Harvard Pilgrim Health Care | TUFTS Health Plan

Point32Health companies

Payment Policy:

Laboratory: Salivary Hormone Testing

Effective date: Nov. 1, 2025

Applies to:

Commercial Products

☒ Harvard Pilgrim Health Care Commercial products
☐ Tufts Health Plan Commercial products

Public Plans Products

☐ Tufts Health Direct – A Massachusetts Qualified Health Plan (QHP) (a commercial product)
☐ Tufts Health Together – MassHealth Accountable Care Partnership Plans
☐ Tufts Health RITogether – A Rhode Island Medicaid Plan
☐ Tufts Health One Care – A dual-eligible product

Senior Products

☐ Tufts Health Plan Senior Care Options (SCO) (a dual-eligible product)
☐ Tufts Medicare Preferred HMO/PPO (Medicare Advantage products)

Policy

Testing of saliva has been proposed as a non-invasive method to measure free (unbound to carrier proteins) steroid hormones, including estrogen, progesterone, androgens, and cortisol, for diagnosis of hormonal imbalance and administration of individualized hormone replacement therapy.

Hypercortisolism can occur in several disorders, including Cushing syndrome (pituitary hypersecretion of corticotropin/ACTH), or glucocorticoid administration resulting in obesity, hypertension, menstrual irregularity, and glucose intolerance.

Terms such as male and female are used when necessary to refer to sex assigned at birth.

Indications and/or Limitations of Coverage

Application of coverage criteria is dependent upon an individual's benefit coverage at the time of the request.

1. For individuals with signs and symptoms of Cushing syndrome, late night salivary cortisol testing **MEETS COVERAGE CRITERIA**.

The following does not meet coverage criteria due to a lack of available published scientific literature confirming that the test(s) is/are required and beneficial for the diagnosis and treatment of an individual's illness.

2. For the screening, diagnosis, and/or monitoring of menopause, infertility, endometriosis, polycystic ovary disease (PCOS), premenstrual syndrome, osteoporosis, sexual dysfunction, seasonal affective disorder, depression, multiple sclerosis, sleep disorders, or diseases related to aging, salivary hormone testing **DOES NOT MEET COVERAGE CRITERIA**.

Applicable CPT/HCPCS Procedure Codes

Procedure codes appearing in policy documents are included only as a general reference tool for each policy. They may not be all-inclusive.

Coding

Code	Description
82530	Cortisol; free
82533	Cortisol; total
S3650	Saliva test, hormone level; during menopause
0462U	Melatonin levels test, sleep study, 7 or 9 sample melatonin profile (cortisol optional), enzyme-linked immunosorbent assay (ELISA), saliva, screening/preliminary

Code	Description
	Proprietary Test: Salimetrics® Salivary Melatonin Profile (Circadian Phase Assessment) Lab/Manufacturer: Salimetrics® Clinical Laboratory, Salimetrics®, LLC

Evidence-based Scientific References

1. ACOG, ASRM. Compounded bioidentical menopausal hormone therapy. Fertility and sterility. Aug 2012;98(2):308-12. doi:10.1016/j.fertnstert.2012.06.002
2. Nieman, Biller BM, Findling JW, et al. The diagnosis of Cushing's syndrome: an Endocrine Society Clinical Practice Guideline. The Journal of clinical endocrinology and metabolism. May 2008;93(5):1526-40. doi:10.1210/jc.2008-0125
3. Nieman LK. Causes and pathophysiology of Cushing's syndrome. Updated September 19, 2024. https://www.uptodate.com/contents/causes-and-pathophysiology-of-cushing-syndrome
4. Lacroix A, Feelders RA, Stratakis CA, Nieman LK. Cushing's syndrome. Lancet (London, England). Aug 29 2015;386(9996):913-27. doi:10.1016/s0140-6736(14)61375-1
5. Quddusi S, Browne P, Toivola B, Hirsch IB. Cushing syndrome due to surreptitious glucocorticoid administration. Archives of internal medicine. Feb 09 1998;158(3):294-6. doi:10.1001/archinte.158.3.294
6. Wood P. Salivary steroid assays - research or routine? Annals of clinical biochemistry. May 2009;46(Pt 3):183-96. doi:10.1258/acb.2008.008208
7. Conaway E. Bioidentical hormones: an evidence-based review for primary care providers. The Journal of the American Osteopathic Association. Mar 2011;111(3):153-64.
8. Flyckt RL, Liu J, Frasure H, Wekselman K, Buch A, Kingsberg SA. Comparison of salivary versus serum testosterone levels in postmenopausal women receiving transdermal testosterone supplementation versus placebo. Menopause (New York, NY). Jul-Aug 2009;16(4):680-8. doi:10.1097/gme.0b013e318199d5c4
9. Lewis JG, McGill H, Patton VM, Elder PA. Caution on the use of saliva measurements to monitor absorption of progesterone from transdermal creams in postmenopausal women. Maturitas. Jan 30 2002;41(1):1-6. doi:10.1016/s0378-5122(01)00250-x
10. Hardiman P, Thomas M, Osgood V, Vlassopoulou V, Ginsburg J. Are estrogen assays essential for monitoring gonadotropin stimulant therapy? Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. Dec 1990;4(4):261-9. doi:10.3109/09513599009024980
11. Klee GG, Heser DW. Techniques to measure testosterone in the elderly. Mayo Clinic proceedings. Jan 2000;75 Suppl:S19-25. doi:10.1016/S0025-6196(19)30637-8
12. Meulenberg PM, Ross HA, Swinkels LM, Benraad TJ. The effect of oral contraceptives on plasma-free and salivary cortisol and cortisone. Clinica chimica acta; international journal of clinical chemistry. Jun 15 1987;165(2-3):379-85. doi:10.1016/0009-8981(87)90183-5
13. Wren BG, McFarland K, Edwards L, et al. Effect of sequential transdermal progesterone cream on endometrium, bleeding pattern, and plasma progesterone and salivary progesterone levels in postmenopausal women. Climacteric : the journal of the International Menopause Society. Sep 2000;3(3):155-60. doi:10.1080/13697130008500109
14. Martin KA, Barbieri RL. Menopausal hormone therapy: Benefits and risks. Updated March 3, 2026. https://www.uptodate.com/contents/menopausal-hormone-therapy-benefits-and-risks
15. Taylor HS, Manson JE. Update in hormone therapy use in menopause. The Journal of clinical endocrinology and metabolism. Feb 2011;96(2):255-64. doi:10.1210/jc.2010-0536
16. Genova. Menopause™ The Original Genova Salivary Sex-Hormone Test. https://www.gdx.net/core/sample-reports/Menopause-Sample-Report.pdf
17. Genova. Hormonal Health. https://www.gdx.net/hormonal-health
18. Nieman LK. Measurement of cortisol in serum and saliva. Updated April 2, 2024. https://www.uptodate.com/contents/measurement-of-cortisol-in-serum-and-saliva
19. Nieman LK. Establishing the diagnosis of Cushing's syndrome. Updated December 3, 2025. https://www.uptodate.com/contents/establishing-the-diagnosis-of-cushing-syndrome
20. Fleseriu M, Hamrahian AH, Hoffman AR, Kelly DF, Katznelson L. American Association of Clinical Endocrinologists and American College of Endocrinology Disease State Clinical Review: Diagnosis of Recurrence in Cushing Disease. Endocr Pract. Dec 2016;22(12):1436-1448. doi:10.4158/ep161512.Dscr
21. ZRTLAB. LCMS Saliva Steroid & Steroid Synthesis Inhibitor Profile. https://www.zrtlab.com/media/2405/lcms-saliva-steroid-profile-pds.pdf
22. UnikeyHealth. Salivery Hormone Test. https://unikeyhealth.com/products/salivary-hormone-test
23. Genova. Rhythm™ Sample Report. https://www.gdx.net/core/sample-reports/Rhythm-Sample-Report.pdf
24. Genova. Menopause Plus™ Sample Report. 2026. https://www.gdx.net/core/sample-reports/Menopause-Plus-Sample-Report.pdf
25. Genova. Comprehensive Melatonin Profile Sample Report. https://www.gdx.net/core/sample-reports/Melatonin-Sample-Report.pdf
26. Genova. Adrenocortex Stress Profile. https://www.gdx.net/product/adrenocortex-stress-hormone-test-saliva

27. Spence K, McKeever E, Graham U, et al. Salivary cortisol determination using the Roche generation II assay. 2018;doi:10.1530/endoabs.59.P007
28. Wurtman. Multiple Sclerosis, Melatonin, and Neurobehavioral Diseases. Frontiers in endocrinology. 2017;8:280. doi:10.3389/fendo.2017.00280
29. Rossouw JE, Anderson GL, Prentice RL, et al. Risks and benefits of estrogen plus progestin in healthy postmenopausal women: principal results From the Women's Health Initiative randomized controlled trial. Jama. Jul 17 2002;288(3):321-33. doi:10.1001/jama.288.3.321
30. Schiffer L, Adaway JE, Arlt W, Keevil BG. A liquid chromatography-tandem mass spectrometry assay for the profiling of classical and 11-oxygenated androgens in saliva. Annals of clinical biochemistry. Sep 2019;56(5):564-573. doi:10.1177/0004563219847498
31. El-Farhan N, Rees DA, Evans C. Measuring cortisol in serum, urine and saliva - are our assays good enough? Annals of clinical biochemistry. May 2017;54(3):308-322. doi:10.1177/0004563216687335
32. Li XS, Li S, Kellermann G. Simultaneous determination of three estrogens in human saliva without derivatization or liquid-liquid extraction for routine testing via miniaturized solid phase extraction with LC-MS/MS detection. Talanta. Feb 1 2018;178:464-472. doi:10.1016/j.talanta.2017.09.062
33. Hinojosa-Amaya JM, Varlamov EV, McCartney S, Fleseriu M. Hypercortisolemia Recurrence in Cushing's Disease; a Diagnostic Challenge. Frontiers in endocrinology. 2019;10:740. doi:10.3389/fendo.2019.00740
34. Nunes ML, Vattaut S, Corcuff JB, et al. Late-night salivary cortisol for diagnosis of overt and subclinical Cushing's syndrome in hospitalized and ambulatory patients. The Journal of clinical endocrinology and metabolism. Feb 2009;94(2):456-62. doi:10.1210/jc.2008-1542
35. Ueland GÅ, Kellmann R, Jørstad Davidsen M, et al. Bedtime Salivary Cortisol as a Screening Test for Cushing Syndrome in Children. Journal of the Endocrine Society. 2021;5(5)doi:10.1210/jendso/bvab033
36. Sakkas D, Howles CM, Atkinson L, et al. A multi-centre international study of salivary hormone oestradiol and progesterone measurements in ART monitoring. Reprod Biomed Online. Oct 24 2020;doi:10.1016/j.rbmo.2020.10.012
37. Doi SA, Clark J, Russell AW. Concordance of the late night salivary cortisol in patients with Cushing's syndrome and elevated urine-free cortisol. Endocrine. Apr 2013;43(2):327-33. doi:10.1007/s12020-012-9855-0
38. Antonelli G, Ceccato F, Artusi C, Marinova M, Plebani M. Salivary cortisol and cortisone by LC-MS/MS: validation, reference intervals and diagnostic accuracy in Cushing's syndrome. Clinica chimica acta; international journal of clinical chemistry. Dec 7 2015;451(Pt B):247-51. doi:10.1016/j.cca.2015.10.004
39. Crewther BT, Obminski Z, Orysiak J, Al-Dujaili EAS. The utility of salivary testosterone and cortisol concentration measures for assessing the stress responses of junior athletes during a sporting competition. J Clin Lab Anal. Jan 2018;32(1)doi:10.1002/jcla.22197
40. Valassi E, Franz H, Brue T, et al. Diagnostic tests for Cushing's syndrome differ from published guidelines: data from ERCUSYN. Eur J Endocrinol. May 2017;176(5):613-624. doi:10.1530/eje-16-0967
41. Oldenburg M, Jensen HJ. Saliva cortisol level as a strain parameter for crews aboard merchant ships. Chronobiol Int. Jul 2019;36(7):1005-1012. doi:10.1080/07420528.2019.1604540
42. Kim YJ, Kim JH, Hong AR, et al. Stimulated Salivary Cortisol as a Noninvasive Diagnostic Tool for Adrenal Insufficiency. Endocrinol Metab (Seoul). Sep 2020;35(3):628-635. doi:10.3803/EnM.2020.707
43. Kvam Hellan K, Lyngstad M, Methlie P, Løvås K, Husebye ES, Ueland GÅ. Utility of Salivary Cortisol and Cortisone in the Diagnostics of Adrenal Insufficiency. The Journal of Clinical Endocrinology & Metabolism. 2024:dgae486. doi:10.1210/clinem/dgae486
44. Brouillard A, Davignon L-M, Cernik R, et al. Comparing immunoassay and mass spectrometry techniques for salivary sex hormone analysis. Psychoneuroendocrinology. 2025/04/01/ 2025;174:107379. doi:10.1016/j.psyneuen.2025.107379
45. Goodman NF, Cobin RH, Ginzburg SB, Katz IA, Woode DE. American Association of Clinical Endocrinologists Medical Guidelines for Clinical Practice for the diagnosis and treatment of menopause. Endocr Pract. Nov-Dec 2011;17 Suppl 6:1-25. doi:10.4158/EP.17.S6.1
46. Cobin RH, Goodman NF. American Association of Clinical Endocrinologists and American College of Endocrinology Position Statement on Menopause–2017 Update. Endocrine Practice. 2017;23(7):869-881. doi:10.4158/EP171828.PS
47. ACOG AJP, Belinda Yauger, ASRM. Compounded Bioidentical Menopausal Hormone Therapy. Obstetrics and Gynecology. 2023. https://www.acog.org/-/media/project/acog/acogorg/clinical/files/clinical-consensus/articles/2023/11/compounded-bioidentical-menopausal-hormone-therapy.pdf
48. NAMS. The 2012 hormone therapy position statement of: The North American Menopause Society. Menopause (New York, NY). Mar 2012;19(3):257-71. doi:10.1097/gme.0b013e31824b970a
49. NAMS. The 2022 hormone therapy position statement of The North American Menopause Society. Menopause: The Journal of the North American Menopause Society. 2022;doi:10.1097/GME.0000000000002028
50. Santoro N, Braunstein GD, Butts CL, Martin KA, McDermott M, Pinkerton JV. Compounded Bioidentical Hormones in Endocrinology Practice: An Endocrine Society Scientific Statement. The Journal of clinical endocrinology and metabolism. Apr 2016;101(4):1318-43. doi:10.1210/jc.2016-1271
51. Nieman. Cushing's syndrome: update on signs, symptoms and biochemical screening. Eur J Endocrinol. Oct 2015;173(4):M33-8. doi:10.1530/eje-15-0464

Publication History

08/01/2026: Administrative edits
09/01/2025: Policy created to support coverage guidelines, effective for dates of service beginning Nov. 1, 2025

Background and Disclaimer Information

This policy applies to the products of Harvard Pilgrim Health Care and Tufts Health Plan and their affiliates, as identified in the check boxes on the first page for services performed by contracted providers.

Payment is based on member benefits and eligibility on the date of service, medical necessity review, where applicable, and the provider's network participation agreement with the Plan. As every claim is unique, this policy is neither a guarantee of payment, nor a final indication of how specific claim(s) will be adjudicated. Claims payment is subject to member eligibility and benefits on the date of service, coordination of benefits, referral/authorization, and utilization management requirements (when applicable), adherence to Plan policies and procedures, and claims editing logic. An authorization is not a guarantee of payment.

Point32Health reserves the right to amend a payment policy at its discretion. CPT and HCPCS codes are updated as applicable; please adhere to the most recent CPT and HCPCS coding guidelines.

We reserve the right to conduct audits on any provider and/or facility to ensure accuracy and compliance with the guidelines stated in this payment policy. If such an audit determines that a provider/facility did not comply with this payment policy, Harvard Pilgrim Health Care and Tufts Health Plan will expect the provider/facility to refund all payments related to noncompliance.