



BlueCross BlueShield
of Alabama

Name of Policy:

Routine Human Papillomavirus (HPV) Testing

Policy #: 027

Category: Medicine/Laboratory

Latest Review Date: August 2010

Policy Grade: **Effective August 1, 2010: Active policy but no longer scheduled for regular literature reviews and update.**

Background/Definitions:

As a general rule, benefits are payable under Blue Cross and Blue Shield of Alabama health plans only in cases of medical necessity and only if services or supplies are not investigational, provided the customer group contracts have such coverage.

The following Association Technology Evaluation Criteria must be met for a service/supply to be considered for coverage:

- 1. The technology must have final approval from the appropriate government regulatory bodies;*
- 2. The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes;*
- 3. The technology must improve the net health outcome;*
- 4. The technology must be as beneficial as any established alternatives;*
- 5. The improvement must be attainable outside the investigational setting.*

Medical Necessity means that health care services (e.g., procedures, treatments, supplies, devices, equipment, facilities or drugs) that a physician, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury or disease or its symptoms, and that are:

- 1. In accordance with generally accepted standards of medical practice; and*
- 2. Clinically appropriate in terms of type, frequency, extent, site and duration and considered effective for the patient's illness, injury or disease; and*
- 3. Not primarily for the convenience of the patient, physician or other health care provider; and*
- 4. Not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness, injury or disease.*

Description of Procedure or Service:

Human Papillomavirus (HPV) has been associated with the development of cervical intraepithelial neoplasia (CIN) and invasive cancer of the cervix. Recent prospective studies have shown that abnormal pap smears that are positive for oncogenic HPV strains are much more likely to be associated with abnormal colposcopic findings than abnormal pap smears that are HPV negative. There is no proven value for testing for additional “low risk” strains of HPV that have not been associated with substantially elevated cancer risk. HPV testing has been used as an adjunctive reflex test in women with atypical squamous cells of undetermined significance (ASCUS) to identify those at highest risk for cervical cancer, who should go on to receive definitive colposcopy. HPV testing has also been proposed as a primary screening test to be performed simultaneously with pap smear screening. The test is the HC2 High-Risk HPV DNA Test, manufactured by Digene Corp., and can identify 13 of the high risk types associated with the development of cervical cancer.

Policy:

Routine Human Papillomavirus (HPV) testing, in conjunction with pap smears, for the purpose of screening women for cervical abnormalities in women over 30 years of age **meets** Blue Cross and Blue Shield of Alabama’s medical criteria for coverage. (Please see benefit applications for specific group coverage).

In these women, if both screening test results are negative, rescreening should not be done more frequently than every 3 years.

Blue Cross and Blue Shield of Alabama does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Cross and Blue Shield of Alabama administers benefits based on the members' contract and corporate medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

Key Points:

There are several studies published in the literature that look at the HPV DNA test as an adjunct to the pap smear, to help identify women at risk for cervical cancer. Several medical organizations have issued guidelines for cervical cancer screening that include HPV testing. These include the American College of Obstetricians and Gynecologists (ACOG), the American Cancer Society (ACS), and the American Society for Colposcopy and Cervical Pathology (ASCCP). Some of these articles and guidelines are summarized below.

Solomon, et al (2001), reported on the ALTS trial, which looked at 3,488 women with a referral diagnosis of ASCUS and compared three management strategies to detect cervical intraepithelial neoplasia Grade 3 (CIN3). The strategies were as follows: immediate colposcopy, triage to colposcopy based on HPV results from Hybrid Capture two and thin layer cytology results, or triage based on cytology results alone. The results showed that testing for HPV-DNA for triage

to immediate colposcopy was more sensitive and equally specific in identifying CIN3 as repeat pap smear using ASCUS as the threshold for colposcopy referral.

In 2002, the American Society for Colposcopy and Cervical Pathology issued guidelines based on the results of this trial. They recommended either repeat pap smear, immediate colposcopy, or HPV testing for women who have ASCUS pap smears. HPV testing can be performed on the remaining liquid media used as part of the preparation of monolayer slides. Otherwise, if the original pap smear was prepared conventionally, HPV testing would require an additional office visit to perform an additional pap smear.

In March 2003, the FDA approved HPV testing, in conjunction with pap smear screening, for primary screening of women over age 30. The HPV DNA test, manufactured by Digene Corp, can identify 13 of the high risk types of HPV associated with the development of cervical cancer. In 2003, both the American Cancer Society and the American College of Obstetrics and Gynecology endorsed combined screening in women over age 30, under conditions that among women who test negative for both tests, screening should not be repeated for three years. ACOG's recommendation was based on the results of studies that demonstrated that women age 30 years and older who had both negative cervical cytology test results and negative high risk type HPV-DNA test results were at extremely low risk of developing CIN2 or CIN3 during the next 3-5 years. The ACOG guidelines state that the combination of cytology and HPV DNA screening should be restricted to women age 30 years and older because transient HPV infections are common in women younger than 30 years, and a positive test result may lead to unnecessary additional evaluation and treatment.

In 2004, ACOG reported on a workshop supported by the NIH, ASCCP, and ACS. They published interim guidance notes that recommended that women older than 30 years with a negative cytology result who have high risk HPV DNA positive test results should have both tests repeated in 6-12 months. Those with persistent HPV on repeat testing should undergo colposcopy regardless of the cytology result.

In April 2005, ACOG published a Practice Bulletin which stated that HPV DNA testing is more sensitive than cervical cytology in detecting CIN2 and 3. Women with negative concurrent test results can be reassured that their risk of unidentified CIN2 and 3 or cervical cancer is approximately 1 in 1,000. They also stated that studies using combined HPV testing with cervical cytology have reported a negative predictive value for CIN2 and 3 of 99-100%.

August 2010 Update

The American College of Obstetricians and Gynecologist (ACOG) issued revised guidelines for cervical cancer screening in November 2009:

- Cervical cancer screening should begin at age 21 years (regardless of sexual history). Screening before age 21 should be avoided because women less than 21 years old are at very low risk of cancer. Screening these women may lead to unnecessary and harmful evaluation and treatment.

- Cervical cytology screening is recommended every two years for women between the ages of 21 years and 30 years. Evidence show that screening women every years has little benefit over screening every other year.
- For women older than 30 years, an appropriate screening test is cytology combined with HPV DNA testing.

Additional recommendations are also listed in the published guidelines but only those applicable to this policy are listed in this policy.

The National Comprehensive Cancer Network (NCCN) also updated their guidelines in October 2009 for cervical cancer screening for appropriate use of new HPV DNA Tests. The NCCN Cervical Cancer Guidelines recommend that HPV DNA testing should complement cervical cancer screening methods, such as regular Pap smears and gynecologic examination, not replace these methods. However, the NCCN Guidelines note that HPV DNA testing is not recommended in women younger than 21 years of age.

The Agency for Healthcare Research and Quality (AHRQ) also has their recommendations (2003) for screening for cervical cancer, these include:

- The United States Preventive Services Task Force (USPSTF) recommends screening for cervical cancer in women who have been sexually active and have a cervix. Indirect evidence suggests most of the benefit can be obtained by beginning within three years of onset of sexual activity or age 21 (whichever comes first) with screening at least every three years. Direct evidence to determine the optimal starting and stopping age and interval for screening is limited.
- USPSTF concluded that the evidence is insufficient to recommend for or against the routine use of HPV testing as a primary screening test for cervical cancer. USPSTF found poor evidence to determine the benefits and potential harms of HPV screening as an adjunct or alternative to regular Pap smear screening.

Additional recommendations are also listed in the published guidelines but only those applicable to this policy are listed in this policy.

The American Cancer Society from 2002 also has similar recommendations regarding screening guidelines for cervical cancer.

The policy remains unchanged at this time.

Key Words:

Human Papillomavirus (HPV), pap smear, cervical cancer, HPV DNA test when used for screening in conjunction with a PAP smear.

Approved by Governing Bodies:

March 2003- HC2 High Risk HPV DNA

Benefit Application:

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

Effective for dates of service on or after 1/1/08 this will be a Standard PMD Preventive Care Benefit.

ITS: Home Policy provisions apply

FEP contracts: Special benefit consideration may apply. Refer to member's benefit plan.

Pre-certification requirements: Not applicable

Coding:

CPT codes: **87620** Infectious agent detection by nucleic acid (DNA or RNA); papillomavirus, human, direct probe technique
 87621 ;papillomavirus, human, amplified probe technique
 87622 ;papillomavirus, human, quantification

References:

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Policy History:

Medical Policy Group, August 2007 (3)

Medical Policy Administration Committee, September 2007

Available for comment September 7-October 22, 2007

Medical Policy Group, August 2010 (1) Key Points Updated, no policy change

Medical Policy Group, August 2010: Active policy but no longer scheduled for regular literature reviews and update.

This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member's plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.

This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield's administration of plan contracts.