Summary of changes to ACS 0401 *Diabetes mellitus and intermediate hyperglycaemia* (July 2012 implementation)

Main changes

- Diabetes mellitus (DM) and intermediate hyperglycaemia (IH) must **always** be coded when documented; this includes Gestational Diabetes Mellitus. [Rule 1]
- Updating of terminology from Impaired Glucose Regulation (IGR) to Intermediate Hyperglycaemia.
- For conditions with a causal relationship, follow lead terms for *Diabetes, Diabetic* or lead terms for other the condition with subterm *diabetic*. If there is not an appropriate entry under these terms, then look under *Diabetes, with*. [Rule 2, Rule 3]
- All complications of DM and IH **classified to category E09-E14** should **always** be coded to reflect the severity of DM and IH. The previous exceptions (multiple microvascular complications and diabetic foot) have been removed. [Rule 4a]
- Where the classification (Alphabetical Index) has linked a condition with DM, yet a specific **cause other than DM is documented** as the cause of the condition, then a code for the causal condition should be sequenced before the DM code(s). [Rule 5]
- Reintroduction of eradicated conditions:
    - Eradicated cataract and DM;
    - Eradicated ulcer and DM; and
    - Chronic kidney disease and DM.
- Removal of hypertension from the criteria for insulin resistance.
- Simplified the format of the criteria for diabetic foot and multiple microvascular complications.
- Removal of clinical content from the standard. The extended clinical version can be viewed at

http://nccc.uow.edu.au/content/groups/public/@web/@chsd/documents/doc/uow126292.pdf.

Documentation of Diabetes Mellitus and Intermediate Hyperglycaemia

The WA Coding Committee has endorsed the following guidelines:

- Diabetes Mellitus must be documented in the current episode to be coded. Where coders are concerned with how far to look back in previous episodes for manifestations of diabetes, the committee suggests a review only of the current medical record volume episodes with a discharge date of no later than 12 months.
- Where there is **only** a patient filled in history form documenting diabetes, please look for further clarification before assigning diabetes. This documentation alone would not be adequate for the assignment of diabetes. Diabetes must be documented by a clinician.
- Criteria for insulin resistance must be documented in the current episode. Coders should not assume that a type 2 diabetes mellitus patient on insulin is insulin resistant.
- Where the criteria for diabetic foot is met, but the Principal Diagnosis to be assigned is not diabetic foot, E1x.73, please seek clarification with the clinician that the 'diagnosis after study' is not diabetic foot.
- See July 2012 WA Coding Committee Minutes (http://www.clinicalcoding.health.wa.gov.au/docs/CCM_Minutes_July12.pdf)

Diabetes mellitus and same day admissions

Diabetes should be coded for same day episodes when it is documented in the admission as per Rule 1 in ACS 0401.

Same day dialysis admissions

As most same day dialysis admissions are auto-generated, it is difficult to assign additional diagnosis codes when the full record is not available at the time of the coding process. Therefore, for auto-generated same day dialysis admissions, it is acceptable to only assign Z49.1 *Extracorporeal dialysis* or Z49.2 *Other dialysis* for peritoneal dialysis together with the appropriate procedure code.

Coding Scenarios

1. Coding of other E codes with diabetic foot

All documented complications of diabetes classified to category E09-E14 should always be coded (Rule 4a). Complications of diabetes classified outside of category E09-E14 should only be coded when they meet the criteria in ACS 0001 and/or ACS 0002 (Rule 4b). When a code from E09-E14 adequately describes the complication, an additional code from another chapter is not required (Rule 6).

85 year old male was admitted to hospital with an ulcer on the right foot and cellulitis of the right foot and leg. A swab of the ulcer was taken, which came back positive for MRSA. The patient has a history of type 2 diabetes mellitus, PVD, peripheral neuropathy. The ulcer was debrided under sedation and after a course of IV antibiotics the patient was discharged.
Principal diagnosis on discharge: Foot ulcer

Principal Diagnosis	E11.73	Type 2 diabetes mellitus with foot ulcer due to multiple causes
Additional Diagnosis	B95.6	Staphylococcus aureus as the cause of diseases classified to other chapters
	Z06.32	Agent resistant to penicillin and related antibiotics, Methicillin resistant agent
	L03.11	Cellulitis of lower limb
	E11.51	Type 2 diabetes mellitus with peripheral angiopathy, without gangrene
	E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy

Diabetic foot criteria are met. As E11.73 contains the concepts of both diabetes and foot ulcer, L97 is not required and E11.73 is assigned as the principal diagnosis.
Diabetes codes for PVD and peripheral neuropathy are assigned to reflect the severity of the diabetes. Cellulitis is treated by antibiotics and meets the criteria in ACS 0002.

2. Diabetic foot codes sequencing

ACS 0001 must be followed when assigning the principal diagnosis in the case of diabetic foot. Cases with a condition from diabetic foot criteria other than L97 listed as the PD should be queried with the clinician before assigning a code other than E1-.73 as the PD.

65 year old female with type 2 diabetes mellitus admitted with left foot cellulitis.
The patient also has PVD and peripheral neuropathy which limit her mobility.
She was treated with IV antibiotics and discharged.
Principal diagnosis on discharge: Cellulitis
The case was queried with the treating clinician and they confirmed that diabetic foot would best reflect the principal diagnosis in this case.

Principal Diagnosis	E11.73	Type 2 diabetes mellitus with foot ulcer due to multiple causes
Additional Diagnosis	L03.11	Cellulitis of lower limb
	E11.51	Type 2 diabetes mellitus with peripheral angiopathy, without gangrene
	E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy

The criteria for diabetic foot have been met. As cellulitis was listed as the PD, the case was queried with the treating clinician and he agreed that diabetic foot should be assigned as the PD. If the criteria for diabetic foot were met but the ‘diabetic foot’ diagnosis itself did not met ACS 0001 (i.e.: was not nominated by the clinician) then the cellulitis would have been assigned as the PD and E11.73 as an additional diagnosis.

3. Ulcer of site other than foot with diabetic foot

When a patient fulfils the criteria for diabetic foot and they also have an ulcer of a site E1-.69 may also be assigned. The accompanying chapter code for the ulcer should also be assigned if it meets ACS 0002.

52 year old male is admitted for treatment of a left foot ulcer and an ulcer of the right calf. The patient also has type 2 diabetes, on insulin therapy for 10 years, peripheral neuropathy and PVD. Both ulcers were debrided under sedation and he was sent home for follow-up with his GP five days later.
Principal diagnosis on discharge: diabetic foot ulcer

Principal Diagnosis	E11.73	Type 2 diabetes mellitus with foot ulcer due to multiple causes
Additional Diagnosis	E11.51	Type 2 diabetes mellitus with peripheral angiopathy, without gangrene
	E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy
	L97	Ulcer of lower limb, not elsewhere classified
	E11.69	Type 2 diabetes mellitus with other specified complication

L97 is assigned for the ulcer on the right calf. E11.69 is assigned following the lookup Diabetes, with, ulcer, lower extremity. Even though there is an excludes note at E11.69 excluding foot ulcer with peripheral angiopathy or neuropathy, the condition we are capturing is the calf ulcer so it is correct to assign E11.69. The foot ulcer has been captured by E11.73.

4. Diabetes with insulin resistance

Hypertension no longer meets the criteria for coding diabetes with features of insulin resistance. Use of insulin does not meet the criteria for coding diabetes with features of insulin resistance.

47 year old female admitted to hospital with a fractured ankle after tripping over the family dog. The patient has a history of type 2 diabetes mellitus and hypertension. She has been on insulin for the last 5 years.
Principal diagnosis on discharge: fractured ankle

Principal diagnosis	S82.88	Fracture of other parts of lower leg
Additional diagnosis	W01.1	Fall on same level from tripping
	Y92.9	Unspecified place of occurrence
	U73.9	Injury or poisoning occurring while engaged in unspecified activity
	E11.9	Type 2 diabetes mellitus without complication
	Z92.22	Personal history of long-term use of insulin

Diabetes should be coded when documented. No diabetic complications exist so diabetes without complication is coded.

5. Diabetes mellitus and eradicated conditions

Kidney transplantation does not cure chronic kidney disease. Diabetes with chronic kidney disease should be coded with a code for the kidney transplant status.

45 year old female was admitted with fever and dysuria. The patient has a history of type 2 diabetes mellitus with chronic kidney disease treated by kidney transplantation. An MSU was taken, which returned a positive result for E.coli. The patient was given IV antibiotics for several days and then discharged home. Principal diagnosis on discharge: Urinary tract infection

Principal diagnosis	N39.0	Urinary tract infection, site not specified
Additional diagnosis	B96.2	Escherichia (E.) coli, as cause of disease classified elsewhere
	E11.22	Type 2 diabetes mellitus with established diabetic nephropathy
	N18.3	Chronic kidney disease, stage 3
	Z94.0	Kidney transplant status

Diabetes with established diabetic nephropathy is coded as the CKD has not been cured by the kidney transplant. Following the use additional code instruction at E11.22 a chapter code to show the stage of CKD is added. Kidney transplant status is also assigned to indicate previous surgery.

6. Diabetes mellitus and eradicated conditions

A code for diabetes with cataract should not be assigned when a cataract has been eradicated by surgery. Other relevant diabetes codes should be assigned with a status code to reflect the eradicating surgery.

73 year old female is admitted with chest pain. The patient has type 2 diabetes and a history of a cataract treated by phaco and IOL. The patient was given GTN and discharged the next day.
Principal diagnosis on discharge: angina.

Principal diagnosis	I20.9	Angina pectoris, unspecified
Additional diagnosis	E11.9	Type 2 diabetes mellitus without complication
	Z96.1	Presence of intraocular lens

Diabetes with cataract has not been assigned because the cataract has been eradicated. Presence of intraocular lens has been assigned to indicate the curative surgery.

7. Features of insulin resistance in diabetes

Criteria for insulin resistance must be documented as a current condition within the episode. As conditions such as obesity and dyslipidaemia may be successfully treated it must be clearly documented that they are a current condition.

45 male was admitted with poor control of his type 2 diabetes mellitus. His admission notes state 'past history of dyslipidaemia – treated with statins'. His insulin dosage was adjusted and he was counselled by the diabetic educator. Principal diagnosis on discharge: Unstable diabetes

Principal diagnosis	E11.65	Type 2 diabetes mellitus with poor control
	Z92.22	Personal history of long term use of insulin

Diabetes with poor control is documented as the principal diagnosis. Dyslipidaemia has not been documented as a current condition so insulin resistance is not coded.

8. Complication with a cause other than diabetes documented

When a specific cause other than diabetes is documented for a complication, the cause should be sequenced before diabetes (Rule 5).

63 year old male admitted for CKD (stage 3) due to renal artery stenosis. The patient also has a history of Type 2 diabetes mellitus and hypertension.
Principal diagnosis on discharge: Chronic kidney disease

Principal diagnosis	N18.3	Chronic kidney disease, stage 3
Additional diagnosis	I70.1	Atherosclerosis of renal artery
	I10	Essential (primary) hypertension
	E11.22	Type 2 diabetes mellitus with established nephropathy

The clinician has identified the principal diagnosis as CKD. Renal artery stenosis is documented as the cause of the CKD so this is sequenced before the diabetes code. Following the use additional code instruction under N18, hypertension is assigned.