Value-Based Approaches to Improve Maternal and Infant Health Care and Outcomes

The Centers for Medicare & Medicaid Services (CMS) Medicaid Innovation Accelerator Program (IAP) is a collaboration between the Center for Medicaid and Children's Health Insurance Program (CHIP) Services and the Center for Medicare & Medicaid Innovation that is designed to build state capacity and support ongoing innovation in Medicaid. From March 2017 to June 2019, the IAP Maternal and Infant Health Initiative (MIHI) Value-Based Payment (VBP) technical assistance opportunity supported Medicaid agencies in Colorado, Maine, Mississippi, and Nevada with selecting, designing, and testing VBP approaches to sustain care delivery models that demonstrate improvement in maternal and infant health (MIH) outcomes. This technical assistance complements the broader MIHI, in which CMS works with states to explore program and policy opportunities to improve outcomes and reduce the cost of care for women and infants in Medicaid and CHIP.

Introduction

Pregnancy and childbirth are pivotal life events, framed by the overall care experience. Interactions with the health care system during this time create opportunities to lay a strong foundation for the ongoing health of women and infants.[1] States are increasingly adopting VBP approaches to promote high-quality, cost-effective, and patient-centered MIH care for Medicaid and CHIP beneficiaries.

This fact sheet provides an overview of VBP approaches under the Health Care Payment Learning & Action Network (HCP-LAN) Alternative Payment Model (APM) Framework,[2] a classification system for health care payment reform. The HCP-LAN APM Framework has four categories based on a continuum of clinical and financial risk for provider organizations. HCP-LAN APM Framework Category 1 represents fee-for-service (FFS) models, which are not considered VBP approaches because they incentivize a high volume of services. This fact sheet includes Medicaid examples and case studies of states that have implemented MIH-focused VBP approaches in the three other categories of the HCP-LAN APM Framework, including key considerations for moving through each category.

Performance Measurement in Maternal and Infant Health Value-Based Payment Reform

Positive MIH outcomes can be reflected in various ways, such as lower rates of unnecessary cesarean sections, low birthweight births, and decreased severe maternal morbidity. VBP approaches aim to promote value-based care by tying payment to specific performance measures.

Assessing the quality and value of care requires consideration of multiple factors, including provider performance, patient engagement, and structural attributes of care settings (e.g., number and qualifications of personnel).[3] Commonly used measures to evaluate progress toward MIH improvement include the CMS Core Set of Maternal and Perinatal Health Measures,[4] Healthcare Effectiveness Data and Information Set (HEDIS®) benchmarks,[5] and the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) surveys.[6] States also may develop or adapt their own quality measures as part of the transition to VBP for MIH care.

HCP-LAN APM Framework Category 2: Fee for Service—Link to Quality

Like traditional FFS payments, Category 2 VBP approaches reimburse providers separately for each service they deliver. However, providers receive bonus payments for activities or investments that could lead to improved care or for superior performance on care quality metrics.[2] Category 2 consists of three subcategories:

- Under **Category 2A**, providers receive incentives to invest in resources or infrastructure that may improve the quality and value of patient care—for example, investments in resources that support practices in becoming pregnancy medical homes or in offering group prenatal care.
- **Category 2B** approaches provide payments for reporting quality measures (pay for reporting)—for example, paying providers for collecting and reporting on quality measures such as rates of early elective cesarean births.
- Under **Category 2C**, providers receive bonus payments for meeting quality improvement or performance excellence targets (pay for performance, or P4P)—for example, timely prenatal care.

LOUISIANA PAY-FOR-PERFORMANCE INITIATIVE TO REDUCE PRETERM BIRTHS

- **Description:** A series of progesterone treatments between 16 and 21 weeks of gestation is an evidence-based intervention to prevent preterm birth in women with a prior preterm birth. To address high preterm birth rates, the Louisiana Department of Health (LDH) established a P4P goal to incentivize Medicaid managed care plans to increase the percentage of pregnant women at risk of delivering preterm who receive 17-progesterone (17-P) injections from 5 percent to 20 percent.[7]
- **VBP Approach—HCP-LAN APM Framework Category 2C (Pay for Performance):** LDH has developed an automated system that generates a weekly report of women with a prior preterm birth who are therefore eligible for 17-P injections. This list is shared with Medicaid managed care plans to allow for immediate case management of high-risk individuals and to avoid missed opportunities for 17-P injection administration.
- **Evaluation:** Between 2013 and 2016, rates of eligible pregnant women with a previous preterm singleton birth event (24–26 weeks) who received one or more 17-P injections between the 16th and 24th week of gestation increased from 4.7 percent to 16.6 percent.[8]

CONSIDERATIONS FOR IMPLEMENTING HCP-LAN APM FRAMEWORK CATEGORY 2 APPROACHES

- Category 2A and 2B approaches allow providers to build capacity for and become familiar with quality measures, but they do not link payment to quality performance. P4P (Category 2C) does link payment to quality and is historically one of the most popular VBP approaches.[9] The P4P maintains an FFS structure but is connected to quality metrics. It can be used to incentivize underutilized evidence-based services, such as home visiting, as part of an approach to meet quality improvement targets.[2] The HCP-LAN considers Category 2 approaches to be most suitable for providers who are just starting to transition to VBP or who could be exposed to unmanageable financial and clinical risk under more advanced VBP approaches (e.g., safety-net MIH care providers with volatile financial margins). Ideally, health care providers and delivery systems will advance to payment approaches that fall under Categories 3 and 4 of the HCP-LAN APM Framework as their measure reporting infrastructure and their ability to manage risk improve.

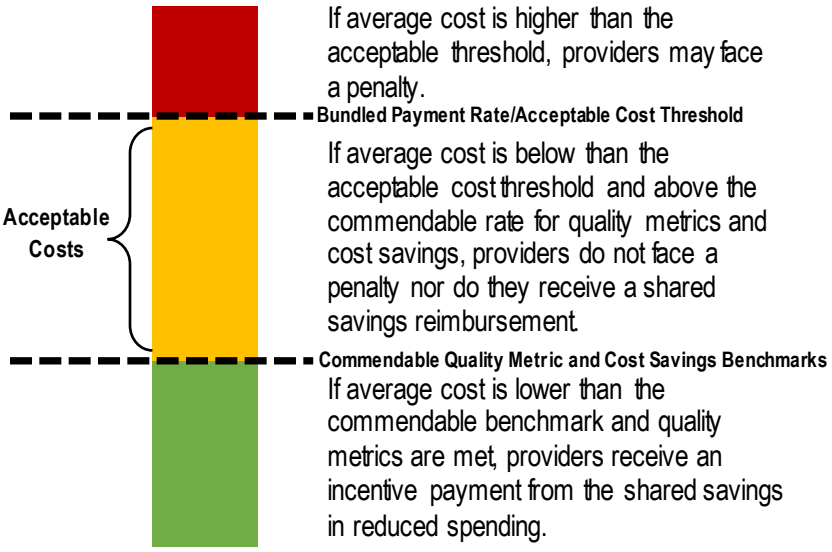
HCP-LAN APM Framework Category 3: APM Built on Fee-for-Service Architecture

Category 3 VBP approaches link payment to financial and care quality benchmarks and typically involve a single bundled payment for a set of services, or "episode of care," delivered by multiple providers.[1] Maternity care is well suited to an episode-based payment because pregnancy has a clear "trigger" point for care, that is, vaginal or cesarean delivery. Typically, payment is made for all prenatal and perinatal medical services for a live birth to the principal accountable provider (PAP), defined as the provider or provider group responsible for care of the pregnant woman. The PAP is responsible for the costs, quality, and coordination of care throughout pregnancy. Facility fees for the birth may be paid separately, with higher fees in the event of a birth by cesarean section. The HCP-LAN Maternity Episode Payment Model Online Resource Bank offers guidance on defining an episode of care, establishing the patient population, and adjusting for risk to encourage broad provider

participation.[10] Using the payment mechanisms described below, the episodic bundled payment incentivizes care coordination across health care providers, rewards providers for efficiency, and encourages providers to reduce unnecessary services and prevent MIH complications.[11]

- Under **Category 3A**, providers who meet cost and quality targets share in cost savings or receive an incentive payment. Providers who meet quality targets but not cost targets are not held financially responsible for excess spending.
- **Category 3B** involves both upside risk in shared savings and downside risk based on cost performance. That is, in addition to the opportunity to receive an incentive payment from meeting cost and quality targets, providers may incur a penalty if costs are higher than the bundled payment rate or another predetermined amount. For example, a provider with a high rate of elective cesarean deliveries may pay a penalty for exceeding cost targets. Exhibit 1 illustrates the concept of acceptable versus unacceptable costs to yield upside or downside risk in a shared savings approach.

Exhibit 1. Upside and Downside Risk in Shared Savings



ARKANSAS PERINATAL EPISODE OF CARE

- **Description:** The Arkansas Health Care Improvement Initiative (AHCII) is a statewide collaboration between Arkansas Medicaid and Arkansas Blue Cross Blue Shield with mandatory provider participation.[12] The AHCII's perinatal episode of care for eligible Medicaid and CHIP beneficiaries is triggered by a live birth and includes all care associated with prenatal care (<40 weeks prior to birth), delivery, and postpartum care (60 days postpartum).[13]
- **VBP Approach—HCP-LAN APM Framework Category 3B (Shared Savings With Downside Risk):** The AHCII perinatal episode payment model includes an opportunity for the PAP to benefit from shared savings. The PAP also may face a penalty should costs exceed a predetermined threshold; the PAP would refund a portion of payment retrospectively for these costs. PAPs that fall between the unacceptable and commendable thresholds for cost savings and perinatal quality metrics do not pay a penalty or receive an incentive payment. PAPs must report a screening rate of 80 percent or higher for HIV, Group B streptococcus (GBS), and chlamydia to meet quality targets.[13] For tracking purposes (not payment related), PAPs also report rates of cesarean deliveries and screening rates for hepatitis B, urinary tract infections or asymptomatic bacteriuria, and gestational diabetes.
- **Evaluation*:** Between 2012 and 2015, there was an increase in GBS and chlamydia screening rates and a decrease in the rate of cesarean deliveries. Additionally, the proportion of PAPs with perinatal episode average

*The results described in this brief are from the Arkansas Health Care Payment Improvement Initiative 3rd Annual Statewide Tracking Report. CMS also conducted an independent evaluation of Arkansas' perinatal episode of care as part of the state's participation in CMS's State Innovation Models. The independent evaluation did not demonstrate a statistically significant decrease in cesarean deliveries from 2012 through 2014. Additional information about the independent evaluation can be found here: https://doi.org/10.1111/1475-6773.13296

costs that were above the unacceptable threshold and less than the commendable level decreased, and the proportion of PAPs with acceptable levels of cost increased.[13]

CONSIDERATIONS FOR IMPLEMENTING HCP-LAN APM FRAMEWORK CATEGORY 3 APPROACHES

- Several existing episode-based payments for MIH care typically exclude high-risk pregnancies (e.g., women with complications during the prenatal period or labor and delivery) to reduce financial risk to providers.[1] Therefore, alternative payment arrangements for high-risk pregnancies likely will be required where episode-based payment models for MIH care are implemented.
- Neonatal complications, particularly those that require neonatal intensive care unit admission, also can expose providers to excessive financial risk. Stop-loss provisions that exclude episodes of care with a total cost above a certain threshold can help mitigate such risk.[14]
- When establishing a budget for an MIH episode-based payment, the episode price should reflect a level that potential provider participants view as feasible to attain (e.g., on the basis of provider-specific and multiprovider utilization history of pregnant Medicaid beneficiaries). Additionally, the HCP-LAN recommends that the episode price include high-value evidence-based support services, such as doula care and prenatal and parenting education, that help achieve the goals of MIH episode-based bundled payments.[1]

HCP-LAN APM Framework Category 4: Population-Based Payment

Category 4 VBP approaches use prospective capitated payments or a global budget to incentivize providers to decrease costs, combined with quality measures and financial benchmarking to hold providers accountable for quality standards.[2] Payments cover services delivered across providers and health care settings over a predetermined period, regardless of the amount of care sought. Category 4 VBP approaches cover a continuum of care services, rather than individual care services billed separately by each provider (Category 2), and are not restricted to an episode of care, such as pregnancy care related to a live birth (Category 3). Like in Category 3B, providers or managed care organizations (MCOs) participating in Category 4 approaches are eligible to share in the savings that they generate with the payer and may be at financial risk should costs exceed a budget. Category 4 consists of three subcategories:

- **Category 4A** approaches involve payments for the management of specific, usually chronic, conditions such as cancer or heart disease by specialist health care providers. Category 4A payments are typically less relevant to MIH than Category 4B approaches.
- **Category 4B** approaches involve payment for maintaining health and managing illness for a defined, or attributed, population (i.e., the population for which a provider or provider group will accept accountability). These approaches typically cover a comprehensive range of health care services for an attributed population. For MIH, Category 4B approaches may be used to provide services to promote women's health across the life span, including preconception and interconception health care.
- Payments under **Category 4C** also cover comprehensive care, but bring together insurance plans and delivery systems within the same organization. This approach may be used by private health insurance companies that own health delivery systems or by provider groups that offer insurance products. Category 4C is not typically used as a VBP mechanism for Medicaid-covered populations.

PENNSYLVANIA AND CAPITATED PAYMENTS FOR THE PERINATAL PERIOD

- **Description:** MIH care for Medicaid and CHIP beneficiaries in Pennsylvania is provided through a statewide, fully capitated Medicaid managed care program in which MCOs must provide all contracted services to members.[15]
- **VBP Approach—HCP-LAN APM Framework Category 4A (Capitated Payments):** The Pennsylvania Department of Human Services has implemented an incentive program based on MCO rankings on selected HEDIS indicators, including four measures relevant to MIH: (1) frequency of ongoing prenatal care, (2) timeliness of prenatal care, (3) receipt of postpartum care, and (4) receipt of well-child visits in the first 15 months of life. The MCOs are penalized with a reduced reimbursement from their total payout if their performance on quality metrics falls below 50 percent compared with national Medicaid benchmarks on similar measures. MCO payments are

based on performance compared with MCOs nationally and any improvements that MCOs have made since the previous year.[15]

- **Evaluation:** From 2016 to 2017, six out of nine Medicaid MCOs in Pennsylvania showed improved performance on all four HEDIS MIH indicators.[16]

GENERAL CONSIDERATIONS FOR IMPLEMENTING HCP-LAN APM FRAMEWORK CATEGORY 4 APPROACHES

- Safeguards should be established to minimize providers' exposure to clinical and financial risk, such as case-mix risk adjustment—that is, adjusting payments for patient-level characteristics that can influence cost and quality outcomes, such as clinical complexity and comorbid conditions (e.g., severe preeclampsia).[6] Case-mix risk adjustment ensures that performance measurement is based on the health care providers' performance rather than on patient-level factors that providers cannot control.
- A key component of Category 4 approaches is patient attribution, which forms the basis for performance measurement, reporting, and payment. Patient attribution identifies a patient population for providers, with incentives for providers to reach out to patients proactively to help close gaps in care, take preventive measures, connect patients to necessary specialists, and address barriers to adherence or other impediments to achieving favorable health outcomes. Ideally, these activities could promote patient engagement and patient-centered decision-making in MIH care (e.g., patient choice in receiving labor and delivery care at a birth center).

Conclusion

State Medicaid agencies increasingly are using VBP approaches to reduce costs and improve the quality of MIH care for Medicaid and CHIP beneficiaries. However, each state progresses at its own pace and along its own trajectory in the journey toward payment reform.

Additional information about this initiative and resources developed around technical assistance provided are available on the Medicaid IAP Value Based Payment and Financial Simulations web page: https://www.medicaid.gov/state_resource_center/innovation_accelerator_program/iap_functional_areas/value_based_payment/index.html. Additional information on the MIHI is available on the Medicaid Maternal & Infant Health Improvement Initiatives web page: https://www.medicaid.gov/medicaid/quality_of_care/improvement_initiatives/maternal_infant_health_care_quality/index.html.

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