



## 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.

### HCPCS Codes (Alphanumeric, CPT® AMA)

Code	Description
82985	Glycated protein
83036	Hemoglobin; glycated

### ICD-10-CM Codes Covered by Medicare Program

The ICD-10-CM codes in the table below can be viewed on CMS' website as part of  
Downloads: Lab Code List, at  
<http://www.cms.gov/Medicare/Coverage/CoverageGenInfo/LabNCDsICD10.html>



**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
D13.7	Benign neoplasm of endocrine pancreas
E08.00	Diabetes mellitus due to underlying condition with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)
E08.01	Diabetes mellitus due to underlying condition with hyperosmolarity with coma
E08.10	Diabetes mellitus due to underlying condition with ketoacidosis without coma
E08.11	Diabetes mellitus due to underlying condition with ketoacidosis with coma
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication
E08.311	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy with macular edema
E08.319	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy without macular edema
<b>*E08.3211</b>	<b>*Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, right eye</b>
<b>*E08.3212</b>	<b>*Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, left eye</b>
<b>*E08.3213</b>	<b>*Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, bilateral</b>
<b>*E08.3219</b>	<b>*Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye</b>
<b>*E08.3291</b>	<b>*Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, right eye</b>
<b>*E08.3292</b>	<b>*Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, left eye</b>
<b>*E08.3293</b>	<b>*Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, bilateral</b>
<b>*E08.3299</b>	<b>*Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye</b>
<b>*E08.3311</b>	<b>*Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, right eye</b>
<b>*E08.3312</b>	<b>*Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, left eye</b>
<b>*E08.3313</b>	<b>*Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, bilateral</b>



**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
*E08.3319	*Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
*E08.3391	*Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, right eye
*E08.3392	*Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, left eye
*E08.3393	*Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, bilateral
*E08.3399	*Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye
*E08.3411	*Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, right eye
*E08.3412	*Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, left eye
*E08.3413	*Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, bilateral
*E08.3419	*Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
*E08.3491	*Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, right eye
*E08.3492	*Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, left eye
*E08.3493	*Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, bilateral
*E08.3499	*Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye
*E08.3511	*Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, right eye
*E08.3512	*Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, left eye
*E08.3513	*Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, bilateral
*E08.3519	*Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, unspecified eye
*E08.3591	*Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, right eye



**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
<b>*E08.3592</b>	<b>*Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, left eye</b>
<b>*E08.3593</b>	<b>*Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, bilateral</b>
<b>*E08.3599</b>	<b>*Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, unspecified eye</b>
E08.36	Diabetes mellitus due to underlying condition with diabetic cataract
E08.39	Diabetes mellitus due to underlying condition with other diabetic ophthalmic complication
E08.40	Diabetes mellitus due to underlying condition with diabetic neuropathy, unspecified
E08.41	Diabetes mellitus due to underlying condition with diabetic mononeuropathy
E08.42	Diabetes mellitus due to underlying condition with diabetic polyneuropathy
E08.43	Diabetes mellitus due to underlying condition with diabetic autonomic (poly)neuropathy
E08.44	Diabetes mellitus due to underlying condition with diabetic amyotrophy
E08.49	Diabetes mellitus due to underlying condition with other diabetic neurological complication
E08.51	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy without gangrene
E08.52	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy with gangrene
E08.59	Diabetes mellitus due to underlying condition with other circulatory complications
E08.610	Diabetes mellitus due to underlying condition with diabetic neuropathic arthropathy
E08.618	Diabetes mellitus due to underlying condition with other diabetic arthropathy
E08.620	Diabetes mellitus due to underlying condition with diabetic dermatitis
E08.621	Diabetes mellitus due to underlying condition with foot ulcer
E08.622	Diabetes mellitus due to underlying condition with other skin ulcer
E08.628	Diabetes mellitus due to underlying condition with other skin complications
E08.630	Diabetes mellitus due to underlying condition with periodontal disease
E08.638	Diabetes mellitus due to underlying condition with other oral complications
E08.641	Diabetes mellitus due to underlying condition with hypoglycemia with coma
E08.649	Diabetes mellitus due to underlying condition with hypoglycemia without coma
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia
E08.69	Diabetes mellitus due to underlying condition with other specified complication
E08.8	Diabetes mellitus due to underlying condition with unspecified complications



**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
E08.9	Diabetes mellitus due to underlying condition without complications
E09.00	Drug or chemical induced diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)
E09.01	Drug or chemical induced diabetes mellitus with hyperosmolarity with coma
E09.10	Drug or chemical induced diabetes mellitus with ketoacidosis without coma
E09.11	Drug or chemical induced diabetes mellitus with ketoacidosis with coma
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication
E09.311	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy with macular edema
E09.319	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy without macular edema
<b>*E09.3211</b>	<b>*Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye</b>
<b>*E09.3212</b>	<b>*Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye</b>
<b>*E09.3213</b>	<b>*Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral</b>
<b>*E09.3219</b>	<b>*Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye</b>
<b>*E09.3291</b>	<b>*Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye</b>
<b>*E09.3292</b>	<b>*Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye</b>
<b>*E09.3293</b>	<b>*Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral</b>
<b>*E09.3299</b>	<b>*Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye</b>
<b>*E09.3311</b>	<b>*Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye</b>
<b>*E09.3312</b>	<b>*Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye</b>
<b>*E09.3313</b>	<b>*Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral</b>



**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
*E09.3319	*Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
*E09.3391	*Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye
*E09.3392	*Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye
*E09.3393	*Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral
*E09.3399	*Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye
*E09.3411	*Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
*E09.3412	*Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
*E09.3413	*Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
*E09.3419	*Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
*E09.3491	*Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye
*E09.3492	*Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye
*E09.3493	*Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral
*E09.3499	*Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye
*E09.3511	*Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
*E09.3512	*Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
*E09.3513	*Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
*E09.3519	*Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
*E09.3591	*Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye



**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
<b>*E09.3592</b>	<b>*Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye</b>
<b>*E09.3593</b>	<b>*Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral</b>
<b>*E09.3599</b>	<b>*Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye</b>
E09.36	Drug or chemical induced diabetes mellitus with diabetic cataract
E09.39	Drug or chemical induced diabetes mellitus with other diabetic ophthalmic complication
E09.40	Drug or chemical induced diabetes mellitus with neurological complications with diabetic neuropathy, unspecified
E09.41	Drug or chemical induced diabetes mellitus with neurological complications with diabetic mononeuropathy
E09.42	Drug or chemical induced diabetes mellitus with neurological complications with diabetic polyneuropathy
E09.43	Drug or chemical induced diabetes mellitus with neurological complications with diabetic autonomic (poly)neuropathy
E09.44	Drug or chemical induced diabetes mellitus with neurological complications with diabetic amyotrophy
E09.49	Drug or chemical induced diabetes mellitus with neurological complications with other diabetic neurological complication
E09.51	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy without gangrene
E09.52	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy with gangrene
E09.59	Drug or chemical induced diabetes mellitus with other circulatory complications
E09.610	Drug or chemical induced diabetes mellitus with diabetic neuropathic arthropathy
E09.618	Drug or chemical induced diabetes mellitus with other diabetic arthropathy
E09.620	Drug or chemical induced diabetes mellitus with diabetic dermatitis
E09.621	Drug or chemical induced diabetes mellitus with foot ulcer
E09.622	Drug or chemical induced diabetes mellitus with other skin ulcer
E09.628	Drug or chemical induced diabetes mellitus with other skin complications
E09.630	Drug or chemical induced diabetes mellitus with periodontal disease
E09.638	Drug or chemical induced diabetes mellitus with other oral complications
E09.641	Drug or chemical induced diabetes mellitus with hypoglycemia with coma





**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
E09.649	Drug or chemical induced diabetes mellitus with hypoglycemia without coma
E09.65	Drug or chemical induced diabetes mellitus with hyperglycemia
E09.69	Drug or chemical induced diabetes mellitus with other specified complication
E09.8	Drug or chemical induced diabetes mellitus with unspecified complications
E09.9	Drug or chemical induced diabetes mellitus without complications
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma
E10.11	Type 1 diabetes mellitus with ketoacidosis with coma
E10.21	Type 1 diabetes mellitus with diabetic nephropathy
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema
<b>*E10.3211</b>	<b>*Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye</b>
<b>*E10.3212</b>	<b>*Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye</b>
<b>*E10.3213</b>	<b>*Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral</b>
<b>*E10.3219</b>	<b>*Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye</b>
<b>*E10.3291</b>	<b>*Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye</b>
<b>*E10.3292</b>	<b>*Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye</b>
<b>*E10.3293</b>	<b>*Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral</b>
<b>*E10.3299</b>	<b>*Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye</b>
<b>*E10.3311</b>	<b>*Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye</b>
<b>*E10.3312</b>	<b>*Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye</b>
<b>*E10.3313</b>	<b>*Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral</b>





**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
*E10.3319	*Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
*E10.3391	*Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye
*E10.3392	*Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye
*E10.3393	*Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral
*E10.3399	*Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye
*E10.3411	*Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
*E10.3412	*Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
*E10.3413	*Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
*E10.3419	*Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
*E10.3491	*Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye
*E10.3492	*Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye
*E10.3493	*Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral
*E10.3499	*Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye
*E10.3511	*Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
*E10.3512	*Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
*E10.3513	*Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
*E10.3519	*Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
*E10.3591	*Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye



**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
<b>*E10.3592</b>	<b>*Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye</b>
<b>*E10.3593</b>	<b>*Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral</b>
<b>*E10.3599</b>	<b>*Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye</b>
E10.36	Type 1 diabetes mellitus with diabetic cataract
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication
E10.40	Type 1 diabetes mellitus with diabetic neuropathy, unspecified
E10.41	Type 1 diabetes mellitus with diabetic mononeuropathy
E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy
E10.43	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy
E10.44	Type 1 diabetes mellitus with diabetic amyotrophy
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication
E10.51	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene
E10.52	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene
E10.59	Type 1 diabetes mellitus with other circulatory complications
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy
E10.618	Type 1 diabetes mellitus with other diabetic arthropathy
E10.620	Type 1 diabetes mellitus with diabetic dermatitis
E10.621	Type 1 diabetes mellitus with foot ulcer
E10.622	Type 1 diabetes mellitus with other skin ulcer
E10.628	Type 1 diabetes mellitus with other skin complications
E10.630	Type 1 diabetes mellitus with periodontal disease
E10.638	Type 1 diabetes mellitus with other oral complications
E10.641	Type 1 diabetes mellitus with hypoglycemia with coma
E10.649	Type 1 diabetes mellitus with hypoglycemia without coma
E10.65	Type 1 diabetes mellitus with hyperglycemia
E10.69	Type 1 diabetes mellitus with other specified complication
E10.8	Type 1 diabetes mellitus with unspecified complications
E10.9	Type 1 diabetes mellitus without complications

NCD 190.21

**\*January 2017 Changes  
ICD-10-CM Version – Red**

Fu Associates, Ltd.

January 2017



**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
E11.00	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)
E11.01	Type 2 diabetes mellitus with hyperosmolarity with coma
E11.21	Type 2 diabetes mellitus with diabetic nephropathy
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema
<b>*E11.3211</b>	<b>*Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye</b>
<b>*E11.3212</b>	<b>*Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye</b>
<b>*E11.3213</b>	<b>*Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral</b>
<b>*E11.3219</b>	<b>*Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye</b>
<b>*E11.3291</b>	<b>*Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye</b>
<b>*E11.3292</b>	<b>*Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye</b>
<b>*E11.3293</b>	<b>*Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral</b>
<b>*E11.3299</b>	<b>*Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye</b>
<b>*E11.3311</b>	<b>*Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye</b>
<b>*E11.3312</b>	<b>*Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye</b>
<b>*E11.3313</b>	<b>*Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral</b>
<b>*E11.3319</b>	<b>*Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye</b>
<b>*E11.3391</b>	<b>*Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye</b>



**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
*E11.3392	*Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye
*E11.3393	*Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral
*E11.3399	*Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye
*E11.3411	*Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
*E11.3412	*Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
*E11.3413	*Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
*E11.3419	*Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
*E11.3491	*Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye
*E11.3492	*Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye
*E11.3493	*Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral
*E11.3499	*Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye
*E11.3511	*Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
*E11.3512	*Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
*E11.3513	*Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
*E11.3519	*Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
*E11.3591	*Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye
*E11.3592	*Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye
*E11.3593	*Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral



**Medicare National Coverage Determinations (NCD)  
Coding Policy Manual and Change Report (ICD-10-CM)**

Code	Description
<b>*E11.3599</b>	<b>*Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye</b>
E11.36	Type 2 diabetes mellitus with diabetic cataract
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy
E11.43	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy
E11.44	Type 2 diabetes mellitus with diabetic amyotrophy
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene
E11.59	Type 2 diabetes mellitus with other circulatory complications
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy
E11.620	Type 2 diabetes mellitus with diabetic dermatitis
E11.621	Type 2 diabetes mellitus with foot ulcer
E11.622	Type 2 diabetes mellitus with other skin ulcer
E11.628	Type 2 diabetes mellitus with other skin complications
E11.630	Type 2 diabetes mellitus with periodontal disease
E11.638	Type 2 diabetes mellitus with other oral complications
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma
E11.65	Type 2 diabetes mellitus with hyperglycemia
E11.69	Type 2 diabetes mellitus with other specified complication
E11.8	Type 2 diabetes mellitus with unspecified complications
E11.9	Type 2 diabetes mellitus without complications
E13.00	Other specified diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)
E13.01	Other specified diabetes mellitus with hyperosmolarity with coma
E13.10	Other specified diabetes mellitus with ketoacidosis without coma



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Code	Description
E13.11	Other specified diabetes mellitus with ketoacidosis with coma
E13.21	Other specified diabetes mellitus with diabetic nephropathy
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease
E13.29	Other specified diabetes mellitus with other diabetic kidney complication
E13.311	Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema
E13.319	Other specified diabetes mellitus with unspecified diabetic retinopathy without macular edema
<b>*E13.3211</b>	<b>*Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye</b>
<b>*E13.3212</b>	<b>*Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye</b>
<b>*E13.3213</b>	<b>*Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral</b>
<b>*E13.3219</b>	<b>*Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye</b>
<b>*E13.3291</b>	<b>*Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye</b>
<b>*E13.3292</b>	<b>*Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye</b>
<b>*E13.3293</b>	<b>*Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral</b>
<b>*E13.3299</b>	<b>*Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye</b>
<b>*E13.3311</b>	<b>*Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye</b>
<b>*E13.3312</b>	<b>*Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye</b>
<b>*E13.3313</b>	<b>*Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral</b>
<b>*E13.3319</b>	<b>*Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye</b>
<b>*E13.3391</b>	<b>*Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye</b>
<b>*E13.3392</b>	<b>*Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye</b>

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Code	Description
*E13.3393	*Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral
*E13.3399	*Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye
*E13.3411	*Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
*E13.3412	*Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
*E13.3413	*Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
*E13.3419	*Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
*E13.3491	*Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye
*E13.3492	*Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye
*E13.3493	*Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral
*E13.3499	*Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye
*E13.3511	*Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
*E13.3512	*Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
*E13.3513	*Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
*E13.3519	*Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
*E13.3591	*Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye
*E13.3592	*Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye
*E13.3593	*Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral
*E13.3599	*Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye





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Code	Description
E13.36	Other specified diabetes mellitus with diabetic cataract
E13.39	Other specified diabetes mellitus with other diabetic ophthalmic complication
E13.40	Other specified diabetes mellitus with diabetic neuropathy, unspecified
E13.41	Other specified diabetes mellitus with diabetic mononeuropathy
E13.42	Other specified diabetes mellitus with diabetic polyneuropathy
E13.43	Other specified diabetes mellitus with diabetic autonomic (poly)neuropathy
E13.44	Other specified diabetes mellitus with diabetic amyotrophy
E13.49	Other specified diabetes mellitus with other diabetic neurological complication
E13.51	Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene
E13.52	Other specified diabetes mellitus with diabetic peripheral angiopathy with gangrene
E13.59	Other specified diabetes mellitus with other circulatory complications
E13.610	Other specified diabetes mellitus with diabetic neuropathic arthropathy
E13.618	Other specified diabetes mellitus with other diabetic arthropathy
E13.620	Other specified diabetes mellitus with diabetic dermatitis
E13.621	Other specified diabetes mellitus with foot ulcer
E13.622	Other specified diabetes mellitus with other skin ulcer
E13.628	Other specified diabetes mellitus with other skin complications
E13.630	Other specified diabetes mellitus with periodontal disease
E13.638	Other specified diabetes mellitus with other oral complications
E13.641	Other specified diabetes mellitus with hypoglycemia with coma
E13.649	Other specified diabetes mellitus with hypoglycemia without coma
E13.65	Other specified diabetes mellitus with hyperglycemia
E13.69	Other specified diabetes mellitus with other specified complication
E13.8	Other specified diabetes mellitus with unspecified complications
E13.9	Other specified diabetes mellitus without complications
E15	Nondiabetic hypoglycemic coma
E16.0	Drug-induced hypoglycemia without coma
E16.1	Other hypoglycemia
E16.2	Hypoglycemia, unspecified
E16.3	Increased secretion of glucagon



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Code	Description
E16.8	Other specified disorders of pancreatic internal secretion
E16.9	Disorder of pancreatic internal secretion, unspecified
E31.0	Autoimmune polyglandular failure
E31.1	Polyglandular hyperfunction
E31.20	Multiple endocrine neoplasia [MEN] syndrome, unspecified
E31.21	Multiple endocrine neoplasia [MEN] type I
E31.22	Multiple endocrine neoplasia [MEN] type IIA
E31.23	Multiple endocrine neoplasia [MEN] type IIB
E31.8	Other polyglandular dysfunction
E31.9	Polyglandular dysfunction, unspecified
E74.8	Other specified disorders of carbohydrate metabolism
E79.0	Hyperuricemia without signs of inflammatory arthritis and tophaceous disease
E83.10	Disorder of iron metabolism, unspecified
E83.110	Hereditary hemochromatosis
E83.111	Hemochromatosis due to repeated red blood cell transfusions
E83.118	Other hemochromatosis
E83.119	Hemochromatosis, unspecified
E83.19	Other disorders of iron metabolism
E89.1	Postprocedural hypoinsulinemia
K86.0	Alcohol-induced chronic pancreatitis
K86.1	Other chronic pancreatitis
K91.2	Postsurgical malabsorption, not elsewhere classified
O24.011	<b>*Pre-existing type 1 diabetes mellitus, in pregnancy, first trimester</b>
O24.012	<b>*Pre-existing type 1 diabetes mellitus, in pregnancy, second trimester</b>
O24.013	<b>*Pre-existing type 1 diabetes mellitus, in pregnancy, third trimester</b>
O24.019	<b>*Pre-existing type 1 diabetes mellitus, in pregnancy, unspecified trimester</b>
O24.03	<b>*Pre-existing type 1 diabetes mellitus, in the puerperium</b>
O24.111	<b>*Pre-existing type 2 diabetes mellitus, in pregnancy, first trimester</b>
O24.112	<b>*Pre-existing type 2 diabetes mellitus, in pregnancy, second trimester</b>
O24.113	<b>*Pre-existing type 2 diabetes mellitus, in pregnancy, third trimester</b>

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Code	Description
O24.119	<b>*Pre-existing type 2 diabetes mellitus, in pregnancy, unspecified trimester</b>
O24.13	<b>*Pre-existing type 2 diabetes mellitus, in the puerperium</b>
O24.311	Unspecified pre-existing diabetes mellitus in pregnancy, first trimester
O24.312	Unspecified pre-existing diabetes mellitus in pregnancy, second trimester
O24.313	Unspecified pre-existing diabetes mellitus in pregnancy, third trimester
O24.319	Unspecified pre-existing diabetes mellitus in pregnancy, unspecified trimester
O24.33	Unspecified pre-existing diabetes mellitus in the puerperium
O24.410	Gestational diabetes mellitus in pregnancy, diet controlled
O24.414	Gestational diabetes mellitus in pregnancy, insulin controlled
O24.419	Gestational diabetes mellitus in pregnancy, unspecified control
O24.430	Gestational diabetes mellitus in the puerperium, diet controlled
O24.434	Gestational diabetes mellitus in the puerperium, insulin controlled
O24.439	Gestational diabetes mellitus in the puerperium, unspecified control
O24.811	Other pre-existing diabetes mellitus in pregnancy, first trimester
O24.812	Other pre-existing diabetes mellitus in pregnancy, second trimester
O24.813	Other pre-existing diabetes mellitus in pregnancy, third trimester
O24.819	Other pre-existing diabetes mellitus in pregnancy, unspecified trimester
O24.83	Other pre-existing diabetes mellitus in the puerperium
O24.911	Unspecified diabetes mellitus in pregnancy, first trimester
O24.912	Unspecified diabetes mellitus in pregnancy, second trimester
O24.913	Unspecified diabetes mellitus in pregnancy, third trimester
O24.919	Unspecified diabetes mellitus in pregnancy, unspecified trimester
O24.93	Unspecified diabetes mellitus in the puerperium
O99.810	Abnormal glucose complicating pregnancy
O99.815	Abnormal glucose complicating the puerperium
R73.01	Impaired fasting glucose
R73.02	Impaired glucose tolerance (oral)
R73.09	Other abnormal glucose
R73.9	Hyperglycemia, unspecified
R78.71	Abnormal lead level in blood



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Code	Description
R78.79	Finding of abnormal level of heavy metals in blood
R78.89	Finding of other specified substances, not normally found in blood
R79.0	Abnormal level of blood mineral
R79.89	Other specified abnormal findings of blood chemistry
R79.9	Abnormal finding of blood chemistry, unspecified
T38.3X1A	Poisoning by insulin and oral hypoglycemic [antidiabetic] drugs, accidental (unintentional), initial encounter
T38.3X2A	Poisoning by insulin and oral hypoglycemic [antidiabetic] drugs, intentional self-harm, initial encounter
T38.3X3A	Poisoning by insulin and oral hypoglycemic [antidiabetic] drugs, assault, initial encounter
T38.3X4A	Poisoning by insulin and oral hypoglycemic [antidiabetic] drugs, undetermined, initial encounter
Z79.3	Long term (current) use of hormonal contraceptives
Z79.4	Long term (current) use of insulin
Z79.891	Long term (current) use of opiate analgesic
Z79.899	Other long term (current) drug therapy
Z86.2	Personal history of diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
Z86.31	Personal history of diabetic foot ulcer
Z86.32	Personal history of gestational diabetes
Z86.39	Personal history of other endocrine, nutritional and metabolic disease

**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.

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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-10-CM Codes That Do Not Support Medical Necessity***

Any ICD-10-CM code not listed in either of the ICD-10-CM covered or non-covered sections.

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