

CLINICAL PAYMENT AND CODING POLICY

If a conflict arises between a Clinical Payment and Coding Policy (CPCP) 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. BCBSTX may use reasonable discretion interpreting and applying this policy to services being delivered in a particular case. BCBSTX 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 (HIPAA) approved code sets. Claims should be coded appropriately according to industry standard coding guidelines including, but not limited to: Uniform Billing (UB) Editor, American Medical Association (AMA), Current Procedural Terminology (CPT®), CPT® Assistant, Healthcare Common Procedure Coding System (HCPCS), ICD-10 CM and PCS, National Drug Codes (NDC), Diagnosis Related Group (DRG) guidelines, Centers for Medicare and Medicaid Services (CMS) National Correct Coding Initiative (NCCI) 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.

β - Hemolytic Streptococcus Testing

Policy Number: CPCPLAB053

Version 1.0

Enterprise Medical Policy Committee Approval Date: 1/25/2022

Plan Effective Date: May 1, 2022

Description

BCBSTX 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:

1. Bacterial culture testing from a throat swab for streptococcal infection for a respiratory illness **may be reimbursable** in the following situations:

- a. Patients have a modified Centor criteria score of 3 or greater (See Note 1 below); OR
 - b. Suspected bacterial pharyngitis in the absence of viral features, including cough, oral ulcers, and rhinorrhea; OR
 - c. After a negative rapid antigen diagnostic test (RADT) in a symptomatic child or adolescent.
2. Blood culture testing for a streptococcal infection **may be reimbursable** in the following situations:
 - a. In patients who fail to demonstrate clinical improvement and in those who have progressive symptoms or clinical deterioration after initiation of antibiotic therapy; OR
 - b. In cases of suspected prosthetic joint infection.
 3. Bacterial culture testing for a streptococcal infection from a skin swab or pus **may be reimbursable** in cases of skin and/or soft tissue infections.
 4. Bacterial culture testing for streptococci from a throat swab **is not reimbursable** in cases of suspected viral pharyngitis.
 5. Rapid antigen diagnostic testing (RADT) for a streptococcal infection **is not reimbursable** in the following cases:
 - a. As a follow-up test to either a positive or negative bacterial culture test for a streptococcal infection; OR
 - b. As a screening method in an asymptomatic patient (except in cases of children under the age of three years who have a mitigating circumstance, including a symptomatic family member); OR
 - c. In cases of suspected viral pharyngitis.
 6. Serological titer testing, αα in cases of suspected acute rheumatic fever or post-streptococcal glomerulonephritis (PSGN), **is not reimbursable**
 7. The simultaneous coding for BOTH amplification and direct probes **is not reimbursable**.
 8. The following tests **are not reimbursable**:
 - a. Panel tests that screen and identify multiple streptococcal strains (*S. pyogenes* [group A], *S. agalactiae* [group B], *S. dysgalactiae* [groups C/G], α-hemolytic streptococcus, and/or γ-hemolytic streptococcus), using either immunoassay or nucleic acid-based assays, such as the Solana Strep Complete Assay and the Lyra Direct Strep Assay; OR
 - b. MALDI-TOF identification of streptococcus; OR
 - c. Anti-streptolysin O immunoassay (EXCEPT in cases of suspected acute rheumatic fever or post-streptococcal glomerulonephritis (PSGN)); OR
 - d. The quantification of any strain of streptococcus using nucleic acid amplification, including PCR; OR
 - e. Hyaluronidase activity or anti-hyaluronidase immunoassay (EXCEPT in cases of suspected acute rheumatic fever or post-streptococcal glomerulonephritis (PSGN)); OR
 - f. Streptokinase activity or anti-streptokinase immunoassay (EXCEPT in cases of suspected acute rheumatic fever or post-streptococcal glomerulonephritis (PSGN)); OR
 - g. Nicotinamide-adenine dinucleotidase activity or anti-nicotinamide-adenine immunoassay

Note 1: Centor criteria includes tonsillar exudates, tender anterior cervical lymphadenopathy, fever, and absence of cough with each criterion being worth one point (Chow, 2018, 2020).

Note 2: For prenatal screening of Group B Streptococcus, please review policy CPCPLAB014

Procedure Codes

Codes
83789, 86060, 86063, 86215, 86317, 86318, 87040, 87070, 87071, 87077, 87081, 87340, 87650, 87651, 87652, 87797, 87798, 87799, 87880

References:

AACC. (2015, 12/30/2017). Strep Throat Test. *Lab Tests Online*. Retrieved from <https://labtestsonline.org/tests/strep-throat-test>

AAOS. (2019). DIAGNOSIS AND PREVENTION OF PERIPROSTHETIC JOINT INFECTIONS CLINICAL PRACTICE GUIDELINE. Retrieved from <https://aaos.org/globalassets/quality-and-practice-resources/pji/pji-clinical-practice-guideline-final-9-18-19-.pdf>

ACOG. (2020). Prevention of Group B Streptococcal Early-Onset Disease in Newborns. Retrieved from <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2020/02/prevention-of-group-b-streptococcal-early-onset-disease-in-newborns>

ASM. (2020). Guidelines for the Detection and Identification of Group B Streptococcus. Retrieved from <https://asm.org/ASM/media/Policy-and-Advocacy/images/ASM-GBS-guideline-031020.pdf?ext=.pdf>

Barshak, M. B. (2021, 1/28/2020). Group B streptococcal infections in nonpregnant adults. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/group-b-streptococcal-infections-in-nonpregnant-adults>

Bilir, S. P., Kruger, E., Faller, M., Munakata, J., Karichu, J. K., Sickler, J., & Cheng, M. M. (2021). US cost-effectiveness and budget impact of point-of-care NAAT for streptococcus. *The American journal of managed care*, 27(5), e157-e163. doi:10.37765/ajmc.2021.88638. (Accession No. 34002967)

Blyth, C. C., & Robertson, P. W. (2006). Anti-streptococcal antibodies in the diagnosis of acute and post-streptococcal disease: streptokinase versus streptolysin O and deoxyribonuclease B. *Pathology*, 38(2), 152-156. doi:10.1080/00313020600557060

Boyanton, B. L., Jr., Darnell, E. M., Prada, A. E., Hansz, D. M., & Robinson-Dunn, B. (2016). Evaluation of the Lyra Direct Strep Assay To Detect Group A Streptococcus and Group C and G Beta-Hemolytic Streptococcus from Pharyngeal Specimens. *J Clin Microbiol*, 54(1), 175-177. doi:10.1128/jcm.02405-15

Bradley, J. S., Byington, C. L., Shah, S. S., Alverson, B., Carter, E. R., Harrison, C., . . . Swanson, J. T. (2011). The Management of Community-Acquired Pneumonia in Infants and Children Older Than 3 Months of Age: Clinical Practice Guidelines by the Pediatric Infectious Diseases Society and the Infectious Diseases Society of America. *Clinical Infectious Diseases*, 53(7), e25-e76. doi:10.1093/cid/cir531

Bruun, T., Kittang, B. R., de Hoog, B. J., Aardal, S., Flaatten, H. K., Langeland, N., . . . Skrede, S. (2013). Necrotizing soft tissue infections caused by *Streptococcus pyogenes* and *Streptococcus dysgalactiae* subsp. *equisimilis* of groups C and G in western Norway. *Clin Microbiol Infect*, 19(12), E545-550. doi:10.1111/1469-0691.12276

CDC. (2018a, 07/12/2018). Acute Rheumatic Fever. Retrieved from <https://www.cdc.gov/groupastrep/diseases-hcp/acute-rheumatic-fever.html>

CDC. (2018b, 11/01/2018). Pharyngitis (Strep Throat). Retrieved from <https://www.cdc.gov/groupastrep/diseases-hcp/strep-throat.html>

CDC. (2018c, 11/01/2018). Post-Streptococcal Glomerulonephritis. Retrieved from <https://www.cdc.gov/groupastrep/diseases-hcp/post-streptococcal.html>

CDC. (2018d, 11/01/2018). Scarlet Fever. Retrieved from <https://www.cdc.gov/groupastrep/diseases-hcp/scarlet-fever.html>

Chow, A. W. (2020a, 04/17/2020). Evaluation of acute pharyngitis in adults. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/evaluation-of-acute-pharyngitis-in-adults>

Chow, A. W. (2020b, 05/18/2018). Evaluation of acute pharyngitis in adults. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/evaluation-of-acute-pharyngitis-in-adults>

Church, D. L., Lloyd, T., Larios, O., & Gregson, D. B. (2018). Evaluation of Simplexa Group A Strep Direct Kit Compared to Hologic Group A Streptococcal Direct Assay for Detection of Group A *Streptococcus* in Throat Swabs. *J Clin Microbiol*, 56(3). doi:10.1128/jcm.01666-17

Cohen, D. M., Russo, M. E., Jaggi, P., Kline, J., Gluckman, W., & Parekh, A. (2015). Multicenter Clinical Evaluation of the Novel Alere i Strep A Isothermal Nucleic Acid Amplification Test. *J Clin Microbiol*, 53(7), 2258-2261. doi:10.1128/jcm.00490-15

Cohen, J. F., Bertille, N., Cohen, R., & Chalumeau, M. (2016). Rapid antigen detection test for group A streptococcus in children with pharyngitis. *Cochrane Database Syst Rev*, 7, Cd010502. doi:10.1002/14651858.CD010502.pub2

Dubois, C., Smeesters, P. R., Refes, Y., Levy, C., Bidet, P., Cohen, R., . . . Cohen, J. F. (2021). Diagnostic accuracy of rapid nucleic acid tests for group A streptococcal pharyngitis: systematic review and meta-analysis. *Clinical Microbiology and Infection*. doi:<https://doi.org/10.1016/j.cmi.2021.04.021>

FB, O. L., Alves, K. B., & Barros, R. R. (2019). Prevalence and long-term persistence of beta-haemolytic streptococci throat carriage among children and young adults. *J Med Microbiol*, 68(10), 1526-1533. doi:10.1099/jmm.0.001054

- FDA. (2016, 06/18/2018). Product Classification. Retrieved from <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpcd/classification.cfm?ID=3515>
- FDA. (2019). 510(k) Substantial Equivalence Determination Design Summary (K183366). Retrieved from https://www.accessdata.fda.gov/cdrh_docs/reviews/K183366.pdf
- FDA. (2020). Groups A, C And G Beta-Hemolytic Streptococcus Nucleic Acid Amplification System. Retrieved from <https://www.accessdata.fda.gov/scripts/cdrh/devicesatfda/index.cfm?db=pmn&id=K201269>
- FDA. (2021). Devices@FDA. Retrieved from <https://www.accessdata.fda.gov/scripts/cdrh/devicesatfda/index.cfm>
- Fraser, H., Gallacher, D., Achana, F., Court, R., Taylor-Phillips, S., Nduka, C., . . . Mistry, H. (2020). Rapid antigen detection and molecular tests for group A streptococcal infections for acute sore throat: systematic reviews and economic evaluation. *Health Technol Assess*, *24*(31), 1-232. doi:10.3310/hta24310
- Freeman, J., & Roberts, S. (2019, 10/24/2019). Approach to Gram stain and culture results in the microbiology laboratory. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/approach-to-gram-stain-and-culture-results-in-the-microbiology-laboratory>
- Gera, K., & McIver, K. S. (2013). Laboratory Growth and Maintenance of Streptococcus pyogenes (The Group A Streptococcus, GAS). *Curr Protoc Microbiol*, *30*, 9d.2.1-9d.2.13. doi:10.1002/9780471729259.mc09d02s30
- Gewitz Michael, H., Baltimore Robert, S., Tani Lloyd, Y., Sable Craig, A., Shulman Stanford, T., Carapetis, J., . . . Kaplan Edward, L. (2015). Revision of the Jones Criteria for the Diagnosis of Acute Rheumatic Fever in the Era of Doppler Echocardiography. *Circulation*, *131*(20), 1806-1818. doi:10.1161/CIR.0000000000000205
- Helmig, R. B., & Gertsen, J. B. (2017). Diagnostic accuracy of polymerase chain reaction for intrapartum detection of group B streptococcus colonization. *Acta Obstet Gynecol Scand*, *96*(9), 1070-1074. doi:10.1111/aogs.13169
- Hojvat, S. A. (2014). *Evaluation of Class III Designation--De Novo Request*. Silver Spring, MD: Food and Drug Administration Retrieved from https://www.accessdata.fda.gov/cdrh_docs/pdf13/k133883.pdf
- IDSA. (2019a). Clinical Practice Guideline: Tonsillectomy in Children (Update) (Endorsed). Retrieved from <https://www.idsociety.org/practice-guideline/tonsillectomy-in-children/>
- IDSA. (2019b). Diagnosis and Prevention of Periprosthetic Joint Infections (Endorsed). Retrieved from <https://www.idsociety.org/practice-guideline/periprosthetic-joint-infections/>
- Kim, H. N., Kim, J., Jang, W. S., Nam, J., & Lim, C. S. (2019). Performance evaluation of three rapid antigen tests for the diagnosis of group A Streptococci. *BMJ Open*, *9*(8), e025438. doi:10.1136/bmjopen-2018-025438

- Kimberlin DW, B. M., Jackson MA, Long SS. (2018). *Group A Streptococcal Infections*.
- Lollar, R. (2016). *K162274 510(k) premarket notification of intent to market Solana Strep Complete Assay*. FDA Retrieved from https://www.accessdata.fda.gov/cdrh_docs/pdf16/K162274.pdf
- Luo, R., Sickler, J., Vahidnia, F., Lee, Y.-C., Frogner, B., & Thompson, M. (2019). Diagnosis and Management of Group a Streptococcal Pharyngitis in the United States, 2011–2015. *BMC Infectious Diseases*, *19*(1), 193. doi:10.1186/s12879-019-3835-4
- Metlay, J. P., Waterer, G. W., Long, A. C., Anzueto, A., Brozek, J., Crothers, K., . . . Whitney, C. G. (2019). Diagnosis and Treatment of Adults with Community-acquired Pneumonia. An Official Clinical Practice Guideline of the American Thoracic Society and Infectious Diseases Society of America. *Am J Respir Crit Care Med*, *200*(7), e45-e67. doi:10.1164/rccm.201908-1581ST
- Miller, J. M., Binnicker, M. J., Campbell, S., Carroll, K. C., Chapin, K. C., Gilligan, P. H., . . . Yao, J. D. (2018). A Guide to Utilization of the Microbiology Laboratory for Diagnosis of Infectious Diseases: 2018 Update by the Infectious Diseases Society of America and the American Society for Microbiology. *Clinical Infectious Diseases*, ciy381-ciy381. doi:10.1093/cid/ciy381
- Mitchell, R. B., Archer, S. M., Ishman, S. L., Rosenfeld, R. M., Coles, S., Finestone, S. A., . . . Nnacheta, L. C. (2019). Clinical Practice Guideline: Tonsillectomy in Children (Update). *Otolaryngol Head Neck Surg*, *160*(1_suppl), S1-s42. doi:10.1177/0194599818801757
- NICE. (2019). Rapid tests for group A streptococcal infections in people with a sore throat. Retrieved from <https://www.nice.org.uk/guidance/dg38>
- Pediatrics, A. A. o. (2018). Group B Streptococcal Infections. In D. Kimberlin, M. Brady, M. Jackson, & S. Long (Eds.), *Red Book: 2018 Report of the Committee on Infectious Diseases* (pp. 762-768): American Academy of Pediatrics.
- Puopolo, K. M., Lynfield, R., & Cummings, J. J. (2019). Management of Infants at Risk for Group B Streptococcal Disease. *Pediatrics*, *144*(2), e20191881. doi:10.1542/peds.2019-1881
- Puopolo, K. M., Madoff, L. C., & Baker, C. J. (2019). Group B streptococcal infection in pregnant women. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/group-b-streptococcal-infection-in-pregnant-women>
- Raignoux, J., Benard, M., Huo Yung Kai, S., Dicky, O., Berrebi, A., Bibet, L., . . . Assouline-Azogui, C. (2016). [Is rapid intrapartum vaginal screening test of group B streptococci (GBS) during partum useful in identifying infants developing early-onset GBS sepsis in postpartum period?]. *Arch Pediatr*, *23*(9), 899-907. doi:10.1016/j.arcped.2016.06.003
- Rantala, S. (2014). Streptococcus dysgalactiae subsp. equisimilis bacteremia: an emerging infection. *Eur J Clin Microbiol Infect Dis*, *33*(8), 1303-1310. doi:10.1007/s10096-014-2092-0
- Schwartz, B., Facklam, R. R., & Breiman, R. F. (1990). Changing epidemiology of group A streptococcal infection in the USA. *Lancet*, *336*(8724), 1167-1171.

Short, S., Bashir, H., Marshall, P., Miller, N., Olmschenk, D., Prigge, K., & Solyntjes, L. (2017). *Diagnosis and Treatment of Respiratory Illness in Children and Adults* (5th ed.). Bloomington, MN: Institute for Clinical Systems Improvement.

Shulman, S. T., Bisno, A. L., Clegg, H. W., Gerber, M. A., Kaplan, E. L., Lee, G., . . . Van Beneden, C. (2012). Clinical practice guideline for the diagnosis and management of group A streptococcal pharyngitis: 2012 update by the Infectious Diseases Society of America. *Clin Infect Dis*, *55*(10), e86-102. doi:10.1093/cid/cis629

Spellerberg, B., & Brandt, C. (2016). Laboratory Diagnosis of *Streptococcus pyogenes* (group A streptococci). In J. J. Ferretti, D. L. Stevens, & V. A. Fischetti (Eds.), *Streptococcus pyogenes : Basic Biology to Clinical Manifestations*. Oklahoma City (OK): University of Oklahoma Health Sciences Center.

Steer, A., & Gibofsky, A. (2018, 05/18/2018). Acute rheumatic fever: Clinical manifestations and diagnosis. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/acute-rheumatic-fever-clinical-manifestations-and-diagnosis>

Steer, A., & Gibofsky, A. (2020, 05/18/2018). Acute rheumatic fever: Clinical manifestations and diagnosis. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/acute-rheumatic-fever-clinical-manifestations-and-diagnosis>

Steer, A. C., Smeesters, P. R., & Curtis, N. (2015). Streptococcal Serology: Secrets for the Specialist. *Pediatr Infect Dis J*, *34*(11), 1250-1252. doi:10.1097/inf.0000000000000881

Stevens, D. L., Bisno, A. L., Chambers, H. F., Dellinger, E. P., Goldstein, E. J. C., Gorbach, S. L., . . . Wade, J. C. (2014). Practice Guidelines for the Diagnosis and Management of Skin and Soft Tissue Infections: 2014 Update by the Infectious Diseases Society of America. *Clinical Infectious Diseases*, *59*(2), e10-e52. doi:10.1093/cid/ciu296

Stevens, D. L., & Bryant, A. (2020a, 04/24/2020). Group A streptococcus: Virulence factors and pathogenic mechanisms. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/group-a-streptococcus-virulence-factors-and-pathogenic-mechanisms>

Stevens, D. L., & Bryant, A. (2020b, 01/26/2018). Group A streptococcus: Virulence factors and pathogenic mechanisms. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/group-a-streptococcus-virulence-factors-and-pathogenic-mechanisms>

Uphoff, T. S., Buchan, B. W., Ledebor, N. A., Granato, P. A., Daly, J. A., & Marti, T. N. (2016). Multicenter Evaluation of the Solana Group A Streptococcus Assay: Comparison with Culture. *J Clin Microbiol*, *54*(9), 2388-2390. doi:10.1128/jcm.01268-16

Wald, E. R. (2021, 06/24/2020). Group A streptococcal tonsillopharyngitis in children and adolescents: Clinical features and diagnosis. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/group-a-streptococcal-tonsillopharyngitis-in-children-and-adolescents-clinical-features-and-diagnosis>

Walker, G., & Habboushe, J. (2018). Centor Score (Modified/McIsaac) for Strep Pharyngitis. Retrieved from <https://www.mdcalc.com/centor-score-modified-mcisaac-strep-pharyngitis>

Weinzierl, E. P., Jerris, R. C., Gonzalez, M. D., Piccini, J. A., & Rogers, B. B. (2018). Comparison of Alere i Strep A Rapid Molecular Assay With Rapid Antigen Testing and Culture in a Pediatric Outpatient Setting. *American Journal of Clinical Pathology*, aqy038-aqy038. doi:10.1093/ajcp/aqy038

Wessels, M. R. (2020a, 04/17/2020). Group C and group G streptococcal infection. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/group-c-and-group-g-streptococcal-infection>

Wessels, M. R. (2020b, 03/25/2019). Group C and group G streptococcal infection. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/group-c-and-group-g-streptococcal-infection>

Policy Update History:

5/1/2022	New policy
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