

# ICD-10-AM/ACHI/ACS Eighth Edition

*Education Workshop 2013*

**NCCC**



national casemix and  
classification centre



ahsri | UOW



## Program

### Session 1 – ACS

1. Conventions
2. ACS 0001 *Principal diagnosis* – dagger/asterisk
3. ACS 0048 *Condition onset flag*
4. ACS 0020 *Bilateral/multiple procedures* – skin lesions
5. ACS 0104 *Viral hepatitis*
6. ACS 0402 *Cystic fibrosis*
7. ACS 2114 *Prophylactic surgery* (New)

## Program

### Session 2 – ICD-10-AM

1. Atrial fibrillation
2. Codes for emergency use
3. Duration of pregnancy
4. Haemorrhoids
5. Hernia
6. Pancreatic tumour of unknown or uncertain behaviour
7. Resistance to antimicrobial and antineoplastic drugs
8. Respiratory failure, type I and type II
9. Sunburn

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## Program

### Session 3 – Neonates

1. Cerebral leukomalacia
2. Hypoxic ischaemic encephalopathy
3. Peri/intraventricular haemorrhage
4. Sudden infant death syndrome
5. Nitric oxide therapy
6. Combined ventilatory support in neonates
7. Posthaemorrhagic hydrocephalus
8. High flow nasal cannula
9. Catheterisation in a neonate
10. Therapeutic hypothermia
11. Jaundice
12. ACS 1615 *Specific interventions for the sick neonate*

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## Program

### Session 4 – ACHI

1. Endoluminal fundoplication (ELF)
2. Insertion of seeds/fiducial markers into prostate
3. Minimally invasive procedures proceeding to open procedures
4. Laparoscopic colectomy & ileocolic resection
5. Procedures for obesity
6. Single event multilevel surgery (SEMLS)
7. Irreversible electroporation (IRE)
8. High intensity focused ultrasound (HIFUS)
9. Percutaneous heart valve replacement
10. Aspiration thrombectomy of the coronary artery
11. Transcatheter thrombectomy of intracranial arteries
12. Peritonectomy/cytoreduction surgery (CRS)
13. Sacral nerve stimulation (SNS)
14. Sentinel lymph node biopsy (SLNB)

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## **Outcomes**

By the end of this session, you should

- be familiar with the major changes in Eighth Edition
- know how to apply these changes

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## **Session 1**

**~ ACS ~**

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## Coding conventions information

- Duplication and inconsistency of information
  
- Review of all sources
  - ACS
  - Introductory material
  - Appendices
  
- Now in Introductory section of each volume
  - consistency & consolidation

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## Coding conventions information

- Alphabetic Index of Diseases
  - *Conventions used in the Alphabetic Index of Diseases*
  
- Tabular List of Diseases
  - *Conventions used in the Tabular List of Diseases*
  - *Guidance in the use of ICD-10-AM*
  
- Alphabetic Index of Interventions
  - *Conventions used in the Alphabetic Index of Interventions*
  
- Tabular List of Interventions
  - *Conventions used in the Tabular List of Interventions*
  - *Guidance in the use of ACHI*

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## Coding conventions information

- 4 x ACS removed:
  - ACS 0033 *Conventions used in the tabular list of diseases*
  - ACS 0034 *Conventions used in the alphabetic index of diseases*
  - ACS 0040 *Conventions used in the tabular list of interventions*
  - ACS 0041 *Conventions used in the alphabetic index of interventions*
  
- ACS Appendix A – *Basic coding guidelines* removed
  - available in ‘Guidance in the use of ...’

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## Coding conventions information

- ACS 0027 *Multiple coding* removed:
  - Contained conventions instructions
  - multiple condition coding – consolidated in ACS 0002 *Additional diagnoses*
  - dagger and asterisk – relocated into *Conventions used in the tabular list of diseases*
  - instructional terms – relocated into *Conventions used in the tabular list of diseases*

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## ACS 0001 *Principal diagnosis* – dagger/asterisk

### **Background:**

- WHO update – Jan 2008

*for morbidity coding, either the dagger or asterisk code  
can be sequenced first*

*Apply principles of ACS 0001 when determining sequencing  
of principal diagnosis*

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## ACS 0001 *Principal diagnosis* – dagger/asterisk

- **Scenario A:** Patient admitted for fracture of femur due to bony metastasis from adenocarcinoma of prostate
  - M90.75\* *Fracture of bone in neoplastic disease, femur*
  - C79.5† *Secondary malignant neoplasm of bone and bone marrow*
- **Scenario B:** Female patient admitted for treatment of gonococcal pelviperitonitis
  - A54.2† *Gonococcal pelviperitonitis and other gonococcal genitourinary infections*
  - N74.3\* *Female gonococcal pelvic inflammatory disease (A54.2†)*

*Apply principles of ACS 0001 when determining sequencing  
of principal diagnosis*

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## **ACS 0048 Condition onset flag**

### **Background:**

- Concern raised by NHISSC  
*(National Health Information Standards and Statistics Committee)*
- Australian Institute of Health and Welfare (AIHW) audit found inconsistencies
  - obstetrics
  - administrative/disease status codes
  - acute exacerbation of chronic conditions
- Previously published advice

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## **ACS 0048 Condition onset flag**

- Consultation with ACSQHC ('The Commission')  
*(Australian Commission on Safety and Quality in Healthcare)*
- Data collections must meet the needs of the end users to be useful

*"COF is used to provide insight into conditions which arise,  
to identify trends and patterns of complications,  
to inform prevention strategies."*

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## ACS 0048 Condition onset flag

### Unchanged:

- COF flags & intentions
  - COF 1 - a condition which arises during the episode and would not have been present or suspected on admission
  - COF 2 - a condition previously existing or suspected ~~present~~ on admission such as presenting problem, a comorbidity or chronic disease ~~or disease status~~
- Principal diagnosis – assign COF 2 (*now one exception*)
- If difficult to determine – assign COF 2

Or your state equivalent

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## ACS 0048 Condition onset flag

### Clarification of existing principles:

- Obstetric conditions
  - COF 1 - arising after admission (eg, complications of L&D, PPH)
  - COF 2 - arising before admission (eg, venous complications, maternal disproportion)
- Administrative/disease status codes
  - COF 1 - arising after admission (eg, cancelled procedure)
  - COF 2 - arising before admission, or general/descriptive (eg, history of tobacco use, duration of pregnancy, colostomy status)
  - retained exceptions for Z37 and Z38 codes, assign COF 2

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## **ACS 0048 Condition onset flag**

### Changes for newborns:

- Newborn – in the 'birth episode'
  - Extension of 'birth episode' to include 'labour & delivery process'
  - COF 1 - conditions arising during the birth episode (eg respiratory distress, birth injuries, feeding problems, neonatal aspiration)
  - COF 2 - conditions which have arisen before birth episode (eg, prematurity, birth weight, talipes, clicking hip)
  
- Newborn principal diagnosis in the 'birth episode'
  - COF 1 allowable against PDx for newborns where appropriate

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## **ACS 0048 Condition onset flag**

- Combination codes
  - COF 1 - newly arising 'acute disease' component (eg, DM with lactic acidosis)
  
- *Note: This is not the same as acute exacerbation of chronic disease*

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## **ACS 0048 Condition onset flag**

### Inclusion of published advice:

- Dagger/asterisk codes
  - appropriate to each code
  
- Conditions newly arising on leave, added distinction
  - COF 1 - approved leave (under hospital responsibility)
  - COF 2 - unapproved leave (not under hospital responsibility)
  
- Conditions crossing over multiple service categories
  - appropriate to each episode/service category

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## **ACS 0048 Condition onset flag**

### **ACS Example 5:**

- Baby born in hospital at 36 weeks (3200g). After delivery, clinical review confirmed 'meconium aspiration syndrome' and newborn was given IV antibiotics and oxygen. Initial check – talipes. Nursing staff felt that there was a slight hip click. Baby was unsettled and fussed at breast. Required assistance with feeding due to tongue tie. Developed jaundice on the second day which was treated with 15 hours of phototherapy. Physiotherapy review for talipes. Paediatric review on day 3 "L hip subluxatable" for follow up.
  - 2 – Preterm infant
  - 1 – Neonatal aspiration of meconium
  - 1 – Other feeding problems of newborn
  - 2 – Tongue tie
  - 2 – Talipes
  - 1 – Jaundice
  - 2 – Subluxatable hip
  - 2 – Singleton born in hospital

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## **ACS 0048 Condition onset flag**

### **ACS Example 6:**

- Singleton born at 38 weeks (2840g) by caesarean section. During caesarean section, scalp laceration occurred requiring review by paediatrician. Initial check – cleft palate, Mongolian spot. Newborn referred to specialist team for repair of cleft palate.

- 1 – Other birth trauma to scalp
- 1 – Fetus and newborn affected by caesarean delivery
- 2 – Cleft palate
- 2 – Singleton born in hospital

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## **ACS 0048 Condition onset flag**

### **ACS Example 3:**

- A woman is admitted for induction of labour due to post dates. Fetal distress arises during labour requiring forceps delivery. The baby is born alive with the cord wrapped tightly around its neck. During delivery she also suffers a second degree perineal tear (that is sutured) and a postpartum haemorrhage. On day three following delivery, the patient experiences chest pain and palpitations and is diagnosed with puerperal cardiomyopathy.

- 2 – Delivery affected by forceps
- 2 – Prolonged pregnancy
- 1 – Second degree perineal laceration during delivery
- 1 – Labour and delivery complicated by fetal distress
- 1 – Labour and delivery complicated by other cord entanglement
- 1 – Other immediate postpartum haemorrhage
- 1 – Cardiomyopathy in the puerperium
- 2 – Single live birth

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## **ACS 0020 *Bilateral/multiple procedures***

### **Background:**

- Published advice – multiple skin biopsies

Eighth Edition changes to:

- Skin lesions

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## **ACS 0020 *Bilateral/multiple procedures***

Amendments to skin lesions :

### **0020 BILATERAL/MULTIPLE PROCEDURES**

Note: exception removed

**1. The SAME PROCEDURE repeated during the episode of care at ~~different~~ DIFFERENT visits to theatre**

A procedure which is repeated during the episode of care at different visits to theatre should be coded as many times as it is performed.

Examples of exceptions to this rule are:

- ~~excision/removal of skin lesions (see point 5 below)~~

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## ACS 0020 *Bilateral/multiple procedures*

Amendments to skin lesions :

### 0020 BILATERAL/MULTIPLE PROCEDURES

Note: new content

#### 5. *Skin or subcutaneous lesion removal, excision or biopsy*

Assign the relevant code for excision of multiple lesions.

For multiple excisions or biopsies or removals performed on:

- separate skin lesions: assign relevant code(s) as many times as it is performed
- same lesion: assign relevant code once

For excision or biopsy or removal of skin lesions repeated during the episode of care at different visits to theatre – see point 1.

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## ACS 0020 *Bilateral/multiple procedures*

### ACS Example 3:

- Excision of two lesions from forearm.

31205-00 [1620] *Excision of lesion(s) of skin and subcutaneous tissue of other sites*

31205-00 [1620] *Excision of lesion(s) of skin and subcutaneous tissue of other sites*

#### 5. *Skin or subcutaneous lesion removal, excision or biopsy*

For multiple excisions or biopsies or removals performed on:

- separate skin lesions: assign relevant code(s) as many times as it is performed

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## ACS 0020 *Bilateral/multiple procedures*

### ACS Example 4:

- Excision of four lesions: 1 x eyelid, 1 x nose and 2 x neck.

31230-00 [1620] *Excision of lesion(s) of skin and subcutaneous tissue of eyelid*

31230-01 [1620] *Excision of lesion(s) of skin and subcutaneous tissue of nose*

31235-01 [1620] *Excision of lesion(s) of skin and subcutaneous tissue of neck*

31235-01 [1620] *Excision of lesion(s) of skin and subcutaneous tissue of neck*

### 5. *Skin or subcutaneous lesion removal, excision or biopsy*

For multiple excisions or biopsies or removals performed on:

- separate skin lesions: assign relevant code(s) as many times as it is performed
- same lesion: assign relevant code once

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## ACS 0020 *Bilateral/multiple procedures*

### ACS Example 7:

- Biopsy of 1 x BCC on forearm and 1 x compound naevus on neck.

30071-00 [1618] *Biopsy of skin and subcutaneous tissue*

30071-00 [1618] *Biopsy of skin and subcutaneous tissue*

### 5. *Skin or subcutaneous lesion removal, excision or biopsy*

For multiple excisions or biopsies or removals performed on:

- separate skin lesions: assign relevant code(s) as many times as it is performed

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## ACS 0104 *Viral hepatitis*

### **Background:**

- Public submission: Hepatitis C no longer incurable
- New treatments with antiviral therapy
- Now being documented as:
  - ‘cured/cleared Hep C’
  - ‘cleared’ with ‘SVR’ (*sustained virological response*)
  - PCR –ve (*polymerase chain reaction*)
  - ‘successfully treated’ with pegylated interferon and ribavirin
- Once cleared, no ongoing infection risk
- ‘Carrier’ is an outdated concept for hepatitis

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## ACS 0104 *Viral hepatitis*

### **Classification**

- Hepatitis should always be coded when documented
  - Except when Hep C is documented as ‘cured’, ‘cleared’ or ‘with SVR’
- When documentation is unclear or ambiguous terms (such as ‘Hepatitis B’ or ‘Hepatitis C positive’), verify the status with the clinician
- If consultation not possible, clinical advice is to classify as chronic viral hepatitis

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## ACS 0104 *Viral hepatitis*

### Classification

#### Past history of hepatitis

- Hep A or Hep E – assign Z86.18 *Personal history of other infectious and parasitic disease* (ACS 2112 *Personal history*)
- Hep B, Hep C or Hep D – verify with clinician, otherwise classify as chronic
  - NB. Except* when Hep C documented as ‘cured’, ‘cleared’ or ‘with SVR’ (*refer next slide*)
- ‘Carrier of viral hepatitis’ should ***never*** be assigned

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## ACS 0104 *Viral hepatitis*

### Classification

#### Cured/Cleared hepatitis C

- With manifestations (where the manifestations meet ACS 0001/0002):
  - code the manifestation(s)
  - also assign B94.2 *Sequelae of viral hepatitis*
- Without manifestations (or manifestations not meeting ACS 0001/0002):
  - assign Z86.18 *Personal history of other infectious and parasitic disease* (when the history meets ACS 2112 *Personal history*)

***If no impact on the episode, do not assign a code for ‘cured’ or ‘cleared’ hepatitis C***

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## ACS 0104 *Viral hepatitis*

### Classification

#### Hepatitis complicating pregnancy

- Assign O98.4 *Viral hepatitis complicating pregnancy, childbirth and the puerperium*
- and a code for the specific type of hepatitis

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## ACS 0104 *Viral hepatitis*

### ACS Example 1

Patient admitted for treatment of cirrhosis of liver due to hepatitis C.

Codes: K74.6 *Other and unspecified cirrhosis of liver*  
B18.2 *Chronic viral hepatitis C*

### ACS Example 3

Patient with 'cured hepatitis C' admitted for treatment of cirrhosis of liver caused by HCV.

Codes: K74.6 *Other and unspecified cirrhosis of liver*  
B94.2 *Sequelae of viral hepatitis*

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## ACS 0104 *Viral hepatitis*

### Scenario A

Patient admitted for treatment of pneumonia. Patient also has hepatitis C (confirmed as current) which is not impacting the episode.

Codes: J18.9    *Pneumonia, unspecified*  
          B18.2    *Chronic viral hepatitis C*

### Scenario B

Patient admitted for treatment of pneumonia. Patient also noted as having 'cleared hepatitis C' which is not impacting the episode.

Codes: J18.9    *Pneumonia, unspecified*

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## ACS 0402 *Cystic fibrosis*

### Background:

- WHO update (2011)
- E84.8 *Cystic fibrosis with other manifestations*  
- inclusion term *Cystic fibrosis with combined manifestations* - deleted
- Amended ACS 0402 *Cystic fibrosis*

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## ACS 0402 *Cystic fibrosis*

Amended code:

**E84** Cystic fibrosis

E84.0 Cystic fibrosis with pulmonary manifestations

E84.1 Cystic fibrosis with intestinal manifestations

E84.8 Cystic fibrosis with other manifestations  
~~Cystic fibrosis with combined manifestations~~

*Allows more than one code from E84.- to be assigned and capture all relevant cystic fibrosis manifestations*

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## ACS 0402 *Cystic fibrosis*

New instructions:

**0402 CYSTIC FIBROSIS**

Note: New rule

Cystic fibrosis (CF) should be coded with the appropriate code from E84.- *Cystic fibrosis* followed by a code(s) for any specified manifestation(s). Note that E84.8 ~~*Cystic fibrosis with other manifestations*~~ includes cases with combined manifestations.

More than one code from E84.- *Cystic fibrosis* should be used if the patient presents with multiple manifestations of CF.

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## ACS 0402 *Cystic fibrosis*

### **Scenario:**

Patient admitted for treatment for bronchiectasis due to CF. The patient also has pancreatic insufficiency due to CF.

Codes: E84.0 *Cystic fibrosis with pulmonary manifestations*  
J47 *Bronchiectasis*  
E84.8 *Cystic fibrosis with other manifestations*  
K86.8 *Other specified disease of pancreas*

*Note: As per published advice June 2010*

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## ACS 2114 *Prophylactic surgery (New)*

### **Background:**

- Query: Prophylactic bilateral salpingo-oophorectomy (BSO)
- Currently ACS 1204 *Plastic surgery – prophylactic mastectomy*
- Prophylactic surgery performed for:
  - range of organs, not limited to mastectomy
  - range of risk factors, not limited to malignancy
- Warranted new standard for prophylactic surgery

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## ACS 2114 Prophylactic surgery (New)

New ACS:

### 2114 PROPHYLACTIC SURGERY

Note: Sequencing rule has changed

#### Classification

When prophylactic surgery is performed for risk factors, an appropriate code from category Z40 Prophylactic surgery should be assigned as the principal diagnosis. The specific type of risk factor (eg personal history of disease, family history of cancer), should be sequenced as an additional diagnosis.

For prophylactic surgery performed in the absence of disease or risk factor, or when a more definitive diagnosis cannot be abstracted from the clinical record, assign Z40.0- Prophylactic surgery for risk-factors related to malignant neoplasms or Z40.8 Other prophylactic surgery as the principal diagnosis alone.

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## ACS 2114 Prophylactic surgery (New)

### ACS Example 1

- Patient has a strong family history of breast cancer and was admitted for prophylactic bilateral total mastectomy

Z40.00      *Prophylactic surgery for risk-factors related to malignant neoplasms, breast*

Z80.3      *Family history of malignant neoplasm of breast*

### ACS Example 2

- Patient admitted for prophylactic laparoscopic bilateral salpingo-oophorectomy after being found to have the BRCA2 gene fault on predictive gene testing. Patient has a past history of breast carcinoma with left mastectomy 28 years ago.

Z40.01      *Prophylactic surgery for risk-factors related to malignant neoplasms, ovary*

Z85.3      *Personal history of malignant neoplasm of breast*

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## Session 2

*~ ICD-10-AM ~*

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### Program

#### Session 2 – ICD-10-AM

1. Atrial fibrillation
2. Codes for emergency use
3. Duration of pregnancy
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5. Hernia
6. Pancreatic tumour of unknown or uncertain behaviour
7. Resistance to antimicrobial and antineoplastic drugs
8. Respiratory failure, type I and type II
9. Sunburn

## Atrial fibrillation

### Background:

- WHO update (2010)
- Atrial fibrillation and atrial flutter
- Expansion of codes to reflect current terminology
- Provide extra specificity

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## Atrial fibrillation

### Atrial fibrillation

Rhythm is irregular

Generally, but not  
always, fast

<http://www.nottingham.ac.uk/nursing/practice/resources/cardiology/fibrillation/>

### Atrial flutter

Rhythm is fast, but  
regular pattern

“Saw-tooth” pattern

<http://www.nottingham.ac.uk/nursing/practice/resources/cardiology/fibrillation/>

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## Atrial fibrillation

New codes:

### **I48** Atrial fibrillation and flutter

<u>I48.0</u>	<u>Paroxysmal atrial fibrillation</u>
<u>I48.1</u>	<u>Persistent atrial fibrillation</u>
<u>I48.2</u>	<u>Chronic atrial fibrillation</u>
<u>I48.3</u>	<u>Typical atrial flutter</u> <u>Type I atrial flutter</u>
<u>I48.4</u>	<u>Atypical atrial flutter</u> <u>Type II atrial flutter</u>
<u>I48.9</u>	<u>Atrial fibrillation and atrial flutter, unspecified</u>

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## Atrial fibrillation

New indexing:

### **Fibrillation**

- atrial or auricular (established) I48.9
- - chronic I48.2
- - paroxysmal I48.0
- - persistent I48.1
- cardiac I49.8
- heart NEC I49.8
- muscular M62.8-
- ventricular I49.0

### **Flutter**

- atrial or auricular I48.9
- - atypical I48.4
- - type I I48.3
- - type II I48.4
- - typical I48.3
- heart NEC I49.8
- ventricular I49.0

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## Atrial fibrillation

### Scenario:

- Patient admitted for treatment of atrial fibrillation

I48.9     *Atrial fibrillation and atrial flutter, unspecified*

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## Codes for emergency use

### Background:

- WHO update (2010)
- Creation of reserve codes in preparation for emergencies
- Enables codes to be allocated swiftly for pandemics
- Restricted use – *on WHO advice only*

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## Codes for emergency use

New note:

Chapter 22

### CODES FOR SPECIAL PURPOSE (U00-U49)

...

### PROVISIONAL ASSIGNMENT OF NEW DISEASES OF UNCERTAIN AETIOLOGY OR EMERGENCY USE (U00-U49)

*Note:* Codes U00-U49 are reserved for use by WHO for the provisional classification of new diseases of uncertain aetiology.

#### U04

Severe acute respiratory syndrome [SARS]

U04.9

Severe acute respiratory syndrome [SARS], unspecified

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## Codes for emergency use

New codes:

#### U06

### Emergency use of U06

*Note:* As codes are not always readily available in electronic systems, categories U06 and U07 have been designated for emergency use so they can be used immediately upon instruction from WHO.

<u>U06.0</u>	<u>Emergency use of U06.0</u>
<u>U06.1</u>	<u>Emergency use of U06.1</u>
<u>U06.2</u>	<u>Emergency use of U06.2</u>
<u>U06.3</u>	<u>Emergency use of U06.3</u>
<u>U06.4</u>	<u>Emergency use of U06.4</u>
<u>U06.5</u>	<u>Emergency use of U06.5</u>
<u>U06.6</u>	<u>Emergency use of U06.6</u>
<u>U06.7</u>	<u>Emergency use of U06.7</u>
<u>U06.8</u>	<u>Emergency use of U06.8</u>
<u>U06.9</u>	<u>Emergency use of U06.9</u>

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## Codes for emergency use

New codes:

### **U07**

#### Emergency use of U07

Note: As codes are not always readily available in electronic systems, categories U06 and U07 have been designated for emergency use so they can be used immediately upon instruction from WHO.

<u>U07.0</u>	<u>Emergency use of U07.0</u>
<u>U07.1</u>	<u>Emergency use of U07.1</u>
<u>U07.2</u>	<u>Emergency use of U07.2</u>
<u>U07.3</u>	<u>Emergency use of U07.3</u>
<u>U07.4</u>	<u>Emergency use of U07.4</u>
<u>U07.5</u>	<u>Emergency use of U07.5</u>
<u>U07.6</u>	<u>Emergency use of U07.6</u>
<u>U07.7</u>	<u>Emergency use of U07.7</u>
<u>U07.8</u>	<u>Emergency use of U07.8</u>
<u>U07.9</u>	<u>Emergency use of U07.9</u>



## Duration of pregnancy

### Background:

- Public submissions
  - difficulty assigning duration of pregnancy when greater than 36 completed weeks
  - particularly for assignment in FDIU and PROM
- Amendment of code title

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## Duration of pregnancy

Updated code title:

### **O09** Duration of pregnancy

...

O09.5 34 – ~~36~~ <37 completed weeks

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## Duration of pregnancy

Updated instructions:

### **O09** Duration of pregnancy

**Note:** 37 completed weeks refers to 36 weeks plus 7 days.  
Duration of pregnancy less than 37 completed weeks is deemed premature.

**Note:** Category O09 identifies the duration of pregnancy at admission on the mother's record and should only be assigned as an additional diagnosis with the following conditions:

- abortion (O00–O07 Pregnancy with abortive outcome)
- early onset of labour (O60 Preterm labour and delivery)
- fetal death in utero (O36.4) (before 37 completed weeks of gestation)
- premature rupture of membranes (O42) (before 37 completed weeks of gestation)

.....

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## Duration of pregnancy

### Scenario:

- Patient admitted for management of fetal death in utero at 36<sup>+5</sup>/40 weeks gestation for medical and surgical induction of labour.

O80 (2)            *Single spontaneous delivery*  
O36.4 (2)        *Maternal care for intrauterine death*  
O09.5 (2)        *Duration of pregnancy 34 – <37 completed weeks*  
O60.3 (2)        *Preterm delivery without spontaneous labour*  
Z37.1 (2)        *Single stillbirth*  
  
90465-05 [1334] *Medical and surgical induction of labour*

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## Haemorrhoids

### Background:

- WHO update (2010) – change in classification
  - Chapter 11 *Diseases of the digestive system* more appropriate than Chapter 9 *Diseases of the circulatory system*.
- Updated clinical terminology
  - classified by ‘degrees’, ‘grades’ or ‘stages’

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## Haemorrhoids

First-degree  
haemorrhoids

Second-degree  
haemorrhoids

Third- and Fourth-degree  
haemorrhoids

<<http://www.webmd.com/digestive-disorders/internal-hemorrhoids-first-to-fourth-degree>>

1. A **first-degree** haemorrhoid bulges into the anal canal during bowel movements.
2. A **second-degree** haemorrhoid bulges from the anus during bowel movements, then goes back inside by itself.
3. A **third-degree** haemorrhoid bulges from the anus during bowel movements and must be pushed back in with a finger.
4. A **fourth-degree** haemorrhoid protrudes from the anus all the time.

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## Haemorrhoids

New codes, different chapter:

**K64**

### Haemorrhoids and perianal venous thrombosis

*Includes:* piles

*Excludes:* complicating:

- childbirth and the puerperium (O87.2)
- pregnancy (O22.4)

- K64.0      First degree haemorrhoids  
Grade/Stage I haemorrhoids (bleeding) (strangulated) (thrombosed) (ulcerated)
- K64.1      Second degree haemorrhoids  
Grade/Stage II haemorrhoids (bleeding) (strangulated) (thrombosed) (ulcerated)
- K64.2      Third degree haemorrhoids  
Grade/Stage III haemorrhoids (bleeding) (strangulated) (thrombosed) (ulcerated)
- K64.3      Fourth degree haemorrhoids  
Grade/Stage IV haemorrhoids (bleeding) (strangulated) (thrombosed) (ulcerated)

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## Haemorrhoids

New codes, different chapter:

**K64**

### Haemorrhoids and perianal venous thrombosis

...

K64.4      Residual haemorrhoidal skin tag  
Skin tags of anus

K64.5      Perianal venous thrombosis  
Perianal haematoma

K64.8      Other specified haemorrhoids

K64.9      Haemorrhoids, unspecified  
Haemorrhoids (bleeding):  
• NOS  
• without mention of degree

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## Haemorrhoids

New indexing:

**Haemorrhoids** (bleeding) (external) (internal) (without mention of degree)  
K64.9 ~~184.9~~

- 1<sup>st</sup> degree (grade/stage I) (without prolapse) K64.0

- 2<sup>nd</sup> degree (grade/stage II) (with prolapse but retracts spontaneously) K64.1

- 3<sup>rd</sup> degree (grade/stage III) (with prolapse and requires manual repositioning or reduction) K64.2

- 4<sup>th</sup> degree (grade/stage IV) (with prolapse and cannot be manually repositioned or reduced) K64.3

...

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## Haemorrhoids

Note – internal and external have been removed:

### Haemorrhoids

...

~~external I84.5~~

~~bleeding, prolapsed, strangulated or ulcerated I84.4~~

~~thrombosed I84.3~~

~~internal I84.2~~

~~bleeding, prolapsed, strangulated or ulcerated I84.1~~

~~thrombosed I84.0~~



## Hernia

### Background:

- WHO update (2009)
- Distinction between 'primary' and 'secondary' hernias
- Secondary hernia
  - incisional
  - parastomal
- Difference between mechanism and management

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## Hernia

### Incisional hernias:

- Abdominal wall protrusions – incision line of a previous surgery

<<http://www.giuseppeamato.eu/en/abdominal-hernia/incisional-hernia>>

<<http://www.drbarrygardiner.com/docs/IncisionalHernia.htm>>

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## Hernia

### Amended codes:

**K43**

### **Ventral hernia**

- Includes:* hernia:
- epigastric
  - hypogastric
  - incisional
  - midline
  - parastomal
  - spigelian
  - subxiphoid

K43.0 ~~Ventral~~Incisional hernia with obstruction, without gangrene

K43.1 ~~Ventral~~Incisional hernia with gangrene

K43.2 Incisional hernia without obstruction or gangrene

...

82

## Hernia

### Parastomal hernias:

- Abdominal wall protrusions – site of a stoma (eg gastrostomy, ileostomy or colostomy).

[http://www.wehealny.org/services/bi\\_hernia/hernia\\_Parastomal.html](http://www.wehealny.org/services/bi_hernia/hernia_Parastomal.html)

<http://www.dansac.com/>

[http://www.allaboutbowelsurgery.com/clinical/parastomal/manage\\_hernia.asp](http://www.allaboutbowelsurgery.com/clinical/parastomal/manage_hernia.asp)

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## Hernia

### New codes:

**K43** Ventral hernia

...

K43.3 Parastomal hernia with obstruction, without gangrene

K43.4 Parastomal hernia with gangrene

K43.5 Parastomal without obstruction or gangrene

...

84

## Hernia

New codes:

**K43** Ventral hernia

...

K43.6 Other and unspecified ventral hernia with obstruction, without gangrene

K43.7 Other and unspecified ventral hernia with gangrene

K43.9 Other and unspecified ventral without obstruction or gangrene



## Pancreatic tumour of uncertain or unknown behaviour

### Background:

- Public submission:
  - nonspecific code assignment – “other digestive organs”
  - grouping inconsistency:
    - Malignant/benign tumours of pancreas group to MDC 07 *Diseases and disorders of the hepatobiliary system and pancreas*
    - Uncertain/unknown behaviour tumours of pancreas group to MDC 06 *Diseases and disorders of the digestive system*
- Need to distinguish pancreas from other digestive organs

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## Pancreatic tumour of uncertain or unknown behaviour

New codes:

**D37**

**Neoplasm of uncertain or unknown behaviour of oral cavity and digestive organs**

~~D37.7~~

~~Other digestive organs~~

~~Anal:~~

~~• Canal~~

~~• Sphincter~~

~~Anus NOS~~

~~Intestine NOS~~

~~Oesophagus~~

**D37.7**

**Other digestive organs**

★D37.71

Pancreas

★D37.79

Other specified digestive organs

Anal:

• canal

• sphincter

Anus NOS

Intestine NOS

Oesophagus

.....



## Resistance to antimicrobial & antineoplastic drugs

### Background:

- WHO update (2009)
- Increasing number of drug types with resistance
- Need to distinguish
- Now classified into:
  - beta-lactam antibiotics
  - other antibiotics
  - antimicrobials
  - antineoplastic drugs

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## Resistance to antimicrobial & antineoplastic drugs

- Beta-lactam antibiotics:
  - penicillin
  - methicillin (multiple antibiotics including methicillin)
  
- Other antibiotics:
  - vancomycin & vancomycin related antibiotics
  - quinolones (eg, moxifloxacin used in Avelox)
  - other multiple antibiotics (excluding those involving methicillin)
  - other single antibiotics

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## Resistance to antimicrobial & antineoplastic drugs

- Antimicrobials:
  - antiparasitic (quinine and related compounds)
  - antifungal
  - antiviral
  - tuberculostatic
  - multiple antimicrobial drugs
  
- Antineoplastic drugs

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## Resistance to antimicrobial & antineoplastic drugs

Deleted codes:

~~Z06~~

~~**Bacterial agents resistant to antibiotics**  
**Resistance to antimicrobial drugs**~~

**Note:** This category is intended for use as an additional code to identify the resistant properties of infectious agent(s) in infections classified elsewhere.

~~Z06.3~~

~~**Agent resistant to penicillin and related antibiotics**~~

~~Z06.4~~

~~**Agent resistant to vancomycin and related antibiotics**~~

~~Z06.8~~

~~**Agent resistant to multiple antibiotics**~~

~~Z06.9~~

~~**Agent resistant to other and unspecified antibiotics**~~

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## Resistance to antimicrobial & antineoplastic drugs

New codes:

**Z06.5**

**Resistance to beta-lactam antibiotics**

*Use additional code (B95–B96) to identify infectious agents resistant to beta-lactam antibiotics*

Z06.50

Resistance to beta-lactam antibiotics, unspecified

Z06.51

Resistance to penicillin

Resistance to:

- amoxicillin
- ampicillin

Z06.52

Resistance to methicillin

Resistance to:

- cloxacillin
- dicloxacillin
- flucloxacillin
- multiple antibiotics including methicillin
- oxacillin

Z06.53

Extended spectrum beta-lactamase [ESBL] resistance

Z06.58

Resistance to other beta-lactam antibiotics

92

## Resistance to antimicrobial & antineoplastic drugs

New codes:

**Z06.6**

### **Resistance to other antibiotics**

*Use additional code (B95–B96) to identify infectious agents resistant to antibiotics*

Z06.60

### Resistance to unspecified antibiotic

Resistance to antibiotic NOS

Z06.61

### Resistance to vancomycin

Z06.62

### Resistance to other vancomycin related antibiotics

Z06.63

### Resistance to quinolones

Z06.67

### Resistance to multiple antibiotics

**Note:** This code should only be assigned when an infectious agent is resistant to two or more antibiotics but the type of antibiotics are not specified. Where multiple resistant antibiotics are specified, code each resistant antibiotic separately.

**Excludes:** resistance to multiple antibiotics involving methicillin (Z06.52)

Z06.68

### Resistance to other single specified antibiotic

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## Resistance to antimicrobial & antineoplastic drugs

New codes:

**Z06.6**

### **Resistance to other antibiotics**

*Use additional code (B95–B96) to identify infectious agents resistant to antibiotics*

Z06.60

### Resistance to unspecified antibiotic

Z06.61

Z06.62

Z06.63

Z06.67

Z06.68

### **Z06.67 Resistance to multiple antibiotics**

**Note:** This code should only be assigned when an infectious agent is resistant to two or more antibiotics but the type of antibiotics are not specified. Where multiple resistant antibiotics are specified, code each resistant antibiotic separately.

**Excludes:** resistance to multiple antibiotics involving methicillin (Z06.52)

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## Resistance to antimicrobial & antineoplastic drugs

New codes:

**Z06.7**

### Resistance to other antimicrobial drugs

*Excludes:* resistance to antibiotics (Z06.5—Z06.6-)

Z06.70

### Resistance to unspecified antimicrobial drug(s)

Drug resistance NOS

Resistance to antimicrobial drugs NOS

Z06.71

### Resistance to antiparasitic drug(s)

Resistance to quinine and related compounds

Z06.72

### Resistance to antifungal drug(s)

Z06.73

### Resistance to antiviral drug(s)

Z06.74

### Resistance to tuberculostatic drug(s)

Z06.77

### Resistance to multiple antimicrobial drugs

*Note:* This code should only be assigned when an infectious agent is resistant to two or more antimicrobial drugs but the type of antimicrobial drugs are not specified. Where multiple resistant antimicrobial drugs are specified, code each resistant drug separately.

*Excludes:* resistance to multiple antibiotics (Z06.67)

Z06.78

### Resistance to other specified antimicrobial drug

95

## Resistance to antimicrobial & antineoplastic drugs

New codes:

**Z07**

### Resistance to antineoplastic drugs

*Note:* Assign Z07 as an additional code to identify resistance to antineoplastic drugs in the treatment of conditions classified elsewhere.

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## Resistance to antimicrobial & antineoplastic drugs

### Scenario A:

- Patient admitted for cellulitis of the leg. Wound swab identified MRSA (methicillin resistant *Staphylococcus aureus*) and confirmed by clinician.

L03.11	<i>Cellulitis of lower limb</i>
B95.6	<i>Staphylococcus aureus as the cause of diseases classified to other chapters</i>
Z06.52	<i>Resistance to methicillin</i>

MRSA - involving methicillin

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## Resistance to antimicrobial & antineoplastic drugs

### Scenario B:

- Patient admitted for cellulitis of the leg. Wound swab identified MRSA (multiple resistant *Staphylococcus aureus*, specified as including vancomycin and amoxicillin) and confirmed by clinician.

L03.11	<i>Cellulitis of lower limb</i>
B95.6	<i>Staphylococcus aureus as the cause of diseases classified to other chapters</i>
Z06.61	<i>Resistance to vancomycin</i>
Z06.51	<i>Resistance to penicillin</i>

MRSA - multiple but specified drugs

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## Resistance to antimicrobial & antineoplastic drugs

### Scenario C:

- Patient admitted for cellulitis of the leg. Wound swab identified MRSA (multiple resistant *Staphylococcus aureus*) and confirmed by clinician.

L03.11      *Cellulitis of lower limb*

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

Z06.67      *Resistance to multiple antibiotics*

MRSA - multiple but unspecified drugs

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## Respiratory failure, type I and type II

### Background:

- WHO update (2009)
- Respiratory failure – failure of gas exchange: oxygenation and carbon dioxide elimination
  - Type I - Hypoxic
  - Type II - Hypercapnic

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## Respiratory failure, type I and type II

### ▪ Type I respiratory failure (Hypoxic)

- most common form of respiratory failure
- a failure of oxygenation
- common causes - diseases involving fluid filling or collapse of alveolar units - cardiogenic or noncardiogenic pulmonary oedema, pneumonia, and pulmonary haemorrhage.

### ▪ Type II respiratory failure (Hypercapnic)

- inadequate ventilation leading to excessive carbon dioxide
- common causes - drug overdose, neuromuscular disease, chest wall abnormalities, and severe airway disorders (eg, asthma and chronic obstructive pulmonary disease [COPD]).

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## Respiratory failure, type I and type II

Video: <http://www.youtube.com/watch?v=uk67-dZobx8>

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## Respiratory failure, type I and type II

New fifth characters:

**J96**      **Respiratory failure, not elsewhere classified**

...

*The following fifth character subdivisions are for use with subcategories J96.0 – J96.9:*

- 0    Type I [hypoxic]
- 1    Type II [hypercapnic]
- 9    Type unspecified

**J96.0**      **Acute respiratory failure**

**J96.1**      **Chronic respiratory failure**

**J96.9**      **Respiratory failure, unspecified**



## Sunburn

### **Background:**

- Public submission
- Lack of specific information impacts data analysis
  - significant health issue
  - long term consequences for skin cancer
- Need to identify the sunburn site and the cause of injury
- Additional burn codes for sunburn

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## Sunburn

New instructions:

**L55**

**Sunburn**

Note: new rules

1911

*Use additional code (T20–T25, T29–T30) to identify site of sunburn*

*Use additional code (T31) to identify percentage of body surface area*

*Use additional external cause code (Chapter 20) to identify cause*

- L55.0 Sunburn, erythema
- L55.1 Sunburn, partial thickness
- L55.2 Sunburn, full thickness
- L55.8 Other sunburn
- L55.9 Sunburn, unspecified

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## Sunburn

New instructions:

**1911**

**BURNS**

Note: new rules

### Classification

#### Sunburn

*Sunburn requires multiple diagnosis codes to fully describe the injury.*

#### Code first:

- L55.0 *Sunburn, erythema*
- L55.1 *Sunburn, partial thickness*
- L55.2 *Sunburn, full thickness*

*Assign an additional code to indicate the site of sunburn from T20-T25, T29-T30 and a supplementary code from T31.- Burns classified according to extent of body surface involved to indicate the percentage body surface area of sunburn.*

*Assign an appropriate external cause code to specify the circumstances of the sunburn injury, for example X32 Exposure to sunlight, W89 Exposure to man-made visible and ultraviolet light.*

*Assign an appropriate place of occurrence code (Y92.-) and activity code (U50–U73).*

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## Sunburn

### Scenario

- 24 year old female patient admitted for burn across abdominal trunk after a 1 hour session in her home solarium. Burn displayed blistering across upper abdominal wall (9% BSA), documented as partial thickness.

L55.1	<i>Sunburn, partial thickness</i>
T21.23	<i>Partial thickness burn of abdominal wall</i>
T31.00	<i>Burns involving less than 10% of body surface, with less than 10% or unspecified full thickness burns</i>
W89	<i>Exposure to man-made visible and ultraviolet light</i>
Y92.09	<i>Place of occurrence, other and unspecified place in home</i>
U73.9	<i>Unspecified activity</i>

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## Session 3

~ *Neonates* ~

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## Program

### Session 3 – Neonates

1. Cerebral leukomalacia
2. Hypoxic ischaemic encephalopathy
3. Peri/intraventricular haemorrhage
4. Sudden infant death syndrome
5. Nitric oxide therapy
6. Combined ventilatory support in neonates
7. Posthaemorrhagic hydrocephalus
8. High flow nasal cannula
9. Catheterisation in a neonate
10. Therapeutic hypothermia
11. Jaundice
12. ACS 1615 *Specific interventions for the sick neonate*

## Neonatal changes

### Background:

- Neonatal Clinical Technical Group
  - improvements in clinical treatments
  - specificity in clinical diagnoses



## Neonatal changes

### New codes:

- Cerebral leukomalacia
- Hypoxic ischaemic encephalopathy (HIE)
- Peri/intraventricular haemorrhage
- Sudden infant death syndrome (SIDS)
- Administration of nitric oxide
- Combined ventilatory support in neonates

### Indexing:

- Posthaemorrhagic hydrocephalus
- High flow nasal cannula

### ACS 1615:

- Catheterisation in a neonate
- Therapeutic hypothermia
- Jaundice
- Reorganisation ACS 1615 *Specific interventions for the sick neonate*

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## Neonatal changes

### Cerebral leukomalacia

Expanded codes:

**P91.2 Neonatal cerebral leukomalacia**

Periventricular leukomalacia [PVL]  
Subcortical leukomalacia

⊛P91.20 Neonatal cerebral leukomalacia, unspecified

⊛P91.21 Neonatal cerebral leukomalacia, cystic

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## Neonatal changes

### Hypoxic ischaemic encephalopathy (HIE)

Expanded codes:

**P91.6** Hypoxic ischaemic encephalopathy [HIE] of newborn

*Code also any co-existent severe birth asphyxia (P21.0)*

P91.60 Hypoxic ischaemic encephalopathy [HIE] of newborn, unspecified

P91.61 Stage 1 hypoxic ischaemic encephalopathy [HIE] of newborn

P91.62 Stage 2 hypoxic ischaemic encephalopathy [HIE] of newborn

P91.63 Stage 3 hypoxic ischaemic encephalopathy [HIE] of newborn

ACS 1616 Hypoxic ischaemic encephalopathy [HIE] – deleted

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## Neonatal changes

### Peri/intraventricular haemorrhage

Expanded codes:

**P52** Intracranial nontraumatic haemorrhage of fetus and newborn

P52.0 Intraventricular (nontraumatic) haemorrhage, grade 1, fetus & newborn

P52.1 Intraventricular (nontraumatic) haemorrhage, grade 2, fetus & newborn

**P52.2** Intraventricular (nontraumatic) haemorrhage, grade 3 and grade 4, of fetus and newborn

P52.21 Intraventricular (nontraumatic) haemorrhage, grade 3, of fetus and newborn

P52.22 Intraventricular (nontraumatic) haemorrhage, grade 4, of fetus and newborn

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## Neonatal changes

### Sudden infant death syndrome (SIDS)

Expanded codes:

**R95** Sudden infant death syndrome

R95.0 Sudden infant death syndrome with mention of autopsy

R95.9 Sudden infant death syndrome without mention of autopsy  
Sudden infant death syndrome, unspecified

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## Neonatal changes

### Administration of nitric oxide

New ACHI code:

**1889** Other therapeutic interventions on respiratory system

92210-00 Nitric oxide therapy

1615

Code first:

• ventilatory support (13882 [569], 92209 [570])

- inhalation drug - in conjunction with other ventilatory support
- for respiratory failure in neonates
- performed in Neonatal ICUs
- code first the ventilatory support
- included in ACS 1615 *Specific interventions for the sick neonate*

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## Neonatal changes

### Combined ventilatory support in neonates

- Public submission – Neonatal clinical technical group
- Increasingly common practice to treat neonates with flexible combinations of both CVS and NIV
- Addition of new ACHI block for combined ventilatory support
- For neonates only

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## Neonatal changes

New ACHI block and code:

**571**

1615

### **Combined ventilatory support**

Combined continuous (invasive) and noninvasive ventilatory support listed in blocks [569] and [570]

**Note:** For neonates only. Duration of combined ventilatory support must be ≥ 96 hours.

Code first:

• duration of ventilatory support:

- continuous (invasive) (see block [569])
- noninvasive (see block [570])

92211-00    Management of combined ventilatory support, ≥ 96 hours

Included in ACS 1615 *Specific interventions for the sick neonate*

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## Neonatal changes

### Scenario:

- Newborn born 35<sup>+4</sup>/40 with respiratory distress syndrome. Baby in NICU intubated and ventilated (76 hours). Moved onto NIV BIPAP (30 hours). (Total = 106 hours)

13882-01 [569] *Management of continuous ventilatory support, >24 and < 96 hours*

92209-01 [570] *Management of noninvasive ventilatory support, >24 and < 96 hours*

92211-00 [571] *Management of combined ventilatory support, ≥ 96 hours*

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## Neonatal changes

### Posthaemorrhagic hydrocephalus

Improved indexing and new inclusion terms:

#### Hydrocephalus

...

- newborn ~~Q03.9~~

- - with spina bifida (see also Spina bifida/with hydrocephalus) Q05.4-

- - congenital Q03.9

- - post intraventricular haemorrhage (IVH) G91.8

- - posthaemorrhagic G91.8

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## Neonatal changes

### Posthaemorrhagic hydrocephalus

Improved indexing and new inclusion terms:

**G91**      **Hydrocephalus**

...

G91.8      Other hydrocephalus

Neonatal:

- post intraventricular haemorrhage (IVH) hydrocephalus
- posthaemorrhagic hydrocephalus

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## Neonatal changes

### High flow nasal cannula (HFNC)

New inclusion terms:

**570**      **Noninvasive ventilatory support**

Bi-level positive airway pressure [BiPAP]

Continuous positive airway pressure [CPAP]

High flow therapy [HFT] (nasal high flow cannula [HFNC])

Intermittent mask CPAP

...

**1889**      **Other therapeutic interventions on respiratory system**

...

92044-00      Other oxygen enrichment

**Excludes:** high flow therapy (nasal high flow cannula) (see block [570])  
hyperbaric oxygenation (see block [1888])

ACS 1006 *Ventilatory support* – incorporated 'high flow' terminology

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## Neonatal changes

### Catheterisation in a neonate

ACS 1615 update:

#### 1615 SPECIFIC INTERVENTIONS FOR THE SICK NEONATE

...

#### Catheterisation in a neonate

13300-00 [738] Catheterisation/cannulation of other vein in neonate

13300-01 [738] Scalp vein catheterisation/cannulation in neonate

13300-02 [738] Umbilical vein catheterisation/cannulation in neonate

13319-00 [738] Central vein catheterisation in neonate

13303-00 [694] Umbilical artery catheterisation/cannulation in neonate

ACS 0042 Procedures normally not coded – exception for neonates added

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## Neonatal changes

### Catheterisation in a neonate

ACS 0042 update:

#### 0042 PROCEDURES NORMALLY NOT CODED

...

4. **Cardiotocography (CTG)** except fetal scalp electrodes

5. **Catheterisation:**

- **arterial or venous** (such as Hickman's, PICC, CVC, Swan Ganz) **except** cardiac catheterisation (blocks [667] and [668]), ~~or~~ surgical catheterisation (block [741]) or catheterisation in neonates (see ACS 1615 Specific interventions for the sick neonate)
- **urinary** except if suprapubic

6. **Doppler recordings**

7. **Dressings**

...

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## Neonatal changes

### Therapeutic hypothermia

New inclusion term:

**1880** Therapies using agents, not elsewhere classified

...

22065-00 Cold therapy  
  1615 Hypothermic therapy (therapeutic hypothermia)

...

- neonatal treatment for lack of oxygen (eg, HIE, birth asphyxia)
- initially passive cooling – blankets, water bath, blood cooling
- alternatively – refrigerated gel packs applied
- included in ACS 1615 *Specific interventions for the sick neonate*

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## Neonatal changes

### Therapeutic hypothermia

ACS 1615 update:

**1615** **SPECIFIC INTERVENTIONS FOR THE SICK NEONATE**

...

#### Therapeutic hypothermia

Therapeutic hypothermia is used for neonates who are at risk of suffering from lack of oxygen to the brain. A lack of oxygen before or during the birth process can destroy brain cells in a newborn and one way to stop this damage continuing is to induce hypothermia. Cooling should be started as soon as possible after birth and involves keeping the newborn's core temperature at 33 - 34 C usually for a period of 72 hours.

Assign 22065-00 [1880] Cold therapy in neonates regardless of duration given.

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## Neonatal changes

### Jaundice

ACS 1615 update:

#### 1615 SPECIFIC INTERVENTIONS FOR THE SICK NEONATE

....  
Jaundice

A diagnosis code for jaundice of the newborn **should only be assigned when > 12 hours of phototherapy is provided.**

However, if a neonate is readmitted specifically for jaundice with or without phototherapy, jaundice should be coded as the principal diagnosis.

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## Neonatal changes

ACS 1615 update and reorganisation:

#### 1615 SPECIFIC INTERVENTIONS FOR THE SICK NEONATE

**1. Code the following only when the intervention meets the specified criteria:**

- Enteral infusion
- Maternal illness/incapacity to care
- Oxygen therapy
- Parenteral antibiotics/anti-infectives
- Phototherapy
- Jaundice (*new*)
- Ventilatory Support
  - Combined ventilatory support (invasive and noninvasive) (*new*)
  - For resuscitation at birth

**2. Code the following intervention when performed:**

- Administration of blood and blood products
- Catheterisation in a neonate (*new*)
- Nitric oxide therapy (*new*)
- Parenteral fluid therapy
- Therapeutic hypothermia (*new*)

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## Session 4

~ *ACHI* ~

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### Program

#### Session 4 – ACHI

1. Endoluminal fundoplication (ELF)
2. Insertion of seeds/fiducial markers into prostate
3. Minimally invasive procedures proceeding to open procedures
4. Laparoscopic colectomy & ileocolic resection
5. Procedures for obesity
6. Single event multilevel surgery (SEMLS)
7. Irreversible electroporation (IRE)
8. High intensity focused ultrasound (HIFUS)
9. Percutaneous heart valve replacement
10. Aspiration thrombectomy of the coronary artery
11. Transcatheter thrombectomy of intracranial arteries
12. Peritonectomy/cytoreduction surgery (CRS)
13. Sacral nerve stimulation (SNS)
14. Sentinel lymph node biopsy (SLNB)

## Endoluminal fundoplication (ELF)

### **Background:**

- public submission
- new procedure
- treatment of gastro-oesophageal reflux disease (GORD)
- EsophyX™ device - minimally invasive procedure
- reconstructs the gastro-oesophageal valve

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## Endoluminal fundoplication (ELF)

[http://medgadget.com/2007/04/esophyx\\_endoluminal\\_fundoplicationelf\\_system\\_for\\_gerd.html](http://medgadget.com/2007/04/esophyx_endoluminal_fundoplicationelf_system_for_gerd.html)

Video: <http://www.youtube.com/watch?v=vTUNwaZtILY>

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## Endoluminal fundoplication (ELF)

New code:

**886**

**Fundoplasty**

...

30527-06 Fundoplasty, transoral approach  
Endoluminal fundoplication (ELF)

*Includes:* repair of diaphragmatic hernia (hiatal hernia)



## Insertion of seeds/fiducial markers into prostate

### Background:

- public submission
- seeds/fiducial markers
  - brachytherapy
  - radiotherapy
- increasingly frequent treatment for prostate cancer
- new code was created in ACHI Seventh Edition
- queries seeking further clarification

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## Insertion of seeds/fiducial markers into prostate

### Brachytherapy

- internal radiation (ie radiation source placed inside the body)
  
- brachytherapy incorporates two components:
  - applicator insertion
  - radiation
  
- two types of brachytherapy:
  - Low dose rate (LDR)
  - High dose rate (HDR)

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## Insertion of seeds/fiducial markers into prostate

- **Low dose rate (LDR) brachytherapy**
  - radioactive seeds (via applicator) are inserted into the prostate
  - through perineum under imaging guidance
  - between 70-150 seeds precisely placed
  - slow release radiation (radiation) starts immediately
  - after time, radiation complete and seeds inactive
  - seeds remain permanently in place (biologically inert)

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## Insertion of seeds/fiducial markers into prostate

### LDR Brachytherapy

Video: <http://www.youtube.com/watch?v=9NKWPL9GrhA>

Seeds (smaller than grains of rice) contain radioactive material

The needles containing seeds are inserted via a template through the perineum into the prostate

X-Ray of prostate seed implants which release radiation

<http://www.isoaid.com/brachytherapyprocedure.html>

<http://www.orau.org/ptp/collection/brachytherapy/seeds.htm>

<http://www.wroa.net/prostatefaq.htm>

<http://www.upmccancercenter.com/cancer/prostate/radbratherapy.html>

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## Insertion of seeds/fiducial markers into prostate

### ▪ High dose rate (HDR) brachytherapy

- tubes are inserted via catheters (applicator) into the prostate in operating theatre
- through perineum under imaging guidance
- patient returns to ward with catheters in place
- transferred to radiation department where tubes/catheters 'connected' to loading machine to start radiation
- radiotherapy (radiation) delivered over several sessions (at least 4-6 hours apart)
- may be supplemented with external radiotherapy

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## Insertion of seeds/fiducial markers into prostate

### HDR Brachytherapy

#### Video:

<http://www.youtube.com/watch?v=nyTEmYLSTak>

After theatre, catheters are connected to an 'Afterloader' machine to deliver radiation internally

<http://patient.varian.com/us/brachytherapy/>

<http://sfbrachy.com/hdr.htm>

In theatre, catheters are inserted via a template through the perineum into the prostate

The catheters remain in place while multiple doses of internal radiation are delivered across intervals of at least 4-6 hours

<http://sfbrachy.com/hdr.htm>

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## Insertion of seeds/fiducial markers into prostate

### Radiotherapy

- external beam radiation (ie radiation administered from outside the body)
  
- treatment option for localised prostate cancer
  - prostate difficult to image with standard x-rays
  - prostate is mobile
  
- markers (ie, fiducial markers) inserted to provide fixed reference points during radiotherapy
  - usually 3 or 4 markers
  - inserted under imaging guidance
  - inserted either in ambulatory care or day surgery under anaesthetic
  - permanent placement

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## Insertion of seeds/fiducial markers into prostate

### Markers for external beam radiotherapy

**Video:** <http://www.youtube.com/watch?v=bFc6V7Mdd38>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3259125/>

<http://biocompatiblesinc.com/products-anchormarker.asp>

<http://www.g-fix.com/ga/product-patient/product-patient-1.html>

[http://www.radoncvic.com.au/rt\\_prostate\\_IMRT.html](http://www.radoncvic.com.au/rt_prostate_IMRT.html)

[http://www.melbourneprostate.org/?page\\_id=452](http://www.melbourneprostate.org/?page_id=452)

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## Insertion of seeds/fiducial markers into prostate

**1160**

### Application, insertion or removal procedures on prostate or seminal vesicle

37227-00     ...  
Implantation of brachytherapy applicator, prostate  
Insertion of catheters (needles) into prostate for brachytherapy

**Includes:** cystoscopy  
ultrasound

**Note:** Radioactive (gold) seeds for brachytherapy

*Code also when performed:*

• brachytherapy, prostate (15338-00 [1792])

**Excludes:** that for radiotherapy planning (37217-00 [1160])

37217-00     Implantation of fiducial marker, prostate

**Note:** Marker for radiotherapy planning

**Excludes:** that for brachytherapy (37227-00 [1160])

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## Insertion of seeds/fiducial markers into prostate

### Scenario A:

- Mr Brown admitted for insertion of radioactive seeds under local anaesthesia for LDR brachytherapy

37227-00 [1160] *Implantation of brachytherapy applicator, prostate*  
15338-00 [1792] *Brachytherapy, prostate*

### Scenario B:

Mr King admitted for insertion of catheters under general anaesthetic (ASA 2) and proceeded to undergo two sessions of HDR brachytherapy.

37227-00 [1160] *Implantation of brachytherapy applicator, prostate*  
92514-29 [1910] *General anaesthesia (ASA 29)*  
15338-00 [1792] *Brachytherapy, prostate*

159

## Insertion of seeds/fiducial markers into prostate

### Scenario C:

Mr Anderson admitted to day surgery unit for insertion of fiducial markers under local anaesthesia in preparation for future external beam radiotherapy.

37217-00 [1160] *Implantation of fiducial marker, prostate*

*Note: non-radioactive 'seeds' can also be used as markers for radiotherapy planning*

160

## Minimally invasive procedures proceeding to open procedure

### Background:

- increasing use of laparoscopic procedures
  - colorectal, bariatric and gynaecological procedures
- consultation with the Colorectal Surgical Society of Australia and New Zealand (CSSANZ) and other clinicians
- better identification of “laparoscopic procedures proceeding to open procedures”

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## Minimally invasive procedures proceeding to open procedure

### New codes:

#### **1011** Other procedures on digestive system

*Use for any converted procedures*

90343-00 Endoscopic procedure proceeding to open procedure

—0019

Code first:

• open surgical procedure(s) performed

...

90343-01 Laparoscopic procedure proceeding to open procedure

—0019

Code first:

• open surgical procedure(s) performed

...

#### **1579** Other procedures for other musculoskeletal sites

90613-00 Arthroscopic procedure proceeding to open procedure

—0019

Code first:

• open surgical procedure(s) performed

...

162

## Minimally invasive procedures proceeding to open procedure

Deleted codes:

**965**

### Cholecystectomy

~~30446-00 Laparoscopic cholecystectomy proceeding to open cholecystectomy~~

**1269**

### Vaginal hysterectomy

~~35756-00 Laparoscopically assisted vaginal hysterectomy proceeding to abdominal hysterectomy~~

~~35756-03 Laparoscopically assisted vaginal hysterectomy proceeding to abdominal hysterectomy with removal of adnexa~~

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## Minimally invasive procedures proceeding to open procedure

Updated ACS 0019:

### 0019 PROCEDURE NOT COMPLETED OR INTERRUPTED

.....

#### Minimally invasive (keyhole) procedures proceeding to open procedure

When an intended minimally invasive procedure proceeds to an open procedure, assign first a code for the open procedure followed by the appropriate code below:

90343-00 [1011] Endoscopic procedure proceeding to open procedure

90343-01 [1011] Laparoscopic procedure proceeding to open procedure, or

90613-00 [1579] Arthroscopic procedure proceeding to open procedure.

164

## Minimally invasive procedures proceeding to open procedure

Updated ACS 0019:

### 0019 PROCEDURE NOT COMPLETED OR INTERRUPTED

.....

**Note:** While codes 90343-00 and 90343-01 are located in Chapter 10 *Procedures on digestive system* they can be used with other codes not located in this chapter to identify endoscopic or laparoscopic procedures which proceed to open procedures.

**Note:** These codes should not be used for diagnostic endoscopy/laparoscopy/arthroscopy.

If the conversion was the result of a procedural complication, code also the complication as per the guidelines in ACS 1904 *Procedural complications*.

165

## Minimally invasive procedures proceeding to open procedure

### ACS Example 2:

Attempted endoscopic release of carpal tunnel, converted to open procedure

39331-01 [76]	<i>Release of carpal tunnel</i>
90343-00 [1011]	<i>Endoscopic procedure proceeding to open procedure</i>

### ACS Example 3:

A laparoscopically assisted vaginal hysterectomy proceeding to total abdominal hysterectomy

35653-01 [1268]	<i>Total abdominal hysterectomy</i>
90343-01 [1011]	<i>Laparoscopic procedure proceeding to open procedure</i>

166

## Minimally invasive procedures proceeding to open procedure

### Scenario A:

Mrs Smith admitted for surgery for obesity. Clinicians plan a laparoscopic Roux-en-Y gastric bypass and a laparoscopic cholecystectomy under general anaesthesia (ASA 2). During theatre, the clinician is required to convert the cholecystectomy from laparoscopic to an open procedure.

30512-03 [889]	<i>Laparoscopic gastric bypass</i>
30443-00 [965]	<i>Cholecystectomy</i>
90343-01 [1011]	<i>Laparoscopic procedure proceeding to open procedure</i>
92514-29 [1910]	<i>General anaesthesia (ASA 29)</i>

167

## Minimally invasive procedures proceeding to open procedure

### Scenario B:

Mrs Martin is admitted for investigation of suspected ovarian tumour. Clinicians intend to perform a diagnostic laparoscopy and may continue with open procedure based on the findings. Diagnostic laparoscopy identified tumour of left ovary extending into fallopian tube. Surgeons review the diagnosis and perform a left salpingo-oophorectomy under general anaesthetic (ASA 2).

35713-11 [1252]	<i>Salpingo-oophorectomy, unilateral</i>
30390-00 [984]	<i>Laparoscopy</i>
92514-29 [1910]	<i>General anaesthesia (ASA 29)</i>

168

## Laparoscopic colectomy & ileocolic resection

### Background:

- Public submission
- Laparoscopy widely used in gastrointestinal surgery
- Many potential advantages such as
  - faster return to normal activity and diet
  - reduced postoperative pain
  - reduced hospital stay

169

## Laparoscopic colectomy & ileocolic resection

Ileocolic resection:  
Ileocolic resection with anastomosis

<http://www.hopkins-gi.org/>

170

## Laparoscopic colectomy & ileocolic resection

New codes:

**913**

### Colectomy

<u>30515-03</u>	<u>Ileocolic resection with anastomosis</u>
<u>30515-04</u>	<u>Laparoscopic ileocolic resection with anastomosis</u>
<u>30515-05</u>	<u>Ileocolic resection with formation of stoma</u>
<u>30515-06</u>	<u>Laparoscopic ileocolic resection with formation of stoma</u>

171

## Laparoscopic colectomy & ileocolic resection

New codes:

**913**

### Colectomy

	...
<u>32003-00</u>	Limited excision of large intestine with anastomosis
<u>32003-02</u>	<u>Laparoscopic limited excision of large intestine with anastomosis</u>
<u>32000-00</u>	Limited excision of large intestine with formation of stoma
<u>32000-02</u>	<u>Laparoscopic limited excision of large intestine with formation of stoma</u>

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## Laparoscopic colectomy & ileocolic resection

New codes:

**913**

### Colectomy

...

32003-01 Right hemicolectomy with anastomosis

32003-03 Laparoscopic right hemicolectomy with anastomosis

32000-01 Right hemicolectomy with formation of stoma

32000-03 Laparoscopic right hemicolectomy with formation of stoma

32005-01 Extended right hemicolectomy with anastomosis

32005-03 Laparoscopic extended right hemicolectomy with anastomosis

32004-01 Extended right hemicolectomy with formation of stoma

32004-03 Laparoscopic extended right hemicolectomy with formation of stoma

173

## Laparoscopic colectomy & ileocolic resection

New codes:

**913**

### Colectomy

...

32006-00 Left hemicolectomy with anastomosis

32006-02 Laparoscopic left hemicolectomy with anastomosis

32006-01 Left hemicolectomy with formation of stoma

32006-03 Laparoscopic left hemicolectomy with formation of stoma

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## Laparoscopic colectomy & ileocolic resection

New codes:

**913**

### Colectomy

...

32005-00	Subtotal colectomy with anastomosis
<u>32005-02</u>	<u>Laparoscopic subtotal colectomy with anastomosis</u>
32004-00	Subtotal colectomy with formation of stoma
<u>32004-02</u>	<u>Laparoscopic subtotal colectomy with formation of stoma</u>
32012-00	Total colectomy with ileorectal anastomosis
<u>32012-01</u>	<u>Laparoscopic total colectomy with ileorectal anastomosis</u>
32009-00	Total colectomy with ileostomy
<u>32009-01</u>	<u>Laparoscopic total colectomy with ileostomy</u>

175

## Laparoscopic colectomy & ileocolic resection

New codes:

**934**

### Rectosigmoidectomy or proctectomy

...

32030-00	Rectosigmoidectomy with formation of stoma Hartmann's procedure
<u>32030-01</u>	<u>Laparoscopic rectosigmoidectomy with formation of stoma Hartmann's procedure via laparoscopy</u>

176

## Procedures for obesity

### **Background:**

Changes in the field of obesity surgery

- Queries from coders and clinicians
- Public submissions – DRG allocation
- Previously published advice – duodenal switch
- ACHI limitations affecting DRG allocation

Consultation with Obesity Surgery Society of Australia and New Zealand (OSSANZ)

177

## Procedures for obesity

- Review of block [889] *Procedures for morbid obesity*

Previously 8 codes, now 27 codes:

- 23 additional codes
- 3 modified codes
- 4 deleted codes

178

## Procedures for obesity

- Instructions for diaphragmatic hernia
  - Block [889] *Procedures for obesity* - relevant ACHI codes
    - Addition of includes note – diaphragmatic (crural) repair
  - Block [998] *Repair of diaphragmatic hernia*
    - Addition of excludes note – when performed during obesity procedure(s)

179

## Procedures for obesity

**889**

**Procedures for obesity**

**Sleeve gastrectomy**

Also known as:

- gastric sleeve
- tube gastrectomy

[http://www.msac.gov.au/internet/msac/publishing.nsf/Content/Obesity\\_+Review](http://www.msac.gov.au/internet/msac/publishing.nsf/Content/Obesity_+Review)

**Video:** <http://www.youtube.com/watch?v=ljxFjl69bEI>

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## Procedures for obesity

**889**

### Procedures for obesity

30511-09 Laparoscopic sleeve gastrectomy [LSG]

Laparoscopic:

...

30511-10 Sleeve gastrectomy [SG]

Banded sleeve gastrectomy [BSG]

Gastrectomy:

• longitudinal

• tube

• vertical

Includes: diaphragmatic (crural) repair

Note: \_\_\_\_\_ may be performed as the first stage of a two-stage surgery

Excludes: when performed concurrently with BPD-DS (30512-02 [889])

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## Procedures for obesity

New indexing:

### **Gastrectomy**

...

- sleeve (SG)

- - **for obesity (banded) 30511-10 [889]**

- - - as part of

- - - - biliopancreatic diversion (with duodenal switch) 30512-02 [889]

- - - - - laparoscopic 30512-01 [889]

- - - - duodenal-jejunal bypass 90940-00 [889]

- - - - ileal interposition 90941-00 [889]

- - - laparoscopic 30511-09 [889]

- - **for procedure(s) other than obesity 30523-00 [879]**

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## Procedures for obesity

**889**

Procedures for obesity

Adjustable gastric  
band (Lap band)

<http://www.fda.gov/medicaldevices/productsandmedicalprocedures/deviceapprovalsandclearances/recently-approveddevices/ucm248133.htm>

**Video:** <http://www.youtube.com/watch?v=Ac-U5ezXbP4>

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## Procedures for obesity

**889**

Procedures for obesity

30511-02

Laparoscopic adjustable gastric banding [LAGB]

Laparoscopic gastric banding NOS

.....

30511-03

Laparoscopic nonadjustable gastric banding [LNGB]

Laparoscopic fixed gastric band

**Includes:** diaphragmatic (crural) repair  
that with replacement

**Note:** involves marlex mesh or gastric ring reinforcement

**Code also when performed:**

- replacement of gastric band reservoir (31441-00 [889])
- revision procedure for obesity (30514-01 [889])

30511-04

Adjustable gastric banding [AGB]

Gastric banding NOS

30511-05

Nonadjustable gastric banding [NGB]

Fixed gastric band

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## Procedures for obesity

**889**

### Procedures for obesity

- 90942-01 Laparoscopic removal of gastric band  
Laparoscopic removal of gastric band:  
• adjustable  
• nonadjustable (fixed)  
...
- 90942-02 Endoscopic removal of gastric band  
Endoscopic removal of gastric band:  
• adjustable  
• nonadjustable (fixed)  
...
- 90942-00 Removal of gastric band  
Removal of gastric band:  
• adjustable  
• nonadjustable (fixed)  
**Includes:** removal of (implanted) gastric band reservoir/port  
**Excludes:** that with replacement (30511-02, 30511-03 **[889]**)

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## Procedures for obesity

**889**

### Procedures for obesity

- 14215-01 Adjustment of gastric band reservoir  
Accessing in order to add or remove fluid (saline) from implanted reservoir/port of gastric band to adjust tightness
- 31441-00 Revision of gastric band reservoir  
Repair of implanted reservoir/port  
Replacement of implanted reservoir/port  
Repositioning of implanted reservoir/port  
**Code also when performed:**  
• replacement of gastric band (30511-02, 30511-03, 30511-04, 30511-05 **[889]**)
- 31441-01 Removal of gastric band reservoir  
Removal of implanted reservoir/port  
**Excludes:** replacement (31441-00 **[889]**)  
with removal of gastric band (90942 **[889]**)

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## Procedures for obesity

**889**

Procedures for obesity

Roux-en-Y gastric  
bypass (RYGB)

<http://www.allinahealth.org/ahs/bariatric.nsf/page/RouxenYsurgery>

**Video:** <http://www.youtube.com/watch?v=Lq8jPX904rw>

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## Procedures for obesity

**889**

Procedures for obesity

30512-03 Laparoscopic gastric bypass

....

30512-00 Gastric bypass

Bypass:

- banded (ring)
- loop
- mini gastric
- Roux-en-Y [RYGB]

**Includes:** anastomosis  
diaphragmatic (crural) repair  
dilation of gastro-enteral stricture

**Note:** \_\_\_\_\_ may be performed as the second stage of a two-stage surgery

*Code also when performed:*

- gastro-enterostomy (30515-00 [881])
- revision procedure for obesity (30514-01 [889])

**Excludes:** Roux-en-Y not for obesity (see Alphabetic Index: Roux-en-Y procedure)

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## Procedures for obesity

889

### Procedures for obesity

#### Biliopancreatic diversion with duodenal switch (BPD-DS)

[http://www.medscape.com/content/2004/00/47/19/471952/471952\\_fig.html](http://www.medscape.com/content/2004/00/47/19/471952/471952_fig.html)

**Video:** <http://www.youtube.com/watch?v=Sdks7Muv9LE> (no sound)

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## Procedures for obesity

889

### Procedures for obesity

30512-01 Laparoscopic biliopancreatic diversion [LBPD]  
....

30512-02 Biliopancreatic diversion [BPD]  
Biliopancreatic diversion with duodenal switch [BPD-DS]  
Duodenal switch [DS]  
Scopinaro procedure

**Includes:** anastomosis  
cholecystectomy  
diaphragmatic (crural) repair  
distal gastrectomy  
sleeve gastrectomy

**Note:** may be performed as the second stage of a two-stage surgery

**Code also when performed:**

- gastro-enterostomy (30515-00 [881])
- revision procedure for obesity (30514-01 [889])

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## Procedures for obesity

**889**

### Procedures for obesity

#### Vertical banded gastroplasty (VBG)

Also known as:  
- stomach stapling

<http://www.iqbalandkhansurgical.com/id28.html>

**Video:** <http://www.youtube.com/watch?v=K4XApq-l6as>

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## Procedures for obesity

**889**

### Procedures for obesity

30511-06 Laparoscopic gastroplasty

Laparoscopic:

...

30511-07 Endoscopic gastroplasty

Endoluminal:

...

30511-08 Gastroplasty

Gastric:

• plication

• stapling

• suturing

Vertical banded gastroplasty [VBG]

***Includes:*** diaphragmatic (crural) repair

***Code also when performed:***

• revision procedure for obesity (30514-01 [889])

192

## Procedures for obesity

**889**

### Procedures for obesity

Ileal interposition:

Kota, S et al. 2011, Remission of Type 2 Diabetes Mellitus by Ileal Interposition with Sleeve Gastrectomy, *International Journal of Endocrinology and Metabolism*, vol. 9 no. 3, pp. 374-381.

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## Procedures for obesity

**889**

### Procedures for obesity

90940-00 Duodenal-jejunal bypass [DJ bypass]

*Includes:* sleeve gastrectomy

90941-00 Ileal interposition

*Includes:* sleeve gastrectomy

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## Procedures for obesity

**889**

Procedures for obesity

**Gastric  
balloon**

[http://www.weightlossurgery.ae/Intragastric\\_Balloon.php](http://www.weightlossurgery.ae/Intragastric_Balloon.php)

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## Procedures for obesity

**889**

Procedures for obesity

90950-00 Insertion of gastric bubble balloon

90950-01 Removal of gastric balloon

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## Procedures for obesity

**889**

### Procedures for obesity

#### Endoluminal sleeve:

<http://www.yourbariatricsurgeryguide.com/endoluminal-sleeve/>

Kethu, S et al 2012, Endoluminal bariatric techniques, *Gastrointestinal Endoscopy*, vol. 76 no. 1, pp. 1-7

**Video:** <http://www.youtube.com/watch?v=805qBVvgXg0&list=PLk0oyqqCz-BmkRqCV7w4IAGgxdryzujPg>

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## Procedures for obesity

**889**

### Procedures for obesity

90943-01 Other laparoscopic procedures for obesity

...

90943-02 Other endoscopic procedures for obesity

Endoluminal sleeve

...

90943-00 Other procedures for obesity

Code also when performed:

• revision procedure for obesity (30514-01 [889])

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## Procedures for obesity

**889**

### Procedures for obesity

30514-01

Revision procedure for obesity

Surgical reversal of procedure for obesity

**Note:** complete reversal of initial surgery immediately followed by another reduction, gastroplasty or bypass procedure

Code also when performed:

• gastro-enterostomy (30515-00 [881])

• gastro-gastrostomy (30375-31 [881])

Code first:

• obesity procedure(s) performed (see block [889])

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## Procedures for obesity

Deleted codes from block [889]:

**889**

### Procedures for obesity

~~14215-00~~

~~Revision of gastric band~~

~~Addition or removal of fluid (saline) from implanted reservoir of gastric band~~

~~Adjustment of gastric band~~

~~Replacement of implanted reservoir of gastric band~~

~~30511-01~~

~~Laparoscopic gastric reduction~~

~~Laparoscopic adjustable gastric banding (LAGB)~~

~~30511-00~~

~~Gastric reduction~~

~~Gastric:~~

~~• banding~~

~~• stapling~~

~~Gastroplasty for morbid obesity~~

~~30514-00~~

~~Surgical reversal of procedure for morbid obesity~~

200

## Procedures for obesity

### Scenario:

- Patient admitted for laparoscopic duodenal switch for their morbid obesity. Clinicians commence with a sleeve gastrectomy before completing the duodenal switch.

E66.8      *Morbid obesity*

30512-01 [889]      *Laparoscopic biliopancreatic diversion [LBPD]*

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## Procedures for obesity

### Instructional notes:

**889**

### Procedures for obesity

30512-01      Laparoscopic biliopancreatic diversion [LBPD]

Laparoscopic:

- biliopancreatic diversion with duodenal switch [LBPD-DS]
- duodenal switch [LDS]
- Scopinaro procedure

#### **Includes:**

anastomosis  
cholecystectomy  
diaphragmatic (crural) repair  
distal gastrectomy  
sleeve gastrectomy

#### **Note:**

may be performed as the second stage of a two-stage surgery

*Code also when performed:*

- gastro-enterostomy (30515-00 [881])
- revision procedure for obesity (30514-01 [889])

202

## Procedures for obesity

### Scenario:

- Patient with morbid obesity admitted for revision of a previous obesity procedure. Now having a laparoscopic adjustable gastric band performed.

E66.8      *Morbid obesity*

30511-02 [889]      *Laparoscopic adjustable gastric banding*

30514-01 [889]      *Revision procedure for obesity*

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## Procedures for obesity

### Instructional notes:

#### **889**      **Procedures for obesity**

30511-02      Laparoscopic adjustable gastric banding [LAGB]  
Laparoscopic gastric banding NOS

#### ***Includes:***

diaphragmatic (crural) repair  
that with replacement

#### ***Code also when performed:***

- replacement of gastric band reservoir (31441-00 [889])
- revision procedure for obesity (30514-01 [889])

204

## Single event multilevel surgery (SEMLS)

### Background:

- MBS update - 2006
- Designed for ambulant children with cerebral palsy
- Also for other neuromuscular conditions (eg, hereditary spastic paraplegias)
- Varying degrees of musculoskeletal pathology or abnormal gait
- Difficult to identify SEMLS cases in current dataset

205

## Single event multilevel surgery (SEMLS)

### Single event multilevel surgery (SEMLS)

- one operation involving multiple orthopaedic procedures
- for correction of spastic muscle/tendon contractions and bony deformities of the lower limbs
- also described as multiple lower extremity procedure (MLEP)

206



## Single event multilevel surgery (SEMLS)

Indications for soft-tissue SEMLS:

Hughes, C et al. 2012, Orthopaedic assessment and management of cerebral palsy, *Orthopaedics and Trauma*, vol. 26 no. 4, pp. 280-91.

207

## Single event multilevel surgery (SEMLS)

Indications for skeletal SEMLS:

Hughes, C et al. 2012, Orthopaedic assessment and management of cerebral palsy, *Orthopaedics and Trauma*, vol. 26 no. 4, pp. 280-91.

208

## Single event multilevel surgery (SEMLS)

New block and codes:

**1580**

### Single event multilevel surgery [SEMLS]

**Note:**

Single event multilevel surgery (SEMLS) is performed for ambulant children with cerebral palsy and a number of other neuromuscular conditions which are phenotypically similar to cerebral palsy such as hereditary spastic paraplegia. SEMLS involves various combinations of orthopaedic procedures in a single operative episode

50450-00 Single event multilevel surgery, involving multiple soft tissue surgery of the lower limb, unilateral

Procedure may comprise the following soft tissue procedures in any combination:

- lengthening (Achilles' tendon) (adductors) (gastrocsoleus) (hamstrings) (peroneus brevis) (peroneus longus) (plantar flexors) (psoas) (psoas over the brim) (tibialis posterior)
- obturator neurectomy (anterior branch)
- phenol to obturator nerve
- release (adductors) (rectus femoris)
- transfer (rectus femoris) (semi-tendinosus) (tibialis anterior) (tibialis posterior)

50455-00 Single event multilevel surgery, involving multiple soft tissue surgery of the lower limb, bilateral

...

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## Single event multilevel surgery (SEMLS)

New block and codes:

**1580**

### Single event multilevel surgery [SEMLS]

...

50450-01 Single event multilevel surgery, involving multiple soft tissue surgery and osteotomies of the lower limb, unilateral

...

50470-00 Single event multilevel surgery, involving multiple soft tissue surgery and osteotomies of the lower limb, bilateral

...

50450-02 Single event multilevel surgery, involving multiple soft tissue surgery, lower limb osteotomies and foot stabilisation, unilateral

...

50475-00 Single event multilevel surgery, involving multiple soft tissue surgery, lower limb osteotomies and foot stabilisation, bilateral

...

210

## Single event multilevel surgery (SEMLS)

New and deleted codes:

**1480**

### Release of hip contracture

Lengthening of:

- adductor brevis
- adductor longus

Psoas:

- at the lesser trochanter
- over the brim (POTB)

<u>50375-00</u>	<u>Medial release of hip contracture, unilateral</u>
<u>50375-00</u>	<u>Medial release of hip contracture, bilateral</u>
<u>50381-00</u>	<u>Anterior release of hip contracture, unilateral</u>
<u>50384-00</u>	<u>Anterior release of hip contracture, bilateral</u>
<u>50375-01</u>	<u>Release of hip contracture, unilateral</u>
<u>50378-01</u>	<u>Release of hip contracture, bilateral</u>

211

## Single event multilevel surgery (SEMLS)

New codes:

**1522**

### Reconstruction procedures on knee

<u>90611-00</u>	<u>Patellar tendon shortening</u>
<u>90611-01</u>	<u>Patellar tendon advancement</u>

**1544**

### Other repair procedures on ankle or foot

<u>90612-00</u>	<u>Os calcis lengthening</u>
	<u>Code also when performed:</u>
	• <u>bone graft (48239-00, 48242-00 [1569])</u>

212

## Single event multilevel surgery (SEMLS)

### Scenario:

- Five year old Jason admitted with spastic diplegic cerebral palsy for SEMLS under general anaesthetic (ASA 3). Procedure included:
  - bilateral hamstring lengthening with semi tendinosus transfer to adductor tubercle,
  - bilateral lengthening of Achilles' tendons and
  - bilateral proximal femoral de-rotation osteotomies.

G80.01 *Spastic diplegic cerebral palsy*

50470-00 [1580] *Single event multilevel surgery, involving multiple soft tissue surgery and osteotomies of the lower limb, bilateral*

92514-39 [1910] *General anaesthesia (ASA 39)*

213

~ **ACHI Part 2** ~

262

## Irreversible electroporation (IRE)

### **Background:**

- Public submission
- IRE – technique used for tissue ablation since 2005
- Can precisely target lesions. Destroys lesions without damaging supporting structures (ducts, vessels and nerves)
- Used for lesions of
  - liver
  - kidney
  - lung
  - prostate

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## Irreversible electroporation (IRE)

Brand: Nanoknife

Electrode Probes

Probe placement

Electrical pulses

<http://www.angiodynamics.com/products/nanoknife>

<http://www.baptist-health.com/technology/nanoknife.aspx>

<http://online.wsj.com/article/SB10001424052748704029304575525832837346848.html>

**Video:** <http://www.youtube.com/watch?v=xiXJOYqAHoo&feature=related>

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## Irreversible electroporation (IRE)

### New inclusion terms:

90181-00 [558] Destruction procedures on lung  
Irreversible electroporation [IRE] of lung lesion/tumour

90299-00 [956] Other destruction of liver  
Irreversible electroporation [IRE] of liver lesion/tumour

### New codes:

90370-00 [1046] Other destruction of lesion of kidney  
Irreversible electroporation [IRE] of kidney lesion/tumour

90408-00 [1162] Other destruction of lesion of prostate  
Irreversible electroporation [IRE] of prostate lesion/tumour

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## Irreversible electroporation (IRE)

### Scenario:

- Mr White admitted for irreversible electroporation of hepatocellular carcinoma of liver performed under general anaesthesia (ASA 2). Electrical probes inserted in theatre under CT guidance.

C22.0 Liver cell carcinoma

M8170/3 Hepatocellular carcinoma NOS

90299-00 [956] *Other destruction of liver*

92514-29 [1910] *General anaesthesia (ASA 29)*

217

## High intensity focused ultrasound (HIFUS)

### **Background:**

- Public submission
- Non-invasive thermal ablation
- Focused ultrasound waves - targets pathogenic tissue
- HIFUS is used on solid tumours (both malignant and benign):
  - uterine fibroids
  - bone
  - breast
  - liver
  - kidney
  - prostate

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## High intensity focused ultrasound (HIFUS)

- Focused ultrasound transducer
- Focused waves rapidly raise temperature at focal point
- No heat created along the way – minimal impact on surrounding tissues
- In less than 10 seconds, focal point reaches a temperature causing irreversible cell death
- Dead tissue is removed via natural process
- Can be combined with imaging, usually MRI guidance  
(referred to as either *MRgFUS* or *MR-HIFUS*)

219

## High intensity focused ultrasound (HIFUS)

High intensity focused ultrasound – MRI guided

The patient lies in a prone position on the treatment table that contains the transducer. The table is docked to the MR scanner.

Shen, S et al. 2009, Image-Guided Thermal Therapy of Uterine Fibroids, *Seminars in Ultrasound, CT and MRI*, vol. 30 no. 2, pp. 91-104.

Vooqt, M et al. 2012, Volumetric feedback ablation of uterine fibroids using magnetic resonance-guided high intensity focused ultrasound therapy, *European Radiology*, vol. 22 No. 2, pp. 411-417.

**Video:** [http://www.youtube.com/watch?v=SJtL\\_KPycYs&NR=1&feature=endscreen](http://www.youtube.com/watch?v=SJtL_KPycYs&NR=1&feature=endscreen)

220

## High intensity focused ultrasound (HIFUS)

High intensity focused ultrasound – MRI guided

MRI control of treatment: the heating effect is visible in real time on magnetic resonance thermal images.

Yagel, S 2004, High-intensity focused ultrasound: a revolution in non-invasive ultrasound treatment?, *Ultrasound in Obstetrics & Gynecology*, vol. 23, no. 3, pp. 216-217.

221



## High intensity focused ultrasound (HIFUS)

High intensity focused ultrasound

Pulses of ultrasound waves travel through rectum into prostate gland and are focussed onto a small area within the prostate.

<http://prostatecanceruk.org/toolkits/hifu>

<http://www.edap-tms.com/products-services/ablatherm-hifu/ablatherm-hifu-device.html>

**Video:** <http://www.youtube.com/watch?v=EkDquVhW-rk&feature=related>

222

## High intensity focused ultrasound (HIFUS)

New codes:

### **1263** Destruction procedures on uterus

...

90451-00 Other destruction of lesion of uterus

*Code also when performed:*

• high intensity focused ultrasound (HIFUS) (90908-01 [1949])

### **1759** Other procedures on breast

...

90726-00 Other destruction of breast  
Destruction of lesion of breast

*Code also when performed:*

• high intensity focused ultrasound (HIFUS) (90908-01 [1949])

224

## High intensity focused ultrasound (HIFUS)

New code:

### **1949** Other ultrasound

...

90908-01 High intensity focused ultrasound [HIFUS]

Code first:

HIFUS for:

- arthritis and other musculoskeletal conditions (90609-00 [1579])
- treatment of lesion(s)/tumour(s):
  - bone (90609-00 [1579])
  - breast (90726-00 [1759])
  - kidney (90370-00 [1046])
  - liver (90299-00 [956])
  - prostate (90408-00 [1162])
  - uterus (90451-00 [1263])

Excludes:

that for arrhythmia or atrial fibrillation (38287-02, 38290-01, 38287-01 [601])

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## High intensity focused ultrasound (HIFUS)

“Code also when performed” instruction at:

- 90299-00 [956] *Other destruction of liver*
- 90370-00 [1046] *Other destruction of lesion of kidney*
- 90408-00 [1162] *Other destruction of lesion of prostate*
- 90451-00 [1263] *Other destruction of lesion of uterus*
- 90609-00 [1579] *Destruction of bone*
- 90726-00 [1759] *Other destruction of breast*

Includes note:

- Block [601] *Destruction procedures on atrium*

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## High intensity focused ultrasound (HIFUS)

Deleted code:

**1166**

**Other closed prostatectomy**

...

~~37203-05~~ High intensity focused ultrasound [HIFUS] (transrectal) of prostate

226

## High intensity focused ultrasound (HIFUS)

ACS 0042 update :

**0042 PROCEDURES NORMALLY NOT CODED**

....

**13. Imaging services** – all codes in ACHI Chapter 20 *Imaging services* and block [451] *Dental radiological examination and interpretation* **except:**

- transoesophageal echocardiogram (TOE) (55118-00 [1942])
- when instructed to do so

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## High intensity focused ultrasound (HIFUS)

### Scenario:

- Patient admitted for treatment of subserosal uterine fibroids with HIFUS performed under MRI guidance under IV sedation (ASA 2).

D25.2      *Subserosal leiomyoma of uterus*

M8890/0   *Leiomyoma NOS*

90451-00 [1263]   *Other destruction of lesion of uterus*

90908-01 [1949]   *High intensity focused ultrasound [HIFUS]*

92515-29 [1910]   *Sedation (ASA 29)*

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## Percutaneous heart valve replacement

### Background

- Coding queries / public submission
- Existing ACHI codes for open replacement, but no ACHI codes for percutaneous replacement.
- Percutaneous replacement is a new and innovative technique:
  - aortic
  - mitral
  - tricuspid
  - pulmonary

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## Percutaneous heart valve replacement

Brands: - CoreValve  
- Cribier-Edwards  
- Lotus  
- Aortx  
- Bonhoeffer

<http://www.medtronic.com/corevalve/>

**Video:** <http://www.youtube.com/watch?v=X1Uk9Jvbut0>

230

## Percutaneous heart valve replacement

New code:

**623**

### Replacement of aortic valve

38488-08 Percutaneous replacement of aortic valve with bioprosthesis  
Transcatheter aortic valve implantation

***Includes:*** cardiac catheterisation  
valvuloplasty

*Code also when performed:*

• coronary angiography (38215-00, 38218 [668])

38488-00 Replacement of aortic valve with mechanical prosthesis

38488-01 Replacement of aortic valve with bioprosthesis

38489-00 Replacement of aortic valve with homograft

38489-01 Replacement of aortic valve with unstented heterograft

231

## Percutaneous heart valve replacement

New code:

**628**

### Replacement of mitral valve

38488-09 Percutaneous replacement of mitral valve with bioprosthesis

*Includes:* cardiac catheterisation  
valvuloplasty

*Code also when performed:*

• coronary angiography (38215-00, 38218 [668])

38488-02 Replacement of mitral valve with mechanical prosthesis

38488-03 Replacement of mitral valve with bioprosthesis

38489-02 Replacement of mitral valve with homograft

232

## Percutaneous heart valve replacement

New code:

**634**

### Replacement of tricuspid valve

38488-10 Percutaneous replacement of tricuspid valve with bioprosthesis

*Includes:* cardiac catheterisation  
valvuloplasty

*Code also when performed:*

• coronary angiography (38215-00, 38218 [668])

38488-04 Replacement of tricuspid valve with mechanical prosthesis

38488-05 Replacement of tricuspid valve with bioprosthesis

38489-03 Replacement of tricuspid valve with homograft

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## Percutaneous heart valve replacement

New code:

**637**

### Repair or replacement of pulmonary valve

- 38270-03 Percutaneous balloon pulmonary valvuloplasty
- 38488-11 Percutaneous replacement of pulmonary valve with bioprosthesis  
*Includes:* cardiac catheterisation  
valvuloplasty  
*Code also when performed:*  
• coronary angiography (38215-00, 38218 [668])
- 38488-06 Replacement of pulmonary valve with mechanical prosthesis
- 38488-07 Replacement of pulmonary valve with bioprosthesis
- 38489-04 Replacement of pulmonary valve with homograft
- 38489-05 Replacement of pulmonary valve with unstented heterograft

234

## Percutaneous heart valve replacement

### Scenario:

- Patient with aortic valve stenosis admitted for percutaneous insertion of aortic valve with CoreValve® prosthesis under IV sedation (ASA 3). Coronary angiography with left heart catheterisation performed at end of procedure to confirm valve placement.

135.0 *Aortic (valve) stenosis*

38488-08 [623] *Percutaneous replacement of aortic valve with bioprosthesis*

38218-00 [668] *Coronary angiography with left heart catheterisation*

92515-39 [1910] *Sedation (ASA 39)*

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## Percutaneous heart valve replacement

Instructional notes:

**623**

### Replacement of aortic valve

38488-08 Percutaneous replacement of aortic valve with bioprosthesis  
Transcatheter aortic valve implantation

*Includes:* cardiac catheterisation  
valvuloplasty

*Code also when performed:*

- coronary angiography (38215-00, 38218 [668])



## Aspiration thrombectomy of the coronary artery

### Background:

- Query received – aspiration thrombectomy of cardiac thrombus
- Several types of devices for percutaneous coronary intervention, including:
  - Aspiration thrombectomy – syringe suction to remove thrombus
  - Embolic protection device – captures debris that is dislodged during stenting

237



## Aspiration thrombectomy of the coronary artery

<http://www.invasivecardiology.com/articles/aspiration-thrombectomy-primary-pci-stemi-review-data-and-current-guidelines>

**Video:** <http://www.youtube.com/watch?v=bUMm8E0w6s>

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## Aspiration thrombectomy of the coronary artery

New codes:

**669**

### Excision procedures on coronary arteries

...

...

90218-00 Percutaneous transluminal coronary angioplasty with aspiration thrombectomy, 1 artery

*Code also when performed:*

• coronary angioplasty with stenting (see block [671])

90218-01 Percutaneous transluminal coronary angioplasty with aspiration thrombectomy, multiple arteries

*Code also when performed:*

• coronary angioplasty with stenting (see block [671])

239

## Aspiration thrombectomy of the coronary artery

### Embolic protection devices:

- FilterWires
- Interceptors
- GuardWires

SpiderFX - <http://www.ev3.net/peripheral/us/embolic-protection/spiderfxtrade-embolic-protection-device.htm>

Emboshield NAV6 - <http://www.abbottvascular.com/us/nav6.html>

**Video:** <http://www.youtube.com/watch?v=Tu8U4kl4NVA> (no sound)

240

## Aspiration thrombectomy of the coronary artery

### New codes:

**669**

### Excision procedures on coronary arteries

...

...

90218-02

Percutaneous transluminal coronary angioplasty with embolic protection device, 1 artery

*Code also when performed:*

- coronary angioplasty with stenting (see block [671])

90218-03

Percutaneous transluminal coronary angioplasty with embolic protection device, multiple arteries

*Code also when performed:*

- coronary angioplasty with stenting (see block [671])

241

## Aspiration thrombectomy of the coronary artery

### Scenario A:

- Mr Clarke is admitted for treatment of coronary thrombosis (*no myocardial infarction*) by aspiration thrombectomy with insertion of stent under IV sedation (ASA 2).

I24.0 (2)      *Coronary thrombosis not resulting in myocardial infarction*

90218-00 [669]      *Percutaneous transluminal coronary angioplasty with aspiration thrombectomy, 1 artery*

38306-00 [671]      *Percutaneous insertion of 1 transluminal stent into single coronary artery*

92515-29 [1910]      *Sedation (ASA 29)*

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## Aspiration thrombectomy of the coronary artery

### Scenario B:

- Mr Clarke is admitted for treatment of coronary atherosclerosis (*native vessel*) by angioplasty with insertion of stent to the left anterior descending artery, with the use of an embolic protection device, under IV sedation (ASA 2).

I25.11      *Atherosclerotic heart disease of native coronary artery*

38306-00 [671]      *Percutaneous insertion of 1 transluminal stent into single coronary artery*

90218-02 [669]      *Percutaneous transluminal coronary angioplasty with embolic protection device, 1 artery*

92515-29 [1910]      *Sedation (ASA 29)*

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## Transcatheter thrombectomy of intracranial arteries

### Background:

- Public submission – transcatheter thrombectomy of intracranial arteries
- Used for treatment of stroke
- Thrombus extracted with retrieval device. Advanced through a guiding catheter via internal carotid artery or internal jugular vein.

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## Transcatheter thrombectomy of intracranial arteries

### Retrieval devices:

- MERCI retriever
- Concentric retriever device
- Penumbra system

Concentric MERCI Retriever embedded in a clot.

Penumbra aspiration.

Clot retrieved from the basilar artery by using the MERCI Retriever.

<http://emedicine.medscape.com/article/1163240-overview#aw2aab6b3>

### **Video:**

<http://www.youtube.com/watch?v=ajcgsAr6K2A&feature=related> (no sound) (Penumbra)  
[http://www.youtube.com/watch?v=99x\\_APzvD1c](http://www.youtube.com/watch?v=99x_APzvD1c) (Merci)

245

## Transcatheter thrombectomy of intracranial arteries

New and revised codes:

### **702** Arterial embolectomy or thrombectomy

*Includes:* that with stenting

...

90235-00 Embolectomy or thrombectomy of intracranial artery  
Transcatheter embolectomy or thrombectomy of intracranial artery

33800-00 Embolectomy or thrombectomy of carotid artery  
*Excludes:* intracranial internal carotid artery (90235-00 [702])

### **729** Venous thrombectomy

*Includes:* that with stenting

90235-01 Thrombectomy of intracranial vein  
Transcatheter thrombectomy of intracranial vein

246

## Transcatheter thrombectomy of intracranial arteries

### Scenario:

- Ms Wilson is admitted with infarction due to thrombosis of cerebral arteries for intracranial thrombectomy under IV sedation (ASA 2). During the procedure a stent is also inserted.

163.3 *Cerebral infarction due to thrombosis of cerebral arteries*

90235-00 [702] *Embolectomy or thrombectomy of intracranial artery*

92515-29 [1910] *Sedation (ASA 29)*

247

## Peritonectomy/cytoreduction surgery (CRS)

### Background:

- Public submission - increasingly performed
- Treatment of disseminated peritoneal carcinomatosis
- Strict patient criteria
- Peritonectomy
- Cytoreductive (or debulking) surgery
- Could require any of a number of procedures

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## Peritonectomy/cytoreduction surgery (CRS)

### Peritonectomy:

- removes the lining of the peritoneal cavity
  - peritoneal mesothelioma
  - pseudomyxoma peritonei (PMP)

### Cytoreductive (or debulking) surgery:

- removes as much of the tumour from the area as possible
- may require removing parts of other affected organs

### Combined with HIPEC (heated/hyperthermic intraperitoneal chemotherapy);

- the heat makes the chemo drugs more effective and aims to eliminate microscopic cancer cells

<http://www.asbestos.com/treatment/surgery/peritonectomy.php>

249

## Peritonectomy/cytoreduction surgery (CRS)

New code:

**989**

### Other excision procedures on abdomen, peritoneum or omentum

96211-00

Peritonectomy  
Cytoreduction surgery (CRS)

**Note:** Multimodal procedure performed for the treatment of peritoneal neoplasms, with the aim of removing all peritoneal tumours. The combination of surgical procedures required for cytoreduction varies with each patient.

**Code also when performed:**

- excision of abdominal, peritoneal or pelvic lesion (see Alphabetic Index)
- intraperitoneal chemotherapy:
  - early postoperative [EPIC] (96201-00 [1920])
  - heated (intraoperative) [HIPEC] (92178-00 [1880] and 96201-00 [1920])
  - postoperative [IPEC] (96201-00 [1920])
- removal abdominal, peritoneal or pelvic organ (see Alphabetic Index)
- repair procedures (see Alphabetic Index)
- resection procedures (see Alphabetic Index)



## Sacral nerve stimulation (SNS)

### **Background:**

- Review based on new MBS codes
- SNS used for urinary conditions, also for faecal incontinence
- Relocated existing ACHI codes from “rectum procedures” into “peripheral nerve electrodes”

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## Sacral nerve stimulation (SNS)

<http://www.webmd.com/urinary-incontinence-oab/oab-treatment-11/slideshow-overactive-bladder>

**Video:** <http://www.youtube.com/watch?v=ONaa8d96m8Q>

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## Sacral nerve stimulation (SNS)

Relocated codes:

**67**

### **Insertion, replacement or removal of peripheral nerve electrodes**

36663-00

Insertion of sacral nerve electrodes

**Includes:** intraoperative test stimulation

*Code also when performed:*

• insertion of neurostimulator (39134-01 [1604])

**Excludes:** that with replacement (36664-00 [67])

36665-00

Adjustment of sacral nerve electrodes

36664-00

Replacement of sacral nerve electrodes

36667-00

Removal of sacral nerve electrodes

253



## Sacral nerve stimulation (SNS)

Relocated codes:

**940**

**Other repair procedures on rectum or anus**

~~32213-00~~

~~Insertion of sacral nerve electrodes~~

~~**Includes:** — intraoperative test stimulation~~

~~**Code also when performed:**~~

~~— insertion of neurostimulator (39134-01 [1604])~~

~~32215-00~~

~~Adjustment of sacral nerve electrodes~~

~~32216-00~~

~~Replacement of sacral nerve electrodes~~

~~32218-00~~

~~Removal of sacral nerve electrodes~~

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## Sacral nerve stimulation (SNS)

Updated code titles:

**67**

**Insertion, replacement or removal of peripheral nerve electrodes**

...

...

39138-00

Insertion of other peripheral nerve electrodes

39131-01

Adjustment of other peripheral nerve electrodes

39137-01

Replacement of other peripheral nerve electrodes

39136-02

Removal of other peripheral nerve electrodes

255

## Sentinel lymph node biopsy (SLNB)

### Background:

- Public submission – sentinel lymph node biopsy of groin
- Existing *Sentinel lymph node biopsy* specifically for 'axilla'
- SLNB used to evaluate staging in multiple types of malignancies, eg:
  - breast
  - stomach
  - bladder
  - head & neck
  - colorectal
  - gastrointestinal
- 'Sentinel' lymph node is the first node 'downstream' from the cancer in the lymphatic system

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## Sentinel lymph node biopsy (SLNB)

SLNB procedure involves three steps:

1. Lymphoscintigram
  - pre-operatively
  - injection of radioactive tracer into skin
  - nuclear medicine scan – first node site of drainage is 'sentinel'
2. Intraoperative lymphatic mapping with blue dye
  - intraoperative injection of blue dye into skin
  - dye absorbed into lymphatic system
3. Selective biopsy of lymph nodes identified as "sentinel" nodes
  - biopsy of 'sentinel nodes' (*either 'blue stained' or identified with probe as 'radioactive'*)

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## Sentinel lymph node biopsy (SLNB)

<http://www.nationalbreastcancer.org/breast-cancer-lymph-node-removal>

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## Sentinel lymph node biopsy (SLNB)

<http://www.qualityoflife.org/cancer/patientinfo/list/summary/?id=CDR62955>

[http://www.patientresource.com/Melanoma\\_Lymph\\_Node\\_Mapping.aspx](http://www.patientresource.com/Melanoma_Lymph_Node_Mapping.aspx)

**Videos:**

[http://www.youtube.com/watch?v=Cdl2JhhTfYc&playnext=1&list=PLdgRcrHHcQlkkioe41ZGdwcwjRXkAIQ0&feature=results\\_main](http://www.youtube.com/watch?v=Cdl2JhhTfYc&playnext=1&list=PLdgRcrHHcQlkkioe41ZGdwcwjRXkAIQ0&feature=results_main)

<http://www.youtube.com/watch?v=nkT02hjVyDY> (includes scenes of surgery)

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## Sentinel lymph node biopsy (SLNB)

New code:

**805**      **Biopsy of lymphatic structure**

...

30300-01      Sentinel lymph node biopsy, not elsewhere classified  
Excision of sentinel lymph node(s)  
***Includes:** injection of radioisotope and mapping (lymphoscintigraphy) of nodal basin*  
***Code also when performed:***  
*• excision of lymph nodes:*  
*• radical (...)*  
*• regional (...)*  
***Excludes:** that of axilla (...)*

Updated code title:

**808**      **Excision procedures on lymph node of axilla**

...

30300-00      Sentinel lymph node biopsy of axilla  
Excision of sentinel lymph node(s) of axilla

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## Sentinel lymph node biopsy (SLNB)

### Scenario:

- Mr Franklin presented for a sentinel lymph node biopsy of the groin under general anaesthesia (ASA 2) to investigate possible spread of his adenocarcinoma of colon. During the procedure, the sentinel lymph node biopsy indicated the cancer had involved the inguinal nodes and a decision was made to excise the regional lymph nodes.

C18.9      *Colon, unspecified*  
M8140/3      *Adenocarcinoma, NOS*  
C77.4      *Inguinal and lower limb lymph nodes*  
M8140/6      *Adenocarcinoma, metastatic NOS*

30329-01 [809]      *Regional excision of lymph nodes of groin*  
30300-01 [805]      *Sentinel lymph node biopsy, not elsewhere classified*  
92514-29 [1910]      *General anaesthesia (ASA 29)*

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*~ Summary of changes ~*



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## Summary

- Effective for separations from 1 July 2013
- New considerations for some standards
- New ICD and ACHI codes
- Follow Alphabetic Index and Tabular List instructional notes

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## Review

### Session 1 - ACS

1. Conventions
2. ACS 0001 *Principal diagnosis* – dagger/asterisk
3. ACS 0048 *Condition onset flag*
4. ACS 0020 *Bilateral/multiple procedures* – skin lesions
5. ACS 0104 *Viral hepatitis*
6. ACS 0402 *Cystic fibrosis*
7. ACS 2114 *Prophylactic surgery* (New)

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## Review

### Session 2 - ICD-10-AM

1. Atrial fibrillation
2. Codes for emergency use
3. Duration of pregnancy
4. Haemorrhoids
5. Hernia
6. Pancreatic tumour of unknown or uncertain behaviour
7. Resistance to antimicrobial and antineoplastic drugs
8. Respiratory failure, type I and type II
9. Sunburn

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## Review

### Session 3 - Neonates

1. Cerebral leukomalacia
2. Hypoxic ischaemic encephalopathy
3. Peri/intraventricular haemorrhage
4. Sudden infant death syndrome
5. Nitric oxide therapy
6. Combined ventilatory support in neonates
7. Posthaemorrhagic hydrocephalus
8. High flow nasal cannula
9. Catheterisation in a neonate
10. Therapeutic hypothermia
11. Jaundice
12. ACS 1615 *Specific interventions for the sick neonate*

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## Review

### Session 4 - ACHI

1. Endoluminal fundoplication (ELF)
2. Insertion of seeds/fiducial markers into prostate
3. Minimally invasive procedures proceeding to open procedures
4. Laparoscopic colectomy & ileocolic resection
5. Procedures for obesity
6. Single event multilevel surgery (SEMLS)
7. Irreversible electroporation (IRE)
8. High intensity focused ultrasound (HIFUS)
9. Percutaneous heart valve replacement
10. Aspiration thrombectomy of the coronary artery
11. Transcatheter thrombectomy of intracranial arteries
12. Peritonectomy/cytoreduction surgery (CRS)
13. Sacral nerve stimulation (SNS)
14. Sentinel lymph node biopsy (SLNB)

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## Outcomes

By the end of this session, participants will

- ✓ be familiar with the major changes for Eighth Edition
- ✓ know how to apply these new changes



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## ICD-10-AM/ACHI/ACS Eighth Edition

*Education Workshop 2013*

*Thank you*