**Purpose of the tool:** The Severe Abdominal Pain/VBAC (vaginal birth after cesarean) In Situ Simulation tool provides a sample scenario for labor and delivery (L&D) staff to practice teamwork, communication, and technical skills in the unit where they work. Upon completion of the Severe Abdominal Pain/VBAC In Situ Simulation, participants will be able to do the following:

* Demonstrate effective communication with the patient and support person before, during, and after an episode of patient care involving severe abdominal pain during a VBAC.
* Demonstrate effective teamwork and communication with clinical team members during maternal and fetal assessment, changes in the clinical status, and actions required for the optimum patient outcome.
* Demonstrate timely recognition and accurate clinical intervention for uterine rupture and the failure of intrauterine resuscitative measures.
* Demonstrate the efficient use of the checklists, protocols, or similar cognitive aids for safe cesarean section.

**Who should use this tool:** Simulation facilitators

**How to use this tool:** This tool should be used in connection with the “Facilitation Instructions for Conducting In Situ Simulations” to prepare, conduct, assess, and debrief in situ simulations on L&D units. Simulation facilitators can adapt, modify, and further tailor this sample scenario to meet the training needs of their unit staff or resources available in their facility.

**Note:** The information presented in this document does not necessarily represent the views of AHRQ. Therefore, no statement in this document should be construed as an official position of AHRQ or of the U.S. Department of Health and Human Services. Outside resources identified do not represent an endorsement of those resources and do not reflect the position of AHRQ or the Federal Government.

Sample Scenario for Severe Abdominal Pain/VBAC In Situ Simulation

This document provides a sample scenario for anin situ simulation for Severe Abdominal Pain/VBAC. This document contains the following:

* Preparation Required
* Clinical Context, Triggers, Distractors, and Expected Behaviors for the Simulation Facilitator
* Severe Abdominal Pain/VBAC Simulation Assessment Tool
* Clinical Context, Triggers, and Distractors Formatted for Printing Separately

Refer to the document titled “Facilitation Instructions for Conducting In Situ Simulation” for general guidance and instructions regarding presimulation planning, presimulation briefing, simulation assessment, and simulation debriefing.

During the simulation, participants are encouraged to practice the use of protocols, checklists, or cognitive aids the unit has developed or adapted for evaluating and treating an episode of patient care involving severe abdominal pain during a VBAC.

# Preparation Required

This simulation requires people to play the roles of the patient and the patient’s support person:

* The actor playing the patient should wear a patient gown, padding (to simulate a postpartum belly), and a wrist identification band and should lie in bed. The simulated patient (“actor”) should wear scrubs under the gown to ensure her privacy.
* The actor playing the support person should be briefed on his or her disposition and how to interact with others in the simulation.

In addition, the following props (i.e., simulated equipment and materials) are required:

* Simulated intravenous (IV) fluids and medications. The team should order and access simulated fluids and medication the way it normally would order these items—for example, through electronic order entry, a Pyxis machine, or a rapid response kit or cart. This allows the team to experience the normal passage of time required to order and access necessary supplies for treatment. Prior planning and coordination with the pharmacy for these simulated items will help make the simulation as realistic as possible.
* Fetal heart rate (FHR) simulator or FHR strips for teams to assess. Simulator should be capable of simulating a Category I and II tracing, late decelerations, and prolonged fetal bradycardia. If a simulator is not available, old FHR paper strips can be used.
* If the protocol in your hospital requires a VBAC patient to have an IV initiated or labs (type and cross [T&C]) done, then this should also be prepared as part of the setup for the scenario.

Clinical Context, Triggers, Distractors, and Expected Behaviors for the Simulation

The content of this simulation is divided into four parts: Clinical Context, Triggers, Distractors, and Expected Behaviors. The Clinical Context is provided at the beginning of the simulation in the form of a patient handoff and introduces that simulated patient and her clinical history. The handoff is followed by a series of Triggers and Distractors, events or actions that introduce new information and shape the context of the clinical response. The simulation facilitator introduces the Triggers and Distractors throughout the course of the simulation. A set of Expected Behaviors is also provided for the Clinical Context and each set of Triggers and Distractors. The Expected Behaviors offer a list of ideal actions that the clinical team might take in response to each set of events in the simulation with particular regard to those that foster effective teamwork and communication. The Expected Behaviors can also serve as a tool to use in evaluating the performance of the simulation participants.

# Clinical Context

*The facilitator provides the clinical context to person in the role of nurse. This can be done using a verbal report and handoff from one nurse to another nurse during change of shift.*

“Yvonne Banda is a 34-year-old G2P1 at 38 weeks gestation. Her EDC [due date] is (mm/dd). She was admitted about an hour ago for observation to rule out labor. She was placed on the monitor; her contractions are moderate every 3 minutes, FHR 130 with moderate variability, occasional accelerations, no decelerations. Cervix is 3 cm and 50% effaced, 0 station. Vertex presentation. Her membranes are intact.

"She has an allergy to penicillin. VS [vital signs] are all in normal range. Her prenatal history is remarkable for anemia, and she delivered her first child by cesarean section for breech baby. She is very nervous about this delivery as her sister delivered a baby 3 months ago in east Africa and passed away from a hemorrhage after delivery via cesarean section.

"She wants this to be a vaginal delivery, and her provider has approved her for a trial of labor. Her husband is with her in the room.”

## Expected behavior/performance (not in any particular order):

* Nurse introduces self to the patient and begins assessment.

**Trigger #1**

*Patient moans with every contraction, acts fearful, requests pain medication.*

 “I can’t get comfortable, my left side is sore.” “I’ve got pain in my shoulder.” “Should I get an epidural?”

**Clinical information provided on cards (one at a time) in response to assessment actions taken by team. For example, after team measures blood pressure (BP), the BP value is provided to team on a card.**

Pulse 100

BP 120/80

Temp 37.2

FHR 130 Category I with moderate variability, no decelerations.

Tocography: Contraction every 2 to every 3 minutes, each lasting 45 seconds

*The facilitator may provide answers to team as needed to help maintain the flow of the simulation.*

**Distractors**

Partner appears anxious, trying to reassure his wife.

Partner asks nurse for pain medication for his wife.

Partner asks questions, does not hear answers, does not understand medical jargon.

He is very verbal.

## Expected behaviors/performance not in any particular order:

* Nurse assesses maternal and fetal status.
* Nurse reassures patient and support person.

**Trigger #2**

Patient is crying out loud and complaining of a sudden, sharp, tearing left-sided pain.

It does not let up between contractions, and she is very agitated.

**Clinical information provided on cards (one at a time) in response to assessment actions taken by team. For example, after team measures BP, the BP value is provided to team on a card.**

Pulse 120

BP 90/65

Resp Rate 20

Temp 37.6 C

FHR begins to increase to 160 with variability minimal. Now Category II. After a few minutes intermittent late decelerations begin to occur.

Tocography: No identifiable contractions

*The facilitator may provide answers to team as needed to help maintain the flow of the simulation. Symptoms and continued fetal deceleration should continue while the team attempts various measures to address.*

## Expected behavior/performance (not in any particular order):

* Nurse turns patient on left side, increases IV fluids, and places oxygen mask on patient.
* Nurse calls for a provider and/or a rapid response team.
* Nurse or provider performs vaginal exam.
* Situation-Background-Assessment-Recommendation (SBAR) is used to inform others of the situation when they arrive. Additional help might be attending physician, anesthesiology, nursing, or rapid response team.
* All team members call out critical patient information.
* Provider speaks to patient and support person or delegates to another team member to inform and answer questions.
* All team members use closed-loop communication and provide mutual support to one another.

**Trigger #3**

*When appropriate during the flow of the simulation, the facilitator provides card to provider or nurse (whoever performs the vaginal exam):*

Patient is still 3 cm; 75% effaced, presenting part is no longer appreciated.

**Clinical information provided on cards (one at a time) in response to assessment actions taken by team. For example, after team measures BP, the BP value is provided to team on a card.**

Pulse 130

BP 80/60

Resp Rate 20

Temp 37.5 C

FHR 160, absent variability, repetitive late decelerations now Category III.

Tocography: No identifiable contractions

Patient appears weak.

*The facilitator may provide answers to team as needed to help maintain the flow of the simulation. The deteriorating fetal and maternal condition should continue while the team attempts various measures to address.*

*Facilitator ends the simulation after no further opportunities for teamwork and communication are apparent.*

**Distractors**

Patient continues to call out from pain on left side, never stops.

Partner is continually asking what is happening.

Partner expresses agitation with so many people coming into the room.

Partner gets very emotional and starts crying when team suggests moving to the operating room [OR] for cesarean section.

“Is the baby going to be all right? We don’t want to have to do a cesarean section. We want a natural birth.”

## Expected behavior/performance (not in any particular order):

* Team provides reassurance and information about what is happening to the patient.
* Clinical assessment and management is appropriate for Category III FHR tracing and potential uterine rupture.
* Provider continues intrauterine resuscitative measures and evaluates fetal response.
* SBAR is used to inform others of the situation when they arrive. Additional help might be attending physician, anesthesiology, nursing, or rapid response team.
* All team members call out critical patient information.
* All team members use closed-loop communication and provide mutual support to one another.
* Leader may call team huddle.
* Team uses CUS (concerned, uncomfortable, safety) or the facility’s “stop the line” phrase, if needed.

# Severe Abdominal Pain/VBAC Simulation Assessment Tool (Optional)

This tool provides a list of expected behaviors in response to the Clinical Context and each set of Triggers and Distractors in the simulation and can be used as a tool in evaluating the performance of the simulation participants.

Trigger 1: Patient Expresses Pain

| **Targeted Behavioral Response** | **Observed** | **Not Observed** | **Notes** |
| --- | --- | --- | --- |
| Nurse assesses maternal and fetal status. |  |  |  |
| Nurse reassures patient and support person. |  |  |  |

Trigger 2: Patient Has Sharp Pain

| **Targeted Behavioral Response** | **Observed** | **Not Observed** | **Notes** |
| --- | --- | --- | --- |
| Nurse turns patient on left side, increases IV fluids, and places oxygen mask on patient. |  |  |  |
| Nurse calls for a provider and/or a rapid response team. |  |  |  |
| Nurse or provider performs vaginal exam. |  |  |  |
| SBAR is used to inform others of the situation when they arrive. |  |  |  |
| All team members call out critical patient information. |  |  |  |
| Provider speaks to patient and support person or delegates to another team member to inform and answer questions. |  |  |  |
| All team members use closed-loop communication and provide mutual support to one another. |  |  |  |

Trigger 3: Presenting Part No Longer Appreciated

| **Targeted Behavioral Response** | **Observed** | **Not Observed** | **Notes** |
| --- | --- | --- | --- |
| Team provides reassurance and information about what is happening to the patient. |  |  |  |
| Clinical assessment and management is appropriate for Category III FHR tracing a potential uterine rupture. |  |  |  |
| Provider continues intrauterine resuscitative measures and evaluates fetal response. |  |  |  |
| SBAR is used to inform others of the situation when they arrive. |  |  |  |
| All team members call out critical patient information. |  |  |  |
| All team members use closed-loop communication and provide mutual support to one another. |  |  |  |
| Leader may call team huddle.  |  |  |  |
| Team uses CUS (concerned, uncomfortable, safety) or the faiclity’s “stop the line” phrase, if needed. |  |  |  |

# Clinical Context, Triggers, and Distractors Formatted for Printing Separately

The clinical context, triggers, and distractors used in this simulation scenario are provided on the next several pages in a format suitable for printing on cardstock in preparation for facilitating this in situ simulation using printed cards. The printed cards can be handed to the simulated patient or participating staff members at appropriate intervals during the simulation.

Clinical Context

“Yvonne Banda is a 34-year-old G2P1 at 38 weeks gestation. Her EDC [due date] is (mm/dd). She was admitted about an hour ago for observation to rule out labor. She was placed on the monitor; her contractions are moderate every 3 minutes, FHR 130 with moderate variability, occasional accelerations, no decelerations. Cervix is 3 cm and 50% effaced, 0 station. Vertex presentation. Her membranes are intact.

"She has an allergy to penicillin. VS [vital signs] are all in normal range. Her prenatal history is remarkable for anemia, and she delivered her first child by cesarean section for breech baby. She is very nervous about this delivery as her sister delivered a baby 3 months ago in east Africa and passed away from a hemorrhage after delivery via cesarean section.

"She wants this to be a vaginal delivery, and her provider has approved her for a trial of labor. Her husband is with her in the room.”

Trigger #1

*Patient moans with every contraction, acts fearful, requests pain medication.*

“I can’t get comfortable, my left side is sore.” “I’ve got pain in my shoulder.” “Should I get an epidural?”

Clinical information to be provided to team in response to their assessment after trigger #1

Pulse 100

BP [blood pressure] 120/80

Temp 37.2

FHR 130 Category I with moderate variability, no decelerations.

Tocography: Contraction every 2 to every 3 minutes, each lasting 45 seconds

Distractors (Trigger #1)

* Partner appears anxious, trying to reassure his wife.
* Partner asks nurse for pain medication for his wife.
* Partner asks questions, does not hear answers, does not understand medical jargon.
* He is very verbal.

Trigger #2

Patient is crying out loud and complaining of a sudden, sharp, tearing left-sided pain. It does not let up between contractions and she is very agitated.

Clinical information to be provided to team in response to their assessment after trigger #2

Pulse 120

BP 90/65

Resp Rate 20

Temp 37.6 C

FHR begins to increase to 160 with variability minimal. Now Category II. After few minutes intermittent late decelerations begin to occur.

Tocography: No identifiable contractions

Trigger #3

Patient is still 3 cm; 75% effaced, presenting part is no longer appreciated.

Clinical information to be provided to team in response to their assessment after trigger #3

Pulse 130

BP 80/60

Resp Rate 20

Temp 37.5 C

FHR 160, absent variability, repetitive late decelerations now Category III.

Tocography: No identifiable contractions

Patient appears weak.

Distractors (Trigger #3)

* Partner is continually asking what is happening.
* Partner expresses agitation with so many people coming into the room.
* Partner gets very emotional and starts crying when team suggests movement to the operating room [OR] for cesarean section.
* “Is the baby going to be all right? We don’t want to have to do a cesarean section. We want a natural birth.”

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