NURSING | LEVEL: 2A

# $\mathsf{OB}$

#### 28 AND 36 WEEK PRENATAL VISITS

Estimated Time: 60 minutes • Debriefing Time: 60 minutes



Scan to Begin

**DISCIPLINE:** Nursing



Patient Name: Olivia Brooks

## **SCENARIO OVERVIEW**

Olivia Brooks is 28-year-old female presenting to clinic for her second and third trimester prenatal visits.

This scenario can be used for high- or low-fidelity simulation. In high-fidelity simulation, the patient videos and tabbed chart content can be used to augment the reality of the simulation. In low-fidelity simulation, the instructor can use role play, in association with the iPad content, to stimulate student critical thinking and discussion about various prenatal care topics.

In State 1, she arrives for her 28 week visit. Students may administer Rhogam and the glucose challenge tolerance test. Students should also review her immunization record to determine if immunizations are needed at this visit. QR codes are provided that demonstrate the following procedures: measuring the fundus, obtaining fetal heart tones, and performing the Leopold's maneuver.

In State 2, Olivia returns for 36-week visit. QR codes are provided that demonstrate a nonstress test with fetal heart monitoring and an image of the strip for interpretation by students.

### **LEARNING OBJECTIVES**

- 1. Maintain a safe, effective health care environment for a patient seeking prenatal care in a clinic setting
- 2. Provide patient centered care by utilizing the nursing process for a patient receiving prenatal care
- 3. Relate patient's health status to assessment findings, medications, laboratory and diagnostic test results, medical and nursing interventions
- 4. Observe fundal height measurement, fetal heart tone monitoring, fetal monitoring, and Leopold's maneuver
- 5. Provide patient education during prenatal care

## **CURRICULUM MAPPING**

### WTCS NURSING PROGRAM OUTCOMES

- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical
  practices, and an evolving professional identity as a nurse committed to evidence-based
  practice, caring, advocacy and quality care
- Demonstrate appropriate written, verbal, and nonverbal communication in a variety of clinical contexts
- Integrate social, mathematical, and physical sciences, pharmacology, and pathophysiology in clinical decision making
- Provide patient centered care by utilizing the nursing process across diverse populations and health care settings
- Minimize risk of harm to patients, members of the healthcare team and self through safe individual performance and participation in system effectiveness
- Use information and technology to communicate, manage data, mitigate error, and support decision-making

### **NURSING FUNDAMENTALS**

- Maintain a safe, effective care environment for adults of all ages
- Use appropriate communication techniques
- Use the nursing process
- Adapt nursing practice to meet the needs of diverse patients in a variety of settings

### **NURSING HEALTH PROMOTIONS**

- Use principles of teaching/learning when reinforcing teaching plans
- Apply principles of family dynamics to nursing care
- Plan nursing care for a healthy pregnant woman
- Encourage healthy lifestyle behaviors in patients

## SIMULATION LEARNING ENVIRONMENT & SET-UP

#### **ENVIRONMENT: CLINIC ROOM**

Inside room or outside room: Vital signs equipment. Sanitizer or sink for hand hygiene.

### **PATIENT PROFILE**

Name: Olivia Brooks Preterm: 0

DOB: 01/29/19XX Number living: 0

Age: 28 LMP: X/X/20XX

MR#: 12919 EDC: X/X/20XX

Gender: Female Gestational Age: 28w1d

Height: 162.5 cm (5'5") Blood Type: A neg

Weight: 70.9 kg (156#) Code Status: Full code

Allergies: NKDA Ethnicity: Caucasian

Gravida: 2 Spiritual Practice: Lutheran

Para: 0 Primary Language: English

AB: 1

<u>Facilitator Note:</u> Before scenario, create the LMP and EDC based on current date so that gestational age is 28 weeks and 1 day for State 1 and 36 weeks 2 days for State 2. You may use the EDC calculator tab within the scenario to assist in your calculations.

### **EQUIPMENT/SUPPLIES/SETTINGS**

### **Patient**

Wearing street clothes

### **Monitor Settings**

No monitor; vital signs equipment; Vital signs are: 116/76, HR 72, RR 14, Temp 37.1, O2 sat 100%

### **Supplies**

• If available: Doppler for fetal heart tones; tape measure for fundal measurement; fetal heart monitoring straps with transducers and machine; Group B Strep specimen container; Simulated Glucose for Glucose Challenge test; urine specimen cup and urinalysis strips; Rhogam for injection

# QR CODES

START	PATIENT	REPORT	FACILITATOR
	E15458		
	TELEC: 4T		[_] }, · · P
FETAL HEART MONITORING	FETAL HEART MONITORING STRIP	FETAL HEART TONES (ACCURATE)	FETAL HEART TONES (INACCURATE)
	回規国		
<u> </u>	<b>至790</b> 卷	23000	76 (A)
LEOPOLD'S MANEUVER	FUNDAL MEASUREMENT	RHOGAM	GROUP B STREP SWAB
			回常回
<b>56</b> (3-7)	30.4 667	10-30 July	(±3,000)
		Territ Assignment	国数据

## **TEACHING PLAN**

### **PREBRIEF**

The facilitator should lead this portion of the simulation. The following steps will guide you through Prebrief.

- Scan the QR Code: "Scan to Begin" while students are in Prebrief.
- "Meet Your Patient" (on iPad) and explain how the iPad works in the simulated learning environment including:
  - Explain how to use the iPad scanner and QR codes. Remind students that there are multiple QR codes in the simulation, but they should only scan them if they think it will provide data necessary for their assessment and evaluation of the patient.
  - Medication Hyperlinks Medications are hyperlinked to DailyMed, which is a medication reference housed by the National Library of Medicine. Students can click on these links during the simulation for upto-date medication content, labels, and package insert information.
  - As the facilitator, you should be aware that throughout the simulation some QR codes are necessary to the programming of the iPad content.
     Directions for which QR codes are required (to be scanned) in each state are listed under each state of the documentation below. The QR codes are also in **BOLD** type.
  - Level Up tab This tab "tells" the content in the iPad to change to what is needed for the next state of a simulation.
- Discuss the simulation "Learning Objective(s)" (on iPad) as well as any other Prebrief materials
- View "Report" on iPad
  - Possible Facilitator Question
    - What assessments and lab work are expected to be performed during a 28 week prenatal visit in a clinic setting?
- View patient video
  - Possible Facilitator Question
    - How will you therapeutically address Olivia's concerns?

• Tabbed iPad Content: The facilitator should allow time for students to browse through the following information located under the tabs on the iPad. Suggested facilitator questions are provided under each tab.

# **PATIENT PROFILE**

Patient demographic information is displayed here

# **OB VISIT CHECKLISTS**

28 week Visit	Completed
Weight and BMI	
VS: BP	
Medication Reconciliation	
Fundal height	
Fetal heart tones	
Administer Rhogam prn	
Patient Education:  o Educate about Group B Strep 36 week visit	
Labwork:  O Urine for protein and glucose today  O GCT today  O Rh antibody screen	

• Suggested Facilitator Question: Describe how a Glucose Challenge Test (GCT) is administered and how the results may impact care of the patient during her pregnancy.

# **EDC CALCULATOR**

LMP can be entered to calculate EDC.

## **OB/GYN HISTORY**

### **OB/GYN History**

**PAST MEDICAL HISTORY:** 28 year old healthy female with history of genital herpes and mixed anxiety depressive disorder.

**SURGICAL HISTORY:** Tonsillectomy age 12; Wisdom teeth extraction age 18; D&C after miscarriage

**FAMILY HISTORY:** Father with hypertension; mother with diabetes mellitus, maternal grandmother with breast cancer

**SOCIAL HISTORY:** Lives in Anytown, WI with her husband and 2 cats.

**TOBACCO USE:** Smoked 1 ppd until discovered was pregnant.

**ALCOHOL USE:** Binge drinking on weekends (6 drinks or more/night) until discovered she was pregnant.

**DRUG USE:** Denies.

**EDUCATION:** High school graduate.

**EMPLOYMENT HISTORY:** Works as a C.N.A. at local skilled nursing facility where helps transfer patients from bed to wheelchair.

### **MENSTRUAL HISTORY:**

**ONSET:** age: 12 yrs **CYCLE:** 30 days **DURATION:** 5 days

LMP: XX/XX/20XX

#### **PAST PREGNANCY HISTORY:**

Date	Weeks Gest.	Length Labor	Type Delivery	Anesth.	Weight	Remarks
2016	12 wks			-		Spontaneous AB

Suggested facilitator question: Identify prenatal risk factors.

### **MEDICAL PROBLEM LIST**

### **Currently Known Medical Problem(s)**

- 1. Pregnancy
- 2. Genital Herpes
- 3. Miscarriage
- 4. Mixed Anxiety Depressive Disorder
- 5. Chronic Back Pain
- 6. Gastroesophageal Reflux
- 7. Allergies, seasonal
- 8. Insomnia
- Suggested facilitator question: How may Olivia's existing medical problems affect her care during her pregnancy?

### **CURRENT MEDICATIONS LIST**

This is an enterable form for students to reconcile the patient's current medications. Students should verify current and discontinued medications during this visit.

Tapping the "Medication" box will display a drop-down list of medications. The student should tap on the appropriate medication and dosage twice, then enter the instructions for how the patient uses the medication under the "Notes" section, and tap "Submit." The medication will then display on the current medication list, with a link provided to the DailyMed website, where information about the medication is provided. The student may also click on "Discontinue" to remove any medications from the list.

Medication	Notes	Submit		
<b>Current Medication</b>	DailyMed Link	Notes	Edit	

### **IMMUNIZATIONS**

The patient's immunization record displays. A link to the CDC Guidelines for Vaccinating Pregnant Women is provided.

Immunization Record	Date Received		
Hepatitis A	Never		

Hepatitis B	1/30/1990, 3/2/1990, 7/5/1990
Haemophilus influenzae type b4 (Hib)	3/2/1990, 5/7/1990, 2/1/1991
HPV	Never
Influenza	12/14/2016
Measles, mumps, rubella (MMR)	2/1/1991
Pneumococcal	Never
IPV – Inactivated Polio	3/2/1990, 5/7/1990, 2/1/1991
Diphtheria, tetanus, & acellular pertussis (DTaP)	3/2/1990, 5/7/1990, 7/5/1990
Td booster	11/14/2000, 9/9/2010
Varicella Vaccine or had Chicken Pox	Reported chicken pox 8/1995

• Suggested facilitator question: Review Olivia's immunization history and compare to the CDC Recommendations for vaccines during pregnancy. Does Olivia need any vaccines at this visit or future visits?

# OB VISIT PROGRESS NOTES

# **OB Visit Progress Notes**

Date	8 wks	16 wk	20 wk	24 wk	Today	32 wk	36 wk	38 wk
Weeks Gestation	8w3d	16w5d	20w2d	24w5d	28w1d			
Weight	156 lb	158 lb	161 lb	166 lb	169			
BP	110/64	112/68	118/72	114/70	116/76			
Fundal Height		16 cm	20 cm	24 cm	28 cm			
Position/Presentation				vertex	vertex			
Station								
FHT		150	168	132	150			
Edema	neg	neg	neg	neg	1+			
Urine glucose & protein		neg	neg	neg	neg			
Contractions								
Fetal Activity				Pos	Pos			
Non-stress test								
Provider	BB	BB	BB	BB	BB			

### **Progress Notes**

Date/Time	Note
8 wks	First prenatal visit; no complaints, excited regarding pregnancy BB
12 wks	Missed appointment; called and stated had mandatory call at work BB
16 wks	Doing well, denies any complaints. Reviewed 2 <sup>nd</sup> semester changes and to schedule 20 week ultrasound BB
20 wks	Ultrasound prior to appointment confirmed due date. Has backache, will try occasional Tylenol and stretching exercises BB
24 wks	Backache improving, feeling quickening. Discussed prep for GCT at next appointment BB
28 wks	

- Suggested facilitator questions:
  - Is Olivia's weight gain appropriate according to current pregnancy recommendations? Why or why not?
  - Review the roles of the various health care team members in obtaining the information above: Medical Assistants; RNs; Providers
  - Describe how to perform a fundal measurement (Facilitator note: may scan QR Code: Fundal Measurement to observe an image of this measurement)
  - Describe how to obtain accurate Fetal Heart Tones. (Facilitator Note: may scan QR Code: Fetal Heart Tones (accurate) or QR Code: Fetal Heart Tones (inaccurate) to observe this procedure
  - What does vertex position mean? (Facilitator note: may scan QR code: Leopold's Maneuver to observe this procedure.)
  - How often should Olivia feel the baby move (Facilitator Note: may review "Kick Count" patient education handout under the Patient Education tab.)

# **GENETICS SCREENING**

## **Genetic Screening**

Genetics Screening	Response (Yes/No)	
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Patient Age > 35 years?	No	
Italian, Greek, Mediterranean, Oriental Background (if MCV<80)	Yes	
Jewish background (Tay Sachs)	No	
History of Neural Tube Defect?	No	
History of Down's Syndrome?	Yes	Paternal uncle's baby
History of Sickle Cell Disease or Trait?	No	
History of Hemophilia?	No	
History of Cystic Fibrosis?	No	
History of Congenital Heart Disease?	Yes	Sister's baby
History of Muscular Dystrophy?	No	
History of Huntington Chorea?	No	
Patient had child with birth defect not listed above, >3 first trimester abortions, or stillbirths?	No	
Baby's father had child with birth defect not listed above, >3 first trimester abortions, or stillbirths?	No	
Medications or street drugs since LMP?	Yes	

- Suggested Facilitator Questions:
  - o Review Olivia's Genetic Screening and identify and prenatal risk factors.
  - $\circ~$  Discuss Thalessemia as a possible cause of Olivia's MCV  $<\!80$  that can be associated with her ethnic heritage.

# LABS

# **Laboratory Results**

CBC					
	8 week visit	Units	Reference Ranges for Pregnant Females		
WBC	5.4	x10³uL	1st trimester: 5.7 - 13.6 2nd trimester: 5.6 - 14.8 3rd trimester: 5.6 - 16.9		

RBC	4.3	x10 <sup>6</sup> uL	1st trimester: 3.42 - 4.55 2nd trimester: 2.81 - 4.49 3rd trimester: 2.72 - 4.43
Hgb	11.4	g/dL	1 <sup>st</sup> trimester: 11.6 - 13.9 2 <sup>nd</sup> trimester: 9.7 - 14.8 3 <sup>rd</sup> trimester: 9.5 -15
НСТ	34	%	$1^{st}$ trimester: $31 - 41$ $2^{nd}$ trimester: $30 - 39$ $3^{rd}$ trimester: $28 - 40$
MCV	79.3	fL	1st trimester: 85 -97.8 2nd trimester: 85.8 - 99.4 3rd trimester: 82.4 - 100.4
Platelet	234	x109uL	1 <sup>st</sup> trimester: 174 – 391 2 <sup>nd</sup> trimester: 155 – 409 3 <sup>rd</sup> trimester: 146 - 429

Prenatal Panel				
	8 wk visit		Normal Reference Range	
ABO Group	A		A, B, AB, O	
Rh Typing	neg		Pos or Neg	
Rh Antibody screen	neg		neg	
HBsAg (Hepatitis B)	neg		neg	
HIV	neg		neg	
HSV 1 &2 by PCR	pos		neg	
RPR	neg		neg	
Rubella	immune		immune	
PAP	normal		normal	
Chlamydia	neg		neg	

Gonorrhea	neg	neg

Urine					
	8 wks		Reference Range		
Urine culture	No growth		No growth		
Urine pregnancy	Positive				

- Suggested Facilitator Questions:
  - Facilitator Note: Students may tap on button under this tab entitled "Normal Reference Ranges During Pregnancy" hyperlink to view reference ranges for a variety of serum lab results at perinatology.com.
  - Interpret Olivia's CBC results in terms of the reference ranges for pregnant females. Note the different ranges per trimester.

### **DIAGNOSTICS**

### **Ultrasound Report #1**

**DESCRIPTION:** First trimester ultrasound for dates. EDC by LMP: xx/xx/20xx.

#### **DISCUSSION:**

Vaginal scan carried out with consent. Chaperone declined. Intrauterine pregnancy. Single live embryo. CRL = 18mm. Gestational age = 8 weeks + 3 days. USEDD = XX.YY.20ZZ

### **Ultrasound Report #2**

**DESCRIPTION:** Second trimester ultrasound at 20 weeks gestation by LMP

### **DISCUSSION:**

Single live pregnancy. HC = 130mm AC = 105mm

FL = 22mm

Anterior placenta, not low.

Gestational age, based on dating parameters of HC and FL = 20 weeks and 4 days. USEDD = XX.YY.20ZZ

Measurement notes: crown rump length (CRL), femur length (FL), head circumference (HC), abdominal circumference (AC), and humerus length (HL) Suggested Facilitator Questions:

- Why may an ultrasound be used to verify EDC?
- Review the meaning of HC, AC, FL, CRL

### PATIENT EDUCATION

A variety of Patient Education handouts are provided under this tab for student use: "Having a Healthy Pregnancy," "CDC Pregnancy – Vaccination," "Kick Counts," "Signs of Preterm Labor," "Warning Signs During Pregnancy," "Managing Pain During Labor," "Helping During Labor," "Breastfeeding" and "Circumcision." Printable versions of these handouts are also available in Appendix A-H.

## **EMERGENCY CONTACT INFORMATION**

Contact	Contact Information
Husband: Joe Brooks	Phone: 555-555-0166
	Address: 303 North Main Street Anytown, WI

# LEVEL

The State Level 1 is displayed here.

### **SCANNER**

Use this tab to scan QR codes.

### **EXIT**

- When tapped, the iPad displays the message, "Are you sure you want to exit? All data will be lost?
  - o If "Yes," the iPad progresses to an embedded survey.

o If "No," the iPad returns to the home screen.

#### STATE 1

## 28 WEEK PRENATAL VISIT

#### Patient Overview

 Students perform tasks lists for a 28 week visit as listed on Prenatal Visit Checklist and provide relevant patient education.

### • Expected Student Behaviors

- Evaluate relevant information about patient's prenatal care under tabs on iPad prior to meeting with patient.
- o Provide appropriate hand hygiene throughout scenario
- Introduce themselves to the patient
- Verify patient identity with name and date of birth
- View OB Visit Checklist for expected tasks to perform during this visit.
   This is a checklist that can be checked off during the scenario.
  - Administer Rhogam
  - Administer glucose challenge tolerance test
  - Obtain urine specimen for Urine protein and glucose
  - Obtain blood specimen for Rh antibody screen
- Review Olivia's Medical Problems, OB/GYN history and Genetics screening and identify any prenatal risk factors
- Review Olivia's Immunization History and the CDC recommendations for vaccines during pregnancy and identify any vaccines needed.
- Interpret lab results from first prenatal visit under Lab tab and verbalize impact on nursing care
- Review Ultrasound reports under Diagnostic tab
- May scan QR Code: Fetal Heart Tones A to view correct procedure or QR Code: Fetal Heart Tones B to view incorrect procedure
- May scan QR Code: Leopold's maneuver to view the procedure
- Provide appropriate focused patient education for this visit using various handouts provided under Patient Education tab

### Technician Prompts

- When administering GCT, patient does not like the thought of drinking the glucose drink and needs some encouragement.
  - Ask questions like, "When can I eat real food?" "How long do I have to wait?"
- When administering Rhogam, ask questions like "Why do I have to get this shot?"

### Suggested Facilitator Questions

- Will Olivia need any immunizations during her pregnancy? Does Olivia need any immunizations at this visit?
- Perform medication reconciliation. Describe the pregnancy category for each of Olivia's current medications. Are they safe to take during pregnancy?
- Interpret the previous lab work results and their impacts on nursing care.
- Review the lab work that will be ordered during today's visit under the Prenatal Visit Checklist.
  - What is the Glucose Challenge Test? How is it administered? What results are considered "abnormal?" How would abnormal results impact nursing care during Olivia's pregnancy?
  - What is the Rh Antibody test? How is it collected? What results are considered abnormal? How would abnormal results impact nursing care during Olivia's pregnancy?
- Why is Rhogam administered during the 28 week visit?
- Describe how to obtain accurate fetal heart tones.
- How can you evaluate if you are hearing the baby's heart or the mother's heart rate through the placenta?
- Review the Patient Education handouts. Discuss key topics to reinforce at this prenatal visit.
- When should Olivia schedule her next prenatal visit?
- Tabbed iPad changes

 When the student has performed expected behaviors, scan QR Code: Facilitator if you would like to progress the scenario to the 36 week prenatal visit. Otherwise, the student may exit at this time.

### STATE 2

## **36 WEEK PRENATAL VISIT**

#### Patient Overview

Students receive a message that "8 weeks have elapsed and Olivia presents for her 36 week visit." A second receptionist video and patient video are displayed. The patient states, "I don't know if I should be concerned, but I feel like I haven't felt the baby move in a while." Students should perform tasks lists for a 36 week visit listed on Prenatal Visit Checklist and prepare to obtain a nonstress test. Students may view a video of the non-stress test being performed by scanning the appropriate QR codes. The student should also assist in the collection of specimens for the following: a urine protein and glucose test; Hbg/HCT; Group B strep.

### Expected Student Behaviors

- Provide appropriate hand hygiene throughout scenario
- Introduce themselves to the patient
- Verify patient identity with name and date of birth
- Therapeutically address patient's concerns about not feeling the baby move
- Investigate patient's report to receptionist that she has "had a few contractions this morning"
- View OB Visit Checklist for expected tasks to perform during this visit
  - Obtain specimen for Urine protein and glucose
  - Prepare to obtain hgb/HCT
  - Assist in collection of Group B Strep specimen. Students may scan
     QR Code: Group B strep for collection instructions.
- Interpret lab results from 28 week visit: CBC, GTT and Rh antibody screen
- May scan QR Code: Fundal Measurement to view a video of the procedure
- Provide appropriate focused patient education for this visit using the handouts provided under Patient Education tab

- Scan QR Code: Fetal Heart Monitoring to view a nonstress test
- Scan QR Code: Fetal Heart Monitoring Strip and interpret the strip

### Technician Prompts

- When asked about not feeling the baby move and/or having contractions, make statements like:
  - "I usually feel the baby move quite a bit, especially at night. Last night I didn't feel any movement."
  - "I have been having some random contractions, here and there. Nothing consistent and they only last about 15 seconds or so."
- When administering the nonstress test, patient has a lot of questions such as:
  - "What will this test tell us?"
  - "Is there something wrong with my baby?"
  - "Why haven't I felt the baby move much?"
  - "How much should I feel the baby move? What is normal?"
- When preparing to collect the Group B test, students should prepare the patient accordingly. The patient should ask questions like:
  - "How is this sample taken?"
  - "Will it hurt like a PAP smear?"
  - "What does it mean if it's positive? Will my baby be OK?"

### Suggested Facilitator Questions

- How often should a patient feel the baby move at 36 weeks gestation?
   What is considered abnormal?
- Are her contractions concerning or not? What are "Braxton Hicks" contractions?
- Regarding the nonstress test: QR Code: Fetal Heart Monitoring may be scanned to view the procedure. QR Code: Fetal Heart Monitoring Strip may be scanned to view an image of the strip result.
  - Interpret the strip: are there any contractions? Interpret the fetal heart rate findings.

- Interpret the lab results from the 28 week visit and how the results will impact nursing care.
- What is Group B strep? How should the specimen be collected? If
  positive results are received, how will this impact nursing care during
  labor and delivery? Facilitator Note: QR Code: Group B Strep Swab
  can be scanned to review how the specimen should be obtained.
- What does Leopold's maneuver tell us about the baby's presentation and position?
- O What does Olivia's fundal measurement tell us today?
- What prenatal education should be provided at today's visit? (See available handouts under Patient Education tab)
- When should Olivia schedule her next prenatal visit?
- Tabbed iPad Content Changes:

# **OB VISIT CHECKLIST**

36 week Visit	Completed
Weight and BMI	
VS: BP	
Medication Reconciliation	
Fundal height	
Fetal heart tones	
Non-stress test prn	
Position/presentation by provider	
Patient Education:	
Labwork:  O Urine for protein and glucose today O Hgb/HCT today O Group B strep	

# OB VISIT PROGRESS NOTES

Date	8 wks	16 wk	20 wk	24 wk	28 wk	32 wk	36 wk	38 wk
Weeks Gestation	8w3d	16w5d	20w2d	24w5d	281d	32w6d	36w1d	
Weight	156 lb	158 lb	161 lb	166 lb	169 lb	173 lb	178 lb	
BP	110/64	112/68	118/72	114/70	116/76	120/72	124/76	
Fundal Height		16 cm	20 cm	24 cm	28 cm	33 cm	37 cm	
Position/Presentation				vertex	vertex	vertex	vertex	
Station							-3	
FHT		150	168	132	150	156	130s	
Edema	neg	neg	neg	neg	1+	1+	2+	
Urine glucose & protein		neg	neg	neg	neg	neg	neg	
Contractions							Pos	
Fetal Activity				Pos	Pos	Pos	Pos	
Non-stress test								
Provider	BB							

# **Progress Notes**

Date/Time	Note
8 wks	First prenatal visit; no complaints, excited regarding pregnancy BB
12 wks	Missed appointment; called and stated had mandatory call at work BB
16 wks	Doing well, denies any complaints. Reviewed $2^{nd}$ semester changes and to schedule 20 week ultrasound BB
20 wks	Ultrasound prior to appointment confirmed due date. Has backache, will try occasional Tylenol and stretching exercises BB
24 wks	Backache improving, feeling quickening. Discussed prep for GCT at next appointment BB
28 wks	1+ edema, worse after shift standing at work. Discussed L&D prep classes. GCT and Rhogam today BB
32 wks	Edema same, trying to keep legs elevated after work. Discussed pain management option for L&D, prefers IM, IV meds. Possible epidural OK. Group B strep culture at next appointment. No herpes breakouts during pregnancy BB
36 wks	

# LABS

# **Laboratory Results**

СВС					
	8 week visit	28 week visit	Units	Reference Range	
WBC	5.4	6.1	x10³uL	1 <sup>st</sup> trimester: 5.7 - 13.6 2 <sup>nd</sup> trimester: 5.6 - 14.8 3 <sup>rd</sup> trimester: 5.6 - 16.9	
RBC	4.3	4.8	x10 <sup>6</sup> uL	1st trimester: 3.42 - 4.55 2nd trimester: 2.81 - 4.49 3rd trimester: 2.72 - 4.43	
Hgb	11.4	12.7	g/dL	1st trimester: 11.6 - 13.9 2nd trimester: 9.7 - 14.8 3rd trimester: 9.5 -15	
НСТ	34	33	%	$1^{st}$ trimester: $31 - 41$ $2^{nd}$ trimester: $30 - 39$ $3^{rd}$ trimester: $28 - 40$	
MCV	79.3	80.1	fL	1st trimester: 85 -97.8 2nd trimester: 85.8 - 99.4 3rd trimester: 82.4 - 100.4	
Platelet	234	242	x10 <sup>9</sup> uL	1st trimester: 174 – 391 2nd trimester: 155 – 409 3rd trimester: 146 - 429	

Glucose Tests						
		28 week visit	Units	Reference Range		
GCT	1 hour	144	mg/dl	< 140		
GTT	fasting	90	mg/dl	< 95		
	1 hour	160	mg/dl	< 180		
	2 hour	110	mg/dl	< 155		
	3 hour	100	mg/dl	< 140		

Prenatal Panel					
	8 week visit	28 week visit	Normal Reference Range		
ABO Group	A		A, B, AB, O		
Rh Typing	neg		Pos or Neg		
Rh Antibody screen	neg	neg	neg		
HBsAg (Hepatitis B)	neg		neg		
HIV	neg		neg		
HSV 1 &2 by PCR	pos		neg		
RPR	neg		neg		
Rubella	immune		immune		
PAP	normal		normal		
Chlamydia	neg		neg		
Gonorrhea	neg		neg		

Urine					
	8 weeks			Reference Range	
Urine culture	No growth			No growth	
Urine pregnancy	Positive				

- Suggested Facilitator Questions:
  - Note the different reference ranges per trimester. Interpret Olivia's results from her 28 week visit.
  - Interpret the results of the Glucose Challenge Tolerance test and any impact on Olivia's prenatal care.

### **EXIT**

After the QR Code: Facilitator code is scanned, indicating that all student expected behaviors have been met, the message will read, "You have been approved to proceed." Students may then tap on Exit and view the message, "Scenario objectives have been met. Are you sure you want to exit the game? Yes/No."

#### **DEBRIEF**

Nothing needed from the iPad.

### **QUESTIONS**

- 1. How did you feel this scenario went?
- 2. Review the learning objective: Maintain a safe, effective health care environment for a patient seeking prenatal care in a clinic setting
  - a. How did you provide safe, effective care to a prenatal patient today?
- 3. Review the learning objective: Relate patients' health status to assessment findings, medications, laboratory and diagnostic test results, medical and nursing interventions
  - a. Review the patients OB/GYN history and Genetics Screening and identify potential prenatal risk factors
  - b. Explain the correct method for obtaining fetal heart tones
  - c. Explain the correct method for fundal height measurement
  - d. Describe the nonstress test procedure and the information it provides
  - e. Describe Leopold's maneuver and the information it provides
  - f. Verbalize how to obtain Glucose Challenge Test
  - g. Interpret the Rh antibody screen and the impact it has on labor and delivery
  - h. Verbalize how to administer Rhogam
  - Verbalize how to obtain Group B strep specimen and the impact of results on labor and delivery
  - j. Review the other lab work results and explain the impact the results will have on labor and delivery
  - k. Review the patient's medications: what are safe to take during pregnancy?
- 4. Review the learning objective: Observe fundal height measurement, fetal heart tone monitoring, fetal monitoring and Leopold's maneuver
  - a. Describe the role of the RN and the provider in obtaining this information
  - b. How is the information obtained used to guide prenatal care?
- 5. Review the learning objective: Provide patient education during prenatal care

- c. What education is important to provide during the 28 week and 36 week prenatal visits
- 6. Review the learning objective: Provide patient centered care by utilizing the nursing process for a patient receiving prenatal care. Tie this scenario to the nursing process:
  - a. Identify 3 priority nursing problems you identified.
  - b. Create a patient centered goal for each nursing problem you identified.
  - c. Discuss focused assessments for each nursing problem.
  - d. Discuss nursing interventions for each nursing diagnosis.
  - e. Re-evaluate the simulation in terms of the nursing process; what was actually accomplished? What could be improved in the future?

Summarize/Take Away Points: "In this scenario you care for a patient coming to a clinical setting for her 28 week and 36 week prenatal visits. What is one thing you learned from participating in this scenario that you will take into your nursing practice?" (Ask each student to share something unique from what the other students share.)

NOTE: Debriefing technique is based on INASCL Standard for Debriefing and NLN Theory-Based Debriefing by Dreifuerst.

# APPENDIX A: HAVING A HEALTHY PREGNANCY PATIENT EDUCATION HANDOUT

# HAVING A HEALTHY PREGNANCY

Staying healthy while pregnant is important not only for your physical and mental well-being, but also for your growing baby. Health is a combination of a number things, including making lifestyle changes, getting proper nutrition, exercising regularly, and avoiding unhealthy/dangerous activities. By making changes to be as healthy as possible, you'll also make your baby grow to be as healthy as possible.



WHAT IS PRENATAL CARE? Prenatal care describes the medical care women get during their pregnancy. As part of your prenatal care, the doctor or midwife will:

- Figure out when your baby is due
- Talk to you about nutrition, physical activity, work, and common pregnancy complaints, such as morning sickness, heartburn, and backache
- Monitor your health to watch for problems
- Monitor your baby's health to check that he or she is growing well
- Talk with you about pregnancy, labor, and delivery, and make a plan for your labor and delivery
- Talk with you about taking care of yourself and your baby after the birth
- Do tests to check you and your baby for different health conditions

### WHAT HAPPENS AT MY FIRST PRENATAL VISIT?

Your doctor or midwife will ask about your health and medical history, and figure out when your baby is due. He or she will also do a pelvic exam to can check your ovaries and the size of your uterus, as well as obtain a PAP smear and screening for STDs like gonorrhea, chlamydia, syphilis and HIV.

#### Other tests include:

- Urine test
- Blood tests to check your general health and to check for specific conditions that could cause problems for you or your baby.

#### WHAT WILL HAPPEN AT EACH PRENATAL VISIT?

- Ask about your symptoms and answer any questions you have
- Check your blood pressure Having high blood pressure can lead to problems, including a serious condition called "preeclampsia."
- Check your weight
- Measure the size of your uterus Your uterus will get bigger as your pregnancy progresses.
- Listen for your baby's heartbeat starting at about 12 weeks of pregnancy.
- Test your urine to check for sugar or protein Having sugar or protein in your urine might be a sign of a more serious problem.
- Ask about your baby's movements Women start feeling their baby move at different times. Most women feel their baby move by 20 to 25 weeks of pregnancy.
- Check your baby's position in your uterus by feeling through your abdomen In the last 3 months of pregnancy, the doctor or midwife will check your baby's position at each visit.

#### WHAT OTHER TESTS ARE PART OF PRENATAL CARE?

Your doctor or midwife will order other tests during your pregnancy such as:

 A test to check for diabetes (high blood sugar) – This involves having nothing to eat overnight, then drinking a sugary drink at the office and having your blood drawn.

- Blood tests to check for certain conditions or infections based on your history and health.
- An ultrasound This test checks your placenta, the fluid around your baby, how
  your baby is growing, and how your baby's organs are developing.
- Tests to check for birth defects or problems babies can be born with
- Tests on your vaginal discharge (the fluid that leaks from your vagina) to check for an infection or if your "water has broken."

### HOW OFTEN WILL I SEE MY DOCTOR OR MIDWIFE DURING PREGNANCY?

Your visits to your doctor or midwife will get more frequent as your pregnancy progresses. One common schedule of visits is the following:

- Every 4 weeks until you are about 28 weeks pregnant
- Then every 2 to 3 weeks until you are about 36 weeks pregnant
- Then every week until delivery

Women with certain medical conditions (including conditions they had before they got pregnant) might need to see their doctor or midwife more often. They might also need other tests to follow their medical condition during pregnancy.

### HOW TO MAINTAIN GOOD HEALTH DURING PREGNANCY

#### 1. Take Prenatal Vitamins

**Prenatal vitamins** contain vitamins and a combination of high levels of folic acid and iron, both of which are responsible for early development of the baby and reducing the risk of complications and defects such as spina bifida and premature birth. Take your prenatal vitamin every day. If you are feeling nauseated, some women find it helpful to take them after their evening meal.





2. **Keep an eye on your weight.** Healthy weight gain will depend on how much you weigh to begin with. Your doctor or nurse will tell you how much weight gain is right for you. In general, a woman who is a healthy weight should gain 25 to 35 pounds during her pregnancy. A woman who is overweight or obese should gain less weight. If you start to lose weight, for example, because you have severe morning sickness, call your doctor or nurse.



3. Eat a healthy diet

Eating the right foods will help your baby's development. Your baby will need nutrients from these foods to form normally and grow. The best diet for you and your baby will include lots of fresh fruits, vegetables, and whole grains, some low-fat dairy products, and a few sources of protein, such as meat, fish, eggs, or dried peas or beans. If you do not eat dairy foods, you will need to get calcium from other sources.

You need to be extra careful about avoiding germs in your food. Getting an infection while you are pregnant can cause serious problems. Here's what you should do to avoid germs in your food:

- Wash your hands well with soap and water before you handle food.
- Make sure to fully cook fish, chicken, beef, eggs, and other meats.
- Rinse fresh fruits and vegetables under lots of running water before you eat them.
- When you are done preparing food, wash your hands and anything that touched raw meat or deli meats with hot soapy water. This includes countertops, cutting boards, and knives and spoons.

**Which foods should I avoid?** — You should avoid certain types of fish and all forms of alcohol. You should also limit the amount of caffeine in your diet, and check with your doctor before taking herbal products.

 Fish – You should not eat types of fish that could have a lot of mercury in them. These include shark, swordfish, king mackerel, and tilefish.
 Mercury is a metal that can keep the baby's brain from developing normally.

You can eat types of fish that do not have a lot of mercury, but not more than 2 times a week. The types of fish and other seafood that are safe to eat 1 or 2 times a week include shrimp, canned light tuna, salmon, pollock, and catfish. Tuna steaks are also OK to eat, but you should have that only 1 time a week.

Check with your doctor or nurse about the safety of fish caught in local rivers and lakes.

- Caffeine Limit the amount of caffeine in your diet by not drinking more than 1 or 2 cups of coffee each day. Tea and cola also have caffeine, but not as much as coffee.
- **Herbal products** Check with your doctor or nurse before using herbal products. Some herbal teas might not be safe.

 Alcohol – You should avoid alcohol completely. Even small amounts of alcohol could harm a baby.



**4. Never smoke while pregnant and avoid passive smoking as far as possible.** It's generally recommended that smoking of any sort be avoided, as it is very damaging to the lungs. This is especially true for pregnant women, because whatever you smoke, your baby smokes as well. Nicotine and tobacco in the blood stream is absorbed by the child, increasing the likelihood of stillbirth, miscarriage, and a low birth weight.. Cut out all smoking in your life, including cigarettes, e-cigs, cigars, and marijuana.



### 5. Stay away from illicit drugs

Drugs of any sort - particularly 'street' drugs - are incredibly dangerous for a developing child. Recreational drugs almost guarantee your child will suffer from a birth defect or complication. Further, mothers who are addicted to drugs and continue to use them while pregnant can actually pass on their addiction to their child. The newborn baby is then addicted to drugs and will suffer withdrawal symptoms when born, just like an adult does. If you're a user of recreational drugs or are addicted, get help from a

psychologist or group therapy, to protect the health of your growing baby.



**6. Don't change a cat's litter box.** A dangerous infection known as toxoplasmosis can be found in cat litter boxes, and can quickly spread to pregnant women. The illness may have no recognizable symptoms in the mother and will pass to the baby undetected, causing serious brain and eye damage to the growing baby. If you have a litter box, steer clear of it and have a friend or relative take over control of cleaning it regularly.



7. **Ask if the medicines you take are safe** — If you take any medicines, supplements, or herbal drugs, ask your doctor or midwife if it is safe to keep taking them while you are pregnant or trying to get pregnant. Your doctor and nurse might need to slowly get you off some medicines because it could harm you to stop them all of a sudden.



**8. Get vaccinated during pregnancy** — Women who are pregnant should get the following vaccines. Check with your doctor or nurse about what other vaccines are recommended as some should be postponed until after pregnancy due to risk to the baby.

**Influenza (flu)** — Pregnant women are at especially high risk of developing complications of the flu. Vaccination against the seasonal flu is recommended for **all** women who are or will be pregnant during influenza season. Influenza vaccine injection (flu shot) during pregnancy has no known harmful effects on the unborn baby, and can help protect the baby from influenza in the first six months after birth, before the baby is eligible for the flu vaccine. The nasal spray influenza vaccine should be avoided because it is made from a live virus.

**Tetanus, diphtheria, and pertussis** — The tetanus, diphtheria, acellular pertussis (Tdap) vaccine is recommended for pregnant women in each pregnancy, and ideally should be given between 27 and 36 weeks of gestation, to help protect the newborn from pertussis infection.



**9. Wear your selt belt and keep the airbags on** — Pregnant women should continue wearing three-point seat belts during pregnancy. The lap belt is placed across the hips

and below the uterus; the shoulder belt goes between the breasts and lateral to the uterus.



10. Avoid travel to Zika prone areas - Pregnant women are advised to consider postponing travel to areas with ongoing mosquito transmission of Zika virus. Women who must travel are advised to take precautions against mosquito bites including wearing long-sleeved shirts and pants, staying in places with air conditioning, sleeping under a mosquito net, and using approved insect repellant. In addition, pregnant women whose male partners have travelled to affected regions should abstain from sexual activity (vaginal, anal, and oral sex) or use condoms for the duration of the pregnancy.



11. Keep active by exercising regularly. Carrying around extra mid-body weight, morning sickness, and aching muscles can all combine to make exercise sound incredibly unappealing. However, keeping active while you are pregnant will ensure not only your health, but your baby's as well. Regular exercise can make delivery less difficult, make losing your baby weight easier, aid in post-birth physical recovery, and encourage healthy fetal growth. Aim to do thirty minutes of low-impact exercise such as swimming, riding a bicycle, lifting weights, or yoga a day. Walking is a good option too

- Don't participate in any high-impact exercises (workout classes, long runs) or contact sports (soccer, rugby, football), as these put you at a high risk for injury.
- Always stretch before you exercise while pregnant; a hormone called 'relaxin' is released to prepare your body for labor, but this can weaken your muscles and joints. Without stretching, you increase your risk for muscle or joint injury.
- Avoid activities or stretches that require you to lie down on your back, because this puts pressure on a major vein that reduces blood flow to the uterus, which may make you feel dizzy and lightheaded.
- Overheating can be dangerous to your baby, so make sure you always keep cool by having a fan and cold water at the ready



By making these efforts to be as healthy as possible during your pregnancy, you'll also help your baby to grow to be as healthy as possible. If you have any questions, be sure to ask your doctor or nurse.

### **Credits:**

Lockwood, C and Magriples, U. Initial Prenatal Assessment and First Trimester Prenatal Care. In: UptoDate, Ramen SM (Ed), UptoDate, Waltham, MA (Accessed on January 19, 2017.)

Images from How to Have a Healthy Pregnancy, downloaded from http://www.wikihow.com/Have-a-Healthy-Pregnancy and other assorted WikiHow topics. See credit on each individual picture.

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# APPENDIX B: CDC PREGNANCY – VACCINATION PATIENT EDUCATION HANDOUT

## **Pregnancy and Vaccination**



Information for pregnant women



You probably know that when you are pregnant, you share everything with your baby. That means when you get vaccines, you aren't just protecting yourself—you are giving your baby some early protection too. You should get a flu shot and whooping cough vaccine (also called Tdap) during each pregnancy to help protect yourself and your baby.

### Whooping Cough Vaccine

Whooping cough (or pertussis) can be serious for anyone, but for your newborn, it can be lifethreatening. Up to 20 babies die each year in the United States due to whooping cough. About half of babies younger than 1 year old who get whooping cough need treatment in the hospital. The younger the baby is when he or she gets whooping cough, the more likely he or she will need to be treated in a hospital. It may be hard for you to know if your baby has whooping cough because many babies with this disease don't cough at all. Instead, it can cause them to stop breathing and turn blue.

Last Updated September, 2016

When you get the whooping cough vaccine during your pregnancy, your body will create protective antibodies and pass some of them to your baby before birth. These antibodies will provide your baby some short-term, early protection against whooping cough.

Learn more at www.cdc.gov/pertussis/pregnant/.

#### Flu Vaccine

Changes in your immune, heart, and lung functions during pregnancy make you more likely to get seriously ill from the flu. Catching the flu also increases your chances for serious problems for your developing baby, including premature labor and delivery. Get the flu shot if you are pregnant during flu season—it's the best way to protect yourself and your baby for several months after birth from flurelated complications.

Flu seasons vary in their timing from season to season, but CDC recommends getting vaccinated by the end of October, if possible. This timing helps protect you before flu activity begins to increase. Find more on how to prevent the flu by visiting www.cdc.qov/flu/.

## Pregnancy and Vaccination

### Keep Protecting Your Baby after Pregnancy

Your ob-gyn or midwife may recommend you receive some vaccines right after giving birth. Postpartum vaccination will help protect you from getting sick and you will pass some antibodies to your baby through your breastmilk. Vaccination after pregnancy is especially important if you did not receive certain vaccines before or during your pregnancy.

Your baby will also start to get his or her own vaccines to protect against serious childhood diseases. You can learn more about CDC's recommended immunization schedule for children and the diseases vaccines can prevent at <a href="https://www.cdc.gov/vaccines/parents/">www.cdc.gov/vaccines/parents/</a>.

Even before becoming pregnant, make sure you are up to date on all your vaccines. This will help protect you and your child from serious diseases. For example, rubella is a contagious disease that can be very dangerous if you get it while you are pregnant. In fact, it can cause a miscarriage or serious birth defects. The best protection against rubella is MMR (measles-mumps-rubella) vaccine, but if you aren't up to date, you'll need it before you get pregnant.

Talk to your ob-gyn or midwife about maternal vaccines and visit: www.cdc.gov/vaccines/pregnancy/



U.S. Department of Health and Human Services Centers for Disease Control and Prevention

CS-HCVG15-MAT-107 09/27/2016

Keep in mind that many diseases rarely seen in the United States are still common in other parts of the world. Talk to your ob-gyn or midwife about vaccines if you are planning international travel during your pregnancy. More information is available at www.cdc.gov/travel/.



### APPENDIX C: KICK COUNTS PATIENT EDUCATION HANDOUT

## **KICK COUNTS DURING PREGNANCY**



Being attentive to your baby's movements will help you notice any significant changes. Setting aside time every day when you know your baby is active to count kicks or fetal movement that you may feel. This may help identify potential problems. Though strongly recommended for high-risk pregnancies, counting fetal movements beginning at 28 weeks can be beneficial for all pregnancies.

Taking time to do your kick counts will encourage you to rest and bond with your baby. Start by finding a comfortable position during a time when your baby is usually most active. Some moms prefer sitting in a well-supported position with their arms holding their bellies. Other moms prefer lying on their left sides, which they find most comfortable and most effective for monitoring their babies. Lying on your left side also allows for the best circulation which could lead to a more active baby.

There are numerous ways to count your baby's movements and numerous opinions on how many movements you are looking for within a certain amount of time.

One method is to time how long it takes you to feel 10 kicks, flutters, swishes, or rolls. Ideally, you want to feel at least 10 movements within 2 hours. You will likely feel 10 movements in less time than that.

### MAINTAIN A DIARY OF FETAL MOVEMENT

	09:00	09:30	10:00	10:30	11:00	11:30	12:00	
1								
2								
3								
4								
5								
6								

Try to count at the same time each day and keep a journal.

Call your health care provider anytime you have questions regarding your baby's movement during pregnancy, if there are fewer than 10 movements in 3 hours, or if the fetal movement are slowing.

### **Credits:**

Content adapted from Fretts, R. (2017). Decreased fetal movement: Diagnosis, evaluation and management. In: UptoDate, Lockwood, C (Ed), UptoDate, Waltham, MA (Accessed on August 10, 2017.)

Images from www.wikihow.com

### APPENDIX D: SIGNS OF PRETERM LABOR PATIENT EDUCATION HANDOUT

# HOW TO RECOGNIZE PRETERM LABOR



If you are pregnant, it is important to recognize the signs and symptoms of preterm labor. If you know the symptoms, you can seek medical treatment that will hopefully prevent you from giving birth to your baby prematurely. Preterm labor occurs when you are between 20 and 37 weeks of pregnancy; any earlier than that, and it's considered a miscarriage. It can be caused by any number of factors, some you have control over and some you don't. Regardless, it's best to learn how to recognize if you are experiencing preterm labor.

#### WHAT CAUSES PRETERM LABOR?

The cause of preterm labor is not well understood. We know that certain things are associated with preterm labor and may increase your risk for early delivery. Common factors include carrying twins or triplets or having had a preterm delivery in the past. At this time, preterm labor can't be prevented. We can only do the next best thing — identify it early and try to help the pregnancy continue and increase your baby's chances for a healthy term delivery.

### **Feel for contractions**

A contraction will feel like a tightening of muscles in your abdominal area, especially near your baby. However, a contraction is not always a sign of preterm labor, as you can have false contractions called Braxton Hicks contractions.

- Braxton Hicks contractions are generally less severe than regular contractions.
   Though Braxton Hicks can be painful sometimes, actual contractions are usually accompanied by more pain and are more regularly spaced. In fact, actual contractions will move closer together as time passes.
- If you're having more than eight contractions in an hour or more than four in 20 minutes, your contractions are likely not Braxton Hicks.
- If you are having contractions and are worried, don't be afraid to call your doctor.
   She'll be better able to determine whether you are having false contractions or regular contractions.

### If you notice irregular Braxton Hicks try the following:

If your contractions are Braxton Hicks, they will eventually subside. To stop contractions try changing how you're positioned. Lie down on your side, if you've been moving around, or do the opposite if you've been lying down, try walking around. Braxton Hicks will usually stop with position changes. True labor contraction will continue despite activity changes. You can also try drinking more fluids or getting extra rest to help alleviate these contractions over time.



### Pressure in your abdomen

If you start feeling pressure in your lower abdomen, that could be a sign of preterm labor. You may also feel pressure in your pelvic area. If you're not sure whether the pressure you're feeling is preterm labor, call your doctor to be sure.



### **Abdominal cramps**

If you start feeling cramps, it may be a sign of preterm labor. Generally, these cramps will feel like you are on your period. In addition, diarrhea may accompany your cramping.



### **Backache**

While a backache may just seem like an annoyance, it may also be a sign you're going into labor. In particular, backaches that are in your lower back could be a symptom, especially ones that don't go away. You'll feel a dull ache, not a sharp pain.

### New vaginal discharge or changes in your vaginal discharge

You may see some spotting or bleeding from your vagina. Spotting is light bleeding. Check your underwear for this symptom, though it may also show up when you are using the restroom.

- In a more severe case, your water may break. In that case, you would notice watery discharge from your vagina. It may gush all at once or be a slow leak.
- You should especially be looking for changes in your vaginal discharge. Some discharge is normal during pregnancy. In your second trimester, you're likely to see white, thin discharge. This discharge is acidic in nature, as it tries to stave off bad bacteria and yeast in your vaginal area. In your third trimester, you're likely to see heavier discharge near the end of the pregnancy. If you've been having normal discharge, but it suddenly changes, call your doctor. Also, look for an increase in thickness or the amount of mucus.

### WHAT TO DO IF YOU NOTICE CONTRACTIONS

- Go to the bathroom and empty your bladder
- Drink plenty of fluids
- Lie down on your side and rest
- Record any contractions you have. Record both the time the contraction begins, as well as the time it ends (start time and end time)
- Call your health care provider if you have 5 or more contractions at regular intervals in the next hour

### **EMERGENCY SITUATIONS**

Sometimes, a problem can occur that needs immediate attention. If you notice any of the signs below, CALL YOUR PROVIDER:

- Bleeding
  - If you have vaginal bleeding, a large gush or steady stream of bright red blood, it is an emergency. Get help right away, lie on your side and put your feet higher than your head. Save any pads or cloths used to catch the blood
- Rupture of the bag of water (amniotic sac)
   Sometimes the bag of water breaks prematurely. If you notice a gush of fluid or a steady trickle, call your doctor. Note any color or odor of the fluid and save pads if you go to the hospital.
- Severe stomach pain

If you have sharp, constant, severe pain that doesn't go away when you change position, with or without contractions or bleeding, call your doctor.

### HOW YOU CAN HELP YOURSELF AT HOME

If your health care provider believes that you are at risk for preterm labor or experiencing any of the early warning signs, you may be told to do these things:

If you notice contractions first call your health care provider.

### Increase your rest

Resting on your side is a helpful way to keep your uterus relaxed. You may be asked to elevate the foot of your bed (or couch) so that your hips are slightly higher than your head — this will keep the pressure of the baby off of your cervix.

### Fluid intake

During your pregnancy, it is even more important to drink 6-8 glasses of fluid per day as recommended for adults.

#### Bedrest

Your doctor may ask you to take rest periods ranging from 1-2 hours twice a day to modified or complete bedrest.

### Decrease strenuous activity

Your doctor may ask that you do not do any heavy physical activity such as jogging, running, tennis or frequent trips up and down stairs. You may also have to limit heavy lifting, cleaning and long trips.

### Change in job activities

Certain work activities may need to be changed or stopped. Your doctor will talk to you if this becomes a possibility.

### Sexual activity

Your health care provider may ask that you stop or limit your sexual activities

Credits: Adapted from March of Dimes (2017). Preterm labor and premature birth: Are you at risk? Available at: <a href="http://www.marchofdimes.org/complications/preterm-labor-and-premature-birth-are-you-at-risk.aspx#">http://www.marchofdimes.org/complications/preterm-labor-and-premature-birth-are-you-at-risk.aspx#</a>

Images from www.wikihow.com

# APPENDIX E: WARNING SIGNS DURING PREGNANCY PATIENT EDUCATION HANDOUT

## WARNING SIGNS DURING PREGNANCY



Certain symptoms should be reported to your physician immediately, during any stage of the pregnancy. These include, but are not limited to, the following:

- Bleeding or leaking fluid from the vagina
- Blurry or impaired vision
- Unusual or severe abdominal pain or backaches
- Frequent, severe, and/or continuous headaches
- Contractions before 37 weeks that occur 4 times every 20 minutes, or contractions 8 times an hour that last for more than an hour
- Decrease in baby's movements
- Dizziness
- Excessive vomiting and diarrhea
- Fever
- Pain or burning with urination
- Strong cramps
- Swelling of face, fingers, and feet
- Chills
- Inability to tolerate foods or liquids

Credits: Adapted from Lockwood, C. (2017). Prenatal care: second and third trimesters. In: UptoDate, Berghella, V (Ed), UptoDate, Waltham, MA (Accessed on August 10, 2017.)

Image from www.wikihow.com

### APPENDIX F: BREASTFEEDING PATIENT EDUCATION HANDOUT

# SUCCESSFUL BREASTFEEDING FOR YOU AND YOUR BABY

### START WITH A CALM BABY AND MOTHER

1. Feed Regularly. Feed your newborn regularly and often. Start with a feeding in the first hour of birth. All newborn babies need to eat frequently, watch the baby not the clock. Watch for feeding cues like sucking and rooting. Bring the baby to the breast frequently. Babies vary for time they take to nurse at each feeding.



- 2. <u>Positioning</u>. Allow your baby to take the lead. Support your baby's body with your arms. Allow your breast to fall naturally and help the baby line up under your breast with your nipple toward the baby's nose.
- 3. Skin to Skin, Hold your baby skin to skin for the first hour after birth and have the baby in your room during the hospital stay. Skin to skin has many benefits including bonding for mothers and babies, breastfeeding success, keeping the baby warm, stabilizing blood sugar levels. Nursing and medical procedures can be completed while the infant is skin to skin. Support people can assist with skin to skin too.
- 4. Breast Compression is a technique that can increase milk supply and get milk to a baby that is not latching as well. Please your hand behind the nipple and areola and compress you breast in a rhythmic fashion. This technique takes practice and a lactation consultant can assist you

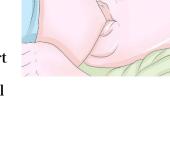


with this. You can do it before, during and after infant feedings.

5. Aim your nipple toward the baby's nose. The baby will then reach for the nipple. Make sure your baby's moth is open wide. The baby's upper lip should barely brush past the top of the nipple. Support the baby's upper back and shoulders with your palm. Do not put pressure on the back of the baby's head.



6. Latching on. Let your baby feed as long as he wants to on the first breast. Some babies are more "efficient" than others, some like to nurse longer. Depending on how much milk a mother makes, a baby may not take the second side. Just make sure to switch between breasts when you start a new feeding. Listen for rhythmic, regular suck/swallow pattern that will let you know the baby has latched properly and milk is being exchanged between mother and infant.



When your baby feeds from your breast, it should feel like a gentle pull, not a pinch or a bite. Look at your nipple after the feeding if your nipple changes shape when in the baby's mouth your infant may be pinching the nipple. Help your baby achieve a deeper latch.

Baby's need to latch onto the underside of the breast, not the nipple.

When your baby is done feeding on a breast, you shouldn't pull or even yank him away. Instead, insert your finger in his mouth so that his mouth releases your breast.

7. Burp your baby (optional). This isn't always necessary. Depending on how much air the baby takes in through the nose while it is nursing, you may or may not need to burp baby. If your baby is arching his back, squirming around, and looking uncomfortable, then he may be ready to get burped. Try to burp him in one of these ways:



Lift your baby toward your shoulder, with your hand on his head and neck for support. He should be facing the area behind you. Rub your baby's back with a firm and open hand to release the trapped air.

Sit your baby on your lap and lean him forward, supporting his chest with the base of your hand and his chin and neck with your fingers. Massage his stomach with your front hand and gently pat his back with the hand on his back.

Lie your baby on your lap with his head raised higher than his stomach. Gently pat his back until he burps.

8. Getting enough milk. A newborn baby will mostly nurse and sleep. You know when the baby is "getting enough" when there are 8-10 wet and or dirty diapers by the end of the week.



9. Maintain a healthy diet. Eat a wide variety of foods that are low in sugar, caffeine, fat and salt and be active. Foods high in iron like beans, leafy greens, and broccoli. Include high fiber foods and whole grains. Many mothers also continue to take prenatal vitamins or should take daily multivitamins to stay healthy. Eat foods with nutritional value. A handful of veggies and dip, a bran muffin or whole wheat grains are quick healthy snacks.



- 10. Stay hydrated. If you want to be healthy and produce enough milk for your baby and to remain healthy, then you have to stay hydrated. Drink at least 8 oz. of water eight times a day, and add some juice, milk, or other healthy drinks into your routine
- 11. Avoid alcohol at least two hours before you breastfeed. The American Academy of Pediatrics view is while you are nursing; avoid drinking alcohol because it can pass through your milk to your baby. Levels of alcohol peak at approximately 30-60 minutes following ingestion then decline rapidly thereafter. Alcohol can inhibit the release of milk from the breast.



12. Avoid smoking. Smoking not only changes the amount of your breast milk supply, but it can change the taste of your breast milk, and can make it much less appealing to your baby. If you are unable to stop smoking cut down the amount of smoking you do. Do not smoke immediately before or during breastfeeding. Discuss the possibility of nicotine replacement therapy and breastfeeding with your health care provider.



13. Medications. Be careful with the medication you take. You should always check with your doctor or a lactation consultant to make sure it's okay to take any of your medications, or a new medication, while you're breastfeeding. Call the Infant Risk Center if you need more information www.infantrisk.com/



## 14. <u>Consult a lactation consultant,</u> midwife or health care provider if:

- Baby is still fussy after nursing.
- Baby is not urinating or having regular bowel movements.
- Breasts are sore, or cracked and nipples are bleeding, this may be sign that baby is not latching correctly or could indicate a more serious problem, such as mastitis.
- Baby is not gaining weight.
- Baby's skin and/or fingernail and/or toenail beds appear to have a yellowish tinge.



Images adapted from: <a href="http://www.wikihow.com/Breastfeed">http://www.wikihow.com/Breastfeed</a>

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### APPENDIX G: MANAGING LABOR PAIN PATIENT EDUCATION HANDOUT

## MANAGING LABOR PAIN

Dealing with labor pain is something that most women fear a great deal, because of stories they read or hear, but the experience of labor is highly individual and can even be totally different for each person and with each birth. There are various options for easing labor pain and making the experience as comfortable as possible. Having a birthing plan created ahead of time is a great idea, but you should also learn about alternatives in case your plan has to be altered during labor. Ideally, you should learn about multiple options to be as prepared as possible when labor starts.



### **BREATHING TECHNIQUES**

**Try focused breathing during contractions.** Pay attention to your breathing while repeating the word "relax" in your head. Think "re-" as you breathe in through your nose and "lax" as you exhale through your lips. Let go of the tension in your body when your exhale also. Another technique is to focus on the cool air you feel as you breathe in through your nose and the warm are as you breath out thru your mouth. Think of blowing the tension away with your breath.

- Don't worry about the speed or depth of your breaths, as long as you establish a rhythm and your inhale is shorter than your exhale.
- Focused breathing helps relieve pain and allows you to conserve energy for later stages of labor.

### VISUALIZATION TECHNIQUES



Focus your attention on something that makes you happy and imagine it in your head during intense pain. It could be your favorite object or your partner's face, or anything that gives you pleasure when you see it. Imagining you are in a relaxing place can also help you forget about the pain for a few minutes. Think of your favorite vacation spot or imagine sitting in your most comfortable chair at home.

- If you could be anywhere, would you be sitting on a beach in the sun, listening to the wave's crash and seagulls? Maybe you would prefer a cabin in the woods with a rocking chair out front and listening to songbirds and insects.
- The more fully you can imagine the scene, the better doing so will distract you from any pain. Use all of your senses to make your image seem more real. Try to feel the sun on your skin or the breeze blowing by.

### **RELAXATION TECHNIQUES**



Include soft music, candles, comfortable pillows for your bed or chair, or whatever you typically use as tools for relaxation time. Spend the minute's in-between contractions enjoying your surroundings in the moment, instead of anticipating the next contraction or thinking about the last one. This will help you get through contractions one at a time, instead of them having a cumulative effect. [10]

- Include an object from home that you love and has personal value for you.
   Concentrate on it and think about what it represents or how it makes you feel to see it.
- Try using your favorite small thing you bought for the baby to remind you of why all the pain is worth it.
- Ask your partner to massage your feet, hands, or back to help you relax more. For some women, the counter pressure of massaging sore areas can relieve some of the pain.<sup>[11]</sup>

### **MOVEMENT**



If you can, get up and take a short walk, even if it is in your room.

If not, change positions where you are as frequently as you feel the need. Sit on the bed on your hands and knees, squat down, lean over the bed or counter, roll on a birthing ball, move from the bed to a chair, etc. Moving your body helps labor along by taking advantage of gravity, and it also gives your mind something to concentrate on instead of the pain.

- If in the hospital and hooked up to monitors and IVs, change your position in bed any time the pain starts worsening. Try sitting on the side of the bed with your feet on the floor, or getting up on your knees, if it is comfortable to do so. Ask your partner to support your torso with their weight.
- Make sure someone is with you while walking around in case you get a contraction and need support or someone to lean on for a moment.
- Keep your walk short and go more than once if you like, rather than walking for too long and tiring your body out before the late stages of labor.
- A birthing ball is similar to an exercise ball, often used in yoga. Bouncing and using it to rock your hips back and forth can help ease pain.
- ASK YOUR LABOR NURSE FOR ASSISTANCE IN THESE TECHNIQUES

### WATER THERAPY



If you are at home or at a birthing center, you likely have a bathtub nearby. Fill it up with warm water (100 degrees F) and soak. Have your partner use a cup to pour water over your shoulders too. Or, take a hot shower instead. The streams of water can feel like a massage and relax you even more.

### **MEDICATION OPTIONS**



- An epidural is a regional anesthetic administered through a needle into your spine. A low dose of medicine is delivered continuously through a pump, with a button to self-administer more when you need it. It might add about an hour to your labor time, but make all of the hours much more manageable. This anesthetic is injected directly into an area in your back, bypassing your bloodstream. This makes it safer for your baby and ensures you receive quick pain relief. Though it can take 15 minutes or longer to kick in, epidurals can be administered as soon as you request it, even if you are not dilated to a certain amount. The anesthesia will numb your entire lower body, including the nerves of your uterus, thereby numbing the pain of your contractions.
- HEALTH CARE PROVIDERS can administer an epidural even in later stages of labor, but it takes 10-20 minutes to start working.
- If you prefer not to use drugs for pain, you may want to ask your doctor to keep an epidural on your back-up plan in case cannot manage the pain on your own.

### **ANALGESIA**

Some women cannot get an epidural for medical reasons, and may need a narcotic pain reliever, such as stadol, nubain, morphine, or fentanyl. Opioids also relieve pain during labor and are usually administered as a single shot usually given in a vein. Nubain is a pain-relief drug that is administered via IV. It is a synthetic opioid that does not numb the body but can reduce pain and anxiety

- They may cause drowsiness in both mother and baby, since they affect the entire body.
- All pain medications offered to ease labor discomfort are safe for the mother and her baby. Going over pros and cons of each one can help you make the best personal choice.

Images adapted from: www.wikihow.com

### APPENDIX H: CIRCUMCISION PATIENT EDUCATION HANDOUT

## **NEWBORN CIRCUMCISION**

Circumcising your son is a big decision. You should do some research on the issue and weigh all the possible risks and benefits — before your child is born, if possible, so that it can be included in your birth plan. In the United States, circumcision is often performed prior to leaving the hospital after the baby is born. Certain religious customs may require the circumcision to be done in the days following the baby's birth. Talk to your health care provider about this procedure.



### DISCUSS THE NEED FOR ADEQUATE PAIN RELIEF

Talk to your doctor about what she recommends for pain relief for your son during and after the circumcision. Local anesthesia is usually all that is considered necessary — general anesthesia should not be used on infants.

There is debate as to pain relief options when performing a circumcision. Injectable anesthesia is most often used for circumcision — the dorsal penile nerve block, which is delivered via two injections, is used in 85% of cases in the US. Topical creams, such as EMLA cream, may also be an option. Infant acetaminophen orally and 20% glucose solution orally can assist with pain during and after the procedure.



Newborns *do* experience pain, and research has proven that local anesthesia is safe and effective, so make sure your doctor is using adequate pain relief measures during the procedure.



### **FAMILIARIZE YOURSELF WITH THE PROCESS**

The physician should talk you through the procedure and techniques, as well as the sanitary precautions taken. You should feel comfortable with every step of the procedure and confident that you fully understand the entire process. Make sure this is part of the birth plan and education prior to delivering, and that you do plenty of research beforehand so you are prepared. Discuss these details with your doctor so you can be aware of what to expect, both for yourself and for your son. There are three different methods typically used for circumcision:

• The Gomco Clamp — With this method, the doctor uses a probe to separate the foreskin from the head of the penis. After that, a bell-shaped device is fitted over the head of the penis and under the foreskin, which may require an incision in the foreskin. The foreskin is pulled up over the bell and a clamp is tightened around it to reduce blood flow to the area. Finally, a scalpel is used to cut and remove the foreskin.

- The Mogen Clamp With this method, the doctor also uses a probe to separate the foreskin from the head of the penis. Then the foreskin is pulled out away from the head and inserted into a metal clamp. The doctor will hold the clamp in place while the foreskin is cut with a scalpel. The clamp will remain in place for a few minutes to ensure all of the bleeding has stopped.
- The Plastibell Technique With this method (similarly to the Gomco Clamp method), the doctor uses a probe to separate the foreskin from the head of the penis. Then the bell-shaped device is fitted over the head of the penis and under the foreskin. Next, a piece of suture is tied around the foreskin to cut off the blood circulation to the foreskin. The doctor will then use a scalpel to cut off the extra foreskin, but the suture is left on. It will fall off on its own approximately three to seven days later.



### POST-PROCEDURE CARE

Though it is a routine procedure, a circumcision requires proper care and cleaning to heal properly. When caring for a newly circumcised newborn, clean the area after every diaper change, keep the area dry, wash the wound gently, let it air dry, dress the wound with gauze and petroleum jelly, and do frequent diaper changes.

Watch for possible signs of infection like persistent redness, swelling, bleeding, and yellow discharge, as well as sores or difficulty urinating.

Watch for signs of bleeding at the site and monitor for urination after the procedure.

### **Credits:**

Content adapted from: Campbell, B. (2017). Techniques for Neonatal Circumcision. In: UptoDate, Lockwood, C and Baskin, L (Eds), UptoDate, Waltham, MA (Accessed on August 10, 2017.)

Images from www.wikihow.com

APPENDIX I: HELPING DURING LABOR PATIENT EDUCATION HANDOUT

# HELPING DURING LABOR AND AFTER THE BIRTH OF A BABY





### **BE CALM**

This is the best thing you can do. If you are calm, this will help your partner remain calm.



### **BE YOUR PARTNER'S ADVOCATE**

This is your main job. Talk with the nurse and ask questions if you are unclear about anything. Your nurse is your advocate too and is there to assist you. Assisting with contractions by timing them and assisting the laboring woman to be relaxed between contractions. Giving her ice chips, holding her hand or giving her a cool pack in between contractions can help. Tell her what a great job she is doing.

The Acronym **SUPPORT** can assist.

This will make it easy to recall all the things you can do to help your wife. Each of these can make a big difference in her comfort levels and the over-all positivity of the birthing experience. Take the time to memorize these helpful points.

- S Support emotionally. Giving positive emotional support is crucial during labor. Listen actively, validate her emotions, ask questions, and reassure your wife to help her feel more comfortable.
- U Urination, at least once an hour. Remind her to go to the bathroom. This will get her moving, which can aid during these stages.
- P Position changes, often.
- P Praise and encouragement, not sympathy, is needed to help her get through this.
- O − Out of bed (walk/shower) is better than laying down.
- R Relaxation is key.
- T Touch: pressure and massage.

### **HELPING AFTER LABOR**





Be attentive to her mood. Both baby blues and postpartum depression are very real. Baby-blues are fairly normal, but be careful for signs of postpartum depression. These can be signals of a serious problem that may require professional help.

- Signs of baby blues:
- Mood swings
- Anxiety
- Sadness
- Irritability

- Feeling overwhelmed
- Crying
- Reduced concentration
- Appetite problems
- Trouble sleeping
- Signs of postpartum depression:
- Depression or severe mood swings
- Excessive crying
- Difficulty bonding with the baby
- Withdrawing from family and friends
- Loss of appetite or sudden, excessive eating
- Insomnia or hypersomnia (lack of sleep or excessive sleep)
- Overwhelming fatigue
- Intense irritability and anger
- Feelings of worthlessness, shame, guilt or inadequacy
- Diminished ability to think clearly, concentrate or make decision





### **CELEBRATE, TOGETHER**

You may want to have everyone you know over to see the baby. Just make sure that you're not over-doing it. A new baby is stressful enough, without all the added chaos from celebrations.

Clean up. Shoo people home before it gets too late. A 10 minute visit is great plenty. Visitors that do laundry, vacuum, grocery shop and make meals for you can stay for a longer visit.





### **GO TEAM**

Parenting is a team activity. Make sure you do your part, but don't go overboard. By becoming an equal partner in your relationship, you can make the time after labor more positive. Especially in the first few weeks after the birth, a new mom may need a lot of time to recover. She made need frequent naps, be sore, and generally fatigued. You will be tired too. Enlist the help of family and friends with offers to help in the first few weeks and beyond if needed.

Try to be as involved with the baby as possible. The mother shouldn't be the only
one getting up with the baby all night – support person's need to assist





Treat her well, but make sure you take care of yourself, too. Partners sometimes have such a strong need to help out, they forget to take care of themselves. Make sure you are rested and content, so that you can be there for your wife. Don't burn yourself out.

Images from <u>wikihow.com</u> and content adapted from: Widarsson, M., Kerstis, B., Sundquist, K., Engström, G., & Sarkadi, A. (2012). Support Needs of Expectant Mothers and Fathers: A Qualitative Study. The Journal of Perinatal Education, 21(1), 36–44. http://doi.org/10.1891/1058-1243.21.1.36

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