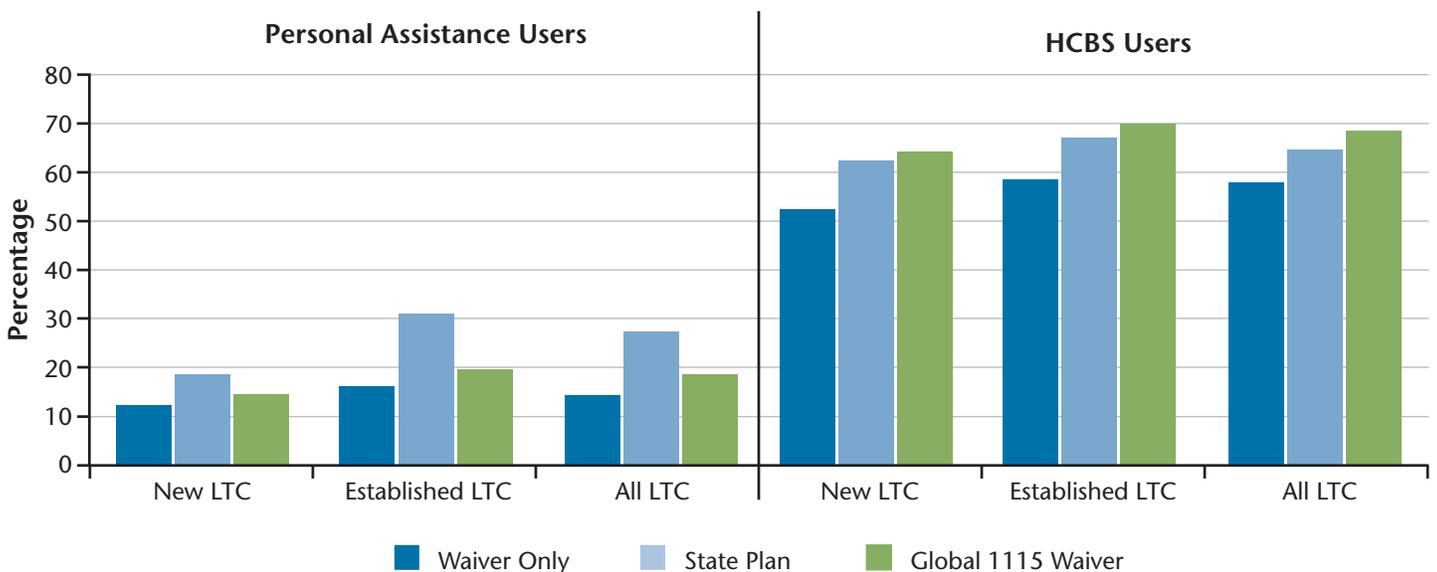


Source: Mathematica analysis of 2009 MAX data from 25 states.

## Use of Personal Assistance Among New and Established Users of Long-Term Care

The proportion of new long-term care users who receive personal assistance services is another indicator of the accessibility of these services. If HCBS is readily available, particularly for those who are new to long-term care, it may help individuals avoid institutional care. Further, if a service like personal assistance was specifically directed toward people new to long-term care to divert them from institutional care in states offering this service through their state plans, then we would expect differences in personal assistance utilization across the state groups to be greater among new users than among established users of long-term care. However, while the median proportions of both new and established long-term care users receiving personal assistance are higher among states that offer these services through a state plan than they are among states that do not, this difference is smaller among new users of long-term care than it is among established long-term care users (Figure 2). Similarly, while the median proportion of new long-term care users who receive HCBS is higher among states that provide personal assistance through a state plan than it is in those that provide it through a waiver only, the difference between the two types of states is only 1.9 percentage points greater among new long-term care users when compared to established long-term care users. Therefore, while new and established long-term care users likely use personal assistance services at a higher rate in states that offer these services through their state plans, these data do not suggest that states designed their state plan services specifically to help people new to long-term care.

**Figure 2. Median Percentage of New and Established Long-Term Care Users Receiving Personal Assistance Services and HCBS**



Source: Mathematica analysis of 2009 MAX data from 25 states.  
 HCBS = Home- and community-based services, LTC = Long-term care.

## Expenditures for Personal Assistance Services

Per-person, per-month expenditures for personal assistance services offer insight into how the costs of providing these services are associated with the means through which states provide them. Among the four population groups we studied, per-person, per-month expenditures for personal assistance are higher in states that offer these services through waivers alone when compared with states that offer these services through their state plans. Among all personal assistance recipients, median monthly expenditures for these services were \$901 per person in states that offer these services through their state plans and \$1,377 in states offering them through waivers alone (Table 2).

## Balance of Long-Term Care Systems

Our analysis of personal assistance services demonstrates the extent to which use of these services varies between states that do and do not offer them through their state plans. If offering these services through a state plan increases access to this widely used form of HCBS, this approach may help individuals avoid institutionalization. One way to assess this possibility is to examine the balance of long-term care services between HCBS and institutional care in state Medicaid programs. The proportion of long-term care expenditures spent on HCBS is one measure of this balance. A state with a more balanced long-term care system will have a higher proportion of its long-term care expenditures going toward community-based services such as personal assistance.

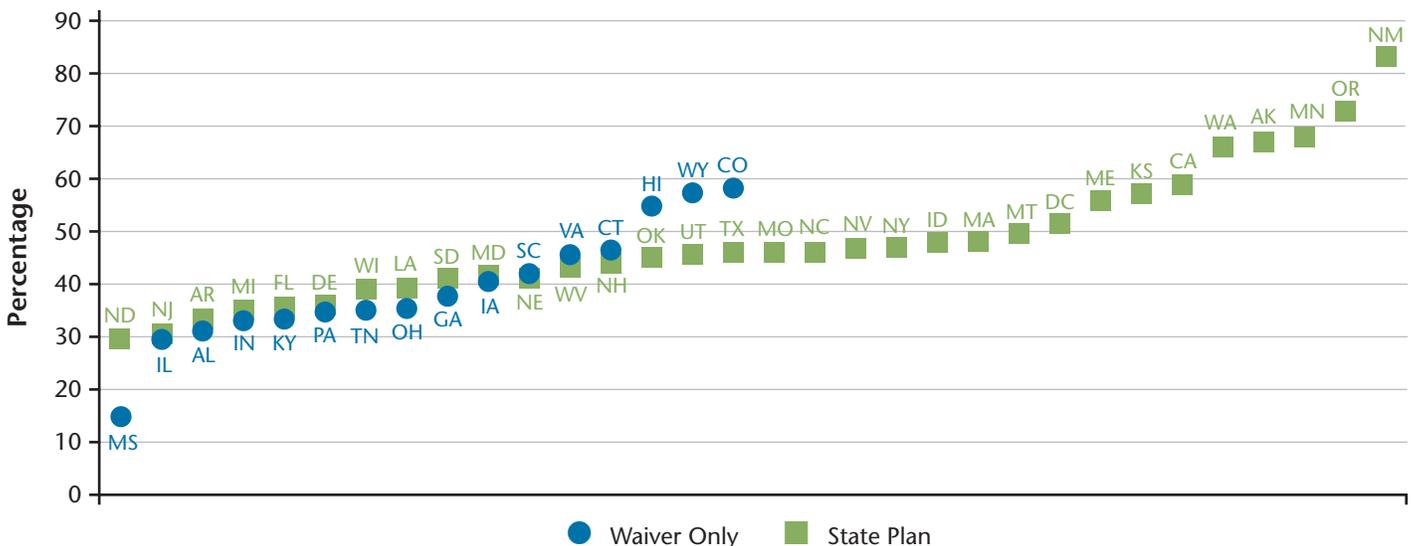
As shown in Figure 3, when all states without global 1115 waivers are included in the analysis, the median proportion of long-term care expenditures spent on HCBS is about 25 percent higher in states that offer personal assistance services through a state plan than it is in those that offer these services through waivers alone (45.9 percent versus 36.8 percent). States that offer personal assistance in their state plans seem to be more likely to have a long-term care system that is more balanced toward HCBS, with a larger proportion of Medicaid long-term expenditures going toward HCBS relative to states that only offer these services through 1915(c) waivers.

## Discussion

### Key Findings

We found several important cost and accessibility implications for states offering personal assistance services through state plans instead of through waivers alone. First, when compared with states that offer these services through waivers alone, state-plan states provide more access to personal assistance services as measured by the median proportions of Medicaid enrollees and HCBS users who use them. However, state-plan states also tend to spend less per-person, per-month on these services when compared with states that offer personal assistance through waivers alone. This suggests that although these services may be accessible to more people in the state-plan states, these states are either covering a wider range of people who have lower levels of need for the service or they are covering more people

**Figure 3. Proportion of Long-Term Care Expenditures for HCBS, by State Method for Providing Personal Assistance Services**



Source: Mathematica analysis of CMS Form 64 FY2009 data presented in Eiken et al. (2010). Figure includes data from 47 states and the District of Columbia. Three states with global 1115 waivers (Arizona, Rhode Island, and Vermont) are excluded.

**Table 2. Median Per-Person, Per-Month Expenditures for Personal Assistance Services Among Personal Assistance Users (in dollars)**

State	All Full-Benefit Enrollees	Elderly	People with Physical Disabilities	People with Developmental Disabilities	People with Severe Mental Illness
<b>Median for All States</b>	<b>1,136</b>	<b>1,010</b>	<b>1,126</b>	<b>1,523</b>	<b>739</b>
<b>Waiver Only</b>					
Alabama	534	346	528	1,820	n.a.
Colorado	753	888	703	592	655
Georgia	1,490	1,095	1,464	2,422	n.a.
Illinois	1,264	1,379	1,273	1,204	1,093
Indiana	1,156	1,069	1,248	1,073	n.a.
Mississippi	1,578	1,630	1,792	1,163	n.a.
Ohio	1,538	1,024	1,778	2,589	n.a.
Pennsylvania	1,746	1,536	1,895	2,667	1,312
Tennessee	1,889	1,158	1,003	3,220	n.a.
Wyoming	325	220	291	928	225
<b>Median for Waiver Only States</b>	<b>1,377</b>	<b>1,082</b>	<b>1,261</b>	<b>1,512</b>	<b>874</b>
<b>State Plan</b>					
Alaska	2,423	2,300	2,544	3,529	688
Delaware	n.a.	n.a.	n.a.	n.a.	n.a.
Florida	733	520	512	1,463	189
Kansas	1,424	1,176	1,561	1,582	861
Massachusetts	1,852	1,905	1,861	n.a.	1,186
Michigan	713	599	843	1,093	759
Montana	1,264	1,272	1,334	1,079	1,142
Nevada	1,116	995	1,297	1,148	818
North Carolina	923	986	823	1,209	502
Oklahoma	646	532	564	2,700	125
South Dakota	523	223	980	218	n.a.
Texas	879	894	826	1,708	533
West Virginia	877	727	846	2,030	719
<b>Median for State Plan States</b>	<b>901</b>	<b>940</b>	<b>913</b>	<b>1,463</b>	<b>719</b>
<b>Global 1115 Waiver</b>					
Rhode Island	1,437	1,325	1,400	1,858	1342
Vermont	895	238	935	n.a.	n.a.
<b>Median for Global 1115 Waiver States</b>	<b>1,166</b>	<b>782</b>	<b>1,168</b>	<b>1,858</b>	<b>1,342</b>

Source: Mathematica analysis of 2009 MAX data from 25 states.

n.a. = not applicable (when no enrollees received these services, per-person, per-month expenditures could not be calculated).

but providing fewer services per-person than states that only provide these services through waivers. Finally, states that offer these services through their state plans spend a higher median share of their long-term care expenditures on HCBS than states that offer these services through waivers alone, which suggests that achieving any rebalancing goal may be easier in these states than in states that restrict personal assistance services to waivers.

## Limitations

Several factors limited our analysis. First, we excluded many states from the MAX analysis due to data limitations. However, when we conducted the same analysis using data from all states with available data, the only changes that affected our conclusions were related to specific population groups. Among people with developmental disabilities, when the additional states were included, the proportion who use personal assistance services was slightly higher in states that offer them through their state plans when compared to those that offer these services through waivers alone. Another difference was found in per-person, per-month expenditures for personal assistance services. Among individuals with severe mental illness, the median per-person, per-month expenditures for personal assistance services were higher in states that offer these services through a state plan than in those that offer it through waivers alone. However, when all states were included in the analysis, the direction of the results remained the same as the results we found from our more limited state analysis among the elderly, individuals with physical disabilities, individuals with developmental disabilities, and overall. It is worth noting that the results for the states with global 1115 waivers changed markedly due to the exclusion of Arizona. However, these states are not part of our conclusions, and Arizona's high reliance on managed care means that its fee-for-service data may not accurately portray service usage in the state.

A second limitation of our analysis is that the HCBS taxonomy we used to identify personal assistance services was developed through an analysis of waiver claims alone. Some states may have reported personal assistance services using different service codes for state plan services than for waiver services, resulting in incomplete identification of personal assistance services in our analysis. However, an exploratory analysis conducted during the development of the taxonomy suggests that this is not an issue in states that rely chiefly on national service codes. We therefore excluded all states that rely on state-specific codes for a high proportion of their claims, and we believe that this issue did not impact our analysis.

Third, we only used fee-for-service data in our analyses of MAX data. Although state reporting of encounter data is

improving, only 15 states had encounter data in the MAX 2009 ambulatory claims records<sup>10</sup> that are considered usable for research purposes (Byrd and Dodd 2012).<sup>11</sup> Additionally, these data are not a usable source of information on expenditures for a specific service. Among the 15 states with usable encounter data in the MAX ambulatory claims records, 8 were excluded from our study for other reasons. Perhaps because we had already excluded those states with large long-term care managed care programs, we found that if we had chosen to include encounter data for the remaining states, our conclusions would not have been affected. Because encounter data were not available with usable quality for all the states included in our study, we chose not to include these data in our results.

## Conclusion

Although only a small fraction of Medicaid enrollees receive personal assistance services, these services are particularly important for HCBS users, as 43.4 percent receive personal assistance (data not shown). In some populations, personal assistance services are even more important. Among participants in the MFP transition programs, nearly 59 percent use personal assistance after they transition from institutional to community-based care (Irvin et al. 2012). Our findings suggest that providing these services through a Medicaid state plan, as opposed to a 1915(c) waiver, is associated with improved accessibility to personal assistance services, potentially helping states to rebalance their long-term care systems.

CMS continues to work with states to help them make HCBS more accessible and rely less on institutional care. The MFP grants awarded to 47 grantees include a rebalancing component, and several states have begun to implement Balancing Incentive Payment programs with the explicit goal of rebalancing their state long-term care systems. These and other efforts to improve access to services such as personal assistance will be vital to reshaping long-term care and will hopefully improve the cost effectiveness of long-term care systems.

For states that would like to focus on diverting people from institutional care or prevent those who enter institutional care from remaining there for long periods, it will be particularly important to consider a full range of strategies, including offering HCBS in state plans. While some states may be concerned about the costs of adding these services to their state plans, if personal assistance services can be offered as one element of an institutional care diversion strategy, then these services may help states rein in their Medicaid long-term care costs by preventing the need for institutionalization. This issue will become more critical as the population ages and the number of Medicaid enrollees who are frail and have disabling conditions grows.

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## Endnotes

- <sup>1</sup> See Eiken et al. (2010) for further information on these data.
- <sup>2</sup> These states are California, Connecticut, Idaho, Iowa, Maryland, Minnesota, Nebraska, New Jersey, North Dakota, New York, Oregon, South Carolina, and Washington.
- <sup>3</sup> This group includes Arkansas, the District of Columbia, Hawaii, Kentucky, Louisiana, Maine, Missouri, New Hampshire, Utah, Virginia, and Wisconsin.
- <sup>4</sup> These states are Arizona and New Mexico.
- <sup>5</sup> See the Kaiser Commission on Medicaid and the Uninsured (2012) for a full list of states that offered personal assistance services through a state plan in 2009. For the MAX analysis, the states included in this group are Alaska, Delaware, Florida, Kansas, Massachusetts, Michigan, Montana, Nevada, North Carolina, Oklahoma, South Dakota, Texas, and West Virginia. Delaware is included in this category even though we found no fee-for-service claims for personal assistance in this state in 2009.
- <sup>6</sup> For the MAX analysis, the states included in this group are Alabama, Colorado, Georgia, Illinois, Indiana, Mississippi, Ohio, Pennsylvania, Tennessee, and Wyoming.
- <sup>7</sup> The states included in this group for the MAX analysis are Rhode Island and Vermont.
- <sup>8</sup> This last restriction was imposed in an effort to exclude enrollees who only receive home health services for an acute condition and not on a long-term basis.
- <sup>9</sup> This includes qualified Medicare beneficiaries with full Medicaid coverage, service limited Medicare beneficiaries with full Medicaid coverage, and Medicare-Medicaid enrollees who were reported in the "other" category in the MAX data.
- <sup>10</sup> Claims for personal assistance services are in the MAX data file that captures all ambulatory claims and is known as the MAX Other Services (OT) file.
- <sup>11</sup> These states are Arizona, California, Delaware, Florida, Kentucky, Michigan, Minnesota, Nebraska, New Jersey, New Mexico, New York, Oregon, Indiana, Texas, and Virginia.

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