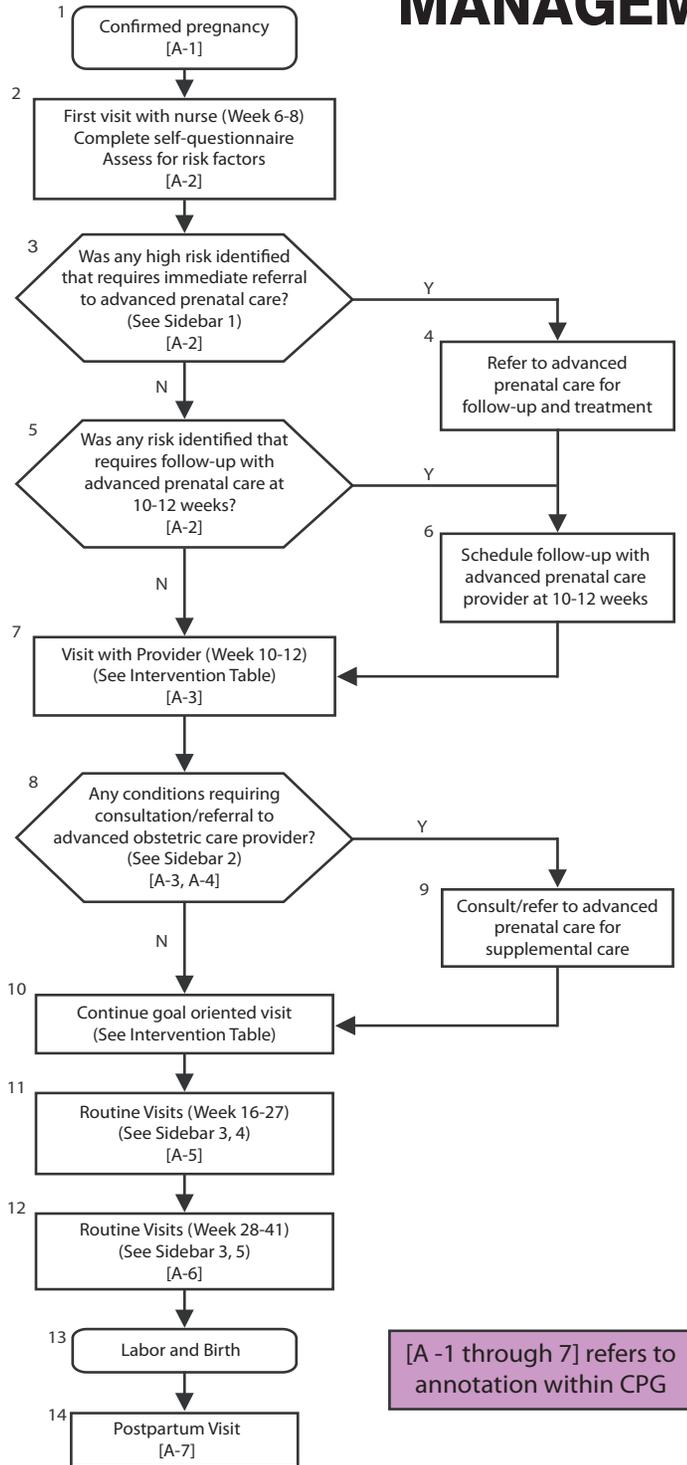


MANAGEMENT OF PREGNANCY



[A -1 through 7] refers to annotation within CPG

Sidebar 1: Example Indicators for Immediate Referral*

Abdominal pain/cramping (significant)	Pregestational Diabetes (Type 1 or 2)
Cardiac abnormality	Recurrent pregnancy loss
Cardiovascular diseases	Renal disorder
Ectopic pregnancy risk	Severe pelvic infections
History of genetic disease	Suicidal
HIV	Thromboembolic disease
Known teratogen exposure	Transplant
Moderate-severe MDD	Uncontrolled hypertension
	Vaginal bleeding

Sidebar 2: Example Indicators for Supplemental Care* ~ Following 10 - 12 Weeks

Prior macrosomia or GDM	Uterine abnormality
Severe pelvic infections	Drug use/alcohol use/smoking
Second trimester pregnancy loss	Current Cancer
Cervical surgery (LEEP, cone biopsy)	Transplant on medication
Bariatric surgery	Cardiac abnormality

Infections:	Medical conditions:	Obstetric conditions:
- Gonorrhea	- Abnormal pap-smear	- Preterm birth
- Chlamydia	- Mild asthma	- Prior cesarean delivery
- Syphilis	- Controlled hypothyroidism	- Second trimester loss
- Hepatitis B	- Previous gastric bypass	- Cervical insufficiency
- Genital herpes	- Depression	- Children with birth defects
- HIV	- At risk for diabetes	

Sidebar 3: Interventions at ALL Routine Visits

- Screen for hypertensive disorders
- Breast feeding education
- Exercise during pregnancy
- Influenza vaccine (season-related)

Sidebar 4: Routine Visit ~ Week 16 - 27

- Auscultate fetal heart tones
- Screen fundal height
- Assess weight gain
- Educate about symptoms of preterm labor (week 20)

Sidebar 5: Routine Visit ~ Week 28 - 41

- Auscultate fetal heart tones
- Screen fundal height
- Assess weight gain
- Assess for symptoms of preterm labor (week 28)
- Assess fetal movement/kick counts

For Specific Intervention
See Summary Table



*See complete CPG for all tables of indicators

VA/DoD Clinical Practice Guideline for the Management of Pregnancy

Table 1 ~ Initial Nurse Assessment and Consultation/Referral Guide

Risk Assessed by Nurse	Lab Tests	Advanced Prenatal Care Provider		
		Immediate Referral	Consult	Follow-Up (wks 10-12)
Uncertain dating criteria	Ultrasound		<input checked="" type="checkbox"/>	
Late presentation	Ultrasound		<input checked="" type="checkbox"/>	
Past OB History:				
Recurrent pregnancy loss		<input checked="" type="checkbox"/>		
Ectopic pregnancy risk (hx of ectopic, tubal surgery, tubal infertility, or PID; current IUD)	Quant HCG/ Ultrasound	<input checked="" type="checkbox"/>		
Prior macrosomia or prior gestational diabetes mellitus (GDM)	Glucola for GDM	<input checked="" type="checkbox"/>		
Preterm birth			<input checked="" type="checkbox"/>	
Second trimester pregnancy loss	Ultrasound		<input checked="" type="checkbox"/>	
Cervical surgery (LEEP, cone biopsy)			<input checked="" type="checkbox"/>	
Bariatric Surgery (less than 18 months)			<input checked="" type="checkbox"/>	
Current Problems:				
Vaginal bleeding		<input checked="" type="checkbox"/>		
Significant abd pain/cramping		<input checked="" type="checkbox"/>		
Prescription, over-the-counter/herbal medications			<input checked="" type="checkbox"/>	
Drug / alcohol use				<input checked="" type="checkbox"/>
Smoking				<input checked="" type="checkbox"/>
Medical Conditions:				
Cardiovascular diseases		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Cardiac abnormality		<input checked="" type="checkbox"/>		
Diabetes mellitus (DM) - Type 1 or 2	Hgb A1c	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Renal disorder (includes pyelonephritis)		<input checked="" type="checkbox"/>		
Hypertension		Not controlled	<input checked="" type="checkbox"/>	
Thyroid disorders	Thyroid function		<input checked="" type="checkbox"/>	
Gastrointestinal disorders on medication			<input checked="" type="checkbox"/>	
Pulmonary disease			<input checked="" type="checkbox"/>	
Family history of DM in first relative	Glucola for GDM			
Neurological disorder			<input checked="" type="checkbox"/>	
Autoimmune disorder/Lupus			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Major mental illness			<input checked="" type="checkbox"/>	
Blood disorders			<input checked="" type="checkbox"/>	
Hepatitis	Hep panel		<input checked="" type="checkbox"/>	
Sexually transmitted disease (STD)	<input checked="" type="checkbox"/>			
Tuberculosis			<input checked="" type="checkbox"/>	
Human immunodeficiency virus (HIV)	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Rash or viral illness			<input checked="" type="checkbox"/>	
Radiation/toxic chemical exposure since becoming pregnant			<input checked="" type="checkbox"/>	
Thromboembolic Disease		<input checked="" type="checkbox"/>		

Risk Assessed by Nurse	Lab Tests	Advanced Prenatal Care Provider		
		Immediate Referral	Consult	Follow-Up (wks 10-12)
Cancer			<input checked="" type="checkbox"/>	
Transplant		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Hx genetic disease or family of genetic disease		<input checked="" type="checkbox"/>		
Dental complaint		To Dentistry		
Screen for Major Depressive Disorder (MDD)		To Mental Health if suicidal or moderate or severe MDD		
Occupational hazards		To Prev Med/ Pub Hlth		
Homeless		To Social Work		
Domestic Violence		To Social Work if unsafe		
Hx of infertility	Transvaginal Ultrasound		<input checked="" type="checkbox"/>	
Hx of mental illness on medications			<input checked="" type="checkbox"/>	
Diet restriction		To Nutritionist	<input checked="" type="checkbox"/>	
Eating disorder			<input checked="" type="checkbox"/>	
Body mass index (BMI) >29 kg/m ²		Glucola for GDM	<input checked="" type="checkbox"/>	
BMI <20 kg/m ²			<input checked="" type="checkbox"/>	
Age (<16 or >35)			<input checked="" type="checkbox"/>	
Routine Lab Tests:				
HIV	<input checked="" type="checkbox"/>			
Complete Blood Count (CBC)	<input checked="" type="checkbox"/>			
ABO Rh blood typing	<input checked="" type="checkbox"/>			
Antibody screen	<input checked="" type="checkbox"/>			
Rapid plasma reagent (RPR)	<input checked="" type="checkbox"/>			
Hepatitis B surface antigen	<input checked="" type="checkbox"/>			
Rubella test	<input checked="" type="checkbox"/>			
Urinalysis and culture	<input checked="" type="checkbox"/>			
Additional Information:				
Religion				
Language barrier				
Current/recent deployed self/family member				
Born outside of US				
Lives with cats				
Wears seat belts				
Planned pregnancy				
Highest level of education				



VA/DoD Clinical Practice Guideline for the Management of Pregnancy

Table 2 ~ Provider Consultation/Referral Guide

Risk Assessed by Routine Prenatal Care Provider	Referral/Consult with	Consider Referral/Consult with
	Advanced Prenatal Care Provider	
General Conditions:		
Genetic condition potentially affecting fetus	<input checked="" type="checkbox"/>	
Body Mass Index (BMI < 16.5 or >30)		<input checked="" type="checkbox"/>
Age < 16 or > 34		<input checked="" type="checkbox"/>
Genetic condition affecting patient or spouse		<input checked="" type="checkbox"/>
Obstetric Conditions: (current or historical)		
Recurrent pregnancy loss	<input checked="" type="checkbox"/>	
Ectopic pregnancy	<input checked="" type="checkbox"/>	
Significant abdominal pain/cramping	<input checked="" type="checkbox"/>	
Vaginal bleeding	<input checked="" type="checkbox"/>	
Second-trimester pregnancy loss	<input checked="" type="checkbox"/>	
Preterm labor (current) or birth (history)	<input checked="" type="checkbox"/>	
Cervical surgery (LEEP, cone biopsy)	<input checked="" type="checkbox"/>	
Uterine abnormality	<input checked="" type="checkbox"/>	
Short (<2.5 cm) cervix (< 36 weeks)	<input checked="" type="checkbox"/>	
Pregnancy induced hypertensive disorders	<input checked="" type="checkbox"/>	
Gestational diabetes mellitus (GDM)	<input checked="" type="checkbox"/>	
Malpresentation (> 36 weeks)	<input checked="" type="checkbox"/>	
Placenta Previa (symptomatic or beyond 28 weeks)	<input checked="" type="checkbox"/>	
Abnormal amniotic fluid: oligo/poly hydramnios	<input checked="" type="checkbox"/>	
Preterm ruptured membranes	<input checked="" type="checkbox"/>	
Fetal growth abnormality (<10, >90 %tile)	<input checked="" type="checkbox"/>	
Known or suspected fetal anomaly	<input checked="" type="checkbox"/>	
Multiple gestation	<input checked="" type="checkbox"/>	
Isoimmunization	<input checked="" type="checkbox"/>	
Abnormal prenatal screening result (aneuploidy risk)	<input checked="" type="checkbox"/>	
Abnormal prenatal screening result (ONTD risk)	<input checked="" type="checkbox"/>	
Intrauterine fetal demise	<input checked="" type="checkbox"/>	
Teratogenic exposure including drugs or radiation		<input checked="" type="checkbox"/>
Placental abruption		<input checked="" type="checkbox"/>
Prior cesarean section		<input checked="" type="checkbox"/>
Intrapartum complications		<input checked="" type="checkbox"/>

Risk Assessed by Routine Prenatal Care Provider	Referral/Consult with	Consider Referral/Consult with
	Advanced Prenatal Care Provider	
Gynecological, Medical, Surgical Conditions:		
Current need for surgery	<input checked="" type="checkbox"/>	
Bariatric surgery (< 18, > 36 months ago)	<input checked="" type="checkbox"/>	
Diabetes mellitus (DM) – Type 1 or 2	<input checked="" type="checkbox"/>	
Hematologic disorders (except mild anemia)	<input checked="" type="checkbox"/>	
Gastrointestinal disorders on medication	<input checked="" type="checkbox"/>	
Chronic hypertension	<input checked="" type="checkbox"/>	
Cardiovascular disease	<input checked="" type="checkbox"/>	
Pulmonary disease including asthma	<input checked="" type="checkbox"/>	
Cancer (current or recent)	<input checked="" type="checkbox"/>	
Neurological disorders including epilepsy	<input checked="" type="checkbox"/>	
Renal, urinary tract disorder	<input checked="" type="checkbox"/>	
Autoimmune disorder including Lupus	<input checked="" type="checkbox"/>	
Antiphospholipid syndrome	<input checked="" type="checkbox"/>	
Thromboembolic disease	<input checked="" type="checkbox"/>	
Transplant	<input checked="" type="checkbox"/>	
Abnormal pap smear		<input checked="" type="checkbox"/>
Breast abnormality		<input checked="" type="checkbox"/>
Pelvic surgery for infertility or infection		<input checked="" type="checkbox"/>
Illicit drug, alcohol, or tobacco use		<input checked="" type="checkbox"/>
Thyroid disorders		<input checked="" type="checkbox"/>
Infectious Diseases:		
Severe pelvic infections	<input checked="" type="checkbox"/>	
Hepatitis	<input checked="" type="checkbox"/>	
Tuberculosis	<input checked="" type="checkbox"/>	
HIV	<input checked="" type="checkbox"/>	
TORCH infection	<input checked="" type="checkbox"/>	
Sexually transmitted infection (STI)		<input checked="" type="checkbox"/>
Psychosocial Conditions:		
Major depressive disorder (MDD)	To Mental Health if suicidal or moderate or severe MDD	<input checked="" type="checkbox"/>
Domestic violence	To Social Work if unsafe environment	<input checked="" type="checkbox"/>
Homeless	To Social Service	<input checked="" type="checkbox"/>

VA/DoD Clinical Practice Guideline for the Management of Pregnancy Trimester Visits

INTERVENTION		Trimester:		First		Second		Third		Post Date	Post-partum	
		Week:		6-8	10-12	16-20	24	28	32	36	38-41	PP
		6-8	10-12	16-20	24	28	32	36	38-41	PP		
I-1	Screening for Hypertensive Disorders of Pregnancy	✓	✓	✓	✓	✓	✓	✓	✓	✓		
I-2	Education for Breastfeeding	✓	✓	✓	✓	✓	✓	✓	✓	✓		
I-3	Education on Exercise During Pregnancy	✓	✓	✓	✓	✓	✓	✓	✓	✓		
I-4	Education and Immunizations - Influenza Vaccine (Seasonal or as appropriate)	✓	✓	✓	✓	✓	✓	✓	✓	✓		
I-5	Screening for Tobacco use - Offer Cessation	✓	*	*	*	*	*	*	*	*	*	
I-6	Screening for Alcohol Use - Offer Cessation	✓										
I-7	Screening for Drug Use - Offer Treatment	✓										
I-8	Screening for Blood Type (ABO, Rh) and Antibody Status	✓										
I-9	Screening for Rubella	✓										
I-10	Screening for Varicella	✓										
I-11	Screening for Hepatitis B Virus (HBV)	✓										
I-12	Treatment for Hepatitis B*							✓	✓			
I-13	Screening for Syphilis Rapid Plasma Reagin (RPR)	✓										
I-14	Screening for Asymptomatic Bacteriuria	✓										
I-15	Screening for Tuberculosis	✓										
I-16	Screening for HIV – Counsel	✓										
I-17	Screening for Td and Tdap Booster	✓										
I-18	Screening for Anemia	✓			*	*						
I-19	Screening for Hemoglobinopathies	✓										
I-20	Screening for Domestic Abuse	✓				✓					✓	
I-21	Screening for Depression	✓				✓					✓	
I-22	Establishing the Gestational Age		✓	✓								
I-23	Auscultation Fetal Heart Tones		✓	✓	✓	✓	✓	✓	✓	✓		
I-24	Screening Fundal Height		✓	✓	✓	✓	✓	✓				
I-25	Assessing Weight Gain (inappropriate)		✓	✓	✓	✓	✓	✓	✓	✓		
I-26	Nutritional Supplement	✓	✓									

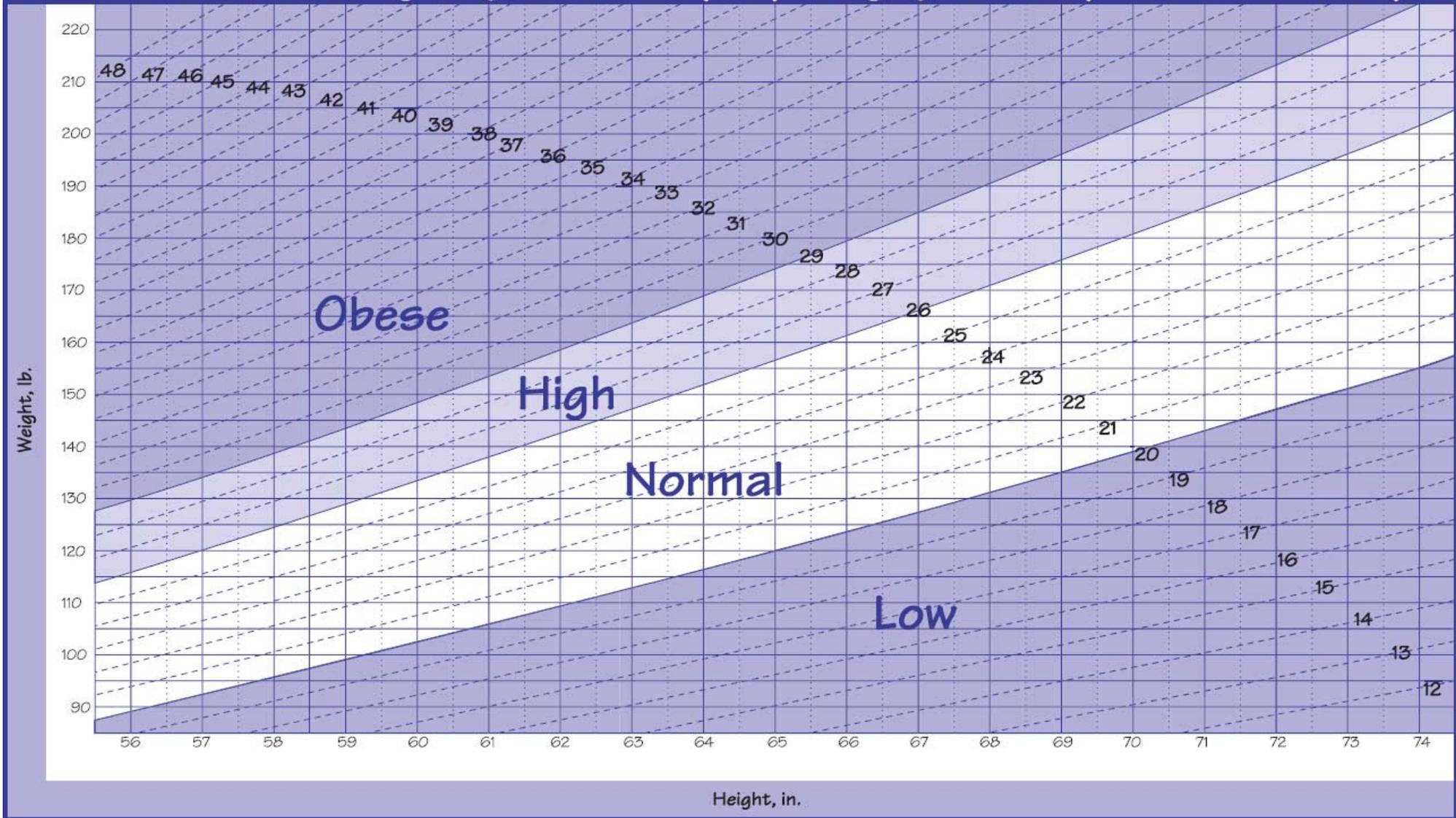
INTERVENTION		Trimester:		First		Second		Third		Post Date	Post-partum	
		Week:		6-8	10-12	16-20	24	28	32	36	38-41	PP
		6-8	10-12	16-20	24	28	32	36	38-41	PP		
I-27	Obesity		✓									
I-28	Assessing History of Gastric Bypass/Bariatric Surgery		✓									
I-29	Screening for Gonorrhea		✓									
I-30	Screening for Chlamydia		✓									
I-31	Assess need for Cervical Cancer Screening		✓									
I-32	Screening for HSV		✓									
I-33	Counseling for Cystic Fibrosis Screening		✓									
I-34	Management of Depression during Pregnancy		✓			✓					✓	
I-35	Periodontal Disease and Dental Care		✓									
I-36	Counseling for and Prenatal Screening	✓	✓	✓								
I-37	Obstetric Ultrasound			✓								
I-38	Education about Preterm Labor				✓							
I-39	Counseling for Trial of Labor				✓							
I-40	Screening for gestational diabetes	*	*			✓						
I-41	Iron supplementation		*	*	*	*	*	*	*	*	*	
I-42	Anti-D prophylaxis for Rh-negative women					✓						
I-43	Assess for preterm labor					✓	✓					
I-44	Daily fetal movement counts					✓	✓	✓	✓			
I-45	Counseling for family planning							✓				
I-46	Screening for Group B Streptococcal (GBS)								✓			
I-47	Assessment of fetal presentation							✓	✓	✓		
I-48	Consider Weekly cervical check/stripping									✓		
I-49	Term management									✓		
I-50	Immunization HPV vaccine										✓	
I-51	Education on Shaken Baby Syndrome										✓	

- Bolded check marks indicate optimum testing time
- Highlighted squares indicate intervention may be performed
- * If risk/condition has been identified

NOTE: Any positive screen may indicate the need for additional interventions and screening at subsequent visits.



Chart for Estimating Body Mass Index (BMI) Category and BMI (Pounds and Inches)



Directions: To find BMI category (e.g., obese), find the point where the woman's height and weight intersect.
To estimate BMI, read the bold number on the dashed line that is closest to this point.



VA/DoD Clinical Practice Guideline for the Management of Pregnancy

Antepartum Care Matrix

Visits	6-8 Weeks	10-12 Weeks	16-20 Weeks	24 Weeks	28 Weeks	32 Weeks	36 Weeks	38-41 Weeks
Goals	Exchange information and identify risk factors that may impact the pregnancy.	Determine current health status and gestational age. Work towards a healthy pregnancy.	Work towards a comfortable and safe pregnancy.	Prevent pre-term labor for a safe and healthy baby.	Monitor baby and maternal progress and learn to count fetal movements.	Prepare for baby's arrival.	Begin preparations for hospital experience.	Prepare for the birth and baby's arrival at home.
Assess	Prenatal history and screen for tobacco, alcohol and illicit drugs, depression, domestic abuse and risk factors, whether cats in home.	H&P exam to include breast and pelvic. Dental status with referral if indicated. Risk factor for PTL/Depression. Tobacco Use.	Fetal growth, maternal well-being F/U on CF testing if done. Counseling and referral if needed. Risk factor for PTL. Tobacco Use.	Fetal growth, maternal well-being. Tobacco Use.	Fetal growth, maternal well-being. Signs and symptoms of PTL or domestic abuse or depression. Tobacco Use.	Fetal growth, maternal well-being. Signs and symptoms of PTL. Tobacco Use.	Fetal growth, maternal well-being. Fetal position. Signs & symptoms of labor. Tobacco Use.	Fetal growth, maternal well-being. Fetal position. Tobacco Use.
Labs/Procedures	CBC, UA, C&S, RPR, ABO & Rh Hemoglobinopathies (if indicated), Rubella, Varicella, Hepatitis B and HIV. Immunizations as needed.	Pap Smear, GC and Chlamydia. Consent/schedule and counseling for CF (if desired) Consent/schedule for aneuploidy screening (11-21 weeks) if desired.	Ultrasound, Quad Screen if desired.	Schedule Diabetes screen, Antibody Screen, Hct and other labs as indicated.	Diabetes screen. If RH negative: Rh antibody screen and D-Immunoglobulin if needed. Other lab work if needed.		GBS	Cervical check, may offer sweeping. Starting at wk 41: Term management. (Amniotic fluid index weekly; Non-stress testing twice weekly.)
Monitor	BP, BMI and weight.	BP, fundal height, fetal heart tone, weight gain and exercise.	BP, fundal height, fetal heart tone, weight gain and exercise.	BP, fundal height, fetal heart tone, weight gain and exercise	BP, fundal height, fetal heart tone, weight gain and exercise.	BP, fundal height, fetal heart tone, weight gain and exercise.	BP, fundal height, fetal heart tone, fetal presentation, weight gain and exercise, fetal kick count.	BP, fundal height, fetal heart tone, fetal presentation, weight gain and exercise, fetal kick count.
Psycho/Social	Social Services/domestic abuse, "Is your home SAFE for you? Identify deployment status of partner.	Emotional Status. Identify deployment status of partner.	Discuss birth control planning. Identify deployment status of partner.	Identify deployment status of partner.	Domestic abuse, "Is your home SAFE for you?" Child care options. Identify deployment status of partner.	Family planning. Identify deployment status of partner.	Apprehension as delivery approaches. Identify deployment status of partner.	Parenting issues. Identify deployment status of partner.
Patient Education	CF and other prenatal screening, breastfeeding, nutrition, substance abuse and cessation, exercise, discomforts, safe meds. Use of Pregnancy and Childbirth book. Centering group if available.	Breastfeeding, nutrition, exercise. Signs to report.	Breastfeeding, nutrition, exercise. Signs to report. True vs. false labor.	Breastfeeding, nutrition, exercise. Pre-term labor (PTL) signs and symptoms. Counseling for PTL and TOL if applicable.	Breastfeeding, nutrition, exercise. Fetal kick count, PTL signs and symptoms. Iron supplementation if indicated.	Birth control, breastfeeding, nutrition, exercise, childbirth classes, birth plan, fetal kick count. PTL signs and symptoms.	Labor and Delivery, fetal kick count. Breastfeeding, pre-admission process.	Fetal kick count, post date pregnancy plan, Labor and Delivery, breastfeeding.

Note: Women with specific risk factors or who develop high risk conditions may require additional surveillance.

VA/DoD Clinical Practice Guideline for the Management of Pregnancy
SAFE Mnemonic

S

Inquire about **Stress** and **Safety**

A

Ask if she is **Afraid** and **Abused**

F

Inquire about **Friends** and **Family**

E

Inquire about an **Emergency** Plan

Screen for domestic abuse at the first visit, week 28 and the post partum visit, using the following three simple/direct questions:

- Within the last year, have you been hit, slapped, kicked, or otherwise physically hurt by someone?
- Since you've been pregnant, have you been hit, slapped, kicked, or otherwise physically hurt by someone?
- Within the last year, has anyone forced you to engage in sexual activities?

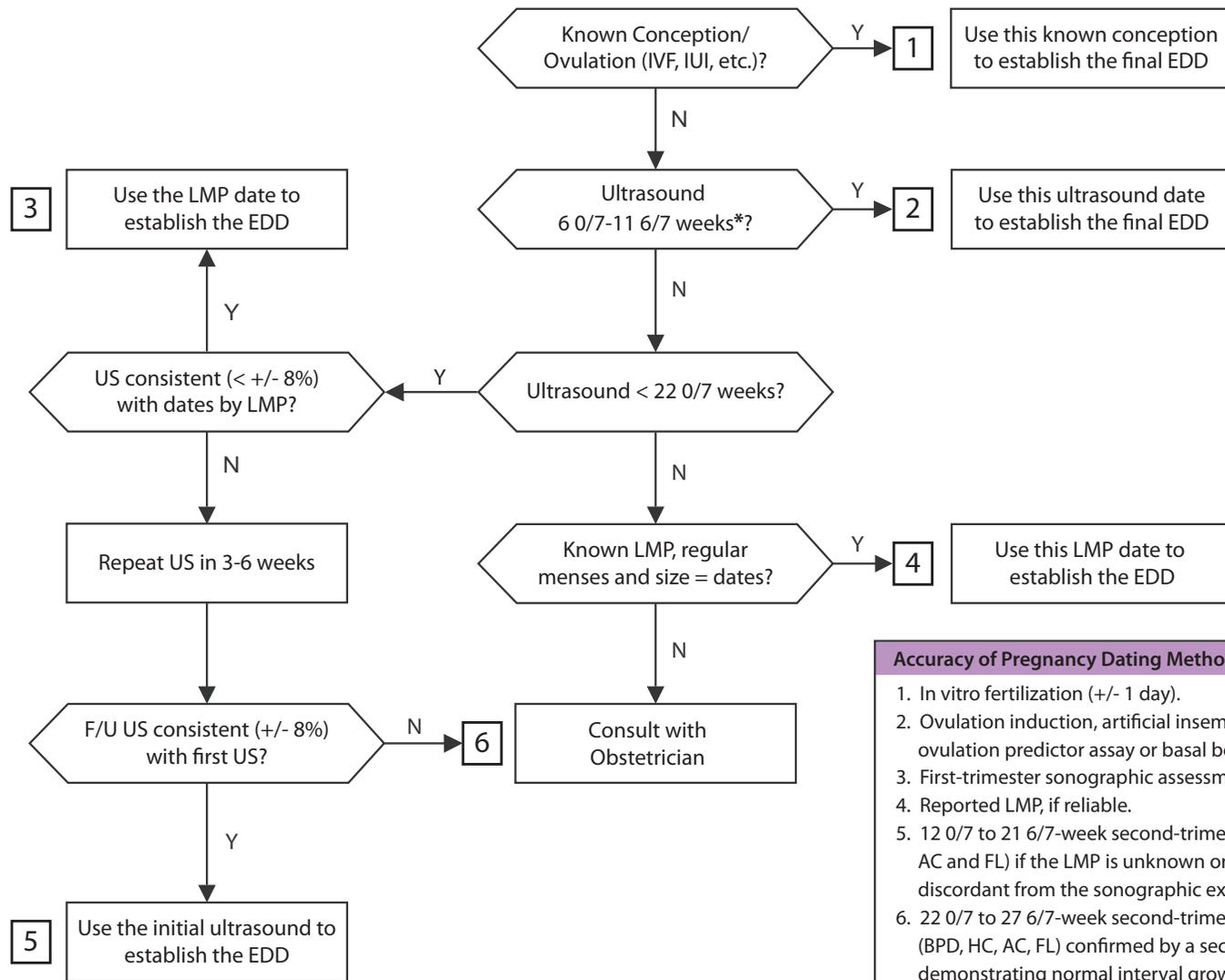
National Domestic Abuse Hotline:
1.800.799.SAFE (7233)

Local Domestic Abuse Hotline:

Source: "Screening for Domestic Violence", MEDWAY, January 2002



VA/DoD Clinical Practice Guideline for the Management of Pregnancy Algorithm for Establishing the Due Date



Accuracy of Pregnancy Dating Methods (Prioritized List)

1. In vitro fertilization (+/- 1 day).
2. Ovulation induction, artificial insemination, a single intercourse record, ovulation predictor assay or basal body temperature measurement (+/- 3 days).
3. First-trimester sonographic assessment (6 0/7 -11 6/7 weeks) (+/-8%).
4. Reported LMP, if reliable.
5. 12 0/7 to 21 6/7-week second-trimester sonographic examination (CRL or BPD, HC, AC and FL) if the LMP is unknown or uncertain or if the LMP is more than 8 percent discordant from the sonographic examination.
6. 22 0/7 to 27 6/7-week second-trimester sonographic examination (BPD, HC, AC, FL) confirmed by a second examination 3-6 weeks later demonstrating normal interval growth (+/- 8%).
7. Third-trimester sonographic evaluation (+/-8%).

NOTES:

- *Note Images of measurements used for dating should be based on a CRL and archived electronically or in the written record for review if necessary.
- *A first trimester ultrasound is not required to establish the due date but should be liberally used if there is a discrepancy in the initial assessment of uterine size or uncertainty regarding the LMP.
- This algorithm recognizes the data supporting reduced rates of post dates inductions, abnormal serum screening results when first trimester ultrasound is used in favor of even a sure and regular LMP.
- 8% rule: Days of Pregnancy by Criteria 1 - Days of Pregnancy by Criteria 2 / Days of Pregnancy by Criteria 1 = % discordant.
- Use caution in changing EDD for transfer in patients with firmly established dates by a sure, regular LMP, confirmed (+/- 5 days) by 6 0/7-11 6/7 week US.



Obtaining a quality crown rump length measurement

1. Machine inserted patient identification on images
2. Archived electronically or scanned into Electronic Medical Record
3. Embryo/fetus in sagittal view occupying 2/3 of the screen
4. Calipers placed from cephalic edge to rump
5. Minimum of 3 CRL measurements for each fetus using average of best 3
6. In multiple gestation, base gestational age on largest embryo/fetus
7. Document presence or absence of fetal yolk sac
8. Document presence or absence of fetal cardiac activity

Optimal Image

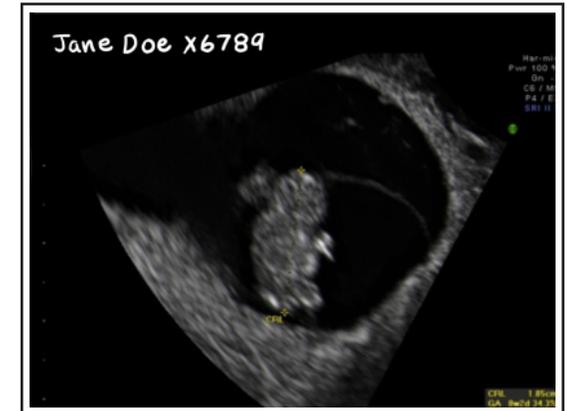
Patient Information on image
Appropriate Zoom
Well Placed Calipers
Fetus in Saggital plane

Doe, Jane 20/123-45-6789



Suboptimal Images

Lacking computer printed patient information or having handwritten information
Inadequate Zoom
Poorly Placed Calipers
AP rather than saggital view



Note : Typically crown rump measurements are included in a first trimester ultrasound. First trimester criteria outlined by AIUM, ACR and ACOG also include visualization of adnexa and pregnancy location.

