

## N432 Labor and Delivery Concept map template

### Medications (Jones and Bartlett Learning, 2021) (Ricci et al., 2021)

- ondansetron
- Pharmacologic: Selective serotonin receptor antagonist
  - Therapeutic: Antiemetic
  - Reason taking: to prevent nausea.
  - Nursing assessments: Monitor for diarrhea, constipation, abdominal pain, headache, dizziness, drowsiness, and fatigue. Monitor liver function studies.
- naloxone
- Pharmacologic: Opioid antagonist
  - Therapeutic: Antidote
  - Reason taking: Sedation
  - Nursing assessments: Drug may cause fetal harm. The patient should check with the prescriber before breastfeeding.
- nalbuphine
- Pharmacologic: Opioid
  - Therapeutic: Opioid analgesic
  - Reason taking: Reversal of respiratory depression related to narcotic effects.
  - Nursing assessments: Can cause decreased FHR variability, fetal bradycardia, and respiratory depression.
- fentanyl-ropivacaine
- Pharmacologic: Opioid
  - Therapeutic: Opioid analgesic
  - Reason taking: Reduce pain.
  - Nursing assessments: Assess for respiratory status frequently, noting any decrease in ventilatory rate or changes in breathing patterns.
- acetaminophen
- Pharmacologic: Nonsalicylate, para-aminophenol derivative
  - Therapeutic: Antipyretic, nonopioid analgesic
  - Reason taking: To relieve mild to moderate pain.
  - Nursing assessments: Use of acetaminophen during pregnancy may increase risk of attention deficit hyperactivity disorder (ADHD) after birth.

### Demographic Data (OSF Database, 2022)

**Admitting diagnosis:** Scheduled Induction  
**Secondary diagnosis:** No secondary diagnosis  
**Age of client:** 32 years old  
**Weight in kgs:** 80.7 kg  
**Allergies:** No known allergies

**Date of admission:** 09.07.2022

**Support person present:** Support people present – Fiancé, sister, and mother.

### Presentation to Labor and Delivery

The patient is a 32-year-old female who presents to labor and delivery for an elective induction. The patient is 39 weeks and 4 days into their pregnancy. G2T0P1A0L1 at time of assessment. The patient's last menstrual period (LMP) was 12.05.2021. The expected due date (EDD) for this patient is on 09/11/2022. The patient denies pain at time of assessment; they are only experiencing some slight pressure and discomfort.

### Electronic Fetal Heart Monitoring: (At the beginning and the end of shift.)

(OSF Database, 2022)

**Baseline EFH: B:** 135 bpm | **E:** 125 bpm

**Variability: B:** Moderate | **E:** Moderate

**Accelerations: B:** Yes | **E:** Yes

**Decelerations: B:** No | **E:** No

#### Contractions:

**-frequency: B:** 1-3.5 min-5 min with coupling | **E:** 1.5-2.5 min

**-length: B:** 55-60 sec | **E:** 60 sec

**-strength: B:** 30-70 mmHg | **E:** 40-60 mmHg

**-patient's response: B:** comfortable, pressure | **E:** comfortable, pressure.

**Stages of Labor (Ricci et al., 2021)**

**Stage 1 (Ricci et al., 2021)**

The first stage of labor is when the patient is cervix dilated from 0 to 10 cm.

- Assessments during this stage:
  - o Leopold maneuver

**Prenatal & Current Lab Values/Diagnostics**

(OSF Database, 2022) (Hinkle & Cheever, 2022)

WBC (cells/mcL)

- Normal range: 4,000-11,000
- Abnormal value: 15,100
- Increased value of WBCs can be caused by infection. The patient has a positive Hep C antibody result.

Hgb (g/dL)

- Normal range: 11-16.8
- Abnormal value: 10.2
- Lower value can be secondary to pregnancy-induced anemia.

Hct

- Normal range: 34%-47%
- Abnormal value: 30%
- Lower value can be secondary to pregnancy-induced anemia.

**Medical History (OSF Database, 2022)**

**Prenatal History:** One child | G2TOP1AOL1 | Denies history of abnormal PAP smear, STDs, or cervical procedures.

**Previous Medical History:** Diverticulitis & (+) Hep C Antibody

**Surgical History:** Tonsillectomy & Adenoidectomy, colonoscopy, skin biopsy.

**Family History:** Mother – healthy | Father – healthy | Maternal grandmother – Colon CA, hyperlipidemia, diabetes, HTN | Maternal grandfather – Diabetes, hyperlipidemia, HTN | Paternal grandmother – HTN | Paternal grandfather – Stoke | Brother – Alcohol abuse |

**Social History:** Marital status – single | Smoke – vape (every day) | No illicit drug use

**Active Orders (OSF Database, 2022)**

- fentanyl & naloxone (epidural/pain relief)
- Oxytocin (Pain relief)
- Diet (Regular)
- ADT order
  - o Admit to inpatient
- Blood Bank order
  - o Type & screen
- Lab order
  - o Type & screen | CBC w/ diff
  - o Drug Screen w/o confirmation
- POCT Order
  - o Up as tolerated
- Respiratory Order
  - o Continuous pulse oximetry
- VS
  - o Q4 hours

- o Cervical effacement is from 40%-100%.
- o Nullipara lasts up to 6 hours; multipara lasts up to 4 hours.
- o Contraction frequency: 2-5 minutes. | Contraction duration: 45-60 seconds. | Contraction intensity moderate to palpate
- o Feelings of hopelessness and anxiety.

- Transition phase (8-10 cm)
  - o Contractions are strong, Q2-3 minutes.
  - o Complete dilation.
  - o Tired, restless, and irritable. Feels out of control.
  - o Rectal pressure and need to have a bowel movement.
  - o Urge to push and an increased blood show.
  - o Most difficult part of labor.

Witnessed patient in Stage 1 of Labor. Patient remained relaxed, secondary to continuous infusion of fentanyl. Catheter was placed in patient prior to assessment. The nurse assessed for cervical dilation; progression occurred. Witnessed patient in active and transition phases, but fentanyl provided comfort and pain-free experience. Loss of feeling in right lower extremity due to fentanyl. Upon assessment, the patient also states that they are in no pain, slight discomfort.

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### Stage 2 (Ricci et al., 2021)

Full dilation (10cm) to birth of the newborn. This stage can last up to 3 hours.

- Assessments during this stage:
  - BP, pulse, and respirations Q5-30 minutes.
  - Contractions
    - Pushing efforts by the patient
  - Increase in bloody show.
  - Shaking of extremities.
  - FHR Q15 minutes and immediately following birth.
  - Perineal lacerations.
- Pelvic phase (period of fetal descent)
- Perineal phase (period of active pushing)
  - Nullipara lasts up to 3 hours; multipara lasts up to 2 hours.
  - Contraction frequency: 2-3 minutes or less. | Contraction duration: 60-90 seconds. | Contraction intensity strong to palpate
  - Strong urge to push.

Witnessed patient in Stage 2 of Labor. The patient has increased bloody show. Pushing efforts were shown by patient; Nine “pushes” and three contractions before the birth of the newborn. Patient experienced some distress while pushing. Vaginal tear, located above clitoris. Gynecologist stitched up laceration to prevent bleeding.

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**Stage 3 (Ricci et al., 2021)**

Delivery of Neonate. Separation and delivery of placenta; 5-10 minutes but may take up to 30 minutes.

- Assessments during this stage:
  - BP, pulse, and respirations Q15 minutes
  - APGARS
  - Clinical findings of placenta separation
- Placental separation:
  - Detaching from the uterine wall.
- Placental expulsion:
  - Coming outside the vaginal opening.

Witnessed the patient in Stage 3 of Labor. The gynecologist delivered the neonate and separated and expelled the placenta. Both Schultz Presentation and Duncan Presentation at time of assessment. The gynecologist collected cord blood for blood typing of the infant.

<b>Nursing Diagnosis 1</b>	<b>Nursing Diagnosis 2</b>	<b>Nursing Diagnosis 3</b>
Risk for bleeding related to anemia as evidenced by abnormal hemoglobin and hematocrit lab values.	Risk for infection related to traumatized tissues as evidenced by pregnancy.	Impaired skin integrity related to wound infection as evidenced by disruption of skin surface from pregnancy.
<b>Rationale for the Nursing Diagnosis</b>	<b>Rationale for the Nursing Diagnosis</b>	<b>Rationale for the Nursing Diagnosis</b>
The patient has low hemoglobin and hematocrit	There is an increased risk for infection due to	Women are susceptible to perineal wound

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values, indicating a risk for bleeding.	tearing of the vaginal tissue.	infections due to compromised skin integrity.
<p style="text-align: center;"><b>Interventions</b></p> <p><b>Intervention 1:</b> Monitor physiological responses for values that remain in expected or normal ranges.</p> <p><b>Rationale:</b> Early bleeding compensatory methods alter respirations, blood pressure, and pulse.</p> <p><b>Intervention 2:</b> Perform vital signs and basic physical assessments for the patient.</p> <p><b>Rationale:</b> This is to assure that the patient is no longer at risk for bleeding.</p>	<p style="text-align: center;"><b>Interventions</b></p> <p><b>Intervention 1:</b> Maintain proper and strict hand hygiene for both the nurse and patient/family.</p> <p><b>Rationale:</b> Proper hand hygiene is the primary method of preventing the spread of infection.</p> <p><b>Intervention 2:</b> Encourage a semi-fowler's position.</p> <p><b>Rationale:</b> This position will allow for drainage to fall by gravity and prevent pooling of infectious secretions.</p>	<p style="text-align: center;"><b>Interventions</b></p> <p><b>Intervention 1:</b> Educate the patient on how to recognize and report signs of complications and to schedule/attend follow up appointments.</p> <p><b>Rationale:</b> This will promote early identification of possible complications. Attending scheduled follow up appointments will effectively aid in the wound's healing process and care in the chance of a complication.</p> <p><b>Intervention 2:</b> Apply cold and warm compresses to the perineal area as appropriate.</p> <p><b>Rationale:</b> Cold pack applied for the first 12-24 hours will help reduce any edema and bruising around the perineal area. After 24 hours, the heat pack will increase circulation, allowing for the area to heal.</p>
<p style="text-align: center;"><b>Evaluation of Interventions</b></p> <p>This can help the patient keep better control over the risk factors for bleeding. The patient experiences no incidence of active bleeding.</p>	<p style="text-align: center;"><b>Evaluation of Interventions</b></p> <p>The patient will achieve timely healing, free of any complications related to infection.</p>	<p style="text-align: center;"><b>Evaluation of Interventions</b></p> <p>The patient will regain skin integrity without complications. The patient will allow for proper wound healing and the absences of skin integrity pressure or breakdown.</p>

(Phelps, 2020)

**References (3):**

Hinkle, J.L., & Cheever, K. H. (2022). *Brunner & Suddarth's textbook of medical-surgical nursing* (15<sup>th</sup> ed.). Wolters Kluwer Health Lippincott Williams & Wilkins.

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Ricci, S. S., Kyle, T., & Carman, S. (2021). *Maternity and pediatric nursing* (4th ed.). Wolters Kluwer.