

Diabetes coding with ACS 0401

Diabetes mellitus and intermediate hyperglycaemia

Eighth edition

health

Effective 1 July 2013

In line with the revised ACS 0401 Diabetes mellitus and intermediate hyperglycaemia that became effective 1 July 2012; VICC has compiled the following ten scenarios to complement the advice already published with the aim of providing further guidance in diabetes coding.

The scenarios aim to cover a range of diabetes topics and each scenario makes reference to the ACS 0401 classification rules and other relevant standards that have been applied for code assignment.

As the focus of the scenarios is about the diabetes coding, procedure codes have been omitted.

With respect to prefixing of diabetes, for ease of application of VIC 0048 Condition onset flag, the diabetes codes are either all prefixed P or all prefixed A unless a code is prefixed C. For all other prefixes, refer to ACS 0048 and VIC 0048 for guidance.

Scenario one

Patient admitted for treatment of necrotic foot on a background of Type 2 diabetes mellitus, peripheral vascular disease with intermittent claudication, hypertension, peripheral neuropathy, retinopathy, postural hypotension and nephropathy.

During the admission the patient had DSA with balloon angioplasty for native SFA stenosis.

Codes assigned:

Prefix	Code	Description
P	E11.52	Type 2 diabetes mellitus with peripheral angiopathy, with gangrene
P	I70.21	Atherosclerosis of arteries of extremities with intermittent claudication
P	E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy
P	E11.31	Type 2 diabetes mellitus with background retinopathy
P	E11.43	Type 2 diabetes mellitus with diabetic autonomic neuropathy
P	E11.22	Type 2 diabetes mellitus with established diabetic nephropathy
P	E11.71	Type 2 diabetes mellitus with multiple microvascular and other specified nonvascular complications

Standards applied:

Standard	Reason
ACS 0001 and ACS 0401 Rule 6	E11.52 meets principal diagnosis definition; and E11.52 is a combination code which expresses both the diabetes, the PVD and necrosis
ACS 0002 and ACS 0401 Rule 4b	I70.21 is assigned because the PVD with intermittent claudication is treated and the intermittent claudication is not covered by E11.52
ACS 0401	Code associated complications or conditions as per ACS 0002
	Rule 1 Always code diabetes mellitus (DM) when documented
	Rule 3 Code conditions that occur commonly with diabetes and are indexed under 'Diabetes, with Always refer to these index entries to classify DM
	Rule 4a Always code complications of DM classified to E09-E14 codes to reflect the severity of the DM

Specific multiple complications in DM

E11.71 is assigned because the patient has peripheral neuropathy, retinopathy, postural hypotension and nephropathy

Scenario two

Patient admitted for IV infusion to treat Charcot's arthropathy. Patient has Type 2 diabetes mellitus with previous history of cataract extraction with lens and peripheral neuropathy.

Codes assigned:

Prefix	Code	Description
P	M14.6*	Neuropathic arthropathy
P	G98†	Other disorders of nervous system, not elsewhere classified
A	E11.61	Type 2 diabetes mellitus with specified diabetic musculoskeletal and connective tissue complication
A	E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy
A	Z96.1	Presence of intraocular lens

Standards applied:

Standard	Reason
ACS 0001	M14.6* meets principal diagnosis definition.
ACS 0401	Rule 1 Always code DM when documented
	Rule 3 Code conditions that occur commonly with diabetes mellitus and are indexed under 'Diabetes, with'. Always refer to these index entries to classify DM
	Rule 4a Always code complications of DM classified to E09-E14 codes to reflect the severity of the DM
	Eradicated conditions and DM Eradicated cataract and DM. As the cataract has been eradicated with surgery, only code the current complications of DM and a code to indicate the status of the previous surgery.
Reference:	Coding Matters Volume 14 Number 3 Article titled Charcot's Arthropathy

Scenario three

Patient is transferred from another acute hospital post toe amputation for treatment of osteomyelitis due to methicillin sensitive staphylococcus aureus. Patient admitted to this hospital for six weeks IV antibiotics. History includes Type 1 diabetes mellitus, peripheral vascular disease, end stage renal failure treated with pancreas-kidney transplant, retinopathy and peripheral neuropathy. Patient stay was complicated by necrosis and cellulitis of foot.

Codes assigned:

Prefix	Code	Description
P	M86.97	Osteomyelitis, unspecified, ankle and foot
P	B95.6	Staphylococcus aureus as the cause of diseases classified to other chapters
P	E10.73	Type 1 diabetes mellitus with foot ulcer due to multiple causes
C	E10.52	Type 1 diabetes mellitus with peripheral angiopathy, with gangrene
C	L03.11	Cellulitis of lower limb
P	E10.71	Type 1 diabetes mellitus with multiple microvascular and other specified nonvascular complications
P	E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy
P	E10.31	Type 1 diabetes mellitus with background retinopathy
P	E10.22	Type 1 diabetes mellitus with established diabetic nephropathy
A	N18.3	Chronic kidney disease, stage 3
A	Z94.0	Kidney transplant status
A	Z94.8	Other transplanted organ and tissue status

Standards applied:

Standard	Reason
ACS 0001	M86.97 meets principal diagnosis definition. B95.6 is assigned in addition in accordance with Coding Matters Vol 13 No 4 March 2007: B95-B97 Bacterial, Viral and Other Infectious Agents The codes from the above category are not intended for use as principal diagnoses. As indicated in the code titles, they are provided for use as supplementary or additional codes to identify the infectious agent(s) in diseases classified elsewhere.
ACS 0401	Rule 1 Always code DM when documented Rule 3 Code conditions that occur commonly with diabetes and are indexed under 'Diabetes, with'. Always refer to these index entries to classify DM Rule 4a Always code complications of DM classified to E09-E14 codes to reflect the severity of the DM Rule 6 E10.52 is a combination code as it clearly identifies necrotic foot in the title therefore I70.24 is not assigned Diabetic foot DM with an infection from category 1 (cellulitis of foot) and one condition from categories 2a (peripheral vascular disease), 2b (peripheral neuropathy) and 2d (toe amputation) Eradicated conditions and DM Chronic kidney disease and DM. The kidney transplant does not eradicate CKD. The DM with chronic kidney disease should be coded Z94.8 & Z94.0 Assigned in accordance with cured or quiescent DM / DM in remission point 3 N18.3 E1x.2 Type 2 diabetes mellitus with kidney complication has an instruction to use additional code to identify the presence of chronic kidney disease (N18.-)
ACS 1438	N18.3 has been assigned because transplanted patient are considered to be stage 3 unless otherwise documented
Specific multiple complications in DM	E10.71 is assigned because the patient has end stage renal failure, retinopathy and peripheral neuropathy

Scenario four

Patient transferred from another acute hospital for management of ketosis/metabolic acidosis. Patient had severe nausea and vomiting due to gastroparesis. During the admission the patient had debridement of a chronic foot ulcer and foot callus performed by podiatry. Wound swab of ulcer grew staphylococcus aureus and streptococcus agalactiae for which the patient was commenced on antibiotics. The patient also required fluids for AKI. Other medical history includes Type 1 diabetes mellitus, autonomic neuropathy and retinopathy.

Codes assigned:

Prefix	Code	Description
P	E10.11	Type 1 diabetes mellitus with ketoacidosis, without coma
P	E10.43	Type 1 diabetes mellitus with diabetic autonomic neuropathy
P	K31.88	Other specified diseases of stomach and duodenum
P	E10.73	Type 1 diabetes mellitus with foot ulcer due to multiple causes
P	B95.6	Staphylococcus aureus as the cause of diseases classified to other chapters
P	B95.1	Streptococcus, group B, as the cause of diseases classified to other chapters
P	L84	Corns and callosities
P	E10.29	Type 1 diabetes mellitus with other specified kidney complication
P	N17.9	Acute kidney failure, unspecified
P	E10.31	Type 1 diabetes mellitus with background retinopathy
P	E10.71	Type 1 diabetes mellitus with multiple microvascular and other specified nonvascular complications

Standards applied:

Standard	Reason
ACS 0001	E10.11 is assigned as principal diagnosis because the ketosis/metabolic acidosis meets principal diagnosis definition
ACS 0002	K31.88, N17.9 and L84 meet additional diagnosis criteria. B95.6 and B95.1 are assigned in accordance with Coding Matters Vol 13 No 4 March 2007: B95-B97 Bacterial, Viral and Other Infectious Agents The codes from the above category are not intended for use as principal diagnoses. As indicated in the code titles, they are provided for use as supplementary or additional codes to identify the infectious agent(s) in diseases classified elsewhere.
ACS 0401	Rule 1 Always code DM when documented Rule 3 Code conditions that occur commonly with diabetes and are indexed under 'Diabetes, with'. Always refer to these index entries to classify DM Rule 4a Always code complications of DM classified to E09-E14 codes to reflect the severity of the DM Rule 4b Code associated complications or conditions as per ACS 0002 Rule 6 E10.11 is a combination code as it clearly identifies ketosis/metabolic acidosis in the code title therefore E88.8 Other specified metabolic disorders and E87.2 Acidosis are not assigned Specific multiple complications in DM E10.71 is assigned because the patient has acute kidney injury, autonomic neuropathy and retinopathy Diabetic foot DM with an infection from category 1 (chronic foot ulcer) and one condition from categories 2b (autonomic neuropathy) and 2c (foot callus)

Scenario five

Patient admitted with Type 2 diabetic third cranial nerve palsy and MCA infarct. Patient also has past history of hypertension and diarrhoea.

Codes assigned:

Prefix	Code	Description
P	E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy
P	H49.0	Third [oculomotor] nerve palsy
P	I63.9	Cerebral infarction, unspecified
A	I10	Essential (primary) hypertension

Standards applied:

Standard	Reason
ACS 0001	E11.41 is assigned as principal diagnosis because a causal relationship is inferred between the DM and the other condition (cranial nerve palsy) (see also ACS 0401 rule 2)
ACS 0002	H49.0 and I63.9 meet additional diagnosis criteria. See also rule 4b for assignment of H49.0 I10 I60–I69 Cerebrovascular diseases has an instruction to use additional code to identify presence of hypertension
ACS 0401	Rule 1 Always code DM when documented Rule 2 E11.41 is assigned because the term 'diabetic nerve palsy allows you to check the Alphabetic Index for appropriate codes indexed directly under Diabetes, diabetic or appropriate codes indexed under the lead term for the condition with a sub-term diabetic. DM with features of insulin resistance Documentation of DM with hypertension alone no longer meets criteria for assignment of E1x.72

Scenario six

Patient admitted with Type 1 diabetes mellitus also has a lower leg venous ulcer which required debridement and daily dressings by podiatry. During the admission the patient had unstable blood sugar levels that required the patient to be commenced on an insulin sliding scale.

Codes assigned:

Prefix	Code	Description
P	E10.69	Type 1 diabetes mellitus with other specified complication
P	I83.0	Varicose veins of lower extremities with ulcer
C	E10.65	Type 1 diabetes mellitus with poor control

Standards applied:

Standard	Reason
ACS 0001	E10.69 meets principal diagnosis criteria
ACS 0002	I83.0 and E10.65 meet additional diagnosis criteria. See also rule 4b for assignment of I83.0
ACS 0401	Rule 1 Always code DM when documented
	Rule 3 Code conditions that occur commonly with diabetes and are indexed under 'Diabetes, with' Always refer to these index entries to classify DM
	Rule 4a Always code complications of DM classified to E09-E14 codes to reflect the severity of the DM
	Rule 4b Code associated complications or conditions as per ACS 0002
References	NCCC Q&A 15 June 2012: Foot ulcer/diabetic ulcer with other documented cause VICC #2628 Poorly controlled blood sugar levels (BSL)

Scenario seven

Patient with impaired fasting glycaemia was admitted with poorly controlled hypertension. Patient's metoprolol was increased with local medical officer follow up required.

Codes assigned:

Prefix	Code	Description
P	I10	Essential (primary) hypertension
A	E09.9	Impaired glucose regulation without complication

Standards applied:

Standard	Reason
ACS 0001	I10 meets principal diagnosis definition
ACS 0401	Rule 1 IH should always be coded when documented (described as impaired fasting glycaemia in this scenario)

Scenario eight

Patient admitted for spinal fusion for lumbar canal stenosis and radiculopathy. Spinal fusion was cancelled because on admission patient was noted to have a necrotic ulcer of toe and left foot drop. Patient remained in hospital for debridement of their foot ulcer. Their stay was complicated by acute renal failure due to dehydration which was treated with IV fluids. Personal history includes Type 2 diabetes mellitus, autonomic neuropathy, traumatic right great toe amputation, obesity, hypertension, proliferative retinopathy, glaucoma and chronic kidney disease secondary to glomerulosclerosis. Patient's eGFR was noted to be 29 on admission bloods and subsequent readings 23, 16 and 14 on discharge.

Codes assigned:

Prefix	Code	Description
P	E11.73	Type 2 diabetes mellitus with foot ulcer due to multiple causes
P	E11.69	Type 2 diabetes mellitus with other specified complication
P	R02	Gangrene, not elsewhere classified
A	M21.37	Wrist and foot drop (acquired), foot
P	E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy
P	M48.06†	Spinal stenosis, lumbar region
P	G55.3*	Nerve root and plexus compressions in other dorsopathies
A	Z53.0	Procedure not carried out because of contraindication
P	E11.29	Type 2 diabetes mellitus with other specified kidney complication
C	N17.9	Acute kidney failure, unspecified
C	E86	Volume depletion
P	N18.5	Chronic kidney disease, stage 5
A	N26	Unspecified contracted kidney
P	E11.22	Type 2 diabetes mellitus with established diabetic nephropathy
A	I10	Essential (primary) hypertension
P	E11.43	Type 2 diabetes mellitus with diabetic autonomic neuropathy
P	E11.72	Type 2 diabetes mellitus with features of insulin resistance
P	E11.33	Type 2 diabetes mellitus with proliferative retinopathy
P	E11.71	Type 2 diabetes mellitus with multiple microvascular and other specified nonvascular complications

Standards applied:

Standard	Reason
ACS 0011	Part C Example 5: If a patient is admitted to hospital for surgery which is not carried out due to a condition present on admission which requires ongoing inpatient care, sequence this condition as the principal diagnosis. A code for the condition for which the procedure was originally intended should also be assigned, followed by Z53 Persons encountering health services for specific procedures, not carried out. Thus, M48.06 is still coded but not as principal diagnosis
ACS 0001 and ACS 0401 Rule 6	E11.73 is assigned as principal diagnosis because it became the reason for admission which would otherwise have been cancelled. E11.73 is a combination code that identifies both the ulcer (which is the actual principal diagnosis) and DM
ACS 0002	R02, M21.37, N17.9 and E86 meet additional diagnosis criteria
ACS 0401	Rule 1 Always code DM when documented Rule 3 Code conditions that occur commonly with diabetes and are indexed under 'Diabetes, with' Always refer to these index entries to classify DM Rule 4a Always code complications of DM classified to E09-E14 codes to reflect the severity of the DM E11.69 Type 2 diabetes mellitus with other specified complication Type 2 diabetes mellitus with: <ul style="list-style-type: none"> diabetic:

- fibrous breast disease (mastopathy)(sclerosing lymphocytic lobulitis)
- muscle infarction (aseptic myonecrosis)(ischaemic myonecrosis)(tumoriform focal muscular degeneration)
- gangrene (acute dermal)(bacterial)(haemolytic):
 - Fournier's
 - Meleney's (progressive bacterial synergistic)
- necrotising fasciitis
- ulcer (lower extremity)

Excludes:

foot ulcer with peripheral:

- angiopathy (E11.73)
- neuropathy (E11.73)

Rule 4b Code associated complications or conditions as per ACS 0002

Rule 5 A specific cause other than DM is documented as the cause of the condition (CKD secondary to glomerulosclerosis)

DM with features of insulin resistance DM with obesity

Specific multiple complications in DM E11.71 is assigned because the patient has acute renal failure, autonomic neuropathy and proliferative retinopathy

Diabetic foot DM with an infection from category 1 (ulcer of toes) and conditions from category 2b (autonomic neuropathy) and 2d (toe amputation)

N18.5 E1x.2 Type 2 diabetes mellitus with kidney complication has an instruction to use additional code to identify the presence of chronic kidney disease (N18.-)

I10 N18 Chronic kidney failure has an instruction to use additional code to identify presence of hypertension

ACS 1438 In cases where there is a range of values reported across the admission, assign the stage for the lowest GFR (eGFR) that is, the highest stage of disease, except where superimposed acute deterioration in kidney function has necessitated the admission, or occurs during the admission. In these instances assign a code for the chronic component of the disease according to the GFR (eGFR) result closest to the discharge date, reflecting the underlying level of kidney function.

E11.69 can be assigned because there is no documented condition which includes gangrene, for example E11.52

Scenario nine

Patient with Type 1 diabetes mellitus presents with periodontal abscess for drainage. Procedure was performed without complication.

Codes assigned:

Prefix	Code	Description
P	K05.2	Acute periodontitis
A	E10.9	Type 1 diabetes mellitus without complication

Standards applied:

Standard	Reason
ACS 0001	K05.2 meets principal diagnosis definition
ACS 0401	Rule 1 Always code DM when documented
Note	E10.63 was not assigned because the term 'acute' is an essential modifier under Index entry Diabetes, with, abscess, periodontal, acute and the term is not documented in the scenario

Scenario ten

Patient admitted for day infusion of CIDP secondary to Type 2 diabetes mellitus with neuropathy.

Codes assigned:

Prefix	Code	Description
P	G61.8	Other inflammatory polyneuropathies
A	E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy

Standards applied:

Standard	Reason
ACS 0001 and ACS 0401 Rule 6	G61.8 is assigned as principal diagnosis as the patient was admitted for treatment of CIDP and E11.42 is not a combination code in this scenario as does not fully describe the CIDP
ACS 0401	Rule 1 Always code DM when documented
	Rule 3 Code conditions that occur commonly with diabetes and are indexed under 'Diabetes, with' Always refer to these index entries to classify DM
	Rule 4b Code associated complications or conditions as per ACS 0001 or ACS 0002