

**Payment Policy |** First-Trimester Detection of Down Syndrome Using Fetal Ultrasound Assessment of Nuchal Translucency Combined with Maternal Serum



**EFFECTIVE DATE:** 11|17|2005  
**POLICY LAST UPDATED:** 12|02|2008

## OVERVIEW

This payment policy documents the coverage determination for First-Trimester Detection of Down Syndrome Using Fetal Ultrasound Assessment of Nuchal Translucency Combined with Maternal Serum. Nuchal translucency is an ultrasound measurement of an approximately one millimeter fluid-filled space at the base of the fetus neck. Nuchal translucency testing combined with blood tests provide a more accurate risk assessment.

## PRIOR AUTHORIZATION

Preauthorization review is not required.

## POLICY STATEMENT

### BlueCHiP for Medicare and Commercial

First-trimester combined screening for detection of Down syndrome is covered for women who are adequately counseled and desire information on the risk of having a child with Down syndrome.

## MEDICAL CRITERIA

None

## BACKGROUND

One of the most common chromosomal abnormalities found at birth is Down Syndrome. Although the risk of having a baby with Down syndrome increases with maternal age, age cannot be the only screening factor as 70% of Down syndrome babies are born to women under the age of 35.

Historically, prenatal detection of Down syndrome was performed in the second trimester of pregnancy. Second trimester screening allows the patient less time to undergo further confirmatory diagnostic testing and may limit options for termination of pregnancy.

### Nuchal Translucency Test:

Nuchal translucency is an ultrasound measurement of an approximately one millimeter fluid-filled space at the base of the fetus neck. During the first trimester, babies with abnormalities tend to accumulate more fluid at the back of the neck causing the translucent space to be larger. Unlike amniocentesis, this test does not give a definitive diagnosis but can be used to determine if further testing would be beneficial.

The first trimester testing is only performed between 11 and 14 weeks of pregnancy. Once the sonographer confirms the baby's gestational age, the nuchal fold area is measured. The nuchal fold measurement, maternal age and baby's gestational age are put into a risk calculation program that uses an algorithm to statistically compute the child's chances of having a chromosomal abnormality.

First Trimester Combined Screening Test:

Nuchal translucency testing combined with blood tests provide a more accurate risk assessment. The blood tests measure two proteins found in the blood, beta human chorionic gonadotropin (b-HCG) and pregnancy-associated plasma protein-A (PAPP-A). Pregnancies with Down Syndrome tend to have lower PAPP-A and higher hCG numbers. Two blood tests are done, one at 11 and one at 14 weeks.

First-trimester combined screening for detection of Down syndrome, (the calculation of risk based on maternal age, human chorionic gonadotropin, pregnancy-associated plasma protein A, and ultrasonic measurement of fetal nuchal translucency), is covered for women who are adequately counseled and desire information on the risk of having a child with Down syndrome.

First-trimester screening for detection of Down syndrome using measurement of nuchal translucency **alone** is **not medically necessary** as there is insufficient medical literature to support the efficacy of this screening.

### COVERAGE

Benefits vary between groups/contracts. Please refer to the appropriate Evidence of Coverage or Subscriber Agreement for applicable Radiology benefits/coverage.

### CODING

#### Blue CHiP for Medicare and Commercial

Radiology:

76813	76814
-------	-------

Laboratory:

84163	84702	84704
-------	-------	-------

### RELATED POLICIES

None

### PUBLISHED

Provider Update	Feb 2009
-----------------	----------

Policy Update	Jan 2008
---------------	----------

### REFERENCES

The American College of Obstetricians and Gynecologists Committee Opinion No. 296: First-Trimester Screening for Fetal Aneuploidy. July 2004:296.

Malone FD, Canick JA, Ball RH, et al. *First-Trimester or Second-Trimester Screening, or Both, for Down's Syndrome*. New England Journal of Medicine; November 10, 2005: 353 (19): 2001-2011.

Simpson JL. Choosing the Best Prenatal Screening Protocol. NEJM; November 10, 2005:353:19.

Snijders RJM, Thom EA, Zachary JM, Platt LD, Greene N, Jackson LG, Sabbaghas RE, Filkins K, Silver RK, Hoggett WA, Ginsberg NA, Beverly S, Morgan P, Blum K, Chilis P, Hill LM, Hecker J, Wapner RJ. First-trimester trisomy screening: nuchal translucency measurement training and quality assurance to correct and unify technique. *Ultrasound Obstet Gynecol* 2002; 19:353-9.

[www.fetalmedicine.com](http://www.fetalmedicine.com)

**CLICK THE ENVELOPE ICON BELOW TO SUBMIT COMMENTS**

This medical policy is made available to you for informational purposes only. It is not a guarantee of payment or a substitute for your medical judgment in the treatment of your patients. Benefits and eligibility are determined by the member's subscriber agreement or member certificate and/or the employer agreement, and those documents will supersede the provisions of this medical policy. For information on member-specific benefits, call the provider call center. If you provide services to a member which are determined to not be medically necessary (or in some cases medically necessary services which are non-covered benefits), you may not charge the member for the services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions. This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice. Blue Cross & Blue Shield of Rhode Island is an independent licensee of the Blue Cross and Blue Shield Association.

