# Recent Developments in State Efforts to Rebalance Long-Term Services and Supports

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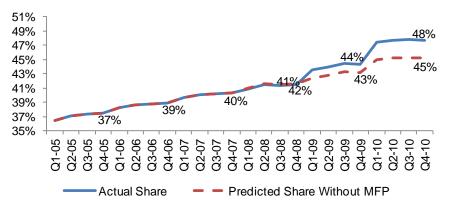
### EXECUTIVE SUMMARY

The national Money Follows the Person (MFP) demonstration includes two components, a transition program that helps Medicaid beneficiaries living in long-term care institutions move to community-based residences and a rebalancing program that makes community-based long-term care services and supports more accessible. This report examines the progress states have made with their MFP rebalancing program and how a subset of states are combining their MFP resources with those from the Balancing Incentive Program to achieve system rebalancing.

### Key Findings

- States have spent MFP rebalancing funds on a wide variety of initiatives, such as helping people access community-based services, financing the provision of services, and supporting provider workforce initiatives.
- States participating in both MFP and the Balancing Incentive Program are using resources from the latter to take rebalancing initiatives to the next level by building upon the infrastructure, innovations, and systems initiatives they started under MFP.
- MFP is associated with an increase in the proportion of total long-term care expenditures flowing to home and community-based services (HCBS); by 2010, the HCBS share of long-term expenditures was 2.5 percentage points higher on average in the initial 30 MFP states than it would have been if MFP was never implemented.

Figure 1. Trends in the HCBS Share of LTC Expenditures With and Without MFP, 2005—2010 (Regression adjusted)



- Source: Mathematica Analysis of 2005–2010 MAX data for 30 states.
- Note: Expenditures were measured on a monthly basis. The analysis included 2,004 months of expenditures across the 30 states that received MFP grant awards in 2007.

### About the Money Follows the Person Demonstration

The MFP demonstration, first authorized by Congress as part of the Deficit Reduction Act of 2005 and then extended by the Patient Protection and Affordable Care Act of 2010, is designed to shift Medicaid's long-term care spending from institutional care to home and community-based services. Congress authorized up to \$4 billion in federal funds to support a twofold effort by state Medicaid programs to (1) transition people living in long-term care institutions to homes, apartments, or group homes of four or fewer residents and (2) change state policies so that Medicaid funds for long-term care services and supports can "follow the person" to the setting of his or her choice. MFP is administered by the Centers for Medicare & Medicaid (CMS), which initially awarded MFP grants to 30 states and the District of Columbia in 2007 and awarded grants to another 13 states in February 2011 and to 3 more states in 2012. CMS contracted with Mathematica to conduct a comprehensive evaluation of the MFP demonstration and to report the outcomes to Congress.

### INTRODUCTION

Designed to help states shift a greater proportion of Medicaid long-term care spending toward HCBS, the MFP rebalancing program and the Balancing Incentive Program provide states with resources for changing the focus of their long-term care systems. These programs are designed to increase the HCBS share of total long-term care spending, a priority for CMS, reflecting the strong preference for home-based care among the majority of people who need long-term services and supports.

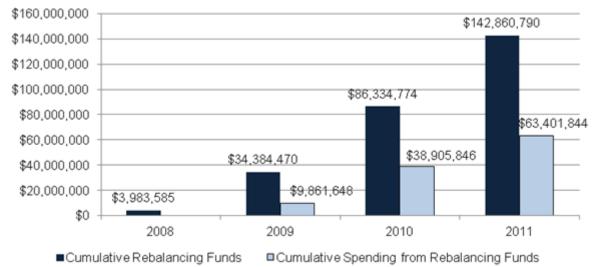
The resources that states receive through MFP and the Balancing Incentive Program are specifically for the improvement and growth of community-based long-term service options. The MFP program allows states to accumulate what are called "rebalancing funds" from the net revenues derived from an enhanced Federal Medical Assistance Percentage (FMAP) they receive as a result of providing HCBS to MFP participants. States are required to use these funds to restructure long-term care systems so that community-based long-term services and supports (LTSS) are more accessible. States do not start accumulating these funds until the MFP transition program is up and running, however. States may be slow to accumulate these funds if it takes time to build the necessary experience and infrastructure required by a larger transition program and to claim federal matching funds after providing HCBS to MFP program participants.

At the time of this report, 16 MFP states had opted to establish a Balancing Incentive Program, which also provides an enhanced FMAP for Medicaid-financed HCBS. This program was established by the Affordable Care Act. As with the MFP program, the funds from the enhanced federal match must be invested in state long-term care systems to help make HCBS more accessible. In contrast to MFP, however, states may begin claiming the enhanced federal match on all HCBS as soon as CMS has approved their Balancing Incentive Program application.

### HOW ARE STATES USING THEIR MFP REBALANCING FUNDS?

States have been steadily accumulating MFP rebalancing funds, with cumulative accrual across the 30 MFP states growing from approximately \$4 million in 2008 to nearly \$142.9 million by the end of calendar year 2011 (Figure 2). However, states have only begun spending these funds. By the end of 2011 spending had reached only an estimated \$63.4 million, or about 44 percent of total accumulated funds. Actual spending levels are most likely higher than this estimated figure, as several states have not reported their rebalancing expenditures (Delaware, Kansas, Louisiana, North Carolina, and North Dakota) or have inconsistently reported spending (Arkansas, California, Delaware, Hawaii, New Hampshire, and Wisconsin).

Figure 2. Cumulative MFP Rebalancing Funds and Expenditure Amounts by Year, 2008-2011



# Source: Mathematica analysis of state MFP Grantee Semiannual Progress Reports, June 2010–2012, and of state budget worksheets for 2012.

MFP rebalancing funds are small relative to overall Medicaid spending on long-term care services and on HCBS. For the 30 MFP states that received grants in 2007, Medicaid spending on LTSS totaled \$108 billion and HCBS spending totaled \$50 billion dollars in 2011 (Eiken et al. 2013). By 2011, the nearly \$142.9 million in accumulated MFP rebalancing funds represented less than one percent of total Medicaid expenditures for HCBS incurred by the 30 MFP states that year.

Although small relative to overall LTSS and HCBS spending, MFP rebalancing funds can have an important impact on rebalancing long-term services and supports when used strategically and judiciously. In 2010 and 2011, MFP states used rebalancing funds for a range of initiatives: to improve awareness of and pathways to HCBS, finance the provision of services, expand 1915(c) waiver programs, support and train providers, invest in strategic planning and research, and improve information technology systems.

Improving Awareness of and Pathways to HCBS. Indiana, Maryland, New York, Texas, and Wisconsin are using their rebalancing funds to help educate residents of nursing homes and intermediate care facilities about community living options. Maryland's initiative in this area focuses on the development of a peer-to-peer education program for people with intellectual and developmental disabilities (ID/DD). California, Connecticut, and Washington are using these funds to help people who want to transition to HCBS but do not qualify for the MFP demonstration.<sup>1</sup>

Financing the Provision of Services. Several states report using their rebalancing funds to maintain HCBS funding during the recent economic recession. Some grantees, such as the District of Columbia and Indiana, use these funds to finance the full array of HCBS. In other states, the spending is more focused on select services. New York is using some of its rebalancing funds to finance an assistive equipment loan program, whereas Kansas and North Dakota are providing MFP participants up to \$2,500 per person to help with the initial expenses associated with establishing a new home (security deposits, cost of home modifications, or purchase of linens or adaptive equipment).

Supporting Providers. A number of states are using their MFP rebalancing funds to support workforce initiatives, such as Ohio's research aimed at better understanding the state's workforce capacity for community-based long-term care or to develop training programs for state staff, providers, and communities, such as the Texas initiative to train at least 600 people in 10 communities on person-centered care for people with ID/DD.

Investing in Strategic Planning and Research. Connecticut utilized MFP dollars to fund an analysis that provided key information to support the state's strategic rebalancing plan. It developed town-level supply and demand projections for both community and institutional LTSS and identified projected gaps in the workforce needed to meet demand. The state used the results to initiate conversations with the nursing home industry and engage them in "right sizing" efforts that include reducing facility beds, transitioning beds for use in assisted living arrangements, and training facility staff to become community providers. The second edition of this rebalancing plan will incorporate supply and demand projections for transportation and housing.

Improving Information Technology Systems. Washington is utilizing MFP funds to develop a critical incident tracking system for MFP participants, which will enable the state to track clients and perpetrators, types of allegation, and critical incidents by waiver type and by MFP participation status.

<sup>&</sup>lt;sup>1</sup> MFP participants must have been in a qualified institution for 90 days or more, be a Medicaid beneficiary, and move to a qualified type of community residence.

# HOW ARE MFP DEMONSTRATIONS AND BALANCING INCENTIVE PROGRAMS WORKING TOGETHER?

The Balancing Incentive Program shares with MFP the goal of system rebalancing, but the two programs differ in the process by which funding is accumulated and program requirements. These differences allow the two programs to complement each other; each program can fill gaps in policies or resources not allowed or available in the other.

In contrast to the MFP program, which provides a large increase in FMAP on HCBS received by MFP participants only, the Balancing Incentive Program provides a smaller enhanced FMAP (2 percent, except in Mississippi which is eligible for a 5 percent enhanced FMAP) on HCBS received by all Medicaid beneficiaries in a participating state. Also in contrast to MFP, the state may begin claiming the enhanced match on all HCBS spending immediately after approval of its application, whereas under MFP states must wait for individuals to transition to begin claiming an enhanced match. For these reasons, states accumulate Balancing Incentive Program funds immediately and more quickly than MFP rebalancing funds.

The requirements of the two programs differ in important ways as well. Although both programs require states to invest their rebalancing funds in their long-term care systems, MFP does not have a specific rebalancing goal that states need to achieve whereas the Balancing Incentive Program expects states to ensure by September 30, 2015, that HCBS accounts for at least 25 or 50 percent of total long-term care expenditures depending on whether the state was below or above the 25 percent goal before the receipt of their grant.

Another difference between the two programs concerns how funds are used. States are under no specific requirements for how they spend their MFP rebalancing funds as long as the spending is designed to enhance the state's long-term care systems and make HCBS more accessible. Under the Balancing Incentive Program, on the other hand, states are required to expend the funds on new or expanded LTSS and to implement three structural changes:

- 1. A core standardized assessment process to collect a standard set of functional assessment data on all individuals applying for HCBS
- 2. A "no wrong door/single entry point" (NWD/SEP) for the LTSS system that ensures statewide access to comprehensive and timely information about community living options and provides timely eligibility determination and enrollment into community-based services
- 3. Conflict-free case management procedures

As of October 2013, 16 MFP states were participating in Balancing Incentive Program and no non-MFP state had been awarded a Balancing Incentive Program grant.

Arkansas	Maryland
Connecticut	Mississippi
Georgia	Missouri
Indiana	New Hampshire
Illinois	New Jersey
Iowa	New York
Louisiana	Ohio
Maine	Texas

Table 1. States Participating in the Balancing Incentive Program as of October 2013

#### Source: http://www.Medicaid.gov.

Many states with Balancing Incentive Program awards use the funds to build upon the infrastructure, systems, and innovations initiated by their MFP programs.

Strengthening the Section Q Referral Process. Revisions to the nursing home resident assessment process (MDS 3.0, Section Q), which went into effect in October 2010, require residents to be asked directly if they want to speak with someone about moving back to the community. If so, they must be referred to MFP or another program that can help people with transition planning. Missouri, however, has seen fewer MFP referrals and transitions than anticipated as a result of Section Q.<sup>2</sup> Under the Balancing Incentive Program, the Missouri MFP program is providing training to nursing facilities, potential MFP participants and guardians, public administrators, and the judicial system on available community living options for individuals identified via Section Q as wanting to move out of an institution.

Building on Outreach Strategies Developed Under MFP. Georgia's State Medicaid Agency is utilizing the Balancing Incentive Program resources to build on an outreach plan developed under MFP that educates nursing facility staff and residents about community-based supports available for transitioning MFP residents. The state is expanding this outreach program to anyone interested in LTSS regardless of institutional status to increase the number of individuals who avoid institutionalization in the first place.

Expanding MFP Services and Systems to the Broader State Population. In New York, the Balancing Incentive Program will bring services developed under MFP to the broader state population. These services include the NY TRIAD demonstration, which lends assistive devices and durable medical equipment to transitioning individuals until the waiver in which they are participating can authorize and provide these items and a web-based registry of

<sup>&</sup>lt;sup>2</sup> January to June 2012 state MFP Semiannual Progress Report.

accessible rental properties searchable by location, income, age, or disability. The state will use its Balancing Incentive Program funds to advertise the availability of these services. The Balancing Incentive Program will also expand the MFP program's peer counseling and support services, which link individuals living in institutions with peers who have successfully transitioned to community settings, and it will provide transition services to all New York residents living in institutional facilities regardless of MFP eligibility.

Utilizing the Same Stakeholders and Staff for Both Programs. Many states have used the same people to staff the MFP demonstration and the Balancing Incentive Program, to ensure that lessons learned from the MFP program are applied to create a stronger Balancing Incentive Program. For example, Iowa's MFP rebalancing workgroup helped to design the state's Balancing Incentive Program, developed the proposed functional and financial screens, and suggested metrics for program evaluation. Texas's MFP Demonstration Advisory Committee will be the primary source of stakeholder input into the Texas Balancing Incentive Program to ensure that both programs are fully leveraged and integrated. And the MFP project director in Connecticut plays a lead role in designing and implementing a number of key components of that state's Balancing Incentive Program.

Expanding Populations Covered Under MFP. Two states plan to use funds from their Balancing Incentive Programs to expand the MFP program to include new populations: Indiana (children and adolescents) and New York (individuals with ID/DD).

Utilizing Balancing Incentive Program Funds To Build on MFP Rebalancing Initiatives: Mississippi

In its Balancing Incentive Program application, Mississippi described what it called a holistic approach to rebalancing, diversion, and transitions that would combine MFP transition efforts with policies and procedures that prevent unnecessary institutionalization in the first place. Its approach involves using funds generated through the Balancing Incentive Program to expand the number of slots in 1915(c) HCBS waiver programs. MFP participants have waiver slots set aside for them, but historically there has been a long waiting list for community-dwelling individuals to enroll in waivers. The state had begun to worry that people would enter facilities to receive waiver services once they transitioned and became MFP participants. Now, using Balancing Incentive Program funds, Mississippi plans to allow 300 community-dwelling individuals currently on a waiver wait list to enroll in waiver programs during a three-month period in 2013.

Utilizing MFP Rebalancing Funds to Implement Structural Changes. Several states are using MFP rebalancing dollars to fund the structural changes required by the Balancing Incentive Program because the changes support community living. Arkansas, Iowa, and Maryland report using MFP funds for the development of assessment tools, training on use of these tools, or implementation of tools statewide to meet the core standardized assessment requirements. In their applications to the Balancing Incentive Program, eight states (Connecticut, Maryland, Mississippi, Missouri, New Hampshire, Texas, Louisiana, and New York) made general statements about using MFP funds to support the initial costs of implementing the three required structural changes under the program. Mississippi is considering using MFP funds to address a shortage of affordable and accessible housing. The Balancing Incentive Program does not allow funds to be used to pay for housing expenditures, but MFP funds are not restricted in this way.

#### Coordinating MFP and the Balancing Incentive Program Efforts: Connecticut

Connecticut has used MFP funds to support the structural changes required by the Balancing Incentive Program in a variety of ways. Under MFP, the state developed an expedited system for determining eligibility for MFP and enrollment into the program. The state will build on this system under the Balancing Incentive Program, expanding it statewide for all Medicaid-funded programs so that more individuals may benefit from the expedited process. Connecticut is also using MFP funds to develop the set of questions the state will use for the core standardized assessment required by the Balancing Incentive Program. These questions, which assess functional status, will be asked of all individuals regardless of their entry point into the state LTSS system. The state is also developing a short self-assessment pre-screen for functional and financial eligibility. Individuals will be able to complete and submit this assessment online and receive an automated referral to the appropriate waiver(s) for which they may be eligible. This online assessment acts as a door into the state's No Wrong Door/Single Entry Point system. MFP participants and staff will pilot test the online system before statewide rollout of the NWD/SEP system.

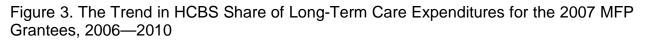
# IS MFP ASSOCIATED WITH CHANGES IN THE BALANCE OF STATE LONG-TERM CARE SPENDING?

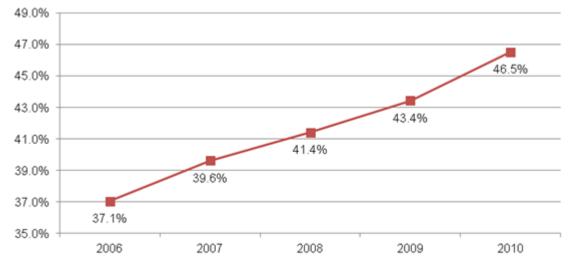
A reasonable question is whether the rebalancing efforts to date have resulted in measurable shifts in the balance of LTSS spending. To answer this question, we used Medicaid expenditure information from 30 states to assess the trend in the share of long-term care expenditures accounted for by HCBS expenditures. See the data and methods section at the end of this report for more details on the data and methods used.

From 2006 to 2008, the HCBS share of long-term care (LTC) expenditures rose from about 37 percent to 41 percent (Figure 3). The share continued to climb to 47 percent by 2010. In other words, the HCBS share was increasing even prior to MFP, reflecting states' earlier efforts to rebalance their long-term care systems. Thus, any changes in the balance of state systems after 2008 cannot be fully attributed to MFP.

The unadjusted trend in the proportion of long-term care expenditures accounted for by HCBS shows a marked increase between 2009 and 2010. When we used Medicaid claims records from the 30 grantees that received awards in 2007 and controlled for population demographics (such as age and gender) and fixed state-specific characteristics in a regression framework, we find that the post-MFP trend (calendar year 2008 and later) in HCBS expenditures was not statistically significantly different from the pre-MFP trend (before 2008)

until 2010 (Figure 4).<sup>3</sup> Starting in 2010, MFP is associated with a statistically significant 2.5 percentage point increase in the HCBS share of expenditures. In other words, the 2010 HCBS share of total LTSS spending in the 30 grantee states was 2.5 percentage points higher than what it would have been in the absence of MFP.





Source: Truven Health Analytics (Eiken et al. 2013).

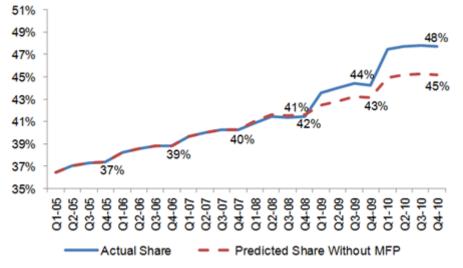


These results suggest that MFP's influence on the balance of state long-term care systems was not immediate, but its influence increased over time as states developed or expanded their MFP programs. They are also consistent with our expectation of a lagged effect of the rebalancing funds on the overall trend in long-term care expenditures, given that states were still in the initial stages of accumulating MFP rebalancing funds in 2008 and 2009 and had not spent them to a large extent until 2010.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> The analysis presented in Figure 4 is based on data from the Medicaid Analytic eXtract (MAX) data system. The use of individual records enabled us to analyze effects at the user level as well as at a finer time frequency compared to state aggregate data, such as that reported by Truven Health Analytics (Eiken et al. 2013). However, our use of MAX data for this analysis may result in difference between our statistics and other published statistics that rely on other data sources. Notably, services billed in bulk are not captured in MAX because they cannot be linked to particular beneficiaries, and our statistics do not reflect services provided by a managed care organization.

<sup>&</sup>lt;sup>4</sup> We would not expect to see any impact on the balance of long-term care spending from the Balancing Incentive Program during these years, as this program did not begin until October 2011.

Figure 4. Trends in the HCBS Share of Long-Term Care Expenditures With and Without MFP, 2005—2010 (regression adjusted)



Source: Mathematica Analysis of 2005-2010 MAX data for 30 states.

Note: Expenditures were measured on a monthly basis. The analysis included 2,004 months of expenditures across the 30 states that received MFP grant awards in 2007.

We also analyzed the trend in the proportion of long-term care users who received HCBS to investigate how this measure of long-term care systems changed after states began implementing their MFP programs in 2008. We found similar results. Beginning in 2010, the data show a statistically significant increase in the trend of HCBS users as a proportion of all long-term care users. In this case, the association was weaker because the absolute increase was smaller at 1.5 percentage points. These results highlight an important point; because institutional services are more expensive, a change in the percentage of HCBS users is likely to lead to a disproportionately larger change in HCBS expenditures. The estimates suggest that for a 1.5 percentage point increase in the proportion of long-term care users receiving HCBS, spending on HCBS relative to institutional care increased by 2.5 percentage points.

Subgroup Analyses. In more detailed and disaggregated analyses, we found that the increase over time in HCBS expenditures as a proportion of total LTC expenditures was most pronounced among individuals with intellectual and developmental disabilities. By the end of 2010, the HCBS share of LTC expenditures among this population was 72 percent, or 2.7 percentage points higher than it would have been if MFP had not been implemented. We found similar, but far weaker and statistically insignificant evidence among the elderly and individuals with mental illness. Among the nonelderly with physical disabilities, we did not see any evidence of an association between MFP and the trend of HCBS expenditures as a proportion of total LTC expenditures. These results are consistent with Irvin et al. (2012) who found that during the same time period, MFP was associated with increased transitions among only those with intellectual and developmental disabilities, but not the other populations participating in MFP.

We also found that MFP's association with the increasing HCBS share of total LTC expenditures was driven primarily by established users—people who had used LTSS for a year

or more—rather than by those new to LTSS. This finding suggests that the influence of MFP during its early years was primarily through the MFP transition program and MFP's overall effect on increasing access to HCBS for long-term recipients of LTSS. MFP's lack of effects on people new to long-term care services, at least in the first years of the program, indicate that it may take time for states to change their systems so that HCBS is more accessible to those entering the long-term care system.

Robustness of Results. In any trend analyses, it is important to take into account other events occurring at the same time, such as the downturn in the economy or the aging of the population, which may exert independent effects on outcomes. We conducted a range of sensitivity tests that included changing the year of implementation from 2008 to 2009; assessing the penetration (number of transitions as a share of the population using long-term care services) of the MFP transition program; testing the sensitivity of the results to the sample of states; and testing a different modeling approach. We found that the basic results were relatively robust and did not change across the different sensitivity tests we conducted.

We found a substantial positive association between MFP and HCBS expenditures as a proportion of LTC expenditures in Texas as early as 2008, which is consistent with a state that was posed to expand a state-designed MFP program that preceded the national demonstration. We also found that the HCBS share of LTC expenditures tended to be higher in states where the MFP program had a larger penetration than in other states. That is, when MFP participants accounted for a larger share of the population of long-term care users, a greater proportion of LTC expenditures were for HCBS.

### DISCUSSION

The MFP demonstration appears to be achieving its broad goal of helping states to increase the capacity of communities to serve people who need long-term services and supports in their homes and community settings. States report considerable activity and new initiatives to enhance their long-term care systems, and the range of state efforts is extremely broad, reflecting the different needs of states and the populations they serve. Some states have directed their funds to a specific issue, population, or service (such as making assistive technology more readily available) while other states have used their rebalancing funds more broadly (for example, to expand the size of their waiver programs). The relatively small amounts of reported spending from MFP rebalancing funds suggest that as recently as 2011, states were still in the initial phase of investing these funds. The lagged spending means that we should expect to see new and expanded initiatives as state rebalancing programs grow and mature. For those MFP states that have also received a Balancing Incentive Program grant, their plans suggest that a surge of activity has started and should continue for the next few years as they implement new and larger initiatives to enhance and refocus resources on community-based long-term services and supports.

Although states have more MFP rebalancing funds to spend, and a number will strengthen and build upon their MFP program with Balancing Incentive Program funds, results from this analysis suggest that HCBS expenditures were experiencing an accelerated growth rate as early as 2010, the third year of the MFP demonstration. To find an increasing trend in expenditures flowing to community-based services this early most likely reflects some effect of the MFP program as well as other changes occurring at the state level, as the analysis could not completely control for secular trends (such as an aging population) that could put upward pressure on HCBS spending. In the third year of the demonstration, the program experienced considerable growth when the total number of transitions more than doubled, but spending from rebalancing funds had just begun in most states (Denny-Brown et al. 2011; Irvin et al. 2011). The gain detected in 2010 should be sustained in the ensuing years as the investment from MFP, and in some states from the Balancing Incentive Program as well, only becomes larger and has a more extensive reach. HCBS expenditures should accelerate further as states expand their MFP rebalancing initiatives and fully implement their Balancing Incentive Program work plans.

### LIMITATIONS

The analyses presented here were constrained by limitations of the data. As mentioned previously, we know the state reports of spending from their MFP rebalancing funds are incomplete and that total rebalancing fund expenditures are underestimated in the data we have available. We anticipate that states will eventually provide a more complete accounting of expenditures as they upgrade their financial tracking systems to better monitor the spending of their MFP rebalancing funds. Mathematica will continue to track these expenditures and the results presented in this report should be considered preliminary and subject to change.

Another limitation affects our assessment and characterization of MFP rebalancing activities. This analysis was based on annual state reports, and some states provide more detailed information for these activities than other states. We were unable to follow up with each state to ensure we understood the details of each rebalancing activity they reported; as a result, we may have misclassified or mischaracterized some of the activities.

Another limitation is that the Medicaid data we used for analyzing the trend in long-term care expenditures were incomplete. Although we had expenditure information for all 2007 MFP grantees through 2009, data from 2010 were missing for several states because of lags in state reporting of Medicaid claims. Sensitivity analyses suggest that this issue did not affect our overall results, which indicates that when we have complete data for 2010, we will continue to detect a significant increase in the trend in the proportion of long-term care expenditures accounted for by community-based services. Once we have Medicaid data for all states, the data will still be incomplete. At this time, we are still unable to incorporate expenditures when someone is enrolled in a managed LTSS system. States frequently do not report their monthly capitated payments or encounter records into their regular Medicaid data files (Byrd and Dodd 2013; Borck et al. 2013). Even if they did, we would not have the information necessary to know how to allocate the monthly capitated payment to long-term services and supports and the encounter records do not include provider payment information. Thus, as more states implement managed LTSS programs, our ability to conduct this type of analysis will become more constrained. Truven Health Analytics is collecting more complete expenditure information for LTSS (Eiken et al. 2013), but their information is aggregated to the state level and most of the analyses presented here required individual level data that allow us to conduct subgroup analyses and to assess expenditures on a monthly and quarterly basis.

Lastly, the analysis of long-term care expenditures was based on a pre-post comparison of the trend in the proportion of long-term care expenditures accounted for by HCBS. This type of

analysis is imperfect because it cannot fully control for other events that may have occurred at the same time as states were implementing their MFP demonstrations and Balancing Incentive Programs. Other broad changes affecting long-term care systems during this time period include an ongoing series of Olmstead and Department of Justice rulings that require states to move residents of institutional facilities to community residencies. In addition, many states were expanding their networks of Aging and Disability Resource Centers. However, given that the increase we detected was driven by the population with intellectual disabilities and that this population dominated the MFP program during its early years, the increase may reflect both the MFP program and court rulings that affected the intermediate care facilities that serve this population. In future analyses, disentangling the effects of MFP from other initiatives will become more challenging because states are now more actively pursuing other initiatives that are likely to affect the balance of long-term care spending. In addition to the Balancing Incentive Program, other programs and policies will likely add to the rebalancing trend. Examples are the Community First Choice Option, which provides states with another avenue for offering personal assistance services as a Medicaid state plan option, and the new housing resources being provided by the Department of Housing and Urban Development (HUD) that include new housing vouchers for the nonelderly population with disabilities and new resources for supportive housing (Lipson et al. 2013).

### CONCLUSION

As the MFP demonstration continues to grow and states fully implement their Balancing Incentive Programs, it will be informative to look beyond the aggregate state results and assess whether some populations benefit more than others from state rebalancing efforts. The results presented here suggest that the acceleration in HCBS expenditures relative to total long-term care expenditures detected in 2010 did not benefit all populations. The increased trend in the share of HCBS expenditures was driven by the population with intellectual and developmental disabilities and people who had been using long-term services and supports for at least a year or more. Other populations that use LTSS did not experience the same growth in HCBS expenditures relative to their overall long-term care expenditures. States have considerable work ahead to ensure that those with physical disabilities, regardless of age, who wish to live in a community setting can access the LTSS they need in their homes. Because the number of agencies and providers serving this population is wide, rebalancing efforts will have to be broad based and extensive. The states in the MFP demonstration and Balancing Incentive Program now have the funds necessary to effect important changes in their long-term care system. Continuing analyses of utilization and expenditure data will document the extent to which these efforts change the composition of long-term care expenditures for all types of populations as well as for the state overall.

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### DATA AND METHODS

### Analysis of MFP Rebalancing Funds and Balancing Incentive Programs

MFP Rebalancing Fund Information. Rebalancing fund information was gathered from data states reported in their semiannual progress reports for the periods from January to June 2011 and January to June 2012 and in their 2012 MFP annual state budget worksheets.

MFP and Balancing Incentive Program Initiatives. Descriptions of MFP and Balancing Incentive Program activities were draw from state MFP semiannual progress reports, MFP operational protocols, Balancing Incentive Program applications and work plans, and interviews with MFP program managers in Connecticut and Mississippi.

#### **Trend Analysis**

Data. To assess the trends in long-term care expenditures, we used data from the Medicaid Analytic eXtract (MAX) data system.<sup>5</sup> MAX eligibility and claims files provide Medicaid data in a uniform format across all states and include demographic and eligibility characteristics and Medicaid service use for every Medicaid enrollee. MAX data were available for all 30 2007 MFP grantees from 2005 through 2009, but the 2010 data were available for only 17 states.<sup>6</sup> We also supplemented the MAX data with MFP administrative data to determine the number of MFP transitions in each state and year.

Expenditure Measures. We computed monthly Medicaid LTC expenditure data, broken down into HCBS and institutional care. We used only fee-for-service claims records for all 1915(c) waiver claims and claims for state plan personal assistance services, at-home private duty nursing, adult day care, home health care of at least 90 days, residential care, or at-home hospice care. The restriction requiring at least three consecutive months (90 days) of home health use is designed to eliminate those receiving home health care for rehabilitation purposes only. Fee-for-service claims for care received in nursing homes, intermediate care facilities for those with intellectual and developmental disabilities, or long-term psychiatric facilities were used to determine expenditures for institutional care. We computed our main outcome of interest, HCBS share of LTC expenditures, as HCBS expenditures divided by the sum of HCBS and institutional long-term care expenditures.

<sup>&</sup>lt;sup>5</sup> Beta-MAX files (early release versions of MAX data) were used when MAX data were not available.

<sup>&</sup>lt;sup>6</sup> The 30 2007 MFP grantee states are Arkansas, California, Connecticut, Delaware, the District of Columbia, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Missouri, North Carolina, North Dakota, Nebraska, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Texas, Virginia, Washington, and Wisconsin. MAX data for 2010 were available for only the following states: Arkansas, California, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Michigan, Nebraska, Ohio, Oregon, Pennsylvania, Texas, and Virginia.

Subgroup Analyses. To classify beneficiaries into MFP target populations—elderly, nonelderly individuals with physical disabilities, individuals with ID/DD, and individuals with mental illness—we used the type of facility and the individual's age if the beneficiary received institutional care. We used waiver type and the individual's age to classify all other beneficiaries. New long-term care users were enrollees who did not have any Medicaid-financed LTC utilization in the previous calendar year. We categorized beneficiaries as established users if they were not new users.

Methods. To control for the pre-MFP trend in the balance of LTC expenditures, we estimated regression models that contained trend terms. Effectively, this methodology attributes any deviations from the 2005–2007 trend to MFP. The regression models were estimated using observations at the state-month level. We included state fixed effects to control for fixed state-specific characteristics. We included calendar month fixed effects to flexibly control for seasonality. We also included state-month averages of age, age squared, race, and gender for the Medicaid population that used LTC services and supports. Regressions were weighted by the denominator values of the outcome variable to reflect population averages. Thus, states with higher levels of LTC expenditures had more influence on the average than states with lower levels of LTC expenditures. Our key explanatory variables were indicators of the post-MFP years 2008, 2009, and 2010. We also refined this measure in a sensitivity analysis, where instead of a binary variable, we constructed a measure of MFP penetration as the number of MFP transitions in a year divided by the average number of monthly LTC users that year.

Formally, we estimated the model below:

 $outcome_{jt} = \beta_{08} \cdot year_{08} + \beta_{09} \cdot year_{09} + \beta_{10} \cdot year_{10} + trend_t + \alpha \cdot X_{jt} + \epsilon_{jt}$ 

where  $outcome_{jt}$  is the outcome of interest,  $year_k$  is an indicator for year k, trend<sub>t</sub> is a linear time trend, and  $X_{jt}$  represents the set of controls, including demographic characteristics and state fixed effects. The parameter  $\beta_k$  is the estimate of the association between MFP and the outcome of interest in year k.

For our main results, we estimated the model for the entire set of states and months over which we have available data. However, we also tested the results by restricting the set of states to those for which we have all years of data (2005 through 2010).