Working together to improve health care quality, outcomes, and affordability in Washington State.

Maternity Bundled Payment Model

2019

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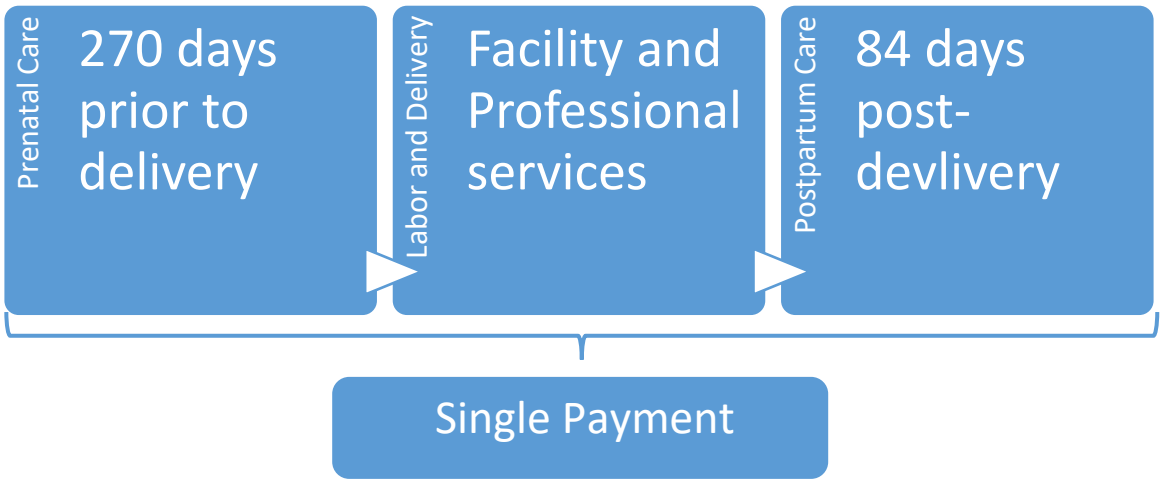
Executive Summary

Pregnancy and childbirth are life-changing, monumental experiences that greatly impact the gestational parent and form the basis for a child's future. The United States has the highest maternal mortality rate of developed countries and vast inequities based on race and ethnicity in both maternal and infant mortality. Cesarean-section rates remain high despite much effort to increase appropriateness. Labor and delivery are expensive, in many cases the most expensive area for health plans and purchasers with wide variation in price. In Washington State, Medicaid pays for more than half of births.

While much of maternity care reimbursement is structured as a limited bundled payment, expanding these definitions and adding clinical components and required quality metrics tied to gain-sharing can address some preventable complications by increased care coordination and the potential for better adoption of evidence-based best practices. Various bundled payment models are being used across the country by state Medicaid agencies, health plans, and others that offer examples and guidance.

The Bree Collaborative elected to develop an episode-based payment model, or bundled payment, for maternity care and has convened a workgroup that met from January 2019 to November 2019. This guideline presents a payment model that includes prenatal care, labor and delivery, and postpartum care along with clinical components for internal quality tracking and performance metrics, as shown in Figure 1, below:



Clinical background and discussion of the bundled payment structure are presented on pages 2-4. The clinical pathway for providers and delivery systems as relevant for prenatal care, labor and delivery, and postpartum care is presented on pages 5-8. Recommendations for other stakeholders including health care purchasers, emergency departments and urgent care, the Washington State Department of Health, and the Washington State Health Care Authority are listed on pages 9-10. Finally, quality metrics are outlined on pages 10-11. This bundle guideline does not specifically recommend exclusions but outlines guidance on how to define exclusions based on the patient population.

In terms of infant outcomes, the strongest predictor for the overall well-being of the infant is the well-being of the gestational parent and 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 when these pathways are inextricably linked. What we are actually caring for with a "maternity bundle" is two lives, and the effects of that care will last for a lifetime, for both the gestational parent and for the child (preterm birth, low birth weight, maternal mood disorder, cesarean-section, delivery complications, breastfeeding, attachment). While we recognize a host of challenges across our systems with incorporating a dyadic approach to care (including service delivery, collaboration and partnership, payment) we must take this 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 in all the areas we care about-physical and mental health, behavior, and learning. To address these most influential early experiences and environments we must employ new strategies for delivering care that allows tailored focus on the parent(s) needs, the infant needs and the relationship between them – dyadic care.

Dr. Robert Bree Collaborative Background

The Dr. Robert Bree Collaborative was established in 2011 by Washington State House Bill 1311 *"…to provide a mechanism through which public and private health care stakeholders can work together to improve quality, health outcomes, and cost effectiveness of care in Washington State."* The Bree Collaborative was named in memory of Dr. Robert Bree, a leader in the imaging field and a key member of previous health care quality improvement collaborative projects.

Members are appointed by the Washington State Governor and include public health care purchasers for Washington State, private health care purchasers (employers and union trusts), health plans, physicians and other health care providers, hospitals, and quality improvement organizations. The Bree Collaborative is charged with identifying health care services annually with substantial variation in practice patterns, high utilization trends in Washington State, or patient safety issues. For each health care service, the Bree Collaborative identifies and recommends best-practice, evidence-based approaches that build upon existing efforts and quality improvement activities to decrease variation. In the bill, the legislature does not authorize agreements among competing health care providers or health carriers as to the price or specific level of reimbursement for health care services. Furthermore, it is not the intent of the legislature to mandate payment or coverage decisions by private health care purchasers or carriers.

See **Appendix A** for a list of current Bree Collaborative members.

Recommendations are sent to the Washington State Health Care Authority for review and approval. The Health Care Authority (HCA) oversees Washington State's largest health care purchasers, Medicaid and the Public Employees Benefits Board Program, as well as other programs. The HCA uses the recommendations to guide state purchasing for these programs. The Bree Collaborative also strives to develop recommendations to improve patient health, health care service quality, and the affordability of health care for the private sector but does not have the authority to mandate implementation of recommendations.

For more information about the Bree Collaborative, please visit: www.breecollaborative.org.

Bree Collaborative members identified maternity care as a priority improvement area and convened a workgroup to develop evidence-based standards. The workgroup met from January to November 2019.

See **Appendix B** for the Maternity Bundled Payment Model Workgroup Charter and a list of members.

See **Appendix C** for results of the guideline and systematic review search.

Background

Clinical Background

Pregnancy and childbirth are life-changing, monumental experiences that greatly impact the gestational parent and form the basis for a child's future. Preexisting health problems may be exacerbated by pregnancy, pre-eclampsia or gestational diabetes that present during pregnancy are associated with increased risk for lifelong cardiovascular disease, and behavioral health complications such as depression or anxiety can be severe and long-lasting.[1] Complications, ranging in severity from first degree perineal laceration to hemorrhage, in labor and delivery are common with some estimates as high as 80% of vaginal deliveries and 95% of cesarean-sections having complications listed in the medical record.[2]

The United States has the highest maternal death rate among developed nations with more than 50,000 mothers having life-threatening complications annually.[3,4] Mortality also differs greatly based on race with black mothers being three to four times as likely to die in childbirth than white mothers and more likely to suffer complications that lead to maternal death and injury.[2,5] Cardiovascular conditions are responsible for over one third of pregnancy-related deaths in the United States, followed by infection (12%), hemorrhage (11%), and others.[6,7]

In 2017, Washington State had 81,208 total births, 50% of which had Medicaid-paid maternity care.[8] The rates for cesarean-section among nulliparous term singleton vertex deliveries, vaginal births after cesarean-section for term singleton vertex deliveries, and primary cesarean-sections among term singleton vertex were 24.3%, 28.3%, and 13.9%.[8] Nationally, 8.3% babies are born with a low birthweight and 9.9% are born preterm.[9] Childbirth remains the largest hospital expense, the largest single cost for state Medicaid agencies, and the largest expense for most commercial health plans.[10,11]

Opportunities for clinical improvement include reducing cesarean section rates, increasing provision of care by appropriate providers in appropriate settings, reducing pre-term birth rates, reducing mortality rates for the gestational parents and for infants, and reducing health disparities.[12,13] Clinical improvements in proactive identification and treatment of cardiovascular disease, increasing the rate of physiologic birth, and provision of more personalized postpartum care with a higher number of and more frequent visits also serve as areas for improvement. Increased use of midwives and greater use of supportive services such as doulas can also help achieve some of these goals.

Lastly, pregnancy presents a unique opportunity to engage people in and connect to ongoing care, especially for those who are marginalized or who may not have regular encounters with the medical system. This is especially important for those with comorbid behavioral health diagnoses, use of illicit drugs during pregnancy not being uncommon.[14]

Bundle Episode Definitions

Bundled payment models can address some preventable complications in maternity care through greater coordination of care, reorganizing care around the patient(s), and through better provision of evidence-based care. Various episode-based payment models are being currently being used across the country, many of which are profiled in the Health Care Payment Learning and Action Network (HPC-LAN) paper.[15,16,17] The HPC-LAN, created to "*drive alignment in payment approaches across and within the public and private sectors of the health care system*,"[18] outlines the following steps to developing a comprehensive bundle:

- Episode definition
- Episode timing
- Patient population
- Services
- Patient engagement
- Accountable entity
- Payment flow
- Episode price
- Type and level of risk
- Quality metrics

Many of the models discussed cover low-risk pregnancies, limiting their impact on health equity while others exclude the highest and lowest cost episodes and select conditions.[9,19] In many cases, cesarean section rate is used as an indicator of success. However, availability of data on outcomes of the various models is variable. The workgroup acknowledges the difficulty in creating specifications, inclusions, and exclusions for an entire state and for different payers that includes different populations. However, the workgroup also emphasizes the need to impact system-wide change through standardization of definitions, metrics, and models.[20] Lessons from other states and regions are clear in recommending shared models and shared definitions to drive sustainability so that time-limited pilots do not become the norm.[21,22]

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. 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.

The workgroup developed a clinical pathway supported by an episode-based payment building on existing perinatal work within Washington State prioritizing health equity, high-quality, and evidence-based perinatal and pediatric care. The workgroup relied extensively on practice guidelines from the American College of Obstetricians and Gynecologists (ACOG) and work done by the Washington State Hospital Association (WSHA) as well as the HPC-LAN outline.

The episode includes prenatal care, labor and delivery, and postpartum 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
- Triggered at delivery to begin 270 days prior to delivery and ending 84 days (3 months) post delivery
    - The workgroup's ideal is to implement a perinatal bundle that will last 365 days (12 months) post-delivery (total 635 days) that also includes pediatric care for 12 months. If and when Medicaid extension to 12 months occurs, this bundle should extend to 12 months postpartum. Pediatric care should be family-centered.
- Including prenatal care, labor and delivery, postpartum services for both facility and professional services
- Exclude anesthesia, insertion of contraceptive device, contraceptive device, genetic testing, and pediatric services
- Obstetric care provider or group is the accountable entity
- Exclusion criteria:
    - 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 ≤45 body mass index (BMI) at the first prenatal visit.
    - Death within episode window
- All services not explicitly addressed in the bundle should be discussed during contracting.
- Cost of care should be tracked but is not a quality metric.

See **Appendix E** for included services and coding.

Care Pathway for Obstetric Care Providers

The following inclusions under prenatal care are listed both as best practice measures tracked internally by the provider(s) and/or care team and as a guide for health plans and/or health care purchasers.

Prenatal Care

- **Intake visit**. A comprehensive intake visit should happen as soon as possible after a patient contacts the provider or group with a positive pregnancy test. At a minimum, the intake visit should happen in the first trimester if the patient contacts the provider or group in the first trimester.
    - Gather patient information, conduct a comprehensive patient medical history including family medical history, prior pregnancy history, preterm birth risk, and concurrent medications. Discuss health insurance or getting access to health insurance.
    - Discuss:
        - Nutrition and prenatal vitamins
        - Importance of continuing exercise
        - Obesity and healthy pregnancy
        - Preparedness for labor and delivery
    - Scheduling dating ultrasound
    - Information on genetic testing and counseling
    - Screen for:
        - Behavioral health, depression, anxiety, suicidality, and tobacco, marijuana, alcohol, and/or other drug use, see more information on tools below
        - Toxic environmental exposures
        - Injury prevention
        - Violence and abuse
- At a minimum, visits every four to six weeks up to 28 weeks gestation. Visits may be done as a group.
- At a minimum, biweekly visits up to 29-36 weeks gestation. Visits may be done as a group.
- At a minimum, weekly visits from 36 weeks until birth.
- **Screenings and Risk Assessments.**
    - **Anemia/hemorrhage risk assessment**.
    - **Cardiovascular disease.** For all pregnant patients, conduct a global cardiovascular risk assessment during the first trimester and again in the second trimester. Next steps should follow the California Maternal Quality Care Collaborative Cardiovascular Disease in Pregnancy and Postpartum Toolkit, ACOG's Pregnancy and Heart Disease Practice Bulletin, and ACOG's Gestational Hypertension and Preeclampsia Practice Bulletin.[23] Educate community primary care and emergency care services that the new onset of asthma during pregnancy should always prompt consideration for a cardiovascular cause, particularly cardiomyopathy of pregnancy, or unmasking of heretofore undiagnosed underlying congenital cardiovascular disease.

        - Patients with red flags for cardiovascular disease (i.e., shortness of breath at rest, severe orthopnea necessitating four or more pillows, resting heart rate ≥120 beats per minute, resting systolic blood pressure ≥160 mm Hg, and/or resting respiratory rate of ≥30 breaths per minute and an oxygen saturation ≤94%) should be promptly evaluated, managed as appropriate following current ACOG and/or other national guidelines. Consider a consultation with maternal and fetal medicine and primary care/cardiology. This may be done via telemedicine, if available.
        - Patients with a personal history of cardiovascular disease should receive a consultation with maternal and fetal medicine and primary care/cardiology. This may be done via telemedicine, if available.
    - **Behavioral Health.** Explain to patients the purpose of screening for depression, anxiety, suicidality, alcohol misuse, and drug use including the safety and security of the information. Screen for depression, anxiety, suicidality, and tobacco, marijuana, alcohol, and/or other drug use at intake and at least every trimester using a validated instrument(s), as described below:
        - **Depression** (e.g. Patient Health Questionnaire-2, PHQ-3 and/or PHQ-9) and **anxiety** (e.g., Generalized Anxiety Disorder-2), follow guidelines within the 2017 Bree Collaborative Behavioral Health Integration Report and Recommendations.
        - **Suicidality** (e.g. ninth question of the PHQ-9, first and second questions of the Columbia Suicide Severity Rating Scale (C-SSRS), the Ask Suicide-Screening Questions (ASQ) as well as current plans and any past attempts). If suicide risk is detected, follow guidelines within the 2018 Bree Collaborative Suicide Care Report and Recommendations, or more recent if available.
        - **Tobacco, marijuana, alcohol** (e.g., AUDIT-C), and **drug use** (e.g., single-item screener, ASSIST, DAST-10, single item cannabis and other drug use questions). If alcohol misuse or illicit drug use is detected, follow guidelines within 2015 Bree Collaborative Addiction and Dependence Treatment Report and Recommendations, or more recent if available following the Screening, Brief Intervention, and Referral to Treatment (SBIRT) protocol.
        - See **Appendix G** for information on behavioral health treatment.
        - See **Appendix H** for information on opioid use disorder treatment.
    - **Infectious Disease.** Screen all patients according to ACOG guidelines (e.g., for HIV here) including for infectious disease and immunity to infectious disease, where appropriate (e.g., rubella, varicella). Information for patients is available here.
        - Follow ACOG practice advisory for Management of Pregnant and Reproductive-Aged Women during a Measles Outbreak or other infectious disease, where appropriate.
    - **Gestational Diabetes Screening.**
- **Vaccination.**
    - Tetanus, diphtheria, and pertussis, third trimester

- Influenza if not already done so in the current season

- **Second trimester education.**
  - Breastfeeding
- **Third trimester education**
  - Breastfeeding
  - Comprehensive, client-centered contraceptive counseling that includes education about a broad range of contraceptive methods including immediate postpartum long-acting reversible contraception and facilitates shared decision-making when and if selecting a method.
  - **Shared Decision Making.** Use shared decision making as appropriate for relevant clinical conditions. See 2019 Bree Collaborative Shared Decision Making Recommendations for information on implementation including clinical workflow and documentation here and those certified by the Health Care Authority here.

- **Social Determinants of Health.** Consider the impact of social determinants of health on patient health. If appropriate, screen patients for unmet needs using a culturally and patient-appropriate tool (e.g., OneCare Vermont: Self-Sufficiency Outcomes Matrix, Oregon Family Wellbeing Assessment, other tools, tribal resources). Link patients to community resources, if needed (e.g., Parent Help 123 website).
- **Patient Support.** Support patients as needed or refer patients to available support services. See **Appendix F:** Support Services. While there is ongoing work at the Health Care Authority and partner agencies to assess different models for implementing doula services under existing programs (i.e. MSS or Managed Care), there is value in including these services in the maternity bundle. First, doula services are a solution that have been shown to meet the "triple aim" of providing better care, improving population health and reducing costs. Second, doula services represent an evidence-based type of dyadic care that focuses on gestational parent and child, improving outcomes for both (e.g., lower cesarean-section rates, lower preterm birth rates, fewer obstetric interventions, shorter labor hours, improved breastfeeding). Third, while evidence shows positive outcomes for all birthing parents who utilize doula services, these associations tend to be stronger in populations who are low income, historically marginalized or disadvantaged, or who experience cultural or linguistic barriers to accessing care. Addressing our ongoing disparities in perinatal health necessitates solutions that may have a greater positive impact on those who are suffering disproportionately. Fourth, the Bree Collaborative bundle has influence across the diverse system of maternity care and payers and given the evidence for doula services we would like to encourage expansion of doula services to all pregnant and post-partum clients in Washington state.

Labor Management and Delivery

The workgroup's goal is for a physiologic birth[24] when safe to do so including:[25,26,27]

- Spontaneous onset and progression of labor;
- Biological and psychological conditions that promote effective labor;
- Vaginal birth of the infant and placenta resulting in physiological blood loss;
- Optimal newborn outcomes, including transition through early skin-to-skin contact when appropriate, including for cesarean sections.
- Keeping the mother and infant together during the postpartum period; and early initiation of breastfeeding.

Additional recommendations include:

- Shared decision making, as appropriate
- Endorse standards within the Washington State Hospital Association Labor Management Bundle including:
    - Maternal and fetal risk assessment
    - Induction of labor
    - Failed induction of labor
    - Management of first and second stage
    - Assessment of fetal status
    - Staffing
- Follow the 2012 Bree Collaborative labor standards for limiting scheduled deliveries before the 39th week, limiting elective inductions between 39 and up to 41 weeks except for language regarding favorability of the cervix, and for appropriate indications for cesarean sections.
    - While the ARRIVE trial supported elective 39 week inductions under controlled study criteria, no data exists to recommend this practice for the general population in a community setting.[28,29] If providers offer 39-week elective inductions, they should ensure that the gestational parent meets the eligibility criteria of the ARRIVE trial, that the decision for elective induction is a shared decision between the woman and her obstetric provider, and that it takes into consideration whether their hospital or facility has the appropriate resources available at that time.
- Comprehensive, client-centered contraceptive counseling that includes education about a broad range of contraceptive methods including immediate postpartum long-acting reversible contraception and facilitates shared decision-making when and if selecting a method.
- Postpartum discharge summary provided to the gestational parent and family that includes follow-up information for any complications of pregnancy (e.g., hypertension) or labor and delivery (e.g., cesarean section), contraceptive plan, next scheduled postpartum visit, next scheduled pediatric visit, infant feeding plan, and other information as relevant.

Postpartum Care

The bundle extends to 84 days (12 weeks) postpartum. Ideally, postpartum care would extend to 12 months. The workgroup recommends at least two postpartum visits with additional visits as needed. Postpartum care should be individualized following recommendations within the American College of Obstetrics and Gynecologists committee opinion on Redefining the Postpartum Visit. Higher-risk patients may need to be seen more often. Visits should at a minimum include the following services related to pregnancy and labor and delivery, and not unrelated services:

- Three weeks, or earlier as needed, postpartum visit including:
    - For patients with eclampsia, follow the Washington State Perinatal Collaborative postpartum follow-up care schedule.
    - Physical recovery from birth
    - Assessment of mood and emotional well-being including screening with a validated tool for depression (e.g., PHQ-9, Edinburgh Postnatal Depression Scale), anxiety (e.g., GAD), suicidality, and tobacco, alcohol, marijuana, and other drug use.
    - Sexuality including contraception (if needed) and discussing birth spacing
        - Same-day placement of long-acting reversible contraceptive, if desired
        - Use of shared decision making on contraception (e.g., Birth control options: Things to consider)
    - Infant care and feeding including breastfeeding
    - Sleep and fatigue
    - Other topics as needed or wanted by the patient

- Additional comprehensive visit prior to 12 weeks postpartum including:[30]
    - Assessment of mood and emotional well-being including screening with a validated tool for depression (e.g., PHQ-9, Edinburgh Postnatal Depression Scale), anxiety (e.g., GAD), suicidality, and tobacco, alcohol, marijuana, and other drug use.
    - Infant care and feeding including breastfeeding
    - Sleep and fatigue
    - Physical recovery from birth
    - Chronic disease management, if needed
    - Health maintenance
    - Identification of primary care provider to assume care after 12 weeks postpartum
    - Discussion of importance of vaccines
    - Gestational diabetes follow-up, if needed
    - Violence and abuse
    - Other topics as needed or wanted by the patient
- **Patient Support.** Support patients as needed or refer patients to available support services. See **Appendix F:** Support Services.

Recommendations for Stakeholder Groups

Health Care Purchasers (Employers and Union Trusts)

- Understand your population's need for and utilization of maternity care including: number of births annually, low-risk cesarean-section rate, total perinatal cost, and other metrics.
- Review available resources on maternity care for purchasers such as those through the Pacific Business Group on Health or the Integrated Healthcare Association.
- Present employee-facing materials as part of wellness programs or other engagement strategies that outline choices made during pregnancy such as those from the March of Dimes or Childbirth Connection.
- Investigate moving to value-based reimbursement in partnership with other purchasers such as the Washington State Health Care Authority.
    - Initial steps can include instituting a blended case rate for vaginal and cesarean-section and/or separate reimbursement for evidence-based supportive services such as for doulas.
    - The workgroup recommends a movement to a bundled payment as outlined in these guidelines that includes prenatal, labor and delivery, and postpartum care extending three months.
    - As high-deductible health plans may incentivize underutilization of beneficial services, alternative mechanisms such as moving the deductible above a specified allowance for the perinatal episode can be used. More information here.

Health Plans

- Offer a bundled payment model aligned with the framework described in these recommendations.

Emergency Department and Urgent Care

- **Cardiovascular Disease.** Assess all women of childbearing age for recent pregnancy and last menstrual period. Women may be at higher risk for cardiovascular disease up to five months postpartum and may present with shortness of breath, chest pain, unresolved cough or swelling. Follow algorithm for taking patient history, physical examination, and workup as outlined in the California Maternal Quality Care Collaborative Cardiovascular Disease in Pregnancy and Postpartum Toolkit.[31]
- **Hypertension and eclampsia.** Follow guidelines within Washington State Perinatal Collaborative postpartum recommendations.

Department of Health

- Create a mechanism to link the gestational parent's identification to the newborn's identification. This can be done on a statewide level (as in New York State) or through and in partnership with health plans.
- Provide comprehensive resources around social determinant of health screening resources including tools to measure need around social determinants of health. Tools include but are not limited to:
    - OneCare Vermont: Self-Sufficiency Outcomes Matrix
    - Oregon Family Wellbeing Assessment
    - Other tools

Washington State Health Care Authority

- Extend Washington State Medicaid eligibility to 12 months (365 days) postpartum at the same income level as for pregnancy.
- Through the Washington State Common Measure Set, continue to report on Cesarean Birth (*number of nulliparous women with a term, singleton baby in a vertex position delivered by cesarean birth),* Prenatal Care (*percentage of women who receive first trimester prenatal care),* Unintended Pregnancies (p*ercentage of pregnancies that was unintended at the time of conception),* Mental Health Service Penetration (*percentage of members with a mental health service need who received mental health services in the measurement year),* Substance Use Disorder Service Penetration *(percentage of members with a substance use disorder treatment need who received a substance use disorder treatment in the measurement year),* Antidepressant Medication Management (*percentage of members 18 years and older who were treated with antidepressant medication, had a diagnosis of major depression and who remained on an antidepressant medication treatment),* Audiological Evaluation No Later Than 3 Months of Age (*percentage of newborns who did not pass hearing screening and have an audiological evaluation no later than 3 months of age),* Childhood Immunization Status (*percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTap); three polio (IPV); one measles, mumps and rubella (MMR); three haemophilus influenza type B (HiB); three hepatitis B (HepB); one chicken pox (VZV); four pneumococcal conjugate (PCV); one hepatitis (Hep A); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday) and* Well Child Visits in the First Fifteen Months of Life (*percentage of members who turned 15 months old during the measurement year and who had six or more well-child visits with a PCP during their first 15 months of life).*

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 patients who have their 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

Appendix A: Bree Collaborative Members

Member	Title	Organization
Susie Dade, MS	Deputy Director	Washington Health Alliance
Peter Dunbar, MB ChB, MBA (Vice-Chair)	CEO	Foundation for Health Care Quality
Gary Franklin, MD, MPH	Medical Director	Washington State Department of Labor and Industries
Stuart Freed, MD	Chief Medical Officer	Confluence Health
Richard Goss, MD	Medical Director	Harborview Medical Center – University of Washington
Sonja Kellen	Global Benefits Director	Microsoft
Dan Kent, MD	Chief Medical Officer, Community Plan	UnitedHealthcare
Wm. Richard Ludwig, MD	Chief Medical Officer, Accountable Care Organization	Providence Health and Services
Greg Marchand	Director, Benefits & Policy and Strategy	The Boeing Company
Robert Mecklenburg, MD	Medical Director, Center for Health Care Solutions	Virginia Mason Medical Center
Kimberly Moore, MD	Associate Chief Medical Officer	Franciscan Health System
Carl Olden, MD	Family Physician	Pacific Crest Family Medicine, Yakima
Drew Oliveira, MD	Executive Medical Director	Regence BlueShield
Mary Kay O'Neill, MD, MBA	Partner	Mercer
John Robinson, MD, SM	Chief Medical Officer	First Choice Health
Jeanne Rupert, DO, PhD	Provider	One Medical
Angela Sparks, MD	Medical Director Clinical Knowledge Development & Support	Kaiser Permanente Washington
Hugh Straley, MD (Chair)	Retired	Medical Director, Group Health Cooperative; President, Group Health Physicians
Shawn West, MD	Medical Director	Premera BlueCross
Laura Kate Zaichkin, MPH	Director of Health Plan Performance and Strategy	SEIU 775 Benefits Group
Judy Zerzan, MD, MPH	Chief Medical Officer	Washington State Health Care Authority

Appendix B: Maternity Bundled Payment Model Charter and Roster

Problem Statement

The United States has the highest maternal death rate among developed nations with more than 50,000 mothers having life-threatening complications annually.[1,2] Mortality also differs greatly based on race with black mothers being three to four times as likely to die in childbirth than white mothers and more likely to suffer complications that lead to maternal death and injury.[1,3] Bundled payment models can address some of these preventable complications with various models being currently being used across the country.[4]

Aim

To recommend a bundled payment model for maternity care that includes pre- and post-natal care, addresses disparities, and includes relevant metrics.

Purpose

To propose evidence-based recommendations for bundling maternity care to the full Bree Collaborative on:

- Addressing racial and income disparities.
- Process and patient outcome metrics.
- Addressing preventable complications.
- Inclusion and exclusion criteria.
- Pre and post-natal care.
- Addressing barriers to integrating recommendations.
- Implementation pathway(s).
- Identifying other areas of focus or modifying areas, as needed.

Duties & Functions

The Maternity Bundle workgroup will:

- Research evidence-based and expert-opinion informed guidelines and best practices (emerging and established).
- Consult relevant professional associations and other stakeholder organizations and subject matter experts for feedback, as appropriate.
- Meet for approximately nine months, as needed.
- Provide updates at Bree Collaborative meetings.
- Post draft report(s) on the Bree Collaborative website for public comment prior to sending report to the Bree Collaborative for approval and adoption.
- Present findings and recommendations in a report.
- Recommend data-driven and practical implementation strategies.
- Create and oversee subsequent subgroups to help carry out the work, as needed.
- Revise this charter as necessary based on scope of work.

[1] Centers for Disease Control and Prevention. Pregnancy-Related Deaths. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-relatedmortality.htm
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Structure

The workgroup will consist of individuals confirmed by Bree Collaborative members or appointed by the chair of the Bree Collaborative or the workgroup chair. The chair of the workgroup will be appointed by the chair of the Bree Collaborative. The Bree Collaborative program director and program assistant will staff and provide management and support services for the workgroup.

Less than the full workgroup may convene to: gather and discuss information; conduct research; analyze relevant issues and facts; or draft recommendations for the deliberation of the full workgroup. A quorum shall be a simple majority and shall be required to accept and approve recommendations to send to the Bree Collaborative.

Meetings

The workgroup will hold meetings as necessary. The program director will conduct meetings along with the chair, arrange for the recording of each meeting, and distribute meeting agendas and other materials prior to each meeting. Additional workgroup members may be added at the discretion of the workgroup chair**.**

Member	Title	Organization
Carl Olden, MD (Chair)	Family Physician	Pacific Crest Family Medicine
Andrew Castrodale, MD	Family Physician	Coulee Medical Center
Angela Chien, MD	Obstetrics and Gynecology	EvergreenHealth
Neva Gerke, LM	President	Midwives Association of Washington
Molly Firth, MPH	Patient Advocate	
Lisa Humes-Schulz, MPA/ Lisa Pepperdine, MD	Director of Strategic Initiatives/ Director of Clinical Services	Planned Parenthood of the Great Northwest and Hawaiian Islands
Rita Hsu, MD, FACOG	Obstetrics and Gynecology	Confluence Health
Ellen Kauffman, MD	Medical Director Emeritus	Obstetrics Clinical Outcomes Assessment Program
Dale Reisner, MD	Obstetrics and Gynecology	Swedish Medical Center
Janine Reisinger, MPH	Director, Maternal-Infant Health Initiatives	Washington State Hospital Association
Mark Schemmel, MD	Obstetrics and Gynecology	Spokane Obstetrics and Gynecology, Providence Health and Services
Vivienne Souter, MD	Medical Director	Obstetrics Clinical Outcomes Assessment Program
Judy Zerzan, MD	Chief Medical Officer	Washington State Health Care Authority

Thank you also to Anaya Balter, RN, CNM, MSN, MBA, Clinical Director for Women's Health, Washington State Health Care Authority.

Appendix C: Guideline and Systematic Review Search Results

Literature search was limited to systems-level interventions.

	Year	*Title*	*Summary*
AHRQ: Research Findings and Reports	2012	Strategies To Reduce Cesarean Birth in Low-Risk Women	Virtually all studies within health care systems that changed policies or procedures evaluated strategies with more than one component. Seventeen of 31 studies reported statistically significant reductions in cesarean from 1.6 to 17.0 percent. Ten of the 17 effective strategies included audit and feedback of cesarean trend data to participating units and/or care providers, 7 included protocols for vaginal birth after prior cesarean, 6 included agreement on overarching labor and delivery guidelines, and 5 included active management of labor protocols. Overall, it is not possible to determine which components are definitively associated with reductions. No single strategy was uniformly successful in reducing cesareans. Strength of evidence was low to insufficient for all strategies. No approach dominated as a strategy appropriate to reduce use of cesarean among low-risk women in the United States.
	2013	Efficacy and Safety of Screening for Postpartum Depression	The potential effectiveness of screening for postpartum depression appears to be related to the availability of systems to ensure adequate follow-up of women with positive results. The ideal characteristics of a screening test for postpartum depression, including sensitivity, specificity, timing, and frequency, have not been defined. Because the balance of benefits and harms, at both the individual level and health system level, is highly dependent on these characteristics, broad consensus on these characteristics is needed.
Cochrane Collection (interventions targeted to low and middle-income countries excluded)	2019	Provision and uptake of routine antenatal services: a qualitative evidence synthesis	This review has identified key barriers and facilitators to the uptake (or not) of antenatal care services by pregnant women, and in the provision (or not) of good-quality ANC by healthcare providers. It complements existing effectiveness reviews of models of ANC provision and adds essential insights into why a particular type of ANC provided in specific local contexts may or may not be acceptable, accessible, or valued by some pregnant women and their families/communities. Those providing and funding services should consider the three thematic domains identified by the review as a basis for service development and improvement. Such developments should include pregnant and postnatal women, community members and other relevant stakeholders.
	2019	Support during pregnancy for women	Pregnant women need the support of caring family members, friends, and health professionals. While programmes that offer additional social support during pregnancy are unlikely to have a large impact on the proportion of low birthweight babies or birth before 37 weeks' gestation and no impact on stillbirth or

	at increased risk of low birthweight babies	neonatal death, they may be helpful in reducing the likelihood of caesarean birth and antenatal hospital admission.
2019	Perceptions and experiences of labour companionship: a qualitative evidence synthesis	We have high or moderate confidence in the evidence contributing to several of these review findings. Further research, especially in low- and middle-income settings and with different cadres of healthcare providers, could strengthen the evidence for low- or very low-confidence findings. Ahead of implementation of labour companionship, researchers and programmers should consider factors that may affect implementation, including training content and timing for providers, women and companions; physical structure of the labour ward; specifying clear roles for companions and providers; integration of companions; and measuring the impact of companionship on women's experiences of care. Implementation research or studies conducted on labour companionship should include a qualitative component to evaluate the process and context of implementation, in order to better interpret results and share findings across contexts.
2018	Non-clinical interventions for reducing unnecessary caesarean section	We evaluated a wide range of non-clinical interventions to reduce unnecessary caesarean section, mostly in high-income settings. Few interventions with moderate- or high-certainty evidence, mainly targeting healthcare professionals (implementation of guidelines combined with mandatory second opinion, implementation of guidelines combined with audit and feedback, physician education by local opinion leader) have been shown to safely reduce caesarean section rates. There are uncertainties in existing evidence related to very-low or low-certainty evidence, applicability of interventions and lack of studies, particularly around interventions targeted at women or families and healthcare organisations or facilities.
2018	Interventions during pregnancy to prevent preterm birth: an overview of Cochrane systematic reviews	Our overview found no up-to-date information in the Cochrane Library for the important treatments of cervical pessary, vaginal progesterone or cervical assessment with ultrasound. We found no high-quality evidence relevant to women at high risk of preterm birth due to multiple pregnancy. It remains important for pregnant women and their healthcare providers to carefully consider whether specific strategies to prevent preterm birth will be of benefit for individual women, or for specific populations of women.
2017	Schedules for home visits in the early postpartum period	Increasing the number of postnatal home visits may promote infant health and maternal satisfaction and more individualised care may improve outcomes for women, although overall findings in different studies were not consistent. The frequency, timing, duration and intensity of such postnatal care visits should be based upon local and individual needs. Further well-designed RCTs evaluating this complex intervention will be required to formulate the optimal package.

2016	Midwife-led continuity models versus other models of care for childbearing women	This review suggests that women who received midwife-led continuity models of care were less likely to experience intervention and more likely to be satisfied with their care with at least comparable adverse outcomes for women or their infants than women who received other models of care. Further research is needed to explore findings of fewer preterm births and fewer fetal deaths less than 24 weeks, and all fetal loss/neonatal death associated with midwife-led continuity models of care.
2015	Giving women their own case notes to carry during pregnancy	The four trials are small, and not all of them reported on all outcomes. The results suggest that there are both potential benefits (increased maternal control and increased availability of antenatal records during hospital attendance) and harms (more operative deliveries). Importantly, all of the trials report that more women in the case notes group would prefer to carry their antenatal records in another pregnancy. There is insufficient evidence on health-related behaviours (smoking and breastfeeding), women's satisfaction, and clinical outcomes. It is important to emphasise that this review shows a lack of evidence of benefit rather than evidence of no benefit.
2015	Alternative versus standard packages of antenatal care for low-risk pregnancy	In settings with limited resources where the number of visits is already low, reduced visits programmes of antenatal care are associated with an increase in perinatal mortality compared to standard care, although admission to neonatal intensive care may be reduced. Women prefer the standard visits schedule. Where the standard number of visits is low, visits should not be reduced without close monitoring of fetal and neonatal outcome.
2013	Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: a qualitative evidence synthesis	Rather than being seen as a lesser-trained health worker, LHWs may represent a different and sometimes preferred type of health worker. The close relationship between LHWs and recipients is a programme strength. However, programme planners must consider how to achieve the benefits of closeness while minimizing the potential drawbacks. Other important facilitators may include the development of services that recipients perceive as relevant; regular and visible support from the health system and the community; and appropriate training, supervision and incentives.
2012	Traditional birth attendant training for improving health	The results are promising for some outcomes (perinatal death, stillbirth and neonatal death). However, most outcomes are reported in only one study. A lack of contrast in training in the intervention and control clusters may have contributed to the null result for stillbirths and an insufficient number of studies may have contributed to the failure to achieve significance for early neonatal deaths. Despite the additional studies

		behaviours and pregnancy outcomes	included in this updated systematic review, there remains insufficient evidence to establish the potential of TBA training to improve peri-neonatal mortality.
Health Technology Assessment Program	2019	Cell-free DNA (cfDNA) prenatal screening for chromosomal aneuploidies	In-progress
	2010	Routine ultrasound for pregnancy	Routine Ultrasound is a covered benefit with conditions consistent with the criteria identified in the reimbursement determination. Routine Ultrasound is a covered benefit for pregnant women, routine screening ultrasound is a covered benefit, with the following conditions: 1. One Ultrasound in week 13 or earlier; 2. One Ultrasound in weeks 16 thru 22; 3. Other Ultrasound subject to agency determination
Centers for Disease Control and Prevention	Patient facing information on pregnancy here.		
Institute for Clinical and Economic Review	No specific maternal health or pregnancy-related reviews other than those that may refer to diagnosis comorbid with pregnancy such as depression.		
Veterans Administration Evidence-based Synthesis Program	2015	Understanding the Intervention and Implementation Factors Associated with Benefits and Harms of Pay for Performance Programs in Healthcare	Seventeen studies examining processes of care associated with the Quality Outcomes Framework met inclusion criteria. The included studies examined a wide range of processes, such as influenza immunizations, prescribing patterns, and the measurement and/or recording of numerous incentivized indicators such as blood pressure, hypertension, glucose, total cholesterol, smoking status and cessation advice, and body mass index. Findings indicate modest improvements associated with the QOF, with the largest increases during the program's first and second year, followed by either a plateau or slowing in improvement rates.

The American College of Obstetricians and Gynecologists	2018	Maternal Immunization	Obstetrician–gynecologists and other obstetric care providers should routinely assess their pregnant patients' vaccination status. Based on this assessment they should recommend and, when possible, administer needed vaccines to their pregnant patients. There is no evidence of adverse fetal effects from vaccinating pregnant women with inactivated virus, bacterial vaccines, or toxoids, and a growing body of data demonstrate the safety of such use. Women who are or will be pregnant during influenza season should receive an annual influenza vaccine. All pregnant women should receive a tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) vaccine during each pregnancy, as early in the 27–36-weeks-of-gestation window as possible.

Appendix D: Exclusions

The workgroup recommends administrative and clinical exclusions, clinical exclusions being individually defined. The workgroup does not recommend exclusions based on a behavioral health diagnosis (including substance use disorder or drug use) or on Body Mass Index (BMI). The following are meant as examples:

Ohio Medicaid excludes the following diagnoses:[32]

- Cancer under active management
- CNS infection and poliomyelitis
- Coma or brain damage
- Cystic fibrosis
- Ectopic pregnancy
- End stage renal disease
- Human Immunodeficiency Virus
- Intrauterine death or intrauterine hypoxia and birth asphyxia
- Paralysis or multiple sclerosis
- Parkinson's disease
- Prolapse of female genital organs
- Solid organ transplants (excluding corneal)
- Multiple gestation
- Multiple other comorbidities
- Death within episode window

The HPC-LAN Maternity Bundle recommends categories for exclusion including:

- Pre-existing health conditions, such as diabetes, hypertension, epilepsy, cancer, renal disease, obesity, advanced maternal age, and mental health conditions;
- Lifestyle choices: Cigarette smoking, alcohol use and illegal drug use;
- Previous pregnancy complications, such as genetic or congenital disorder, stillborn, preterm delivery; and
- Pregnancy complications, which can also arise during the pregnancy and birth, such as: Multiple gestation, fetal growth restriction, prolonged premature rupture of membranes, or placenta abnormalities.

Appendix E: Included Services and Coding

Global Obstetrical Package – CPT codes:

- 59400
- 59510
- 59610
- 59618

Global obstetrical care includes antepartum care, delivery and postpartum care 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)

Appendix F: Support Services

Gestational parents, their babies and families may require supportive services to align person-centered mother-baby care with their social and physical needs, goals, values, capacities and preferences. This section focuses primarily on support services for Apple Health moms and babies. To support the mother's choices and goals, support services should be integrated into the birth plan and clinical care plan.

Commercial health plans may provide support services using maternity case management, lactation consulting, breastfeeding support, or other services during the maternity and newborn episode. Gestational parents may also self-pay for support services, such as doulas, that follow their birth plan and pregnancy and delivery goals. Clinicians and their teams can learn more about support services for mothers and babies with commercial health plan coverage by contacting the woman's health plan.

Apple Health Member Support Services

First Steps Maternity Support Services (MSS): Any pregnant or up to 60 days postpartum Medicaid enrollee is eligible for MSS. MSS is an optional, enhanced service which is reimbursed fee for service. The services provided may take place in an office setting, the client's home or an alternate location. The purpose of MSS is to improve and promote healthy birth outcomes using an interdisciplinary team consisting of a registered nurse, behavioral health specialist, and registered dietitian. Some MSS providers also have community health workers as part of the team. MSS helps clients access prenatal care as early as possible and obtain health care for eligible infants. MSS covered services consist of in-person screening for risk factors, interventions for identified risk factors, brief counseling, education related to pregnancy and infant health, basic health messages, breastfeeding support, referrals to community resources, case management, and care coordination.

> For more information and to find an MSS provider in your area, check the MSS Provider Directory, click here or call the Help Me Grow Washington Hotline at 1-800-322-2588.

First Steps Childbirth Education (CBE): Any pregnant client covered by Washington Medicaid is eligible for at least six hours of education provided by a Health Care Authority-approved CBE educator who accepts Apple Health. Education must include topics related to pregnancy, labor and birth, and newborn care.

> For more information and to find a HCA-approved CBE educators, click here or call the Help Me Grow Washington Hotline at 1-800-322-2588.

Doula: The goal of doula services is to reduce disparities in birth outcomes among racial, ethnic, and geographic populations; improve birth outcomes by reducing preterm birth, low birth rate, cesarean sections; shorten labor time; reduce the need for pain medications; reduce consequences associated with morbidities such as severe lacerations and hemorrhage; and improve rates of breastfeeding and length of time babies are breastfed. Recent legislation requires the Health Care Authority to implement doula services through the First Steps Maternity Support Services (MSS) program. HCA is collaborating with partner agencies, doula advocates, and MSS providers to determine cost savings and how best to

implement. HCA is also working with the Centers for Medicare and Medicaid Services (CMS) to add doulas as an allowable provider in the Medicaid State Plan in order to reimburse for services.

> Please sign up for HCA's GovDelivery messages to stay informed as HCA works to implement doula services.

Parent-Child Assistance Program (PCAP): PCAP is an evidence-based home visitation case-management model for mothers who abuse alcohol or drugs during pregnancy. Its goals are to help mothers build healthy families and prevent future births of children exposed prenatally to alcohol and drugs. A client who is pregnant or postpartum, self-reports heavy substance use during the current or recent pregnancy, and has not successfully accessed community resources for substance use treatment and long-term recovery is eligible for PCAP.

> More information about the PCAP program can be found here.

Additional Support Services

Home Visiting for Families (DCYF): This program provides voluntary services in the home to expecting parents and families with infants and young children. Visits focus on linking families to health care and other community resources, promoting strong parent-child attachment, and coaching parents on learning activities to help their child's development. Visits also include regular screenings to help parents identify possible health and developmental issues.

> Find a local home visiting program by calling the Help Me Grow Washington Hotline at 1-800-322-2588.

Partnership Access Line (PAL) for Moms: University of Washington (UW) Partnership Access Line for Moms (PAL for Moms) is a free telephone consultation service for health care providers caring for patients with mental health problems who are pregnant, postpartum, or planning pregnancy. Any health care provider in Washington State can receive consultation, recommendations, and referrals to community resources from a UW psychiatrist with expertise in perinatal mental health.

Psychiatrists provide consultation on any mental health-related question for patients who are pregnant, in the first year postpartum, who are planning pregnancy, or who have pregnancy-related complications (e.g. pregnancy loss, infertility). Topics may include depression, anxiety, or other psychiatric disorders; adjustment to pregnancy loss, complications, or difficult life events; risks of psychiatric medications; non-medication treatments; and consulting about women on psychotropic medications who are wanting to or thinking about getting pregnant.

Perinatal psychiatrists are also available to help any practice thinking about instituting routine screening for depression. They can come to a clinic and provide a broad overview of best practices for depression screening and follow-up in the perinatal period.

> The phone line 877-725-4666 (PAL4MOM), is staffed weekdays from 9 AM to 5 PM. Providers can call at any time and receive a call back within one working day. Providers can also e-mail with any questions or to set up a consultation at ppcl@uw.edu.

211: 2-1-1 is an easy-to-remember phone number for people to call for health and human service information and referrals and other assistance to meet their needs. Pregnant and postpartum patients can call 2-1-1 (or 1-877-211-9274) to get connected with mental health providers within their area.

Click here for more information.

WithinReach: A not-for-profit organization that provides multiple ways for people to access support in-person, over the phone and online in order to find resources in their community. WithinReach is a leader and coalition builder for programs such as Basic Food education, Medicaid outreach and immunization action in Washington State. WithinReach's ParentHelp123 website assists pregnant patients and families in finding resources like food banks, play and learn groups, free or low-cost health clinics by entering their zip code.

Patients can also call WithinReach's Help Me Grow Hotline at 1-800-322-2588 to apply for Medicaid online or be referred to other resources.

Crisis Line: For patients thinking of suicide or are in crisis can call 1-866-427-4747.

Team-Based Care

Team-based care supports success in implementing bundled episode care delivery and payment. The World Health Organization defines team-based care as "*the provision of comprehensive health services to individuals, families, and/or their communities by at least two health professionals who work collaboratively along with patients, family caregivers, and community service providers on shared goals within and across settings to achieve care that is safe, effective, patient-centered, timely, efficient, and equitable*."[33]

Team-based care engages the primary obstetric or midwifery clinicians and their office-based team (including nurses, medical assistants, and other staff) in a model to manage a specific panel of patients with a focus on person-centered care. Care teams explore opportunities to improve and optimize efficient, high quality, person-centered care delivery. The team develops clinical workflow, processes and competencies to assure all members are engaged in delivering and coordinating patient care at the right time, using the right team member to support person-centered care in partnership with moms and families and other clinical and community-based organizations. This may mean some team members take on new roles in performing screening, interventions or education, and coordinating care to support clinicians in focusing on clinical care planning and leading their team.

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.[34] 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.[35] 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.[36] 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.[37] Agonist medication therapy, methadone or buprenorphine, is generally recommended for patients who are pregnant. [38,39] 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

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