



190.21 - Glycated Hemoglobin/Glycated Protein

Description

The management of diabetes mellitus requires regular determinations of blood glucose levels. Glycated hemoglobin/protein levels are used to assess long-term glucose control in diabetes. Alternative names for these tests include glycated or glycosylated hemoglobin or Hgb, hemoglobin glycated or glycosylated protein, and fructosamine.

Glycated hemoglobin (equivalent to hemoglobin A1) refers to total glycosylated hemoglobin present in erythrocytes, usually determined by affinity or ion-exchange chromatographic methodology. Hemoglobin A1c refers to the major component of hemoglobin A1, usually determined by ion-exchange affinity chromatography, immunoassay or agar gel electrophoresis. Fructosamine or glycated protein refers to glycosylated protein present in a serum or plasma sample. Glycated protein refers to measurement of the component of the specific protein that is glycated usually by colorimetric method or affinity chromatography.

Glycated hemoglobin in whole blood assesses glycemic control over a period of 4-8 weeks and appears to be the more appropriate test for monitoring a patient who is capable of maintaining long-term, stable control. Measurement may be medically necessary every 3 months to determine whether a patient's metabolic control has been on average within the target range. More frequent assessments, every 1-2 months, may be appropriate in the patient whose diabetes regimen has been altered to improve control or in whom evidence is present that intercurrent events may have altered a previously satisfactory level of control (for example, post-major surgery or as a result of glucocorticoid therapy). Glycated protein in serum/plasma assesses glycemic control over a period of 1-2 weeks. It may be reasonable and necessary to monitor glycated protein monthly in pregnant diabetic women. Glycated hemoglobin/protein test results may be low, indicating significant, persistent hypoglycemia, in nesidioblastosis or insulinoma, conditions which are accompanied by inappropriate hyperinsulinemia. A below normal test value is helpful in establishing the patient's hypoglycemic state in those conditions.

HCCPS Codes (Alphanumeric, CPT[®] AMA)

Code	Description
82985	Glycated protein
83036	Hemoglobin; glycated

ICD-9-CM Codes Covered by Medicare Program

The individual ICD-9-CM codes included in code ranges in the table below can be viewed on CMS' website under Downloads: Lab Code List. The link is: <http://www.cms.gov/Medicare/Coverage/CoverageGenInfo/LabNCDsICD9.html>

Code	Description
211.7	Benign neoplasm of islets of Langerhans
249.00-249.01	Secondary diabetes mellitus without mention of complication
249.10-249.11	Secondary diabetes mellitus with ketoacidosis



**Medicare National Coverage Determinations (NCD)
Coding Policy Manual and Change Report**

Code	Description
249.20-249.21	Secondary diabetes mellitus with hyperosmolarity
249.30-249.31	Secondary diabetes mellitus with other coma
249.40-249.41	Secondary diabetes mellitus with renal manifestations
249.50-249.51	Secondary diabetes mellitus with ophthalmic manifestations
249.60-249.61	Secondary diabetes mellitus with neurological manifestations
249.70-249.71	Secondary diabetes mellitus with peripheral circulatory disorders
249.80-249.81	Secondary diabetes mellitus with other specified manifestations
249.90-249.91	Secondary diabetes mellitus with unspecified complication
250.00-250.93	Diabetes mellitus & various related codes
251.0	Hypoglycemic coma
251.1	Other specified hypoglycemia
251.2	Hypoglycemia unspecified
251.3	Post-surgical hypoinsulinemia
251.4	Abnormality of secretion of glucagon
251.8	Other specified disorders of pancreatic internal secretion
251.9	Unspecified disorder of pancreatic internal secretion
258.0-258.9	Polyglandular dysfunction and related disorders
271.4	Renal glycosuria
275.01	Hereditary hemochromatosis
275.02	Hemochromatosis due to repeated red blood cell transfusions
275.03	Other hemochromatosis
275.09	Other disorders of iron metabolism
577.1	Chronic pancreatitis
579.3	Other and unspecified postsurgical nonabsorption
648.00	Diabetes mellitus complicating pregnancy, Childbirth or the puerperium, unspecified as to episode of care or not applicable
648.03	Diabetes mellitus complicating pregnancy, Childbirth or the puerperium, antepartum condition or complication
648.04	Diabetes mellitus complicating pregnancy, Childbirth or the puerperium, postpartum condition or complication
648.80	Abnormal glucose tolerance complicating pregnancy, childbirth or the puerperium, unspecified as to episode of care or not applicable
648.83	Abnormal glucose tolerance complicating pregnancy, childbirth or the puerperium, antepartum condition or complication
648.84	Abnormal glucose tolerance complicating pregnancy, childbirth or the puerperium, postpartum condition or complication
790.21-790.29	Abnormal glucose tolerance test
790.6	Other abnormal blood chemistry (hyperglycemia)
962.3	Poisoning by insulin and antidiabetic agents
V12.21	Personal history of gestational diabetes
V12.29	Personal history of other endocrine, metabolic, and immunity disorders
V58.67	Long-term (current) use of insulin
V58.69	Long-term use of other medication

NCD 190.21

***October 14 Changes – Red**



Indications

Glycated hemoglobin/protein testing is accepted as medically necessary for management and control of diabetes and to assess hyperglycemia, a history of hyperglycemia or dangerous hypoglycemia. Glycated protein testing may be used in place of glycated hemoglobin in the management of diabetic patients, and is useful in patients with abnormalities of erythrocytes such as hemolytic anemia or hemoglobinopathies.

Limitations

It is not reasonable and necessary to perform glycated hemoglobin tests more often than every three months on a controlled diabetic patient to determine if the patient's metabolic control has been on average within the target range. It is not reasonable and necessary for these tests to be performed more frequently than once a month for diabetic pregnant women. Testing for uncontrolled type one or two diabetes mellitus may require testing more than four times a year. The above Description Section provides the clinical basis for those situations in which testing more frequently than four times per annum is indicated, and medical necessity documentation must support such testing in excess of the above guidelines.

Many analytical methods of glycated hemoglobin show interference from elevated levels of fetal hemoglobin or by variant hemoglobin molecules. When the glycated hemoglobin assay is initially performed in these patients, the laboratory may inform the ordering physician of a possible analytical interference. Alternative testing, including glycated protein, for example, fructosamine, may be indicated for monitoring the degree of glycemic control. It is therefore conceivable that a patient will have both a glycated hemoglobin and glycated protein ordered on the same day. This should be limited to the initial assay of glycated hemoglobin, with subsequent exclusive use of glycated protein. These tests are not considered to be medically necessary for the diagnosis of diabetes.

ICD-9-CM Codes That Do Not Support Medical Necessity

Any ICD-9-CM code not listed in either of the ICD-9-CM covered or non-covered sections.

Sources of Information

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