

Humana® Claims Payment Policy

Subject: Laboratory - Diabetes Mellitus Testing

Application: Commercial and Medicare Advantage Products

Policy number: LAB2024001

Related policies: N/A

Published date: 11/2024

Review date: 11/2024

Disclaimer: The intended audience of this medical claims payment policy is health care providers who treat Humana members. This policy is made available to provide information on certain Humana claims payment policies. This policy is a guideline only and does not constitute medical advice, guarantee of payment, plan pre-authorization, an explanation of benefits, or a contract. This policy does not govern whether a procedure is covered under a specific member plan or policy, nor is it intended to address every claim situation. Claims may be affected by other factors, such as: state and federal laws and regulations, provider contract terms, and our professional judgment. This policy is subject to change or termination by Humana. Humana has full and final discretionary authority for its interpretation and application. No part of this policy may be reproduced, stored in a retrieval system or transmitted, in any shape or form or by any means, electronic, mechanical, photocopying or otherwise without express written permission from Humana. When printed, this version becomes uncontrolled. For the most current information, always refer to the following website: [Humana.com/ClaimPaymentPolicies](https://www.humana.com/ClaimPaymentPolicies)

Medicare Advantage Payment Policy

As a Medicare Advantage plan, we have developed payment policies to explain coverage more fully for services. The criteria outlined for the Commercial Payment Policy will apply to Medicare Advantage plans except when the procedure(s) has established criteria through the Original Medicare National Coverage Determinations (NCD's) and Local Coverage Determinations (LCD's) as outlined below.

In addition to this policy, claims payments are subject to other plan requirements for the processing and payment of claims, including, but not limited to, requirements of medical necessity and reasonableness and applicable referral or authorization requirements.

- 1) For individuals with a diagnosis of either type 1 or type 2 diabetes, measurement of hemoglobin A1c (83037) **IS REIMBURSABLE** once every three months.
- 2) For individuals with a diagnosis of prediabetes, annual screening for type 2 diabetes with a measurement of hemoglobin A1c (83037) **IS REIMBURSABLE**.
- 3) Screening for prediabetes or type 2 diabetes with a measurement of hemoglobin A1c (83037) **IS REIMBURSABLE** once every 3 years in individuals aged 18 and over with any of the following:
 - Overweight or obese
 - History of gestational diabetes
 - Family history of diabetes
 - Cardiovascular disease
 - Hypertension
 - Hypercholesterolemia
 - Metabolic syndrome
 - Polycystic ovary syndrome
 - High-risk race/ethnicity (e.g., African American, Latino or Hispanics, Native American, Asian American, Pacific Islanders) at risk for Type 2 diabetes (e.g., obesity)
 - Physical inactivity
 - Other clinical conditions associated with insulin resistance (e.g., acanthosis nigricans)
- 4) Screening for diabetes with an oral glucose tolerance test (OGTT) (82951, 82952) or measurement of hemoglobin A1c (83037) **IS REIMBURSABLE** once every 3 years for children aged 10-17 with at least one of the following characteristics:

- Overweight or obese
- Family history of type 2 diabetes
- Hypertension
- Dyslipidemia
- Polycystic ovary syndrome
- Acanthosis nigricans

- 5) For individuals 10 years of age or older who have been diagnosed with cystic fibrosis (CF), screening for CF-related diabetes with an OGTT (82951, 82952) **IS REIMBURSABLE** once every 365 days.
- 6) For pregnant individuals, an OGTT (82951, 82952) **IS REIMBURSABLE** up to once per month during pregnancy.
- 7) Measurement of hemoglobin A1c (83037) **IS NOT REIMBURSABLE** when billed in conjunction with measurement of (82985) fructosamine.

Applicable procedures for Medicare Advantage plans

Procedure Code	Code Description
82951	Glucose; tolerance test (GTT), 3 specimens (includes glucose)
82952	Glucose; tolerance test, each additional beyond 3 specimens (List separately in addition to code for primary procedure)
83037	Hemoglobin; glycosylated (A1c) by device cleared by FDA for home use

References

AAFP. (2022). Screening for Abnormal Blood Glucose and Type 2 Diabetes Mellitus: Recommendation Statement. *Am Fam Physician*, 105(1), Online. <https://www.aafp.org/afp/2022/0100/od1.html>

ADA. (2022, July 28). *Statistics About Diabetes*. <https://www.diabetes.org/resources/statistics/statistics-about-diabetes>

Al-Badri, A., Hashmath, Z., Oldland, G. H., Miller, R., Javaid, K., Syed, A. A., Ansari, B., Gaddam, S., Witschey, W. R., Akers, S. R., & Chirinos, J. A. (2018). Poor Glycemic Control Is Associated With Increased Extracellular Volume Fraction in Diabetes. *Diabetes Care*. <https://doi.org/10.2337/dc18-0324>

Al Mansari, A., Obeid, Y., Islam, N., Fariduddin, M., Hassoun, A., Djaballah, K., Malek, M., Dicker, D., & Chaudhury, T. (2018). GOAL study: clinical and non-clinical predictive factors for achieving glycemic control in people with type 2 diabetes in real clinical practice. *BMJ Open Diabetes Res Care*, 6(1), e000519. <https://doi.org/10.1136/bmjdr-2018-000519>

American Diabetes Association Professional Practice, C. (2022a). 4. Comprehensive Medical Evaluation and Assessment of Comorbidities: Standards of Medical Care in Diabetes-2022. *Diabetes Care*, 45(Suppl 1), S46-S59. <https://doi.org/10.2337/dc22-S004>

American Diabetes Association Professional Practice, C. (2022b). 15. Management of Diabetes in Pregnancy: Standards of Medical Care in Diabetes-2022. *Diabetes Care*, 45(Suppl 1), S232-S243. <https://doi.org/10.2337/dc22-S015>

Arbiol-Roca, A., Pérez-Hernández, E. A., Aisa-Abdellaoui, N., Valls-Guallar, T., Gálvez-Carmona, F., Mariano-Serrano, E., Medina-Casanovas, M., & Ruiz-Morer, M. R. (2021). The utility HBA1c test as a screening biomarker for detecting gestational diabetes mellitus. *Clinical Biochemistry*, 90, 58-61. <https://doi.org/10.1016/j.clinbiochem.2021.01.002>

Blonde, L., Umpierrez, G. E., Reddy, S. S., McGill, J. B., Berga, S. L., Bush, M., Chandrasekaran, S., DeFronzo, R. A., Einhorn, D., Galindo, R. J., Gardner, T. W., Garg, R., Garvey, W. T., Hirsch, I. B., Hurley, D. L., Izuora, K., Kosiborod, M., Olson, D., Patel, S. B., . . . Weber, S. L. (2022). American Association of Clinical Endocrinology Clinical Practice Guideline: Developing a Diabetes Mellitus Comprehensive Care Plan—2022 Update. *Endocrine Practice*, 28(10), 923-1049. <https://doi.org/10.1016/j.eprac.2022.08.002>

- Blunt, B. A., Barrett-Connor, E., & Wingard, D. L. (1991). Evaluation of fasting plasma glucose as screening test for NIDDM in older adults. Rancho Bernardo Study. *Diabetes Care*, 14(11), 989-993.
<https://doi.org/10.2337/diacare.14.11.989>
- CDC. (2020). *National Diabetes Statistics Report 2020 Estimates of Diabetes and Its Burden in the United States*.
<https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf>
- Committee, D. C. C. P. G. E. (2018). *Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada*. <http://guidelines.diabetes.ca/docs/CPG-2018-full-EN.pdf>
- Cowie, C. C., Rust, K. F., Byrd-Holt, D. D., Gregg, E. W., Ford, E. S., Geiss, L. S., Bainbridge, K. E., & Fradkin, J. E. (2010). Prevalence of Diabetes and High Risk for Diabetes Using A1C Criteria in the U.S. Population in 1988–2006. *Diabetes Care*, 33(3), 562. <https://doi.org/10.2337/dc09-1524>
- Darukhanavala, A., Van Dessel, F., Ho, J., Hansen, M., Kremer, T., & Alfego, D. (2021). Use of hemoglobin A1c to identify dysglycemia in cystic fibrosis. *PLoS One*, 16(4), e0250036. <https://doi.org/10.1371/journal.pone.0250036>
- 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., Owens, D. K., Pbert, L., Silverstein, M., Stevermer, J., Tseng, C. W., & Wong, J. B. (2021). Screening for Prediabetes and Type 2 Diabetes: US Preventive Services Task Force Recommendation Statement. *Jama*, 326(8), 736-743. <https://doi.org/10.1001/jama.2021.12531>
- Durnwald, C. (2023, July 5, 2023). *Gestational diabetes mellitus: screening, diagnosis, and prevention*
<https://www.uptodate.com/contents/gestational-diabetes-mellitus-screening-diagnosis-and-prevention>
- ElSayed, N. A., Aleppo, G., Aroda, V. R., Bannuru, R. R., Brown, F. M., Bruemmer, D., Collins, B. S., Hilliard, M. E., Isaacs, D., Johnson, E. L., Kahan, S., Khunti, K., Leon, J., Lyons, S. K., Perry, M. L., Prahalad, P., Pratley, R. E., Seley, J. J., Stanton, R. C., . . . on behalf of the American Diabetes, A. (2023a). 2. Classification and Diagnosis of Diabetes: Standards of Care in Diabetes-2023. *Diabetes Care*, 46(Suppl 1), S19-S40. <https://doi.org/10.2337/dc23-S002>
- ElSayed, N. A., Aleppo, G., Aroda, V. R., Bannuru, R. R., Brown, F. M., Bruemmer, D., Collins, B. S., Hilliard, M. E., Isaacs, D., Johnson, E. L., Kahan, S., Khunti, K., Leon, J., Lyons, S. K., Perry, M. L., Prahalad, P., Pratley, R. E., Seley, J. J., Stanton, R. C., . . . on behalf of the American Diabetes, A. (2023b). 14. Children and Adolescents: Standards of Care in Diabetes-2023. *Diabetes Care*, 46(Suppl 1), S230-S253. <https://doi.org/10.2337/dc23-S014>
- Gambino, R. (2007). Glucose: a simple molecule that is not simple to quantify. *Clin Chem*, 53(12), 2040-2041.
<https://doi.org/10.1373/clinchem.2007.094466>
- Garber, A. J., Handelsman, Y., Grunberger, G., Einhorn, D., Abrahamson, M. J., Barzilay, J. I., Blonde, L., Bush, M. A., DeFronzo, R. A., Garber, J. R., Garvey, W. T., Hirsch, I. B., Jellinger, P. S., McGill, J. B., Mechanick, J. I., Perreault, L., Rosenblit, P. D., Samson, S., & Umpierrez, G. E. (2020). CONSENSUS STATEMENT BY THE AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS AND AMERICAN COLLEGE OF ENDOCRINOLOGY ON THE COMPREHENSIVE TYPE 2 DIABETES MANAGEMENT ALGORITHM - 2020 EXECUTIVE SUMMARY. *Endocr Pract*, 26(1), 107-139.
<https://doi.org/10.4158/cs-2019-0472>
- Geifman-Holtzman, O., Machtinger, R., Spiliopoulos, M., Schiff, E., Koren-Morag, N., & Dulitzki, M. (2010). The clinical utility of oral glucose tolerance test at term: can it predict fetal macrosomia? *Arch Gynecol Obstet*, 281(5), 817-821.
<https://doi.org/10.1007/s00404-009-1160-7>
- Goodney, P. P., Newhall, K. A., Bekelis, K., Gottlieb, D., Comi, R., Chaudrain, S., Faerber, A. E., Mackenzie, T. A., & Skinner, J. S. (2016). Consistency of Hemoglobin A1c Testing and Cardiovascular Outcomes in Medicare Patients With Diabetes. *J Am Heart Assoc*, 5(8). <https://doi.org/10.1161/jaha.116.003566>
- Gu, J., Pan, J. A., Fan, Y. Q., Zhang, H. L., Zhang, J. F., & Wang, C. Q. (2018). Prognostic impact of HbA1c variability on long-term outcomes in patients with heart failure and type 2 diabetes mellitus. *Cardiovasc Diabetol*, 17(1), 96.
<https://doi.org/10.1186/s12933-018-0739-3>
- Hanssen, K. F., Bangstad, H. J., Brinchmann-Hansen, O., & Dahl-Jorgensen, K. (1992). Blood glucose control and diabetic microvascular complications: long-term effects of near-normoglycaemia. *Diabet Med*, 9(8), 697-705.
- Hayward, R. A., & Selvin, E. (2022, August 31). *Screening for type 2 diabetes mellitus*.
<https://www.uptodate.com/contents/screening-for-type-2-diabetes-mellitus>
- Hoelzel, W., Weykamp, C., Jeppsson, J. O., Miedema, K., Barr, J. R., Goodall, I., Hoshino, T., John, W. G., Kobold, U., Little, R., Mosca, A., Mauri, P., Paroni, R., Susanto, F., Takei, I., Thienpont, L., Umamoto, M., & Wiedmeyer, H. M. (2004). IFCC reference system for measurement of hemoglobin A1c in human blood and the national standardization

- schemes in the United States, Japan, and Sweden: a method-comparison study. *Clin Chem*, 50(1), 166-174. <https://doi.org/10.1373/clinchem.2003.024802>
- IEC. (2009). International Expert Committee report on the role of the A1C assay in the diagnosis of diabetes. *Diabetes Care*, 32(7), 1327-1334. <https://doi.org/10.2337/dc09-9033>
- Inzucchi, S., & Lupsa, B. (2023, February 7). *Clinical presentation, diagnosis, and initial evaluation of diabetes mellitus in adults*. <https://www.uptodate.com/contents/clinical-presentation-diagnosis-and-initial-evaluation-of-diabetes-mellitus-in-adults>
- Jin, J. (2022). Screening for Type 2 Diabetes in Children and Adolescents. *Jama*, 328(10), 993. <https://doi.org/10.1001/jama.2022.15240>
- Kanyal Butola, L., Ambad, R., Kanyal, D., & Vagga, A. (2021). Glycated Haemoglobin-Recent Developments and Review on Non-Glycemic Variables.
- Kramer, C. K., Araneta, M. R., & Barrett-Connor, E. (2010). A1C and diabetes diagnosis: The Rancho Bernardo Study. *Diabetes Care*, 33(1), 101-103. <https://doi.org/10.2337/dc09-1366>
- LeRoith, D., Biessels, G. J., Braithwaite, S. S., Casanueva, F. F., Draznin, B., Halter, J. B., Hirsch, I. B., McDonnell, M. E., Molitch, M. E., Murad, M. H., & Sinclair, A. J. (2019). Treatment of Diabetes in Older Adults: An Endocrine Society* Clinical Practice Guideline. *The Journal of Clinical Endocrinology & Metabolism*, 104(5), 1520-1574. <https://doi.org/10.1210/jc.2019-00198>
- Ludvigsson, J. F., Neovius, M., Söderling, J., Gudbjörnsdóttir, S., Svensson, A. M., Franzén, S., Stephansson, O., & Pasternak, B. (2019). Maternal Glycemic Control in Type 1 Diabetes and the Risk for Preterm Birth: A Population-Based Cohort Study. *Ann Intern Med*, 170(10), 691-701. <https://doi.org/10.7326/m18-1974>
- Malkani, S., & Mordes, J. P. (2011). The implications of using Hemoglobin A1C for diagnosing Diabetes Mellitus. *Am J Med*, 124(5), 395-401. <https://doi.org/10.1016/j.amjmed.2010.11.025>
- Mamtora, S., Maghsoudlou, P., Hasan, H., Zhang, W., & El-Ashry, M. (2021). Assessing the Clinical Utility of Point of Care HbA1c in the Ophthalmology Outpatient Setting. *Clinical ophthalmology (Auckland, N.Z.)*, 15, 41-47. <https://doi.org/10.2147/OPHTH.S287531>
- Mañé, L., Flores-Le Roux, J. A., Pedro-Botet, J., Gortazar, L., Chillarón, J. J., Llauradó, G., Payà, A., & Benaiges, D. (2019). Is fasting plasma glucose in early pregnancy a better predictor of adverse obstetric outcomes than glycated haemoglobin? *Eur J Obstet Gynecol Reprod Biol*, 234, 79-84. <https://doi.org/10.1016/j.ejogrb.2018.12.036>
- MayoClinic. (2022, March 24). *Glucose Tolerance Test*. <https://www.mayoclinic.org/tests-procedures/glucose-tolerance-test/about/pac-20394296>
- Merzon, E., Green, I., Shpigelman, M., Vinker, S., Raz, I., Golan-Cohen, A., & Eldor, R. (2021). Haemoglobin A1c is a predictor of COVID-19 severity in patients with diabetes. *Diabetes Metab Res Rev*, 37(5), e3398. <https://doi.org/10.1002/dmrr.3398>
- Miller, W. G., Myers, G. L., Ashwood, E. R., Killeen, A. A., Wang, E., Ehlers, G. W., Hassemer, D., Lo, S. F., Secombe, D., Siekmann, L., Thienpont, L. M., & Toth, A. (2008). State of the art in trueness and interlaboratory harmonization for 10 analytes in general clinical chemistry. *Arch Pathol Lab Med*, 132(5), 838-846. [https://doi.org/10.1043/1543-2165\(2008\)132\[838:sotait\]2.0.co;2](https://doi.org/10.1043/1543-2165(2008)132[838:sotait]2.0.co;2)
- Mitsios, J. P., Ekinci, E. I., Mitsios, G. P., Churilov, L., & Thijs, V. (2018). Relationship Between Glycated Hemoglobin and Stroke Risk: A Systematic Review and Meta-Analysis. *J Am Heart Assoc*, 7(11). <https://doi.org/10.1161/jaha.117.007858>
- NACB. (2011). Guidelines and Recommendations for Laboratory Analysis in the Diagnosis and Management of Diabetes Mellitus. In D. Sacks (Ed.), *LABORATORY MEDICINE PRACTICE GUIDELINES*. <https://www.aacc.org/science-and-practice/practice-guidelines/diabetes-mellitus>
- Nathan, D. M., Singer, D. E., Hurxthal, K., & Goodson, J. D. (1984). The clinical information value of the glycosylated hemoglobin assay. *N Engl J Med*, 310(6), 341-346. <https://doi.org/10.1056/nejm198402093100602>
- NGSP. (2023, 8/23). *College of American Pathologists (CAP) GH5 Survey Data*: . <https://ngsp.org/CAP/CAP23b.pdf>
- NICE. (2022, June 29). *Type 2 diabetes in adults: management*. NICE. <https://www.nice.org.uk/guidance/ng28/chapter/1-Recommendations>
- Petersen, P. H., Jorgensen, L. G., Brandslund, I., De Fine Olivarius, N., & Stahl, M. (2005). Consequences of bias and imprecision in measurements of glucose and hba1c for the diagnosis and prognosis of diabetes mellitus. *Scand J Clin Lab Invest Suppl*, 240, 51-60. <https://doi.org/10.1080/00365510500236135>

- Rohlfing, C., Wiedmeyer, H. M., Little, R., Grotz, V. L., Tennill, A., England, J., Madsen, R., & Goldstein, D. (2002). Biological variation of glycohemoglobin. *Clin Chem*, 48(7), 1116-1118.
- Rossing, P., Caramori, M. L., Chan, J. C. N., Heerspink, H. J. L., Hurst, C., Khunti, K., Liew, A., Michos, E. D., Navaneethan, S. D., Olowu, W. A., Sadusky, T., Tandon, N., Tuttle, K. R., Wanner, C., Wilkens, K. G., Zoungas, S., & de Boer, I. H. (2022). KDIGO 2022 Clinical Practice Guideline for Diabetes Management in Chronic Kidney Disease. *Kidney International*, 102(5), S1-S127. <https://doi.org/10.1016/j.kint.2022.06.008>
- Saito, Y., Noto, H., Takahashi, O., & Kobayashi, D. (2019). Visit-to-Visit Hemoglobin A1c Variability Is Associated With Later Cancer Development in Patients With Diabetes Mellitus. *Cancer J*, 25(4), 237-240. <https://doi.org/10.1097/ppo.0000000000000387>
- Selvin, E. (2022, November 14). *Measurements of glycemic control in diabetes mellitus*. <https://www.uptodate.com/contents/measurements-of-glycemic-control-in-diabetes-mellitus>
- Selvin, E., Crainiceanu, C. M., Brancati, F. L., & Coresh, J. (2007). Short-term variability in measures of glycemia and implications for the classification of diabetes. *Arch Intern Med*, 167(14), 1545-1551. <https://doi.org/10.1001/archinte.167.14.1545>
- Skyler, J. S., Bakris, G. L., Bonifacio, E., Darsow, T., Eckel, R. H., Groop, L., Groop, P. H., Handelsman, Y., Insel, R. A., Mathieu, C., McElvaine, A. T., Palmer, J. P., Pugliese, A., Schatz, D. A., Sosenko, J. M., Wilding, J. P., & Ratner, R. E. (2017). Differentiation of Diabetes by Pathophysiology, Natural History, and Prognosis. *Diabetes*, 66(2), 241-255. <https://doi.org/10.2337/db16-0806>
- Tommerdahl, K. L., Brinton, J. T., Vigers, T., Nadeau, K. J., Zeitler, P. S., & Chan, C. L. (2019). Screening for cystic fibrosis-related diabetes and prediabetes: Evaluating 1,5-anhydroglucitol, fructosamine, glycated albumin, and hemoglobin A1c. *Pediatr Diabetes*, 20(8), 1080-1086. <https://doi.org/10.1111/pedi.12914>
- USPSTF. (2018, October). *Grade Definitions*. <https://www.uspreventiveservicestaskforce.org/uspstf/about-uspstf/methods-and-processes/grade-definitions>
- USPSTF. (2021). Screening for Gestational Diabetes: US Preventive Services Task Force Recommendation Statement. *Jama*, 326(6), 531-538. <https://doi.org/10.1001/jama.2021.11922>
- van 't Riet, E., Alsema, M., Rijkelijhuizen, J. M., Kostense, P. J., Nijpels, G., & Dekker, J. M. (2010). Relationship between A1C and glucose levels in the general Dutch population: the new Hoorn study. *Diabetes Care*, 33(1), 61-66. <https://doi.org/10.2337/dc09-0677>
- Weykamp, C., John, W. G., Mosca, A., Hoshino, T., Little, R., Jeppsson, J. O., Goodall, I., Miedema, K., Myers, G., Reinauer, H., Sacks, D. B., Slingerland, R., & Siebelder, C. (2008). The IFCC Reference Measurement System for HbA1c: a 6-year progress report. *Clin Chem*, 54(2), 240-248. <https://doi.org/10.1373/clinchem.2007.097402>
- WHO. (2016). *Global Report on Diabetes* (WHO, Issue. <http://www.who.int/diabetes/global-report/en/>
- WHO. (2020). *Diagnosis and Management of Type 2 Diabetes*. <https://www.who.int/publications/i/item/who-ucn-ncd-20.1>
- Xie, W., Wu, N., Wang, B., Xu, Y., Zhang, Y., Xiang, Y., Zhang, W., Chen, Z., Yuan, Z., Li, C., Jia, X., Shan, Y., Xu, B., Bai, L., Zhong, L., & Li, Y. (2021). Fasting plasma glucose and glucose fluctuation are associated with COVID-19 prognosis regardless of pre-existing diabetes. *Diabetes Res Clin Pract*, 180, 109041. <https://doi.org/10.1016/j.diabres.2021.109041>
- Yang, C. Y., Li, H. Y., Sung, F. C., Tan, E. C., Wei, J. N., & Chuang, L. M. (2019). Relationship between fasting plasma glucose and incidence of diabetes in children and adolescents. *Diabet Med*, 36(5), 633-643. <https://doi.org/10.1111/dme.13925>
- Zhao, M. J. Y., Prentice, J. C., Mohr, D. C., & Conlin, P. R. (2021). Association between hemoglobin A1c variability and hypoglycemia-related hospitalizations in veterans with diabetes mellitus. *BMJ Open Diabetes Res Care*, 9(1). <https://doi.org/10.1136/bmjdr-2020-001797>