



ACCELERATING AND ALIGNING
CLINICAL EPISODE PAYMENT MODELS:

MATERNITY CARE

Draft White Paper

Written by:

The Clinical Episode Payment (CEP) Work Group

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Executive Summary

[Placeholder: Formal abstract to be developed after incorporating feedback from the community.]

Overview

The Health Care Payment Learning & Action Network (LAN) established its Guiding Committee (GC) in May 2015 as the collaborative body charged with advancing alignment of payment approaches across and within the private and public sectors. This alignment aims to accelerate the adoption and dissemination of meaningful financial incentives to reward providers and systems of care that implement person-centered care and patient-responsive delivery systems. The Centers for Medicare & Medicaid Services (CMS) Alliance to Modernize Health Care (CAMH), the federally funded research and development center operated by the MITRE Corporation, was asked to convene this large national initiative.

In keeping with the goals of the U.S. Department of Health and Human Services (HHS), the LAN aims to have 30% of U.S. health care payments in APMs or population-based payments by 2016, and 50% by 2018. One promising area for payment innovation and alignment is in payment for “episodes of care” to improve patient outcomes, enhance health system performance, and control costs. A **clinical episode payment** is a bundled payment for a set of services that occur over time and across settings. This payment model can be focused on a:

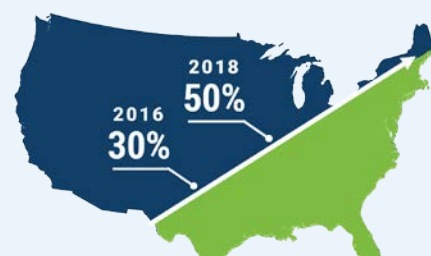
- Setting (such as a hospital or a hospital stay);
- Procedure (such as elective surgery); or
- Condition (such as diabetes).

Currently, there is much interest in episode-based payment models. Both public and private purchasers are exploring how best to promote acceleration and alignment of these models because episode payments offer a particularly promising approach to efficiently create and sustain delivery systems that advance value, quality, cost effectiveness, and patient engagement.

Health Care Payment Learning & Action Network (LAN)

To achieve the goal of better care, smarter spending, and healthier people, the U.S. health care system must substantially reform its payment structure to incentivize quality, improve health outcomes, and emphasize value over volume. Such alignment requires a fundamental change in how health care is organized and delivered, and requires the participation of the entire health care ecosystem. The Health Care Payment Learning & Action Network (LAN) was established as a collaborative network of public and private stakeholders, including health plans, providers, patients, employers, consumers, states, federal agencies, and other partners within the health care ecosystem. By making a commitment to changing payment models, establishing a common framework, aligning approaches to payment innovation, sharing information about successful models, and encouraging use of best practices, the LAN can help reduce barriers and accelerate the adoption of APMs.

U.S. Health Care Payments in APMs



Purpose of the White Paper

In November 2015, the GC convened the Clinical Episode Payment (CEP) Work Group. The GC charged the group members with creating a set of recommendations that can facilitate the adoption of clinical episode-based payment models. The GC noted a specific interest in models that fall within Categories 3 and 4 of its [Alternative Payment Model Framework \(Appendix A\)](#).

Clinical episode payment models are different from traditional fee-for-service (FFS) health care payment models, in which providers are paid separately for each service they deliver. Instead, clinical episode payment models take into consideration the quality, costs, and outcomes for a patient-centered course of care over a set period of time and across multiple settings. This course of care is known as the “clinical episode.” The experience of current initiatives suggests that paying for health care based on the care delivered in a clinical episode has the potential to increase coordination of care, enhance quality of care, and reduce fragmentation in the medical system. This leads to a better experience and improved health for patients and lower costs for payers and providers.

This White Paper addresses maternity care, which is the second of the three priority areas identified by the CEP Work Group. Background on the CEP Work Group’s charge, priority areas, selection criteria, and guiding principles are outlined in [Appendix A](#). The roster of the Work Group members who prepared this White Paper is in [Appendix B](#). Work Group members participate in this effort as individuals and not on behalf of their organizations.

The goal of using clinical episode payments is to improve the value of maternity care by **reducing costs and improving outcomes, as well as the experience of care, for the woman and her baby**. Although the payment incentives in episode payment provide support for this goal, the design and implementation of the episode’s care pathway(s) and delivery model(s) are also critical; for example, rates of cesarean births or early elective inductions could be impacted by changing protocols in within a hospital. The Work Group believes that the goal of episode payment should go beyond lowering costs and be designed such that it supports a more patient-centered approach to care. Specific goals of maternity episode payment include:

- Increasing the percentage of vaginal births and decreasing unnecessary cesarean births;
- Increasing the percentage of births that are full-term and decreasing preterm and early elective births;
- Decreasing complications and mortality, including readmissions and neonatal intensive-care unit (NICU) use;
- Providing support for childbearing women and their families in making critical decisions regarding the prenatal, labor and birth, and postpartum phases of maternity care and respecting those choices;
- Increasing the level of coordination across providers and settings of maternity care; and
- Consistently providing a woman- and family-centered experience.

Care improvements must occur across the continuum of prenatal, labor and birth, and postpartum care to support a more patient-centered approach to care.

At this stage in the process, the Work Group is requesting feedback on the draft White Paper and the recommendations in order to strengthen the recommendations and obtain broad agreement on the proposed definitions and approaches.

Background: Maternity Care

Pregnancy and childbirth are pivotal events in a woman's life, framed by both the overall care experience and the actual birth event. During pregnancy, women are concerned with many things, including the healthy development of the baby, the labor and birth experience, and how she will take care of herself and her newborn postpartum. Interactions with the health care system during this time create opportunities to address and allay these concerns by laying a strong foundation for the ongoing health of the woman, her baby, and her family as a whole. Often times prenatal care, labor and birth, and postpartum care are viewed as three distinct periods, and care is delivered as such. However, by viewing them as three phases within one episode, the potential opens up to incentivize the types of interactions and care delivery that support positive outcomes.

Positive outcomes can be reflected in a variety of ways: a greater percentage of appropriate vaginal births; a greater percentage of full-term babies born at healthy weights; strong recoveries for women; and healthy starts for the babies. Thoughtful episode payment seeks to achieve these outcomes at a lower overall cost to the system and lower cost to women and families. The Work Group's recommendations provide an outline for how to achieve this goal without becoming overly prescriptive about the exact mechanisms for doing so.

In maternity care today, there are a variety of payment models, many of which utilize a global fee for professional services. These models may include a global fee for 1) prenatal care professional services and the professional component of labor and birth; 2) prenatal care through postpartum care; or 3) partial and full prenatal care and for postpartum care. Facility fees for the actual birth are typically paid separately, with higher fees in the event of a birth by cesarean section. This funding model is associated with overuse of high-cost interventions and underuse of low-cost interventions, which leads to less-than-desirable outcomes for women and their babies despite the fact that the maternity population is generally healthy.¹ By providing incentives for the provision of higher-value practices and for care coordination across the continuum of services and providers, episode payment can potentially have a significant impact on the short- and long-term health of a woman and her baby, as well as on the health of American society.

Childbirth is the most common reason for hospitalization in the United States.² In 2009, combined maternal and newborn stays represented 23% of all hospital stays.² According to Healthcare Cost and Utilization Project (HCUP) data, while charges billed by hospitals represent a significant over-estimate of actual payment, such charges totaled \$127 billion in 2013 (actual payments are roughly half of billed charges).³ These charges do not include provider fees across the episode. In addition, hospital-billed charges increased more than 90% between 2003 and 2013.^{3, 4}

¹ It is also important to note that maternal mortality in the United States has risen over the past 30 years. <http://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html>

² Wier LM (Thomson Reuters), Pfuntner A (Thomson Reuters), Maeda J (Thomson Reuters), Stranges E (Thomson Reuters), Ryan K (Thomson Reuters), Jagadish P (AHRQ), Collins Sharp B (AHRQ), Elixhauser A (AHRQ). *HCUP Facts and Figures: Statistics on Hospital-based Care in the United States, 2009*. Rockville, MD: Agency for Healthcare Research and Quality, 2011 (<http://www.hcup-us.ahrq.gov/reports.jsp>).

³ AHRQ. (2013) HCUPNet, Healthcare Cost & Utilization Project. Rockville, MD: AHRQ. <http://hcupnet.ahrq.gov>.

⁴ AHRQ. (2003) HCUPNet, Healthcare Cost & Utilization Project. Rockville, MD: AHRQ. <http://hcupnet.ahrq.gov>.

A study by Truven Analytics shows the cost of birth varies significantly by payer, type of birth (vaginal or cesarean section), and setting where the birth occurs (see Figure 1). In 2013, the average total maternal-newborn payments for cesarean births, including all facility and provider fees for prenatal, labor and delivery, and postpartum/newborn care, was \$27,866 for a commercial payer and \$13,590 for Medicaid. For both payer types, total payments for cesarean births were roughly 50% higher than for vaginal births. One of the reasons that cesarean birth costs more is that there are 50% higher neonatal intensive care unit (NICU) payments associated with these surgeries, compared to the percentage of vaginal births requiring NICU stays.

Figure 1: Costs and Disparities in Maternity Care

	Commercial Market	Medicaid
Volume (HCUP 2013) * Medicare, other, or uninsured accounted for the remainder	2,012,584 (48.99%) births	1,811,759 (44.10%) births
Payment variation by payer and type of birth (Truven, 2010)	Vaginal: \$18,329 Cesarean: \$27,866	Vaginal: \$9,131 Cesarean: \$13,590
Significant Opportunities for Improved Outcomes	<ul style="list-style-type: none"> • Reduce cesarean rates: Current average of cesarean is 32.2%, up 60% from the most recent low of 20.7% in 1996.⁵ WHO data find that cesarean rates higher than 10% are not associated with further reductions in infant or maternal mortality.⁶ • Reduce pre-term rates: 9.57% of births are pre-term, a statistic that includes early elective deliveries. The American College of Obstetricians and Gynecologists (ACOG) recommends no early births unless medically indicated.⁷ • Increase in births occurring in the highest value setting: Vaginal births are 50% less costly in birth centers than in hospitals.⁸ • Reduce infant mortality rates: Infant mortality is higher in the United States than in 38 other countries.⁹ • Reduce maternal mortality rate in the United States, which has doubled since 1987).¹⁰ • Reduce racial/ethnic disparities: The percent of pre-term births for non-Hispanic white is 8.91%, non-Hispanic black is 13.23%, and Hispanics is 9.03%, with additional significant disparities in infant mortality and low-birth weight babies.¹¹ 	

⁵ Osterman et al. 2013, "Changes in Cesarean Delivery Rates by Gestational Age: United States. 1996-2011, NCHS Data Brief No.124, June 2013, Centers for Disease Control and Prevention, accessed April 13, 2016.

⁶ World Health Organization. WHO Statement on Cesarean Section Rates. Geneva, Switzerland: WHO 2015. Accessed at http://apps.who.int/iris/bitstream/10665/161442/1/WHO_RHR_15.02_eng.pdf

⁷ Hamilton, B.E., Martin J.A., Osterman M.J., Curtin, S.C., and Mathews, T.J. Births: Final Data for 2014. National Vital Statistics Reports; Vol 64 No 12, Hyattsville, MD: National center for Health Statistics. 2015. Accessed at http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_12.pdf

⁸ IBID. Note: This increase in the number of out of hospital births also includes increases in births at home.

⁹ World Health Organization. World Health Statistics 2014. Geneva, Switzerland: WHO, 2014. Accessed at http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf

¹⁰ Ibid.

¹¹ Mathews, T.J., MacDorman, M.F. Infant Mortality Statistics from the 2010 Period Linked Birth/Infant Death Data Set. National Vital Statistics Reports; Vol. 62 No. 8. Hyattsville, MD: National Center for Health Statistics. Accessed at http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_08.pdf

The setting in which a woman gives birth also affects the cost, as well as the type of delivery. The average national cesarean rate in the United States is currently 32.2%^{12, 13} despite the fact that the U.S. Surgeon General calls for a reduction in cesarean rates for low-risk women to 23.9% by 2020. Just as with other surgical procedures, there is significant, non-clinically supported variation in cesarean rates across hospitals. Even hospitals in the same city show wide variation. For example, Jersey City Medical Center near Newark, NJ, reported a 35% cesarean section rate for low-risk women, compared to a 19% rate at Trinitas Regional Medical Center in nearby Elizabeth, NJ.¹⁴ In California, rates varied from 18% in one hospital to more than 50% in another, according to a recent study.¹⁵ This story repeats all throughout the country.

For women who choose a midwife and a birth center for their primary care provider and birth setting, respectively, the costs are significantly less than in a hospital.¹⁶ Of course, part of this is due to the fact that birth centers do not provide cesarean section procedures. There are occasions when a woman chooses a midwife to manage prenatal care and a birth center for labor and birth, but ultimately delivers in a hospital due to complications. The costs in this scenario are still lower for vaginal birth if a midwife managed the prenatal care and subsequently manages the hospital birth.¹⁷ Although the use of community-based settings, such as birth centers, is growing as a percent of births—70% growth from 2004 to 2012¹⁸—98.6% of births still occur in a hospital.¹⁹

These data demonstrate that too often the resources spent on maternity care services are not leading to the highest value birth care. This is reflected in the fact that the United States has a higher rate of infant mortality than 38 other countries and a lower successful breastfeeding rate than 98 other countries.²⁰ It is also reflected in the 9.57% pre-term birth rate (which includes early elective deliveries) in 2014.¹² This rate persists despite advocacy by the American College of Obstetricians and Gynecologists (ACOG) against early induction unless medically indicated.¹⁸ Finally, there are significant racial and ethnic disparities in birth outcomes, with non-Hispanic black babies at more than twice the risk of dying at birth compared to non-Hispanic white babies.²¹

¹² Ibid.

¹³ World Health Organization. WHO Statement on Cesarean Section Rates. Geneva, Switzerland: WHO 2015. Accessed at http://apps.who.int/iris/bitstream/10665/161442/1/WHO_RHR_15.02_eng.pdf

¹⁴ Haelle, Tara, "Your Biggest C-Section Risk May be Your Hospital," Consumer Reports, April 13, 2016. Accessed at <http://www.consumerreports.org/doctors-hospitals/your-biggest-c-section-risk-may-be-your-hospital/>

¹⁵ Main EK, Morton CH, Hopkins D, Giuliani G, Melsop K and Gould JB. 2011. Cesarean Deliveries, Outcomes, and Opportunities for Change in California: Toward a Public Agenda for Maternity Care Safety and Quality. Palo Alto, CA: CMQCC. (Available at www.cmqcc.org)

¹⁶ Howell et al. "Potential Medicaid cost savings from maternity care based at a freestanding birth center. Medicare and Medicaid research review, 4(3): E1-13. 2014. Accessed at: https://www.cms.gov/mmrr/Downloads/MMRR2014_004_03_a06.pdf and Johantgen et al. "Comparison of labor and delivery care provided by certified nurse-midwives and physicians: A systematic review, 1990 to 2008. Women's Health Issues, 22 (1):e73-e81.

¹⁷ Ibid.

¹⁸ MacDorman MF, Mathews TJ, Declercq E. Trends in Out-of-Hospital Births in the United States, 1990-2012. NCHS data brief, no 144. Hyattsville, MD: National Center for Health Statistics. 2014

¹⁹ Hamilton, B.E., Martin J.A., Osterman M.J., Curtin, S.C., and Mathews, T.J. Births: Final Data for 2014. National Vital Statistics Reports; Vol 64 No 12, Hyattsville, MD: National center for Health Statistics. 2015. Accessed at http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_12.pdf

²⁰ World Health Organization. World Health Statistics 2014. Geneva, Switzerland: WHO, 2014. Accessed at http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf

²¹ Healthy People 2010 Final Review Maternal Infant, and Child Health Figure 16-2 at http://www.cdc.gov/nchs/data/hpdata2010/hpdata2010_final_review_focus_area_16.pdf

The good news is that evidence-based care practices can deliver higher quality care at a lower cost. For the majority of low-risk births, lower resource-intensive births do correlate with positive outcomes. Based on the definition of a low-risk pregnancy as full-term, singleton, and head-first presentation, some estimates show that as many as 85% of births are low-risk. However, this number does not take into consideration other risk factors, such as chronic diseases or factors in the woman's obstetric history.²² If the percentage of safely achievable vaginal births were to increase, resulting in a decrease in cesareans, overall birth costs would decrease. Outcomes should improve as well, given that vaginal births have fewer complications. Further, with a decrease in the rate of early elective and pre-term births, fewer babies would need high-cost NICU care, and babies would have better survival rates and a healthier start.

Although the relationship between quality of care and better health outcomes is recognized by the field, this relationship is not always reflected in the current U.S. payment system, which is characterized by the fact that it often incentivizes higher cost, lower quality care. In the maternity care context, for example, vaginal births cost less,²³ have fewer complications, and involve shorter stays, thus providing less reimbursement to hospitals; but they also require patience and often several hours of hard work by the women, as well as support from obstetricians/gynecologists (OB/GYNs), nurses, and midwives. In contrast, cesareans are sometimes considered more convenient by women, practitioners, and facilities because of the shorter duration of labor and the ability to schedule in advance. Thus, the rate of cesareans has increased 60% from the most recent low of 20.7% in 1996²⁴ — despite the fact that they are considered riskier for both the mother and baby. **ACOG and the Society for Maternal-Fetal Medicine have both stated that this increase has not been accompanied by discernable gains in maternal or newborn health.**

Role of Episode Payment in Maternity Care

Episode payment can address the need for appropriate, high-quality, prenatal and postpartum care. Testing for potential problems (such as gestational diabetes or birth defects), monitoring the growth and health of the growing fetus and the woman, providing education to the woman on what to expect during and after birth, and supporting her in making decisions about her preferences for interventions, settings, and provider types, can all lead to a more engaged and healthier childbearing woman. Postpartum care that supports the new mother in breastfeeding, baby care, contraceptive care, mental health and self-recovery can have a lifelong impact on the health of both the woman and her baby. Yet these and other high-value services are not always effectively provided since the bulk of payment is focused on hospital-based labor/delivery services. Therefore, the goal of episode payment design in this realm is to incentivize the delivery of the full continuum of services by holding providers accountable for their quality and coordination, and to decrease costs while improving the value of maternity care overall.

²² Stapleton, S. R., Osborne, C. and Illuzzi, J. (2013), Outcomes of Care in Birth Centers: Demonstration of a Durable Model. *Journal of Midwifery & Women's Health*, 58: 3–14. doi: 10.1111/jmwh.12003

²³ Truven Health Analytics. The Cost of Having a Baby in the United States. Ann Arbor, MI: Truven, January 2013. Accessed at

²⁴ Wier LM (Thomson Reuters), Pfuntner A (Thomson Reuters), Maeda J (Thomson Reuters), Stranges E (Thomson Reuters), Ryan K (Thomson Reuters), Jagadish P (AHRQ), Collins Sharp B (AHRQ), Elixhauser A (AHRQ). *HCUP Facts and Figures: Statistics on Hospital-based Care in the United States, 2009*. Rockville, MD: Agency for Healthcare Research and Quality, 2011 (<http://www.hcup-us.ahrq.gov/reports.jsp>).

Fortunately, Medicaid (which pays for approximately 44% of births annually), commercial payers, and large purchasers have begun to develop episode payment initiatives for maternity care in recognition of the ways in which episode payment can drive higher-quality, lower-cost care.

There are three general types of models in the market today that bundle all or some of the services for maternity care into an episode payment (see [Appendix C](#) for a chart summarizing various initiatives). Examples of each are below:

1. **Comprehensive bundle.** Several initiatives, led by both Medicaid and commercial payers, define the episode as the prenatal, labor and birth, and postpartum time frame and include care for the woman and, sometimes, the newborn (see Figure A2). This strategy acknowledges the importance of support throughout the entire maternity care experience to ensure the best outcomes for the woman and her baby. It is agnostic as to both the birth site and who manages the birth, and whether the birth is vaginal or a cesarean, but it is typically priced assuming a hospital birth.
2. **Comprehensive birth center/midwife bundle.** This provider-driven episode model includes the full continuum of services as in the comprehensive bundles, but is priced based on midwife management, and thus reflects the cost of a birth center birth. In this model, if a woman is referred to a hospital, then the hospital is paid a separate fee; the bundle is only for the midwife services and the fee for a birth center. In some cases, the midwife still manages the birth even if it is in the hospital, but the facility fee for the hospital is paid separately.
3. **Blended rate for hospital labor and birth (regardless of delivery type).** Several purchasers and providers are implementing episodes framed specifically around hospital-based labor and birth, and which do not include costs for prenatal or postpartum care or care for the baby. This model blends cesarean and vaginal birth reimbursement rates into a blended case rate for hospitals. The primary goal is to decrease cesarean rates. Hospital payments and the clinical professional fees are the same regardless of the delivery method. The episode price also includes the costs of postpartum complications, but no other postpartum costs are included.

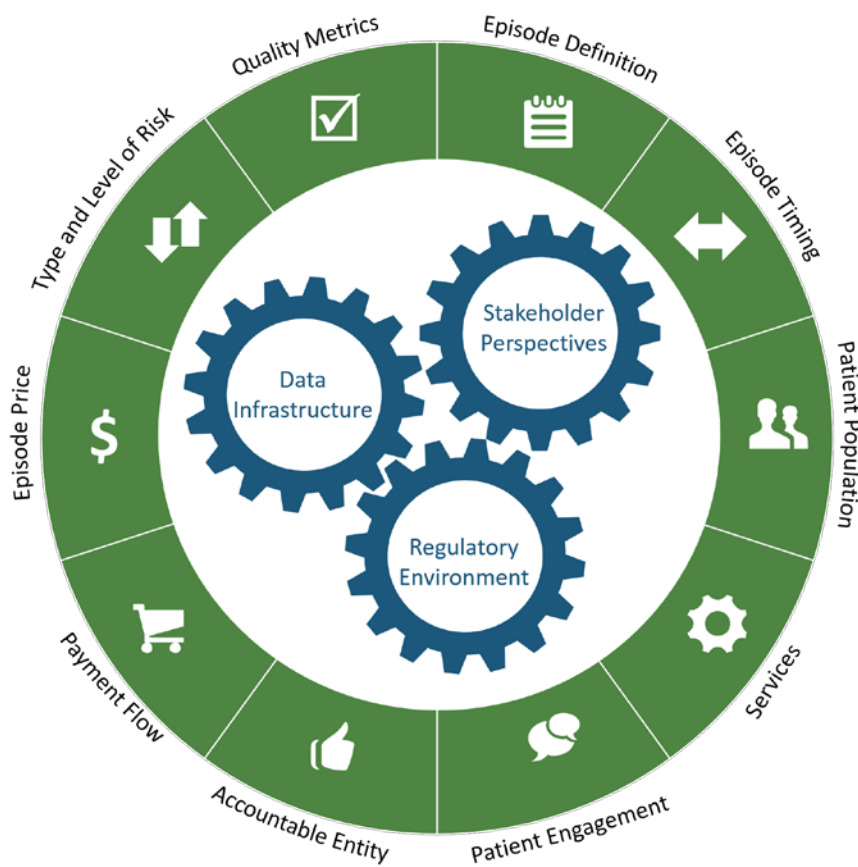
As described in more detail in [Appendix D](#), maternity episode payment has been associated with increased use of preventive services, lower cesarean rates, lower readmission and complication rates, and lower early elective birth rates.

Recommendations: Maternity Care

The Work Group's recommendations fall into two categories:

- **Design Elements:** The design elements address questions stakeholders must consider when designing an episode-based payment model, including, but not limited to, the definition, the duration of the episode, and what services are to be included (Figures 2–4).
- **Operational Considerations:** Operational considerations relate to implementing an episode payment model, including the roles and perspectives of stakeholders, data infrastructure issues, and the regulatory environment in which APMs must operate. Operational considerations should not be assessed in a vacuum, as they are inter-related to design element decisions.

Figure 2: Graphical Summary of Maternity Design Elements & Operational Considerations



Source: Ripple Effect Communications, Inc.

How to Use the Recommendations

The recommendations developed by the CEP Work Group support maternity care episode payment adoption across a broad set of payers, providers, and purchasers, with meaningful engagement from consumers and patients. These recommendations are designed to help all stakeholders align their efforts and define the circumstances and rationale for when and how it may be reasonable to use an alternative payment model such as episode payment. The recommendations include design elements and operational considerations that reflect the current maternity care episode payment models in which most stakeholders operate. Such recommendations are practical and can be implemented in many places today.

The recommendations also include aspirational goals that point to a future state in which infrastructure, market, and other challenges are addressed and can support further innovation in episode payment. Some stakeholders are farther along in episode payment design and implementation and may be well-positioned to adopt these recommendations all at once. Other stakeholders may feel it is more feasible to adopt certain recommendations and set a glidepath toward implanting others in the future. These recommendations may require development to be achievable.

Individual payers may use these recommendations to design payment initiatives and guide contract negotiations; however, the impact of these reforms will be the strongest and have the most clarity when efforts to reform payment are multi-payer, both public and private, and include the purchasing influence of self-insured employers.

Design Elements

The CEP Work Group conducted research and analysis on a range of existing episode payment initiatives (see [Appendix D](#)). Based on their experience and the analysis of current initiatives, the Work Group identified a set of episode payment model design elements (Figure 2). These elements reflect the decisions that payers and providers need to make prior to implementation. Figure 3 summarizes the 10 design element recommendations that are discussed in this draft White Paper.

Figure 3: Summary of Maternity Care Episode Design Element Recommendations

1. Episode Definition	The episode is defined to include prenatal care, labor and birth, and postpartum/newborn care for low-risk women and their babies. The intent of the Work Group is to define low-risk as broadly as possible, with limited exclusions.
2. Episode Timing	The episode should begin 40 weeks before the birth and end 60 days post-discharge for the woman and should be from birth through 30 days post-discharge for the baby.
3. Patient Population	The population includes low-risk pregnant women and their babies. The intent of the Work Group is to define low-risk as broadly as possible, with limited exclusions. Clinical episode payment can provide incentives for needed care improvement for the vast majority of pregnant women.

4. Services	Covered services include all services provided during pregnancy, labor and birth, and the postpartum period (for the women) and newborn care for the baby. Exclusions should be limited. Initiatives should also consider including high-value support services, such as doula care and prenatal and parenting education.
5. Patient Engagement	Engaging women and their families is critical in all three phases of the episode—prenatal, labor and birth, and postpartum/newborn—to contribute to the foundation for healthy women and babies.
6. Accountable Entity	The accountable entity should be chosen based on its ability to engineer change in the way care is delivered to the woman and its ability to accept risk for an episode of care. In most situations, a physician (an obstetrician or family practitioner) or midwife practice may be most able to impact change.
7. Payment Flow	While the unique circumstances of the episode initiative will determine the payment flow, the CEP Work Group encourages further spread of prospective payment. The two primary options are: (1) a prospectively established price that is paid as one payment to the accountable entity or (2) FFS payments, as is currently done, to individual providers within the episode with retrospective reconciliation with the prospectively set target price and a potential for shared savings/losses for the accountable entity.
8. Episode Price	The episode price should strike a balance between provider-specific and multi-provider/regional utilization history. The price should: 1) acknowledge achievable efficiencies already gained by previous programs; 2) reflect a level that potential provider participants see as feasible to attain; and 3) include the cost of services that help achieve the goals of episode payment.
9. Type and Level of Risk	The goal should be to utilize both upside and downside risk. Transition periods and risk mitigation strategies should be used to encourage broad provider participation.
10. Quality Metrics	<ul style="list-style-type: none"> • Prioritize use of metrics that capture the goals of the episode, including outcome metrics, particularly patient-reported outcome and functional status measures; • Use quality scorecards to track performance on quality and inform decisions related to the ability to share in shared savings or losses and determine the level of those savings or losses; • Use quality information and other supports to communicate with and engage patients and other stakeholders.

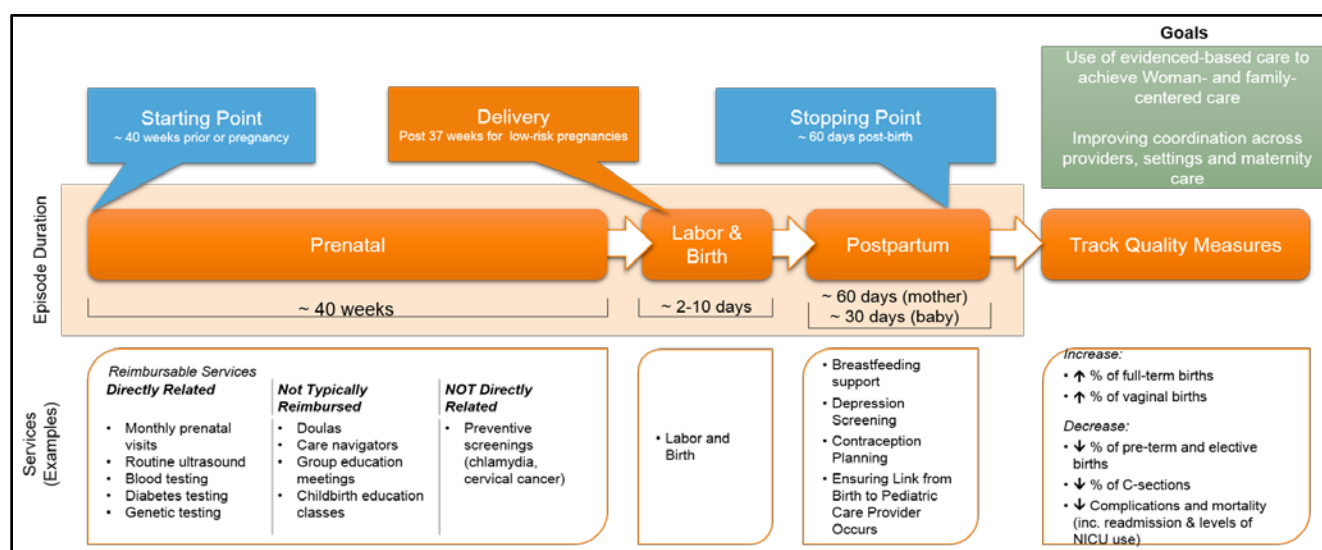
Source: The MITRE Corporation

1. Episode Definition

The episode is defined to include prenatal care, labor and birth, and postpartum/newborn care for low-risk women and their babies. The intent of the Work Group is to define low-risk as broadly as possible, with limited exclusions.

The Work Group recommends defining the episode to include all services and care delivered during three phases of maternity: prenatal, labor and birth, and postpartum (see Figure 4). Including these three phases within the episode (as opposed to narrowly defining the episode around labor and birth, which are arguably the most costly aspects of maternity care) is key to achieving the goals of episode payment. Additional discussion of the episode timeline and population are offered below.

Figure 4: Maternity Episode Definition and Timeline



Source: Ripple Effect Communications, Inc.

2. Episode Timing

The episode should begin 40 weeks before the birth and end 60 days postpartum for the woman and 30 days post-birth for the baby

Including the entire pregnancy, the labor and birth, and the postpartum/newborn period within one payment recognizes the importance of prenatal and postpartum/newborn support for the health of the woman and her baby. However, some episode payment initiatives limit the time period for the episode to

hospital care only and use a blended hospital case rate (blending payment for vaginal births with cesareans) for labor and birth. While this approach has been shown to decrease the rate of cesareans, the potential for improved outcomes could be increased by including prenatal and postpartum care in the episode and encourages a more woman/patient-centered, coordinated approach across settings.

Consistent prenatal care – in addition to providing continuous care for the woman – can identify high-risk markers, such as gestational diabetes. Prenatal care can also include childbirth education to support a woman through the mental and physical challenges of vaginal delivery and provide other supports during pregnancy, giving birth, and the transition to new parenthood. High-quality postpartum support can lower readmissions, increase rates of breastfeeding, reduce postpartum depression, and provide a strong foundation for the woman as a caregiver to her baby and her family.

There may be concerns among stakeholders that including prenatal and postpartum care in the episode can lead to decreased access to or limited delivery of those services by a provider trying to utilize fewer resources to maximize potential savings. Another concern regarding postpartum care is whether the clinician who manages the birth should also be accountable for postpartum care. The Work Group believes these concerns, although valid, are manageable. For example, some initiatives require the collection and monitoring of certain performance metrics, such as number of visits and delivery of certain prenatal tests and screening before the birth and the provision of breastfeeding support or contraceptive advice afterwards to ensure their delivery. Concerns have also been raised about whether to include women who do not opt to access prenatal care. To address these concerns, one bundling initiative adjusts the episode definition and price based on differing numbers of prenatal visits. Another option is to exclude from the episodes women who do not have a minimum number of visits.

Recognizing all of these concerns, it is nevertheless optimal for episode payment to include prenatal and postpartum care in addition to labor and birth, so as to fully leverage the opportunity to improve value and outcomes across all three phases of maternity care.

3. Patient Population

The population includes low-risk pregnant women and their babies. The intent of the Work Group is to define low-risk as broadly as possible, with limited exclusions. Clinical episode payment can provide incentives for needed care improvement for the vast majority of pregnant women.

There are two issues of particular importance in defining the population in the episode—whether to include newborn care and whether to include all pregnant women or a subset of low-risk women.

Including the baby. Some current maternity episode payment initiatives include the baby, while others include only care for the woman. The Work Group recommends including the baby in the episode population, given that the primary focus of the episode is the birth and the primary goal is a healthy woman **and** a healthy baby. Stakeholder readiness to implement maternity care episode payment can be a

factor in determining whether to include the baby in the population. In the beginning of these initiatives, even limiting the episode to the childbearing woman can yield improvements in value and may be less complex for the provider to implement. However, the Work Group recommends transitioning to a design that includes the woman and baby as soon as possible.

The inclusion of the baby in the episode population raises issues related to assigning an accountable entity (e.g., when managing the pregnancy requires a neonatology specialist in addition to or instead of the OB/GYN or the midwife). Although these cases are relatively rare in a population of low-risk women, such instances highlight the need for cooperation among all providers across the episode, as well as the need for clear policies on the level of risk when the provider identified as the accountable entity has limited ability to manage care across providers.

Defining the pregnancy level of risk. The Work Group recommends limiting the population to low-risk pregnant women. However, the episode should be defined to include as broad a group of women as possible. All pregnant women, regardless of risk levels, can benefit from improvements in care delivery. Limiting the population to low-risk pregnant women is intended to acknowledge that some high-risk pregnancies introduce a level of variability and potential risk for the accountable entity that could be difficult to manage, particularly for small practices. In the event that a low-risk pregnancy results in a baby who requires intensive care, stop-loss policies should be established to mitigate potential unanticipated risks. Critical to the episode population design element is defining a low-risk or high-risk pregnancy. Definitions vary, depending on when in the maternity period the determination is made and by whom. Some have used the Healthy People 2020 definition of a full-term, single, head-first presentation pregnancy and calculate 85% of pregnancies meet this definition of a low-risk pregnancy.²⁵ Therefore, the list of exclusions should be limited and could include those with active cancer, AIDS, multiple sclerosis, renal dialysis, pulmonary embolism, or multi-gestation (twins or triplets). Other ways to limit risk through risk-adjustment, including factors that might arise during pregnancy, and stop/loss limits will be discussed in the discussion on the Level and Type of Risk below. See [Appendix E](#) for links to resources that provide lists of exclusions.

4. Services

Covered services include all services provided during pregnancy, labor and birth, and the postpartum period (for the women) and newborn care for the baby. Exclusions should be limited. Initiatives should also consider including high-value support services, such as doula care and prenatal and parenting education.

²⁵ Healthy People 2020 Objective MICH 7.1, <https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives>. Eighty five percent cited in Stapleton, S. R., Osborne, C. and Illuzzi, J. (2013), Outcomes of Care in Birth Centers: Demonstration of a Durable Model. Journal of Midwifery & Women's Health, 58: 3–14. doi: 10.1111/jmwh.12003

All services currently covered during prenatal care visits, labor and birth, postpartum care, and newborn care should be included as part of the episode services. We note the time frame for newborn care is fewer days than the woman's care to limit the services included in the price to those needed to address newborn needs.

Central to the recommendation of included services is the issue of currently underused services. Some underused services are typically covered in today's delivery system but others are not. Each set of services creates opportunities for effective implementation of a maternity care episode payment strategy.

- **Currently covered but underused services not directly related to pregnancy and birth:** Some initiatives see the OB/GYN, midwife, family physician, or osteopath as the primary care provider and view the prenatal care period as an opportunity to perform preventive screenings, such as for screenings for chlamydia or cervical cancer. These screenings are not specifically related to pregnancy but it may be important to include them in the episode price, as they are commonly provided to women as part of their pre-natal care.²⁶ Another option might be to pay separately for them through FFS, but include them in episode quality metrics, perhaps with a pay for performance incentive in addition to the bundled payment incentives.
- **Commonly uncovered (and underused) high-value services directly related to pregnancy and birth:** A variety of services that have been shown to improve a woman's birth experience and potentially improve outcomes are not commonly part of typical benefit packages. One important service that clinical episode payment is designed to encourage is greater care coordination across providers by the providers themselves. Typically, providers are expected to provide some level of this coordination without additional reimbursement. Other services not typically covered are those provided by doulas, care navigators (e.g., for shared decision-making, shared care planning, community referrals, and follow up on such matters as smoking cessation, mental health referrals, and completion of postpartum visits), group prenatal visits, and breastfeeding support.

Although bundling currently covered services could result in efficiencies and improved outcomes, providing incentives to increase the use of the enhanced services described above may lead to even higher-value care. Prospective payment (as described in the Payment Flow Recommendation below) allows for provider flexibility to deliver these services, as it does not rely on a direct payment from the payer for individual covered services. Evaluation of the enhanced prenatal care models—through maternity care homes, group prenatal care, and birth centers—being tested within the CMS Center for Medicare and Medicaid Innovation's Strong Start initiative provides lessons for the types of services that support maternity care episode payment models (see "Patient Engagement" recommendation below). Regardless, it is important to monitor the shift in service patterns to ensure that the Strong Start initiative results in the highest value care feasible and does not lead to unintended consequences of restricting important services.

²⁶ Current ed. Of *Guidelines for Perinatal Care* from AAP and ACOG discusses many and provides ACOG's Antepartum Record.

5. Patient Engagement

Engaging women and their families is critical in all three phases of the episode—prenatal, labor and birth, and postpartum/newborn—to contribute to the foundation for healthy women and babies.

Engaging the patient across the full episode of maternity care provides important opportunities to contribute to maternity care episode payment success. It is not uncommon for pregnant women to want to understand the changes they are experiencing and to learn about care options. Many prioritize being involved in making decisions about their care. They are motivated to contribute to healthy outcomes for themselves and their babies. Moreover, given that most are embarking on a long period of having disproportionate responsibility for managing health care across generations, the entire maternity care episode is an optimal time to help women become effective users of health care.

It is important to help women – as early as possible in their maternity experience – understand that their choice of care provider and birth setting are interrelated. Given the extent of practice variation, understanding these choices could greatly impact their care options, experiences, and outcomes. With the growth of meaningful public reporting of performance results, and evidence of women’s considerable interest in finding and using such information,²⁷ many women would benefit from being directed to relevant resources and having access to guidance from someone who could help them identify and interpret available and relevant comparative quality information. Health plans are well positioned to support women in this way and, as a pregnancy proceeds, to encourage them to assess whether their chosen care arrangements prove to be a good match with their values and preferences. This can both help a woman obtain high-quality care and foster quality-based competition in the marketplace.

After a maternity care provider is selected, shared care planning should be integrated into the episode throughout, including goal setting, shared decision-making, and documenting preferences and decisions, with the understanding that circumstances can change over time. Optimally, information technology makes the care plan available across the episode at all sites of care and to all members of the care team, including women and families.

Some patient engagement efforts involve enhanced services, such as the maternity home and group prenatal visits being studied in the CMS-sponsored Strong Start demonstration.^{28, 29} In the maternity care home model, clinical or community health worker care coordinators are assigned to work with pregnant women to support their goals, provide referrals to community resources (such as smoking cessation programs, childbirth education, mental health services, breastfeeding support), foster successful care transitions, and ensure that women attend postpartum visits. The Year 2 Strong Start evaluation suggests that this model is associated with a decrease in interventions that are not medically indicated and that

²⁷ Listening to Mothers III survey. Page 7 in http://transform.childbirthconnection.org/wp-content/uploads/2013/06/LTM-III_Pregnancy-and-Birth.pdf

²⁸ <https://www.centeringhealthcare.org/what-we-do/centering-pregnancy>

²⁹ Hill I, Benatar S, Courtot B, et al. (2014). Strong Start for Mothers and Newborns Evaluation: Year 1 Annual Report; Volume 1 – Cross-Cutting Synthesis of Findings. Urban Institute, Health Management Associates, American Institutes of Research, Brilljent.

women are pleased with the enhanced service model.³⁰ Strong Start participants experiencing enhanced prenatal care in birth centers had a reduction in cesareans and other interventions, strong breastfeeding results, and were especially happy with their experiences.³¹ In the context of this clinical episode payment model, a care coordinator is also well positioned to ensure that childbearing women complete self-reported surveys of experience and outcome. In addition, women who have had access to doula services, inclusive of prenatal and postpartum support, have experience lower frequency of cesareans and increased breastfeeding.³²

High-quality childbirth education classes are another important way to engage women in learning about options and making informed decisions about their care. Benefit policies vary, but many Medicaid programs include childbirth education as a covered benefit. In fact, Healthy People 2020 includes a goal to increase the number of women who attend childbirth classes,³³ as such classes can decrease a woman's fear regarding labor and birth and have been shown to be a critical factor in reducing early elective births.

Other examples of tools for patient engagement include shared decision-making aids, such as the decision aids developed by the [Informed Medical Decisions Foundation](#) and [Childbirth Connection](#) (now available through Healthwise) and the use of mobile devices, such as Text4baby, to access health information and services that provide individualized information based on the pregnancy stage and individual needs. An online inventory identifies decision aids by topic that have been rated according to international standards.³⁴

Further, based on the success of the Open Notes project, a growing proportion of patients are gaining full access to their electronic health records.³⁵ Another initiative—Maternity Neighborhood³⁶—helps clinicians and women communicate and query one another, track women's progress, schedule appointments, and share educational resources. Meanwhile, the initiative enables women to review, discuss, and contribute to their health record. Existing experience suggests that full and interactive access to health records may contribute to the success of episode payment models. Patient portals can deliver a broad range of user-friendly, evidence-based tools and educational resources. While not yet standard practice, a wide variety of patient engagement support is now available (see [Appendix E](#) for a list of resources, including patient engagement tools).

The maternity care episode should support the standardized use of patient engagement strategies and models, particularly given that these strategies are typically underutilized. In fact, it may be feasible to encourage some reinvestment of a portion of overall episode savings into services that support such engagement. One provider-driven initiative specifically included additional services such as doulas and

³⁰ https://downloads.cms.gov/files/cmml/strongstart-enhancedprenatalcare_evalrptyr2v1.pdf

³¹ Year Two Evaluation Report: Strong Start for Mothers and Newborns: Evaluation Year 2 Annual Report. March 2016. https://downloads.cms.gov/files/cmml/strongstart-enhancedprenatalcare_evalrptyr2v1.pdf

³² National Partnership for Women & Families and Childbirth Connection (January 2016). *Overdue: Medicaid and Private Insurance Coverage of Doula Care to Strengthen Maternal and Infant Health* [Issue Brief]. Retrieved from <http://transform.childbirthconnection.org/wp-content/uploads/2016/01/Insurance-Coverage-of-Doula-Care-Brief.pdf>

³³ <https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives>

³⁴ An inventory can be found at <https://decisionaid.ohri.ca/AZlist.html>

³⁵ <http://www.bmj.com/content/350/bmj.g7785.long>
<https://jamia.oxfordjournals.org/content/early/2016/02/10/jamia.ocv167>
<http://www.ncbi.nlm.nih.gov/pubmed/26827154>

³⁶ <http://maternityneighborhood.com/products/>

patient navigators and found them to be of significant value in engaging patients and improving outcomes.³⁷

Further, to consistently improve upon patient engagement activities, it will be important to use patient activation metrics to track patient engagement overall. A change score for the Patient Activation Measure (healthy person version recently endorsed by the National Quality Forum [NQF]) administered near the beginning and end of pregnancy would incent those participating in the episode payment to build women's skills, knowledge, and confidence as they approach giving birth and new parenthood.

A final approach to engaging women is to communicate, in plain language, that they are receiving their maternity care within an episode payment and the implications of such a care model for their participation and cost sharing and the quality and outcomes of their care.

6. Accountable Entity

The accountable entity should be chosen based on its ability to engineer change in the way care is delivered to the woman and its ability to accept risk for an episode of care. In most situations, a clinician (obstetrician, midwife, or family practitioner) will be most able to impact change.

While local situations will vary, the CEP Work Group favors clinicians as the preferred accountable entity. The accountable clinicians are more likely to be involved throughout the entire pregnancy, and they also have less of a stake than a hospital in the type of delivery, as their fees do not vary as much with delivery type. In addition, if the payment is FFS payment with retrospective reconciliation, hospitals may have less of an incentive to decrease practices that provide higher reimbursement because the bulk of the costs for this episode are in the labor and birth facility fees.

Optimally, accountability would be shared among all involved providers, such that incentives are aligned. In circumstances where the provider is a health system, accountability should be shared between the clinicians and the facility (either the hospital or birth center). One initiative brought together the facility and the providers through a birth center as the accountable entity. If the woman needs to go to the hospital for the actual birth, the facility fee is paid outside the bundle. Others use a blended (vaginal and cesarean) case rate with a discount built in to encourage lower cesarean rates, and, in these cases, hold the hospital and clinicians accountable separately for the overall payments.

One challenge will be if a newborn needs intensive care. In such an instance, the newborn specialist will take over as the decision maker, and the episode design would need to recognize this change. While we anticipate that limiting the population to low-risk pregnancies, stop/loss limits and risk adjustment may limit the risk of the assigned accountable entity, it will remain difficult for that clinician who managed the birth to coordinate with or impact the care delivered by the specialist. Another challenge is that, in some cases, the clinician who managed the woman's care before the birth may not be available to manage the

³⁷ Providence Health and Services initiative, article and e-mail conversation. April 2016. See [Appendix D](#) for more detail.

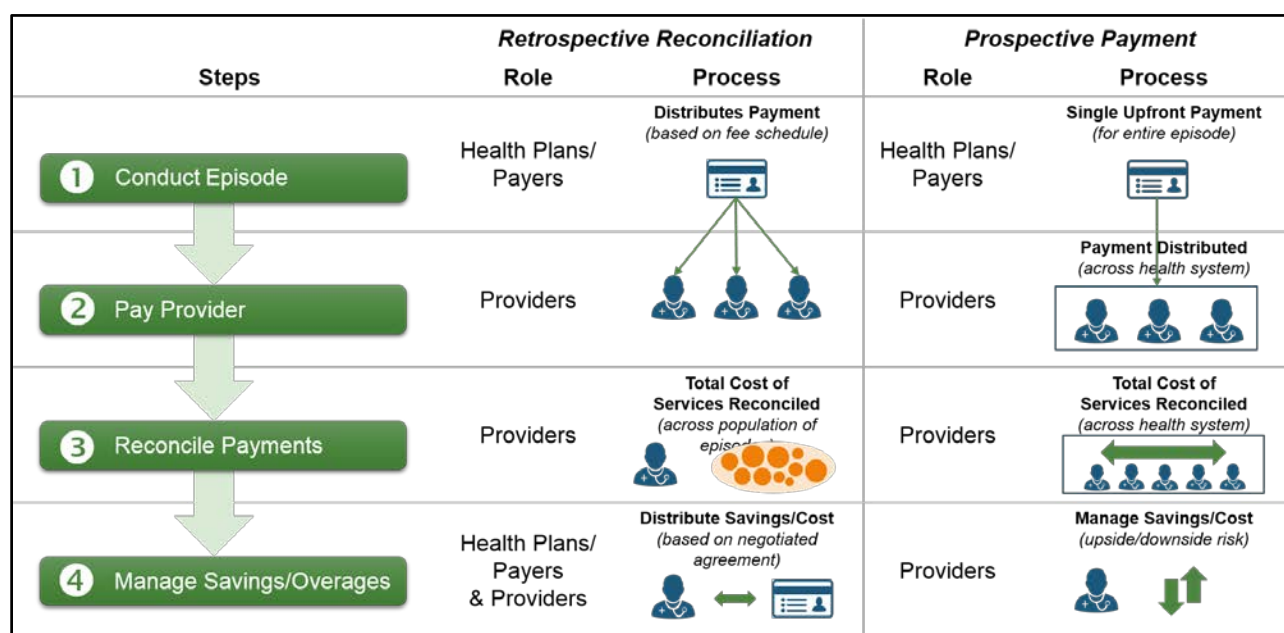
actual labor and birth or the hospital may use a “laborist” to manage the birth. Regardless, the determination of the accountable entity must take into consideration the specific context.

7. Payment Flow

While the unique circumstances of the episode initiative will determine the payment flow, the CEP Work Group encourages further spread of prospective payment. The two primary options are: (1) a prospectively established price that is paid as one payment to the accountable entity or (2) FFS payments, as is currently done, to individual providers within the episode with retrospective reconciliation with the prospectively set target price and a potential for shared savings/losses for the accountable entity.

Episode payment is typically done in one of two ways (See Figure 5).

Figure 5: Retrospective Reconciliation vs. Prospective Payment



Source: Ripple Effect Communications, Inc.

- In **Prospective Payment**, payment is provided for the whole episode, including all services and providers, and paid to the accountable entity to subsequently pay each provider in turn. This payment typically occurs after the episode has occurred but is termed “prospective,” as the price of the episode is set in a prospective budget ahead of time, and the savings or losses are not

shared with the payer—they are simply a function of how well the accountable entity (and the providers with whom it coordinates) manage to the pre-determined price.

- In **Retrospective Reconciliation**, individual providers are each paid on a typical FFS basis and then there is a reconciliation between the target episode price and the actual average episode price after a period of time across all the episodes attributed to a provider. Based on a specific formula, either negotiated or established by the payer, the accountable entity can share in gains and/or losses with the payer. In some instances, gains or losses are also shared among providers in the episode to encourage collaboration and coordination across settings. These types of gain-sharing arrangements need to be considered within the constraints of federal laws that may impact their design (as discussed in more detail in the regulatory section below).

Prospective payment is an option in some circumstances such as when the accountable entity is a health system that already integrates the clinician and facility payment. However, retrospective reconciliation is simpler to administer, as it requires fewer changes from current practice where the prevailing model is an open, non-integrated system. In addition, retrospective reconciliation is more prevalent in current episode initiatives, as it does not require providers to develop the capacity to pay claims; allows for better tracking of the resources used in the episode; and can be built on an existing payment system. As a practical matter, it may be more difficult to implement a single prospective payment when multiple providers involved in delivering the care do not already have mechanisms for administering payment among themselves, such as is the case in integrated systems. Increased use of prospective payment can accelerate development of various supporting mechanisms to aid in this process.

Nevertheless, prospective payment has advantages in that it is a clear break from legacy FFS payment and may encourage greater coordination and innovation in episode payment. For example, in a prospective payment initiative, it may be more feasible to be flexible in delivering otherwise uncovered services, such as childbirth education or patient navigation, which assist providers in achieving the goals of fewer pre-term deliveries and a higher level of vaginal births.

8. Episode Price

The episode price should strike a balance between provider-specific and multi-provider/regional utilization history. The price should: 1) acknowledge achievable efficiencies already gained by previous programs; 2) reflect a level that potential provider participants see as feasible to attain; and 3) include the cost of services that help achieve the goals of episode payment.

Pricing episodes involves significant complexity both to assure the accuracy of estimates and to develop a pricing structure that is fair to providers but encourages innovation. The goal should be to establish a price that encourages competition among providers to achieve the best outcomes for the lowest cost. However, issues such as accounting for variation in the risk of the population, the impact of differing fee schedules and negotiating power, shifts in insurers mid-stream, regional variation in availability of types of providers, and ensuring that payments are sufficient to adequately reimburse for high-value services will all need to be taken into consideration.

The monetary rewards or penalties that an accountable entity may experience are determined in large part by the manner in which the episode price is established. In addition, there are several key aspects that interact in the establishment of the episode price. All payers will expect some return on their investments in this payment design and can choose a variety of mechanisms to generate some level of savings. It is also important to consider including in the target episode price costs for historically underused services, as discussed in Recommendation 4, and additional services, such as a patient navigator/care coordinator, group visits, a doula, or breastfeeding support. Further, whether to build in savings for improvements, such as lower cesarean rates is also a consideration.

Typically, the target episode price is set using some combination of regional and provider-specific claims data for a period of time that includes a sufficient number of cases used in estimates for the coming year. In some cases, the payer can also include an estimate of a decrease in costs based on quality improvements, such as lower cesarean rates or less need for NICU care. The Work Group recommends balancing regional-/multi-provider³⁸ and provider-specific cost data:

- **Regional Costs:** Using region-level claims data allows the payer to take into account the costs of multiple providers within a region, reflecting the fact that one provider's costs may not be representative of the entire region. It also addresses the variability that may exist for a provider with a low volume of cases. However, the concern with using regional claims is that, if as a whole, providers in that region have already achieved a certain level of efficiency, they may be less able to achieve further savings. In essence, these regions (or the providers in them) will argue that an efficient region will be "punished" for its previous work to achieve these efficiencies. On the other hand, if the region, on average, has a higher per bundle cost than other regions (or specific providers within the region), the payer may not achieve as great a level of savings than if the episode price was to be set at a national or provider-specific level.
- **Provider Costs:** Provider-specific costs are the actual costs for the provider's previous patients. For example, if the OB/GYN practice is the accountable entity, the payer would conduct the analysis using the current episode definition and apply it to its pregnant patients over the past two years. The challenge is that although these costs may be accurate for a given clinical practice with a given payer, they may build in already gained efficiencies that make it more difficult to achieve savings or have built-in inefficiencies that limit the savings for the payer.

The data used should be a mix of provider and regional claims experience. This mix will ensure that the established episode price takes into consideration the unique historic experience of the specific provider and that goals are set based on what is feasible in the region. Risk adjustment will also be needed during this process to adjust for the unique characteristics of the population the provider serves, which is discussed further in Recommendation 9.

One challenge in maternity care is that different providers may have different episode costs. Consequently, payers may take various approaches to episode pricing as a function of other factors (e.g., network configuration, benefit incentives, and preferred mechanisms for coming to agreement on pricing). For example, because there is significant variation in cesarean section rates across providers, as well as varying

³⁸ For purposes of this paper, region is not defined. The region will be defined as a combination of the experience of multiple providers. We use the term "regional" to reflect this assumption.

prices, payers will need to determine upon which providers it wants to base the episode. Determining what level of cesarean rate to build into the price will vary based on the payer's network and negotiating power or may impact the decisions the payer makes regarding with which hospitals to contract. It is also the case that services delivered at one hospital may be more or less expensive based on the fees they have negotiated with payers.

Significant variation in costs between hospitals and birth centers can also greatly impact episode cost. Research increasingly reveals that births managed by midwives and births in birth centers are not only less expensive than hospital births but also often lead to the same, if not better, outcomes.³⁹ If a woman chooses to go to a birth center, the cost structure is significantly lower than if she chooses to give birth in a hospital. A strategy might be one whereby the payer builds a network with hospitals that have lower cesarean rates or with incentives for women to more fully utilize and expand access to birth centers in their region. The bundled price could be based on that lower intensity birth model but would only apply in that setting.

9. Type and Level of Risk

The goal should be to utilize both upside and downside risk. Transition periods and risk mitigation strategies should be used to encourage broad provider participation.

The goal when setting an episode price should be to incorporate both upside and downside risk. Absent downside risk (meaning if the actual costs exceed the target episode price), the accountable entity and other involved providers have less incentive to make the necessary care redesign changes to create efficiencies and improve patient care. Further, increases in the cost of care delivery from year to year often negate the benefits of upside sharing of savings because of the reliance on historic data. Prospective payment by definition includes both. Retrospective reconciliation with upfront FFS payment can be designed to only share in savings (upside risk) or to share in savings and in losses (downside risk). In some cases, payers will begin with upside risk to allow for the provider to establish the infrastructure and reengineer care practices to become capable of managing downside risk in the future.

However, taking on downside risk may be difficult for smaller providers, including many OB/GYN and midwife practices that are also the providers best able to support a new model of maternity care. Further, inclusion of downside risk may be a barrier to provider participation when the initiative is voluntary. In addition, it is important to acknowledge that several of the primary goals of the maternity care episode (for example decreasing cesarean and NICU use) will result in lower per patient reimbursement for the hospital. This means that if the clinician practice is the accountable entity and there is no upside or downside risk to the hospital where the majority of births will occur, then the providers—the clinicians and the facilities—

³⁹ Howell et al. "Potential Medicaid cost savings from maternity care based at a freestanding birth center. Medicare and Medicaid research review, 4(3): E1-13. 2014. Accessed at: https://www.cms.gov/mmrr/Downloads/MMRR2014_004_03_a06.pdf and Johantgen et al. "Comparison of labor and delivery care provided by certified nurse-midwives and physicians: A systematic review, 1990 to 2008. Women's Health Issues, 22 (1):e73-e81.

will have very different incentive structures. This source of tension will need to be explicitly addressed, either through some type of shared accountability and the ability to share in the savings or risk for any potential losses.

To address concerns related to the level of risk, payers can utilize strategies to limit that risk or to transition (phase in) to downside risk arrangements over time. This is particularly important if the initiative is voluntary and participation would be limited absent the option for upside risk only. Decisions about type, level, and timing of upside and downside risk illustrate the tensions between payers and providers: more attractive risk arrangements for payers may be less attractive for providers and vice versa. Consequently, in the private market, these factors become part of the ongoing negotiations among network participants and payers.

Mechanisms for Limiting Risk

The level at which those risk limits are set is a critical design element. There are several issues to consider, such as whether the accountable entity will be required to pay the full difference between the total dollars over the established episode price and the actual episode costs back to the payer or whether limits will be established. Limits are especially important considering that an accountable entity is accountable for care provided by other providers. In the case of maternity care, the facility accounts for the largest percentage of overall costs. What the accountable entity (the clinician practice) is paid through FFS payment is limited compared to the liability associated with the entire cost of the episode over the estimates for the entire population of included births.

One risk-mitigation strategy already addressed is limiting high-risk cases through exclusions. Following are additional strategies used by various initiatives to limit risk in an episode payment while still maintaining as broad an episode population as is feasible:

- **Risk-adjustment**: Risk adjusting the episode price, based on the severity within the population in the maternity bundle, is one risk-mitigation strategy. Most initiatives will include a list of included and excluded women and then *also* have a list of factors that would be used to adjust the episode price. There are a variety of approaches to capturing patient characteristics, risk factors, and other parameters that predict maternity care episode expenditures. For example, the Health Care Incentives Improvement Institute's (HCl3) evidence-based case rates create a variety of patient-specific episodes that re-calibrate based on various patient-specific severity factors. The maternity bundles in Tennessee are also adjusted based on a variety of factors, including risk and/or severity factors captured in recent claims data, such as early labor, preeclampsia/eclampsia, and behavioral health conditions. Although, risk-adjustment methods are limited in their predictive accuracy based on claims alone, over time, these factors and their weights can be updated to become more accurate based on empirical experience. At the same time, we recognize that risk adjustment can potentially lead to gaming. For example, a provider may adopt more intensive coding to either increase the reimbursement, or to ensure the patient is not included in episode population. Or a provider may refer more difficult patients to other practices to limit their own panel to only the lowest risk women. This will need to be monitored to ensure that codes are not being overused to obtain higher payments rather than to accurately reflect the condition or risk of the pregnancy.
- **Risk Corridors, Stop-Loss Caps, and Capital Requirements**: Stop-loss caps are already discussed in the context of the included population as one way to limit the risk of very high-cost newborns at an individual patient level. Stop-loss caps can also be used on an aggregate level across the

population. Risk corridors limit the exposure of the accountable entity by establishing an upper limit over which the accountable entity will not have to pay back any amount of dollars the overall costs of the episodes may go over the established episode price. These corridors can also be placed on the upside risk, such that the incentives to limit care are not as great as they would be otherwise. Another risk mitigation strategy is to require the accountable entity to maintain a certain level of capital such that it can cover losses and invest in the necessary infrastructure. While these types of arrangements are often used to limit insurance risk, the same concepts can also be used in this context to limit service risk.

10. Quality Metrics

Prioritize use of metrics that capture the goals of the episode, including outcome metrics, particularly patient-reported outcome and functional status measures;

Use quality scorecards to track performance on quality and inform decisions related to the ability to share in shared savings or losses and determine the level of those savings or losses;

Use quality information and other supports to communicate with and engage patients and other stakeholders.

A wide variety of measures are in use for maternity care that could be used to support the goals and operation of clinical episode payment. At this time, the Work Group does not have specific recommendations for the most effective measures but rather provides the measurement landscape as it pertains to maternity and newborn care quality. The Work Group also notes the importance of the development of patient-reported outcomes and functional status (particularly postpartum) measures.

Selecting measures: Those already implementing maternity bundles use a variety of metrics, but there seem to be two primary categories or strategies. First, there are measures of whether certain processes or services were provided due to concerns that they might be underutilized absent some mechanism for accountability. These include measures such as the number of prenatal visits, screening tests, breastfeeding support, and depression screening. Second are measures of outcomes, which can correlate to changes in care delivery. These include rates of vaginal births/cesareans, pre-term and early elective births, rates of episiotomy, exclusive breastfeeding in the hospital, and patient complications. These two categories together can capture the quality of care delivered in the prenatal, labor and birth, and postpartum time frame.

In selecting the metrics for an episode payment model, it is important to recognize the preference for alignment of measures across programs, use of nationally endorsed measures, and a limited, tight set of measures with a low burden of collection. The Work Group supports these principles whenever they can be met with measures that incentivize priority opportunities for improving maternity care. A measure that meets these criteria without the potential for high impact among childbearing women and newborns would not

be fit for this purpose and is not recommended. The Work Group is not including recommendations for specific metrics at this time. The following are examples of some potential measures.

Example Measures

Core Quality Measures Collaborative. In the spirit of building on existing measurement consensus processes, the Work Group recommends consideration of the applicable measures recently released from the Core Quality Measures Collaborative (CQMC) that could be used in the maternity bundle.⁴⁰ Measures in the CQMC OB/GYN Core Set that are only applicable to gynecological care and not obstetric care are not included here. However, measures in the core set that may not be considered directly related to maternity care but are often delivered either during the prenatal or postpartum period are included. The CQMC divided the set into accountability for the OB/GYN and for the hospital/acute care setting, but they could also be used for quality measurement of an episode of care.

CQMC measures related to the ambulatory OB/GYN setting include:

- Frequency of ongoing prenatal care;
- Cervical cancer screening;
- Chlamydia screening and follow up.

CQMC measures identified for the hospital/acute care settings include:

- Incidence of episiotomy;
- Elective delivery for vaginal or cesarean at ≥ 37 and < 39 weeks of gestation completed (PC-01);
- Cesarean (nulliparous women with a term, singleton baby in a vertex position delivery by cesarean section – PC-02);
- Antenatal steroids under certain conditions (PC-03); and
- Exclusive breast milk (PC-05).

CMS Medicaid and CHIP Child and Adult Core Measures for maternity care. As illustrated in Figure 6, CMS works with state Medicaid agencies to develop a core set of child and adult measures that include some maternity metrics of importance to that community.

Figure 6: Medicaid and CHIP Child and Adult Core Measures for Maternity Care

	Source	Adult Core	Child Core	CQMC
PC-01: Elective delivery	NQF 0469	X		X
PC-03: Antenatal steroids	NQF 0476	X		X
Timeliness of Prenatal Care	NQF 1517	X	X	
PC-02: Cesarean Section	NQF 0471		X	X
Live births less than 2500 grams	NQF 1382		X	
Frequency of ongoing prenatal care	NQF 1391		X	X
Behavioral health risk assessment for pregnant women	AMA-PCPI		X	

⁴⁰ <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/Downloads/OB-GYN-Measures.pdf>

	Source	Adult Core	Child Core	CQMC
Pediatric Central Linked Associated Bloodstream infections: neonatal ICU and pediatric ICU (CLABSI)	NQF 0139		X	
Postpartum contraceptive use among women ages 15-44	Developmental measure (OPA/CDC)	Likely to be included in future sets		

Other potential measures:

- The generic Consumer Assessment of Healthcare Providers and Systems (CAHPS) patient experiences of care facility, clinician, and health plan measures do not map well to antenatal-newborn care and this population. But, there may be specific CAHPS supplemental items that could be of use to measure patient experience.⁴¹
- To measure experience of care within its episode payment model, Community Health Choice developed a survey by selecting items that have primarily been used in previous national *Listening to Mothers* surveys. Topics included the timing and communication experience in prenatal care, planning for the birth, and the mother's experience after the birth including caregiver follow up and her overall satisfaction with the experience.
- Functional status, particularly after birth, to capture such self-reported outcomes as pain, ability to perform activities, and depression is also a domain that needs more focus, as it is a time period that sets the stage for the health of the recovering woman and her newborn. Functional status instruments are not routinely used in the initiatives we have reviewed but have been used for postpartum research and could be developed into survey instruments for this context. Research on these functional status surveys demonstrate their ability to measure postpartum health.
- A measure of patient skills, knowledge and confidence in managing one's health—the Patient Activation Measure ((NQF #2483: *Gains in Patient Activation (PAM) Scores from 6-12 months*) — would demonstrate whether the health system has provided opportunities for increasing activation from early to late pregnancy.
- Several other measures are also of interest, including rates of unexpected newborn complications and rates of vaginal birth after cesarean. Rates of newborn complications, particularly unexpected complications, measure the ultimate outcome of the birth—the baby's health. A measure of the vaginal birth after cesarean (VBAC) rate in low-risk women could address an important opportunity for improvement that would be complementary to the above-mentioned cesarean rate. Further, provision of influenza vaccines prenatally also has been shown to decrease complications. These measures are not the only ones that various initiatives have used, and each initiative may want to customize its quality metrics to some extent, depending on the needs of its population.

⁴¹ <https://cahps.ahrq.gov/Surveys-Guidance/index.html>

Quality Scorecard: Utilizing performance on metrics into scorecards for ensuring high-quality care delivery, informing the decisions of the woman, family, and her providers, and using the scorecard to determine payment levels is a core feature of any episode payment initiative. Further, this information will be critical for engaging patients in decisions related to choice of provider and setting and types of care delivery. Below, we describe in more detail the potential measures that could be used and the manner they would be used in a scorecard and for information purposes for patients and other stakeholders.

Most episode payment initiatives use a quality scorecard with defined thresholds that a provider must meet or exceed to receive either the full reimbursement for an episode or the full shared savings. However, the decision on where those thresholds are set or how they are used should be left to the payer and provider to negotiate. Some initiatives vary the level of shared savings based on performance metrics, while others also use minimum performance levels as a threshold for receiving any portion of the savings. In a prospectively paid initiative, it may be useful to withhold some portion of the prospective payment and base its payment or level of payment on the reporting of and performance on the quality scorecard.

Quality Information to Communicate and Engage with Patients: In addition to using information on quality to determine payment, it is important to other stakeholders to have access to data on quality. As discussed under Patient Engagement, women need quality data on the performance of different facilities and on maternity care providers to inform their choices. Currently, data on maternity care provider performance are not routinely available and thus, development is needed to support more widespread, routine data collection.

Employers, purchasers, and payers also need these data to develop provider networks and to help employees make these important choices. Specifically, employees need to understand the bundle and what their role is in receiving high-quality care.

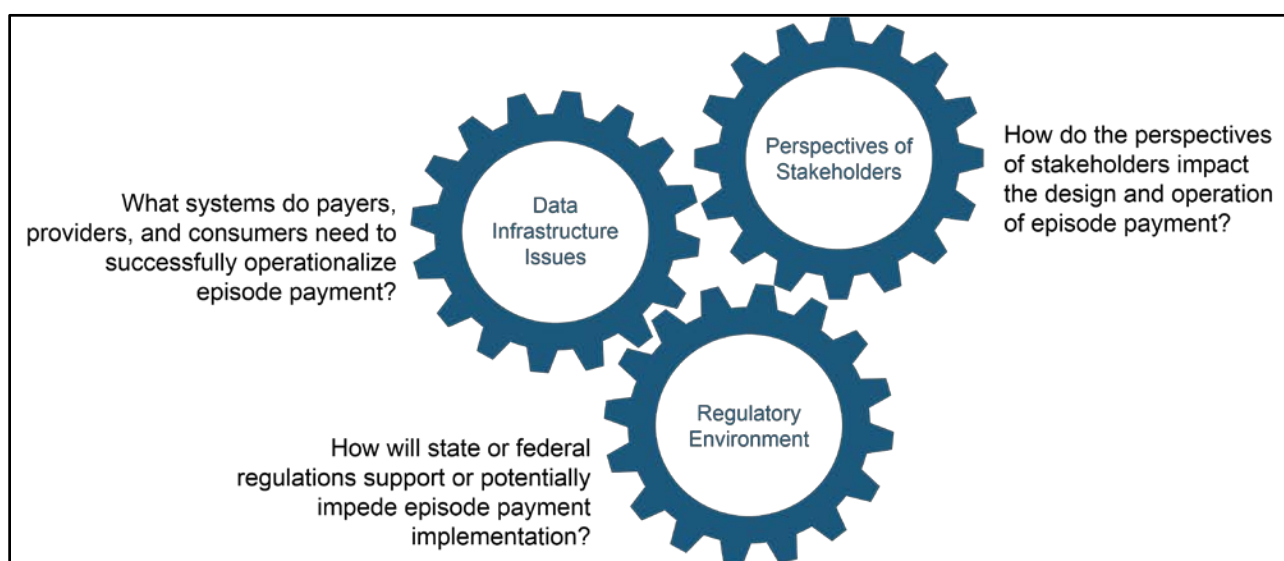
Finally, episode payment design must build in the capacity to collect, analyze, and provide data and to support childbearing women in identifying and interpreting this information. The use of patient navigators (some existing initiatives have used community health workers for this) can be helpful in providing this support, but the information itself must first be available.

Operational Considerations

Although the design of an episode of care is critical to the success of episode-based payments, some aspects of the way episode payment models are conducted affect the likelihood that payers and providers will be able to adopt a given model. These so-called operational considerations include remaining mindful of the perspectives of stakeholders; building and maintaining an appropriate infrastructure for data collection, analysis, and payment; and finally, staying abreast of regulatory changes that could impact the design and operation of episode payments (Figure 6).

In this section, no specific recommendations are included. Instead, the CEP Work Group has developed three key questions that all adopters of clinical episode payment should address when planning and designing episode payment models.

Figure 6: Operational Considerations



Source: Ripple Effect Communications, Inc.

1. Roles and Perspectives of Stakeholders

How do the perspectives of stakeholders impact the design and operation of maternity care bundle payments?

It is important to understand the varied perspectives of those who will be impacted by the clinical episode payment. Each stakeholder, whether payer, provider, consumer, or purchaser has unique expectations, goals, and limitations during the design of an episode payment. Because of the multiplicity of these diverse perspectives, it is important to consider all stakeholder voices in the design and operation of episode payments.

Many stakeholders have multiple and sometimes conflicting viewpoints. For example, commercial health plans and large payers, such as the states and the federal government, may be primarily focused on creating incentives for providers to achieve economies of scale and thus be willing to invest in data infrastructure to support that goal. Meanwhile, providers may be equally interested in the potential of episode payments but have reservations about leadership and accountability when it comes to care coordination across multiple medical settings. Patients bring a wide range of resources and abilities to the conversation; some have access to shared decision-making tools that can positively impact the delivery of value-based care; others may need additional supports to benefit from the potential for quality that episode payments offer.

Well-designed payment models consider all of the perspectives above, as well as support reliable delivery of care that is provided at the right time in the right setting.

Stakeholder Perspectives

Payers: Payers (commercial health plans, Medicare, and Medicaid) seek to create incentives for providers to coordinate care across provider types and thus create efficiencies that decrease costs for a bundle of services. They are often looking for a business case when investing in strong data infrastructure for episode payment implementation, as well as develop new contracting procedures with participating providers.

Providers: Providers (clinicians and facilities) look for indicators of sufficient leadership and accountability for episode payment to be established to ensure that the goals of care redesign and care coordination across settings and clinicians are prioritized over cost savings. They are interested in aligning financial incentives, data requirements, and quality measurement requirements across all payers with which they contract.

Patients and Consumers: Childbearing women and their families contribute to, and benefit from, episode payment models, including participating in design and using high-quality decision tools to help determine appropriate interventions. When they have access to meaningful quality and cost information, they are able to make thoughtful care arrangements that favor the highest value care and providers. Finally, women can provide important feedback on care experiences and outcomes, which helps measure success and drive improvement.

Employers and Purchasers: Large purchasers hold significant leverage with payers and can push for episode payment within their contracting negotiations. In the case of maternity care, this leverage is held by employers and state Medicaid agencies that can press their managed care organizations (MCOs) to use bundled payment for maternity care. Purchasers can advance the goal of aligning incentives between themselves and providers through episode payment. Purchasers may also be interested in integrating tiered networks within a bundled payment model to provide incentives to employees to seek care from high-performing providers and improve value through enhanced benefits.

2. Data Infrastructure Issues

What systems do payers, providers, and consumers need to successfully operationalize episode payment?

One of the biggest challenges to implementing maternity care episode payment involves managing and sharing the vast amounts of data necessary to assess and mitigate risk. Therefore, effective data infrastructure systems must be able to achieve two things:

- Group claims into episodes for analysis and payment; and
- Meet providers' need for critical patient information to be accessible across providers and to patients.

At present, the field lacks scalable infrastructure for widespread, effective, efficient adoption of episode-based payment. Payer systems are set up for FFS payment, or, in some cases, full capitation. Clinical episode payments require pulling claims from multiple data files, applying exclusionary rules, calculating and updating target episode prices, and doing so within the context of multiple provider contracts and enrollee benefit designs. Simply put, some payers are struggling to develop the business case and justify the return on investment for setting up these systems.

However, in order for episode payment to be successful, there needs to be a data infrastructure that supports and facilitates analysis for the purposes of establishing the episode price; bundling claims to determine actual expenditures; and communicating clinical, patient-generated, and care coordination data across providers. In the case of maternity care, this is critical, as the clinician who manages a woman's prenatal care may not be the one who manages the birth or treats the patient postpartum. In many cases, a woman will be managed by a practice, but the actual clinicians she sees may change based on availability. Further, some hospitals are using "laborists," who are employed by the hospital. This data infrastructure must support care across these clinicians and their ability to understand patient preferences and expectations, and for women to communicate their preferences and goals.

In addition, regardless of whether clinical episode payment is prospective or utilizes retrospective reconciliation with upfront FFS payment, it is critical to build and implement software and systems to group these claims to estimate and establish the episode price, calculate actual costs, and make the correct payment adjustments. Currently, the data analysis and systems being used are too manual, and the expense of either replacing or building this type of process on top of legacy systems will limit broader implementation of episode payment. Depending on the volume of payment that is done in this manner and the monetary impact, revising legacy systems to be able to handle this level of complexity may not be a high priority for a payer. Consequently, payers are faced with a "buy or build scenario" whereby they can either buy the complex infrastructure, albeit with little knowledge about the quality of the product, or try to build it themselves, with the understanding that it will be a long-term investment in this type of payment reform. Although the needs are complex, some companies have developed the capacity to assist payers and providers in these functions. Further movement toward the use of clinical episode payments will create an even greater market for such services.

Moreover, these systems must be able to support data sharing with providers and payers in a transparent manner to ensure that all involved understand where the opportunities for efficiencies and improvements in care occur across the episode, including potential individual patient management. However, it is often difficult to obtain useful data in a sufficiently timely manner to allow for the most effective care management of the patient. Another issue is the capacity for provider entities, and in some cases, payers, to analyze the data. Even if the underlying claims are available and the logic for running the data was shared, provider entities often find it challenging to run the necessary reports.

Finally, for the episode payment model to be as effective as possible, women and families must have access to tools and information that foster their engagement in their care throughout the episode and help drive high-value care, including the attainment of achievable outcomes. To engage women and families, there needs to be infrastructure that provides access to health records and to comparative quality information about prospective care options, as well as tools for shared decision making (i.e., decision aids); information about the payment model and cost transparency; communication with care providers, including those supporting care coordination and navigation; developing and maintaining shared care plans; and convenient completion of self-reported outcomes and experiences of care measures.

The Work Group recommends the following two models for operationalizing the data infrastructure needed to implement episode payment:

- **A Service or Utility Model:** In this model, a group of payers pays a third party to develop a core set of logic that could be used to group claims; provide feedback and benchmarking to providers; and support data sharing for patient management instead of each payer having to develop the capacity individually. Several examples were provided by Work Group members, including vendors that are performing this capacity; large payers, such as Medicaid in one state; and regional initiatives whereby purchasers or payers support a third party to perform these tasks in a uniform manner. State-sponsored all-payer claims databases (APCDs) are one example of this. It would be useful to find neutral sources of such data and analysis to allow for multi-payer analysis. This ensures that providers involved in this form of payment are not subject to multiple definitions of episodes and benchmarking formulas. Another concept to ensure high-quality products is to create a “certification” process for this type of function.
- **Defining a Core Set of Logic:** A core set of logic will assist the health care industry in developing the capacity for grouping claims into bundles by standardizing some of the logic and allowing each payer to customize some of the more specific rules. This could be applied individually by payers or within the context of a third party described above.

3. Regulatory Environment

How can the current and evolving federal and state legal landscape in the health care industry affect episode payment implementation?

Any episode payment initiative needs to remain cognizant of the statutory and regulatory framework that may impact the manner in which it creates relationships with providers and the manner in which the incentive and risk structures are established. For maternity care, there are four potential regulatory areas that may impact the maternity care episode payment strategy:

First, states define the types of providers, including practitioners, and settings of care that support birth. They define licensure and certification of providers and the scope of practice under which the providers operate. At a minimum, these regulations will impact decisions related to participating providers, services covered, and episode price determination.

Second, the Medicaid context is important to consider, given a large number of births are paid for by Medicaid. A high percentage of those are paid through MCOs; therefore, it will be important to consider the manner in which a state contracts with MCOs to determine whether states could encourage such payment arrangements or whether the Medicaid MCOs may be interested in paying for maternity care in that manner. There are examples whereby a state encourages these types of payment arrangements through their contracted MCOs, whereas other states had MCOs build bundled payments for maternity care into their contracts with providers without state encouragement.

Third, many states have created, or are considering creating, regulations designed to ensure that providers do not take on a level of risk that they might not be able to support without harming the patient or other consumers (regardless of whether it is characterized as insurance or service risk).

Fourth, several federal regulations designed to prevent inappropriate incentives for providers and to protect beneficiaries may affect providers' incentive structure with other providers and consumers and patients. Three federal laws of significant interest to health care systems are the physician self-referral law, anti-kickback statute, and civil monetary penalty (CMP) laws. It will be important for providers to discuss with legal counsel the potential implications of these and other laws on proposed arrangements for clinical episode payment. HHS issued limited waivers of these laws for specific types of models including the Bundled Payment for Care Improvement (BPCI) initiative and the Comprehensive Joint Replacement regulation. More discussion can be found on the CMS Fraud and Abuse Waivers webpage.⁴²

Two other legal issues also impact the implementation of clinical episode payment—medical liability and the Emergency Medical Treatment and Active Labor (EMTALA) requirements. Regarding medical liability, it may be the case that clinicians and facilities need to balance concerns related to liability with their preference for delivering a certain type of care. Payers need to be aware of and respectful toward these concerns. EMTALA is important, as some pregnant women will be seen for the first time in the emergency room and will be given whatever care the hospital and clinician on call determine feasible without regard or awareness of the clinical episode payment context. This may be particularly important if the bundled payment is developed for the costs of a birth center birth.

Moving Forward: Priorities for Supporting Maternity Care Episode Payment

The Work Group's recommendations reflect actions that are feasible for stakeholders to implement in the current environment; in fact, many are based on existing initiatives. At the same time, there are a number of areas in which evolution is necessary in order to fully optimize the impact that APMs such as episode

⁴² <https://www.cms.gov/Medicare/Fraud-and-Abuse/PhysicianSelfReferral/Fraud-and-Abuse-Waivers.html>

payment may have on patients and the health care system. While this list is not exhaustive, the following are certain high-priority issues that are particularly relevant to episode payment.

- **Transparency of Cost Data:** All stakeholders need transparent, detailed data on the negotiated prices for maternity care that payers establish with providers. Having these data available via a trusted source will allow purchasers, payers, patients, and consumers to make informed decisions. In addition, information on regional cost variation and on how variation relates to different circumstances is particularly valuable.
- **Provider and System Readiness:** Individual providers may have interest in participating in an episode payment initiative; however, in order for episode payment to be effective, it requires coordination among a collaborative care team that includes both providers and payers. Most markets lack the systems and infrastructure to support this type of collaboration and are still hallmarked by siloed care environments that do not share common data or payment systems. Addressing the readiness of both providers and the systems in which they deliver care will be critical to easing the path toward greater episode payment implementation.
- **Quality Measurement and Patient Engagement:** While some measures of maternity outcomes and patient engagement tools are available today, they are not well used nor aligned across multi-payers. In many cases, development of additional tools would contribute to episode payment models. Consequently, continuing the conversation on the development of strategies to encourage further use and development will be critical in determining the effectiveness of maternity care episode payment models.
- **High-value, Underused Services:** As noted in the body of this White Paper, a wide variety of high-value services, both those currently covered and others non-covered, are underused today. Research suggests their use can increase vaginal birth rates, lower pre-term birth rates, and provide necessary support for childbearing women and newborns throughout the episode. There are a number of episode payment design elements that point to ensuring that payment models incentivize the use of such services.

Conclusion

The recommendations and implementation options described in the body of this White Paper are directed toward all stakeholders. Certain recommendations will resonate more with those who are directly involved in implementation, such as large payers and providers. However, it is the intention of the CEP Work Group that consumers, patients and their families, caregivers, purchasers, and states will also view these recommendations and options as starting points for critical conversations about how to align adoption of episode payment models.

The Work Group recognizes that there are many additional elements that can be helpful in deploying episode-based payment programs. These include technical assistance, detailed specification of care delivery models, and aligned benefit designs. While important, these elements are outside the scope of the CEP Work Group based on its charge from the GC and the designated focus of the LAN.

The Work Group understands that implementation of the full set of maternity care episode recommendations may not be feasible in all markets and/or for all stakeholders. The design element

recommendations are designed to be implemented as a whole, or in phases, depending on market conduciveness, organizational readiness, and the characteristics of particular initiatives.

Appendix A: About the CEP Work Group

History and Rationale

In November 2015, the Guiding Committee (GC) launched the Clinical Episode Payment (CEP) Work Group ([Appendix B](#)) to create “practical, actionable, operationally meaningful” recommendations that can facilitate the adoption of clinical episode-based payment models. The GC noted a specific interest in models that fall within Categories 3 and 4 of its [Alternative Payment Model Framework, described below](#). In addition, the GC encouraged the CEP Work Group to create recommendations that build on existing experience and successes, to identify and address critical barriers to adoption to accelerate progress, and to address key technical components of selected payment models. These technical components include risk adjustment, attribution, performance measures, and how to efficiently share data without compromising patient privacy. The GC also emphasized the importance of staying mindful of the perspectives of patients and consumers while seeking out these best practices.

Work Group Charge

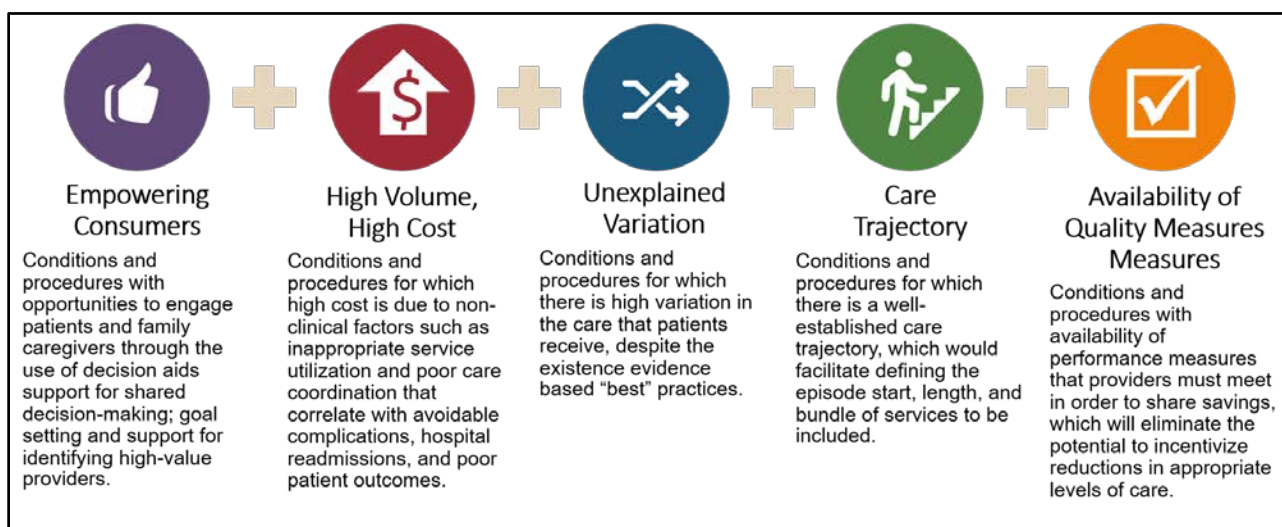
Since the first episode payments were introduced more than 30 years ago, public and private purchasers (and a range of delivery systems) have explored a variety of episode payment models with varying degrees of success. This is because, as research has shown, while episode payments offer great potential as an alternative to FFS care, designing and implementing such models comes with financial, technological, cultural, logistical, and informational obstacles. These challenges, along with the sheer diversity of designs and approaches currently in use, have made it difficult to promote alignment and acceleration of payment models across the U.S. health care system. Thus, the CEP Work Group’s charge was as follows:

- Provide a directional roadmap for providers, health plans, patients and consumers, purchasers, and states, based on existing efforts and innovative thinking; and
- Promote alignment (within the commercial sector, as well as across the public and commercial sectors) in both design and operational approach; and
- Find a balance between alignment/consistency and flexibility/innovation; and
- Strike a balance between short-term realism and long-term aspiration.

Priority Areas

In convening the CEP Work Group, the GC stipulated that the Work Group should take certain considerations into account as they explored opportunities to advance the alignment and adoption of episode-based APMs. In developing its recommendations, the GC noted that the CEP Work Group should develop a list of priority areas that together reflect a broad spectrum of potential episode types, represent a diverse range of patients, and have the potential to be widely adoptable and useful across the entire U.S. health system. The Work Group used the criteria in Figure A1 to prioritize the diseases and conditions on which their work would focus.

Figure A1: Criteria for Prioritization



Source: Ripple Effect Communications, Inc.

Based on these considerations, the CEP Work Group agreed to focus on the following three priority areas:

- Elective joint replacement
- Cardiac care
- Maternity care

The CEP Work Group chose these priority areas in the belief that they have the greatest potential to create greater consensus and alignment of payment methods across payers and, thus, over time, to accelerate the adoption of clinical episode-based payments.

Key Principles

Before the CEP Work Group set out to develop its recommendations, the members developed a set of key principles to guide their assessment of models currently in use. These principles align with the broader set of principles described in the LAN APM Framework White Paper.⁴³ They are focused, however, specifically on the design of episode payments. In addition, in their research and discussion, the CEP Work Group chose to emphasize clinical episode payments that also achieve one or more of the following:

- Incentivize **person-centered care**. One goal of alternative payment models (and a principle of the LAN APM Framework⁴⁴) is to deliver⁴⁵ person-centered care, defined as high-quality care that is both evidence based and delivered in an efficient manner and where patients' and caregivers' individual preferences, needs, and values are paramount.

⁴³ Reference to [Alternative Payment Model \(APM\) Framework White Paper](#)

⁴⁴ Principle 1 of the APM Framework

⁴⁵ Definition of Patient-Centered Care (APM Framework White Paper, page 4)

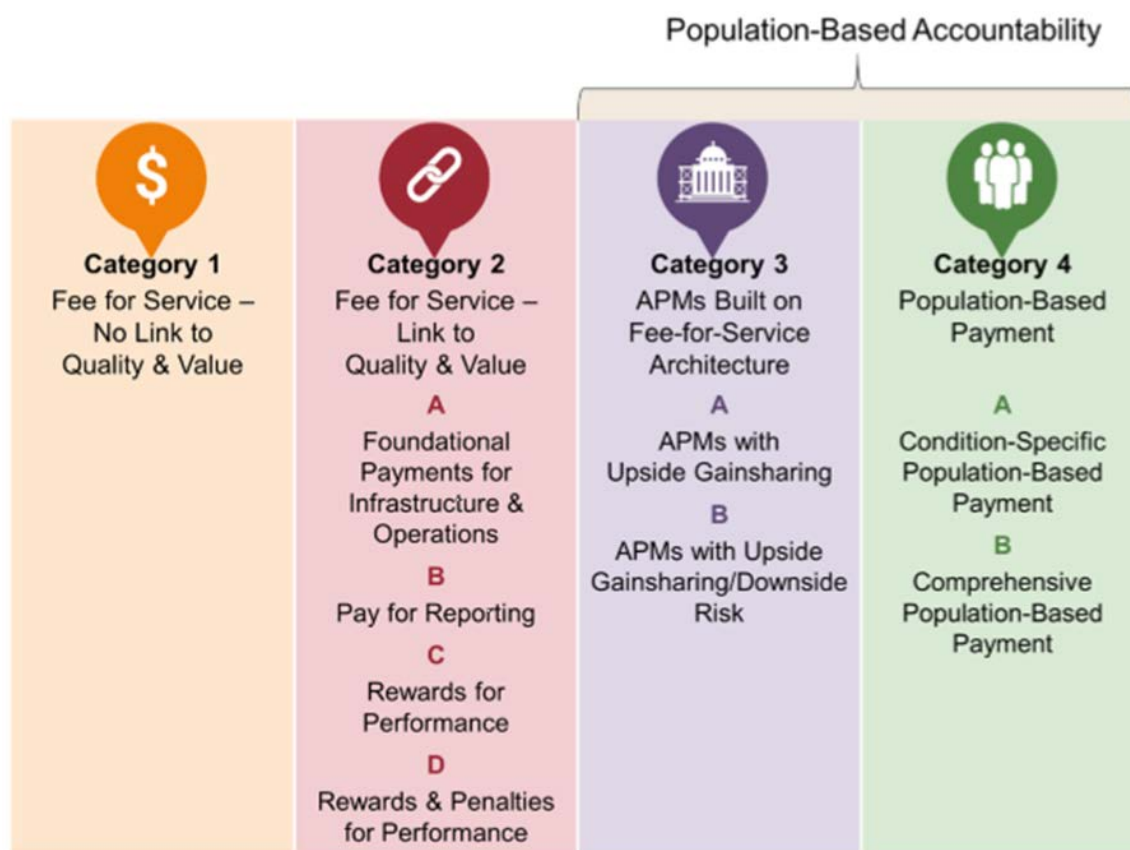
- Improve patient outcomes through **effective care coordination**. Episode payment encourages providers to better coordinate care across and within care settings and focus more strongly on care quality to achieve better care, smarter spending, and healthier people. Effective care coordination is particularly important for those with chronic conditions and for other high-risk/high-need patients.
- **Reward high-value care** by incentivizing providers and patients, together with their family caregivers, to discuss the appropriateness of procedures. Therefore, episodes and procedures that do not align with patient preferences can be avoided.
- **Reduce unnecessary costs** to the patient and to the health care system. Episode payment offers incentives to examine all the cost drivers across the episode, including fragmentation, duplication, site of service, volume of services, and input costs/prices. Episode payment can create (for payers and consumers) an “apples-to-apples” comparison for assessing quality and cost. This well-defined “product” allows buyers to compare price and quality.

APM Framework Alignment

In January 2016, the Alternative Payment Model Framework Progress and Tracking Work Group released the [Alternative Payment Model \(APM\) Framework White Paper](#), which defines payment model categories and establishes a common framework and a set of conventions for measuring progress in the adoption of APMs.

Figure A2 illustrates the four categories within the APM Framework. Categories 3 and 4 represent population-based accountable APMs. Clinical episode-based payments fall into either Categories 3 or 4, depending on whether they are designed around procedures, such as a hip replacement, or health conditions, such as pregnancy. This White Paper discusses maternity care episode payment, which is a condition-based episode and, thus, is in line with Category 4.

Figure A2: APM Framework (At-a-Glance)



* Note: The framework situates existing and potential APMs into a series of categories.

Source: Ripple Effect Communications, Inc.

Appendix B: Roster

Clinical Episode Payment (CEP) Work Group Members and Staff

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Appendix C: Acknowledgements

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Appendix D: Summary Review of Selected Maternity Care Initiatives – DRAFT⁴⁶

Results are based on self-reported performance.

	Episode Definition	Episode Timing	Population	Service Inclusion/Exclusion	Accountable Entity	Payment Flow	Episode Price	Level and Type of Risk	Quality Metrics	Patient Engagement	Results
Tennessee Health Care Improvement Innovation Initiative	Low-risk pregnancy with live birth	40 weeks prior to delivery through 60 days after delivery or discharge	Mother only Exclusions: Various comorbidities, maternal death, any indication of leaving AMA, triggering events occurring at FQHC/RHC, and use of TPL.	Prenatal: Related medical claims, related medication, or emergency department claims Delivery: All claims Postpartum – Days 1-30: Non-Inpatient Admissions (readmissions), ED claims not resulting in readmission, other pharmacy/professional/facility claims with an inclusion code Postpartum – Days 31-60: All related medical claims and medications	Physician or midwife who delivers the baby <i>Global Billing Code:</i> Tax ID of the billing provider or group <i>No Global Billing Code:</i> Tax ID of the billing provider or group responsible for delivery	FFS with retrospective reconciliation	End of an episode: Costs are totaled and adjusted using a risk weight based on: woman's age, health conditions, and complications during pregnancy. PAP's end of year average adjusted cost is compared to "Commendable" and "Acceptable" levels established by each payer. Pregnancies with a cost greater than the 99.73 rd percentile after adjustment and certain comorbidity pregnancies will be excluded from PAP's annual average adjusted cost.	Upside/ downside risk	Gain sharing: Screening rates for HIV, group B streptococcus (GBS), cesarean section Informational only (not for gain sharing): Screening rates for gestational diabetes, asymptomatic bacteriuria, hepatitis B specific antigen, Tdap vaccination	NA	Available late 2016
Arkansas Health Care Payment Improvement Initiative	Low-risk pregnancy with live birth	Roughly 40 weeks before delivery through 60 days postpartum	Mother only Exclusions: Various comorbidities and high-risk pregnancy	Inclusions: All prenatal care, care related to labor and delivery, and postpartum maternal care, including labs, imaging, specialist consultations, and inpatient care Exclusions: Patient costs that are incurred during the episode time period that are not related to the maternity episode	Physician or nurse midwife (provider or provider group) who delivers the baby and performs the majority of prenatal care (identified by claims with the appropriate global OB bundle procedure, prenatal care bundle procedure, or office visit procedure)	FFS with retrospective reconciliation	FFS payments during episode, retrospective adjustment based upon patient comorbidities Provider average episode cost is compared to Commendable, Acceptable, Unacceptable thresholds that are established by each payer annually. When providers have 5+ episodes, an average episode cost in the Commendable range, and have met the quality metrics, they are eligible to share in savings. For providers that have 5+ episodes and an average cost in the Unacceptable range, they share in the risk.	Upside/ downside risk	Performance metrics are linked to payment, but reporting metrics are not. Cost savings require a provider to meet quality thresholds on all performance metrics and report data for reporting metrics. Quality Metrics (80% threshold): prenatal screenings and appropriate utilization of diagnostic tests Performance quality metrics linked to shared savings: HIV, GBS, and chlamydia screenings. Reporting only metrics: gestational diabetes screening, UTI or asymptomatic bacteriuria screening, hepatitis B-specific antigen screening, and cesarean section utilization rate.	NA	Medicaid cesarean section rate reduced from 38.6% (baseline) to 33.5% (2014), with an estimated 2-4% direct savings to date. Preliminary results show an increase in reported screenings. From 2012 to 2014, chlamydia screening increased from 65% to 90% and group B strep screening increased from 90% to 93%.

⁴⁶ MITRE Corporation analysis; results reported are based on studies of varying statistical rigor and extrapolated from several publications.

	Episode Definition	Episode Timing	Population	Service Inclusion/Exclusion	Accountable Entity	Payment Flow	Episode Price	Level and Type of Risk	Quality Metrics	Patient Engagement	Results
Community Health Choice	Low-risk and high-risk deliveries with severity markers	Mother: 270 days prior to delivery through 60 days post discharge	Mother and newborn	All prenatal care and services related to delivery.	OB/GYNs from two multispecialty group providers who are participating in the pilot	FFS with retrospective reconciliation	Use historical average costs and adjust based on risk factors (e.g., age, comorbidities, clinical severity markers).	Upside only in Year 1 with move to upside/downside in Year 2	Normal birth weight: Prenatal care and screenings; Delivery care (cesarean section rate, elective deliveries); Postpartum care with depression screening; Baby care (breastfeeding, hepatitis B vaccine)	Active with community groups that promote prenatal care	Results not yet available
		Newborn: Initial delivery stay and all services/costs up to 30 days post discharge	Exclusions: First phase: Currently Level 4 NICU stay Second phase: Planning on using individual stop/loss limits	Blended cesarean section and vaginal delivery rate			Year 1: Use quality scorecard for monitoring and setting benchmarks.		Low birth weight: Similar to above plus NICU infection rates		
			Blended nursery levels 1, 2, and 3	Year 2: Set quality thresholds for shared savings.			Patient-reported outcome measures: Hardcopy survey is mailed, and results are accepted in hardcopy or online.				
			Exclusions: Level 4 NICU stays	Year 3 and beyond: Move away from current contractual payments to flat dollar or other budget payments with reconciliation.			Additional measures for monitoring purposes				
Providence Health Integrated Network "The Pregnancy Care Package" Case study still under review by Providence Health	Low-risk pregnancy	Positive pregnancy confirmation until 6 weeks after delivery	Mother and newborn	All prenatal and postpartum care, including check-ups, prenatal tests, education, psychosocial support, labor, delivery, hospital stay, and postpartum care. Doulas and patient navigators are also included services.	Nurse midwife	Prospective	Fixed, negotiated fee	Upside/downside risk	NA	NA	First implementation at nurse midwife-based clinic: 10% reduction in overall pregnancy costs and a cesarean section rate of 19%

	Episode Definition	Episode Timing	Population	Service Inclusion/Exclusion	Accountable Entity	Payment Flow	Episode Price	Level and Type of Risk	Quality Metrics	Patient Engagement	Results
Geisinger Health System (GHS) Perinatal ProvenCare Initiative	Low-risk pregnancy Exclusions: Late referrals, high-risk patients, members without continuous enrollment during the entire episode or other primary coverage	Prenatal: Identification of pregnancy in the first or second trimester Postpartum: Concludes with postpartum visit 21-56 days post delivery	Mother only Exclusions: Neonatal care	All prenatal, labor and delivery, and postpartum care; at least 12 continuous weeks of prenatal care and delivery must be performed by a GHS provider. Global payment includes technical and professional, physician, consultations, and supporting clinicians Prenatal: Professional and outpatient services only Postpartum: Inpatient readmissions, outpatient, and professional Exclusions: Care provided by non-GHS providers	GHS provider	Prospective	Fixed rate for episode	Upside/ downside risk	103 evidence-based elements of care are incorporated, measured, and tracked for compliance.	"Patient Compact" was developed so that patients could become partners in their own care.	Preliminary results: Improved in nearly all 103 measures identified; reduced NICU admissions by 25%; 23% reduction in NICU use; 26% reduction in cesarean sections; 68% reduction in birth trauma. Since 2011, Geisinger has not performed an early induction or elective cesarean before 41 weeks unless medically indicated. No cost savings have been made publicly available to date.
Pacific Business Group on Health (PBGH) PBGH Blended Case Rate	High- and low-risk pregnancy	Hospital labor and delivery only	Mother only	Blended case rate for all facility and professional fees rendered during labor and delivery for both vaginal and cesarean section births	Hospital accountable for the facility blended rate. Medical group practice accountable for the professional blended rate.	Prospective	Rate for cesarean section and vaginal birth the same and negotiated between payer and hospital, and payer and physician group, respectively.	Upside and downside risk with no prospective risk adjustment	Rate of cesarean sections performed among primary, low-risk (NTSV) births Incidence of unexpected newborn complications is also used as a balancing measure.	NA	Three hospitals in pilot demonstrated a 20% decrease in cesarean section rates, which was sustained. Also, no changes in incidence of unexpected newborn complications.
American Association of Birth Centers (AABC) Bundled Payment Proposal	Low-risk pregnancy	Enrollment in freestanding birth center through and including 6-week postpartum care visit	Mother and newborn care through first 28 days of life	Prenatal care, nutrition, patient navigation, care coordination, discussion of options for birth, breastfeeding and childbirth preparation instruction, health education and support to avoid preventable complications, labor and birth in the birth center, newborn care and home visits Large birth center includes lab services, ultrasound, obstetrician, and perinatal visits Includes facility fee and professional fee at time of birth in the birth center.	Freestanding birth center (FSBC)	FFS with retrospective reconciliation	Small birth centers would receive incentive payments for each participant provided with enhanced services. Large birth centers would receive a bundled rate for professional and facility services with shared savings for overall cost savings.	Small birth centers: upside Large birth centers: upside/ downside	Number of prenatal visits, cesarean birth rate, elective delivery before 39 weeks, preterm birth and low birth weight rates, breastfeeding initiation and continuation, NICU admissions, perineal integrity, and completion of the 6-week postpartum visit	Prenatal education, enhanced prenatal care, doulas, peer counselors, and continuous support during labor and birth. Client experience surveys	Birth centers typically achieve average cesarean rates of 6% for women admitted to birth center in labor, 1.59% episiotomy rate, and 0.11% elective delivery rate before 39 weeks of pregnancy.

	Episode Definition	Episode Timing	Population	Service Inclusion/Exclusion	Accountable Entity	Payment Flow	Episode Price	Level and Type of Risk	Quality Metrics	Patient Engagement	Results
Baby+Company	Low-risk pregnancy	Initial OB visit at birth center through 6 weeks postpartum	Mother and newborn	<p>Prenatal care, birthing plan, classes, postpartum care, newborn exam, metabolic screen, and medications</p> <p>Includes facility and professional fees</p> <p>Exclusions: labs, ultrasounds</p>	FSBC if low-risk pregnancy, uncomplicated delivery	FFS with retrospective reconciliation	<p>Working with payers to set pricing based on the outcomes (healthy mother and baby)</p> <p>Separate bundle rates if transferred before/during labor</p>	Incremental percentage at end of year if hit certain quality markers	NTSV cesarean, early elective delivery, exclusive breastfeeding during birth center stay, cesarean rate among women who entered labor in the birth center	<p>Measured by logging in to a patient’s EHR’s mirrored interface that allows for patients to record their experiences.</p> <p>Electronic experience surveys at 32 weeks and postpartum</p>	<p>More than 90% engagement</p> <p>NTSV rate: 11.8%</p> <p>Early elective rate: 0%</p> <p>Exclusive breastfeeding rate: 100%</p> <p>Cesarean rate for BC labors: 5.3%</p>
The Minnesota Birth Center's BirthBundle™	Low-risk pregnancy	270 days prior to delivery and 56 days postpartum	Mother and newborn	<p>Prenatal care, labs within normal OB panel, ultrasound, and perinatal consults within reasonable scope, and birth</p> <p>Facility fee (birth center only, hospital facility fee outside of bundle) and professional fee at time of birth</p> <p>Baby assessment and facility fees at delivery</p> <p>24-hour postpartum assessment</p> <p>1-2 week and 6 week postpartum visit</p>	Birth center	Model is prospectively determined budget but payment is currently retrospective	<p>Use birth center historical data.</p> <p>Professional fees only are included if delivered in a hospital.</p> <p>Facility fees are FFS outside of bundle.</p> <p>If all care is within the birth center, facility and professional fees are included in the bundle.</p>	Upside and downside within the bundle	Patient-reported outcome measures	Prenatal/postpartum care surveys	Results not yet available, but significantly lower level of cesarean sections than the national average

	Episode Definition	Episode Timing	Population	Service Inclusion/Exclusion	Accountable Entity	Payment Flow	Episode Price	Level and Type of Risk	Quality Metrics	Patient Engagement	Results
<div>Ohio Episode-Based Payment Model</div> <div>Case study still under review by Ohio</div>	Low-risk pregnancy with live birth	280 days prior to delivery until 60 days post delivery	Mother only Exclusions: specific clinical and business exclusions	Relevant prenatal care and complications, delivery care, and relevant care and complications through the postpartum period, including readmissions relevant to the episode. Exclusions: prenatal medications	Physician/group delivering the baby	FFS payment with retrospective reconciliation	Risk adjusted reimbursement per episode for each accountable provider Adjust average episode cost down based on presence of 70+ clinical risk factors	Upside/Downside Share savings if average costs below Commendable levels and quality targets are met Pay negative incentive if average costs are above Acceptable level No impact if average costs are between Commendable and Acceptable levels Incentive payment based on outcomes after close of 12 month performance period Removal of any individual episodes that are more than three standard deviations above the risk-adjusted mean	Linked to Incentive Payments: HIV Screening, GBS Screening, cesarean Rate, Postpartum Visit Rate For Reporting Only: % of episodes with gestational diabetes screening, % of episodes with prenatal hepatitis B screening, % of episodes with chlamydia screening, ultrasound rate Year 1: quality metric threshold will at a level where 75% of providers pass all metrics tied to incentive payments After Year 1: quality metric threshold will increase to top quartile performance over the next 5 years	NA	NA

Appendix E: Implementation Resources

Examples of Maternity Episode Payment Initiatives:

State of Tennessee Health Care Initiative Episodes of Care Description and Examples	The State of Tennessee Health Care Initiative website offers descriptions of different episodes of care and examples of quality and cost reporting from providers.
Arkansas Health Care Improvement Initiative Payment Reform Report	The Arkansas Health Care Improvement Initiative report describes the state's payment reforms, including its episode payment work. Description of the episode design and findings from its initiative are included. The roles of Medicaid and several insurers, including Blue Cross Blue Shield of Arkansas, are described in detail.
Community Health Choice Maternity and Newborn Care Bundled Payment Pilot	Community Health Choice's pilot includes both the mother and newborn in the episode of care and uses a blended cesarean and vaginal delivery payment rate.
Providence Health's Pregnancy Care Package	Providence Health's Pregnancy Care Package uses a bundled payment model that includes the use of certified nurse midwives, patient navigators, and doulas on the care team.
Geisinger's Perinatal ProvenCare Initiative	Geisinger uses the ProvenCare model to provide a global payment for the perinatal episode and allows providers to share in savings.
Pacific Business Group on Health (PBGH) Maternity Payment and Care Redesign Pilot Case Study	The Pacific Business Group on Health designed a pilot program to reduce low risk, first time cesarean deliveries and implemented this program across three Southern California Hospitals.
Baby+Company	Baby+Company is a birth center model that provides enhanced prenatal care and education to reduce the rate of cesarean deliveries, and shows significant savings in cost for both vaginal and cesarean deliveries. The Baby+Company website offers additional details about the birth center.
The Minnesota Birth Center's BirthBundle™	The Minnesota Birth Center's BirthBundle™ provides cost savings by offering a single, global fee for maternity care. It uses certified nurse midwives who collaborate with OB physicians to provide coordinated clinical care throughout the pregnancy, delivery, and postpartum period.

Ohio Health Transformation <u>Episode-Based Payment Model</u>	<p>The Ohio Governor’s Office of Health Transformation website offers information on its implementation of episode-based payment models.</p>
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General Resources:

Integrated Healthcare Association’s <u>Description of Maternity and Women’s Health Episode Definitions</u>	<p>The Integrated Healthcare Association’s description of the Maternity and Women’s Health Episodes definitions offers a prototype used by several payers and providers, particularly in California.</p>
Health Care Incentives Improvement Institute’s (HCI³) <u>Evidence-Based Case Rates and Definitions</u>	<p>The Health Care Incentives Improvement Institute (HCI³) website provides open source definitions of various evidence-based case rates. Includes specific codes that can be used for defining the episode starting point and what services are included.</p>
Catalyst for Payment Reform (CPR) <u>Maternity Care Payment Action Brief</u>	<p>The Catalyst for Payment Reform issue brief on maternity care payment discusses challenges with maternity payment reform, offers advice to purchasers, and defines blended payment for delivery.</p>
<u>Center for Healthcare Quality & Payment Reform (CHQPR)</u>	<p>The CHQPR website offers various publications and reports detailing suggestions for payment reform.</p>
<u>Overdue: Medicaid and Private Insurance Coverage of Doula Care to Strengthen Maternal and Infant Health</u>	<p>The National Partnership for Women & Families, Childbirth Connection, and Choices in Childbirth worked together on this issue brief, which provides additional details on how doula services can be incorporated into a perinatal episode of care to help reduce the cost of an episode.</p>
<u>American Association of</u>	<p>The AABC website provides comprehensive information on the role of</p>

<u>Birth Centers (AABC)</u>	birth centers in maternity care, including a proposal related to using alternative payment models for maternity care.
National Association of Certified Professional Midwives (NACPM)	The NACPM offers a proposal to address the definition of the eligible population, three payment models, quality metrics, and data collection for maternity bundles.
<u>Bundled Payment Proposal</u>	

Patient Engagement:

Childbirth Connection <u>Listening to Mothers III: Pregnancy and Birth</u>	Results from a national survey of women's childbearing experiences.
Childbirth Connection <u>Listening to Mothers III: New Mothers Speak Out</u>	Results from a national survey of women's childbearing experiences.
<u>Support for Healthy Breastfeeding Mothers and Healthy Term Babies</u>	The Cochrane Library provides a discussion on the effectiveness of encouraging early and ongoing support for breastfeeding.
<u>US OpenNotes Initiative</u>	This initiative allows patients to access their providers' clinical notes online.
<u>Maternity Neighborhood</u>	Tools available online to help connect women with their providers during their perinatal episode.
Strong Start Initiative <u>Year 1 Annual Report</u> <u>Year 2 Annual Report</u>	Results from both Year 1 and Year 2 of the Strong Start for Mothers and Newborns Initiative.
<u>CenteringPregnancy</u>	This website offers additional information on CenteringPregnancy's group care and education.
<u>Informed Medical Decisions Foundation</u>	HealthWise Research and Advocacy provides information for patients to participate in a shared decision-making process of their health care.

<u>Patient Decision Aids</u>	An online inventory of decision aids by topic that have been rated according to international standards.
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Quality Measurement:

<u>Core Quality Measure Collaborative (CQMC)</u>	America's Health Insurance Plans (AHIP), together with CMS and the NQF, convenes the Core Quality Measures Collaborative (CQMC), which is comprised of leaders from health plans, physician specialty societies, employers, and consumers. The CQMC works to develop consensus-driven core measure sets across a variety of clinical areas, including orthopedics, with the goal of harmonizing implementation across both commercial and government payers, which will in turn support quality improvement efforts, reduce the reporting burden of quality measures, and offer consumers actionable information for decision-making.
<u>National Quality Forum</u>	The National Quality Forum (NQF) leads national collaboration to improve health and health care quality through measurement, primarily through measure endorsement. NQF oversees the Quality Positioning System, a searchable database of quality measures.
<u>CMS Measures Inventory</u>	The CMS Measures Inventory is a compilation of measures used by CMS in various quality, reporting, and payment programs. The Inventory lists each measure by program, reporting measure specifications including, but not limited to, numerator, denominator, exclusion criteria, National Quality Strategy (NQS) domain, measure type, and National Quality Forum (NQF) endorsement status.
<u>Healthy People 2020</u>	This website provides information on various Health People quality initiatives for maternal, infant, and child health.
American Congress of Obstetricians and Gynecologists (ACOG) <u>Quality Improvement in Maternity Care</u>	ACOG provides guidelines that address areas where quality improvement initiatives may provide positive outcomes for the mother and infant during a perinatal episode.
Centers for Medicare & Medicaid Services (CMS)	This CMS website provides links to various data and measurement material related to maternal and infant care.

<u>Maternal and Infant Health Care Quality</u>	
<u>Better Measurement of Maternity Care Quality</u>	This blog by <i>Health Affairs</i> discusses variations in rates of obstetrical complications across the nation and offers steps that may help clinicians become more aware of quality measures.