Labor-Vaginal Delivery

UNFOLDING Reasoning

Anne Jones, 17 years old

Primary Concept		
Pain		
Interrelated Concepts (In order of emphasis)		
1. Perfusion 2. Stress 3. Anxiety 4. Reproduction 5. Clinical Judgment 6. Communication 7. Collaboration		
NCLEX Client Need Categories	**Percentage of Items from Each Category/Subcategory**	**Covered in Case Study**
Safe and Effective Care Environment		
• Management of Care	17-23%	✓
• Safety and Infection Control	9-15%	
Health Promotion and Maintenance	6-12%	✓
Psychosocial Integrity	6-12%	✓
Physiological Integrity		

• Basic Care and Comfort	6-12%	✓
• Pharmacological and Parenteral Therapies	12-18%	✓
• Reduction of Risk Potential	9-15%	✓
• Physiological Adaptation	11-17%	✓

History of Present Problem:

Anne is a 17-year-old, gravida 1 para 0 who is 39 weeks gestation and admitted to the labor room for observation at 1200. She began having contractions three hours ago at 8 to 10-minute intervals with each contraction lasting 30 seconds. She states her pain is 3/10. Her membranes are intact. On admission, a vaginal exam indicates cervical dilation is 1 cm, 80% effacement, and 0 station.

After two hours of observation, her cervix is 2-3 cm/ 80% effacement/0 station and contractions are now 4-5 minutes apart, lasting 60-70 seconds and pain remains 3/10. Fetal lie is longitudinal with a cephalic presentation. You have her prenatal records from her visits to the office. She is Group Beta Strep (GBS) positive and received antibiotics at 36 weeks. Her blood type is B-.

Personal/Social History:

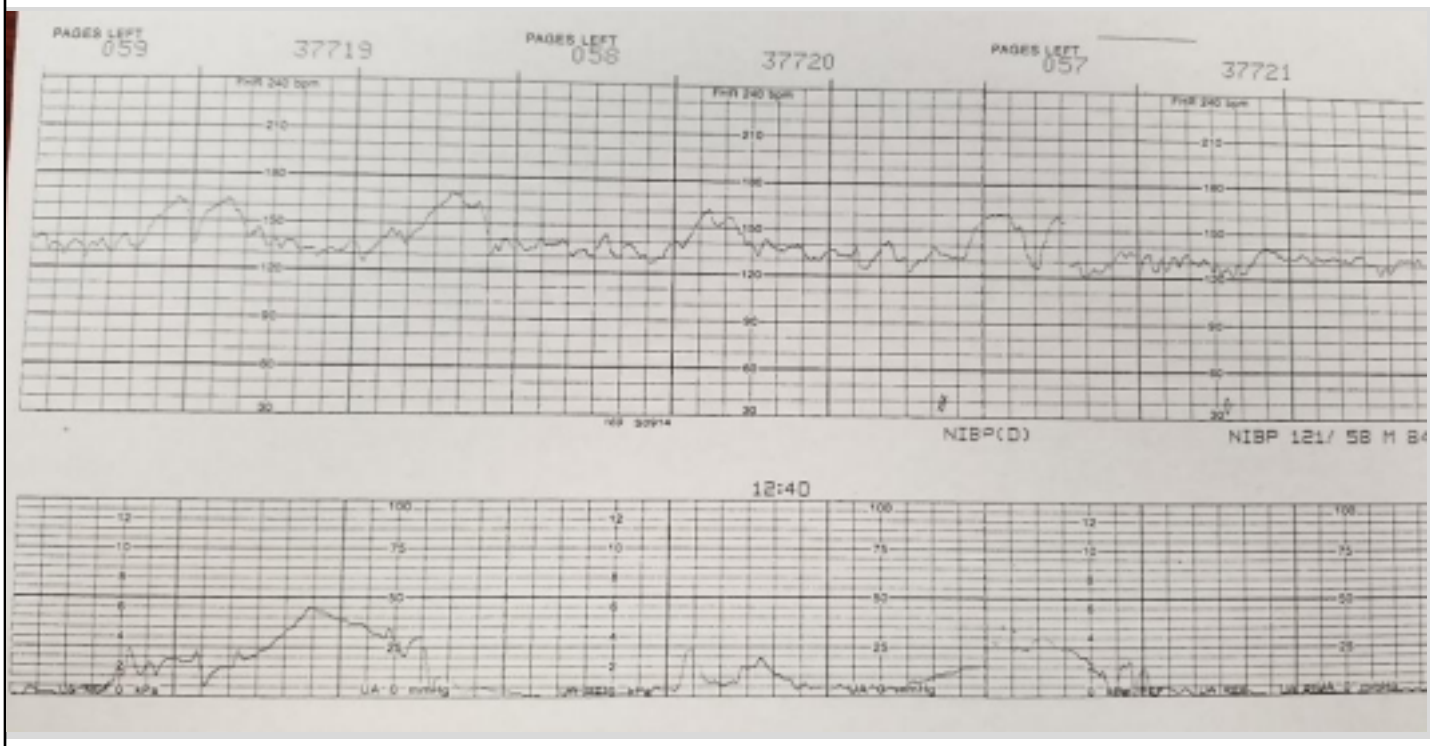
Anne's mother is with her. Anne is not married and the father of the baby is not involved. She appears to be relaxed although she states she is a bit nervous. She wants a natural non-medicated birth and her mother will help coach her. She plans on breastfeeding for "awhile". She attended childbirth preparation classes with her mother.

What data from the histories are RELEVANT and must be interpreted as clinically significant by the nurse? *(Reduction of Risk Potential)*

RELEVANT Data from Present Problem:	**Clinical Significance:**
GBS positive Contractions 8-10min apart/1cm dilated 17 years old 39 weeks Non medicated birth B-	Will Need antibiotics during labor Latent Phase of labor She is not mature Viability of fetus Offering other soothing/pain options For blood transfusion purposes
RELEVANT Data from Social History:	**Clinical Significance:**
Mother is with her She is not married Father of the baby is not involved She is anxious She has taken childbirth preparation classes	This is her support person Cause anxiety Cause anxiety Cause stress on mother and baby Has had education on birth

Anne is placed on a fetal monitor and the nurse collects the following strip:

Fetal Heart Rate Strip Assessment:

Fetal Monitoring Strip:

Interpretation:
4 to 5 min apart lasting 60 to 70 seconds apart, Baseline is 135 BPM, moderate variability, accelerations present
Clinical Significance:
To verify if the heart rate is normal or abnormal (Its a category one tracing) normal acid-base

Patient Care Begins:

Current VS:	**P-Q-R-S-T Pain Assessment:**	
T: 98.6 F/37.0 C (oral)	**P**rovoking/Palliative:	Began 3 hours ago
P: 76 (regular)	**Q**uality:	Cramping that comes and goes, lasting 40 sec after 1 hour 60- 70 sec.
R: 18 (regular)	**R**egion/Radiation:	Uterus

BP: 125/80	**S**everity:	3/10
O2 sat: 98	**T**iming:	8-10 min then 4-5 mins

What VS data are RELEVANT and must be interpreted as clinically significant by the nurse? *(Reduction of Risk Potential/Health Promotion and Maintenance)*

RELEVANT VS Data:	**Clinical Significance:**
Pain level	Normal for the latent labor

Current Assessment:	
General Appearance:	Calm, body relaxed, no grimacing, appears to be slightly anxious.
Respiratory:	Breath sounds clear with equal aeration bilaterally ant/post, non-labored respiratory effort
Cardiac:	Pink, warm & dry, slight ankle edema, heart sounds regular with no abnormal beats, pulses strong, equal with palpation at radial, brisk cap refill
Neuro:	Alert and oriented to person, place, time, and situation (x4)
HEENT:	Normal cephalic
Chest:	Breasts tender on palpation, areola darkened and occasional veins present
Abdomen:	Soft; no masses, uterus palpable above the umbilicus, mild indenting with palpation, the fetus is in LOA position by palpation
Extremities:	Mild spider varicose veins on the medial aspect of left leg, deep tendon reflexes 2+
Vaginal Exam:	Small amount clear mucous, 1cm/80%/0, membranes intact

What assessment data are RELEVANT and must be interpreted as clinically significant by the nurse? *(Reduction of Risk Potential/Health Promotion and Maintenance)*

RELEVANT Assessment Data:	**Clinical Significance:**
Anxious Fetus position	First child she is having and baby's father isn't present LOA position which is the best position

Clinical Reasoning Begins…

1. Interpreting relevant clinical data, what is the primary concern? What primary health-related concepts does this primary problem represent? *(Management of Care/Physiologic Adaptation)*

Problem:	Pathophysiology of Problem in OWN Words:	Primary Concept:
Labor	Your body will prepare for the birth of your baby (stage one), deliver the baby (stage two), and deliver the placenta throughout the three phases of labor (stage three). Your body will use contractions to widen and efface your cervix throughout labor.	Pain

Collaborative Care: Medical Management *(Pharmacologic and Parenteral Therapies)*

Care Provider Orders:	Rationale:	Expected Outcome:
Admit to Labor and Delivery	Change in cervix	Deliver a baby
Intermittent fetal heart monitoring ambulating as tolerated	To determine if the fetus is in distress and see the fetus's response to contractions assist with labor	Deliver a healthy baby
Ampicillin 2 g IVPB when in active labor and 1 g every 4 hours while in labor	GBS +	Not pass to the baby

Vital Signs every hour	Monitor the mother's response to labor. Assess for complications with labor.	Will have normal vitals
Limit vaginal exams.	Prevention of infections	No infection
May ambulate as tolerated	Progression of labor	Smooth process of delivery and progress in labor

PRIORITY Setting: Which Orders Do You Implement First and Why? *(Management of Care)*

Care Provider Orders:	Order of Priority:	Rationale:
• Establish peripheral IV • Ampicillin 2 g IVPB now x1 and 1 g every 4 hours while in labor • Intermittent fetal heart monitoring ambulating as tolerated	Fetal monitoring IV established Ampicillin	Monitor baby heart rate Needs antibiotic Prevent infection being passed to baby

Collaborative Care: Nursing

2. What body system(s) will you assess most thoroughly based on the primary/priority concern?
(Reduction of Risk Potential/Physiologic Adaptation)

PRIORITY Body System:	PRIORITY Nursing Assessments:
Reproductive	Check dilation, fetal heart rate, assess amniotic fluid, and monitor temperature

3. What nursing priority (ies) will guide your plan of care? *(Management of Care)*

Nursing PRIORITY:	Infection	
PRIORITY Nursing Interventions:	**Rationale:**	**Expected Outcome:**
IV Antibiotics	To prevent infection	To not have an infection occur in the fetus or mother
Checking temperature	To monitor if there is an infection	
Fetal tachycardia	To monitor if the fetus has an infection	
Cloudy and odor of amniotic fluid	To assess if there is an infection	
Decrease vaginal exam	To prevent the introduction of infection	
Changing chucks	To prevent infection	

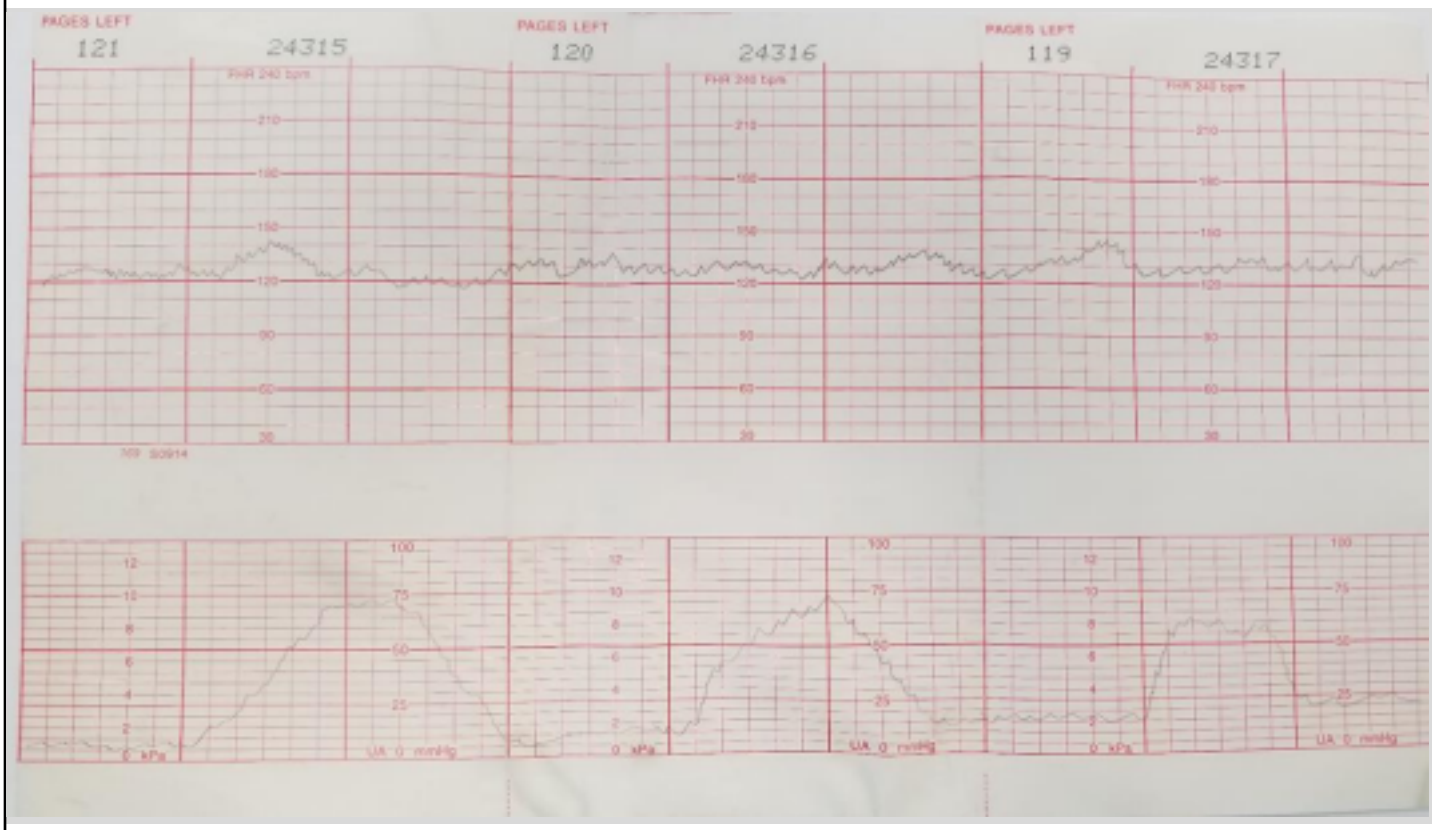
4. What psychosocial/holistic care PRIORITIES need to be addressed for this patient?
(Psychosocial Integrity/Basic Care and Comfort)

Psychosocial PRIORITIES:	Risk for anxiety	
PRIORITY Nursing Interventions:	**Rationale:**	**Expected Outcome:**
CARE/COMFORT: ***Caring/compassion as a nurse*** ***Physical comfort measures***	Provide an opportunity for conversation to allow the client to express their feelings and thoughts. Educate the client on the process of labor. Demonstrate breathing and relaxation techniques to reduce the stressors contributing to the anxiety. Providing all of the little things for the client.	The client will be relaxed and ready for labor
EMOTIONAL (How to develop a therapeutic relationship): ***Discuss the following principles needed as conditions essential for a therapeutic relationship:*** • *Rapport* • *Trust* • *Respect* • *Genuineness* • *Empathy*	Encourage the client to express feelings of fear or concern. Stress and fear can prolong the labor.	Have developed a healthy relationship with the patient

Four hours later… (1600)

Anne is breathing through the contractions and her mother is at her side. She has put on the call light because she thinks her water broke. You, as the nurse, go in and assess. Her contractions are now every three minutes and moderate in intensity with palpation. You perform a vaginal exam and note clear fluid that has no odor, she is 6 cm dilated, 90% effacement, and +1 station. Vertex presentation and fetal position is LOA with good flexion of the head. You notice the following FHR on the strip.

Fetal Monitoring Strip:



Interpretation:

Baseline 125 contractions lasting 1-2 min and 2-3 min apart. Moderate variability

Clinical Significance:

Mother and baby are progressing normally. Fetal HR demonstrates accelerations. Fluid is clear no signs of infection of cord present on vaginal exam.

Current VS:	**Most Recent:**	**Current PQRST:**	
T: 98.8 F/37.1 C (oral)	**T:** 98.6 F/37.0 C (oral)	**P**rovoking/Palliative:	
P: 86 (regular)	**P**: 76 (regular)	**Q**uality:	"Squeezing, tightening"
R: 22 (regular)	**R**: 18 (regular)	**R**egion/Radiation:	abdomen

BP: 130/80	**BP**: 125/80	**S**everity:	6/10
O2 sat: 98% room air	**O2 sat:** 98% room air	**T**iming:	Every 3-4 mins

1. What data is RELEVANT and must be interpreted as clinically significant by the nurse?
(Reduction of Risk Potential/Health Promotion and Maintenance)

RELEVANT VS Data:	**Clinical Significance:**
Slight increase in BP and RR Pain: squeezing, tightening in the abdomen. 6/10 pain scale, every 3-4min	Slight increase is expected as pain increases from contractions. Anne is demonstrating normal signs and symptoms of labor.
RELEVANT Assessment Data:	**Clinical Significance:**
6 cm dilated Clear fluid of amniotic fluid	In the active phase of labor

2. Has the status improved or not as expected to this point? Does your nursing priority or plan of care need to be modified in any way after this evaluation assessment? *(Management of Care, Physiological Adaptation)*

Evaluation of Current Status:	**Modifications to Current Plan of Care:**
Progression through labor as expected	**R**elaxation exercises, distractions, breathing exercises

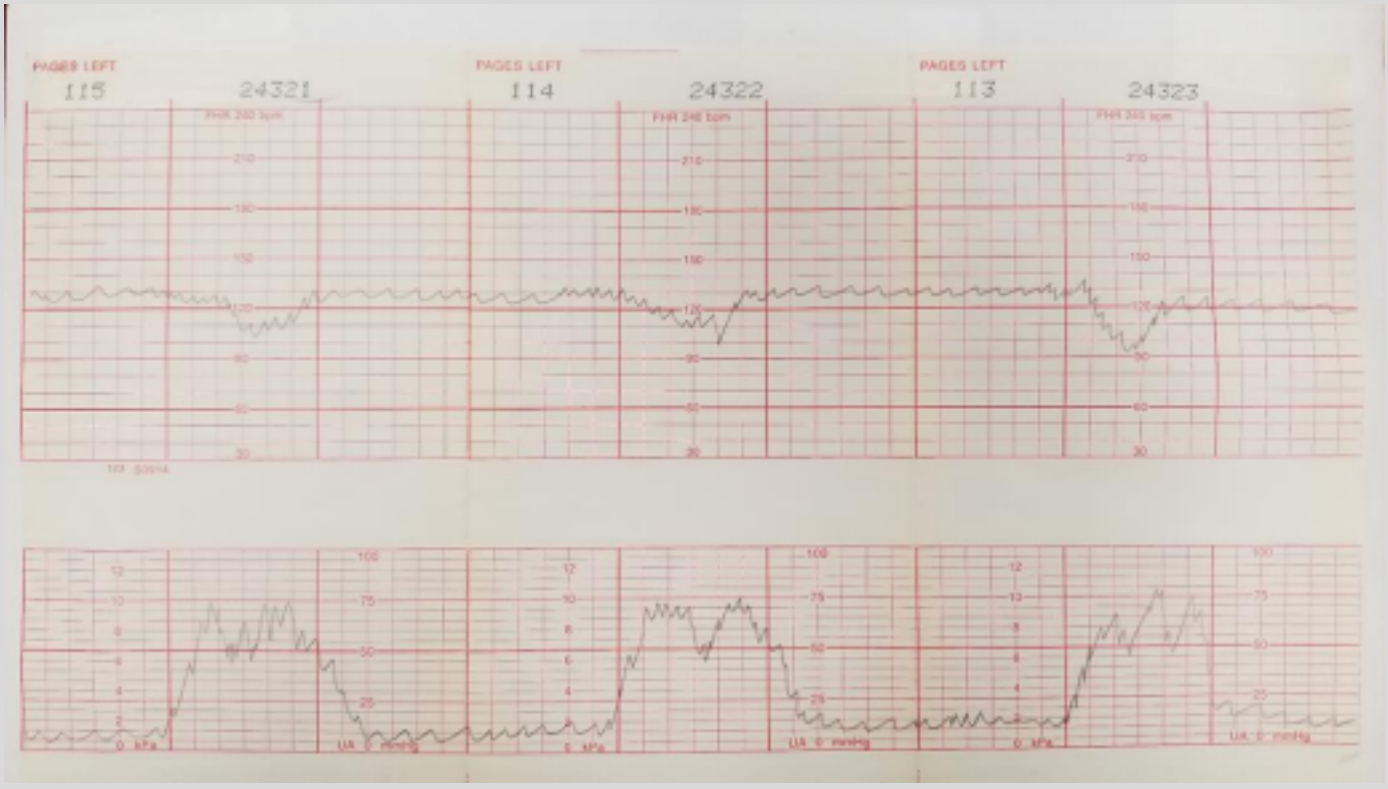
3. Based on your current evaluation, what are your CURRENT nursing priorities and plan of care?
(Management of Care)

CURRENT Nursing PRIORITY:	Acute Pain	
PRIORITY Nursing Interventions:	**Rationale:**	**Expected Outcome:**
Provide distraction and coach her Help client to the shower	Help promote a normal prorgession of labor and distraction from contractions	Anne remains in control of her pain.

Four hours later… (2000)

Anne puts on her call light and you answer it. She states she feels pressure "down there". You perform a vaginal exam. She is now 10 cm/100%/2+. She has the urge to push.

Fetal Monitoring Strip:



Interpretation:

130 baselines, presentation of early deceleration, minimal variability

Clinical Significance:

Fetus is demonstrating head compression and still adequate oxygenated. The normal progression of labor. Baby is about to deliver and need to prepare for birth.

Half an hour later (2030)…

Anne delivers a healthy male infant at 2032. Placenta delivered at 2045. No pain medication was given. Pitocin 30 units/500 mL IV was began after the delivery of the placenta. Infant Apgars were 8 and 9.

Weight: 7 lbs 0 oz (3.2 kg) 20 (50.8 cm) inches long. Skin-to-skin contact with baby initiated and her baby boy attempted to breastfeed and latched on for 5 minutes on right side. Anne is smiling and holding and talking to her baby. Her uterus is firm, one finger width below the umbilicus and midline. Lochia moderate rubra. Mid-line episiotomy is well approximated, slightly bruised and area swollen. Ice pack applied to perineum. Anne was able to void 400 mL clear, yellow urine after delivery. She has

finished recovery and is being transferred to the postpartum unit.

RELEVANT Assessment Data:	**Clinical Significance:**
Second stage 32 minutes **Third stage when placenta delivers is 13 minutes** **Pit started after placenta delivery** **Breastfeeding and talking to the baby** **Apgar 8 and 9** **U1 firm** **Bleeding, bruising, and lochia** **Able to void**	**Uterus is contracting down** **No displacement of the uterus** **Normal delivery process.** **Positive attachment and bonding with baby** **Episiotomy is normal**

Current VS:	**P-Q-R-S-T Pain Assessment:**	
T: 98.6 F/37.0 C (oral)	**P**rovoking/Palliative:	sitting
P: 74 **(**regular)	**Q**uality:	throbbing
R: 18 (regular)	**R**egion/Radiation:	perineum
BP: 122/78	**S**everity:	3/10
O2 sat: 98% room air	**T**iming:	constant

What VS data are RELEVANT and must be interpreted as clinically significant by the nurse? *(Reduction of Risk Potential/Health Promotion and Maintenance)*

RELEVANT VS Data:	**Clinical Significance:**
Pain assessment	**All other vitals are normal after birth.**

Effective and concise handoffs are essential to excellent care and, if not done well, can adversely impact the care of this patient. You have done an excellent job to this point; now finish strong and give the following SBAR report to the nurse who will be caring for this patient: *(Management of Care)*

Situation:
Name/age: Anne 17YO. Single mother. First child. **BRIEF summary of primary problem: Delivered vaginally without pain medication** **Day of delivery: 07/08/22 today**

Background:
Primary problem/diagnosis: **RELEVANT past medical history:** **RELEVANT background data:**
Assessment:
Most recent vital signs: Noted above **RELEVANT body system nursing assessment data: Reproductive system** **RELEVANT lab values: GBS positive, B- blood type** **TREND of any abnormal clinical data (stable-increasing/decreasing): Stable increasing** **How have you advanced the plan of care? Lactation consultant / educate** **Patient response: Nursed well, breastfeeding, normal newborn care, and take care of episiotomy** **INTERPRETATION of current clinical status (stable/unstable/worsening): stable**
Recommendation:
Suggestions to advance the plan of care: weigh pads, check the uterus, check her perineum.

Caring and the "Art" of Nursing

What is the patient likely experiencing/feeling right now in this situation? What can you do to engage yourself with this patient's experience, and show that he/she matters to you as a person? (*Psychosocial Integrity)*

What Patient is Experiencing:	**How to Engage:**
Taking in the phase of birth	Discuss and educate on what happened. Have a conversation with the client. Help the client accomplish what they need to do and keep them calm and taken care of.

Use Reflection to THINK Like a Nurse

What did you learn that you can apply to future patients you care for? Reflect on your current strengths and weaknesses this case study identified. What is your plan to make any weakness a future strength?

What Did You Learn?	**What did you do well in this case study?**
I learned the expectation of the stage of labor as the mother and fetus progress to delivery.	Understand the fetal heart rate monitor strip.
What could have been done better?	**What is your plan to make any weakness a future strength?**
Understanding the psychological process of process of labor and delivery.	Take the time to talk with the mother and provide all of the small tasks to comfort the mother as best as you can.