Piedmont WellStar HealthPlans, Inc.
PRENATAL CLINICAL GUIDELINE

Relevance to Population: Piedmont WellStar HealthPlans, Inc. is dedicated to high-quality evidence based prenatal care of the membership of women of childbearing age, including the population at high risk. Prenatal care includes preconception care that identifies health and social risks that leads to poor pregnancy outcomes, low birth weight and infant mortality. The major goal of prenatal care is to ensure the birth of a healthy baby with minimal risk for the mother.

Population Covered by Guideline: All pregnant women.

Clinical Indicators Measured by Piedmont WellStar HealthPlans, Inc.:

1. Screening for Timeliness of Prenatal Care. HEDIS®
2. Screening for Postpartum Care. HEDIS®

Definition: Care provided the pregnant woman in order to prevent complications and decrease the incidence of maternal and prenatal mortality.

Prenatal Care:
The current American College of Obstetricians and Gynecologists (ACOG) *Guidelines for Perinatal Care,* Sixth Edition October 2007 is available at http://www.acog.org/resources_and_publications/ [1]

The following is a summary of the key clinical indicators of the guideline.

Office visits

- Frequency:
  - Advise office visit at 8-10 weeks of pregnancy (or earlier if the patient is at risk for ectopic pregnancy)
  - Every 4 weeks for first 28 weeks.
  - Every 2 – 3 weeks until 36 weeks gestation.
  - Every week after 36 weeks gestation.

  Frequency of visits is determined by individual needs and assessed risk factors.

  Goal: Coordination of care for detected medical, psychosocial complications and risk factors.

First Prenatal Visit (8-10 weeks of pregnancy if first contact earlier)

- Assessment
  - Initial history and physical.
  - Family medical history.
  - Genetic history.
  - General exam to confirm pregnancy.
  - Complete needs assessment.
  - Preterm labor risk, education and prevention.
  - Assess for tobacco, alcohol, drug use.
  - Domestic violence screening.
  - Screen for depression (current or historical) using a standardized screening tool.
  - Prescriptions: prenatal vitamins or iron supplement.
- Education and counseling
  - Scope of care provided in the office and anticipated schedule of visits.
  - Expected course of pregnancy.
  - Advise regarding specific complications.
  - Discuss routine lab studies/testing.
  - Discuss genetic counseling and testing.
  - Discuss high risk conditions.

- Education regarding: Labor and delivery, nutrition, exercise, working, air travel, routine dental care, tobacco use and smoke exposure, alcohol/drug consumption, over-the-counter medications, pets, etc.
- Practices to promote health maintenance such as use of safety restraints including lap and shoulder belts.
- Assess barriers to care (transportation, child care issues, work schedule).
- Encourage maternity program enrollment and prenatal classes.
- Offer influenza vaccination, regardless of the stage of pregnancy, if the woman will be pregnant during the influenza season.

- Routine Laboratory/diagnostic studies
  - Blood type and screen.
  - CBC for H&H.MCV.
  - Platelet Count
  - Hepatitis B surface antigen (HBsAg).
  - RPR or VDRL.
  - Screening for gestational diabetes if at high risk (see section on gestational diabetes below).
  - HIV testing unless they decline (opt-out approach). For women that decline the provider should address objections and encourage testing strongly
  - Cervical Cancer Screening (if the patient is due).
  - Urine C&S.
- Genetic and infectious disease testing and counseling
  - Cystic fibrosis carrier screening should be offered to all couples. Genetic counseling is recommended for individuals with a family history of cystic fibrosis or those found to be carriers. [11,14]
  - Hemoglobinopathy carrier screening should be offered to individuals of African, Southeast Asian and Mediterranean descent. Couples at risk for having a child with sickle cell disease or thalassemia should be offered genetic counseling to review prenatal testing and reproduction options. [12,13]
  - All pregnant women should be screened for chlamydia during the first prenatal visit. Those women that are less than or equal to 25 years of age or at risk for chlamydia infection should be screened again during the third trimester. [2,9,15]
  - All pregnant women at risk for sexually transmitted diseases should be screened for gonorrhea at the initial prenatal visit. Risk factors include age less than 25, a previous infection, new or multiple sex partners, inconsistent condom use, commercial sex work and drug use. If positive, counsel to decrease risk of reinfection and refer partner for testing and treatment. Repeat screening is recommended during the third trimester of pregnancy. [9]
  - Rescreen for HIV in the third trimester for women at high risk of acquisition[19]
  - Rescreen for syphilis in women at high risk of acquisition[19]
- Goals:
  - Improve the timeliness of prenatal care.
  - Prenatal care within the first trimester or within 42 days of enrollment.
  - Provide education and recommended screening and intervention.
  - Monitor progression of pregnancy.
  - Assess the well-being of the woman and her fetus.
  - Early detection and intervention of high risk factors.
  - Complete 80% of expected prenatal visits. (ACOG recommends 14 visits).
  - Decrease the incidence of smoking during pregnancy.
  - Improve the frequency of appropriate testing during pregnancy.

Gestational Diabetes (GDM) Risk[1]

Risk assessment for GDM should be undertaken at the first prenatal visit and categorized as follows:

- High Risk Status
  - Prepregnancy BMI ≥ 27 kg/m.[3,7]
  - Personal history of GDM.
  - Glycosuria.
  - Previous delivery of a baby greater than 9 pounds (4.1 kg).
  - Family history of diabetes.
- Intermediate Risk Status
  - Neither high-risk nor low-risk criteria are met.
- Low Risk Status
  - Age <25 years old.
  - Weight normal before pregnancy (BMI ≤ 25).
  - Member of an ethnic group with low prevalence of GDM.
  - No known diabetes in first-degree relatives.
  - No history of abnormal glucose tolerance.
  - No history of poor obstetric outcome.

A woman with a low risk does not require additional glucose screening. Women that fall into the high risk category should be screened using a glucose challenge test (GCT) as soon as possible. If the screening test is abnormal, further testing should be done using a three-hour glucose tolerance test to determine if the woman has GDM. If the initial screening is negative high risk women should be have a repeat GCT at 24-28 weeks gestation. Women at intermediate risk should also be screened with a GCT at 24-28 weeks. Any woman with an abnormal result should be further tested using a three-hour oral glucose tolerance test to determine the presence of GDM.

When the above criteria for Low Risk Status were applied to data from more than 18,000 pregnancies in a predominantly Caucasian population, researchers determined that only 3% of women with GDM would not have been diagnosed.[4] However, only 10% of the population would have been exempted from screening. For this reason, many physicians elect to screen all pregnant patients as a practical matter.

Recent research by the Hyperglycemia and Adverse Pregnancy Outcomes (HAPO) has suggested that using a one-step screening method, instead of the two-step method described above, results in more accurate identification of women with GDM. The study also emphasized that universal screening is the best method to improve diagnosis results. The International Association of Diabetes and Pregnancy Study Groups (IADPSG) and the American Diabetes Association (ADA) are currently working with U.S. obstetrical organizations to consider adopting diagnostic criteria recommended by the HAPO study. A diagnosis of "Overt Diabetes" is also under consideration for high risk women who meet the criteria for GDM prior to 24 weeks gestation.

Subsequent Prenatal Visits

- Every visit
  - Vital signs.
  - Weight (height/weight/BMI – initial visit).
  - Fetal assessment from 10th week.
  - Uterine size for progressive growth and consistency with EDD.
  - Domestic violence screening.
  - Assessment of tobacco use and smoke exposure.
- 11 – 14 weeks
  - Pelvic exam if fetal heart tones (FHT) not heard with amplification.

- Discuss breastfeeding.
- Review laboratory data.
- Offer screening tests for aneuploidy. This would include First Trimester Screening (nuchal translucency combined with blood tests) if available. [5,9]
  - All pregnant women, regardless of age, should be offered screening for aneuploidy.
  - Women found to have increased risk for aneuploidy with screening should be offered genetic counseling and the option of chorionic villus sampling (CVS) or second trimester amniocentesis
- If previous C-section, discuss VBAC and its risks, benefits and alternatives.

- 15-20 weeks
  - Offer ultrasound
  - Offer screening test for aneuploidy with the Multiple Marker Screen (quad screen) if not done in first trimester (triple/quad screen). This also incorporates neural tube defect (NTD) screening. [5,9]
    - Screening and invasive diagnostic testing for aneuploidy should be available to all women who present for prenatal care before 20 weeks of gestation regardless of maternal age.
    - Offer genetic counseling and the option of second trimester amniocentesis to women found to have increased risk for aneuploidy with screening.
  - Offer neural tube defect screening (MSAFP) to women who elect first trimester screening for aneuploidy.
  - Advise regarding normal fetal movement; review signs and symptoms of pre-term labor (PTL).
  - Review results of MSAFP/triple/quad screen and ultrasound if not already done.

- 20 weeks
  - Tdap should be administered after 20 weeks in women that have not previously received the vaccine. Providers should counsel the patient, adolescents and adults that will have close contact with the baby during the first 12 months of life should also receive Tdap[20].

- 24 – 28 weeks
  - Screening for gestational diabetes.
  - Select baby's medical provider.
- 28 weeks
  - Repeat type and screen if Rh negative, H&H.
  - Administer Rhogam if Rh (-) and indirect Coombs (-).
  - Confirm and document name of baby's medical provider.
  - Discuss cord blood banking to allow a pregnant woman to make an informed decision on whether to participate in a public or private umbilical cord blood banking program.
- 32 – 34 weeks
  - Repeat testing for women at risk for sexually transmitted disease, including RPR, HIV, gonorrhea and chlamydia. [2,15]
  - Discuss Group B Strep protocol.
- 36 weeks
  - Determine fetal position.
  - Group B Strep screen.
  - Discuss the risks and benefits of HSV prophylaxis in women with a history of genital herpes.
  - Labor education: latent phase of labor, rupture of membranes (ROM), active labor management, analgesia in labor.

- 38 weeks
    - Review labor education; discuss contraception and prescribe contraception as needed.
- > 41 weeks
    - Baseline nonstress test (NST) or contraction stress test (CST), ultrasonography (US), biophysical profile (BPP) or a combination of these tests.
    - Discuss labor induction > 41 weeks.

Postpartum Care

- Postpartum vaccine
    - Women (including women who are breastfeeding) who have not received a dose of Tdap previously should receive Tdap after delivery and before discharge from the hospital if 2 years or more have elapsed since the most recent dose of Td. If Tdap can't be administered before discharge, it should be administered as soon as feasible. The dose of Tdap substitutes for the next decennial dose of Td.[6]
- Postpartum visit
    - On or between 21 days and 56 days after delivery
        - Pelvic exam and /or weight, BP, breast, and abdomen exam.
        - Screen for postpartum depression. Refer for intervention if indicated.
        - Screen for domestic violence.
        - Discuss sexual activity and contraception.
        - Review nutrition and exercise.
        - Discuss method of feeding (breast or bottle).
- Women with GDM should be screened for diabetes 6-12 weeks postpartum and should be followed up with subsequent screening for the development of diabetes or pre-diabetes.[7]

Goal: Return to optimal maternal health and recovery post pregnancy

Clinical practice guidelines are designed to assist clinicians by providing a framework for the evaluation and treatment of patients. The prenatal clinical practice guideline is based on the most current recommendations from the American College of Obstetricians and Gynecologists in addition to the scientific evidence sources referenced below. The current ACOG guideline for the management of prenatal and postpartum care is available at http://www.acog.org/resources_and_publications/

Additional Resources for Piedmont WellStar HealthPlans Members

- **My Health Advice Line** is staffed by experienced Registered Nurses and is available 24/7 to provide telephonic support to members. Call 855-514-3679.
- **Online** interactive preventive health programs and resources are available by logging in at www.pwplans.org/individuals.

Scientific Evidence Sources:

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17. Lockwood CJ, Magriples U. Prenatal care (after initial prenatal assessment). *UpToDate*; Ver. 19.2, updated Aug 6, 2012.
18. Berens P. Overview of postpartum care. *UpToDate*; Ver 19.2, updated May 18, 2012.
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20. Centers for Disease Control and Prevention. Updated Recommendations for Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccine (Tdap) in Pregnant Women and Persons Who Have or Anticipate Having Close Contact with an Infant Aged <12 Months – Advisory Committee on Immunization Practices (ACIP), 2011. MMWR 2011:60;41:1424-1426.