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. BCBSNM 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 ("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.

Thyroid Disease Testing

Policy Number: CPCPLAB019

Version 1.0

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

Plan Effective Date: May 1, 2022

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:

1. Thyroid function testing **may be reimbursable** in the following situations:
    a. Individuals with symptoms consistent with hypothyroidism (See Policy Guidelines)
        i. TSH to confirm or rule out primary hypothyroidism.
        ii. Free T4 as a follow up to abnormal TSH findings

iii. Free T4 as a follow up in cases of suspected secondary hypothyroidism when TSH is normal
iv. TSH to distinguish between primary and secondary hypothyroidism.
v. TSH, free T4 for monitoring individuals being treated for hypothyroidism every 6-12 weeks upon dosage change and annually in stable individuals.

b. Individuals with symptoms consistent with hyperthyroidism (See Policy Guidelines)
   i. TSH to confirm or rule out primary hyperthyroidism
   ii. Free T4 as a follow up to abnormal TSH findings
   iii. Total or free T3 as a follow up to abnormal FT4 findings or if still concerned with hyperthyroidism
   iv. Free T4 to distinguish between primary and secondary hyperthyroidism
   v. TSH and free T4 should be measured for monitoring individuals being treated for hyperthyroidism every 6-12 weeks
   vi. Monitoring individuals closely after treatment for hyperthyroidism
      1. Close monitoring first 3 months post treatment
      2. Annual monitoring after first year even if asymptomatic for risk of relapse or late-onset hypothyroidism

c. Asymptomatic individuals at high risk for thyroid disease due to:
   i. A personal or family history of thyroid dysfunction (limited to one time)
   ii. Personal or family history of type 1 diabetes or other autoimmune disorder (limited to one time)
   iii. Prescribed drugs that can interfere with thyroid function (annually or when dosage or medication changes). Drugs interfering with thyroid function include, but are not limited to, amiodarone, interferon, iodine, lithium, tyrosine kinase inhibitors, sulfonamides

d. Women undergoing evaluation for infertility

e. Women in pregnancy and postpartum
   i. Monitoring of pregnant women being treated for hypothyroidism, every 4 weeks
   ii. Free T4 or Total T4 testing for management of thyroid disease during pregnancy (see Note 1)
   iii. FT4 measurements in all patients in 1st trimester in the presence of a suppressed serum TSH
   iv. Measurement of serum total T3 (TT3) and *thyrotropin receptor antibodies (TRAb*) for establishing a diagnosis of hyperthyroidism
   v. TSH testing if there is a thyroid nodule
   vi. TSH to evaluate hypothyroidism in the first trimester pregnancy and in the postpartum period
   vii. TSH in euthyroid, but TPO or Tg antibody positive pregnant women
   viii. Serum TSH in early pregnancy in the following situations:
      1. History of thyroid dysfunction or prior thyroid surgery
      2. Age >30 years
      3. Symptoms of thyroid dysfunction or the presence of goiter
      4. TPOAb positivity
      5. Type 1 diabetes or other autoimmune disorders
      6. History of miscarriage or preterm delivery
      7. History of head or neck radiation
      8. Family history of thyroid dysfunction
      9. Morbid obesity (BMI ≥40 kg/m2)
      10. Use of amiodarone or lithium, or recent administration of iodinated radiologic contrast

11. Infertility
12. Residing in an area of known moderate to severe iodine insufficiency
13. TSH, FT4, and *TPOAb* tests in postpartum depression

f. Patients with disease or neoplasm of the thyroid or other endocrine glands
g. Individuals with chronic or acute urticaria.
h. TSH testing of individuals undergoing immune reconstitution therapy (IRT)
    i. Individuals with active relapsing remitting multiple sclerosis (MS) undergoing therapy with alemtuzumab (Lemtrada)
    ii. Individuals with HIV undergoing highly active antiretroviral therapy (HAART)
    iii. Individuals following allogeneic bone marrow transplantation (BMT) or hematopoietic stem cell transplantation (HSCT)
i. Individuals suspected of central hypothyroidism.
j. Pediatric individuals diagnosed with short stature.

2. Testing for thyroid antibodies **may be reimbursable** for the evaluation of autoimmune thyroiditis.

3. Testing for serum thyroglobulin and/or anti-thyroglobulin antibody levels **may be reimbursable** for individuals with thyroid cancer for detection of tumor recurrence, post-surgical evaluation, surveillance, and maintenance for differentiated thyroid carcinomas.

4. Testing for thyrotropin-releasing hormone (TRH) **may be reimbursable** for the evaluation of the cause of hyperthyroidism or hypothyroidism.

5. Testing of reverse T3, T3 uptake and total T4 **is not reimbursable** in all situations except for the following:
    a. Total T4 testing for management of thyroid disease during pregnancy (see Note 1)

6. Measurement of total T3 and/or free T3 **is not reimbursable** in the assessment of hypothyroidism.

7. Measurement of total or free T3 level **is not reimbursable** when assessing levothyroxine (T4) dose in hypothyroid patients.

8. Testing for thyroid dysfunction in asymptomatic nonpregnant individuals for thyroid disease **is not reimbursable** during general exam without abnormal findings.

Note 1: Due to significant changes in thyroid physiology during pregnancy, measurement of hormone levels should only be performed at labs that have trimester specific normal ranges for their assay(s). While FT4 is the preferred test, TT4 may be useful if the TSH and FT4 results are discordant or when trimester specific normal ranges for FT4 are unavailable.

Policy Guidelines

Hypothyroidism signs and symptoms may include:

1. Fatigue
2. Increased sensitivity to cold
3. Constipation
4. Dry skin
5. Unexplained weight gain
6. Puffy face

7. Hoarseness
8. Muscle weakness
9. Elevated blood cholesterol level
10. Muscle aches, tenderness and stiffness
11. Pain, stiffness or swelling in your joints
12. Heavier than normal or irregular menstrual periods
13. Thinning hair
14. Slowed heart rate
15. Depression
16. Impaired memory

Hyperthyroidism can mimic other health problems, which may make it difficult for your doctor to diagnose. It can also cause a wide variety of signs and symptoms, including:

1. Sudden weight loss, even when your appetite and the amount and type of food you eat remain the same or even increase
2. Rapid heartbeat (tachycardia) — commonly more than 100 beats a minute — irregular heartbeat (arrhythmia) or pounding of your heart (palpitations)
3. Increased appetite
4. Nervousness, anxiety and irritability
5. Tremor — usually a fine trembling in your hands and fingers
6. Sweating
7. Changes in menstrual patterns
8. Increased sensitivity to heat
9. Changes in bowel patterns, especially more frequent bowel movements
10. An enlarged thyroid gland (goiter), which may appear as a swelling at the base of your neck
11. Fatigue, muscle weakness
12. Difficulty sleeping
13. Skin thinning
14. Fine, brittle hair

Procedure Codes

Codes
80438, 80439, 83519, 84432, 84436, 84437, 84439, 84442, 84443, 84445, 84479, 84480, 84481, 84482, 86376, 86800

References:

AAFP. (2012). Hypothyroidism: An Update. Retrieved from https://www.aafp.org/afp/2012/0801/p244.html

AAFP. (2018). Thyroid Dysfunction Screening. Retrieved from https://www.aafp.org/patient-care/clinical-recommendations/all/thyroid-dysfunction.html

AAP. (2017). Retrieved from http://www.choosingwisely.org/clinician-lists/aap-soen-avoid-measuring-thyroid-function-and-insulin-levels-in-obese-children/

ACOG. (2020). Thyroid Disease in Pregnancy: ACOG Practice Bulletin, Number 223. *Obstet Gynecol, 135*(6), e261-e274. doi:10.1097/aog.0000000000003893

Alexander, E. K., Pearce, E. N., Brent, G. A., Brown, R. S., Chen, H., Dosiou, C., . . . Sullivan, S. (2017). 2017 Guidelines of the American Thyroid Association for the Diagnosis and Management of Thyroid Disease During Pregnancy and the Postpartum. *Thyroid, 27*(3), 315-389. doi:10.1089/thy.2016.0457

ASCP. (2015). Retrieved from http://www.choosingwisely.org/clinician-lists/american-society-clinical-pathology-suspected-thyroid-disease-evaluation/

ASCP. (2020). American Society for Clinical Pathology. Retrieved from https://www.choosingwisely.org/clinician-lists/ascp32-avoid-thyroid-stimulating-hormone-tsh-screening-in-annual-well-visits-for-asymptomatic-adults-regardless-of-age/

Bernstein, J. A., Lang, D. M., Khan, D. A., Craig, T., Dreyfus, D., Hsieh, F., . . . Wallace, D. (2014). The diagnosis and management of acute and chronic urticaria: 2014 update. *J Allergy Clin Immunol, 133*(5), 1270-1277. doi:10.1016/j.jaci.2014.02.036

Biktagirova, E. M., Sattarova, L. I., Vagapova, G. R., Skibo, Y. V., Chuhlovina, E. N., Kravtsova, O. A., & Abramova, Z. I. (2016). [Biochemical and immunological markers of autoimmune thyroiditis]. *Biomed Khim, 62*(4), 458-465. doi:10.18097/pbmc20166204458

Brent, G. (2017). Thyroid hormone action. In D. Ross (Ed.), *UpToDate*. Waltham. MA.

Brent, G. (2020). Thyroid hormone action. In D. Ross (Ed.), *UpToDate*. Waltham. MA.

Burmeister, L. A. (1995). Reverse T3 Does Not Reliably Differentiate Hypothyroid Sick Syndrome from Euthyroid Sick Syndrome. *Thyroid, 5*(6), 435-441. doi:10.1089/thy.1995.5.435

CFPC. (2020). Thirteen Things Physicians and Patients Should Question. Retrieved from https://choosingwiselycanada.org/family-medicine/

CSEM. (2020). Five Things Physicians and Patients Should Question. Retrieved from https://choosingwiselycanada.org/endocrinology-and-metabolism/

CTFPHC. (2019). Summary of recommendations for clinicians and policy-makers. Retrieved from https://canadiantaskforce.ca/guidelines/published-guidelines/asymptomatic-thyroid-dysfunction/

Diana, T., Krause, J., Olivo, P. D., König, J., Kanitz, M., Decallonne, B., & Kahaly, G. J. (2017). Prevalence and clinical relevance of thyroid stimulating hormone receptor-blocking antibodies in autoimmune thyroid disease. *Clin Exp Immunol, 189*(3), 304-309. doi:10.1111/cei.12980

Easy DNA. (2020). Genetic Predisposition Testing for Graves' Disease. Retrieved from https://www.easy-dna.com/genetic-predisposition-dna-testing/graves-disease/

ES. (2020). Five Things Physicians and Patients Should Question. Retrieved from https://www.choosingwisely.org/societies/endocrine-society/

EverlyWell. (2020). Check your thyroid from the comfort of home. Retrieved from https://www.everlywell.com/products/thyroid-test/

Garber, J. R., Cobin, R. H., Gharib, H., Hennessey, J. V., Klein, I., Mechanick, J. I., . . . Woeber, K. A. (2012). Clinical practice guidelines for hypothyroidism in adults: cosponsored by the American Association of Clinical Endocrinologists and the American Thyroid Association. *Endocr Pract, 18*(6), 988-1028. doi:10.4158/ep12280.gl

Gholve, C., Kumarasamy, J., Kulkarni, S., & Rajan, M. G. R. (2017). In-House Solid-Phase Radioassay for the Detection of Anti-thyroglobulin Autoantibodies in Patients with Differentiated Thyroid Cancer. *Indian J Clin Biochem, 32*(1), 39-44. doi:10.1007/s12291-016-0568-7

Gomes-Lima, C., & Burman, K. D. (2018). Reverse T3 or perverse T3? Still puzzling after 40 years. *Cleve Clin J Med, 85*(6), 450-455. doi:10.3949/ccjm.85a.17079

Health_Testing_Centers. (2020). Thyroid Function. Retrieved from https://www.healthtestingcenters.com/search-results/?search=thyroid

HealthCheck. (2020). Complete Thyroid Function Panel. Retrieved from http://www.healthcheckusa.com/thyroid-tests/panels/complete-thyroid-function-panel.aspx

Jin, H. Y. (2018). Prevalence of subclinical hypothyroidism in obese children or adolescents and association between thyroid hormone and the components of metabolic syndrome. *J Paediatr Child Health, 54*(9), 975-980. doi:10.1111/jpc.13926

Jonklaas, J., Bianco, A. C., Bauer, A. J., Burman, K. D., Cappola, A. R., Celi, F. S., . . . Sawka, A. M. (2014). Guidelines for the treatment of hypothyroidism: prepared by the american thyroid association task force on thyroid hormone replacement. *Thyroid, 24*(12), 1670-1751. doi:10.1089/thy.2014.0028

Kahaly, G. J., Bartalena, L., Hegedus, L., Leenhardt, L., Poppe, K., & Pearce, S. H. (2018). 2018 European Thyroid Association Guideline for the Management of Graves' Hyperthyroidism. *Eur Thyroid J, 7*(4), 167-186. doi:10.1159/000490384

Kazerouni, F., & Amirrasouli, H. (2012). Performance characteristics of three automated immunoassays for thyroid hormones. *Caspian J Intern Med, 3*(2), 400-104.

Kiel, S., Ittermann, T., Völzke, H., Chenot, J.-F., & Angelow, A. (2020). Frequency of thyroid function tests and examinations in participants of a population-based study. *BMC Health Services Research, 20*(1), 70. doi:10.1186/s12913-020-4910-7

Kluesner, J. K., Beckman, D. J., Tate, J. M., Beauvais, A. A., Kravchenko, M. I., Wardian, J. L., . . . True, M. W. (2018). Analysis of current thyroid function test ordering practices. *J Eval Clin Pract, 24*(2), 347-352. doi:10.1111/jep.12846

Korevaar, T. I. M., Derakhshan, A., Taylor, P. N., Meima, M., Chen, L., Bliddal, S., . . . Peeters, R. P. (2019). Association of Thyroid Function Test Abnormalities and Thyroid Autoimmunity With Preterm Birth: A Systematic Review and Meta-analysis. *Jama, 322*(7), 632-641. doi:10.1001/jama.2019.10931

Kravets, I. (2016). Hyperthyroidism: Diagnosis and Treatment. *Am Fam Physician, 93*(5), 363-370.

LetsGetChecked. (2020). Home Thyroid Testing. Retrieved from https://www.letsgetchecked.com/us/en/home-thyroid-test/

Leung, A. M., & Brent, G. A. (2016). The Influence of Thyroid Hormone on Growth Hormone Secretion and Action. In L. E. Cohen (Ed.), *Growth Hormone Deficiency: Physiology and Clinical Management* (pp. 29-46). Cham: Springer International Publishing.

Li, D., Radulescu, A., Shrestha, R. T., Root, M., Karger, A. B., Killeen, A. A., . . . Burmeister, L. A. (2017). Association of Biotin Ingestion With Performance of Hormone and Nonhormone Assays in Healthy Adults. *Jama, 318*(12), 1150-1160. doi:10.1001/jama.2017.13705

Livingston, M., Birch, K., Guy, M., Kane, J., & Heald, A. H. (2015). No role for tri-iodothyronine (T3) testing in the assessment of levothyroxine (T4) over-replacement in hypothyroid patients. *Br J Biomed Sci, 72*(4), 160-163.

Luewan, S., Chakkabut, P., & Tongsong, T. (2011). Outcomes of pregnancy complicated with hyperthyroidism: a cohort study. *Arch Gynecol Obstet, 283*(2), 243-247. doi:10.1007/s00404-010-1362-z

Masika, L. S., Zhao, Z., & Soldin, S. J. (2016). Is measurement of TT3 by immunoassay reliable at low concentrations? A comparison of the Roche Cobas 6000 vs. LC-MSMS. *Clin Biochem, 49*(12), 846-849. doi:10.1016/j.clinbiochem.2016.02.004

Medicine, S. f. M.-F. (2014, August 1, 2014). Screening for thyroid disease in pregnancy. Retrieved from https://www.smfm.org/publications/88-screening-for-thyroid-disease-in-pregnancy

Muller, I., Moran, C., Lecumberri, B., Decallonne, B., Robertson, N., Jones, J., & Dayan, C. M. (2019). 2019 European Thyroid Association Guidelines on the Management of Thyroid Dysfunction following Immune Reconstitution Therapy. *European Thyroid Journal, 8*(4), 173-185. doi:10.1159/000500881

NICE. (2019). Thyroid disease: assessment and management. Retrieved from https://www.nice.org.uk/guidance/ng145

Paloma_Health. (2020). Complete Thyroid Blood Test Kit. Retrieved from https://www.palomahealth.com/home-thyroid-blood-test-kit

Richmond, E. J., & Rogol, A. D. (2021, APril 19, 2021). Causes of short stature. *UpToDate.* Retrieved from https://www.uptodate.com/contents/causes-of-short-stature#H297546237

Ross, D. S. (2018). Laboratory assessment of thyroid function - UpToDate. In D. Cooper (Ed.), *Laboratory assessment of thyroid function*. Retrieved from https://www.uptodate.com/contents/laboratory-assessment-of-thyroid-function?search=thyroid%20function%20tests&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1

Ross, D. S. (2019a). Diagnosis of and screening for hypothyroidism in nonpregnant adults. Retrieved from https://www.uptodate.com/contents/diagnosis-of-and-screening-for-hypothyroidism-in-nonpregnant-adults?search=hypothyroidism&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1

Ross, D. S. (2019b). Diagnosis of hyperthyroidism - UpToDate. In D. Cooper (Ed.), *UpToDate*. Waltham. MA.

Ross, D. S. (2019c). Laboratory assessment of thyroid function. In D. Cooper (Ed.), *UpToDate*. Waltham. MA.

Ross, D. S. (2019d). Overview of thyroid disease in pregnancy. Retrieved from https://www.uptodate.com/contents/overview-of-thyroid-disease-in-pregnancy?topicRef=7891&source=related_link

Ross, D. S., Ardisson, L. J., & Meskell, M. J. (1989). Measurement of thyrotropin in clinical and subclinical hyperthyroidism using a new chemiluminescent assay. *J Clin Endocrinol Metab, 69*(3), 684-688. doi:10.1210/jcem-69-3-684

Ross, D. S., Burch, H. B., Cooper, D. S., Greenlee, M. C., Laurberg, P., Maia, A. L., . . . Walter, M. A. (2016). 2016 American Thyroid Association Guidelines for Diagnosis and Management of Hyperthyroidism and Other Causes of Thyrotoxicosis. *Thyroid, 26*(10), 1343-1421. doi:10.1089/thy.2016.0229

Rugge, J. B., Bougatsos, C., & Chou, R. (2015). Screening and treatment of thyroid dysfunction: an evidence review for the U.S. Preventive Services Task Force. *Ann Intern Med, 162*(1), 35-45. doi:10.7326/m14-1456

SMFM. (2019). Retrieved from http://www.choosingwisely.org/clinician-lists/smfm-screening-for-subclinical-hypothyroidism/

Society, E. (2018a). Retrieved from http://www.choosingwisely.org/clinician-lists/endocrine-society-thyroid-ultrasounds-in-patients-with-abnormal-thyroid-function-tests/

Society, E. (2018b). Five Things Physicians and Patients Should Question. Retrieved from https://www.choosingwisely.org/societies/endocrine-society/

Stagnaro-Green, A., Abalovich, M., Alexander, E., Azizi, F., Mestman, J., Negro, R., . . . Wiersinga, W. (2011). Guidelines of the American Thyroid Association for the diagnosis and management of thyroid disease during pregnancy and postpartum. *Thyroid, 21*(10), 1081-1125. doi:10.1089/thy.2011.0087

Taylor, P. N., Razvi, S., Pearce, S. H., & Dayan, C. M. (2013). Clinical review: A review of the clinical consequences of variation in thyroid function within the reference range. *J Clin Endocrinol Metab, 98*(9), 3562-3571. doi:10.1210/jc.2013-1315

TellmeGEN. (2020). Thyroid Function. Retrieved from https://www.tellmegen.com/results/individual-traits/thyroid-function/?lang=en

USPSTF. (2017). Thyroid Cancer: Screening. Retrieved from https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/thyroid-cancer-screening

Wilson, S. A., Stem, L. A., & Bruehlman, R. D. (2021). Hypothyroidism: Diagnosis and Treatment. *Am Fam Physician, 103*(10), 605-613.

Yazici, P., Mihmanli, M., Bozkurt, E., Ozturk, F. Y., & Uludag, M. (2016). Which is the best predictor of thyroid cancer: thyrotropin, thyroglobulin or their ratio? *Hormones (Athens), 15*(2), 256-263. doi:10.14310/horm.2002.1677

Policy Update History:

5/1/2022	New policy