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Prenatal Care

Pregnancy is a time of change and there is a lot to learn. Whether you hoped for this pregnancy for a long time or were surprised by it, you are bound to have many questions.

Throughout your pregnancy, your clinician and members of your care team will provide a series of resources on topics relevant to your pregnancy. This is to help you learn what you can do to have a healthy pregnancy. They will answer common questions, explain your baby's growth and your changing body, and share ways to cope with discomforts you may feel.

We have materials, some of which we will give to you at your visits. Most are available on-line on the Atrius Public Website along with addition information and links that we reviewed and approved. Go to *AtriusHealth.org* and type in *Pregnancy Resources* in the search field. If you do not have access to the internet, please let your prenatal care team know so that we can provide you with handouts. In the coming months, we hope you'll ask many questions and take good care of yourself and your baby-to-be.

Your Plan for a Healthy Pregnancy

Prenatal care is important

Regular contact during pregnancy is very important. Prenatal care lets us follow your baby's growth and your health. We can help you learn about your pregnancy, too, and get ready for labor, birth, and parenthood. Please be sure to keep all your appointments, even if you feel fine.

Your pregnancy will usually be dated from the first day of your last menstrual period. Counting from that day, most pregnancies usually last about 40 weeks. Once you start getting prenatal care, you will have regular contact every 4-6 weeks during the first 28 weeks of pregnancy. Some of this will be at check-ups or ultrasounds, some will be on the telephone, and some may be via video visit! Patients who are feeling fine and who do not have significant risk factors may continue to be seen monthly up to 32 weeks while others will benefit from more frequent visits. Check-ups will be more often as you get closer to your due date or if you have any complications. As you approach your due date visits will be at least every week or so.

Most pregnancies are healthy and consistent prenatal care helps prevent problems. But sometimes problems do occur with little or no warning. If you have concerns or any of the warning signs identified by your clinicians, call your health care team for advice. When your Ob/Gyn office is closed the calls are transferred automatically to our After-Hours nurses who can advise you or contact the on-call Ob/Gyn physician or midwife. **Someone is on call at the hospital 24 hours a day.**

Your health care team

Depending on where you choose to go for prenatal care, you may see a nurse practitioner, certified nurse midwife, or an obstetrician during your check-ups. Usually, these health care professionals work together as a team. Registered nurses also play an important role on the team in providing education, answering questions and having regular telephone contact with you during the pregnancy. The team Medical Assistant will welcome you to each visit and take your vital signs. All these people have one goal - to help you have a healthy, joyful pregnancy and birth.

Your first visit is a good time to talk to your clinician about your options for care during pregnancy. For example, you may prefer to see a midwife or an obstetrician during prenatal visits. You might choose between one of our affiliated hospitals for the birth. Some of these choices may depend on what your insurance plan offers.

Your care team is comprised of various health care professionals.

Ob/Gyn nurse practitioners (NPs) and physician assistants (PAs)

- Ob/Gyn NPs are registered nurses with advanced education in women's health care (often a master's degree).
- Ob/Gyn PAs have completed a comprehensive training program.
- NPs and PAs must pass national certifying exams and be licensed by the state where they practice.
- These providers find and treat common health problems in women. They do exams and order needed lab tests and prescribe medicine. NPs and PAs care for women with normal pregnancies before and after birth, but do not deliver babies. They also teach women to care for themselves and their babies. When there are medical problems NPs and PAs consult with MDs.

Certified nurse midwives (CNMs)

- CNMs are registered nurses with advanced education in obstetrics and gynecology (often a master's degree). They must finish studies in an accredited program, pass an exam given by the American College of Nurse Midwives, and be licensed by the state where they practice.
- They find and treat common health problems in women of all ages. They do exams, order needed lab tests, and prescribe medicine. CNMs also teach women about how their bodies work and encourage them to participate in their health care.
- CNMs also deliver babies in the hospital. Occasionally, some choose to practice only in the office and do not attend births. When complications arise, CNMs consult doctors. CNMs are trained to handle normal births. They do not do cesarean sections and generally do not use forceps or vacuum extractors during births. Some problems during labor require a nurse midwife to work with a doctor. When this happens, your midwife will still help support you through the rest of labor and birth.

Obstetricians (OBs)

- Obstetricians complete four years of medical school after college and do 4-5years of practical training in a hospital (residency) caring for women, delivering babies, and learning surgical techniques. Like all doctors, obstetricians must be licensed by the state.
- OBs are trained to care for women during and after pregnancy and childbirth. A woman may choose an OB as her primary clinician during pregnancy. Obstetricians do all cesarean sections and births that require forceps and most vacuum extractions.

Registered nurses (RNs)

- **RNs** must finish three to four years of nursing education and training in an accredited program. They also must be licensed by the state.
- RNs provide education, give test results, answer medical questions, and handle phone calls from patients. They also help with routine health care such as IV's and injections.

Licensed Practical Nurses (LPN'S)

- LPNs must finish a one-year certification program at an accredited school and be licensed by the state.
- LPN's also answer medical questions, help with procedures such as IV's and injections, renew prescriptions, and counsel patients.

Medical Assistants

- Medical Assistants (MA) have had some medical training (either at, or and outside of, Atrius Health). They take your blood pressure and weight, and check urine samples for signs of sugar and protein (and sometimes infection). They schedule checkups, too.

Discuss any problems with earlier pregnancies with your clinician.

If you've had problems with earlier pregnancies, talk with your primary or obstetric clinician. S/he will try to find out what caused the problem and how likely it is to happen again. Your current pregnancy will be watched carefully, and special tests may be done, if needed.

What happens during check-ups

You are welcome to bring your partner or a support person with you to prenatal check-ups. At your first visit, your clinician will go over your medical history with you. Your weight and blood pressure will be checked. A urine sample will be tested. They will also do a physical exam and may check for other infections, such as chlamydia. Common tests done during pregnancy to check for problems with your health or pregnancy are shown in the following table.

Test name	What the test measures
Urine tests	Urine is checked for sugar, protein, and bacteria. Their presence may signal diabetes or a
	bladder or kidney problem or the pregnancy disease called pre-eclampsia. This is only
	done when indicated.
Blood tests	Your blood is checked for low red blood cell count (anemia). Blood tests may also be
	used to check for antibodies to hepatitis B & hepatitis C virus, HIV syphilis, German
	measles, chicken pox, and some genetic diseases if you consent. Your blood type and Rh
	factor are also determined.
Cervical tests	Cells from the cervix during your pelvic exam may be checked for infection and cancer
	by taking a culture called a Pap smear. This is only done if you are due for one.
Physical exam	Your clinician may check your:
	☐ Ears, eyes, nose throat, and teeth
	☐ Thyroid gland
	□ Breasts
	☐ Heart, lungs, back, abdomen, arms, and legs
	□ Vulva, vagina, cervix, and pelvis
	☐ Uterus and ovaries
	☐ Lymph nodes

Your **due date** will be estimated, counting from the first day of your last menstrual period (**LMP**). It will be 40 weeks from your LMP if you know that day and have regular periods. If you can't recall the day your last period started, your clinician will estimate the due date by the size of your uterus or ultrasound. Remember, though, **due dates are just estimates.** Few women --only about one in 20 --give birth exactly on that day. Most babies are born during the two weeks before or after their due dates.

At later prenatal visits, your clinician will check your blood pressure and weight, and may test your urine for sugar and protein. They will look for swelling in your hands, legs, and feet. Your **fundal height** (the distance from the top of your uterus to your pubic bone) will be checked to follow the growth of your uterus and baby. After 10-12 weeks of pregnancy, your clinician will listen to the baby's heartbeat, too.

Ongoing Care

You may find that you have questions you'd like your health care team to answer before your next visit to the office.

- You can send non-urgent questions via MyHealth online at any time or call the office.
- For urgent problems, call your health care team right away. If your regular clinician is not available, an on-call clinician will care for you.

How Your Baby Grows

The first step toward pregnancy is **ovulation**, when an ovary releases an egg. The egg is swept into a fallopian tube. There a sperm fertilizes it, forming a single, complete cell. The fertilized egg starts dividing right away into an ever-increasing number of cells. The tiny bundle of cells travels down the fallopian tube to the uterus, where it burrows into the soft, nourishing lining about seven days later. This is called **implantation**.

Your clinicians will date your pregnancy from the first day of your last menstrual period (LMP). Most pregnancies last about 40 weeks. A normal range for pregnancy is 37-42 weeks. That adds up to nine calendar months. Pregnancy is divided by **three trimesters.** The first trimester is thought of as weeks one to 13, the second is weeks 14 to 28, and the third is weeks 29 to birth.

The First Trimester

Weeks five to six:

The fertilized egg is now called an **embryo.** It has a simple brain and spine, and its digestive tract has begun to form. By the end of the sixth week, the heart begins beating and the embryo is about ¼ inch long. The **placenta**, which will nourish your baby in the uterus, continues to develop. It is a spongy, disk-shaped organ attached to the wall of the uterus. The **umbilical cord** links the embryo to the placenta. Oxygen, nutrients, and many other substances circulating in your bloodstream pass through the placenta to your baby. The baby's waste products pass back through the placenta to your bloodstream and are filtered out of your body.

A fluid-filled bag called the **amniotic sac** surrounds the baby. The **amniotic fluid** inside it is water and secretions from the fetus, placenta, and sac. This fluid will let the baby move freely within the uterus and cushion it against bumps and jars. It also helps the baby maintain a steady body temperature.

You don't look pregnant yet, but you usually feel pregnant. Your period is late. You may have early pregnancy symptoms such as extreme tiredness, tender breasts, and nausea. You may vomit occasionally and need to urinate often. Many women notice mood swings.

Week eight:

About an inch long, the baby is now called a **fetus.** All his major body organs and systems have formed but are not completely developed. Eyes, ears, and facial features are forming. Between weeks 10-12, a clinician can usually start to hear a heartbeat using an ultrasound device.

Your body is still adjusting to the changes of pregnancy. You still feel the discomforts of the past month. The amount of blood in your body increases. As a result, your heart pumps more blood than it did before you became pregnant.

Week twelve:

Most of your baby's internal organs (like the heart and kidneys) are working. Legs and arms have formed but are still small. Muscles are developing and the baby is active in your uterus, although you probably can't feel him moving yet. The baby can open and close his mouth.

Nausea may start to ease off (though sometimes it lasts well into pregnancy). You may not need to urinate as often as in the earlier weeks of your pregnancy. Your breasts are heavier and still tender. It's probably time to buy a larger bra and start looking for looser, comfortable clothes. If this is your second pregnancy, you may find yourself needing these clothes earlier. Because your abdominal muscles stretched during your first pregnancy, your next pregnancy may show sooner.

The Second Trimester

Week sixteen:

Although only eight inches long, your baby is now completely formed. From now on, she will mature and gain weight. Her skin is **pink** and so thin it is almost transparent. She has fingernails and toenails.

You are probably beginning to feel more energetic, more like yourself. You are starting to look pregnant. Your nipples and the colored area around them (the **areolae**) may start to darken. A dark line may begin to appear down the middle of your stomach. It will fade sometime after birth.

Soon you will feel a sensation like fluttering or tiny bubbles. Clinicians call this first awareness of the baby moving **quickening.** If you are a first-time mom, you may not notice this until around 20-22 weeks. In later pregnancies, you may feel this sooner, anywhere between 14-18 weeks. For a few women, it happens even earlier. Mark the date you first notice it on your calendar and tell your clinician.

Week twenty:

Permanent teeth are developing behind the already-formed baby teeth. A white, oily substance called **vernix** protects the baby's skin. Your baby sleeps and wakes and can grip with his hands. He is eight- to 10-inches long and weighs between a half-pound to a pound.

Your breasts may start to leak drops of a cloudy, yellow, watery fluid called **colostrum.** When you breastfeed, this will nourish your baby during the first few days after birth until your breasts start to make milk. (If you don't notice drops of colostrum, don't worry. Not all women produce it at this time.) You may start to feel discomforts of later pregnancy. You may be short of breath, for example, have heartburn, or leak urine when you laugh, cough, or sneeze. This is a good time to start practicing Kegel exercises to strengthen vaginal muscles that help support your bladder and uterus.

Week twenty-four:

Around weeks 24-26, your baby can hear sounds. She hears your voice and may startle at sudden loud noises. His skin is getting thicker and is covered by fine, soft hair called **lanugo**. You will notice times when she is very active, followed by times of calm when he is thought to be sleeping.

This is the start of your biggest weight gain, and your belly grows quickly. You may feel the baby's movements high in your abdomen or low in your pelvis. Your pelvic joints and ligaments are softening to prepare for birth. This softening probably causes pain you may feel in your groin, above your pubic bone, and in your side, as well as brief, sharp pains in your vagina. You may notice your uterus gets hard occasionally with **Braxton-Hicks** contractions. They help prepare your uterus for labor. These contractions often happen more when you change position or if you are dehydrated. Usually, they aren't painful.

Your baby's movements are a sign of its well-being. Once you can feel your baby move regularly, you should call your clinician if there is a day when the baby seems much less active than usual.

The Third Trimester

Week twenty-eight:

Your baby grows quickly now and weighs close to three pounds. This weight gain includes fat under the skin. The baby's brain is more developed. He has many taste buds and a strong sense of taste. With advanced medical care, babies born after 28 weeks of pregnancy almost always survive.

You may feel late pregnancy discomforts like swelling and breathlessness. As your breasts and belly grow larger, stretch marks may appear. After birth, they will slowly fade to a silvery white.

Week thirty-two:

Your baby continues to mature and grow bigger and heavier. She kicks more strongly and can sense the difference between light and dark. Now that the baby is bigger, she presses on your internal organs. Pressure against your diaphragm (the muscle below your lungs) may cause even more shortness of breath. It can be hard to get comfortable and to sleep. Your Braxton-Hicks contractions may be getting even stronger, but probably are still not painful. As your uterus grows, your bowels get more sluggish, leading to a bloated, full feeling; heartburn and constipation are common.

Week thirty-six:

Your baby is almost ready to be born. He now gains between one-quarter to one-half pound a week and has begun to fill out. He is about 18 inches long. If this is your first baby, he may begin to drop into your pelvis now and get ready for birth. In later pregnancies, this may not happen until you go into labor. If the baby drops, it may be easier for you to breathe, and any heartburn may improve.

You also will feel increasing pressure in your pelvis and need to urinate more often since the baby is pressing on your bladder. Because there is less room in your uterus, movements may feel like kicks, jabs, or squirming and may cause discomfort. From now on, your prenatal checkups will be every week.

Week forty:

Ready to be born, your baby is about 20 inches long and weighs between 5-10 pounds. Most of her lanugo has disappeared. She has moved into the lower part of the uterus and may press against your cervix.

Your belly is large enough to make moving around a major effort. Your cervix is softening to prepare for labor, and you may feel pressure low in your abdomen. Braxton-Hicks contractions are so much stronger that you sometimes may think you are in labor. You are probably not in true labor if your contractions are irregular and stop when you move or change position. **Don't be surprised if you don't go into labor on your due date.** Remember, only one in 20 babies is born on their due date. Most are born within two weeks before or after their due date.

Weeks forty to forty-two:

If you have not yet given birth, special tests will be done to monitor the health and well-being of your baby. Labor is generally induced after 41 weeks and by 42 weeks at the latest if it has not started naturally.

Pregnancy, childbirth, and parenting classes

A wide variety of organizations offer pregnancy, childbirth, and parenting classes. The hospital at which you are delivering will have classes available and there are many classes in the community.

You will find that prices vary widely, too. Some classes cost a lot but may be available at a reduced fee if you ask.

Be sure to register for classes early in pregnancy even though many don't start until your sixth or seventh month. If you can't take classes, try to learn more about pregnancy and childbirth and breastfeeding through videos and books.

Childbirth education classes are very helpful for first-time parents, so try to take them if you can. If you already are a parent, you may benefit from a shorter refresher course or a sibling class for your child. Topics that are often covered may include:

- what to expect during pregnancy, labor, and birth.
- relaxation and breathing techniques to use during labor
- options for pain relief
- infant feeding and preparing for a new family member
- common hospital procedures and a tour of the hospital

Breastfeeding: For first time parents, we highly recommend a breastfeeding class. Topics should include breastfeeding basics, instruction on how to make sure your baby is getting enough milk, and ways to avoid problems like sore nipples.

Meet the Clinicians: Some Atrius health sites have "Meet the Doctor" or "Meet the Midwife" meetings so you can meet your OB clinician's colleagues. Some sites have "Meet the Pediatrician" to help you choose who you would like to care for your newborn.

Planning for your baby's birth

By your third trimester, you should start thinking about:

- Choosing a pediatrician:
 - a doctor to care for your baby after you leave the hospital
 - Atrius Health has Pediatricians at most practices locations
- Plan for infant feeding
- What kind of help you will need at home
- Your plans for maternity leave, if you work outside your home
- Purchasing a car seat
- Finding out what's required to put your baby on your health plan
- Whether you'll have your baby circumcised if you have a boy
- Getting to the hospital and plans for your other children if you have them

Talk to your clinician about these issues. Ask for the appropriate resources.

Note: the sex of the baby is randomly referred to as either he or she.