### Step 11 – Nurse Performs Ultrasound Exam

Questions the Nurse may ask during the ultrasound:

1. “Are you surprised by what you are seeing on your ultrasound?”
2. “How do you feel about seeing your baby’s heartbeat on ultrasound?”

#### Exclusion of Family and Friends during the Exam

**NOTE:** If the patient asks if her friends/family can come in for the ultrasound, simply explain that they are welcome once the routine is completed. Sometimes the woman will be more open with you when she is alone and not feel the freedom to say much (what she truly is feeling) in front of her visitor. She may also be uncomfortable to have her visitor present for a vaginal ultrasound, but may be too embarrassed to ask them to step out once they are already there in the room. Explain to the patient that her family/friends will be able to join her after the initial portion of the ultrasound.

#### Nurse

1. Have the patient sit on the table.
2. Explain to her that if she is early “We may have to do a vaginal ultrasound, but let’s take a look first and see what we see through your abdomen.”
3. Prepare the patient for the ultrasound at this time.
	1. Have her lie down on her back on the table and pull out the leg support.
	2. Have her slide her pants and underwear down to just below her hips. During the first trimester, her pregnancy is low in the pelvic region. You need access to that area on her abdomen. You can use the beginning of her pubic hairline as a reference.
	3. Tuck in a paper towel to protect her clothes and give her some sense of privacy. Say, “I’m going to tuck this paper towel in here to prevent the gel from getting on your clothes and to give you privacy.” The more she is covered, the more privacy she has, and the more comfortable she will feel.
4. Apply the gel to her lower abdominal/pelvic area.
5. Place the probe on her and begin scanning.
6. Let her know right away if you can see as clearly as you’d like to perform the exam. “It looks like we’ll have a clear picture.”

***If you cannot see the boundaries clearly, go to the “***[***Vaginal Ultrasound***](#_Vaginal_Ultrasound)***” section below.***

***If you can see the boundaries clearly, go to the “***[***Ultrasound Routine***](#_Ultrasound_Routine)***” section below.***

#### Vaginal Ultrasound

1. If you cannot see the image clearly, you will need to perform a vaginal ultrasound. This procedure should be presented as the next logical step in a standard of care. The national standard of care for first trimester sonography uses the vaginal ultrasound.
2. Inform the patient that you need to do a vaginal ultrasound by saying, “I will need to do a vaginal ultrasound today to get a clear picture because I am not able to see clearly through your abdomen to confirm viability.”
3. Have her go to the bathroom before proceeding. A full bladder with a vaginal ultrasound can be uncomfortable.
4. Instruct her on how the vaginal ultrasound exam is performed (i.e. that you will insert the vaginal probe just a short way into her vagina. That the probe will be covered and use lubricant to make it more comfortable for her).
5. Protect her privacy by giving the patient a drape sheet.
6. Step out of the room to have her slide her pants and underwear off.
7. Have her lie down and for her comfort, have her place her feet in stirrups. Explain to her that this position will help get the best picture and that the stirrups will be helpful to her because she will not have to hold her legs up in an uncomfortable position for an extended period of time.
8. Place some ultrasound gel on the tip of the probe and place the cover on the probe.
9. Put some K-Y Jelly on the outside of the probe cover to make it more comfortable for the patient, and verbalize this to her. She needs to hear that we are looking out for her comfort.
10. Protect her privacy, asking her to insert the probe.
11. Give her a paper towel beforehand to wipe her hand off from the gel that is on the probe.
12. Tell her that you will hold the handle and she will insert the tip of the probe into her vagina for her privacy.

Proceed with [Ultrasound Routine](#_Ultrasound_Routine) (below) from here.

#### Ultrasound Routine

During the ultrasound routine, you will need to provide the patient with tangible information as soon as possible. The patient may invite a guest into view the ultrasound if she wishes and at the discretion of the nurse. The guest may be invited in prior to the beginning of the exam or immediately following the initial view of the baby.

1. Enter the patient’s ID number into the New Patient Data Entry page. (DOB, followed by her initials)
2. Select the abdominal or vaginal probe. Use the abdominal probe initially if the patient is unsure of her LMP to begin with the abdominal probe and move to the transvaginal probe if you are not able to see clearly.
3. Obtain a “glamour shot” first, and then obtain midline longitudinal and midline transverse views. Label each picture with appropriate label: (ML LONG, ML TRV). Print one copy of each view.
4. If the gestational age is less than approximately 12 weeks, obtain 3 Gestational sac diameters, and the fetal pole crown-rump length (CRL). Print copy of each.
5. If the gestational age is more than 12 weeks, obtain the bi-parietal diameter and femur length measurements. Print copy of each.
6. Using the Pulse Doppler mode, obtain the heart rate measurement: (see specific protocol below)
	1. Immediately following the selection of the Pulse Doppler mode, decrease the Thermal Index setting to less than 1.0. (ALARA – As low as reasonably achievable)
	2. Holding the probe steadily over the heart, measure the rate for 10 seconds maximum or less. (ALARA – As low as reasonably achievable)
	3. Make sure the Pulse Doppler volume is turned up so the heartbeat is audible.
	4. Use freeze mode to calculate heart rate.
	5. Print copy of heart rate.
	6. If it is difficult to obtain a heartbeat using the Pulse Doppler mode, attempt using the “M” mode to capture the heart rate. Print copy of heart rate.
7. Using the Dual mode, locate the right adnexa in longitudinal, freeze, update, and then freeze again in the transverse position. Label LONG RT ADNX TRV. Print copy. Explain while taking pictures of the adnexa that you want to see the ovaries to make sure there isn’t anything to be concerned about.
8. Repeat with adnexa on left side. Label LONG LT ADNX TRV. Print copy.
9. Obtain one more “glamour” shot of the baby and click “freeze”.
10. After obtaining the above pictures for Medical Director, verbalize basic anatomy of baby, including yolk sac, heartbeat, head, abdomen, arms/legs, spinal column, ribs, umbilical cord, etc. if possible. Be sure to say “I am seeing what I would expect to see” or “I’m not seeing what I would expect to see” depending upon what is visualized.
11. Print out the report for the chart after completing your routine.
12. Close the report and return screen to the last picture of baby.
13. Provide the patient with any appropriate pictures.

**NOTE:** The only pictures she can have to take home are heartbeat measurements and unlabeled pictures of her baby. **DO NOT GIVE HER PICTURES WITH A DUE DATE OR ANY DATING INFORMATION ON THEM**. She can use such pictures to facilitate an abortion and that is not the purpose of the ultrasound. You can verbalize the date you have seen from the measurements and you can tell her the baby’s size. But you can NOT give it in writing.

1. Reiterate that a physician must still confirm what you have seen in the ultrasound.
2. After printing the pictures ask, “Is there anything else you would like to see?”
3. Give the patient her pictures in a frame. Point out what you see in the pictures to solidify what she saw and also so she can remember, as she takes the pictures home.
4. Answer any questions she may have at this point.
5. Remind her that you will be in touch to confirm her ultrasound with her once the doctor has reviewed the report. Give her a general idea of when you will talk to her and see her next.
6. Show the fetal/uterine models at the end so she can see her baby’s actual size.