



REPORT

Bundling, Benchmarking, and Beyond: Paying for Value in Home- and Community-Based Services

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Foreword

As aging populations grow, so do the demands for affordable, high-quality, long-term care options. State policymakers are paying special attention to the role of Medicaid programs, which pay for the vast majority of long-term services and supports (LTSS). Over the last several years, public policy has shifted LTSS from being provided primarily in institutional care settings, such as nursing homes, to being provided in home- or community-based settings. Home- and community-based services (HCBS) include a diverse set of supports that allow individuals to reside in their own homes or assisted-living facilities.

With this shift to homes and communities for long-term care, new questions emerge:

- What constitutes high-quality HCBS and how do Medicaid agencies measure quality?
- How do Medicaid agencies pay for HCBS?
- Given the increasing demand and the cost of HCBS, how do Medicaid agencies ensure appropriate use of these services and for which populations are they most appropriate?

To help state policymakers address these challenges, the Medicaid Evidence-based Decisions Project (MED) commissioned a report focused on alternative payment methods and quality metrics for HCBS. MED is a self-governing collaboration of state Medicaid agencies based at the Center for Evidence-based Policy at Oregon Health & Science University.

This report is adapted from the MED report—and addresses the same questions for a broader audience. It offers tools, resources, and examples for policymakers as they look for innovative ways to reimburse for and assess quality in Medicaid HCBS. This challenge will grow as the population grows.

The Milbank Memorial Fund and the Center for Evidence-based Policy share a commitment to using the best available evidence and experience in health policymaking. We hope this report helps state leaders ensure quality and affordable LTSS options in Medicaid.

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Acknowledgments

The Milbank Memorial Fund and the Center for Evidence-based Policy would like to thank the advisory group of state policymakers for their contributions to this report. Their expertise on long-term care, specifically home- and community-based services, added value and insight, and we appreciate their dedication to provide guidance on this report.

- Craig Cloud, Director, Division of Aging and Adult Services, Arkansas Department of Human Services
- Representative Eileen Cody, 34th District Representative, Washington State Legislature; Chair, House Health and Wellness Committee
- Duane Mayes, Director, Senior and Disabilities Services, Alaska Department of Health and Social Services
- Kate McEvoy, Director, Division of Health Services, Connecticut Department of Social Services.

We are grateful to the Medicaid officials from Arkansas, Colorado, and Tennessee and the former Centers for Medicare & Medicaid Services administrator for serving as key informants for this report (Appendix A).

We also thank the 19 participating state Medicaid agencies of the Medicaid Evidencebased Decisions (MED) Collaborative for its permission to use research conducted for the collaborative as the foundation for the content of this report.

Finally, the authors of this report at the Center for Evidence-based Policy would like to acknowledge the Milbank Memorial Fund for its partnership and support in the production of this report. The Milbank Memorial Fund has been a leader in promoting evidence-based health policy for more than 100 years, and its contribution to supporting states' work to make decisions guided by the best available evidence is positively impacting the health of individuals across the country.

Overview

The increase in home- and community-based services (HCBS) expenditures—combined with the growing emphasis by the Centers for Medicare & Medicaid Services (CMS) on new payment methods that lead to higher-quality health care, lower costs, and healthier people—has compelled policymakers to explore new ways to pay for and measure the quality of Medicaid HCBS. This report provides an overview of Medicaid's long-term services and supports (LTSS) including HCBS. It provides information about Medicaid spending on LTSS, federal HCBS authorities, and the recent shift in LTSS toward HCBS and away from institutional care. The report examines one alternative payment model (APM), bundled payments, and its applicability to Medicaid HCBS state examples from Colorado and Arkansas. The report also looks at efforts to establish quality measurement systems to promote high quality and payment for value in Medicaid HCBS, especially current efforts regarding quality metrics for HCBS.

The report offers tools, resources, and examples for policymakers as they consider innovative ways to reimburse for and assess quality in Medicaid HCBS. Although HCBS may be used for acute care or LTSS, this report focuses primarily on HCBS in the context of LTSS. Policymakers will find helpful tools for developing bundled payments for HCBS. The paper outlines lessons learned from existing bundled payment initiatives—the Four Cs for Developing HCBS Bundle Payments (consistency and transparency; coordination of care; calculating payment; and capacity of Medicaid agencies and providers). It also highlights several factors regarding quality measurement, summarized in the Three Ms for HCBS Quality Assessment (measures, methods, and monitoring).

Introduction

Millions of children, adults, and seniors with disabilities and chronic illnesses need services to support their daily living.¹ They may require a wide range of services for their day-to-day activities over long periods of time or indefinitely, such as assistance with bathing, dressing, meal preparation, and medical care (e.g., medication management and skilled nursing).¹ Medicare and private health insurers generally offer only limited LTSS, with the result that individuals who need this care either must pay out of pocket or rely on Medicaid if they meet eligibility criteria.² In fact, Medicaid programs across the United States pay for the majority (61%) of LTSS.

Medicaid Spending on LTSS

In fiscal year 2015, LTSS accounted for 30% (\$158 billion) of Medicaid benefit expenditures.³ During the same year, older adults and individuals with disabilities, the two primary groups who need LTSS, accounted for 23% of total Medicaid enrollment. But they constituted more than half (56%) of Medicaid spending.² As medical treatment and medical technology advance, people are living longer, including the aging baby boomer population and those with disabling and chronic conditions.⁴ Adults over 65 years often require in-

creasing levels of LTSS as they age because they develop chronic illnesses and conditions. Accordingly, Medicaid LTSS expenditures are projected to rise over the next 10 years,² and part of this projected increase is attributed to adults living longer.⁵

Medicaid LTSS Options

LTSS has two main options in Medicaid: institutional care and HCBS provided in community settings. Institutional LTSS is a required benefit by federal Medicaid statute and includes settings such as nursing facilities and intermediate care facilities for individuals with intellectual disabilities.^{6,7}

HCBS are primarily optional Medicaid benefits under the federal Medicaid statute.8 CMS defines HCBS as "services made available to support individuals living at home or in a community-based setting; these may include home health care, durable medical equipment, assistive technology, chore services, nursing care, transportation, adult day care, in-home meal services, and more." HCBS offers many services ranging from clinical care to services affecting other aspects of a person's health, such as transportation. HCBS may be provided in a variety of community settings, including private residences and apartment-style assisted-living facilities, and may encompass short-term care for beneficiaries with acute conditions or LTSS for the elderly and beneficiaries with chronic conditions. 10

HCBS Authorities

HCBS became an option for Medicaid in 1981 when Congress added Section 1915(c) to the Social Security Act, which permitted state Medicaid agencies to seek waivers to provide HCBS as Medicaid benefits. Additional HCBS options have been established in recent years. The key Medicaid HCBS authorities are the following:

1915(c) HCBS Waiver. This waiver authority allows Medicaid agencies to provide a range of HCBS to beneficiaries.⁸ Under this authority, a Medicaid program may limit the number of beneficiaries who can receive HCBS through the waiver and choose specific beneficiary populations to be eligible for services.⁸ The waiver must be cost neutral. As of 2017, 47 states and the District of Columbia had at least one 1915(c) waiver; the total number of 1915(c) waivers across the United States was 296.¹²

1915(i) State Plan HCBS. This option was established through the Deficit Reduction Act of 2005 and was expanded through the Patient Protection and Affordable Care Act (ACA) in 2010. ^{13,14} A state Medicaid program may offer a range of HCBS benefits to beneficiaries and establish specific medical necessity criteria for the services. ⁸ State Medicaid agencies must offer HCBS covered through this authority statewide and cannot set enrollment caps or have waiting lists for benefits. ⁸ As of December 2015, 17 state Medicaid agencies offered some HCBS benefits through the 1915(i) HCBS state plan option. ⁴

1915(j) State Plan Self-Directed Personal Assistance Services. This state plan option, added to the federal Medicaid statute through the Deficit Reduction Act of 2005, allows beneficiaries to voluntarily direct their own personal care services. ^{13,15} This means that beneficiaries may choose their own providers and manage a set amount of funds to be used for

personal care services based on their needs.⁸ Medicaid agencies are allowed to limit the population eligible and the number of people who can self-direct the personal care services they are eligible to receive.⁸ But because other state plan and waiver options inherently incorporate self-direction, only five state agencies had used the 1915(j) state plan option as of 2014.⁴

1915(k) State Plan Community First Choice. This state plan option was authorized through the ACA and allows state Medicaid agencies to receive an enhanced federal match for offering certain HCBS, including attendant services and supports, to promote community-based living for beneficiaries who would otherwise require institutional care. Medicaid programs are not allowed to target certain populations or geographic areas or place enrollment caps on the benefits. As of March 2016, Medicaid programs in eight states had approved 1915(k) state plan amendments.

1115 Demonstration Waivers. Section 1115 of the Social Security Act gives the secretary of health and human services the authority to allow states to test new policy approaches to Medicaid, including innovative delivery systems, eligibility for populations not typically eligible for Medicaid, and benefits and services not usually covered by Medicaid. As of March 2018, 12 state Medicaid programs had approved 1115 waivers focused on managed long-term services and supports (MLTSS), and four Medicaid agencies had pending waivers with a similar focus. Although these waivers differ across states, all 1115 waivers focused on using MLTSS to expand access to HCBS, especially for beneficiaries at risk of entering institutional care (e.g., seniors with chronic conditions, individuals with disabilities).

Expansion of HCBS

Over the last three decades, state Medicaid programs have vastly expanded the availability of HCBS to beneficiaries who need LTSS through state plan amendments and waivers. In addition to the several HCBS authorities that have been established, the movement to expand HCBS as an alternative to institutional care can be attributed to the following:¹⁸

- **Olmstead v L.C.** In 1999 the US Supreme Court's *Olmstead* decision stated that under the Americans with Disabilities Act, individuals must be placed in the least restrictive setting in accordance with the appropriateness of the services, individual preference, and the availability of HCBS.¹⁹
- **Beneficiaries' Preference.** Medicaid beneficiaries and their families have a strong preference for HCBS over institutional care, as demonstrated through actions by advocacy groups and subsequent litigation related to *Olmstead v L.C.* Survey data also suggest that older adults prefer to receive LTSS in their homes.²⁰
- **Cost.** Although Medicaid programs' benefits and reimbursement rates vary, there is a widespread belief that HCBS is less costly than institutional care.

Because of the expansion of HCBS in Medicaid, LTSS expenditures have dramatically shifted. From 1995 to 2015, expenditures for HCBS increased from 18% to 55% of total Medicaid LTSS expenditures.³ Estimates suggest that spending on HCBS will continue to increase and, by 2020, will account for nearly two-thirds of Medicaid LTSS spending.²¹

Triple Aim of Health in HCBS

Given the growing population of individuals who rely on Medicaid for LTSS, policymakers face mounting pressure to provide the types of LTSS that are valued and preferred by Medicaid beneficiaries while balancing fiscal constraints and ensuring high-quality care. In addition, CMS has recently increased pressure on Medicaid programs to shift away from fee-for-service (FFS) payments toward paying for value and quality. Nonetheless, the majority of HCBS are paid for using FFS payments, and quality information on HCBS programs is limited.^{3,22}

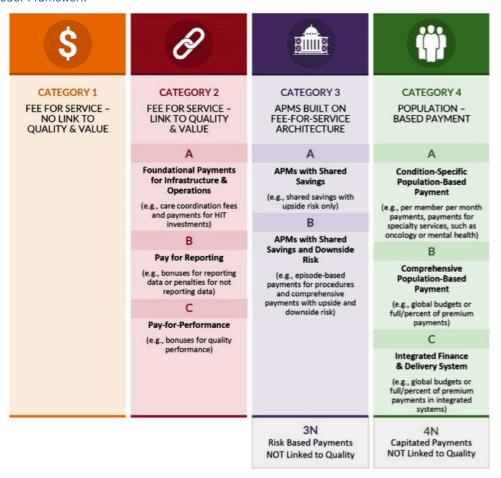
Policymakers are exploring new ways to pay for HCBS and assess the quality of care they are purchasing. But establishing alternative payment methods and quality improvement strategies for HCBS that promote the Triple Aim of health (better health care, lower costs, and healthier people) is difficult, for the following reasons:

- **HCBS Program Diversity.** State Medicaid agencies have immense flexibility to design HCBS programs covering authorities, scope of services, eligibility criteria, and limitations.²² This has resulted in vastly different HCBS programs across states. Specific priorities, needs, and constraints affect individual state Medicaid HCBS benefits, which can complicate the evaluation of the overall value and quality of care.²²
- **Beneficiary and Provider Heterogeneity.** Beneficiaries receiving HCBS have their own preferences and needs, such as a different severity of needs, and they receive care from many and various providers.²³ This can make it harder to group beneficiaries into population cohorts for alternative payment models (APMs) and to select metrics that holistically capture HCBS quality. In addition, high-quality care and outcomes may differ from beneficiary to beneficiary given the diverse population.²²
- Provider and System Capacity. HCBS cross a variety of domains, and the scope of services are beyond clinical care. The HCBS provider system mainly consists of small or independent providers that often lack the data infrastructure required for bundled payments and quality measurement systems.²⁴
- Strong Stakeholder Viewpoints. HCBS often involve sensitive family decisions, such as where an elderly family member (e.g., mother, father) will live and what kind of care he or she will receive. Beneficiaries, families, and advocates tend to have strong opinions about what optimal care should entail.

Bundled Payment Models for HCBS

The Alternative Payment Model Framework created by the Health Care Payment Learning and Action Network (HCP LAN) outlines payment models for transforming the health care system from a volume-based system, reliant on FFS payments to providers, to one that focuses on person-centered care and pays providers for quality care and the achievement of health outcomes (Figure 1).²⁵

Figure 1. Health Care Payment Learning and Action Network (HCP LAN) Alternative Payment Model Framework



Source: Health Care Payment Learning & Action Network, 2017, http://hcp-lan.org/workproducts/apm-framework-onepager.pdf.

Abbreviations: APM: alternative payment model, HCP LAN: Health Care Payment Learning and Action Network, HIT: health information technology.

Notes: 3N and 4N are not considered true payment reform because quality is not addressed and cannot be considered a value-based payment.

One APM, which could fit into category 3 or 4 of the framework depending on the arrangement, is the bundled payment. Bundled payment approaches, also called episode-based payments, generally package together payments for a set, or bundle, of services for a

defined health care procedure or the treatment of a clinical condition over a period of time, often termed an episode. ²⁶ Providers may deliver a variety of services based on the beneficiary's particular needs during a single episode of care. ²⁷ For example, in a clinical setting, a bundled payment for a hip replacement or knee surgery episode would likely include the surgery, hospital stay, and other recovery services such as physical therapy. ²⁸

The interest in bundled payments in the clinical discipline has grown in recent years.²⁶ CMS implemented several bundled payment initiatives related to clinical conditions in Medicare, including the following:

- **Acute Care Episode.** This three-year demonstration was launched in 2009 with five hospitals and involved bundled payments for orthopedic and cardiac surgery.²⁹ The initiative resulted in an average savings of \$585 per case (\$7.3 million across all episodes) but no significant changes in process or outcome quality measures.³⁰
- **Bundled Payments for Care Improvement Initiative.** This voluntary program, which began in 2013, allows hospitals, post-acute home-health agency providers, physician groups, and other organizations to receive bundled payments for 48 episodes.³¹ As of 2016, the initiative had 1,522 participants.³¹

Design and Operational Elements for HCBS Bundled Payments

As noted earlier, a few states have started to explore new methods to pay for HCBS. For example, some Medicaid programs have used waivers to shift LTSS, including HCBS, into a managed care model, paying managed care organizations (MCOs) a capitated monthly rate for patients receiving LTSS.¹⁷ In addition, the Program for the All-Inclusive Care for the Elderly (PACE), which serves more than 45,000 individuals across 36 states, provides HCBS to individuals who are dually eligible for Medicare and Medicaid.³² A nonprofit PACE entity receives a capitated monthly rate per member to provide several HCBS to adults over age 55.³³ State agencies, however, are just beginning to explore how bundled payments might be adapted from the clinical discipline for use in HCBS.

The HCP LAN Clinical Episode Payment Work Group produced a framework outlining important design elements and operational considerations for episode payment models in the clinical field (Figure 2). The design elements address important fundamentals of bundled payments, and the operational considerations (the gears in the middle of the framework) center on the implementation of a bundled payment model. Although this framework is specific to bundled payments in the clinical discipline, it offers important implications to policymakers exploring bundled payments for HCBS.

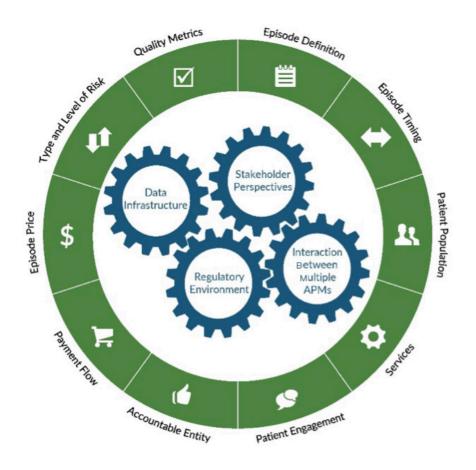


Figure 2. Episode Payment Design Elements and Operational Considerations

Source: Health Care Payment and Learning Action Network, 2016, https://hcp-lan.org/groups/cep/clinical-epi-sode-payment/.

Abbreviation: APMs: alternative payment models

Bundled Payment Design Elements for HCBS

Using the Episode Payment Framework, the following focuses on how the design elements could be applied to bundled payments for HCBS.

Episode Definition and Timing. Episodes of care in bundled payment models are generally grouped into four categories:

- Procedural episode: Health care procedure with a defined beginning and end (e.g., knee replacement).
- Chronic condition episode: Disease or long-term health issue not bound by a specific period (e.g., diabetes).
- Acute condition episode: Condition requiring a set of services with a defined beginning and end (e.g., pregnancy, asthma attack).
- Primary care episode: Defined by specific populations (e.g., children, elderly). ^{26,34}

Episodes in HCBS could fall into any of the four categories, but specifically for HCBS in LTSS, bundled payments would likely fall into chronic condition episodes or episodes based on specific populations (e.g., elderly). Beneficiaries may need to receive a set of HCBS indefinitely, so the plan of care for the episode would need to be for a relatively extended period (e.g., 6 months, 12 months).

Beneficiary Population. In bundled payment models, in which providers assume a level of risk, larger beneficiary populations will help limit the influence of outliers (e.g., beneficiaries who require more expensive care).³⁴ To allow for accurate predictions of episode prices, bundled payments work best among beneficiary populations that are relatively similar.³⁵ Given the diverse health needs and beneficiary characteristics in HCBS, policymakers may need to develop criteria that account for a variety of beneficiary characteristics.³⁶ For example, the beneficiary's age, diagnosis, level and type of need, housing situation, and social supports all could help group beneficiaries for HCBS bundled payments. Policymakers should also have established criteria to determine when this model is not suitable for a certain beneficiary given his or her particular needs.

Services. Policymakers need a system to determine which HCBS should be part of a bundled payment. Given the broad array of HCBS offered in Medicaid programs, one tool that could help Medicaid administrators group HCBS is the taxonomy developed by CMS (Appendix B).³⁷ Another consideration for policymakers is the growing use of self-directed HCBS and how those services might be incorporated into bundled payments. Once bundled payments for HCBS are operating well, a state agency might bundle other services that address social determinants of health as a next step to provide holistic care in LTSS for beneficiaries.

Beneficiaries' Engagement. Beneficiaries and their families have strong opinions about the provision of HCBS, such as their perceived level of need and required services to live as independently as possible in a community setting. Particularly in models in which services are bundled, beneficiaries need the opportunity to participate in their plans of care and should know how their bundle of HCBS will be delivered.³⁸ Planning should also include a discussion about the family's and caregiver's capacity to care for a beneficiary, especially when he or she is living in a private residence.³⁸

Accountable Entity. The accountable entity in bundled payments is the payer, provider, or provider group that receives the bundled payment and disperses it to other providers delivering care during the episode. Long-term HCBS can involve several providers, so a Medicaid program may want to begin bundled payments with accountable entities that can be easily identified in HCBS. For beneficiaries living in assisted-living facilities, such as apartment-style housing, the accountable entity could be the facility or a contracted home health agency. For beneficiaries living in private residences, identifying a provider or provider group as the accountable entity may be difficult.

In addition to an accountable entity receiving and dispersing payments, an accountable entity is needed to coordinate care for the beneficiary to provide patient-centered care

and avoid duplicative services.³⁹ This is particularly important for HCBS because care for any one beneficiary will likely extend to clinical, social, behavioral, and community-based providers. Care could be coordinated through the same accountable entity that disperses payments, such as an MCO.

Payment Flow. Bundled payments typically are made through a retrospective or prospective payment process.²⁸

- Retrospective Payment. When retrospective payments are used during the episode, providers are paid for each service, with an adjustment at the end based on the difference between the estimated cost and the actual cost.²⁸ Depending on the specific arrangement, accountable entities may share their savings or losses with the payer and/or providers.²⁸
- Prospective Payment. When prospective payments are used, the price of the episode is estimated and established for the bundle of services before the care has been delivered.²⁸ The payment is delivered to an accountable entity, which in turn pays the providers.²⁸ For long-term HCBS, prospective payments may be calculated on an assessed daily or weekly set of HCBS, with the provider receiving a daily or weekly rate for the set of services. Prospective payments may be challenging, though, as the payments should be connected to quality metrics and should allow for additional payments if the beneficiary requires more care than originally estimated.

Episode Price. There are many ways to calculate the targeted or estimated price of a bundle of services for an episode. Reviewing historical claims data to calculate an average or general cost of an episode can be useful to predict its future cost, although previous payments may not have been linked to quality or value. A Medicaid program must possess the infrastructure and capacity to continually monitor the target price for specific bundles of services.

Risk adjustment is necessary to determine an episode price for Medicaid HCBS. When calculating the price of a bundle of services, risk adjustment considers the beneficiary's severity of need and appropriate level of health care services.²⁸ This is important for providers that serve small and/or diverse beneficiary populations.³⁵ Risk adjustment has also been shown to help avoid underutilizing services for beneficiaries with complex or severe needs.³⁵

Medicaid agencies often use assessment tools for risk adjustment to evaluate a beneficiary's severity of need.⁴⁰ With few validated tools, states have created most of these tools.⁴⁰ Assessment tools may group beneficiaries into specific levels, or tiers, of services, which can help create population cohorts and bundles of services for HCBS. Another way to assess severity of need is to use the history of beneficiaries with similar conditions to help predict future needs for specific episodes or bundles of care.³⁴

Type and Level of Risk. Ideally, the share of risk assigned to providers in a bundled payment arrangement refers to costs within their control (e.g., avoiding redundant services by coordinating care).⁴¹ Providers that do not coordinate with one another, as is often the case with HCBS providers, might have less control over certain variables, such as contracts with payers, than do those working in an integrated, centralized system.⁴²

Taking on risk in bundled payment arrangements can be extremely challenging for small providers that do not rely on large provider networks, as is often the case with HCBS providers. Medicaid agencies should carefully consider the level and type of risk these providers are able to assume and still remain operational. They might need support from state policymakers or other experts to develop the infrastructure required for bundled payments. In addition, HCBS providers might not have the financial capacity to assume high levels of risk. One approach to addressing this challenge is a stop-loss agreement in which providers are protected from ongoing losses if bundled payments do not work as intended.

Quality Metrics in Bundled Payments. Effective bundled payment models include quality metrics that assess the value of services, gauge whether beneficiaries are receiving the appropriate level of care, and identify gaps in care. Establishing quality metrics for bundled payments for any procedure or condition is difficult.^{28,35} Quality metrics in health care are often based on care received in a single health care setting, not care received across multiple settings, as often occurs in bundled payments.²⁸ Quality metrics for HCBS bundled payments must incorporate the unique characteristics of HCBS while also accounting for the difficulties of establishing quality metrics with bundled payments. Quality metrics for HCBS is discussed in more detail in the second section of this report.

Bundled Payment Operational Considerations for HCBS

Besides the design elements, policymakers must weigh other crucial factors that will affect the implementation of bundled payments. Stakeholders' perspectives and data infrastructure are especially important to bundled payments for HCBS. Stakeholders, including beneficiaries and their families, providers, and MCOs, will likely have a particular view of bundling of HCBS for LTSS. Family members may serve as the primary caregiver, including receiving payment, for part or all the HCBS that the beneficiary receives and therefore will need to play an active role in establishing bundled payments for HCBS.

Bundled payments require a data infrastructure to distribute funds to various providers and to track beneficiary outcomes. The interoperability of data and information between providers and health plans is critical to coordinating care.^{23,24} Given that HCBS providers (e.g., home health agencies, independent nurses) and Medicaid agencies may lack the data infrastructure for bundled payment, policymakers must decide what infrastructure is necessary to administer and monitor bundled payments. Especially for LTSS, which may be administered by a state agency other than Medicaid, such as a division of aging, state agencies will need the appropriate infrastructure to share information across state agencies and with providers and other payers.

Bundled Payments for Medicaid HCBS Examples

Medicaid programs have begun implementing bundled payment approaches for specific populations receiving HCBS. The following examples review those approaches for HCBS in Arkansas Medicaid and Colorado Medicaid.

Arkansas Medicaid—Living Choices Assisted Living Waiver

The Living Choices Assisted Living Waiver in Arkansas Medicaid operates under a 1915(c) HCBS waiver.⁴³ To qualify for this waiver, beneficiaries must be at least 65, or be 21 to 64 and have been deemed to have physical disabilities by the Social Security Administration or the Arkansas Department of Human Services Medical Review Team.⁴³ In addition, beneficiaries must have been deemed eligible for admission to a nursing home at an intermediate level of care (e.g., they are unable to perform one to three activities of daily living, such as eating and toileting), based on a standard medical need determination assessment.⁴³ In this waiver, beneficiaries live in assisted-living facilities, typically apartment-style housing, and receive a bundle of HCBS to help them live independently and remain in their community. The waiver includes the following HCBS:

- Attendant care (i.e., assistance with activities of daily living, such as eating, dressing, and using the bathroom)
- Extended prescription drug coverage
- Medication oversight and administration
- Nonmedical transportation
- Nursing evaluations and some nursing services
- Pharmacist consultant services
- Social and recreational activities⁴³

Arkansas Medicaid pays the assisted-living facility or a contracted provider of the facility, such as a home health agency, a daily rate for all HCBS that a beneficiary is eligible to receive, which is considered the bundle of services. A beneficiary qualifies for one of four tiers, or levels, of HCBS determined by the standard medical need determination assessment process. A Each tier has a unique procedure code, and a provider submits that code for reimbursement each day for providing HCBS to the beneficiary. Beneficiaries' plans of care must align with the tier to which they are assigned and be updated annually or when conditions change.

This program offers lessons for the application of bundled payments for HCBS. The four-tiered system may be a model for incorporating a beneficiary's level of need into HCBS bundles. The daily rate is a method of paying providers for the bundle of services that a beneficiary relies on each day for a prolonged period. This model also addresses the need for a relatively long episode of care, since the plan of care is updated annually, as opposed to a shorter time frame like every 60 or 90 days.

Colorado Medicaid—Brain Injury Waiver Supported Living Program

Another example of a bundled payment model in Medicaid HCBS is the Brain Injury Waiver Supported Living Program in Colorado, available through a 1915(c) HCBS waiver. In this program, beneficiaries reside in assisted-living facilities or group homes and receive HCBS to bolster their independent living in the community.⁴⁵ The program uses case management tools to evaluate an individual's functional status, living situation needs, and medical history.⁴⁶ Currently, the tool is administered by HCBS providers, but in the future the agency plans to have an independent nurse complete the assessment to prevent any conflicts of interest, given that the assessed severity of need establishes the amount of payment the provider receives (R. Deherrera, personal communication, August 17, 2017). A daily rate is calculated based on the estimated amount of time, or units of each service, that would be expected given the beneficiary's need.⁴⁷ The assessment is conducted twice annually, and the daily rate is set prospectively for each six-month period during the year (R. Deherrera, written communication, August 2017).

Colorado Medicaid has reported that this model of bundled payments is preferable to the administratively burdensome, less efficient, and potentially costlier FFS payment models for HCBS in this setting (R. Deherrera, written communication, August 2017). Although this example is a bundled payment model, it does not incorporate quality metrics (R. Deherrera, written communication, August 2017).

Considerations for Policymakers in HCBS Bundled Payments (The Four Cs)

The states' experience in applying bundled payment approaches in Medicaid HCBS is relatively new. Nevertheless, important lessons can be drawn from the bundled payment approaches used in limited capacities for HCBS and other episodes of care. The following Four Cs for Developing HCBS Bundled Payments highlight the transferrable lessons in four domains and the considerations for each domain.

Consistency and Transparency

When applying this model to HCBS, policymakers should strive for coherence and regularity in key components of bundled payment models and promote a shared and consistent understanding among stakeholders. Transparency, including the involvement of stakeholders, in key areas can facilitate effective implementation and performance, and the information obtained can be used to develop quality measures and quality improvement approaches. Consistency and transparency are needed in the following:

- Definition and timing of episode.
- Services.
- Definition of population served and applicability to service array (e.g., severity of need, tiering).
- Identification of outcomes important to the beneficiary for services provided.
- Data collection across providers and affected organizations, including interoperability.

- Consistent understanding and iterative involvement of stakeholders.
- Use of consistent metrics to measure quality of care and beneficiary outcomes.
- Methods to consistently identify and define the cost of care.

Coordination of Care

Although HCBS are centered on the beneficiary, the coordination of care becomes more important when using a bundled payment model for HCBS. The following questions are designed to help Medicaid administrators make key decisions regarding care coordination:

- What is the range of providers and provider types necessary to deliver complementary, as opposed to duplicative, care, given the targeted population's level of need severity?
- Where is the desired locus of coordination: MCO, care coordination or care management entity, provider or provider group, or other?
- What are the most important aspects of care coordination for the beneficiary population?
- How are beneficiary-centered values reflected in the way that care will be organized and coordinated?
- What are the formal and/or informal organizational arrangements that define which services will be delivered, by whom, and for what price?
- What infrastructure, work processes, data sharing, or record sharing are necessary to facilitate a coordinated, beneficiary-centered approach?

Calculating Payments

Calculating payments for smaller populations or populations with a greater variation in severity of need, which is often the case among beneficiaries receiving HCBS in Medicaid, may not be precise. To address this variability and minimize overall risk, policymakers could consider the following:

- Use data (e.g., FFS claims data) to compare the actual costs of an episode of care or health care treatment with an established target cost and to continually review payment calculations.
- Establish methods to be used over time to accurately predict the cost of care and perhaps establishing actuarial formulations.
- Estimate the individual's or population's severity of need, which requires a tool or instrument or other method to accurately assess those needs specific to the HCBS population (including the need for social supports).

Risk adjustment methods should be used for varying levels of need severity in the HCBS population to ensure that providers have adequate resources to supply the needed care for beneficiaries with special needs while motivating them to offer appropriate care for beneficiaries.

Capacity of Medicaid Agencies and Providers

Bundled payments require Medicaid agencies, MCOs (if applicable in states), and providers to have certain infrastructure for data purposes, interoperability, and care coordination. However, the systems involved in HCBS may not have the needed requirements for successful bundled payment models. Accordingly, state agencies should decide how to assess and advance key areas of clinical and business readiness for this type of payment model.

- Clinical readiness (primarily providers and managed care entities), including
 - Ability to coordinate care among providers and organizations, inside and outside traditional clinical care.
 - ° Creation of care relationships or care groups that support care for beneficiaries with varying levels of severity and need.
 - Ability to offer care and support beneficiaries during episodes of care with systematized protocols across myriad organizations and care systems.
 - ° Ability to use data to improve the delivery and value of care.
 - ° Capability to engage beneficiaries and assess their perspectives and values.
 - Ability to translate beneficiaries' individual values into episodes of care delivered at the population level.
- Business readiness (Medicaid agencies, managed care entities, and providers), including:
 - ° Capability to collect, analyze, and model data and give meaningful feedback to providers to support the delivery of care.
- A standardized data infrastructure to identify and track outcomes related to cost and quality of care over an extended period in individual agencies and across agencies, including:
 - ° Interoperability or the ability to aggregate information among multiple providers.
 - ° Ability to track bundled payments and severity payments revenue and to measure them against the actual cost of care.
 - ° Operational and financial ability to share and manage risk in plans of long-term care.
 - ° Leadership that supports necessary organizational and system changes.

Key Takeaways

- Bundled payments, which package together services for a single health care episode, may be a model for appropriate care and may help Medicaid agencies cover the growing costs of HCBS.
- Bundled payments in the clinical field have lessons for HCBS, and certain beneficiary and provider characteristics in HCBS will require careful planning when bundling payments for HCBS.

- Examples in Arkansas Medicaid and Colorado Medicaid show how bundled payments are applied to HCBS for individuals living in assisted-living facilities, including paying providers a daily rate for a package of HCBS.
- In exploring bundled payments for HCBS, important considerations for state agencies are addressing the Four Cs for Developing HCBS Bundled Payments—Consistency and Transparency, Coordination of Care, Calculating Payments, and Capacity of Medicaid Agencies and Providers.

Quality Metrics for HCBS

Quality measurement is a key component of bundled payments, as highlighted in the previous section, as well as of other APMs that tie payment to value. Establishing quality metrics for a health care delivery system requires resources, careful planning, and implementation over a long time.²³ CMS has emphasized quality for HCBS in recent years through efforts with the National Quality Forum (NQF), the Agency for Healthcare Research and Quality (AHRQ), the National Core Indicators (NCI), and the Long-Term Quality Alliance.48 Despite this recent interest, no set of standardized HCBS quality metrics are used across HCBS programs. In 2014, CMS changed the quality assurance reporting system for 1915(c) HCBS waiver programs in order to improve the oversight of beneficiary outcomes and to better align data and reporting requirements. But the agency has not offered specific guidance on comprehensive quality metrics for HCBS.⁴⁸ An environmental scan completed by the State Health Access Data Assistance Center in 2016 showed that most HCBS quality measures used by Medicaid agencies focus on process and compliance with CMS reporting, not on outcomes for beneficiaries.²⁴ In addition, most agencies lack quality measures that address decision-making, consumer voice, caregiver supports, equity, and affordability.24

Definition of High-Quality HCBS

An important initial step in identifying quality metrics for HCBS is defining high-quality HCBS.⁴⁹ Stakeholders, including providers, beneficiaries, and advocates, are likely to have varied ideas about what is needed, what brings value to beneficiaries, and how that value should be measured. Although working with stakeholders may require extra time in the process, a collaborative approach can help the acceptance of quality measurement.

As a starting point, NQF identified 13 characteristics of high-quality HCBS for policymakers to consider:

- Optimizes individual choice and control in the pursuit of self-identified goals and life preferences.
- Promotes social connectedness and the inclusion of people who use HCBS in accordance with individual preferences.

- Offers a flexible range of services that are sufficient, accessible, appropriate, effective, dependable, and timely to respond to individuals' strengths, needs, and preferences and that are provided in a setting of the individual's choosing.
- Integrates health care and social services to promote well-being.
- Promotes privacy, dignity, respect, and independence; freedom from abuse, neglect, exploitation, coercion, and restraint; and other human and legal rights.
- Ensures that everyone can achieve the balance of personal safety and dignity of risk that he or she desires.
- Supplies and supports an appropriately skilled workforce that is stable and adequate to meet demand.
- Supports family caregivers.
- Engages individuals who use HCBS in the design, implementation, and evaluation of the system and its performance.
- Reduces disparities by offering equitable access to, and delivery of, services that are developed, planned, and provided in a culturally sensitive and linguistically appropriate manner.
- Coordinates and integrates resources to best meet the needs of the individual and maximize affordability and long-term sustainability.
- Delivers—through adequate funding—accessible, affordable, and cost-effective services to those who need them.
- Supplies valid, meaningful, integrated, aligned, accessible, outcome-oriented data to all stakeholders.⁴⁹

Although the definitions of high-quality HCBS may vary from state to state, these characteristics show that quality measurement in HCBS will likely include multiple and diverse measures that address the complexity and distinctiveness of HCBS.

Quality Measurement Frameworks

Another critical and complex process is identifying detailed constructs or specific measures and accompanying data sources that measure whether an HCBS program is achieving the agreed-on characteristics of high-quality HCBS. This may be difficult given that HCBS quality measures must span several domain areas. Experts in the field have proposed frameworks to help policymakers find domains, measures, and data sources to incorporate in a quality measurement strategy for HCBS. A few are listed in this section that policymakers could adapt for use in their states.

National Quality Forum HCBS Quality Measurement Framework

During a two-year project funded by the US Department of Health and Human Services and guided by a diverse group of stakeholders, the NQF devised a framework for use in HCBS

programs to identify quality metrics, considering factors such as program structure, process, and outcome measures for various domains (Figure 3).²³ The NQF HCBS Quality Measurement Framework contains 11 domains that relate to but do not directly match the NQF list of characteristics of high-quality HCBS programs discussed previously:

- Service delivery and effectiveness
- Person-centered planning and coordination
- Choice and control
- Community inclusion
- Caregiver support
- Workforce
- Human and legal rights
- Equity
- Holistic health and functioning
- System performance and accountability
- Consumer leadership in system development²³

System

Provider

Service Delivery and Effectiveness
Person-Centered Planning and Coordination Inclusion Community Inclusion Community Inclusion Caregiver Support Workforce

Human and Legal Rights

Equity
Hollstic Health and Finite Community Inclusion
System Performance
System P

Figure 3. NQF HCBS Quality Measurement Framework

Source: National Quality Forum, 2016, http://www.qualityforum.org/Publications/2016/09/Quality_in_Home_and_ Community-Based_Services_to_Support_Community_Living__Addressing_Gaps_in_Performance_Measurement.aspx.

NQF created subdomains in each of the 11 domains and identified possible measure concepts and related data sources. Building on this work, NQF also published an HCBS measure set in 2017 that includes quality metrics and measure concepts (Appendix C). Although this measure set focuses primarily on clinical and health/functional status measures, it also addresses certain social aspects of HCBS through the inclusion of the Home and Community-Based Services Consumer Assessment of Healthcare Providers and Systems (HCBS CAHPS) Survey. This measure set could serve as a starting point for policymakers to develop a more comprehensive HCBS quality measurement approach with additional measures focused on beneficiaries' satisfaction and quality of life.

AHRQ and Truven Health Analytics (Thomson Reuters) HCBS Quality Measurement Framework

The Deficit Reduction Act of 2005 called on AHRQ to develop quality measures related to HCBS. Through a collaborative process with stakeholders and a review of the literature, AHRQ found the following 21 constructs in three domains—client functioning, client experience, and program performance—as a framework for quality measures in HCBS:

- Client's functioning
 - ° Change in daily activity function
 - ° Availability of support with everyday activities when needed
 - ° Presence of friendships
 - Maintenance of family relationships
 - ° Employment status
 - ° School attendance (children only)
 - ° Community integration
 - ° Receipt of recommended preventive health care services
 - ° Serious, reportable, adverse health events
 - ° Avoidable hospitalizations
- Client experience
 - ° Respectful treatment by direct-service providers
 - ° Opportunities to choose providers
 - ° Opportunities to choose services
 - ° Satisfaction with case management services
 - ° Perception of quality of care
 - ° Satisfaction and choice regarding residential setting

- ° Report of abuse or neglect
- Availability of support for resilience and recovery (mental health service recipients only)
- Program performance
 - ° Access to case management services
 - ° Availability of care coordination
 - ° Receipt of all services in the care plan⁵⁰

The AHRQ report includes possible data sources for each of the constructs and discusses the gaps in measurement for certain constructs, such as in the domain centering on program performance. Although the AHRQ report is somewhat outdated because it was last reviewed in 2010, policymakers may still find the domains, and specifically the measures included in the scan, useful in identifying data sources and potential measures.⁵⁰

Accountable Care Organizations Quality Framework for LTSS

Another quality framework that could serve as a foundation for measuring HCBS quality is that used in LTSS with accountable care organizations in the CMS Shared Savings Program in Medicare.⁵¹ This framework covers the following four domains of LTSS service delivery:

- · Beneficiary's or caregiver's experience
- Care coordination/beneficiary's safety
- Preventive health
- At-risk population⁵¹

The four domains include associated metrics and data sources (Appendix D).⁵¹

Data Sources for HCBS

The availability of data sources is crucial to establishing HCBS quality metrics. Medicaid programs will likely need to use several sources to obtain comprehensive data that cover HCBS's primary quality domains, such as collecting data on its own beneficiaries.⁵⁰

FFS claims and MCO encounter data may offer information about HCBS's utilization and costs currently being delivered to beneficiaries, but it may not provide the information needed for quality measurement. The difficulties of using these types of data are the delays in reporting FFS claims and MCO encounter data (generally six months to two years), inconsistent accuracy and detail, and possible problems determining what services were provided.⁵²

For data related to aspects of HCBS such as beneficiaries' satisfaction and quality of life, state programs may have to use self-reported surveys.⁵⁰ Although existing surveys might be used to collect this type of information for HCBS, they do not measure certain aspects of

HCBS, like care coordination and access to case management services. ⁵⁰ Surveys designed to collect consumer input from a specific population, such as individuals with intellectual or developmental disabilities, may not be applicable to all beneficiaries receiving long-term HCBS. ⁵⁰ In addition, survey data often lack benchmarks because surveys are not used consistently across or within Medicaid programs. Given the limitations in measurement, state Medicaid programs may first have to find data sources and then select metrics from those sources that fit specific HCBS domains of interest. Medicaid programs must also determine the resources and capacity required to manage the survey data collection and analysis. Three survey instruments that could be used for HCBS quality measures are discussed next. Appendix E is a table adapted from the NQF that includes additional data sources linked to the domains from the NQF HCBS Quality Measurement Framework.

National Core Indicators

NCI is a collaborative effort of the National Association of State Directors of Developmental Disabilities Services and the Human Services Research Institute. NCI instruments include the adult consumer survey (administered in person), family surveys (administered through the mail), and staff stability surveys (administered online).⁵³ These survey instruments collect data on a variety of measures such as administrative records, demographics, health status, employment status, choice, access to transportation, relationships, community involvement, quality of services and supports, and place of care for individuals with intellectual or development disabilities.⁵³

Although NCI instruments are not specifically designed for Medicaid HCBS programs, the surveys could be used or adapted for use in a quality measurement system for Medicaid HCBS. Surveys in the NCI have been used by at least three state Medicaid agencies (New Jersey, Tennessee, and Texas) to assess quality in Medicaid waivers focused on MLTSS.⁵⁴

HCBS Consumer Assessment of Health Care Providers and Systems

The HCBS CAHPS Survey was developed by CMS for voluntary use by state Medicaid programs in FFS HCBS and MLTSS.⁵⁵ The survey contains 69 core items regarding beneficiaries' experience with Medicaid HCBS, such as personal choice, satisfaction, and community inclusion.⁵⁵ The survey also assesses cognitive ability, access to adequate services from staff, communication and quality of interaction with staff, choice, transportation, personal safety, and community inclusion.⁵⁵ The survey is designed to be delivered by an interviewer in person or by telephone and to be completed by a Medicaid beneficiary.⁵⁵

The process of obtaining HCBS CAHPS data is extensive, as it requires survey planning, vendor selection (if a Medicaid program chooses that route), and data collection and analysis. ⁵⁶ This process may take about a year to complete, depending on individual state processes. ⁵⁶ Internal resources are needed to manage the process, including the selection and management of an external vendor to provide the data collection if a Medicaid program chooses that option. ⁵⁶ Because collecting data for this survey takes a long time, state programs would probably select only a sample of beneficiaries receiving HCBS to complete the survey. ⁵⁵

States' experience with the HCBS CAHPS Survey is relatively new. CMS supported seven state agencies to test the tool during its development.⁵⁶ For example, in 2013, the Connecticut Department of Social Services linked performance incentives to providers in older adult waiver contracts to HCBS CAHPS Survey components, including beneficiaries' access to care, choice and control, respectful and dignified treatment, and inclusion in the community.⁵⁶

Money Follows the Person Quality of Life Survey

The Money Follows the Person Quality of Life Survey was created for participants in the Money Follows the Person demonstration. This demonstration was authorized in 2005 and expanded in 2010 to promote transitions of individuals from institutional to community settings.⁵⁷ The survey uses items from several other surveys, including NCI instruments and questions focused on living situation, choice and control, access to personal care, respect/dignity, community integration/inclusion, overall life satisfaction, and health status.⁵⁸ The survey is intended to be administered in person and takes about 15 to 20 minutes to complete.⁵⁸ Items from this survey might be used or adapted for use in a quality measurement system for HCBS.

Quality Metrics for Medicaid HCBS Example

It is uncertain if Medicaid programs have systematically and holistically approached quality measurement for HCBS, but other initiatives related to LTSS in Medicaid offer valuable lessons as well.

Tennessee Quality Improvement in Long Term Services and Supports

The Tennessee Quality Improvement in Long Term Services and Supports (QuILTSS) initiative focuses on value-based purchasing in Medicaid LTSS.⁵⁹ Tennessee Medicaid (TennCare) started the initiative for nursing facilities and plans to apply the lessons learned to HCBS, with some HCBS initiatives already under way. In 2013, TennCare implemented a stakeholder engagement process to gather information on what was important to Medicaid beneficiaries regarding the quality of their LTSS.⁶⁰ Medicaid administrators used the collected information to create, in partnership with stakeholders, a quality improvement framework and strategy for nursing facilities.⁵⁹ In addition to clinical outcomes, TennCare officials selected quality metrics related to beneficiaries' satisfaction and quality of life, such as choice (e.g., meal times, meal menus, and sleep and wake times).⁶⁰

When this framework and data collection were first implemented, the participating nursing facilities were awarded points for developing an infrastructure and installing quality improvement processes (P. Killingsworth, oral communication, July 2017). The points, acting as financial incentives paid retrospectively as per diem rate adjustments, were awarded for performance improvement activities in categories related to satisfaction, culture change/ quality of life, staffing and staff competency, and clinical performance.³⁶ Incremental payments were given to the nursing facilities, first paying for quality improvement processes and then gradually shifting to paying for outcomes and performance (P. Killingsworth,

oral communication, July 2017). As of 2017, 4% of the payments were tied to quality for nursing facilities.⁶⁰

TennCare is still developing and implementing HCBS-specific quality metrics but will concentrate on person-centered outcomes, such as aligning services and supports with personal preferences and goals, employment, and community integration, which are hard to measure (P. Killingsworth, oral communication, July 2017).

Considerations for Policymakers in HCBS Quality Metrics (The Three Ms)

Given the absence of a universal measure set, policymakers will need to tailor quality measures to their respective state HCBS programs. Selecting quality measures and establishing a process to collect and analyze quality metric data require several stages. The following Three Ms for HCBS Quality Assessment offer key questions for state policymakers to ponder as they plan for quality measurement for HCBS:

Measures

- Which stakeholders should be involved in defining high-quality HCBS (e.g., beneficiaries, families, providers)?
- What types of metrics are important to consider for HCBS, based on agreed-on definitions of high-quality HCBS (e.g., clinical measures, beneficiaries' satisfaction, quality of life)?
- Which measures will address individual, provider, MCO, and HCBS program-level quality?
- Which metrics have available data sources or require original data collection using survey instruments or other tools?
- Which HCBS experts could help review candidate quality measures?

Methods

- What are the standardized systems for data collection, management, analysis, and reporting needed for state Medicaid agencies, providers, MCOs, and beneficiaries?
- What systems are in place and/or what improvements are needed to allow for interoperability and information exchange among Medicaid programs, MCOs, providers, and care coordinators?
- What capacities should be expanded internally and/or externally to collect quality measurement data?
- What resources are available for data collection and analysis, especially for survey data that take a long time to collect and analyze?
- What education and outreach do MCOs, providers, beneficiaries, and families need for the successful implementation of quality measurement for HCBS?

Monitoring

- How can selected quality metrics be continually evaluated to allow for course correction and to ensure measures to give Medicaid agencies the information they need to assess quality?
- How can quality metrics be incorporated in the payments to providers?

Key Takeaways

- Stakeholders' input on the characteristics of high-quality HCBS can serve as a foundation for creating an HCBS quality measurement strategy.
- Despite the absence of a universal measure set, recent efforts have resulted in frameworks with measure sets and data sources that could be adapted by state Medicaid programs.
- A standardized system to collect and analyze data is important to connect quality metrics to HCBS outcomes.
- Quality measurement initiatives such as TennCare's QuILTTS for nursing facilities can help policymakers explore quality measurement for LTSS.

In sum, when exploring quality metrics for HCBS, policymakers should address the Three Ms for HCBS Quality Assessment—Measures, Methods, and Monitoring.

Conclusion

LTSS in Medicaid will continue to be an issue for policymakers as the baby boomers age and people with disabling and chronic conditions live longer. The shift away from institutional LTSS toward HCBS will likely continue as well. Meanwhile, policymakers must maintain a balanced budget while ensuring appropriate and quality LTSS for individuals using Medicaid. New methods to pay for HCBS, such as bundled payments, and methods to measure quality of HCBS are promising; however, the diversity and specific characteristics of HCBS programs, providers, and beneficiary populations require careful considering and planning. Accordingly, initiatives should be evaluated to absorb the lessons learned and to establish promising practices for policymakers in other states. By investigating the topics presented in this report, policymakers can take another step toward better care, lower costs, and healthier people in HCBS.

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Appendix A

Methods

Search Strategy

Researchers at the Center for Evidence-based Policy examined policy sources to identify relevant policy briefs, national policy summaries, laws, regulations, and guidance, using the terms "home- and community-based services," "HCBS," "long-term services and supports," "LTSS," "quality metrics," "quality," "bundled payment," "level of care," "level of severity," "risk," "alternative payment method," "payment," "value-based payment / purchasing," and "managed care." In addition, the researchers searched Google using the terms "home- and community-based services," "HCBS," "long-term services and supports," "LTSS," "quality metrics," "quality," "bundled payment," "level of care," "level of severity," "risk," "alternative payment method," "payment," "value-based payment / purchasing," and "managed care," and they reviewed key sources from reference lists.

For state-specific policies and programs, the center researchers searched state websites, provider manuals, and relevant laws and regulations, and communicated with Medicaid officials in Arkansas, Colorado, and Tennessee. They also interviewed a former Centers for Medicare & Medicaid Services (CMS) administrator for information about quality metrics for home- and community-based services (HCBS).

Sources Searched

AcademyHealth

Agency for Healthcare Research and Quality

Alliance for Healthcare Reform

Association of State and Territorial Health Officials

Center for Health Care Strategies, Inc.

Centers for Medicare & Medicaid Services

Commonwealth Fund

Health Resources and Services Administration

Kaiser Family Foundation

Mathematica Policy Research

Medicaid and CHIP Payment and Access Commission

Medicare Payment Advisory Commission

National Academy of Insurance Commissioners

National Academy for State Health Policy

National Association of State Medicaid Directors

National Committee for Quality Assurance

National Conference of State Legislatures

National Core Indicators

National Governors Association

National Quality Forum

RAND

Robert Wood Johnson Foundation

US Code of Federal Regulations

US Government Accountability Office

Personal Communication Contacts

Patti Killingsworth, Assistant Commissioner and Chief of Long-Term Services and Supports, Bureau of TennCare, July 17, 2017

William Golden, Medical Director, Division of Medical Services, Arkansas Department of Human Services, June 15, 2017

Randie Deherrera, Rates and Operations Section Manager, Finance Office/Payment Reform Section, Colorado Medicaid, August 17, 2017

Anita Yuskauskas, Former Technical Director for Quality in HCBS at CMS, Current Coordinator and Instructor, Health Policy and Administration, Penn State Lehigh Valley, July 20, 2017

Appendix B

CMS HCBS Taxonomy

HCBS Taxonomy Category	HCBS Taxonomy Service
Case management	Case management
Round-the-clock services	Group living, residential habilitation
	Group living, mental health services
	Group living, other
	Shared living, residential habilitation
	Shared living, mental health services
	Shared living, other
	In-home residential habilitation
	In-home round-the-clock mental health services
	In-home round-the-clock services, other
Supported employment	Job development
	Ongoing supported employment, individual
	Ongoing supported employment, group
	Career planning
Day services	Prevocational services
	Day habilitation
	Education services
	Day treatment/partial hospitalization
	Adult day health
	Adult day services (social model)
	Community integration
	Medical day care for children
Nursing	Private duty nursing
	Skilled nursing
Home-delivered meals	Home-delivered meals
Rent and food expenses for live-in caregiver	Rent and food expenses for live-in caregiver

HCBS Taxonomy Category	HCBS Taxonomy Service
Home-based services	Home-based habilitation
	Home health aide
	Personal care
	Companion
	Homemaker
	Chore
Caregiver support	Respite, out-of-home
	Respite, in-home
	Caregiver counseling and/or training
Other mental health and behavioral	Mental health assessment
services	Assertive community treatment
	Crisis intervention
	Behavior support
	Peer specialist
	Counseling
	Psychosocial rehabilitation
	Clinic services
	Other mental health and behavioral services

HCBS Taxonomy Category	HCBS Taxonomy Service
Other health and therapeutic services	Health monitoring
	Health assessment
	Medication assessment and/or management
	Nutrition consultation
	Physician services
	Prescription drugs
	Dental services
	Occupational therapy
	Physical therapy
	Speech, hearing, and language therapy
	Respiratory therapy
	Cognitive rehabilitative therapy
	Other therapies
Services supporting participant direction	Fiscal management services in support of participant direction
	Information and assistance in support of participant direction
Participant training	Participant training
Equipment, technology, and	Personal emergency response system
modifications	Home and/or vehicle accessibility adaptations
	Equipment and technology
	Supplies
Nonmedical transportation	Nonmedical transportation
Community transition services	Community transition services
Other services	Goods and services
	Interpreter
	Housing consultation
	Other
Unknown	Unknown

Source: CMS, 2014, https://www.cms.gov/mmrr/Downloads/MMRR2014_004_03_b01.pdf. Abbreviations: CMS: Centers for Medicare & Medicaid Services, HCBS: Home- and Community-Based Services

Appendix C

National Quality Forum HCBS Measure Set

The following is an excerpt from the 2017 National Quality Forum report (http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=85915) on quality metric recommendations for HCBS:

NQF #0097 Measure of Medication Reconciliation (NCQA)

This is one of two medication reconciliation measures supported for inclusion in the CI-LTSS measure set. The measure assesses the percentage of discharges for beneficiaries 18 years of age and older for whom the discharge medication list was reconciled with the current medication list in the outbeneficiary medical record by a prescribing practitioner, clinical pharmacist, or registered nurse. The denominator measures discharges from an in-beneficiary facility. The CC noted the challenge CI-LTSS providers have when trying to access clinical records. Ultimately, the CC voted to support this measure despite the challenges in the use of the measure. The CC recommended this measure for the BCN and PMH program areas.

NQF #0101 Falls: Screening for Fall Risk (NCQA)

The CC noted that the change in function and balance at age 65 and over could be significant regardless of psychosocial barriers. Falls can make a difference between admission to a nursing home versus staying in the community. NQF #0101 is a process measure that assesses fall prevention in older adults. This measure has three rates: (1) screening for future fall risk; (2) falls risk assessment; and (3) plan of care for falls. The CC recommended this measure for the Medicaid IAP CI-LTSS program.

NQF #0326 Advance Care Plan (NCQA)

This measure assesses the percentage of beneficiaries aged 65 years and older who have an advance care plan or surrogate decision maker documented in the medical record, or documentation in the medical record that an advance care plan was discussed, but the beneficiary did not wish or was not able to name a surrogate decision maker, or provide an advance care plan. The CC noted that this measure is consistent with person-centered care. The CC agreed that this measure helps high-risk elderly (65+) individuals maintain personal choice, so they can remain in their home/community. Therefore, the CC recommended this measure for the Medicaid IAP CI-LTSS program.

NQF #0419 Documentation of Current Medications in the Medical Record (CMS)

This is one of two medication reconciliation measures supported for inclusion in the

CI-LTSS measure set. This measure assesses the percentage of visits for beneficiaries

aged 18 years and older for which the eligible professional attests to documenting a list of

current medications using all immediate resources available on the date of the encounter.

The denominator of this measure includes eligible outbeneficiary individuals already in the

community. The CC agreed that this measure includes a broader approach to medication

reconciliation and reflects the state of practice in home health. This measure is also in-

cluded in the Family of Measures for Dual Eligible Beneficiaries. The CC recommended this measure for inclusion in the CI-LTSS as well as the PMH program area.

NQF #0647 Transition Record with Specified Elements Received by Discharged Beneficiaries (Discharges from an Inbeneficiary Facility to Home/SelfCare or Any Other Site of Care) (PCPI)

This measure assesses the transmission of transition record to a beneficiary's primary care physician or other healthcare professional within 24 hours of discharge from an inbeneficiary facility. This measure intends to improve the continuity of care and reduce hospital readmissions by ensuring that the beneficiary's discharge information is available at the first post-discharge physician visit. The CC noted that it is critically important that all providers, family members, and community supports have information (e.g., inbeneficiary care, post-discharge/beneficiary self-management, etc.){{"etc." not needed with "e.g."}} to start appropriate care upon discharge.

The Consensus Standards Approval Committee (CSAC) in July 2017 voted to remove endorsement from NQF #0647 due{{"due to" is used only with nouns & the verb "to be"}} to a lack of current performance data and because the testing during measure development only used data from one site's EHR. Ultimately, the CC voted to recommend this measure for the Medicaid IAP CI-LTSS program for the reasons noted above.

NQF #2483 Gains in Beneficiary Activation (PAM) Scores at 12 Months (Insignia Health) The CC supported the inclusion of NQF #2483. The Beneficiary Activation Measure® (PAM®) is a 10- or 13-item questionnaire that assesses individuals' knowledge, skill, and confidence for managing their health and healthcare. The measure assesses individuals on a 0-100 scale. The change score would indicate a change in the beneficiary's knowledge, skills, and confidence for self-management. This measure addresses the effectiveness of providers in engaging and activating individuals to take an active role in their health and healthcare. One of the goals of CI-LTSS is educating and activating individuals, giving them the tools they need to take control. The CC also recommended this measure for the BCN program area. Inclusion of the measure in multiple program areas supports alignment.

NQF #2967 CAHPS® Home and Community Based Services (HCBS) Measures (CMS) Services (HCBS) Measures elicit feedback from adult Medicaid beneficiaries receiving home and HCBS about the quality of the long-term services and supports they receive in the community and delivered to them under the auspices of a state Medicaid HCBS program. The CC supported the inclusion of this measure for several reasons. First, this measure is part of a suite of CAHPS surveys. States have accepted and have experience implementing CAHPS surveys. Second, it is one of the first tools with performance measures to assess HCBS quality from the perspective of the individuals receiving support. Third, it focuses on supports needed to live independently, instead of many current measures adapted from clinical and medical care. In addition, NQF's MAP Medicaid Adult Taskforce supported this measure for inclusion in the 2018 Adult Core Set. If CMS adds this measure to the CI-LTSS program area and the Adult Core Set, there would be alignment between the various programs and corresponding measure set.

Adult Access to Preventative/Ambulatory Care 20-44, 45-64, 65+ (NCQA)

The CC supported the inclusion of this measure, and noted the importance of this measure as a proxy for whether people can get to necessary care. This measure assesses the percentage of members 20 years and older who had an ambulatory or preventive care visit. From the CI-LTSS perspective, this measure could be a proxy for whether people have transportation and capacity to reach care or available services. The CC recommended this measure for the Medicaid IAP BCN, SUD, and PMH programs. Inclusion of the measure in multiple program areas supports the concept of measurement alignment.

Home- and Community-Based Long-Term Services and Supports Use Measure Definition (HCBS) (Washington State Department of Social and Health Services)

This measure assesses the proportion of months receiving long-term services and supports (LTSS) associated with receipt of services in home and community-based settings during the measurement year. The CI-LTSS TEP agreed that this is a good measure for assessing states' rebalancing efforts, but it is not a quality measure. Rebalancing in the CI-LTSS field is very important because it addresses states' efforts to move people from institutional settings to community settings. Due to the nascence of CI-LTSS measurement, it is important for a state to capture and understand the performance of its CI-LTSS program. Therefore, the CC supports the inclusion of this measure.

Percentage of Short-Stay Residents who were Successfully Discharged to the Community (CMS)

This measure assesses the percentage of all new admissions to a nursing home from a hospital for short-stay residents discharged to the community within 100 calendar days of entry and for 30 subsequent days, did not die, were not admitted to a hospital for an unplanned inbeneficiary stay, and were not readmitted to a nursing home. The CC supported this measure for inclusion as a rebalancing measure. Although, the denominator includes only Medicare fee-for-service and not Medicaid, the CC noted that Medicaid waiver programs can broaden the definition of the denominator. The managed care plans are responsible for all individuals in the plan, including Medicare Advantage, fee-for-service, or Medicaid.

Individualized Plan of Care Completed—Measure Concept

The CI-LTSS TEP acknowledged the Individualized Plan of Care Completed (IPC) as a good measure concept with the potential for implementation, after there is further development with detailed specifications. This measure concept assesses those with high-risk score who have an individual plan of care (IPC). The CC noted that the specifications of the concept lack clarity. Therefore, it was difficult to determine if the IPC is synonymous with a person-centered plan. The CC recommended clarifying measure specifications and defining IPC. The TEP and the CC agreed that the CI-LTSS populations benefit from care plans that are person-centered and person-driven and/or caregiver-driven based on the preferences, goals, and values of the individual. This measure applies to all populations in Medicaid. Ul-

timately, the CC supported the measure concept for inclusion in the Medicaid IAP CI-LTSS program.

National Core Indicators (The National Association of States United for Aging and Disabilities)—Measure Concept

The NCI survey provides states with information about the experiences of adults with intellectual and developmental disabilities receiving publicly funded services and supports. Currently, the survey is in use in 46 states plus the District of Columbia. The Administration for Community Living has provided grant funding to the stewards of the NCI and NCI-AD measures. The funding supports the stewards' pursuit of NQF endorsement for at least 20 Beneficiary Reported Outcome-Performance Measures (PRO-PMs) from the NCI Adult Consumer Survey (ACS) and NCI-AD ACS over the next three years. The CC supported inclusion of this measure concept because it focuses on elements important to quality of life. The NCI addresses individuals with intellectual and developmental disabilities.

National Core Indicators—Aging and Disability (NCI-AD) (The National Association of States United for Aging and Disabilities)—Measure Concept

The NCI-AD survey measures approximately 50 "indicators" of outcomes of CI-LTSS for older adults and adults with physical and other disabilities, excluding adults with intellectual disability/developmental disability (ID/DD). The CC agreed that the survey focuses on elements related to quality of life, which is critically important to the disability and aging populations. Currently, 14 states use this survey. The Administration for Community Living has provided grant funding to the stewards of the NCI and NCI-AD measures. The funding supports the stewards' pursuit of NQF endorsement for at least 20 PRO-PMs from the NCI ACS and NCI-AD ACS over the next three years. The CC recommended this measure concept for inclusion in the Medicaid IAP CI-LTSS program.

Number and Percent of Waiver Participants Who Had Assessments Completed by the MCO that Included Physical, Behavioral, and Functional Components to Determine the Member's Needs—Measure Concept

This measure concept requires physical, mental, and psychosocial considerations in the assessment done by a managed care organization. The TEP members agreed that this assessment should inform the development of the care plan once the person's needs are considered. The measure concept is in use in multiple states including Kansas. The CC supported this measure concept for inclusion as it screens for physical, behavioral, and functional status—all critical components for the CI-LTSS population.

Appendix DMedicare Accountable Care Organization Quality Measures

ACO Measure	Measure Title	NQF Number	Measure Steward	Method of Data Submission
Domain: Benefi	ciary/Caregiver Experience			
ACO 1	CAHPS: Getting Timely Care, Appointments, and Information	0005	AHRQ	Survey
ACO 2	CAHPS: How Well Your Providers Communicate	0005	AHRQ	Survey
ACO 3	CAHPS: Beneficiaries' Rating of Provider	0005	AHRQ	Survey
ACO 4	CAHPS: Access to Specialists	N/A	CMS/AHRQ	Survey
ACO 5	CAHPS: Health Promotion and Education	N/A	CMS/AHRQ	Survey
ACO 6	CAHPS: Shared Decision Making	N/A	CMS/AHRQ	Survey
ACO 7	CAHPS: Health status/Functional status	N/A	CMS/AHRQ	Survey
ACO 34	CAHPS: Stewardship of Beneficiary Resources	N/A	CMS/AHRQ	Survey
Domain: Care C	Coordination/Beneficiary Safety			
ACO 8	Risk-Standardized, All-Condition Readmission	1789	CMS	Claims
ACO 35	Skilled Nursing Facility 30-Day All-Cause Readmission Measures	2510	CMS	Claims
ACO 36	All-Cause Unplanned Admissions for Beneficiaries with Diabetes	N/A	CMS	Claims
ACO 37	All-Cause Unplanned Admissions for Beneficiaries with Heart Failure	N/A	CMS	Claims
ACO 28	All-Cause Unplanned Admissions for Beneficiaries with Multiple Chronic Conditions	N/A	CMS	Claims
ACO 43	Acute Composite (AHRQ Prevention Quality Indicator [PQI] #91)	N/A	AHRQ	Claims
ACO 11	Use of Certified EHR Technology	N/A	CMS	Quality Payment Program Data
ACO 12	Medication Reconciliation Pos-Discharge	0097	NCQA	Web Interface
ACO 13	Falls: Screening for Future Fall Risk	0101	AMA/PCPI/ NCQA	Web Interface

ACO 44	Use of Imaging Studies for Low Back Pain	0052	NCQA	Claims
Domain: Prever	ntive Health			
ACO 14	Preventive Care and Screening: Influenza Immunization	0041	AMA/PCPI	Web Interface
ACO 15	Pneumonia Vaccination Status for Older Adults	0043	NCQA	Web Interface
ACO 16	Preventive Care and Screening: Body Mass Index Screening and Follow-Up	0421	CMS	Web Interface
ACO 17	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	0028	AMA/PCPI	Web Interface
ACO 18	Preventive Care and Screening: Screening for Clinical Depression and Follow-up Plan	0418	CMS	Web Interface
ACO 19	Colorectal Cancer Screening	0034	NCQA	Web Interface
ACO 20	Breast Cancer Screening	N/A	NCQA	Web Interface
ACO 42	Statin Therapy for the Prevention and Treatment of Cardiovascular Disease	N/A	CMS	Web Interface
Domain: At-Ris	k Population			
ACO 40	Depression Remission at 12 Months	0710	MNCM	Web Interface
ACO 27	Diabetes: Hemoglobin A1c Poor Control	0059	NCQA	Web Interface
ACO 41	Diabetes: Eye Exam	0055	NCQA	Web Interface
ACO 28	Controlling High Blood Pressure	0018	NCQA	Web Interface
ACO 30	Ischemic Vascular Disease: Use or Aspirin of Another Antithrombotic	0068	NCQA	Web Interface

Abbreviations: ACO: Accountable Care Organization, CMS: Centers for Medicare & Medicaid Services, EHR: electronic medical records; AHRQ: Agency for Healthcare Research and Quality; AMA: American Medical Association; CAHPS: Consumer Assessment of Healthcare Providers and Systems; MNCM: Minnesota Community Measurement; National Quality Forum; NCQA: National Committee on Quality Assurance; NQF: National Quality Forum; PCPI: Physician Consortium for Performance Improvement; N/A: not available.

Source: Table adapted from Research Triangle Institute International, 2017, https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/2017-Reporting-Year-Narrative-Specifications.pdf.

Appendix ENational Quality Forum Interim Report Instruments and Measures

Domains	Title	Description
Choice and Control; Effectiveness/Quality of Services; System Performance; Health and Well-Being	National Core Indicators—Aging and Disability (NCI-AD)	Developed to measure approximately 50 "indicators" of good outcomes of LTSS for older adults and adults with physical and other disabilities, excluding adults with intellectual and/or developmental disabilities.
Effectiveness/Quality of Services; Choice and Control	Home Health Care Consumer Assess- ment of Health- care Providers and Systems (CAHPS) Survey	Designed to measure the experiences of people receiving services from Medicare-certified home health agencies that are provided by nurses and therapists, including physical, occupational, and speech-language therapists. The survey was designed to (1) produce meaningful data on the beneficiary's perspective to allow comparisons of agencies; (2) encourage agencies to improve quality of care through public reporting; and (3) enhance accountability.
Choice and Control; Human and Legal Rights; Effectiveness/ Quality of Services; Health and Well-Being	Money Follows the Person Quality of Life Survey	Designed to measure quality of life in seven domains: living situation, choice and control, access to personal care, respect/dignity, community integration/inclusion, overall life satisfaction, and health status of people who have moved from institutional to community settings.
Choice and Control	Personal Ex- perience Out- comes—Integrat- ed Interview and Evaluation System	Evaluates a broad set of individual experiences using person-centered language.
Choice and Control	Personal Life Quality Protocol and Component Scales	A battery of instruments used to assess quality of life in individuals with intellectual or developmental disabilities. Outcomes scales include California Development Evaluation Report (CDER) Behavior Scale—Adaptive Behavior; CDER Behavior Scale—Challenging Behavior; Individual Goal Progress; Decision Control Inventory; Integrative Activities; Productivity; Satisfaction; and Environmental Qualities.
Choice and Control; Effectiveness/Quality of Services	Personal Outcome Measures (POM)	Focuses on the choices people have made and do make in their lives. The Council on Quality and Leadership (CQL) drew up a list of 21 personal outcomes to assess whether individuals are supported in a way that achieves the outcomes most important to them.

Source: Table adapted from National Quality Form, 2015, https://www.qualityforum.org/WorkArea/linkit.aspx?Link-Identifier=id&ItemID=81346.

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Suggested Citation:

Bennett AD, Curtis P, Harrod CS. Bundling, benchmarking, and beyond: paying for value in home- and community-based services. Milbank Memorial Fund. July 2018. https://www.milbank.org/publications/bundling-benchmarking-and-beyond-paying-for-value-in-home-and-community-based-services

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