Integrated Prenatal Screening

What Is The Integrated Prenatal Screening Test?
Integrated screening is a test for pregnant women, which involves an ultrasound performed ideally at 12 weeks along with first and second trimester blood draws. The test will help detect Down syndrome and trisomy 18 by identifying those may be at an increased risk for these conditions. If at increased risk, you may be offered genetic counseling and possibly additional testing to rule out these problems. This screening test may not be covered by your insurance and currently costs $200 - $500.00 depending on the option you choose.

What Does the Integrated Prenatal Screening Test Measure?
It combines the use of:
1. An ultrasound examination to measure the amount of fluid accumulation behind the baby’s neck (nuchal translucency). Most laboratories won’t accept nuchal measurements unless they are performed by a sonographer specifically certified to do them as our sonographers are at the University of Washington.
2. A laboratory test performed on the mother’s blood at 10 weeks 3 days to 13 weeks 6 days weeks to measure the levels of a protein normally found in the blood of all pregnant women
   • PAPP-A (pregnancy associated plasma protein-A)
3. A laboratory test performed on the mother’s blood at 15 –18 weeks to measure the levels of 4 proteins normally found in the blood of all pregnant women
   • AFP (Alpha fetoprotein)
   • hCG (Human chorionic gonadotropin)
   • E3 (unconjugated estriol)
   • Inhibin A
The Integrated Screen will detect up to 92% of babies affected with Down Syndrome and up to 90% with Trisomy 18. It will also detect up to 80% of babies that have open neural tube defects such as Spina Bifida. Since the first and second trimester results are combined, your risk assessment will not be available until your second trimester blood work is completed.

What Is Down Syndrome?
In each of our cells, we have 46 chromosomes (23 from the mother and 23 from the father). They give instructions for our development. Down syndrome results when there is an extra number 21 chromosome (three, instead of two). Any woman, at any age, can have a baby with Down syndrome, although the risk increases with the age of the mother. People with Down syndrome usually have mild to moderate mental retardation, as well as other medical problems.

What Is Trisomy 18?
Trisomy 18 is a severe chromosome abnormality that causes multiple birth defects and very severe mental retardation. Few babies with Trisomy 18 survive into childhood. Trisomy 18 results when the fetus has three, instead of the normal two, copies of chromosome 18. Like Down syndrome, the chance to have a pregnancy affected with trisomy18 increases with increased maternal age.

What Is an Open Neural Tube Defect?
The neural tube, which forms very early in pregnancy, eventually develops into the baby’s brain and the spinal cord. If the tube does not close completely, an opening remains along part of the baby’s spine or head. If the opening is in the spine (spina bifida), the symptoms range from paralysis of the legs to lack of bowel and bladder control to hydrocephaly (water on the brain). If the opening is in the head (anencephaly), brain development is incomplete. These babies are often stillborn or die shortly after birth. Open neural tube defects occur in 1 or 2 out of every 1000 births.
What Does It Mean If My Screen Is “Positive”?  
About 5% of women will have a “positive” screen. This increase in risk does not mean the baby has a chromosome abnormality. It simply indicates that further tests need to be considered. The options for further testing may include ultrasound examination and amniocentesis for fetal chromosome analysis. These additional tests will accurately diagnose Down syndrome, Trisomy 18 and neural tube defects.

Remember that the Integrated Screen is not a diagnostic test. It cannot tell you whether your unborn baby has or doesn’t have a problem. It will simply tell you the odds (chance) that the baby has a problem. Keep in mind that the vast majority of women with “screen positive” results do not have babies with Down syndrome, trisomy 18 or a neural tube defect.

What Does It Mean If My Screen Is “Negative”?  
A negative result indicates that the risk that the fetus has Down syndrome or trisomy 18 is not increased compared to that of a 35 year old woman. However, a negative result does not completely eliminate the possibility that the fetus may have Down syndrome, trisomy 18, other chromosome abnormalities or a neural tube defect.

What Is The Cost Of Integrated Screening?  
This testing is relatively new and has not yet been determined to be a standard prenatal test. Therefore, most insurance companies do not yet cover this screening. The cost is outlined below along with the CPT codes, which your insurance company might ask for in determining coverage.

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<th>Test</th>
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When Should This Testing Be Performed?  
- 1st trimester blood and ultrasound nuchal (NT) measurement
  --11 weeks 0 days – 13 weeks 6 days
- 2nd trimester blood
  --15 weeks 0 days – 20 weeks 6 days

What Is A Genetic Counselor?  
A genetic counselor is a master’s level specialist who provides information and support to families or individuals and prospective parents. The genetic counselor will take a family and pregnancy history, assess your risk factors and provide you with information about your options for screening and prenatal diagnosis. The genetic counselor will be able to help you make decisions about whether or not to have testing and which testing is right for you. Although the screening itself may not be covered, the genetic counseling most likely will be.

How Can I Get More Information?  
If you have questions or would like more information about Integrated Screening please contact your midwife or doctor or call:

Prenatal Genetics and Fetal Therapy Program
University of Washington Medical Center   (206) 598-8130