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 Oklahoma may use reasonable discretion interpreting and applying this policy to services being delivered in a particular case. BCBSOK 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® 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.

Testing for Diagnosis of Active or Latent Tuberculosis

Policy Number: CPCPLAB027

Version 1.0

Approval Date: 09/26/2025

Plan Effective Date: 01/03/2026

Description

The Plan 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. To diagnose or screen for latent tuberculosis (TB) infection, an interferon gamma release assay (IGRA) **may be reimbursable** in:
    a. Individuals who are at risk for infection with *Mycobacterium tuberculosis* (Mtb);
    b. Individuals who are unlikely to be infected with Mtb when screening is obliged by law.

2. For all suspected TB infections, the following tests **may be reimbursable:**
    a. Acid fast bacilli (AFB) smear/stain
    b. Culture and culture-based drug susceptibility testing of *Mycobacteria* spp.
    c. Qualitative nucleic acid amplification testing (NAAT) for *Mycobacteria* spp., *M tuberculosis,* and *M. avium* complex.

3. For individuals whose sputum is AFB smear positive or NAAT positive, molecular-based drug susceptibility testing **may be reimbursable** when **one** of the following criteria is met:
    a. The individual has been treated for TB in the past.
    b. The individual was born in or has lived for at least 1 year in a foreign country with at least a moderate TB incidence (≥20 per 100,000) or a high primary multi-drug resistant (MDR)-TB prevalence (≥2%).
    c. The individual is a contact of an individual with MDR-TB;
    d. The individual is HIV infected.

4. Repeat drug susceptibility testing **may be reimbursable** in **any** of the following situations:
    a. For individuals whose sputum cultures remain positive after 3 months of treatment.
    b. When there is bacteriological reversion from negative to positive.

5. For individuals with pleural effusion, pericardial effusion, or ascites and suspected TB infection, cell counts, protein, glucose, and lactate dehydrogenase (LDH) concentrations of cerebrospinal, pleural, peritoneal, pericardial, and other fluids **may be reimbursable.**

6. In HIV-infected individuals with CD4 cell counts ≤100 cells/microL who have signs and symptoms of tuberculosis, urine-based detection of mycobacterial cell wall glycolipid lipoarabinomannan (LAM) **may be reimbursable**.

7. For individuals with active tuberculosis, interferon gamma release assay (IGRA) **is not reimbursable**.

8. Quantitative nucleic acid testing for *Mycobacterium spp, M. tuberculosis,* and *M. avium* complex **is not reimbursable**.

9. Testing of adenosine deaminase (ADA) and interferon-gamma (IFN- γ) levels in cerebrospinal, pleural, peritoneal, pericardial, and other fluids for the diagnosis of extrapulmonary TB **are not reimbursable**.

10. Testing of serum protein biomarkers or panels of biomarkers for the detection and diagnosis of TB **are not reimbursable**.

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
81099, 82945, 83520, 83615, 84157, 84311, 86480, 86481, 87070, 87077, 87116, 87150, 87153, 87181, 87184, 87185, 87186, 87187, 87188, 87190, 87206, 87551, 87552, 87556, 87557, 87561, 87562, 87564, 0574U

References:

1. Lewinsohn DM, Leonard MK, LoBue PA, et al. Official American Thoracic Society/Infectious Diseases Society of America/Centers for Disease Control and Prevention Clinical Practice Guidelines: Diagnosis of Tuberculosis in Adults and Children. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*. Jan 15 2017;64(2):111-115. doi:10.1093/cid/ciw778
2. Bernardo J. Diagnosis of pulmonary tuberculosis in adults. Updated August 29, 2025. https://www.uptodate.com/contents/diagnosis-of-pulmonary-tuberculosis-in-adults
3. Pai M, Flores LL, Hubbard A, Riley LW, Colford JM, Jr. Nucleic acid amplification tests in the diagnosis of tuberculous pleuritis: a systematic review and meta-analysis. *BMC infectious diseases*. 2004;4:6. doi:10.1186/1471-2334-4-6
4. Menzies D. Use of interferon-gamma release assays for diagnosis of latent tuberculosis infection (tuberculosis screening) in adults. Updated July 23, 2025. https://www.uptodate.com/contents/use-of-interferon-gamma-release-assays-for-diagnosis-of-latent-tuberculosis-infection-tuberculosis-screening-in-adults
5. Pai M, Denkinger CM, Kik SV, et al. Gamma interferon release assays for detection of Mycobacterium tuberculosis infection. *Clinical microbiology reviews*. 2014;27(1):3-20. doi:10.1128/cmr.00034-13
6. WHO. *Global tuberculosis report 2024*. World Health Organization; 2024. https://iris.who.int/bitstream/handle/10665/379339/9789240101531-eng.pdf?sequence=1

7. Dheda K, Gumbo T, Gandhi NR, et al. Global control of tuberculosis: from extensively drug-resistant to untreatable tuberculosis. *The Lancet Respiratory medicine*. Apr 2014;2(4):321-38. doi:10.1016/s2213-2600(14)70031-1
8. Heemskerk D, Caws M, Marais B, Farrar J. Clinical Manifestations. *Tuberculosis in Adults and Children*. Springer; 2015.
9. Peto HM, Pratt RH, Harrington TA, LoBue PA, Armstrong LR. Epidemiology of extrapulmonary tuberculosis in the United States, 1993-2006. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*. 2009;49(9):1350-7. doi:10.1086/605559
10. Dheda K, Schwander SK, Zhu B, van Zyl-Smit RN, Zhang Y. The immunology of tuberculosis: from bench to bedside. *Respirology (Carlton, Vic)*. 2010;15(3):433-50. doi:10.1111/j.1440-1843.2010.01739.x
11. Barry CE, 3rd, Boshoff HI, Dartois V, et al. The spectrum of latent tuberculosis: rethinking the biology and intervention strategies. *Nature reviews Microbiology*. 2009;7(12):845-55. doi:10.1038/nrmicro2236
12. Landry J, Menzies D. Preventive chemotherapy. Where has it got us? Where to go next? *The international journal of tuberculosis and lung disease : the official journal of the International Union against Tuberculosis and Lung Disease*. Dec 2008;12(12):1352-64.
13. ATS. Targeted tuberculin testing and treatment of latent tuberculosis infection. . *American journal of respiratory and critical care medicine*. Apr 2000;161(4 Pt 2):S221-47. doi:10.1164/ajrccm.161.supplement_3.ats600
14. FDA. Summary of Safety and Effectiveness Data. https://www.accessdata.fda.gov/cdrh_docs/pdf/p010033b.pdf
15. Daniel TM. The immunology of tuberculosis. *Clinics in chest medicine*. 1980;1(2):189-201.
16. Francis J, Seiler RJ, Wilkie IW, O'Boyle D, Lumsden MJ, Frost AJ. The sensitivity and specificity of various tuberculin tests using bovine PPD and other tuberculins. *The Veterinary record*. 1978;103(19):420-5.
17. Katial RK, Hershey J, Purohit-Seth T, et al. Cell-Mediated Immune Response to Tuberculosis Antigens: Comparison of Skin Testing and Measurement of In Vitro Gamma Interferon Production in Whole-Blood Culture. *Clin Diagn Lab Immunol*. 2001;8(2):339-45. doi:10.1128/cdli.8.2.339-345.2001
18. Fenton MJ, Vermeulen MW, Kim S, Burdick M, Strieter RM, Kornfeld H. Induction of gamma interferon production in human alveolar macrophages by Mycobacterium tuberculosis. *Infection and immunity*. 1997;65(12):5149-56.
19. Lein AD, Von Reyn CF. In vitro cellular and cytokine responses to mycobacterial antigens: application to diagnosis of tuberculosis infection and assessment of response to mycobacterial vaccines. *The American journal of the medical sciences*. Jun 1997;313(6):364-71.
20. Menzies D, Pai M, Comstock G. Meta-analysis: new tests for the diagnosis of latent tuberculosis infection: areas of uncertainty and recommendations for research. *Annals of internal medicine*. 2007;146(5):340-54.
21. Diel R, Loddenkemper R, Nienhaus A. Predictive value of interferon-gamma release assays and tuberculin skin testing for progression from latent TB infection to disease state: a meta-analysis. *Chest*. 2012;142(1):63-75. doi:10.1378/chest.11-3157

22. Ruan Q, Zhang S, Ai J, Shao L, Zhang W. Screening of latent tuberculosis infection by interferon-gamma release assays in rheumatic patients: a systemic review and meta-analysis. *Clinical rheumatology*. 2016;35(2):417-25. doi:10.1007/s10067-014-2817-6
23. Auguste P, Tsertsvadze A, Pink J, et al. Comparing interferon-gamma release assays with tuberculin skin test for identifying latent tuberculosis infection that progresses to active tuberculosis: systematic review and meta-analysis. *BMC infectious diseases*. 2017;17(1):200. doi:10.1186/s12879-017-2301-4
24. Nasiri MJ, Pormohammad A, Goudarzi H, et al. Latent tuberculosis infection in transplant candidates: a systematic review and meta-analysis on TST and IGRA. *Infection*. 2019;47(3):353-361. doi:10.1007/s15010-019-01285-7
25. Khanna U, Ellis A, Gallop J, Galadari A, Hu J, Fernandez AP. AB008. Utility of repeat latent tuberculosis testing in patients with immune-mediated diseases taking biologics. *Ann Transl Med*. Mar 2021;9(5)doi:10.21037/atm.2021.AB008
26. Neema S, Radhakrishnan S, Dabbas D, Vasudevan B. Latent Tuberculosis in Psoriasis Patients Planned for Systemic Therapy - A Prospective Observational Study. *Indian Dermatol Online J*. 2021;12(3):429-432. doi:10.4103/idoj.IDOJ_698_20
27. Ren W, Ma Z, Li Q, et al. Antigen-specific chemokine profiles as biomarkers for detecting Mycobacterium tuberculosis infection. *Front Immunol*. 2024;15:1359555. doi:10.3389/fimmu.2024.1359555
28. Pai M, Nicol MP, Boehme CC. Tuberculosis Diagnostics: State of the Art and Future Directions. *Microbiology spectrum*. 2016;4(5)doi:10.1128/microbiolspec.TBTB2-0019-2016
29. Mase SR, Ramsay A, Ng V, et al. Yield of serial sputum specimen examinations in the diagnosis of pulmonary tuberculosis: a systematic review. *The international journal of tuberculosis and lung disease : the official journal of the International Union against Tuberculosis and Lung Disease*. May 2007;11(5):485-95.
30. Steingart KR, Ng V, Henry M, et al. Sputum processing methods to improve the sensitivity of smear microscopy for tuberculosis: a systematic review. *The Lancet Infectious diseases*. 2006;6(10):664-74. doi:10.1016/s1473-3099(06)70602-8
31. Steingart KR, Henry M, Ng V, et al. Fluorescence versus conventional sputum smear microscopy for tuberculosis: a systematic review. *The Lancet Infectious diseases*. 2006;6(9):570-81. doi:10.1016/s1473-3099(06)70578-3
32. Gordin F, Slutkin G. The validity of acid-fast smears in the diagnosis of pulmonary tuberculosis. *Archives of pathology & laboratory medicine*. 1990;114(10):1025-7.
33. Yajko DM, Nassos PS, Sanders CA, Madej JJ, Hadley WK. High predictive value of the acid-fast smear for Mycobacterium tuberculosis despite the high prevalence of Mycobacterium avium complex in respiratory specimens. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*. 1994;19(2):334-6.
34. Greco S, Girardi E, Navarra A, Saltini C. Current evidence on diagnostic accuracy of commercially based nucleic acid amplification tests for the diagnosis of pulmonary tuberculosis. *Thorax*. 2006;61(9):783-90. doi:10.1136/thx.2005.054908
35. Cheng VC, Yew WW, Yuen KY. Molecular diagnostics in tuberculosis. *European journal of clinical microbiology & infectious diseases : official publication of the European Society of Clinical Microbiology*. 2005;24(11):711-20. doi:10.1007/s10096-005-0039-1

36. Ling DI, Flores LL, Riley LW, Pai M. Commercial nucleic-acid amplification tests for diagnosis of pulmonary tuberculosis in respiratory specimens: meta-analysis and meta-regression. *PloS one*. Feb 6 2008;3(2):e1536. doi:10.1371/journal.pone.0001536
37. CDC. Updated guidelines for the use of nucleic acid amplification tests in the diagnosis of tuberculosis. *MMWR Morbidity and mortality weekly report*. 2009;58(1):7-10.
38. Taylor Z, Nolan CM, Blumberg HM. Controlling tuberculosis in the United States. Recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America. *MMWR Recommendations and reports : Morbidity and mortality weekly report Recommendations and reports*. 2005;54(Rr-12):1-81.
39. RBS. TB Breathalyser - TB Breath Test. http://www.rapidbiosensor.com/tbbreathalyser
40. Institute CaLS. Laboratory Detection and Identification of Mycobacteria, 2nd Edition. M48. Wayne, PA: Clinical and Laboratory Standards Institute.; 2018.
41. Woods GL, Lin S-YG, Desmond EP. Susceptibility Test Methods: Mycobacteria, Nocardia, and Other Actinomycetes. *Manual of Clinical Microbiology, Eleventh Edition*. ASM; 2015.
42. Cruciani M, Scarparo C, Malena M, Bosco O, Serpelloni G, Mengoli C. Meta-analysis of BACTEC MGIT 960 and BACTEC 460 TB, with or without solid media, for detection of mycobacteria. *Journal of clinical microbiology*. 2004;42(5):2321-5.
43. Bourgi K, Patel J, Samuel L, Kieca A, Johnson L, Alangaden G. Clinical Impact of Nucleic Acid Amplification Testing in the Diagnosis of Mycobacterium Tuberculosis: A 10-Year Longitudinal Study. *Open forum infectious diseases*. 2017;4(2):ofx045. doi:10.1093/ofid/ofx045
44. Shah M, Martinson NA, Chaisson RE, Martin DJ, Variava E, Dorman SE. Quantitative analysis of a urine-based assay for detection of lipoarabinomannan in patients with tuberculosis. *Journal of clinical microbiology*. 2010;48(8):2972-4. doi:10.1128/jcm.00363-10
45. Nakiyingi L, Moodley VM, Manabe YC, et al. Diagnostic accuracy of a rapid urine lipoarabinomannan test for tuberculosis in HIV-infected adults. *Journal of acquired immune deficiency syndromes (1999)*. 2014;66(3):270-9. doi:10.1097/qai.0000000000000151
46. Shah M, Hanrahan C, Wang ZY, et al. Lateral flow urine lipoarabinomannan assay for detecting active tuberculosis in HIV-positive adults. *The Cochrane database of systematic reviews*. 2016;(5):Cd011420. doi:10.1002/14651858.CD011420.pub2
47. WHO. Guidelines on the Management of Latent Tuberculosis Infection. https://www.ncbi.nlm.nih.gov/books/NBK293809/
48. Gupta-Wright A, Corbett EL, van Oosterhout JJ, et al. Rapid urine-based screening for tuberculosis in HIV-positive patients admitted to hospital in Africa (STAMP): a pragmatic, multicentre, parallel-group, double-blind, randomised controlled trial. *Lancet (London, England)*. 2018;392(10144):292-301. doi:10.1016/s0140-6736(18)31267-4
49. De Groote MA, Sterling DG, Hraha T, et al. Discovery and Validation of a Six-Marker Serum Protein Signature for the Diagnosis of Active Pulmonary Tuberculosis. *Journal of clinical microbiology*. 2017;55(10):3057-3071. doi:10.1128/jcm.00467-17

50. Heyckendorf J, Andres S, Köser CU, et al. What Is Resistance? Impact of Phenotypic versus Molecular Drug Resistance Testing on Therapy for Multi- and Extensively Drug-Resistant Tuberculosis. *Antimicrob Agents Chemother*. 2018;62(2)doi:10.1128/aac.01550-17
51. Ustinova VV, Smirnova TG, Sochivko DG, et al. New assay to diagnose and differentiate between Mycobacterium tuberculosis complex and nontuberculous mycobacteria. *Tuberculosis (Edinburgh, Scotland)*. 2019;114:17-23. doi:10.1016/j.tube.2018.10.004
52. Adams S, Ehrlich R, Baatjies R, Dendukuri N, Wang Z, Dheda K. Evaluating Latent Tuberculosis Infection Test Performance Using Latent Class Analysis in a TB and HIV Endemic Setting. *Int J Environ Res Public Health*. Aug 14 2019;16(16)doi:10.3390/ijerph16162912
53. Zürcher K, Ballif M, Fenner L, et al. Drug susceptibility testing and mortality in patients treated for tuberculosis in high-burden countries: a multicentre cohort study. *The Lancet Infectious diseases*. 2019;19(3):298-307. doi:10.1016/s1473-3099(18)30673-x
54. Jain J, Jadhao P, Banait S, Salunkhe P. Diagnostic accuracy of GeneXpert MTB/RIF assay for detection of tubercular pleural effusion. *PloS one*. 2021;16(6):e0251618. doi:10.1371/journal.pone.0251618
55. Karthek V, Bhilare P, Hadgaonkar S, et al. Gene Xpert/MTB RIF assay for spinal tuberculosis- sensitivity, specificity and clinical utility. *J Clin Orthop Trauma*. May 2021;16:233-238. doi:10.1016/j.jcot.2021.02.006
56. Medina-Marino A, Bezuidenhout D, Bezuidenhout C, et al. In-home TB Testing Using GeneXpert Edge is Acceptable, Feasible, and Improves the Proportion of Symptomatic Household Contacts Tested for TB: A Proof-of-Concept Study. *Open forum infectious diseases*. 2024;11(6):ofae279. doi:10.1093/ofid/ofae279
57. CDC. Clinical Testing and Diagnosis for Tuberculosis. Updated April 17, 2025. https://www.cdc.gov/tb/hcp/testing-diagnosis/index.html
58. WHO. Implementing Tuberculosis Diagnostics. https://iris.who.int/bitstream/handle/10665/162712/9789241508612_eng.pdf
59. WHO. Latent TB Infection : Updated and consolidated guidelines for programmatic management. https://apps.who.int/iris/bitstream/handle/10665/260233/9789241550239-eng.pdf
60. WHO. WHO consolidated guidelines on tuberculosis. Module 3: Diagnosis - Rapid diagnostics for tuberculosis detection, 2021 update. https://www.who.int/publications/i/item/9789240029415
61. NIH. Guidelines for the Prevention and Treatment of Opportunistic Infections in Adults and Adolescents with HIV: Mycobacterium tuberculosis Infection and Disease. https://clinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-opportunistic-infections/mycobacterium-0
62. Nahid P, Mase SR, Migliori GB, et al. Treatment of Drug-Resistant Tuberculosis. An Official ATS/CDC/ERS/IDSA Clinical Practice Guideline. *American journal of respiratory and critical care medicine*. 2019;200(10):e93-e142. doi:10.1164/rccm.201909-1874ST
63. USPSTF, Mangione CM, Barry MJ, et al. Screening for Latent Tuberculosis Infection in Adults: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2023;329(17):1487-1494. doi:10.1001/jama.2023.4899

64. Miller JM, Binnicker MJ, Campbell S, et al. Guide to Utilization of the Microbiology Laboratory for Diagnosis of Infectious Diseases: 2024 Update by the Infectious Diseases Society of America (IDSA) and the American Society for Microbiology (ASM). *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*. 2024;doi:10.1093/cid/ciae104
65. AAP. *Red Book® 2021-2024: Report of the Committee on Infectious Diseases, 32nd Edition*. 2021.
66. Domínguez J, Boettger EC, Cirillo D, et al. Clinical implications of molecular drug resistance testing for Mycobacterium tuberculosis: a TBNET/RESIST-TB consensus statement. *The International Journal of Tuberculosis and Lung Disease*. 2016;20(1):24-42. doi:10.5588/ijtld.15.0221
67. NICE. Tuberculosis. https://www.nice.org.uk/guidance/ng33/chapter/Recommendations
68. ERS/ECDC. ERS/ECDC Statement: European Union Standards for Tuberculosis Care - 2017 update https://www.ecdc.europa.eu/sites/default/files/documents/ESTC-leaflet-September-2018.pdf
69. NSTC. Testing and Treatment of Latent Tuberculosis Infection in the United States. https://tbcontrollers.org/docs/NSTC/LTBI_Clinical_Guide_Feb2025_FINAL.pdf
70. Doherty SD, Van Voorhees A, Lebwohl MG, et al. National Psoriasis Foundation consensus statement on screening for latent tuberculosis infection in patients with psoriasis treated with systemic and biologic agents. *J Am Acad Dermatol*. 2008;59(2):209-17. doi:10.1016/j.jaad.2008.03.023

Policy Update History:

Approval Date	Effective Date; Summary of Changes
09/26/2025	01/03/2026; Document updated with literature review. The following changes were made to Reimbursement Information: Added to #2: Qualitative nucleic acid amplification testing (NAAT) for Mycobacteria spp., M tuberculosis, and M. avium complex. That resulted in removal of #3 and #9 as direct probe testing is no longer available. Now #3 – replaced "Hologic Amplified MTD" with "NAAT" for clarity; now #8 updated "M. avium intracellulare" to "M. avium complex" to align with updated naming convention. Added codes 87564, 0574U; removed codes 87149, 87550, 87555, 87560. References revised.
10/30/2024	01/15/2025: Document updated with literature review. Reimbursement Information unchanged. References revised; some added, others updated.
02/01/2024	02/01/2024: Document updated with literature review. Reimbursement information revised for clarity. References revised.
11/01/2023	11/01/2023: Document updated with literature review. The following changes were made to Reimbursement Information: #2 and #3 were combined and now reads: For all suspected TB infections, the following tests may be reimbursable: Acid fast bacilli (AFB) smear/stain; Culture and culture-based drug susceptibility testing of Mycobacteria spp. Add #4 For patients whose sputum is AFB smear positive of Hologic Amplified MTD positive, molecular-based drug susceptibility testing may be reimbursable when one of the following criteria is met: a. The individual has been treated for TB in the past. b. The individual was born in or has lived for at least 1 year in a foreign country with at least a moderate TB incidence (≥20 per 100,000) or a high primary multi-drug resistant (MDR)-TB prevalence (≥2%). c. The individual is a contact of an individual with MDR-TB; d. The individual is HIV infected. Other revisions made for clarity. References updated.
11/1/2022	11/01/2022: New policy