



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 Texas 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 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.

Diabetes Mellitus Testing

Policy Number: CPCPLAB004

Version 1.0

Approval Date: February 5, 2025

Plan Effective Date: May 15, 2025

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. For individuals with acute or persistent classic symptoms of diabetes mellitus, (See **NOTE 1**), measurement of fasting plasma glucose **may be reimbursable**.
2. For individuals with a diagnosis of type 1 or type 2 diabetes mellitus, measurement of hemoglobin A1c **may be reimbursable** in **any** of the following situations:
 - a. Upon initial diagnosis to establish a baseline value and to determine treatment goals.
 - b. Twice a year (every 6 months) in individuals who are meeting treatment goals and who, based on daily glucose monitoring, appear to have stable glycemic control.
 - c. Quarterly in individuals who are not meeting treatment goals for glycemic control.
 - d. Quarterly in individuals whose pharmacologic therapy has changed.
 - e. Quarterly for individuals who are pregnant.
3. For prediabetic individuals, annual screening for type 2 diabetes with a fasting plasma glucose test or measurement of hemoglobin A1c **may be reimbursable**.
4. For asymptomatic individuals who are 35 years of age or older and who have no risk factors for diabetes, screening for prediabetes or type 2 diabetes once every three years with a fasting plasma glucose test **may be reimbursable**.
5. For individuals 18 years of age or older, screening once every three years for prediabetes or type 2 diabetes with a fasting plasma glucose test **or** measurement of hemoglobin A1c **may be reimbursable** for individuals with **any** of the following risk factors:
 - a. For individuals who are overweight or obese;
 - b. For first-degree relatives (See **NOTE 2**) of individuals with diabetes;
 - c. For individuals with a history of cardiovascular disease;
 - d. For individuals with hypertension;
 - e. For individuals with hypercholesterolemia;
 - f. For individuals with metabolic syndrome;
 - g. For individuals who are obese and have acanthosis nigricans;
 - h. For individuals with polycystic ovary syndrome;

- i. For individuals with metabolic dysfunction-associated steatotic liver disease (MASLD);
 - j. For individuals who were previously diagnosed with gestational diabetes mellitus (GDM).
6. For individuals who are positive for HIV, screening for diabetes and prediabetes with a fasting plasma glucose test **may be reimbursable** in any of the following situations:
 - a. For individuals starting antiretroviral therapy (ART);
 - b. For individuals switching their ART;
 - c. 3-6 months after starting or switching antiretroviral therapy;
 - d. annually when screening results were initially normal.
7. For individuals 10 years of age and older who have been diagnosed with cystic fibrosis but not with CF-related diabetes, annual screening for CF-related diabetes with an OGTT **may be reimbursable**.
8. For overweight or obese individuals less than 18 years of age, diabetes screening once every three years with a fasting plasma glucose test, an OGTT, or measurement of hemoglobin A1c **may be reimbursable** for individuals with any of the following risk factors:
 - a. The individual has a maternal history of diabetes or gestational diabetes mellitus during the child's gestation;
 - b. The individual has a family history of type 2 diabetes in first-or second-degree relatives (See **NOTE 2**)
 - c. The individual has signs of insulin resistance or conditions associated with insulin resistance (acanthosis nigricans, hypertension, dyslipidemia, polycystic ovary syndrome, or small for gestational age birth weight).
9. For pregnant individuals, a fasting plasma test or an OGTT up to once per month during pregnancy **may be reimbursable**.
10. For individuals diagnosed with GDM during pregnancy, an OGTT **may be reimbursable** in **any** of the following situations:
 - a. To screen for persistent diabetes or prediabetes 4-12 weeks postpartum
 - b. For individuals with a positive initial postpartum screening result, repeat screening to confirm a diagnosis of persistent diabetes or prediabetes.
11. For all other situations not addressed above, fasting plasma glucose testing at a wellness visit with no abnormal findings **is not reimbursable**.

12. For all other situations not previously addressed (See **NOTE 3**), measurement of hemoglobin A1c **is not reimbursable**.

Note 1: According to the American Diabetes Association (ADA), measurement of plasma glucose is sufficient to diagnose diabetes mellitus in a patient with classic symptoms (polyuria, polyphagia, polydipsia).

Note 2: First-degree relatives include parents, full siblings, and children of the individual. Second-degree relatives include grandparents, aunts, uncles, nieces, nephews, grandchildren, and half-siblings of the individual.

Note 3: Measurement of hemoglobin A1c **should not** be performed in **any** of the following situations:

- 1) To test for diabetes in individuals presenting with acute or persistent classic symptoms of diabetes mellitus.
- 2) In pregnant individuals without an established diagnosis of diabetes or prediabetes.
- 3) To screen for diabetes in individuals diagnosed with cystic fibrosis.
- 4) In conjunction with measurement of fructosamine.
- 5) In individuals with a condition associated with increased red blood cell turnover, (e.g., individuals with sickle cell disease or who are HIV positive individuals receiving hemodialysis or erythropoietin therapy or who have had recent blood loss or a transfusion).

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
82947, 82951, 82952, 82985, 83036, 83037

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>
- ACG. (2024). *Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD) Overview*.
<https://gi.org/topics/steatotic-liver-disease-masd/>

- 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/bmjdrc-2018-000519>
- American Diabetes Association Professional Practice, C. (2022). 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 Committee. (2023a). 2. Diagnosis and Classification of Diabetes: Standards of Care in Diabetes—2024. *Diabetes Care*, 47(Supplement_1), S20-S42. <https://doi.org/10.2337/dc24-S002>
- American Diabetes Association Professional Practice Committee. (2023b). 4. Comprehensive Medical Evaluation and Assessment of Comorbidities: Standards of Care in Diabetes—2024. *Diabetes Care*, 47(Supplement_1), S52-S76.
<https://doi.org/10.2337/dc24-S004>
- American Diabetes Association Professional Practice Committee. (2023c). 10. Cardiovascular Disease and Risk Management: Standards of Care in Diabetes—2024. *Diabetes Care*, 47(Supplement_1), S179-S218. <https://doi.org/10.2337/dc24-S010>
- American Diabetes Association Professional Practice Committee. (2023d). 11. Chronic Kidney Disease and Risk Management: Standards of Care in Diabetes—2024. *Diabetes Care*, 47(Supplement_1), S219-S230. <https://doi.org/10.2337/dc24-S011>
- American Diabetes Association Professional Practice Committee. (2023e). 15. Management of Diabetes in Pregnancy: Standards of Care in Diabetes—2024. *Diabetes Care*, 47(Supplement_1), S282-S294. <https://doi.org/10.2337/dc24-S015>
- American Diabetes Association Professional Practice Committee. (2023f). 16. Diabetes Care in the Hospital: Standards of Care in Diabetes—2024. *Diabetes Care*, 47(Supplement_1), S295-S306. <https://doi.org/10.2337/dc24-S016>
- 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/https://doi.org/10.1016/j.clinbiochem.2021.01.002>
- Bi, Y., Yang, Y., Yuan, X., Wang, J., Wang, T., Liu, Z., Tian, S., & Sun, C. (2024). Association between liver enzymes and type 2 diabetes: a real-world study

- [Original Research]. *Frontiers in Endocrinology*, 15.
<https://doi.org/10.3389/fendo.2024.1340604>
- 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. (2021). *CDC National Diabetes Statistics Report*.
<https://www.cdc.gov/diabetes/php/data-research/index.html>
- Committee, A. D. A. P. P. (2023a). 6. Glycemic Goals and Hypoglycemia: Standards of Care in Diabetes—2024. *Diabetes Care*, 47(Supplement_1), S111-S125.
<https://doi.org/10.2337/dc24-S006>
- Committee, A. D. A. P. P. (2023b). 14. Children and Adolescents: Standards of Care in Diabetes—2024. *Diabetes Care*, 47(Supplement_1), S258-S281.
<https://doi.org/10.2337/dc24-S014>
- 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>
- Diabetes Canada Clinical Practice Guidelines Expert Committee. (2018). *Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada*. <https://www.sciencedirect.com/journal/canadian-journal-of-diabetes/vol/42/suppl/S1>
- 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>
- EISayed, 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. (2023). 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>
- 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. (2023, 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., Umemoto, 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, 02/07/2023). *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., Gudbjörnsdottir, 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/OPHTHS287531>
- 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. (2024, 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., Seccombe, 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.
- 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>

- 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>
- Sacks, D. B., Arnold, M., Bakris, G. L., Bruns, D. E., Horvath, A. R., Lernmark, Å., Metzger, B. E., Nathan, D. M., & Kirkman, M. S. (2023). Guidelines and Recommendations for Laboratory Analysis in the Diagnosis and Management of Diabetes Mellitus. *Diabetes Care*, 46(10), e151-e199. <https://doi.org/10.2337/dci23-0036>
- 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>
- Tiwari, D., & Aw, T. C. (2024). The 2024 American Diabetes Association guidelines on Standards of Medical Care in Diabetes: key takeaways for laboratory. *Exploration of Endocrine and Metabolic Diseases*, 1(4), 158-166. <https://doi.org/10.37349/eemd.2024.00013>

- 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., Alssema, M., Rijkelijkhuizen, 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/bmjdrc-2020-001797>

Policy Update History:

Approval Date	Effective Date; Summary of Changes
02/05/2025	05/15/2025; Document updated with literature review. The following changes were made to Reimbursement Information: Added #2e: Quarterly for individuals who are pregnant; added

	#5i: For individuals with metabolic dysfunction-associated steatotic liver disease (MASLD). References revised.
09/13/2024	01/01/2025: New policy