I. PURPOSE:

To provide routine prenatal care to all women who are pregnant or are considering pregnancy. Care will encompass preventive care, counseling, and screening for risks to maternal and fetal health. The goal of prenatal care is to facilitate birth of a healthy baby with minimal risk for the mother. Several key components will aid in this:

- Early and accurate estimation of gestational age and due date
- Identification of risks and potential complications
- Ongoing evaluation of health status for mother and fetus
- Anticipation of problems and interventions as indicated
- Patient education and communication

II. INCLUSION CRITERIA:

All patients presenting with a possibility of pregnancy should be evaluated promptly to facilitate early entry into prenatal care.

III. RESPONSIBILITY:

A. Obstetrics and Gynecology
B. Community Health Services

IV. GUIDELINE:

A. The initial visits to complete the prenatal assessment should take place in the first trimester, before 13 weeks from the last menstrual period (LMP). HEDIS measurement is 13 weeks.
   1. The obstetric intake and ongoing assessments: medical and obstetric history, physical exam, indicated laboratory/diagnostic studies, assessment, assessment of support system, psychosocial, cultural, education and counseling. Please refer to the attached table, which outlines the standard elements of perinatal care.
   2. During the first prenatal visit general information about the course of the patient’s pregnancy should be discussed including: Expected laboratory studies, course of pregnancy, signs and symptoms to report to their healthcare provider and how to report them, health care team members roles, anticipated schedule of visits, costs, risk counseling, psychosocial topics, family history and genetic testing.

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3. Early and accurate dating of the pregnancy, by Ultrasound and LMP or in the case of assisted reproductive technology utilize the data available, is important to determine: appropriate obstetric care, monitoring of fetal growth, for accurate treatment of preterm and post-term births and related morbidities.

4. Folic acid supplementation: initiation is recommended as early as possible (ideally pre-conception). Folic acid has been shown to reduce the risk of neural tube defects.

5. Promote continuity of care by utilizing suitable standardized documentation forms/databases in the electronic medical record.). Initiate documentation at intake for all pregnant patients. Documentation should include a problem list and updated throughout the pregnancy.

B. Ongoing Prenatal Care:
1. Prenatal care should be provided by a single provider whenever possible or group prenatal care visits appropriate to risk levels.

2. The frequency of visits is determined by the patient’s individual needs and risk factors. Visits should be scheduled to include screening tests associated with gestational age. The ACOG recognizes the following schedule for low risk women:
   a. Weeks 6-10: at least one virtual nurse intake visit
   b. Weeks 8-12: at least one in person OB provider visit
   c. Weeks 16-18: at least one virtual provider visit
   d. Weeks 20-22: ultrasound and at least one in person provider visit
   e. Weeks 24-36: every 4 weeks
   f. Weeks 36-delivery: every 2 weeks

3. High-risk women may need more frequent visits to monitor for changes in condition and status.

4. Visits should allow enough time to accomplish the following:
   • monitor the progression of the pregnancy
   • assess the well-being of the fetus and the mother and provide reassurance
   • provide education, recommend screening, and interventions
   • detect medical and psychosocial complications and develop interventions as indicated

5. Prenatal patients should be counseled on what screening tests are available, what the tests are for, possible risks to the mother and fetus, and the choices she will face once the results are obtained.

6. Screen mother for prenatal depression symptoms as well as adequate access to financial resources and emotional support.

7. Screen mother for substance use disorder as well as adequate access to services and resources.

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C. Genetic Screening:
1. All women should be offered aneuploidy screening; those who meet criteria can be offered referral to genetics.
2. Other indications for genetic referral include:
   a. Fetal structural anomalies
   b. Ultrasound markers of aneuploidy
   c. History of previously affected pregnancy
   d. Couples with known translocations, chromosome inversions, or aneuploidy
   e. Women with a positive maternal serum screen should be offered prenatal diagnosis by amniocentesis or chorionic villus sampling (CVS)
3. Other tests should be offered to pregnancies of specific ethnic backgrounds.
   a. Hemoglobinopathies:
      i. African, Mediterranean, Middle Eastern, West Indian, Hispanics, and Southeast Asian descent: risk for sickle cell anemia, β-thalassemia, or other hemoglobinopathies. These patients should be screened by evaluation of MCV and ferritin. If MCV is <80fL and normal serum ferritin greater than 50 mcg/dL, then check hemoglobin electrophoresis as indicated by the Evaluation, Diagnosis, and Care of Women with Anemia During Pregnancy guidelines (Attachment C).
      ii. Southeast Asian descent: risk for α-thalassemia. These patients should be screened by evaluation of MCV. If MCV is <80fL, hemoglobin electrophoresis and ferritin should be offered. The combination of depressed MCV with normal electrophoresis and ferritin is consistent with α-thalassemia.
      iii. Although due to the increasingly diverse ethnic and geographic distribution of hemoglobinopathy genotypes in the United States it may be best to take a comprehensive personal and family history to determine if someone has any risk factors of hemoglobinopathy and offer screening to those individuals.
   b. Cystic Fibrosis: To all women.
      At present, all perinatal patients accessing perinatal care through DHMP or DH clinics are offered CF and Spinal Muscular Atrophy (SMA) screening. This can be done at intake or through referral to genetics.
   c. Tay-Sachs disease: Ashkenazi Jews, Cajuns, French Canadian
4. Zika Virus: Denver Health will follow the current recommended guideline by the CDC for travel to an area with Zika virus transmission as well as recommendations for screening, testing, and management of pregnant returning travelers.
   a. Health care providers will ask about recent travel

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b. Refer to “Who needs Zika Testing Flowchart” for further care and recommendations.
c. Additional information can be accessed through the CDC at [www.cdc.gov/zika](http://www.cdc.gov/zika)

D. Additional Considerations:
1. Diabetic screening: See “Diabetes Screening and Diagnosis in Pregnancy and the Postpartum Period for general information on GDM diagnosis in pregnancy and postpartum follow up testing for women with GDM.”
2. See “Outpatient Management of Diabetes in Pregnancy and Postpartum.” For Ambulatory Care Services (ACS) maternity care providers offering care to women with GDM well controlled with diet or oral medications in the antepartum period please refer to this guideline for care details.
3. Tuberculosis (TB) Screening:
   a. The outpatient antenatal screening for TB is defined in “Denver Health Ambulatory Care Services Protocol for Latent TB infection (LTBI), Diagnosis and Management, Pediatric and Adult patients.”
   b. In the rare case where a pregnant woman with active TB or at high risk for active TB is admitted to the hospital, please refer to “Tuberculosis in Pregnancy.”
4. Group B Streptococcus (GBS) screening no earlier than 35 weeks. Refer to “Perinatal Group B Streptococcal Screening and Treatment.”
5. Human Immunodeficiency Virus (HIV) in pregnancy refer to “Peripartum HIV Testing and Treatment.”
6. Hepatitis C Virus (HCV) screening is recommended with each pregnancy. Refer to “Hepatitis C Virus (HCV) in Pregnancy.”
   a. The standing order and guidelines for HCV screening is defined in “Rapid Hepatitis C Virus Antibody Test Standing Order.”
7. Prolonged pregnancy management refer to “Prolonged Pregnancy Management.”
8. Evaluation and diagnosis of women with anemia during pregnancy refer to “Evaluation, Diagnosis and Care of Women with Anemia During Pregnancy.”
9. For antepartum consultations in the outpatient and inpatient settings, providers refer to:
   b. “Family Medicine Inpatient Consultation of OB Services.”

E. Vaccination:
1. All pregnant women should be offered vaccination for influenza (in season) regardless of gestational age. No evidence of risks have been found when vaccinating pregnant women with an inactive virus or bacterial vaccines or toxoids and should be administered. Since live vaccines

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have not been studied on risk to the fetus they should be avoided during pregnancy. Risks and benefits should be considered when deciding on a vaccine not routinely recommended during pregnancy.

2. Tetanus-Diphtheria-Pertussis (Tdap) should be given to pregnant women in each pregnancy regardless time elapsed from last Tetanus (Td) or Tdap vaccine. Vaccine should ideally be administered between 27-36 weeks.

3. Other vaccines recommended in pregnancy include hepatitis A, hepatitis B, and for patients with prior splenectomy or functional asplenia the pneumococcal vaccine is recommended.

4. COVID-19 vaccination is recommended for all people 6 months and older. This includes people who are pregnant, breastfeeding, trying to get pregnant now, or might become pregnant in the future. CDC also recommends COVID-19 vaccines for infants 6 months and older who’s mother was vaccinated or had a COVID infection before or while pregnant. People who are pregnant should stay up to date with their COVID-19 vaccines, including getting a COVID-19 booster shot when it’s time to get one.

5. Women noted to be Rubella-non immune of prenatal labs will be offered vaccination in the immediate postpartum interval while in hospital.

F. Postpartum Care:

1. Postpartum care should be received 7-84 days after delivery to meet HEDIS requirements.
2. Please refer to Attachment A which outlines the recommended elements of care in the postpartum period.
3. Patients are encouraged to attend a comprehensive visit in the 6 week postpartum period:
   a. 14 days (often with new infant for dual care)
   b. between 7-84 days (HEDIS standard) to complete care goals
4. Early and additional postpartum visits may be scheduled as indicated to follow up on high risk or other medical conditions (ex: surgical post-operative visit, blood pressure checks.)
5. Ongoing breastfeeding support should be offered to all patients.
6. Review need for pap testing as indicated per protocol.
7. Screen mother for postpartum depression symptoms as well as adequate access to financial resources and emotional support.

V. Relevant Denver Health Policies and Procedures:

a. Women’s Care Genetics Clinical Referral Guideline PSID# 5322196
b. Diabetes Screening and Diagnosis in Pregnancy and the Postpartum Period PSID# 6458836
c. Outpatient Management of Diabetes in Pregnancy and Postpartum. PSID# 6434217

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d. Tuberculosis in Pregnancy PSID# 7451961
e. Latent TB Infection Screening and Treatment PSID# 5722779
f. Perinatal Group B Streptococcal Screening and Treatment PSID# 7730757
g. Peripartum HIV Testing and Treatment PSID# 7030869
h. Prolonged Pregnancy Management PSID# 6912601
i. Evaluation, Diagnosis and Care of Women with Anemia During Pregnancy PSID# 4881879
j. Obstetrical Consultative and Referral Practices Between the Departments of Family Medicine and Obstetrics and Gynecology in Outpatient PSID# 3481291
k. Family Medicine Inpatient Consultation of OB ServicesPSID# 7058425

VI. REFERENCES:

VII. ATTACHMENTS
Attachment A: Low Risk Schedule for Antenatal and Postpartum Care
Attachment B: Zika Information

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