



Clinical Guideline: Routine and High Risk Prenatal Care

Relevance to Population: Maternity is one of the top diagnoses in the Gateway population with maternal age ranging from 10 to 46. In 2008, there were 9526 deliveries plan wide, with a high risk delivery rate of 42.05%. NICU admits /1000 live births was 84.69 plan wide in 2008. The two most frequent risk factors are smoking followed by depression. Smoking is associated with increased perinatal mortality, ectopic pregnancy and bleeding complications of pregnancy and a higher incidence of small, low birth weight babies and preterm deliveries. Untreated depression has been associated with unfavorable health behaviors in pregnancy and subsequent fetal growth restrictions, preterm deliveries, placental abruption, and newborn irritability. With early identification of maternal risk factors, Gateway can make an impact on reducing risk factors that can lead to poor pregnancy outcome, low birth weight and infant mortality.

Population Covered by Guideline: All pregnant women

Key Clinical Indicators: The following summarize the key clinical indicators of the guideline.

Clinical Indicator	Frequency of Monitoring	Goal
Prenatal Visits	<ul style="list-style-type: none"> ➤ Every 4 weeks for the first 28 to 30 weeks of pregnancy ➤ Every 2-3 weeks until 36 weeks of gestation. ➤ Weekly after 36 weeks of gestation ➤ Frequency of follow up visits determined by the individual woman's needs and assessment of her risk factors ➤ Postpartum visit 	<ul style="list-style-type: none"> ➤ Prenatal care visit in 1st trimester or within 42 days of enrollment ➤ Equal to or greater than 80% of expected prenatal visit. (ACOG recommends 14 visits) ➤ Monitor progression of the pregnancy, detect medical and psychosocial complications and institute indicated interventions ➤ Early identification and intervention of high risk factors ➤ Postpartum visit on or between 21 days and 56 days after delivery
Risk profiles	<ul style="list-style-type: none"> ➤ Preconception visit ➤ First prenatal visit; including completion of OB Needs Assessment Form (ONAF) ➤ Submission of additional ONAF for any changes in risk status ➤ Submission of 2nd ONAF at 28-32 weeks gestation ➤ Submission of 3rd ONAF at postpartum visit 	<ul style="list-style-type: none"> ➤ To increase women's awareness of reproductive risk and health enhancing behaviors to improve the outcome of pregnancy ➤ Early identification of risk factors that lead to poor pregnancy outcomes ➤ Coordination of care with Mom MattersSM Case Management for all high risk members ➤ Ongoing assessment of high-risk conditions at each visit ➤ 2nd screening for preterm labor and birth ➤ 3rd screening to identify postpartum issues example depression ➤ Psychological and psychosocial assessment

Clinical Indicator	Frequency of Monitoring	Goal
Weight²	➤ Every visit	<ul style="list-style-type: none"> ➤ If underweight, gain should be 28 to 40 pounds ➤ If average weight, gain should be 25 to 35 pounds ➤ If overweight, gain should be 15 to 25 pounds ➤ If obese, gain should be <15 pounds
Blood Pressure	➤ Every visit	➤ Systolic < 140 and Diastolic ≤ 90mmHG
Fetal assessment	➤ Every visit from the 10 week visit on	➤ Assessment of fetal heart rate, fundal height, growth, movement, contractions, and fetal position
Laboratory screening: Universal <ol style="list-style-type: none"> 1) CBC with platelets 2) Blood type and screen including Rh type 3) Antibody Screen 4) RPR 5) Rubella antibody titer (immunity) 6) Urinalysis, including microscopic exam 7) Urine culture 8) Hepatitis B surface antigen 9) Universal HIV Screening 10) Cervical cytology, screening for gonorrhea and Chlamydia 11) Urine dip for glucose and protein 12) Group B beta strep screening 13) Diabetes screening 14) Offer MSAFP 15) Offer screening for aneuploidy and neural deficit. (nuchal translucency, biochemical markers, CVS, HCG, unconjugated esteriol, Inhibin A screening and/or amniocentesis as appropriate) 16) Anatomical ultrasound 17) Genetic screening 18) Varicella antibody titer if negative history of disease or unknown 	<ol style="list-style-type: none"> 1) Initial visit and repeat Hct/Hgb at 26-28 week gestation 2) Initial visit 3) Initial visit and repeat at 28 weeks gestation for unsensitized, D negative individuals. [If second antibody test for Rh negative, give prophylactic Rho (D)] 4) Initial visit and repeat at 28 weeks if at risk, during third trimester, at delivery of a still born child, offer to repeat at the delivery of a child if member resides in a high risk county¹ 5) Initial visit 6) Initial visit 7) Initial visit 8) Initial visit 9) Initial visit and repeat in third trimester in certain jurisdiction with elevated rates of HIV infection among pregnant women. Refer to local health departments 10) Initial visit and repeat at 36 weeks if at risk 11) Each visit 12) 35-37 weeks gestation 13) 24-28 weeks, and consider earlier screening if at risk, or BMI ≥ 30 14) 15-18 weeks and up to 22 6/7th week 15) First-second trimester 16) 16-20 weeks gestation, repeat if indicated. If dating unsure consider earlier ultrasound 17) Screening should be made available to all couples for cystic fibrosis. Consider genetic counseling for familial history of hemoglobinopathies, Tay-Sachs, thalassemia, or other inherited disorders 18) Immunize postpartum if titer is low or negative 	<p>Improve the frequency of appropriate testing during pregnancy</p>

Clinical Indicator	Frequency of Monitoring	Goal
<p>Laboratory Screening: Risk Based</p> <p>1) Hepatitis C antibody</p> <p>2) Hemoglobin electrophoresis³</p> <p>3) Urine drug screen based on history</p> <p>4) Screen for bacterial vaginosis</p>	<p>1) Initially for high risk, e.g., tattoos, history of IV drug use</p> <p>2) -Individuals of African descent should have hemoglobin electrophoresis: - Solubility tests (Sickledex) alone are not adequate for screening; - Individuals of Southeast Asian, Mediterranean descent, and with MCV<80 should have hemoglobin electrophoresis - Other individual at risk</p> <p>3) If indicated</p> <p>4) If history of preterm labor</p>	
<p>Immunization</p> <p>Gateway Health Plan follows the Centers for Disease Control and Prevention., recommended Adult Immunization Schedule-United States , 2009</p> <p>Recommended Adult Immunization Schedule has been approved by ACIP, ACOG, ACP & AAFP</p> <p>Please see attachment</p> <p>Links: http://www.cdc.gov/vaccines/recs/schedules/downloads/adult/2010/adult-schedule-11x17.pdf www.cdc.gov/mmwr/ January 15,2010</p>		<p>Reduce the risk of disease and complications in susceptible women and/or fetus/neonate</p>
<p>Counseling & Education</p> <p>1) Nutrition, folic acid supplement, and obesity²</p> <p>2) Dental care</p> <p>3) Substance use: tobacco smoke, alcohol, illicit drugs, and over-counter drugs</p> <p>4) Effects of second hand smoke</p> <p>5) Physical activity/life style</p> <p>6) Domestic violence and abuse</p> <p>7) Sexual practices and STDs</p> <p>8) Preterm birth prevention- consider progesterone support for previous spontaneous preterm birth</p> <p>9) Physiology of pregnancy, expect course of care</p> <p>10) Self help for discomforts</p> <p>11) Breast feeding</p> <p>12) Child birth education classes</p> <p>13) Maintaining good control of preexisting medical conditions</p> <p>14) Labor and delivery</p> <p>15) Aspects of postpartum care and newborn care</p> <p>16) Necessary preparations for hospital</p>	<p>Every visit</p>	<p>Increase the percentage of women who are screened and advised regarding the increase risk of poor pregnancy outcomes with obesity</p> <p>Increase the percentage of pregnant women who receive timely counseling and education on smoking, exposure to second hand smoke. For smokers to quit and are offered cessation counseling</p> <p>Increase education of members who are pregnant</p>

Clinical Indicator	Frequency of Monitoring	Goal
Counseling & Education (Continued) 17) Resources available 18) Depression (monitor prenatal & postpartum) 19) Any other risk assessed/identified on ONAF	Every trimester and postpartum	Increase the percentage of women who receive screening and treatment for perinatal depression

¹ As of July 10, 2009 women residing in these areas are considered high risk: Allegheny, Beaver, Berks, Bucks, Carbon, Centre, Columbia, Dauphin, Delaware, Erie, Franklin, Lancaster, Lawrence, Lehigh, Luzerne, Mercer, Montgomery, Northampton, Philadelphia, Pike, Schuylkill, Somerset, Wayne, Westmoreland, and York. Refer to local health department.

² ACOG's recommendations for obese patients who are pregnant or planning to conceive include having a preconception consultation and weight-loss counseling, seeking information on the risks of obesity and pregnancy, and continuing nutritional counseling and exercise programs after delivery.

³ ACOG Practice Bulletin, Number 78, January 2007 "Hemoglobinopathies in Pregnancy"

Clinical Indicators Measured by Gateway Health Plan are:

- 1) Frequency of on-going prenatal visits.
- 2) Screening for smoking and second hand smoke, referred/offered smoking cessation counseling including second hand smoke, and quit smoking.
- 3) Prenatal and Postpartum depression screening.

Scientific Evidence Sources:

Guidelines for Perinatal Care: Sixth Edition: American Academy of Pediatrics, 141 Northwest Point Road, P.O. Box 927, Elk Grove, IL, 60009-0927. American College of Obstetricians and Gynecologists; 409 12th Street, SW; Washington, DC 20024-2188. 2007.

Precis, an Update in Obstetric and Gynecology: Primary and Preventive Care: Second Edition: American College of Obstetricians and Gynecology; 1999.

Health Care Guideline: Routine Prenatal Care: Institute for Clinical Systems Improvement; August 2009.

Pennsylvania Department of Health, Health Advisory # 166 & 167: Testing for Syphilis: Counties in which the rate of Syphilis is at or above the level at which special precautions should be taken. Pennsylvania Department of Health; July 2, 2009 and July 10, 2009.

Bacterial Vaginosis: Center for Disease Control and Prevention; April 5, 2004.

BMI Body Mass Index: BMI for Adults: Center for Disease Control and Prevention.

Revised Recommendations for HIV Testing for Adults, Adolescents, and Pregnant Women in Health-Care Settings: Center for Disease Control and Prevention.

Recommendation Adult Immunization Schedule United States, January 15, 2010: Approved by Advisory Committee on Immunization Practices, the American College of Obstetricians and Gynecologists, and the American Academy of Family Physicians.

Psychosocial Risk Factors: Perinatal Screening and Intervention : ACOG Committee Opinion August 2006, Vol.108 No. 2.

Perinatal Depression: Prevalence, Screening Accuracy, and Screening Outcomes: AHRQ Evidence Report NO.119.

Screening for Fetal Chromosomal Abnormalities: ACOG Practice Bulletin: Clinical Management Guidelines for Obstetrician-Gynecologists, Number 77, January 2007

Hemoglobinopathies in Pregnancy: ACOG Practice Bulletin: Clinical Management Guidelines for Obstetrician-Gynecologists, Number 78, January 2007

