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## Background

While the Bree Collaborative cannot recommend specific reimbursement amounts, the workgroup does acknowledge the need to offer guidance on payment timing and reimbursement flow as this will impact provider participation in a bundled payment model. In all cases, payers and/or purchasers should determine their reimbursement levels through historical benchmarking. Episode price for gestational parents diagnosed with opioid use disorder should be determined separately from those without.

Prospective reimbursement refers to an established amount paid to the accountable entity while retrospective reimbursement relies on fee-for-service reimbursement to individual providers followed by reconciliation after the episode is complete with shared savings or loss. Retrospective reconciliation has a lower administrative burden and will be easier for a provider as the accountable entity and is therefore recommended as a first step for the Washington state community.

### Pediatric Care

The strongest predictor for the overall well-being of the infant is the well-being of the gestational parent. The early relationship between the infant and parent(s) is critical to build a lifelong foundation for health. The continued separation of parent and infant health care service delivery and payment structures does not align with current best available scientific evidence. A perinatal bundle includes at least is two lives with effects that last for a lifetime for both gestational parent and child (e.g., preterm birth, low birth weight, maternal mood disorder, cesarean-section, delivery complications, breastfeeding, attachment).

While challenges to dyadic care exist across the health system, the workgroup hopes to take the opportunity to shape the future of care in a way that is person- and family-centered and will make the most difference for families in Washington state. Experiences and environments in early life establish the trajectory for lifelong outcomes for physical and mental health, behavior, and learning. New payment strategies incent coordination of care that better supports the gestational parent and child that allow tailored focus on physical and relationship needs.

The episode includes prenatal care, labor and delivery, postpartum care, and pediatric care as follows:

- Fee-for-service with retrospective reconciliation initially
  - The workgroup recommends moving toward a prospective payment model with retrospective reconciliation as a first step for the obstetric community
- Risk adjustment based on patient-specific factors including opioid use disorder
- Triggered at delivery to begin 270 days prior to delivery and ending 84 days (3 months) post delivery for the gestational parent and 30 days post delivery for the baby
- Including prenatal care, labor and delivery, postpartum services for both facility and professional services, and pediatric care
- Exclude anesthesia, insertion of contraceptive device, contraceptive device, genetic testing
- Obstetric care provider or group is the accountable entity

- **Exclusion criteria for gestational parent and newborn:**
  - Incomplete claims within episode time
  - Age: younger than 16, older than 40
  - Cost below first percentile or higher than ninety-ninth percentile
  - Diagnoses within the episode window or 90 days prior to or after episode window as determined by the payer or purchaser based on high-cost claims. See **Appendix D** for Exclusion criteria examples. The workgroup does not recommend basing exclusion criteria on behavioral health diagnoses including substance use disorder or drug use and/or  $\leq 45$  body mass index (BMI) at the first prenatal visit.
  - Gestational parent or newborn death within episode window
  - Major congenital malformations, See **Appendix K**
  - Twins or higher order multiples
- **Services excluded from episode payment:**
  - Pediatric trauma in the first 30 days
  - Pediatric diagnoses unrelated to labor and delivery
  - Other services not explicitly addressed in the episode should be discussed during contracting
- Cost of care should be tracked but is not a quality metric

## Clinical Pathway - Pediatric Care

**Timeline:** Delivery through 30 days post-delivery

Visit schedule and content should follow the American Academy of Pediatrics [Recommendations for Preventive Pediatric Health Care](#). Higher-risk newborns may need to be seen more often. See **Appendix I** for a list of information recommended to be shared between pediatric and obstetric care providers. Note that new acute illnesses are excluded from bundle payment.

Visits should at a minimum include the following services:

- **Newborn.**
  - Measurements: Length, weight, head circumference
  - Screening: + red reflex, hearing
  - Developmental: surveillance, psychosocial assessment
  - Newborn Screening
  - Pulse oximeter screening
  - Immunization counseling including recommended hepatitis B immunization
  - Feeding evaluation
  - Jaundice evaluation (transcutaneous bilirubin measurement routinely, serum bilirubin measurements as needed)
- **2-5 days of birth.** (48-72 hours of discharge from inpatient care) earlier if indicated, ideally within 48 hours of discharge, taking into account when the gestational parent is discharged.<sup>1,2</sup>
  - Measurements: Length, weight
  - Developmental: surveillance, psychosocial assessment
  - Hepatitis B immunization if not given at birth
  - Feeding evaluation
  - Jaundice evaluation (transcutaneous bilirubin measurement routinely, serum bilirubin measurements as needed)
- **30 days of birth**
  - 7-14 days newborn screening
  - Measurements: Length, weight, head circumference, (blood pressure, if indicated)
  - Screening: hearing if not done earlier
  - Developmental: surveillance, psychosocial assessment
  - Immunization counseling including first or second Hepatitis B immunization
  - Feeding evaluation
  - Jaundice evaluation (transcutaneous bilirubin measurement as needed)
  - Postpartum depression screening

## Quality Metrics

The workgroup recommends the following seven quality metrics be tracked for each episode. The workgroup aimed to select both process and outcome metrics and measure both unexpected complications in newborns and severe maternal morbidity to balance the emphasis on a physiologic birth. These metrics should be used for tracking in the first year.

- **Cesarean Birth**

- **PC-O2**

- Percentage of nulliparous women with a term, singleton baby in a vertex position delivered by cesarean birth (C-section). Detailed numerator and denominator is available here:

- <https://manual.jointcommission.org/releases/TJC2018B/MIF0167.html>

- **Unexpected Complications in Term Newborns - Severe Rate**

- **PC-06.1**

- The percent of infants with unexpected newborn complications among full term newborns with no preexisting conditions. Severe complications include neonatal death, transfer to another hospital for higher level of care, severe birth injuries such as intracranial hemorrhage or nerve injury, neurologic damage, severe respiratory and infectious complications such as sepsis.

- Detailed information is available here:

- <https://manual.jointcommission.org/releases/TJC2018B/MIF0393.html>

- **O1: Severe Maternal Morbidity**

- Denominator: All mothers during their birth admission, excluding ectopics and miscarriages

- Numerator: Among the denominator, all cases with any severe maternal morbidity (SMM) code

- Detailed information is available here: <https://pqcnc->

- <documents.s3.amazonaws.com/aim/aimexpert/PQCNCAIMOBHMetrics.pdf>

- **Chlamydia Screening**

- Percentage of pregnant women 16–24 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year. Detailed information is available here: [www.ncqa.org/hedis/measures/chlamydia-screening-in-women/](http://www.ncqa.org/hedis/measures/chlamydia-screening-in-women/)

- **Group B Streptococcus Maternal Screening**

- **Behavioral Health Risk Assessment for Pregnant Women**

- American Medical Association - PCPI

- Percentage of patients, regardless of age, who gave birth during a 12-month period seen at least once for prenatal care who received a behavioral health screening risk assessment that includes the following screenings at the first prenatal visit: screening for depression, alcohol use, tobacco use, drug use, and intimate partner violence. Detailed information is available here:

- [www.ahrq.gov/sites/default/files/wysiwyg/policymakers/chipra/factsheets/0085behavior.pdf](http://www.ahrq.gov/sites/default/files/wysiwyg/policymakers/chipra/factsheets/0085behavior.pdf)

- **Postpartum visit scheduled**

- Developed by the workgroup. Percentage of gestational parents who have first postpartum visit (of at least two) scheduled prior to leaving inpatient care or if delivery occurred outside of the inpatient setting, while the obstetric care provider is present in the delivery setting.

- **Pediatric visit scheduled or referral process initiated**

- Developed by the workgroup. Percentage of newborns with first pediatric visit scheduled or referral to pediatric care made prior to leaving inpatient care or, if delivery occurred outside of the inpatient setting, while the obstetric care provider is present in the delivery setting including transfer of pediatric discharge information.

**Appendix D: Episode and Perinatal Guideline Systematic Review Search Results**

Perinatal Episode Review

State	Name	Author Type	Included	Time Start	Time End	Model	Outcomes	Literature
<b>TN</b>	Tennessee Health Care Improvement Innovation Initiative	Medicaid	Mom	280 days prior	60 days	Retrospective FFS	Saved \$ in 2017, C-section unchanged	White paper: Establishing Maternity Episode Payment Models: Experiences from Ohio and Tennessee. <a href="https://hcp-lan.org/workproducts/mac/Establishing-Maternity-Episode-Payment-Models.pdf">https://hcp-lan.org/workproducts/mac/Establishing-Maternity-Episode-Payment-Models.pdf</a> Case Study: Tennessee’s Perinatal Episode of Care Payment Strategy Promotes Improved Birth Outcomes [https://nashp.org/wp-content/uploads/2017/10/Tennessee-Case-Study-Final.pdf]. (n.d.)
<b>AK</b>	Arkansas Health Care Payment Improvement Initiative	Medicaid + Arkansas Blue Cross Blue Shield Partnership	Mom	40 weeks prior	60 days	Retrospective FFS	Reduced C-section rate, cost. Increased chlamydia screening rate	Carroll, C., Chernew, M., Fendrick, A. M., Thompson, J., & Rose, S. (2017). Effects of Episode-Based Payment on Health Care Spending and Utilization: Evidence from Perinatal Care in Arkansas. doi:10.3386/w23926 Arkansas Health Care Payment Improvement Initiative [https://achi.net/wpcontent/uploads/2018/10/Arkansas-Health-Care-Payment-Improvement-Initiative-StateTracking-Report-Year-3-Full-Report.pdf]. (2017, May).
<b>PA</b>	Geisinger Health System	Delivery System	Mom	Positive pregnancy	At postpartum visit (21-56 days)	Prospective	Decreased NICU admissions, c-sections	“In the Literature: Geisinger's ProvenCare Safely Reduces Cesarean Rate with Implementation of Evidence-Based Guidelines   Transforming Maternity Care.” In the Literature Geisingers ProvenCare Safely Reduces Cesarean Rate with Implementation of Evidence based Guidelines, 2019,
<b>OH</b>	Ohio Episode-Based Payment Model	Medicaid	Mom	280 days prior	60 days	Retrospective FFS	Increased cost	White paper: Establishing Maternity Episode Payment Models: Experiences from Ohio and Tennessee. <a href="https://hcp-lan.org/workproducts/mac/Establishing-Maternity-Episode-Payment-Models.pdf">https://hcp-lan.org/workproducts/mac/Establishing-Maternity-Episode-Payment-Models.pdf</a>

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<b>NJ</b>	Horizon Blue Cross and Blue Shield of New Jersey	Plan	Mom	Positive pregnancy	30 days	Retrospective	Lower rate of C-sections, lower cost	Maternity Program. (n.d.). Retrieved from <a href="https://www.horizonblue.com/members/wellness/maternity-program">https://www.horizonblue.com/members/wellness/maternity-program</a> NJ's Horizon BCBS Pays \$3M in Shared Savings for Episodes of Care; Readmissions, C-sections Reduced. (n.d.). Retrieved from <a href="https://www.ajmc.com/focus-of-the-week/njs-horizonbcbs-pays-3m-in-shared-savings-for-episodes-of-care-readmissions-c-sections-reduced-">https://www.ajmc.com/focus-of-the-week/njs-horizonbcbs-pays-3m-in-shared-savings-for-episodes-of-care-readmissions-c-sections-reduced-</a>
<b>MA</b>	General Electric	Purchaser	Mom	Positive pregnancy	90 days post		\$2million savings, decreased c-section to 6%	Mincer, J. (2018, November 07). U.S. companies team up with hospitals to reduce employee maternity... Retrieved from <a href="https://www.reuters.com/article/us-world-work-maternity/u-s-companies-team-up-with-hospitals-to-reduce-employee-maternity-costs-idUSKCN1NC1EQ">https://www.reuters.com/article/us-world-work-maternity/u-s-companies-team-up-with-hospitals-to-reduce-employee-maternity-costs-idUSKCN1NC1EQ</a>
<b>Natl</b>	Humana	Plan	Mom	200 days prior	45 days post	Retrospective		<a href="https://khn.org/news/maternity-care-bundling-payments-insurance-cesarean-sections/">https://khn.org/news/maternity-care-bundling-payments-insurance-cesarean-sections/</a> <a href="https://www.modernhealthcare.com/article/20180418/TRANSFORMATION04/180419927/humana-launches-bundled-payment-model-for-maternity-care#:~:text=The%20bundled%20payment%20will%20be,and%2045%20days%20after%20discharge.">https://www.modernhealthcare.com/article/20180418/TRANSFORMATION04/180419927/humana-launches-bundled-payment-model-for-maternity-care#:~:text=The%20bundled%20payment%20will%20be,and%2045%20days%20after%20discharge.</a>
<b>Natl</b>	Cigna and U.S. Women's Health Alliance	Plan	Mom					<a href="https://khn.org/news/maternity-care-bundling-payments-insurance-cesarean-sections/">https://khn.org/news/maternity-care-bundling-payments-insurance-cesarean-sections/</a> <a href="https://www.prweb.com/releases/2017/11/prweb14901333.htm">https://www.prweb.com/releases/2017/11/prweb14901333.htm</a>
<b>NJ, TX</b>	UnitedHealthcare	Plan	Mom			Retrospective		<a href="https://medcitynews.com/2019/05/unitedhealthcare-launches-new-maternity-care-bundled-payment-program/">https://medcitynews.com/2019/05/unitedhealthcare-launches-new-maternity-care-bundled-payment-program/</a>
<b>OR</b>	Providence Health & Services	Delivery System	Mom and baby	Positive pregnancy	42 days post	Retrospective FFS		McKesson. Bundles of Joy. <a href="https://www.mckesson.com/Blog/Bundles-of-Joy/">https://www.mckesson.com/Blog/Bundles-of-Joy/</a>
<b>NC, TN, CO</b>	Baby+ Company	Delivery System	Mom and baby	First visit	56 days post	Retrospective FFS		<a href="http://www.babyandcompany.com/">http://www.babyandcompany.com/</a>

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<b>MN</b>	The Minnesota Birth Center's BirthBundl eTM	Delivery System	Mom and baby	270 days prior	60 days post	Retrospective		<a href="http://www.ehcca.com/presentations/BPSummit5/calvin_t4.pdf">http://www.ehcca.com/presentations/BPSummit5/calvin_t4.pdf</a>
<b>NY</b>	New York State Department of Health	Medicaid	Mom and baby	Positive pregnancy	Mom=60 days, baby=30 days	Retrospective		<a href="https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/vbp_library/2016-0603_maternity_rpt.htm">https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/vbp_library/2016-0603_maternity_rpt.htm</a>
<b>TX</b>	Health Care Incentives Improvement Institute (now Altarum)	Plan, Delivery system, provider, and NGO partnership	Mom and baby	270 days prior	60 days (baby unknown)			Mixed results for Medicaid maternity bundle in Texas. (2019, January 23). Retrieved from <a href="https://www.healthexec.com/topics/care-delivery/mixed-results-medicaid-maternity-bundle-texas">https://www.healthexec.com/topics/care-delivery/mixed-results-medicaid-maternity-bundle-texas</a> <a href="http://www.ehcca.com/presentations/BPSummit5/love_t4.pdf">http://www.ehcca.com/presentations/BPSummit5/love_t4.pdf</a> Negotiating Maternity Care Bundles. <a href="https://www.hfma.org/topics/trends/52111.html">https://www.hfma.org/topics/trends/52111.html</a> A Process for Structuring Bundled Payments in Maternity Care <a href="https://catalyst.nejm.org/doi/full/10.1056/CAT.16.0597">https://catalyst.nejm.org/doi/full/10.1056/CAT.16.0597</a>
<b>Natl</b>	American Association of Birth Centers	Delivery System Association	Mom and baby	First visit	Mom=60 days, baby=28 days	Retrospective FFS	c-section, episiotomy rate, elective delivery	<a href="http://hcp-lan.org/">http://hcp-lan.org/</a>
<b>Natl</b>	Signify Health	NGO	Mom and baby	280 days prior	Mom=60 days, baby=30 days	Retrospective	lower rate preterm birth, % missed appointments, earlier entry into care	Modeled off HPC-LAN. <a href="https://www.careinnovationinstitute.com/episodes/pregnancy-pregn-episode-description/pregn-version-1/">https://www.careinnovationinstitute.com/episodes/pregnancy-pregn-episode-description/pregn-version-1/</a>

## Appendix F: Included Services and Coding

### Perinatal Episode:

- 59400
- 59510
- 59610
- 59618
- 99381

The perinatal episode includes antepartum care, delivery, postpartum care, and pediatric care for 30 days and is reported using the date of delivery as the date of service after all services are rendered by a provider from a solo practice or multiple providers within the same group practice.

The following are included services:

- Initial and subsequent histories
- Physical examinations
- Recording of weight, blood pressures, fetal heart tones
- Radiology (up to two ultrasounds, additional approved on individual basis)
- Routine chemical urinalysis
- Monthly visits up to 28 weeks gestation
- Biweekly visits up to 36 weeks gestation
- Weekly visits 36 weeks until delivery
- Hospital and observation care
- Evaluations and management (E&M) services within 24 hours of delivery
- Admission to hospital
- Admit history and physical
- Management of uncomplicated labor
- Placement of internal fetal and/or uterine monitors; fetal monitoring
- Catheterization or catheter insertion
- Perineum preparation
- Injection of local anesthesia
- Induction of labor/artificial rupture of membranes
- Preoperative counseling for cesarean delivery, preparation of abdomen and abdominal incision
- Delivery of fetus (vaginal or cesarean)
- Delivery of placenta
- Insertion of cervical dilator
- Simple removal of cerclage (not under anesthesia)
- Episiotomy and/or repair of first- and second-degree lacerations
- Removal of sutures/staples
- E&M services following delivery
- Postpartum visits as needed (limited to addressing pregnancy-related concerns)
- Newborn evaluation
- Well child visit 2-5 days, 30 days

## Appendix J: Pediatric – Obstetrics Information Exchange

### Obstetrics to Pediatrics

- Maternal depression score
- Other psychosocial concerns
- Maternal prenatal labs results
- Maternal medications
- Delivery complications
- Pertinent/significant family history

### Pediatrics to Obstetrics

- Maternal depression score
- Other psychosocial concerns
- Any clinical concerns including congenital abnormalities, etc
- Newborn care complications
- Milk supply concerns

## Appendix K: Major Congenital Malformations

- Anencephaly
- Cleft lip
- Cleft palate
- Cleft palate with cleft lip
- Craniorachischisis
- Encephalocele
- Exomphalos/omphalocele
- Gastroschisis
- Hypospadias
- Iniencephaly
- Reduction defects of upper and lower limbs
- Spina bifida
- Talipes equinovarus/clubfoot

Source: <https://www.cdc.gov/ncbddd/birthdefects/surveillancemanual/chapters/chapter-1/chapter1-4.html>

## References

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<sup>1</sup> Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics*. 2012 Mar;129(3):e827-41. doi: 10.1542/peds.2011-3552. Epub 2012 Feb 27. PMID: 22371471.

<sup>2</sup> American Academy of Pediatrics. Committee on Fetus and Newborn. Hospital stay for healthy term newborns. *Pediatrics*. 2010 Feb;125(2):405-9. doi: 10.1542/peds.2009-3119. Epub 2010 Jan 25. PMID: 20100744.