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Background

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 (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 client 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.

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. Visits should at a minimum include the following services:

- **Newborn**. A physical examination that includes:
  - Measurements: length, weight, head circumference, blood pressure
  - Screening: Vision, hearing
  - Developmental: developmental surveillance, psychosocial assessment
  - Newborn screening
  - Bilirubin
  - Critical Congenital Heart Defect
  - Immunization
  - Feeding evaluation
  - Jaundice evaluation
- **2-5 days of birth.** (48-72 hours of discharge from inpatient care) or earlier if indicated. Newborns discharged less than 48 hours after delivery must be examined within 48 hours of discharge.[1,2] A physical examination that includes:
  - Measurements: Length, weight, head circumference, blood pressure
  - Screening: Vision, hearing
  - Developmental: Developmental surveillance, psychosocial assessment
  - Immunization
  - Feeding evaluation
  - Jaundice evaluation
- **Within 30 days of birth**. A physical examination that includes:
  - Measurements: Length, weight, head circumference, blood pressure
  - Screening: Vision, hearing if not done earlier
  - Developmental: Developmental surveillance, psychosocial assessment
  - Immunization
  - Feeding evaluation
  - Jaundice evaluation
  - Postpartum depression

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/
- **Group B Streptococcus Maternal Screening**
- **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.
- **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
- **Pediatric visit scheduled**
  Developed by the workgroup. Percentage of newborns with first pediatric visit 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.

Appendix C: Episode and Perinatal Guideline Systematic Review Search Results

Perinatal Episode Review

State	Name	Author Type	Included	Time Start	Time End	Model	Outcomes	Literature
TN	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. https://hcp-lan.org/workproducts/mac/Establishing-Maternity-Episode-Payment-Models.pdf 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.)
AK	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).
PA	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,
OH	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. https://hcp-lan.org/workproducts/mac/Establishing-Maternity-Episode-Payment-Models.pdf

NJ	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 https://www.horizonblue.com/members/wellness/maternity-program NJ's Horizon BCBS Pays $3M in Shared Savings for Episodes of Care; Readmissions, C-sections Reduced. (n.d.). Retrieved from https://www.ajmc.com/focus-of-the-week/njs-horizonbcbs-pays-3m-in-shared-savings-for-episodes-of-care-readmissions-c-sections-reduced-
MA	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 https://www.reuters.com/article/us-world-work-maternity/u-scompanies-team-up-with-hospitals-to-reduce-employee-maternity-costs-idUSKCN1NC1EQ
Natl	Humana	Plan	Mom	200 days prior	45 days post	Retrospective		https://khn.org/news/maternity-care-bundling-payments-insurance-cesarean-sections/ 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.
Natl	Cigna and U.S. Women's Health Alliance	Plan	Mom					https://khn.org/news/maternity-care-bundling-payments-insurance-cesarean-sections/ https://www.prweb.com/releases/2017/11/prweb14901333.htm
NJ, TX	UnitedHealthcare	Plan	Mom			Retrospective		https://medcitynews.com/2019/05/unitedhealthcare-launches-new-maternity-care-bundled-payment-program/
OR	Providence Health & Services	Delivery System	Mom and baby	Positive pregnancy	42 days post	Retrospective FFS		McKesson. Bundles of Joy. https://www.mckesson.com/Blog/Bundles-of-Joy/
NC, TN, CO	Baby+ Company	Delivery System	Mom and baby	First visit	56 days post	Retrospective FFS		http://www.babyandcompany.com/

MN	The Minnesota Birth Center's BirthBundle™	Delivery System	Mom and baby	270 days prior	60 days post	Retrospective		http://www.ehcca.com/presentations/BPSummit5/calvin_t4.pdf
NY	New York State Department of Health	Medicaid	Mom and baby	Positive pregnancy	Mom=60 days, baby=30 days	Retrospective		https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/vbp_library/2016-0603_maternity_rpt.htm
TX	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 https://www.healthexec.com/topics/care-delivery/mixed-results-medicaid-maternity-bundle-texas http://www.ehcca.com/presentations/BPSummit5/love_t4.pdf Negotiating Maternity Care Bundles. https://www.hfma.org/topics/trends/52111.html A Process for Structuring Bundled Payments in Maternity Care https://catalyst.nejm.org/doi/full/10.1056/CAT.16.0597
Natl	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	http://hcp-lan.org/
Natl	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. https://www.careinnovationinstitute.com/episodes/pregnancy-pregn-episode-description/pregn-version-1/

Appendix E: 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)
Well child visit 2-5 days, 30 days

Appendix G: Behavioral Health Treatment

Screening for behavioral health conditions is integrated into this bundled payment models and is standard of care. Effectiveness of screening for perinatal behavioral health conditions is contingent on availability of adequate follow up for those who screen positive. The ACOG's consensus bundle on maternal mental health for perinatal depression and anxiety includes general guidance to include perinatal mood and anxiety disorder screening, intervention, referral, and follow-up into maternity care practices.[3] This bundle does not include guidance on other mental health or substance use disorders but can be used as a template to address these other disorders.

Behavioral health treatment in the perinatal period should be informed by symptom severity and patient preference. Common mental disorders such as depression and anxiety can be managed in the prenatal setting while patients with bipolar disorder or psychosis may require a referral to specialty mental health. The pathways described previously recommend using a validated symptom measure such as the PHQ-9 to help determine intensity and type of treatment for common mental disorders. For example:

- For mild depression (PHQ-9 score 5 -10) – education, psychotherapy
- For moderate depression (PHQ-9 score 10 - 15) – psychotherapy and / or medication management
- For severe depression (PHQ-9 score >15) – psychotherapy and medication management. More information: http://www.cqaimh.org/pdf/tool_phq9.pdf

As behavioral health conditions are not recommended as exclusion criteria, providers who screen for behavioral health conditions as recommended will have to make a decision on next steps for treatment. If prenatal providers opt to refer patients out for specialty mental health treatment, attempts should be made to track on these referrals as evidence suggests that less than 20% of patients follow up on specialty mental health referrals.[4] Should prenatal providers opt to provide integrated mental health treatments (which is preferable especially for mild to moderate depression and anxiety, and is associated with better follow up and patient outcomes), reimbursement options include fee-for-service co-located psychotherapy or using collaborative care codes, more information here: www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/BehavioralHealthIntegration.pdf.[5] Better patient outcomes are reported with measurement-based treatment to target that forms the cornerstone of collaborative care.

Future considerations for health care purchasers and policy makers include establishing another layer of bundled payment that covers the costs of evidence-based integrated perinatal behavioral health treatments. This will incentivize the delivery of integrated perinatal behavioral health treatments known to reduce barriers to care and improve patient outcomes.

Appendix H: Opioid Use Disorder Treatment

Medication-assisted treatment should be informed by individual patient characteristics and preferences. Medications differ in the location from which they can be dispensed, how they can be prescribed, side effects, and how they work chemically.[6] Agonist medication therapy, methadone or buprenorphine, is generally recommended for patients who are pregnant. [7,8] Providers should follow the Committee on Obstetric Practice and American Society of Addiction Medicine joint opinion Opioid Use and Opioid Use Disorder in Pregnancy and the Bree Collaborative's 2017 Opioid Use Disorder Treatment Report and Recommendations. Buprenorphine services for patients who are pregnant with opioid use disorder are available among primary care providers with obstetrics privileges, group buprenorphine care, case management, patient navigation and maternal support services

Recommendations include:

- Gestational parents who have opioid use disorder should be started on opioid maintenance therapy as early as possible in pregnancy to help reduce the severity of neonatal abstinence syndrome. After a positive screen for opioid use disorder, medical examination and psychosocial assessment should be performed.
- Co-manage care for patients who are pregnant with opioid use disorder with a prenatal care provider and an addiction specialist.
- Use urine drug testing to detect or confirm suspected use with informed consent.
- Use a supported referral to a setting offering methadone or buprenorphine rather than withdrawal management or abstinence. Initiate treatment with opioid replacement therapy as early as possible. Hospitalization during initiation may be advisable

References

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