

Appendix:**Code Tables**

Hypoglycemia: Patients with the primary diagnosis of hypoglycemia [251.0 (hypoglycemic coma), 251.1 (other specified hypoglycemia), 251.2 (hypoglycemia, unspecified), and 962.3 (poisoning by insulins and antidiabetic agents)]

Metabolic: Acute metabolic complications, defined as a composite of diabetes with hyperosmolality (250.2X), diabetes with ketoacidosis (250.1X) and diabetes with other coma (250.3X).

Diabetes, risk factors, and related conditions

Characteristic	ICD-9 Diagnosis Codes
Type 2 diabetes	250.00, 250.02, 250.10, 250.12, 250.20, 250.12, 250.20, 250.22, 250.30, 250.32, 250.40, 250.42, 250.50, 250.52, 250.60, 250.62, 250.70, 250.72, 250.80, 250.82, 250.90, 250.92
Secondary diabetes	249.x
Prediabetes	790.21, 790.22, 790.29
Gestational diabetes	648.0x, V12.21
Prediabetes in pregnancy	648.8x
Pregnancy	V22.x, V23.x, V27.x
Moderate or Severe Liver Disease	456.0-456.21, 572.2-572.8
Dementias	290.xx, 331.0, 331.83, 438.0
	HCPCS/CPT codes
Diabetes Education	GO108, G0109, G0270, G0271, S9140, S9141, S9145, S9455, S9460, S9465, S9470, 0403T, 95250, 95251, 97802-97804, 98960-98962, 99078, 99490

Diabetes Complications Severity Index: DCSI

Complication	ICD-9 Diagnosis	ICD-9 Code
Retinopathy	Diabetic ophthalmologic disease	250.5x
	Background retinopathy	362.01
	Other retinopathy	362.1
	Retinal edema	362.83
	CSME	362.53
	Other retinal disorders	362.81, 362.82
	Proliferative retinopathy	362.02
	Retinal detachment	361.xx
	Blindness	369.xx .00-.99

	Vitreous hemorrhage	379.23
Nephropathy	Diabetic nephropathy	250.4
	Acute glomerulonephritis	580
	Nephrotic syndrome	581
	Hypertension, nephrosis	581.81
	Chronic glomerulonephritis	582
	Nephritis/nephropathy	583
	Chronic renal failure	585
	Renal failure NOS	586
	Renal insufficiency	593.9
	Urine protein ≥ 30 mg/g of creatinine, Serum creatinine > 2.0 mg/dL	
Neuropathy	Diabetic neuropathy	356.9, 250.6
	Amyotrophy	358.1
	Cranial nerve palsy	951.0, 951.1, 951.3
	Mononeuropathy	354.0-355.9
	Charcot's arthropathy	713.5
	Polyneuropathy	357.2
	Neurogenic bladder	596.54
	Autonomic neuropathy	337.0, 337.1
	Gastroparesis/diarrhea	564.5, 536.3
	Orthostatic hypotension	458
Cerebrovascular	TIA	435
	Stroke	431, 433, 434, 436
Cardiovascular	Atherosclerosis	440.xx
	Other IHD	411
	Angina pectoris	413
	Other chronic IHD	414
	Myocardial infarction	410
	Ventricular fibrillation, arrest	427.1, 427.3
	Atrial fibrillation, arrest	427.4, 427.5
	Other ASCVD	429.2
	Old myocardial infarction	412
	Heart failure	428
	Atherosclerosis, severe	440.23, 440.24
	Aortic aneurysm/dissection	441
PVD	Diabetic PVD	250.7
	Other aneurysm, LE	442.3
	PVD	443.81, 443.9
	Foot wound + complication	892.1
	Claudication, intermittent	443.9
	Embolism/thrombosis (LE)	444.22
	Gangrene	785.4

	Gas gangrene	0.4
	Ulcer of lower limbs	707.1
Metabolic	<i>Ketoacidosis</i>	<i>250.1</i>
<i>(REMOVED)</i>	<i>Hyperosmolar</i>	<i>250.2</i>
	<i>Other coma</i>	<i>250.3</i>

	<u>DPP4</u>	<u>GLP1</u>	<u>Basal Insulin</u>	<u>SGLT2</u>	<u>SFU</u>	<u>TZD</u>
Hypoglycemia Composite	4.9	29.0	17.4	5.4	15.3	3.1
Metabolic Complication Composite	9.5	6.6	28.9	9.7	12.7	12.4

* *Adjusted estimates of events per 1000 person years following the first fill date*