Hyperglycaemic hyperosmolar state (HHS)/Hyperosmolar nonketotic state (HONK) in diabetes mellitus

HHS is a rare but potentially fatal complication of diabetes mellitus, also known by the acronym HONK (Hyperosmolar nonketotic state). Patients with diabetes who are diagnosed with (HHS), must be coded using the following ICD-10 codes and sequencing:

In patients with HHS with coma:

A code from categories E10-E14 with a fourth character .0 with coma

E87.0 Hyperosmolality and hypernatraemia

In patients with HHS without coma:

A code from categories E10-E14 with a fourth character .6 with other specified complications

E87.0 Hyperosmolality and hypernatraemia

Example 1: Patient with Type 2 diabetes is admitted to hospital and found to be unresponsive to stimuli; the patient is diagnosed with a hyperglycaemic hyperosmolar coma.

E11.0 Type 2 diabetes mellitus, with coma

E87.0 Hyperosmolality and hypernatraemia

Example 2: Patient admitted due to drowsiness; the patient has Type 2 diabetes. The patient is diagnosed with hyperglycaemic hyperosmolar state.

E11.6 Type 2 diabetes mellitus, with other specified complications

E87.0 Hyperosmolality and hypernatraemia

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Low Mood
The clinical statement “low mood” with no other information should be coded as
If the low mood is described as being recurrent then it should be coded as
F38.1 Other recurrent mood [affective] disorders.
If the low mood is described as being persistent then it should be coded as
F34.9 Persistent mood [affective] disorder, unspecified.

Mixed dementia or mixed vascular and Alzheimer dementia
The following codes must be used for diagnoses of ‘mixed dementia’ or ‘mixed vascular and Alzheimer dementia’:
G30.8† Other Alzheimer disease
F00.2* Dementia in Alzheimer disease, atypical or mixed type (G30.8†)

Suicidal Ideation (SMR04)
When a patient is admitted to a mental health facility (SMR04) with suicidal intention/ideation this information should be recorded in BOTH the admission AND the discharge diagnosis sections using the code R45.8 Other symptoms and signs involving emotional state (includes suicidal ideation/tendencies).
Previously this code has been recorded in the admission diagnoses when appropriate, but then has been omitted from the discharge diagnoses. Clinical advice is now that this should also be recorded in the discharge diagnosis of SMR04 following any confirmed psychiatric diagnoses.

Type 2 Myocardial Infarction
Coders are likely to come across the term “Type 2 myocardial infarction”. This must be coded to I24.8 Other forms of acute ischaemic heart disease. Conditions linked to ‘Type 2 myocardial infarction’ should be coded in addition to I24.8, as documented in “Comorbidities Coding (Other conditions coding on SMR01)”, CG21 Nov 2007.

Bile reflux into the Stomach and Biliary Gastritis
Update to CG19 Sep 06
The terms bile reflux or biliary gastritis may sometimes be used to describe endoscopic findings in the stomach. They refer to the reflux of bile into the stomach, either from the duodenum or from an anastomosis such as a gastrojejunostomy, and its effects. Bile reflux and biliary gastritis both have index trails which lead to K29.6.
In a patient where there is no clinical statement that gastro-oesophageal reflux (GORD) is also occurring e.g. the endoscopy report clearly states that the oesophagus is normal, both bile reflux and biliary gastritis may be coded to:
K29.6 Other gastritis
However if bile reflux or biliary gastritis is noted in a patient stated to have GORD there is no need to use the code K29.6. Instead K21.- gastro-oesophageal reflux disease will cover these circumstances.
Compound drugs, multiple drug and alcohol involvement

When the drug has more than one component, each component should be coded separately and sequenced according to the order in the British National Formulary (BNF) which is a publication of the British Medical Association and the Royal Pharmaceutical Society of Great Britain. It is recommended that clinical coders have access to, or obtain a copy of, the British National Formulary which is updated every March and September. Copies are sent to every Pharmacy department, ward and doctor in every NHS organisation.

The on-line version can be found at the website below:

http://www.medicinescomplete.com/mc/bnf/current/

Where there is multiple drug involvement in a poisoning case, each drug identified by the clinician must be coded separately. The poisoning codes should be sequenced in the order in which the drugs are listed by the clinician on the source document.

When there is also alcohol involvement, the alcohol code must be recorded, even if this means dropping another substance code.

The External Cause code for the first listed substance is the only one which needs to be recorded.

See standard: CG 14 Jan 04 for examples.

Conditions caused by an infectious agent

An infectious condition may be identified by a code for the condition followed by a code from the block B95 - B98 to identify the agent or organism causing the condition.

Example: Cellulitis caused by streptococcus

L03.9 Cellulitis, unspecified

B95.5 Unspecified Streptococcus as the cause of diseases classified to other chapters

Note: It is not appropriate to use a code from another block in Chapter I (e.g. A49.1 Streptococcal and enterococcal infection, unspecified site) in this context.

Example: Staphylococcus aureus infection of stump

T87.4 Infection of amputation stump

B95.6 Staphylococcus aureus as the cause of diseases classified to other chapters

Y83.5 Amputation of limb(s) as the cause of later complication

Last coding position ICD-10

Update to CG4 Sep 99

When submitting clinical codes to ISD, the SMR Datasets only allow for 6 ICD-10 codes. Whilst locally it may be possible to record more than 6, coders must be aware that validation rules are applied to the Main Condition, plus 5 ‘Other Conditions’. This means that certain codes should NEVER be entered in the sixth position:

Any ‘Dagger’ code. These require to be followed directly by an Asterisk code when in ‘Other Conditions’.

Chapter XIX codes, which must be followed by a code from Chapter XX.
Leg ulcer with infection
If a diagnosis of leg ulcer with infection is given, code the leg ulcer, L97.X, followed by the infectious agent, if known, using an appropriate code from B95.- to B98.-.

Examples:
Leg ulcer with MRSA infection.
L97.X - Ulcer of lower limb, not elsewhere classified
B95.6 - Staphylococcus aureus as the cause of diseases classified to other chapters
(U82.1 – Resistance to methicillin)

Note: Use of U82-U85 is optional in Scotland

Where the infectious agent is unknown, the default code of L08.9 should be used to record the infection. This code follows the code for leg ulcer.

Leg ulcer with infection.
L97.X - Ulcer of lower limb, not elsewhere classified
L08.9 - Local infection of skin and subcutaneous tissue, unspecified

MRSA (Methicillin resistant staphylococcus aureus)
MRSA infection takes various forms. It is usually found in wound infections, but may be present as sepsis, other generalised infection or a patient may be a carrier of MRSA. These situations are all coded differently, and examples are given below:

1) MRSA infection of surgical wound on abdomen
   T81.4   Infection following a procedure, not elsewhere classified
   B95.6   Staphylococcus aureus as the cause of diseases classified to other chapters
   Y83.9   Surgical procedure, unspecified
   (U82.1 Resistance to methicillin )

2) MRSA infection of traumatic wound
   T79.3   Post-traumatic wound infection, not elsewhere classified
   B95.6   Staphylococcus aureus as the cause of diseases classified to other chapters
   X59.9   Unspecified accident
   (U82.1 Resistance to methicillin)

3) MRSA sepsis
   A41.0   Sepsis due to Staphylococcus aureus
   (U82.1 Resistance to methicillin)

4) MRSA infection
   A49.0   Staphylococcal infection, unspecified
   (U82.1 Resistance to methicillin)

5) MRSA positive/carrier
   Z22.3   Carrier of other specified bacterial diseases
   (U82.1 Resistance to methicillin)

Codes above in brackets ( ) are from Ch XXII – Codes for special purposes. These are optional in Scotland. They do not require to be submitted on SMRs.
Patient with Type 2 diabetes treated with Insulin  
Update to CG9 July 01

It has come to our attention that there are differences in the way sites are coding patients with Type 2 diabetes who are treated with insulin. If a patient with Type 2 diabetes is started on treatment with insulin injections this does not mean that they have Type 1 diabetes (the condition that used to be called insulin dependent diabetes mellitus). They are a patient with Type 2 diabetes on insulin treatment and should continue to be coded to E11.-.

Myocardial Infarction and Unstable Angina – STEMI & NSTEMI 5th Digits  
Update to SCCS8 Sep 14 and CG26 Oct 10

In June 2007 ISD published a guideline on ‘Coding the Acute Coronary Syndromes Using ICD-10’ (CG20 June 07) to help coders deal with clinical statements associated with the term ‘acute coronary syndrome’. The main feature of the 2007 guideline was the introduction of a fifth digit for use with I20.0 Unstable angina. This fifth digit was used to record clinical statements describing the levels of troponin (a biochemical marker of myocardial damage) found in the patient's blood.

The Scottish Cardiac Society has now adopted a new, international definition of myocardial infarction (MI). This new definition should have the effect of simplifying the terminology encountered by coders when coding MI patients in Scotland. This guideline outlines the statements most likely to be encountered and clarifies how they should be coded:

1. **Unstable angina** - this should be coded I20.0 Unstable angina, exactly according to ICD-10 rules and conventions.

   (NOTE that coders no longer need look for, or take account of, clinical statements describing blood troponin levels. The 5th digits signifying “troponin status” which were applied to I20.0 in the 2007 guideline are no longer applicable. This is because unstable angina is always “troponin-negative” by the new definition).

2. **ST elevation myocardial infarction (STEMI) and Non-ST elevation myocardial infarction (NSTEMI)**

   Clinicians will usually classify an MI as either a STEMI or NSTEMI. It is clinically important to distinguish between these two types of MI, and consequently it is also important to record them in coded SMR data.

   “ST elevation” and “non-elevation” refer to the appearance of a part of the patient’s electrocardiogram (ECG) trace.

   The ICD-10 index and the categories I21 Acute myocardial infarction and I22 Subsequent myocardial infarction make no explicit mention of ST elevation. NSTEMI is index-trailed and included in I21.4 Acute subendocardial myocardial infarction, but in Scotland this index trail and inclusion should be ignored (see SCCS 11 March 2016 ‘Recording of NSTEMI’) and NSTEMI should be recording as instructed here.

   Coders will be aware that the sub-categories of I21 and I22 classify MIs according to another feature of the patient's ECG trace, namely the identification of the area of the myocardium affected – anterior wall, inferior wall etc. (NOTE that it is clinicians who are responsible for the interpretation of ECG traces. Coders are responsible only for the coding of clinical statements made after such interpretation).

   The need to record STEMI and NSTEMI must fit in with the existing structure of the ICD-10 codes for MI. This will be done by adding a 5th digit for use ONLY with categories I21 Acute myocardial infarction and I22 Subsequent myocardial infarction.

   Coders should add a fifth digit from Table 1 whenever they use codes from categories I21 and I22.

<table>
<thead>
<tr>
<th>Fifth digit</th>
<th>Meaning of fifth digit for I21.- and I22.- ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Non-ST Elevation Myocardial Infarction (NSTEMI)</td>
</tr>
<tr>
<td>1</td>
<td>ST Elevation Myocardial Infarction (STEMI)</td>
</tr>
<tr>
<td>9</td>
<td>MI with no statement of ST elevation or non-elevation</td>
</tr>
</tbody>
</table>
To use these 5th digits with I21 and I22, the MI should first be coded as usual, taking into account available information about any previous MIs and about the area of the myocardium affected – anterior, inferior etc.

(NOTE that the essential modifier ‘transmural’ which is found in the index trail leading to I21.- Acute myocardial infarction can be ignored. This is because it is unlikely to appear in clinical statements). The 5th digit signifying NSTEMI, STEMI or ‘no statement’ should then be added.

Examples (assuming that this is the patient’s first MI) are shown in Table 2.

Table 2

<table>
<thead>
<tr>
<th>Example of clinical statement to be coded</th>
<th>ICD-10 code</th>
<th>Fifth digit</th>
<th>Final code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anterior NSTEMI</td>
<td>Anterior MI = I21.0</td>
<td>NSTEMI = 0</td>
<td>I21.00</td>
</tr>
<tr>
<td>Anterior STEMI</td>
<td>Anterior MI = I21.0</td>
<td>STEMI = 1</td>
<td>I21.01</td>
</tr>
<tr>
<td>Anterior MI</td>
<td>Anterior MI = I21.0</td>
<td>no statement = 9</td>
<td>I21.09</td>
</tr>
<tr>
<td>NSTEMI</td>
<td>MI unspecified = I21.9</td>
<td>NSTEMI = 0</td>
<td>I21.90</td>
</tr>
<tr>
<td>STEMI</td>
<td>MI unspecified = I21.9</td>
<td>STEMI = 1</td>
<td>I21.91</td>
</tr>
<tr>
<td>MI</td>
<td>MI unspecified = I21.9</td>
<td>no statement = 9</td>
<td>I21.99</td>
</tr>
</tbody>
</table>

3. Aborted MI - this should be coded as **I24.0 Coronary thrombosis not resulting in myocardial infarction**.

4. The phrase “acute coronary syndrome” should no longer appear as the sole, definitive, diagnostic statement. It may appear as a generic, descriptive term in the clinical information used by the coder. However it should be accompanied by more specific information i.e. “unstable angina”, “NSTEMI” or “STEMI”. The coder should code the more specific information according to this guideline.

If “acute coronary syndrome” is the only clinical statement about the acute cardiac event which is available to the coder then:

firstly the coder should seek clarification from the clinician about how the case should be classified according to the rules in this guideline.

ONLY if clarification cannot be obtained, then the phrase “acute coronary syndrome” should be coded to **I24.9 Acute ischaemic heart disease, unspecified**.

Please note that clinical coding standards in this edition apply to all discharges on and after 1st April 2017.

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