



User Manual

Childbirth VR Simulation Usage Instructions

Table of Contents

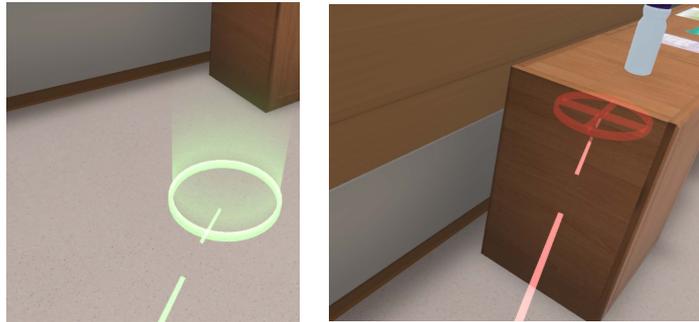
Controls.....	3
Dialogue	4
General Examinations	5
Stage 2 Labour	7
Stage 3 Labour	8



Controls

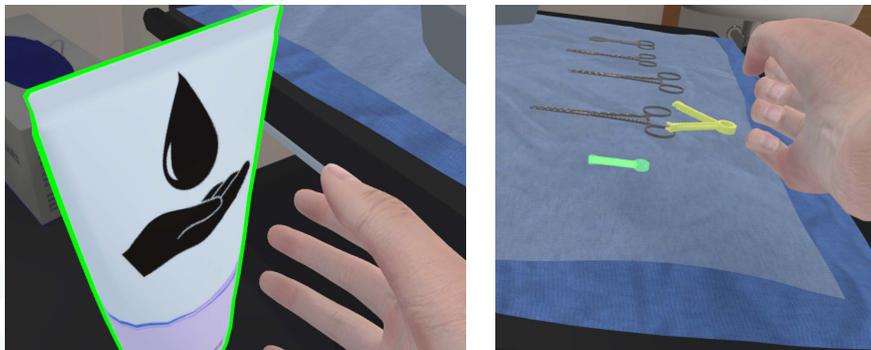
Teleport

The green and red indicates whether you are able to teleport to the selected area



Grab/Activate/Use

As you reach towards an object, a green outline should appear which indicates what you will be grabbing. Letting go of the object will drop it. Sometimes a green area will indicate where your object will land once let go of it.



Laser Pointer

Used to communicate with mother, partner and midwife



Point

Used for pressing buttons when within 'reaching' distance from the dialogue menu or ringing for assistance from senior nurse



Dialogue

Communication with Mother

There are several options of interacting with the mother. You are able to communicate and request her to perform certain actions depending on the current stage of labor and what she is doing at that particular time (e.g. standing vs. lying down). Below are the key options you can use to communicate with the mother.

Mother: Labour Stage 1

Request: Transitioning of positions
e.g. lying down, lifting gown, changing birth position

Notify: General examinations
e.g. Taking temperature, blood pressure, palpations

Questions: Asking name, current planned birth position, and performing a vaginal examination



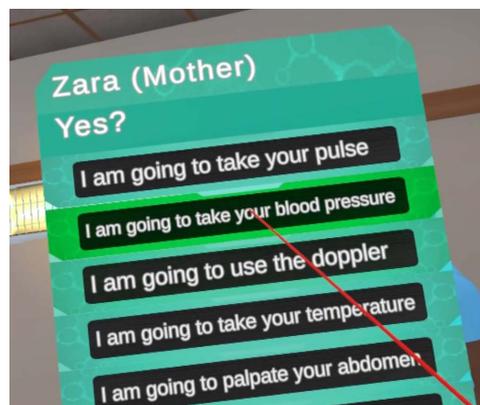
Mother: Labour Stages 2 & 3

Request: Interaction with the baby
e.g. rotating baby, handing baby over, cuddle baby

Notify: General examinations
e.g. Taking temperature, blood pressure, palpations

Questions: Asking for mother's name

Encourage: Skin-to-skin and breastfeeding baby



Communication with other parties

Partner:

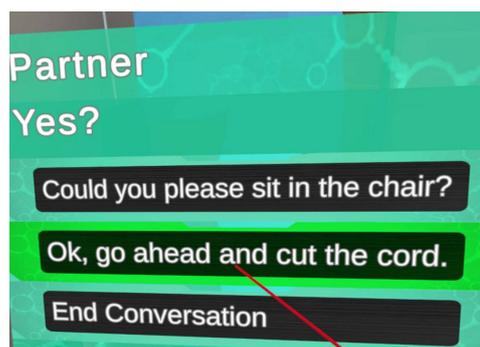
Sitting in the chair

Cutting the cord

Midwife:

Check the resuscitaire

Leave room



General examinations

Initial greeting and note checks

Use the laser pointer to interact/talk to the mother and partner and ask them their names to begin with. You can then check the notes on the bench. Activate the notes by gripping and use the arrows to navigate through different pages. You can check what number pregnancy this is for the mother, what her previous birth was like and if there are any medical or obstetric issues. Once you're happy with this, select close on the bottom right hand corner.



Handwashing and drying

Use the soap and the faucet similarly to real-world scenarios. When you place your hands next to each other this should trigger the handwashing animation. This works the same with paper towels when trying your hands. An animation of putting gloves will also trigger when grabbing the glove box.



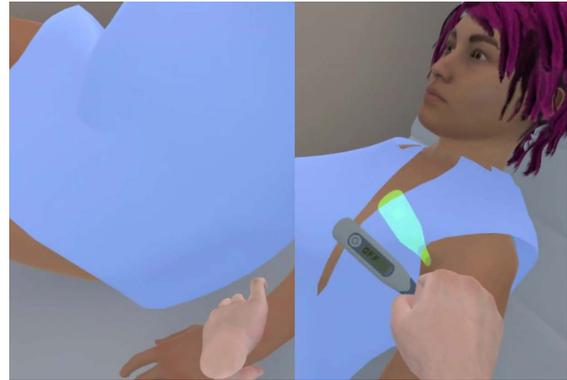
Taking blood pressure (sitting or standing)

Ask the mother if you can take her blood pressure, once she consents take the mother's blood pressure by taking hold of the cuff and wrap this around her arm. The machine is wireless so you can walk back to the machine to press it on and read the numbers.



Taking a pulse and temperature (sitting or standing)

Request and take the mother's pulse, you should be able to feel this through the haptics (vibrations) of the controller and you can count the rate by looking at the clock above the bed while measuring her pulse. Take her temperature under her LEFT axilla.



Performing palpations (lying down only)

To check the baby's positioning, ask the mother to lift her gown and place BOTH hands on her abdomen, you should be able to see the visualisation as long as the mother is not in the middle of contraction.

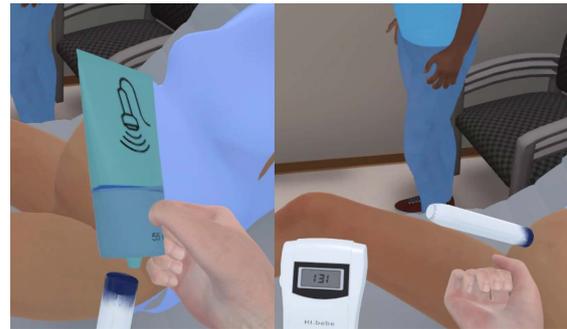
Tip: Your hands should not be digging into her abdomen but gently placed on top/hovering over.



Using the Doppler (lying down only)

Grip and hold the Doppler wand and base. These are wirelessly connected. Grip the lubrication gel and apply the gel on the end of the wand with the black tip. Place the doppler onto the abdomen just above the symphysis pubis.

Note: You may have to position this higher up on her abdomen than expected



Performing a Vaginal Examination (lying down - gown must be down)

Ask the mother to put the gown back down and ask to perform a Vaginal Examination. In this image, we performed the examination just before the mother started pushing the baby. Therefore, you can see the sutures of the baby's head and her cervix is fully dilated. Remember to then let the mother know you have completed the examination.



Stage 2 Labour

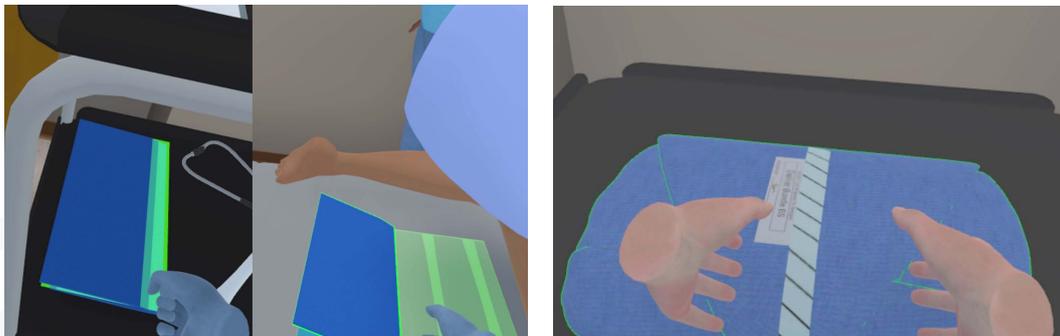
Requesting a senior midwife

When the mother is close to giving birth, ring the bell on the phone for the senior midwife to come into the room. Once she has arrived, you can ask her to check the resuscitaire.



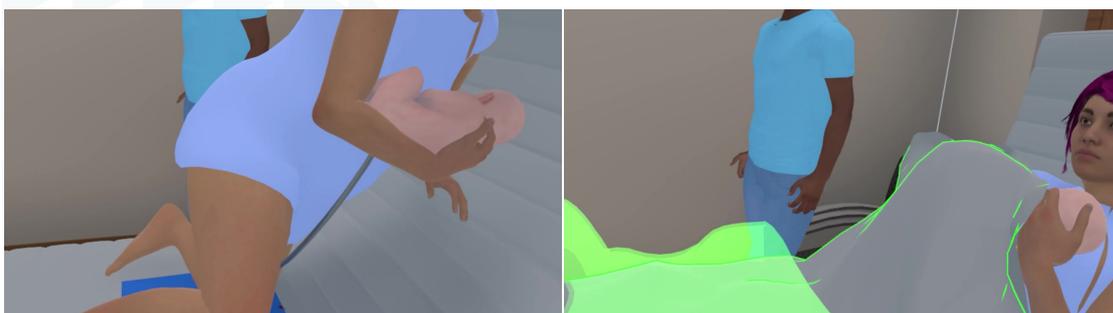
Prepare equipment

Request that the mother changes into her preferred birthing position. Place the incontinence pad on the bed and open the birthing pack (on large trolley).



Support the mother

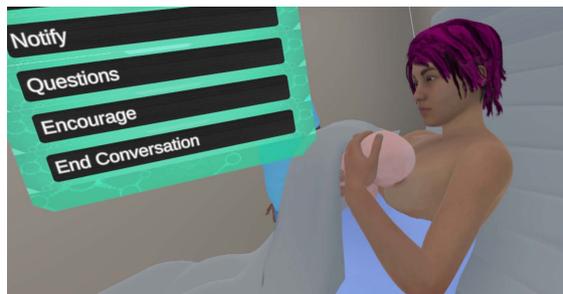
Be ready to support and catch the baby and hand the baby to the mother. Put a towel on the baby and mother.



Stage 3 Labour

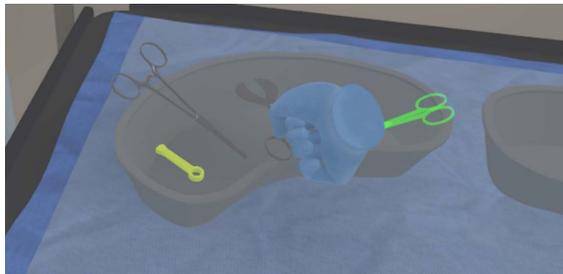
Encourage mother

Ask mother to perform skin-to-skin and try breastfeeding the baby. You'll have to place the blanket back on from the shelf. These encourage options will only appear when the mother is holding the baby.



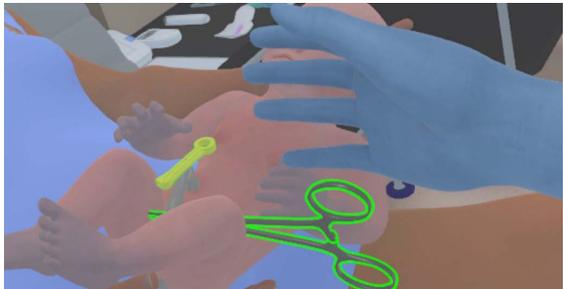
Observing the mother

Observe the mother carefully for signs of placental separation. This is on a timer and will come out naturally. You can take a peek underneath the blanket without touching it.



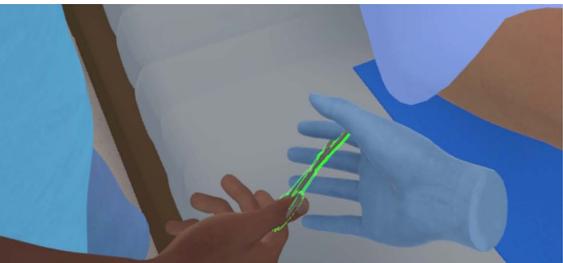
Preparing to cut the cord

Once the blue colour on the cord has disappeared you can start clamping the cord. You can ask the mother to rotate the baby towards you so you can do this easier.



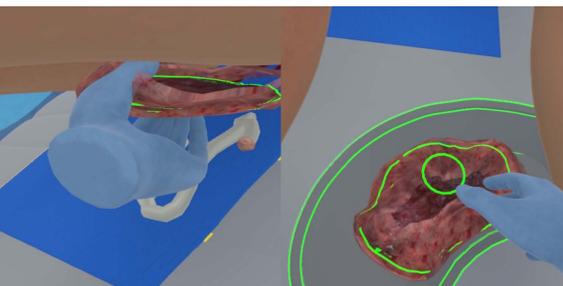
Asking partner to cut the cord

Ask the partner to get ready to cut the cord, hand him the scissors, then inform him to go ahead and cut the cord.



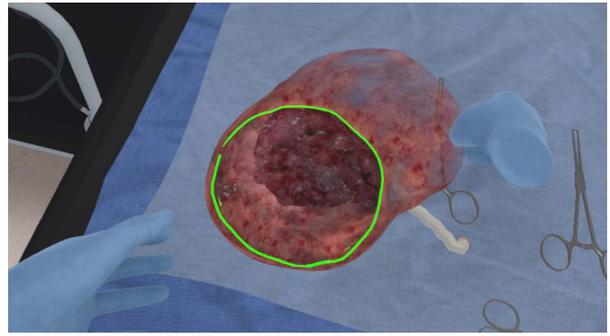
Placental separation

When the placenta is birthed, hold the placenta carefully - make sure the placenta is highlighted NOT the incontinence pad, the mother, or the cord and place it into an EMPTY kidney dish.



Inspecting the placenta

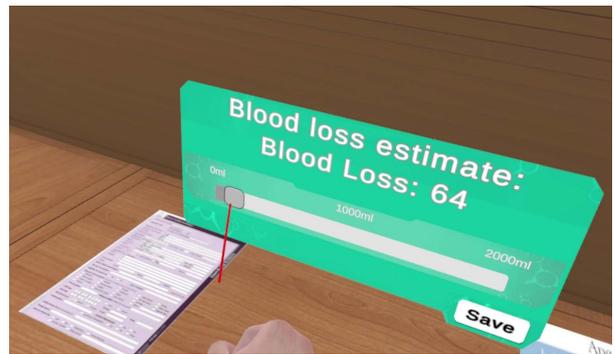
Place kidney dish and placenta on the trolley and inspect the cord by holding the membranes and place it back when happy with it.



Final checks and filling in records

Inspect and see if the mother has any damage to the perineum. Once you are happy with this you can place a maternity pad under her. Remember to tell her you're done performing the exam and place the towel back on top.

You can record information such as the APGAR score for the baby and mother's blood loss estimate.



Exiting the simulation

Proceed to the exit door and use the later pointer in order to log out of your account. There is also a hand sanitizer by the exit which you can use before leaving the room.





Prepare for risky events in a safe environment through immersive training.

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