



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. The two most frequent risk factors being 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: Routine <ol style="list-style-type: none"> 1) CBC (Hematocrit, Hemoglobin and MCV) 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, HCG, unconjugated esteriol, and Inhibin A screening 15) Offer screening for aneuploidy 16) Anatomical ultrasound 17) Genetic screening as appropriate 	<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 county.¹ 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, consider additional screening if high risk, or BMI ≥ 30. 14) 15-18 weeks 15) Before 20 weeks of gestation regardless of maternal age. 16) 16-20 weeks gestation, repeat if indicated. If dating unsure consider earlier ultrasound. 17) Historic genetic counseling by provider, discuss options if appropriate i.e., cystic fibrosis screening, and sickle cell. 	<p>Improve the frequency of appropriate testing during pregnancy.</p>

Clinical Indicator	Frequency of Monitoring	Goal
Laboratory Screening: Non-routine 1) Hepatitis C antibody 2) Hemoglobin electrophoresis 3) Urine drug screen based on history 4) Screen for bacterial vaginosis	1) Initially for high risk, i.e., tattoos 2) If indicated. i.e., anemia with abnormal MCV, sickle cell 3) If indicated 4) If history of preterm labor	
Immunization 1) Hepatitis B 2) DTaP/DT 3) MMR 4) Varicella Vaccine 5) Influenza Vaccine 6) Pneumococcal Vaccine	1) If indicated, offer preconceptual or during pregnancy 2) If last given ≥ 10 years give DT during the second or third trimester. If last given < 10 years give DTaP immediate postpartum period. 3) If indicated immediate postpartum period 4) If indicated during preconceptual counseling, postpartum for women who do not have evidence of varicella immunity should receive 1 st dose before discharge from healthcare facility. The 2 nd dose should be administered 4 to 8 weeks later. 5) Encourage during influenza season to all women who are pregnant regardless of trimester. 6) Offer to women at high risk for pulmonary complications.	Reduce the risk of disease and complications in susceptible women and/or fetus/neonate.
Counseling & Education 1) Nutrition, folic acid supplement, and obesity ² 2) Dental care 3) Substance use: tobacco smoke, alcohol, illicit drugs, and over-counter drugs 4) Effects of second hand smoke 5) Physical activity/life style 6) Domestic violence and abuse 7) Sexual practices and STDs 8) Preterm birth prevention- consider progesterone support for previous spontaneous preterm birth 9) Physiology of pregnancy, expect course of care 10) Self help for discomforts 11) Breast feeding 12) Child birth education classes 13) Maintaining good control of preexisting medical conditions 14) Labor and delivery 15) Aspects of postpartum care and newborn care 16) Necessary preparations for hospital	Every visit	Increase the percentage of women who are screened and advised regarding the increase risk of poor pregnancy outcomes with obesity 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. Increase education of members who are pregnant.

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	Increase the percentage of women who receive screening and treatment for perinatal depression.

¹ As of April 4, 2007 women residing in these areas are considered high risk: Allegheny, Beaver, Berks, Bradford, Bucks, Cumberland, Dauphin, Erie, Fayette, Lancaster, Lehigh, Lycoming, Montgomery, Northampton, Philadelphia, Pike, Washington, 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.

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; September 2001.

Pennsylvania Department of Health, Health Advisory #86: 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; April 4, 2007.

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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, October 2007-September 2008: 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.