

If a conflict arises between a Clinical Payment and Coding Policy and any plan document under which a member is entitled to Covered Services, the plan document will govern. If a conflict arises between a CPCP and any provider contract pursuant to which a provider participates in and/or provides Covered Services to eligible member(s) and/or plans, the provider contract will govern. "Plan documents" include, but are not limited to, Certificates of Health Care Benefits, benefit booklets, Summary Plan Descriptions, and other coverage documents. Blue Cross and Blue Shield of New Mexico may use reasonable discretion interpreting and applying this policy to services being delivered in a particular case. BCBSNM has full and final discretionary authority for their interpretation and application to the extent provided under any applicable plan documents.

Providers are responsible for submission of accurate documentation of services performed. Providers are expected to submit claims for services rendered using valid code combinations from Health Insurance Portability and Accountability Act approved code sets. Claims should be coded appropriately according to industry standard coding guidelines including, but not limited to: Uniform Billing Editor, American Medical Association, Current Procedural Terminology, CPT<sup>®</sup> Assistant, Healthcare Common Procedure Coding System, ICD-10 CM and PCS, National Drug Codes, Diagnosis Related Group guidelines, Centers for Medicare and Medicaid Services National Correct Coding Initiative Policy Manual, CCI table edits and other CMS guidelines.

Claims are subject to the code edit protocols for services/procedures billed. Claim submissions are subject to claim review including but not limited to, any terms of benefit coverage, provider contract language, medical policies, clinical payment and coding policies as well as coding software logic. Upon request, the provider is urged to submit any additional documentation.

# Diagnostic Testing of Common Sexually Transmitted Infections

Policy Number: CPCPLAB051

Version 1.0

Approval Date: October 30, 2024

Plan Effective Date: January 15, 2025

## Description

BCBSNM has implemented certain lab management reimbursement criteria. Not all requirements apply to each product. Providers are urged to review Plan documents for eligible coverage for services rendered.

## **Reimbursement Information**

This policy is limited to testing for *C. trachomatis, N. gonorrhoeae, T. pallidum, T. vaginalis* (for guidance on *T. vaginalis* in vaginitis, see CPCPLAB059 Diagnosis of Vaginitis Including Multi-Target PCR Testing), HSV, and HPV. The following conditions and/or tests are discussed in the corresponding policies:

- Human Immunodeficiency Virus CPCPLAB065
- Hepatitis B and C CPCPLAB015
- Pediatric Preventive Screening CPCPLAB016
- Cervical Cancer Screening CPCPLAB002
- Pathogen Panel Testing CPCPLAB045

For STI screening in pregnant individuals, please see CPCPLAB014 Prenatal Screening (Nongenetic).

- 1. Antibody testing for syphilis infection **may be reimbursable** in the following situations:
  - a. For any asymptomatic person in a high-risk category (**See Notes 1 & 2**), once a year assessment using either a "standard" or "reverse" algorithm that includes initial and confirmatory tests for any initial positive test such as:
    - i. Treponemal Ig test **AND**
    - ii. Nontreponemal test;
  - b. Once every three months for HIV-positive men or men who have sex with men (MSM);
  - c. For diagnosis of any person presenting with signs and/or symptoms of a syphilis infection\* (**See Note 3**);
  - d. Treponemal Ig testing and nontreponemal testing (once prior to transplant) as a part of a pre-transplant assessment in both donors and recipients for an allogeneic hematopoietic stem cell transplantation (allo-HCT);
  - e. When a nontreponemal test is used as a test of cure (TOC) for a positive syphilis infection.

- For asymptomatic individuals NOT belonging to a high-risk category (See Notes 1 & 2) antibody screening for syphilis may be reimbursable only in the following situations:
  - a. As part of newborn screening;
  - b. As part of follow-up in a victim of sexual assault;
  - c. For sexually active individuals less than 18 years of age (annually).
- 3. Polymerase chain reaction (PCR) and nucleic acid amplification testing (NAAT) for syphilis **is not reimbursable**.
- 4. Nucleic acid amplification tests (NAATs) for chlamydia **may be reimbursable** in the following situations:
  - a. Once a year assessment for any asymptomatic person in a high-risk category (**See Notes 1 & 4**);
  - b. For diagnosis of any person presenting with signs and/or symptoms of a chlamydial infection (**See Note 5**);
  - c. For diagnosis of any person with suspected lymphogranuloma venereum (LGV);
  - d. As test of cure of treatment at least three months after initial chlamydial diagnosis.
- For asymptomatic individuals NOT belonging to a high-risk category (See Note 1 & 4), screening for chlamydia may be reimbursable only in the following situations:
  - a. As part of newborn screening;
  - b. As part of follow-up of victim of sexual assault;
  - c. For sexually active individuals less than 18 years of age (annually).
- 6. Serology testing for chlamydia or lymphogranuloma venereum (LGV) **is not reimbursable.**
- 7. Nucleic acid amplification tests (NAATs) for gonorrhea **may be reimbursable** in the following situations:
  - a. Once a year assessment for any asymptomatic person in a high-risk category (**See Note 1 & 4**);
  - b. For diagnosis of any person presenting with signs and/or symptoms of a gonorrheal infection (**See Note 6**);
  - c. As test of cure of treatment.
- 8. For an individual that does not respond to initial treatment, culture testing for *N. gonorrhoeae* to determine antimicrobial susceptibility **may be reimbursable**.
- For asymptomatic individuals NOT belonging to a high-risk category (See Note 1 & 4), screening for gonorrhea may be reimbursable only in\_the following situations:
  - a. As part of newborn screening;

- b. As part of follow-up of victim of sexual assault;
- c. For sexually active individuals less than 18 years of age (annually).
- 10. Nucleic acid amplification tests (NAATs) or PCR-based testing for *T. vaginalis* **may be reimbursable** in the following situations:
  - a. Symptomatic individuals (See Note 7);
  - b. Asymptomatic individuals belonging to a high-risk group;
  - c. Concurrent STI or history of STIs;
  - d. Individuals in high prevalence settings, such as STI clinics;
  - e. Individuals who exchange sex for payment.
- 11. Rapid identification of *Trichomonas* by enzyme immunoassay **is not reimbursable.**
- 12. For symptomatic individuals (**See Note 8**), testing for *Mycoplasma genitalium* using NAAT **may be reimbursable.**
- 13. For asymptomatic individuals (**See Note 8**), screening for *M. genitalium* using NAAT **is not reimbursable.**
- 14. When an individual meets the conditions described above, multitarget PCR testing (targets limited to *C. trachomatis, N. gonorrhoeae, T. vaginalis,* and *M genitalium*) **may be reimbursable.**
- 15. For individuals with active genital ulcers or mucocutaneous lesions, nucleic acid amplification testing (NAAT) for herpes simplex virus (HSV-1) or herpes simplex virus-2 (HSV-2) **may be reimbursable**.
- 16. Immunoassay testing for herpes simplex virus-1 (HSV-1), and/or herpes simplex (non-specific type test) **is not reimbursable**.
- 17. Type-specific serologic testing for herpes simplex virus-2 (HSV-2) using a glycoprotein G2 (gG2) **may be reimbursable** in the following situations:
  - a. Recurrent or atypical genital symptoms or lesions in individuals with a negative herpes simplex virus PCR or culture result;
  - b. For the clinical diagnosis of genital herpes in individuals with a negative PCR or culture result or without laboratory confirmation;
  - c. When an individual's partner has genital herpes.
- 18. Screening for herpes simplex virus-1 or herpes simplex virus-2 (HSV-1 and HSV-2) in asymptomatic individuals is not reimbursable.
- 19. In the diagnosis and/or assessment of cancer or cancer therapy (immunohistochemistry testing for p16 or NAAT testing for high-risk human papillomavirus [HR-HPV]), testing for HR-HPV **may be reimbursable**.

- 20. Testing for HPV **is not reimbursable** in the following situations:
  - To screen for oncogenic high-risk types, such as HPV-16 and HPV-18, as part of a general sexually transmitted disease (STD) or sexually transmitted infection (STI) screening process or panel for asymptomatic patients;
  - b. As part of diagnosis of anogenital warts;
  - c. To screen for low-risk types of HPV;
  - d. In the general population either as part of a panel of tests or as an individual NAAT to determine HPV status.
- 21. Prior to beginning a Preexposure prophylaxis (PrEP) regimen, the following screens/tests **may be reimbursable**:
  - a. Serum creatinine and estimate creatine clearance to determine baseline renal function.
  - b. Antibody screening to confirm a baseline negative antibody result for HIV.
  - c. Hepatitis B (HBV) and/or Hepatitis C screening to identify positive individuals.
  - d. Pregnancy testing.
  - e. Baseline and periodic screening for STIs in accordance with CDC guidelines for individuals taking PrEP.
- 22. While an individual is undergoing a preexposure prophylaxis (PrEP) regimen for HIV prevention, the following screens/tests **may be reimbursable**:
  - a. A blood test once every three months to confirm a negative antibody result for HIV.
  - b. Serum creatinine and estimated creatinine clearance three months after beginning PrEP and up to one time every six months thereafter to assess renal function.
  - c. NAAT screening, based on anatomic site of exposure, for gonorrhea and chlamydia:
    - i. Once every three months for MSM and for individuals with child-bearing potential
    - ii. Nine months after PrEP is initiated and once every six months thereafter for sexually active individuals.
  - d. Blood test to screen for syphilis:
    - i. Once every three months in MSM and individuals with childbearing potential;
    - ii. Nine months after PrEP is initiated and once every six months thereafter for sexually active individuals.
  - e. A pregnancy test once every three months.
- 23. Nucleic acid testing to determine antimicrobial susceptibility in *N. gonorrhoeae* or macrolide resistance in *M. genitalium* **is not reimbursable.**

- 24. Using nucleic acid testing to quantify the following microorganisms **is not reimbursable:** 
  - a. Chlamydia trachomatis
  - b. Neisseria gonorrhoeae
  - c. Herpes Simplex Virus-1
  - d. Herpes Simplex Virus-2
  - e. Human Papillomavirus
  - f. Treponema pallidum

**NOTE 1:** For sexually active children and adolescents under the age of 18, risk factors for chlamydia, gonorrhea and/or syphilis infection as defined by the CDC include: (CDC,2021c)

- Initiating sex early in adolescence;
- Living in detention facilities;
- Receiving services at STD clinics;
- Being involved in commercial sex exploitation or exchanging sex for drugs, money, food, or housing;
- Having multiple sex partners;
- Having sequential sex partners of limited duration or concurrent partnerships;
- Failing to use barrier protection consistently and correctly;
- Having lower socioeconomic status, and facing numerous obstacles to accessing healthcare;
- At risk individuals also include:
  - Males who have sex with males (YMSM);
  - Transgender youths;
  - Youths with disabilities, substance abuse, or mental health disorders.

#### NOTE 2: High-risk for Syphilis (Cantor, et al., 2016; CDC, 2023a):

- Sexually active men who have sex with men (MSM);
- Sexually active HIV-positive status;
- Having a sexual partner recently diagnosed with an STI;
- Exchanging sex for money or drugs;
- Individuals in adult correctional facilities;
- During pregnancy when the following risk factors are present:
  - Sexually active HIV-positive status;
  - Sexually active with multiple partners;
  - o Sexually active in conjunction with drug use or transactional sex;
  - Late-entry to prenatal care (i.e., first visit during the second trimester or later) or no prenatal care;
  - Methamphetamine or heroin use;
  - Incarceration of the woman or her partner;
  - Unstable housing or homelessness.

#### NOTE 3: Signs and Symptoms of a Syphilis Infection (CDC, 2018, 2023a)

- Chancre;
- Skin rash and/or mucous membrane lesions in mouth, vagina, anus, hands, and feet;
- Condyloma lata;
- Secondary symptomology can include fever, fatigue, sore throat, swollen lymph nodes, weight loss, muscle aches, headache, and hair loss;
- Signs and symptoms of neurosyphilis can include severe headache, trouble with muscle movements, muscle weakness or paralysis (not being able to move certain parts of the body), numbness, and changes in mental status (trouble focusing, confusion, personality change) and/or dementia (problems with memory, thinking, and/or making decisions).
- Signs and symptoms of ocular syphilis can include eye pain or redness, floating spots in the field of vision ("floaters"), sensitivity to light, and changes in vision (blurry vision or even blindness).
- Signs and symptoms of otosyphilis may include hearing loss, ringing, buzzing, roaring, or hissing in the ears ("tinnitus"), balance difficulties, and dizziness or vertigo.
- Signs and symptoms of late/tertiary syphilis include inflammatory lesions of the cardiovascular system (e.g., aortitis, coronary vessel disease), skin (e.g., gummatous lesions), and bone (e.g., osteitis).

**NOTE 4: High-risk for Chlamydia and/or Gonorrhea** (CDC, 2021b, 2024a, 2024d; LeFevre, 2014):

- Sexually active men who have sex with men (MSM);
- Sexually active HIV-positive status;
- Sexually active women 24 years and under;
- Women 25 years or older who have a new sex partner, multiple sexual partners, or a sex partner with concurrent partners; practice inconsistent condom use when not in a mutually monogamous relationship;
- Having a sexual partner recently diagnosed with an STI;
- Previous or concurrent STI;
- Exchanging sex for money or drugs;
- History of incarceration.

### NOTE 5: Signs and Symptoms of a Chlamydia Infection (CDC, 2021b, 2024a):

- Genital symptoms, including "discharge, burning during urination, unusual sores, or rash;"
- Pelvic Inflammatory Disease, including "symptoms of abdominal and/or pelvic pain, along with signs of cervical motion tenderness, and uterine or adnexal tenderness on examination;"
- Urethritis;
- Pyuria;
- Dysuria;
- Increase in frequency in urination;
- Epididymitis (with or without symptomatic urethritis) in men;
- Proctitis;

• Sexually acquired chlamydial conjunctivitis.

### NOTE 6: Signs and Symptoms of Gonorrhea (CDC, 2024d):

- Dysuria;
- Urethral infection;
- Urethral or vaginal discharge;
- Epididymitis (Testicular or scrotal pain);
- Rectal infection symptoms include anal itching, discharge, rectal bleeding, and painful bowel movements.

#### NOTE 7: Signs and Symptoms of Trichomoniasis (CDC, 2023b):

- Vaginal or penile discharge;
- Itching, burning sensation, or soreness of the genitalia;
- Discomfort or burning sensation during/after urination and/or ejaculation;
- Urethritis;
- Epididymitis;
- Prostatitis.

#### NOTE 8: Signs and Symptoms of *M. genitalium* Infection (CDC, 2021a):

- When present, typical symptoms of *M.gen*-urethritis in men include dysuria, urethral pruritus, and purulent or mucopurulent urethral discharge.
- When present, typical symptoms of *M.gen* cervicitis in women include vaginal discharge, vaginal itching, dysuria, and pelvic discomfort.
- When present, typical symptoms of PID due to *M.ge*n include mild to severe pelvic pain, abdominal pain, abnormal vaginal discharge, and/or bleeding.

### **Procedure Codes**

The following is not an all-encompassing code list. The inclusion of a code does not guarantee it is a covered service or eligible for reimbursement.

#### Codes

82565, 82575, 84702, 84703, 86592, 86593, 86631, 86632, 86694, 86695, 86696, 86701, 86702, 86703, 86704, 86705, 86706, 86780, 86803, 86804, 87081, 87110, 87181, 87340, 87490, 87491, 87492, 87528, 87529, 87530, 87563, 87590, 87591, 87592, 87623, 87624, 87625, 87660, 87661, 87797, 87798, 87799, 87808, 88341, 88342, 88344, 0064U, 0065U, 0096U, 0210U, 0402U, 0455U, 0463U, 0483U, 0484U, 0500T, G0432, G0433, G0435, G0472, G0475, G0499, S3645

### References

Abbott. (2023). Alinity m STI AMP Kit.

https://www.molecularcatalog.abbott/int/en/alinity-m-sti-assay

Albrecht, M. A. (2024, June 20). *Epidemiology, clinical manifestations, and diagnosis of genital herpes simplex virus infection*.

https://www.uptodate.com/contents/epidemiology-clinical-manifestations-and-diagnosis-of-genital-herpes-simplex-virus-infection

Allen, U. D., MacDonald, N. E., & Top, K. (2019). *Diagnosis and management of sexually transmitted infections in adolescents*.

https://www.cps.ca/en/documents/position/sexually-transmitted-infections

 Arbyn, M., Roelens, J., Simoens, C., Buntinx, F., Paraskevaidis, E., Martin-Hirsch, P. P., & Prendiville, W. J. (2013). Human papillomavirus testing versus repeat cytology for triage of minor cytological cervical lesions. *Cochrane Database Syst Rev*(3), Cd008054. https://doi.org/10.1002/14651858.CD008054.pub2

BASHH. (2018, 09/26/2018). BASHH CLINICAL EFFECTIVENESS GROUP Update on the treatment of Chlamydia trachomatis (CT) infection. https://www.bashhguidelines.org/current-guidelines/urethritis-and-cervicitis/chlamydia-2015/

- BD. (2020). *BD receives FDA Approval for HPV Test with Extended Genotyping Capabilities*. https://www.bd.com/en-us/company/news-and-media/press-releases/july-22-2020-bd-receives-fda-approval-for-hpv-test-with-extended-genotyping-capabilities
- Brischetto, A., Gassiep, I., Whiley, D., & Norton, R. (2018). Retrospective Review of Treponema pallidum PCR and Serology Results: Are Both Tests Necessary? *J Clin Microbiol*, *56*(5). https://doi.org/10.1128/jcm.01782-17
- Bristow, C. C., Morris, S. R., Little, S. J., Mehta, S. R., & Klausner, J. D. (2019). Metaanalysis of the Cepheid Xpert(®) CT/NG assay for extragenital detection of Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (NG) infections. Sex Health, 16(4), 314-319. https://doi.org/10.1071/sh18079

Cantor, A. G., Pappas, M., Daeges, M., & Nelson, H. D. (2016). Screening for syphilis: Updated evidence report and systematic review for the us preventive services task force. *JAMA*, *315*(21), 2328-2337. https://doi.org/10.1001/jama.2016.4114

- Castle, P. E., Stoler, M. H., Wright, T. C., Jr., Sharma, A., Wright, T. L., & Behrens, C. M. (2011). Performance of carcinogenic human papillomavirus (HPV) testing and HPV16 or HPV18 genotyping for cervical cancer screening of women aged 25 years and older: a subanalysis of the ATHENA study. *Lancet Oncol*, *12*(9), 880-890. https://doi.org/10.1016/s1470-2045(11)70188-7
- CDC. (2018, 04/16/2021). *Syphilis (Treponema pallidum): 2018 Case Definition*. https://ndc.services.cdc.gov/case-definitions/syphilis-2018/
- CDC. (2019, 04/18/2022). *HPV & Men Fact Sheet*. https://npin.cdc.gov/publication/hpvand-men-cdc-fact-sheet-0
- CDC. (2021a, 07/22/2021). Mycoplasma genitalium.

https://www.cdc.gov/std/treatment-guidelines/mycoplasmagenitalium.htm

CDC. (2021b). *Sexually Transmitted Infections Treatment Guidelines, 2021*. Retrieved 07/28/2021 from https://www.cdc.gov/std/treatment-guidelines/STI-Guidelines-2021.pdf

CDC. (2021c). *Sexually Transmitted Infections Treatment Guidelines, 2021 - Adolescents.* https://www.cdc.gov/std/treatment-guidelines/adolescents.htm

- CDC. (2022). *Pre-Exposure Prophylaxis (PrEP)*. Centers for Disease Control and Prevention. https://www.cdc.gov/hiv/risk/prep/index.html
- CDC. (2023a, 12/08/2023). *About Syphilis*. https://www.cdc.gov/syphilis/about/index.html
- CDC. (2023b, 12/13/2023). *About Trichomoniasis*. https://www.cdc.gov/trichomoniasis/about/index.html
- CDC. (2024a, 02/20/2024). About Chlamydia.
- https://www.cdc.gov/chlamydia/about/index.html
- CDC. (2024b, 02/20/2024). About Genital Herpes.
- https://www.cdc.gov/herpes/about/index.html CDC. (2024c, 02/06/2024). *About Genital HPV Infection*.
  - https://www.cdc.gov/sti/about/about-genital-hpv-infection.html
- CDC. (2024d, 02/15/2024). *About Gonorrhea*. https://www.cdc.gov/gonorrhea/about/index.html
- CDC. (2024e, February 15). *Drug-Resistant Gonorrhea*. https://www.cdc.gov/gonorrhea/hcp/drug-resistant/index.html
- CDC. (2024f, March 7). *Neurosyphilis, Ocular Syphilis, and Otosyphilis*. https://www.cdc.gov/syphilis/hcp/neurosyphilis-ocular-syphilis-otosyphilis/
- CDC. (2024g, April 11). *The State of STIs Infographic*. Centers for Disease Control and Prevention. https://www.cdc.gov/sti/media/pdfs/TheStateOfSTIs.pdf
- CDC. (2024h, January 30, 2024). Table 2. Chlamydia Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2022. https://www.cdc.gov/std/statistics/2022/tables/2.htm

Cepheid. (2022). *Xpert*® *CT/NG*. https://www.cepheid.com/Package%20Insert%20Files/Xpert-CTNG-US-ENGLISH-Package-Insert-301-0234--Rev-K.pdf

canada.org/photos/custom/Members/pdf/Laboratory%20Diagnosis%20of%20STI \_April%202017\_final-5.pdf

- Cook, R. L., Hutchison, S. L., Ostergaard, L., Braithwaite, R. S., & Ness, R. B. (2005). Systematic review: noninvasive testing for Chlamydia trachomatis and Neisseria gonorrhoeae. *Ann Intern Med*, *142*(11), 914-925.
- Cosentino, L. A., Danby, C. S., Rabe, L. K., Macio, I., Meyn, L. A., Wiesenfeld, H. C., & Hillier, S. L. (2017). Use of Nucleic Acid Amplification Testing for Diagnosis of Extragenital Sexually Transmitted Infections. *J Clin Microbiol*, 55(9), 2801-2807. https://doi.org/10.1128/jcm.00616-17
- Davidson, K. W., Barry, M. J., Mangione, C. M., Cabana, M., Caughey, A. B., Davis, E. M., Donahue, K. E., Doubeni, C. A., Krist, A. H., Kubik, M., Li, L., Ogedegbe, G., Pbert, L., Silverstein, M., Simon, M. A., Stevermer, J., Tseng, C. W., & Wong, J. B. (2021). Screening for Chlamydia and Gonorrhea: US Preventive Services Task

Force Recommendation Statement. *JAMA*, *326*(10), 949-956. https://doi.org/10.1001/jama.2021.14081

- de Vries, H. J. C., de Barbeyrac, B., de Vrieze, N. H. N., Viset, J. D., White, J. A., Vall-Mayans, M., & Unemo, M. (2019). 2019 European guideline on the management of lymphogranuloma venereum. *J Eur Acad Dermatol Venereol*, *33*(10), 1821-1828. https://doi.org/10.1111/jdv.15729
- Dykewicz, C. A., Jaffe, H. W., & Kaplan, J. E. (2000). *Guidelines for Preventing Opportunistic Infections Among Hematopoietic Stem Cell Transplant Recipients*. https://www.cdc.gov/mmwr/preview/mmwrhtml/rr4910a1.htm
- FDA. (2012a, 12/27/2012). 501(k) Premarket Notification Xpert CT/NG. https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm?ID=K12171 0
- FDA. (2012b, 12/27/2012). *510(k) SUBSTANTIAL EQUIVALENCE DETERMINATION DECISION SUMMARY K121710*.

https://www.accessdata.fda.gov/cdrh\_docs/reviews/K121710.pdf

FDA. (2019a, 05/23/2019). 501(k) Premarket Notification Xpert CT/NG, GeneXpert Dx System, GeneXpert Infinity-48s and GeneXpert Infinity-80 Systems, GeneXpert Infinity-48 System, Xpert Vaginal/Endocervical Specimen Collection, Xpert Urine Specimen Collection Kit, Xpert Swab Specimen Collection Kit.

https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm?ID=K19044 1

FDA. (2019b, 05/23/2019). *510(k) SUBSTANTIAL EQUIVALENCE DETERMINATION DECISION SUMMARY K190441*.

https://www.accessdata.fda.gov/cdrh\_docs/reviews/K190441.pdf

FDA. (2021, 07/26/2021). *BD ONCLARITY HPV ASSAY*. U.S. Food & Drug Administration. https://www.accessdata.fda.gov/scripts/cdrh/devicesatfda/index.cfm?db=pma&i d=391601

Feldman, S., & Crum, C. P. (2024, June 24). Cervical cancer screening tests: Techniques for cervical cytology and human papillomavirus testing. https://www.uptodate.com/contents/cervical-cancer-screening-tests-techniquesfor-cervical-cytology-and-human-papillomavirus-testing

- Gaydos, C. A., Ako, M. C., Lewis, M., Hsieh, Y. H., Rothman, R. E., & Dugas, A. F. (2019).
  Use of a Rapid Diagnostic for Chlamydia trachomatis and Neisseria gonorrhoeae for Women in the Emergency Department Can Improve Clinical Management:
  Report of a Randomized Clinical Trial. *Ann Emerg Med*, *74*(1), 36-44.
  https://doi.org/10.1016/j.annemergmed.2018.09.012
- Ghanem, K. G. (2024, July 8). *Clinical manifestations and diagnosis of Neisseria gonorrhoeae infection in adults and adolescents*. https://www.uptodate.com/contents/clinical-manifestations-and-diagnosis-ofneisseria-gonorrhoeae-infection-in-adults-and-adolescents

Ghanem, K. G., & Tuddenham, S. (2024, March 15). *Screening for sexually transmitted infections*. Wolters Kluwer. Retrieved 06/30/2022 from https://www.uptodate.com/contents/screening-for-sexually-transmittedinfections Gilson, R., Nugent, D., Werner, R. N., Ballesteros, J., & Ross, J. (2020). 2019 IUSTI-Europe guideline for the management of anogenital warts. *J Eur Acad Dermatol Venereol*, *34*(8), 1644-1653. https://doi.org/10.1111/jdv.16522

Glass, N., Nelson, Heidi D. (2021). Screening for Genital Herpes Simplex: A Brief Update for the U.S. Preventive Services Task Force. https://www.uspreventiveservicestaskforce.org/Home/GetFile/1/733/herpesup/p df

- Golden, M., O'Donnell, M., Lukehart, S., Swenson, P., Hovey, P., Godornes, C., Romano, S., & Getman, D. (2019). Treponema pallidum Nucleic Acid Amplification Testing To Augment Syphilis Screening among Men Who Have Sex with Men. J Clin Microbiol, 57(8). https://doi.org/10.1128/jcm.00572-19
- Goldstein, E., Martinez-García, L., Obermeier, M., Glass, A., Krügel, M., Maree, L., Gunson, R., Onelia, F., Pacenti, M., & Nelson, K. S. (2021). Simultaneous identification of Chlamydia trachomatis, Neisseria gonorrhoeae, Mycoplasma genitalium, and Trichomonas vaginalis–multicenter evaluation of the Alinity m STI assay. *Journal of Laboratory Medicine*, *45*(4-5), 213-223.
- Guenat, D., Launay, S., Riethmuller, D., Mougin, C., & Pretet, J. L. (2016). Validation of Novaprep((R)) HQ+ liquid-based cytology medium for high-risk human papillomavirus detection by hc2. *Infect Agent Cancer*, *11*, 41. https://doi.org/10.1186/s13027-016-0092-7
- Guy, R. J., Causer, L. M., Klausner, J. D., Unemo, M., Toskin, I., Azzini, A. M., & Peeling,
   R. W. (2017). Performance and operational characteristics of point-of-care tests
   for the diagnosis of urogenital gonococcal infections. *Sex Transm Infect*, *93*(S4),
   S16-s21. https://doi.org/10.1136/sextrans-2017-053192
- Hicks, C. B., & Clement, M. (2022, September 27). *Syphilis: Screening and diagnostic testing*. https://www.uptodate.com/contents/syphilis-screening-and-diagnostic-testing
- Hicks, C. B., & Clement, M. (2023, December 20). *Syphilis: Epidemiology, pathophysiology, and clinical manifestations in patients without HIV.* https://www.uptodate.com/contents/syphilis-epidemiology-pathophysiologyand-clinical-manifestations-in-patients-without-hiv
- Hsu, K. (2024, May 1). *Clinical manifestations and diagnosis of Chlamydia trachomatis infections*. https://www.uptodate.com/contents/clinical-manifestations-and-diagnosis-of-chlamydia-trachomatis-infections
- Janier, M., Hegyi, V., Dupin, N., Unemo, M., Tiplica, G. S., Potocnik, M., French, P., & Patel, R. (2014). 2014 European guideline on the management of syphilis. *J Eur Acad Dermatol Venereol*, *28*(12), 1581-1593. https://doi.org/10.1111/jdv.12734
- Janier, M., Unemo, M., Dupin, N., Tiplica, G. S., Potocnik, M., & Patel, R. (2020). 2020 European guideline on the management of syphilis. *Acta Clin Belg*. https://doi.org/10.1080/17843286.2020.1773112
- Juarez-Figueroa, L., Uribe-Salas, F., Garcia-Cisneros, S., Olamendi-Portugal, M., & Conde-Glez, C. J. (2007). Evaluation of a rapid strip and a particle agglutination tests for syphilis diagnosis. *Diagn Microbiol Infect Dis*, *59*(2), 123-126. https://doi.org/10.1016/j.diagmicrobio.2007.04.008
- Kelly, H., Coltart, C. E. M., Pant Pai, N., Klausner, J. D., Unemo, M., Toskin, I., & Peeling, R. W. (2017). Systematic reviews of point-of-care tests for the diagnosis

of urogenital Chlamydia trachomatis infections. *Sex Transm Infect*, *93*(S4), S22-s30. https://doi.org/10.1136/sextrans-2016-053067

Kingston, M., French, P., Higgins, S., McQuillan, O., Sukthankar, A., Stott, C., McBrien,
B., Tipple, C., Turner, A., Sullivan, A. K., Radcliffe, K., Cousins, D., FitzGerald, M.,
Fisher, M., Grover, D., Higgins, S., Kingston, M., Rayment, M., & Sullivan, A. (2016).
UK national guidelines on the management of syphilis 2015. *Int J STD AIDS*, *27*(6),
421-446. https://doi.org/10.1177/0956462415624059

Lanjouw, E., Ouburg, S., de Vries, H. J., Stary, A., Radcliffe, K., & Unemo, M. (2016). 2015 European guideline on the management of Chlamydia trachomatis infections. *Int J STD AIDS*, *27*(5), 333-348. https://doi.org/10.1177/0956462415618837

- LeFevre, M. L. (2014). Screening for Chlamydia and gonorrhea: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med*, *161*(12), 902-910. https://doi.org/10.7326/m14-1981
- Liu, T. Y., Xie, R., Luo, L., Reilly, K. H., He, C., Lin, Y. Z., Chen, G., Zheng, X. W., Zhang, L. L., & Wang, H. B. (2014). Diagnostic validity of human papillomavirus E6/E7 mRNA test in cervical cytological samples. *J Virol Methods*, *196*, 120-125. https://doi.org/10.1016/j.jviromet.2013.10.032

Marcell, A. V., & Health, M. T. C. f. F. P. a. R. (2014). *Preventive Male Sexual and Reproductive Health Care: Recommendations for Clinical Practice*. U.S. Department of Health and Human Services. Retrieved 07/12/2018 from http://content.guidelinecentral.com/guideline/get/pdf/2787

- Moyer, V. A. (2014). Screening for oral cancer: U.S. preventive services task force recommendation statement. *Ann Intern Med*, *160*(1), 55-60. https://doi.org/10.7326/M13-2568
- Murray, P., Braverman, P., Adelman, W., Breuner, C., Levine, D., Marcell, A. V., PJ, M., O'Brien, R., & Burstein, G. (2014). Screening for nonviral sexually transmitted infections in adolescents and young adults. *Pediatrics*, *134*(1), e302-311. https://doi.org/10.1542/peds.2014-1024

NCCN. (2023a, December 20). *NCCN Clinical Practice Guidelines in Oncology Anal Carcinoma*. https://www.nccn.org/professionals/physician\_gls/pdf/anal.pdf

NCCN. (2023b, October 25). *NCCN Clinical Practice Guidelines in Oncology Penile Cancer* Retrieved 06/30/2022 from

https://www.nccn.org/professionals/physician\_gls/pdf/penile.pdf

NCCN. (2024a, May 6). *NCCN Clinical Practice Guidelines in Oncology Cervical Cancer*. Retrieved 06/30/2022 from

https://www.nccn.org/professionals/physician\_gls/pdf/cervical.pdf

NCCN. (2024b, May 1). NCCN Clinical Practice Guidelines in Oncology Head and Neck Cancers Retrieved 06/30/2022 from

https://www.nccn.org/professionals/physician\_gls/pdf/head-and-neck.pdf

NCCN. (2024c, May 1). NCCN Clinical Practice Guidelines in Oncology Vulvar Cancer (Squamous Cell Carcinoma). Retrieved 06/30/2022 from https://www.nccn.org/professionals/physician\_gls/pdf/vulvar.pdf

NCCN. (2024d, April 29). NCCN Clinical Practice Guidelines Occult Primary (Cancer of Unknown Primary [CUP]). Retrieved 06/30/2022 from https://www.nccn.org/professionals/physician\_gls/pdf/occult.pdf NICE. (2018). National Institute for Health and Care Excellence: Clinical Guidelines. In Cancer of the Upper Aerodigestive Tract: Assessment and Management in People Aged 16 and Over. National Institute for Health and Care Excellence (UK) Copyright (c) National Collaborating Centre for Cancer.

https://www.nice.org.uk/guidance/ng36/evidence/full-guideline-2307980269

Nwokolo, N. C., Dragovic, B., Patel, S., Tong, C. Y., Barker, G., & Radcliffe, K. (2016). 2015 UK national guideline for the management of infection with Chlamydia trachomatis. *Int J STD AIDS*, *27*(4), 251-267.

https://doi.org/10.1177/0956462415615443

Palefsky, J. M. (2024, July 11). *Human papillomavirus infections: Epidemiology and disease associations*. https://www.uptodate.com/contents/human-papillomavirus-infections-epidemiology-and-disease-associations

Papp, J. R., Schachter, J., Gaydos, C. A., & Van Der Pol, B. (2014). Recommendations for the laboratory-based detection of Chlamydia trachomatis and Neisseria gonorrhoeae--2014. *MMWR Recomm Rep*, 63(Rr-02), 1-19. https://www.cdc.gov/mmwr/pdf/rr/rr6302.pdf

Patel, R., Green, J., Clarke, E., Seneviratne, K., Abbt, N., Evans, C., Bickford, J., Nicholson, M., O'Farrell, N., Barton, S., FitzGerald, M., & Foley, E. (2015). 2014 UK national guideline for the management of anogenital herpes. *Int J STD AIDS*, *26*(11), 763-776. https://doi.org/10.1177/0956462415580512

Patel, R., Kennedy, O. J., Clarke, E., Geretti, A., Nilsen, A., Lautenschlager, S., Green, J., Donders, G., van der Meijden, W., Gomberg, M., Moi, H., & Foley, E. (2017). 2017 European guidelines for the management of genital herpes. *Int J STD AIDS*, *28*(14), 1366-1379. https://doi.org/10.1177/0956462417727194

Pham, M. D., Wise, A., Garcia, M. L., Van, H., Zheng, S., Mohamed, Y., Han, Y., Wei, W. H., Yin, Y. P., Chen, X. S., Dimech, W., Braniff, S., Technau, K. G., Luchters, S., & Anderson, D. A. (2020). Improving the coverage and accuracy of syphilis testing: The development of a novel rapid, point-of-care test for confirmatory testing of active syphilis infection and its early evaluation in China and South Africa. *EClinicalMedicine*, *24*, 100440. https://doi.org/10.1016/j.eclinm.2020.100440

Riley, L. E., & Wald, A. (2022, 02/10/2022). *Genital herpes simplex virus infection and pregnancy*. https://www.uptodate.com/contents/genital-herpes-simplex-virus-infection-and-pregnancy

Society, C. P. (2024, March 28). *Diagnosis and management of congenital syphilis – Avoiding missed opportunities*. Canadian Paediatric Society. https://www.cps.ca/en/documents/position/congenital-syphilis

Tsang, R. S., Martin, I. E., Lau, A., & Sawatzky, P. (2007). Serological diagnosis of syphilis: comparison of the Trep-Chek IgG enzyme immunoassay with other screening and confirmatory tests. *FEMS Immunol Med Microbiol*, *51*(1), 118-124. https://doi.org/10.1111/j.1574-695X.2007.00289.x

Tshomo, U., Franceschi, S., Tshokey, T., Tobgay, T., Baussano, I., Tenet, V., Snijders, P. J., Gheit, T., Tommasino, M., Vorsters, A., & Clifford, G. M. (2017). Evaluation of the performance of Human Papillomavirus testing in paired urine and clinician-collected cervical samples among women aged over 30 years in Bhutan. *Virol J*, 14(1), 74. https://doi.org/10.1186/s12985-017-0744-2

Ullmann, A. J., Schmidt-Hieber, M., Bertz, H., Heinz, W. J., Kiehl, M., Kruger, W., Mousset, S., Neuburger, S., Neumann, S., Penack, O., Silling, G., Vehreschild, J. J., Einsele, H., Maschmeyer, G., Infectious Diseases Working Party of the German Society for, H., Medical, O., & the, D.-K. (2016). Infectious diseases in allogeneic haematopoietic stem cell transplantation: prevention and prophylaxis strategy guidelines 2016. *Ann Hematol*, *95*(9), 1435-1455. https://doi.org/10.1007/s00277-016-2711-1

Unemo, M. (2020). 2020 European guideline on the diagnosis and treatment of gonorrhoea in adults. *Int J STD AIDS*. https://iusti.org/wp-content/uploads/2020/10/IUSTI-Gonorrhoea-2020.pdf

USPSTF. (2019). Preexposure Prophylaxis for the Prevention of HIV Infection: US Preventive Services Task Force Recommendation Statement. *JAMA*, *321*(22), 2203-2213. https://doi.org/10.1001/jama.2019.6390

USPSTF. (2023, February 14). *Genital Herpes Infection: Serologic Screening*. https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/genitalherpes-serologic-screening

- White, J., O'Farrell, N., & Daniels, D. (2013). 2013 UK National Guideline for the management of lymphogranuloma venereum: Clinical Effectiveness Group of the British Association for Sexual Health and HIV (CEG/BASHH) Guideline development group. *Int J STD AIDS*, *24*(8), 593-601. https://doi.org/10.1177/0956462413482811
- Wong, E. H., Klausner, J. D., Caguin-Grygiel, G., Madayag, C., Barber, K. O., Qiu, J. S., Liska, S., & Pandori, M. W. (2011). Evaluation of an IgM/IgG sensitive enzyme immunoassay and the utility of index values for the screening of syphilis infection in a high-risk population. *Sex Transm Dis*, *38*(6), 528-532. https://doi.org/10.1097/OLQ.0b013e318205491a

Workowski, K. A., & Bolan, G. A. (2015). Sexually transmitted diseases treatment guidelines, 2015. *MMWR Recomm Rep*, *64*(Rr-03), 1-137. https://pubmed.ncbi.nlm.nih.gov/26042815/

Yao, Y. L., Tian, Q. F., Cheng, B., Cheng, Y. F., Ye, J., & Lu, W. G. (2017). Human papillomavirus (HPV) E6/E7 mRNA detection in cervical exfoliated cells: a potential triage for HPV-positive women. *J Zhejiang Univ Sci B*, 18(3), 256-262. https://doi.org/10.1631/jzus.B1600288

Zhiyan, L., Meiling, W., Ping, L., Jinhua, D., Zhenlin, Y., & Zhenru, F. (2015). Consistency Between Treponema pallidum Particle Agglutination Assay and Architect Chemiluminescent Microparticle Immunoassay and Characterization of Inconsistent Samples. *J Clin Lab Anal*, *29*(4), 281-284. https://doi.org/10.1002/jcla.21765

## **Policy Update History**

10/30/2024	01/15/2025: Document updated with literature review. The following changes were made to Reimbursement Information: Added 1.d. Treponemal Ig testing and nontreponemal testing (once prior to transplant) as a part of a pre-transplant assessment in both donors and recipients for an allogeneic
	hematopoietic stem cell transplantation (allo-HCT); added 12: For symptomatic individuals (See Note 8), testing for Mycoplasma genitalium using NAAT may be reimbursable;
	added 13. For asymptomatic individuals (See Note 8), screening for M. genitalium using NAAT is not reimbursable; added T. vaginalis, and M genitalium to #13; added Nucleic
	acid testing to determine antimicrobial susceptibility in N. gonorrhoeae or macrolide resistance in M. genitalium is not reimbursable. Added additional signs and symptoms of a syphilis infection to Note 3; added Note 8 for Signs and
	Symptoms of M. genitalium infection. Added codes 87563, 0402U, 0455U, 0463U, 0483U, 0484U; removed 0167U, 0353U, 0354U. References revised.
11/01/2023	11/01/2023: Document updated with literature review. Reimbursement information revised for clarity. Added #10: When an individual meets the conditions described above for both chlamydia and gonorrhea, multitarget PCR testing (targets limited to C. trachomatis and N. gonorrhoeae) may be
11/1/2022	reimbursable. References revised; some added, others removed. 11/01/2022: New policy