



Canadian Coding Standards for Version 2012 ICD-10-CA and CCI

Revised September 2012

Standards and Data Submission



Canadian Institute
for Health Information

Institut canadien
d'information sur la santé



Who We Are

Established in 1994, CIHI is an independent, not-for-profit corporation that provides essential information on Canada's health system and the health of Canadians. Funded by federal, provincial and territorial governments, we are guided by a Board of Directors made up of health leaders across the country.

Our Vision

To help improve Canada's health system and the well-being of Canadians by being a leading source of unbiased, credible and comparable information that will enable health leaders to make better-informed decisions.

Table of Contents

Acknowledgements	xi
Introduction	xiii
General Coding Standards for ICD-10-CA.....	1
Main and Other Problem Definitions for NACRS	1
Main Problem (MP)	1
Other Problem (OP)	1
Coding of Main and Other Problems for NACRS	3
Definitive (Formulated) Diagnostic Statement.....	4
Symptom, Sign or Abnormal Test Result	4
Specific Reason For Encounter	5
Diagnosis Typing Definitions for DAD	5
Definition of Comorbidity	6
Diagnosis Type (M)—Most Responsible Diagnosis (MRDx).....	6
Diagnosis Type (1)—Pre-Admit Comorbidity	7
Diagnosis Type (2)—Post-Admit Comorbidity.....	7
Prefix 5 and 6	7
Diagnosis Type (3)—Secondary Diagnosis	8
Diagnosis Type (W), (X), (Y)—Service Transfer Diagnosis	9
Diagnosis Type (4)—Morphology Codes	10
Diagnosis Type (5)—Admitting Diagnosis.....	10
Diagnosis Type (6)—Proxy Most Responsible Diagnosis (MRDx).....	10
Diagnosis Type (7), (8)—Restricted to CIHI—DO NOT USE.....	12
Diagnosis Type (9)—External Cause of Injury Code	12
Diagnosis Type (0)—Newborn	12
More Examples of Diagnosis Typing for Comorbid and Secondary Conditions.....	14
Diagnosis Cluster	15
Creating a Diagnosis Cluster for a Drug-Resistant Microorganism Infection(s).....	16
Creating a Diagnosis Cluster for a Post-Intervention Condition(s).....	17
Creating a Diagnosis Cluster for Adverse Effect(s) in Therapeutic Use.....	25
Diagnoses of Equal Importance	27
Specificity	29
Using Diagnostic Test Results in Coding	29
Dagger/Asterisk Convention	30
Acute and Chronic Conditions.....	33
Impending or Threatened Conditions.....	34

Underlying Symptoms or Conditions	35
Query Diagnosis (Q)/Etiology	36
Use Additional Code/Code Separately Instructions	39
Sequelae	40
Admissions From Emergency Department	41
Cancelled Interventions.....	43
General Coding Standards for CCI	47
Selection of Interventions to Code for Ambulatory Care	47
Clinic Visits	47
All Other Ambulatory Care Visits.....	47
Additional Mandatory CCI Codes for Ambulatory Care.....	49
Selection of Interventions to Code for Acute Inpatient Care	52
Additional Mandatory CCI Codes for Acute Inpatient Care	56
Selection of Interventions to Code From Section 5.....	58
Additional Mandatory CCI Codes From Section 5	58
Composite Codes in CCI.....	59
Multiple Codes in CCI	60
Multiple Codes From Different Rubrics	60
Multiple Codes From the Same Rubric	62
Procurement or Harvesting of Tissue for Closure, Repair or Reconstruction	64
Combined Diagnostic and Therapeutic Interventions	65
Endoscopic Interventions	66
Interventions to Manage Bleeding.....	68
Destruction or Excision of Aberrant/Ectopic Tissue	70
Debulking of a Space-Occupying Lesion	70
Abandoned Interventions	71
Failed Interventions.....	72
Change of Plans During an Intervention	73
Converted Interventions	74
Revised Interventions.....	74
A Staged Intervention Versus Revision of an Intervention	78
Chapter I—Certain Infectious and Parasitic Diseases	81
Infections.....	81
Drug-Resistant Microorganisms.....	82
Septicemia/Sepsis.....	84
Human Immunodeficiency Virus (HIV) Disease	88
Viral Hepatitis	92

Chapter II—Neoplasms.....	93
Primary and Secondary Neoplasms.....	93
Multiple Independent Primary Neoplasms	95
Neoplasms Arising in Lymphoid, Hematopoietic and Related Tissue.....	97
Neoplasms Extending Into Adjacent Tissue.....	98
Neoplasms of Ectopic Tissue.....	98
Neoplasms With Overlapping Boundaries (Contiguous Sites).....	98
Admissions Following Diagnosis of Cancer	99
Complications of Malignant Disease	100
Recurrent Malignancies	101
Interventions Relevant to Neoplasm Coding.....	102
Brachytherapy.....	104
Other Standards Related to Neoplasm Coding.....	105
Chapter III—Diseases of the Blood and Blood-Forming Organs and Certain Disorders	
Involving the Immune Mechanism	107
Acute Blood Loss Anemia	107
Anemia of Chronic Disease	109
Chapter IV—Endocrine, Nutritional and Metabolic Diseases.....	113
Diabetes Mellitus.....	113
Dehydration.....	123
Chapter VI—Diseases of the Nervous System	125
Intracranial Resection of Lesions or Neoplasms.....	125
Duraplasty and Cranioplasty Following Intracranial Resection	125
Coding Hierarchy for Intracranial Lesion Resection.....	125
Hierarchy for Classifying Intracranial Lesion Resection—Flowchart.....	126
Revision of CSF Shunt Systems (Ventricle, Brain Stem, Spinal Canal)	127
Partial Revision	127
Complete Revision	127
Seizures	128
Correct Index Search for Seizure(s) and Seizure Disorder—Flowchart.....	129
Neurological Deficits Following a Stroke.....	132
Hemiplegia	132
Chapter IX—Diseases of the Circulatory System	135
Hypertension and Associated Conditions	135
Hypertensive Heart and Hypertensive Renal Disease	135
Hypertension with Cerebrovascular Disease	136

Ischemic Heart Disease	
Acute Coronary Syndrome (ACS)	137
Selection of Status Attribute for Percutaneous Coronary Intervention (PCI).....	145
Thrombolytic Therapy	147
Angina	150
Chronic Ischemic Heart Disease	151
Related Interventions	152
Occlusion Following Coronary Artery Bypass Grafts (CABG).....	153
Cardiac Arrest	154
Strokes, Cerebrovascular Accidents (CVA) and Transient Ischemic Attacks (TIA)	157
Current Stroke	157
Sequelae of Cerebrovascular Disease.....	158
Related Interventions	159
Vascular Syndromes of Brain in Cerebrovascular Diseases.....	159
Peripheral Vascular Disease.....	160
Related Interventions	161
Aneurysms	161
Chapter X—Diseases of the Respiratory System	163
Lobar Pneumonia.....	163
Pneumonia in Patients With Chronic Obstructive Pulmonary Disease (COPD)	164
Asthma	166
Status Asthmaticus	166
Resection of Space-Occupying Lesion (Polyps) of Nose.....	168
Septoplasty for Deviated Nasal Septum	169
Invasive Ventilation	172
Chapter XI—Diseases of the Digestive System.....	175
Gastroenteritis and Diarrhea	175
Bleeding Esophageal Varices	176
Related Interventions	177
Gastrointestinal Bleeding	178
Diagnostic Esophagogastroduodenoscopy (EGD).....	179
Diagnostic Colonoscopic Interventions	181
Diagnostic Endoscopic Interventions Performed on the Lower Gastrointestinal Tract.....	184
Selection of Attributes at Hernia Repair	186

Chapter XII—Diseases of the Skin and Subcutaneous Tissue	187
Cellulitis	187
Chapter XIII—Diseases of the Musculoskeletal System and Connective Tissue	189
Osteoarthritis	189
Related Interventions	191
Arthrectomy and Arthroplasty	192
Fractures	193
Pathological Fractures	193
Stress Fractures	194
Fractures Flowchart	196
Joint Fracture Reduction, Fixation and Fusion	197
Excision (of Lesion) of Bone, Soft Tissue and Skin	198
Excision (of Lesion) of Bone, Soft Tissue and Skin Flowchart	199
Spinal Stenosis	200
Chapter XIV—Diseases of the Genitourinary System	201
Stages of Chronic Kidney Disease (CKD)	201
Continuous Ambulatory Peritoneal Dialysis (CAPD) Peritonitis	202
Menorrhagia as the Most Responsible Diagnosis (MRDx)	203
Chapter XV—Pregnancy, Childbirth and the Puerperium	205
Selection of the Sixth-Digit in Obstetrical Coding	205
Allowable Sixth-Digit Combinations	206
Sequencing Obstetrical Diagnosis Codes	208
Intrauterine Death	211
Pregnancy With Abortive Outcome	212
O03—O08 Pregnancy With Abortive Outcome	212
O04 Medical Abortion	212
Medical Abortion at or After 20 Weeks Resulting in a Stillborn	213
Medical Abortion Resulting in a Liveborn	215
O05 Other Abortion	217
O07 Failed Attempted Abortion	217
Continuing Pregnancy After Abortion/Selective Fetal Reduction in Multiple Gestation	219
Complications Following Abortion and Ectopic and Molar Pregnancy	221
Streptococcal Group B Infection/Carrier in Pregnancy	223
Delivery in a Completely Normal Case	224
Delivery With History of Previous Cesarean Section	226
Multiple Gestation	228
Maternal Care Related to the Fetus, Amniotic Cavity and Possible Delivery Problems	229
Prolonged Pregnancy/Post-Dates Pregnancy	231

Premature Rupture of Membranes.....	232
Pre-Term Labor.....	234
Long Labor.....	234
Precipitate Labor.....	236
Obstructed Labor.....	236
Labor and Delivery Complicated by Fetal Stress.....	239
Postpartum Hemorrhage.....	240
Complications of Anesthesia During Labor and Delivery.....	242
Interventions Associated With Delivery.....	243
Induction and Augmentation of Labor.....	244
Postpartum Interventions.....	247
Dilation and Curettage.....	248
Chapter XVI—Certain Conditions Originating in the Perinatal Period.....	249
Low Birth Weight and/or Preterm Infant.....	249
Sequencing Low Birth Weight, Fetal Malnutrition, Poor Fetal Growth and/or Prematurity.....	251
Fetal Asphyxia and Birth Asphyxia.....	253
Neonatal Jaundice.....	256
Confirmed Sepsis and Risk of Septicemia in the Neonate.....	256
Birth Trauma.....	259
Chapter XVII—Congenital Malformations, Deformations and Chromosomal Abnormalities.....	263
Congenital Anomaly Syndromes and Specific Manifestations.....	263
Primary Code Selection for ICD-10-CA Classification of Multiple Congenital.....	264
Chapter XVIII—Symptoms, Signs and Abnormal Clinical and Laboratory Findings, not Elsewhere Classified.....	267
Systemic Inflammatory Response Syndrome (SIRS).....	267
Vital Signs Absent (VSA).....	271
Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes.....	273
Reactions and Poisonings	
Adverse Reactions in Therapeutic Use Versus Poisonings.....	273
Allergic Reaction in Non-Therapeutic Use.....	280
Trauma-Related Conditions	
Current Versus Old Injuries.....	281
Early Complications of Trauma.....	285
Intracranial Injury NOS Versus Head Injury NOS.....	286
Skull Fracture and Intracranial Injury.....	287
Open Wounds.....	287

Fractures—Closed Versus Open	289
Treatment of Fractures.....	289
Dislocations	290
Injury to Blood Vessels.....	290
Significant Injuries	291
Crush Injuries	291
Bilateral Injuries.....	293
Burns and Corrosions	294
Extent of Body Surface Area Involved in Burn Injury	296
Assignment of Most Responsible Diagnosis/Main Problem in Multiple Burns	297
Burns of Multiple Body Regions	297
Multiple Injuries	
Sequencing Multiple Injuries for Severity	298
Code Assignment for Multiple Superficial Injuries	299
Code Assignment for Multiple Types of Significant Injuries Involving a Single Body Region.....	300
Code Assignment for Multiple Types of Significant Injuries Involving Multiple Body Regions.....	302
Coding Nonspecific Multiple Injuries for Emergency Department Visits.....	303
Intervention-Related Conditions	
Post-Intervention Conditions	304
Post-intervention Condition Code Assignment	304
Searching the Alphabetical Index for the Primary Code for a Post-Intervention Condition	311
Residual Codes	318
Assignment of Additional Codes for Specificity	319
Assignment of External Cause Code	321
Rejection/Failure of Transplanted Organs, Grafts and Flaps	323
Complications of Devices, Implants or Grafts	324
Intrinsic Forces: Complications excluding Malfunction and Breakage	325
Intrinsic Forces: Malfunction or Breakage	327
Extrinsic Forces: Mechanical Complication.....	328
Misadventures During Surgical and Medical Care	330
Misadventure Code Assignment	330
Hemorrhage Complicating a Procedure	336
Puncture/Laceration/Perforation During a Procedure	338
Foreign Body Accidentally Left Following a Procedure	341

Chapter XX—External Causes of Morbidity and Mortality	343
External Cause Codes	343
Place of Occurrence.....	343
Type of Activity.....	344
Chapter XXI—Factors Influencing Health Status and Contact With Health Services	345
Pre-Treatment Assessment	345
Admission for Observation	347
Admission for Follow-Up Examination	349
Admission for Convalescence.....	352
Screening for Specific Diseases	354
Prophylactic Organ Removal	357
Coding of NACRS Visits for Rehabilitative Services	357
Admission for Administration of Chemotherapy, Pharmacotherapy and Radiation Therapy.....	358
Admission for Insertion of a Vascular Access Device (VAD)	360
Admission for Blood Transfusion	361
Palliative Care	362
Boarder Babies and Boarder Mothers.....	367
Personal and Family History of Malignant Neoplasms.....	368
Appendix A—Resources	371
General Coding Standards for CCI	371
Definitions of Flaps and Grafts.....	371
Chapter I—Certain Infectious and Parasitic Diseases	372
Drug Resistant Microorganisms	372
Viral Hepatitis	373
Chapter IV—Endocrine, Nutritional and Metabolic Diseases	376
Diabetes Mellitus.....	376
Chapter IX—Diseases of the Circulatory System	383
Acute Coronary Syndrome (ACS) and Related Interventions	383
Strokes, Cerebrovascular Accidents (CVA) and Transient Ischemic Attacks (TIA)	387
Atrial Fibrillation.....	388
Chapter X—Diseases of the Respiratory System	389
Lobar Pneumonia.....	389
Asthma	389
Adult Respiratory Distress Syndrome	389
Chapter XI—Diseases of the Digestive System.....	390
Diagnostic Colonoscopic Interventions	390

Chapter XII—Diseases of the Skin and Subcutaneous Tissue	391
Cellulitis	391
Chapter XIII—Diseases of the Musculoskeletal System and Connective Tissue	391
Osteoarthritis	391
Spinal Stenosis	392
Chapter XIV—Diseases of the Genitourinary System.....	392
Stages of Chronic Kidney Disease (CKD).....	392
Pelvic Relaxation.....	393
Chapter XV—Pregnancy, Childbirth and the Puerperium.....	395
Length of Gestation	395
Trimesters	395
Chapter XVI—Certain Conditions Originating in the Perinatal Period.....	396
Fetal Asphyxia and Birth Asphyxia.....	396
Respiratory Distress of Newborn	397
Neonatal Jaundice	398
Chapter XVIII—Symptoms, Signs and Abnormal Clinical Laboratory Findings, Not Elsewhere Classified	399
Systemic Inflammatory Response Syndrome (SIRS).....	399
Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes.....	399
Crush Injuries	399
Appendix B—Y83-Y84 Inclusion List	401
Appendix C—Table of Changes—2012 Canadian Coding Standards.....	407
Appendix D—Mandatory Attributes in CCI.....	441
Appendix E—Classification Edits.....	445
Appendix F1—References to Mandatory Diagnosis Type 3/Other Problem in Directive Statements.....	459
Appendix F2—References to Optional Diagnosis Type 3/Other Problem in Directive Statements.....	467

Acknowledgements

The Canadian Institute for Health Information (CIHI) wishes to acknowledge and thank the National Coding Advisory Committee, representing their respective jurisdictions, for their contribution to the *Canadian Coding Standards for Version 2012 ICD-10-CA and CCI*.

The continued support and contributions provided by the many individual reviewers from all provinces and territories are also gratefully acknowledged.

We would also like to acknowledge the expertise provided by representatives from the following:

- Canadian Cardiovascular Society
- Canadian Diabetes Association
- CIHI Classification Advisory Committee
- WHO Update and Revision Committee
- Society of Obstetricians and Gynecologists of Canada

Introduction

The *Canadian Coding Standards for Version 2012 ICD-10-CA and CCI* are intended for use with the 2012 version of the *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Canada* (ICD-10-CA) and the *Canadian Classification of Health Interventions* (CCI).

Format of the Coding Standards

Each standard contains the following:

- Directive statements framed and shaded in a shadow box
- Examples to demonstrate application of the directive statements.

These standards apply to data submitted to the Discharge Abstract Database (DAD) and the National Ambulatory Care Reporting System (NACRS). Where applicable, directive statements and examples are preceded with a symbol indicating whether the statement applies to DAD only, NACRS only or to both DAD and NACRS. Not all directives are easily assigned a DAD or NACRS icon, but each has the potential to apply to either database.

The symbols used are:



DAD only



NACRS only



Both DAD and NACRS

The data elements included in the examples are dependent upon the purpose of the example, the coding standard in which the example appears, and also whether or not there is sufficient information to provide each data element. Those data elements include diagnosis typing, prefix 5 and/or prefix 6, and the diagnosis cluster.

The diagnosis type for DAD and the problem identification for NACRS are indicated in the examples using the following:

- | | |
|-----|----------------------------|
| (M) | Most responsible diagnosis |
| (1) | Diagnosis type (1) |
| (2) | Diagnosis type (2) |
| (3) | Diagnosis type (3) |
| (9) | Diagnosis type (9) |
| (0) | Diagnosis type (0) |
| (W) | Diagnosis type (W) |
| (X) | Diagnosis type (X) |
| (Y) | Diagnosis type (Y) |
| MP | Main problem diagnosis |
| OP | Other problem diagnosis |

Clinical and intervention information relevant to understanding the direction in the coding standard is included whenever necessary. Exceptions to directives are listed where appropriate.

Each coding standard is understood best when read in its entirety. There may be more than one directive statement within a directive box and there may be more than one directive box within a standard. These are designed to flow in a logical sequence. Each directive statement must be applied in the context of the entire standard in which it is embedded.

Amendments

Amendments and new coding standards are developed by CIHI in consultation with the various provinces and territories. Some standards have been adapted from provincial documents and incorporated into these national standards.

The word “amended” followed by a date appears in the title banner for a standard to indicate years when:

- new direction was provided in the standard,
- wording changes were made to clarify the direction, and/or
- examples were modified or new examples added.

Standards are not designated as “amended” when changes are limited to reformatting or adding a hyperlink.

Revisions to the coding standards will be made on a regular basis to keep pace with changing health care information needs.

Data Quality

The coding standards are intended to supplement the classification rules inherent in ICD-10-CA and CCI by providing additional information that could not be embedded into the classifications. It is assumed that users of this document will have had training in abstracting relevant information from clinical records and in the use of ICD-10-CA and CCI.

The clinical record is the source for coding morbidity data. Reabstraction studies have identified inadequate chart documentation as one of the causes for data quality concerns in the classification of diagnoses, problems and interventions. From a data collection perspective, inadequate documentation falls into two categories:

1. Deficiencies in the documentation.

“Complete, clear, and accurate documentation is the foundation for complete and accurate coding of all types of medical records”ⁱ. Deficiencies in the documentation result from:

- failure of health care provider to record information,
- lack of detail or specificity,

i. MacDonald, Ellen (January 1999). *Better Coding through Improved Documentation: Strategies for the Current Environment*. Journal of AHIMA, Vol 70, No 1, pages 32–35.

- conflicting or inconsistent information,
- illegible documents and/or
- missing documents.

Within provincial/territorial hospital act legislation, there exist regulations that itemize the documentation that must be included in the clinical record. Typically the legislation designates the Board of Directors as responsible for ensuring these requirements are met.

When the record does not contain sufficient information to assign a code, the coder must consult with the responsible healthcare provider. The *Canadian Coding Standards* cannot provide direction to compensate for deficiencies in the documentation.

2. Failure of health care facilities to provide appropriate documents from the clinical record to the coder.

To support data quality, health care facilities must ensure coders have access to the documentation necessary for accurate code selection. As hospitals across Canada deal with recruitment issues, shortening data submission timelines, and the migration to the electronic health record, processes are created that result in coders not having access to the pertinent documentation. These include, but are not limited to, hybrid records and coders working from remote locations.

CIHI suggests that facilities establish internal policies to specify the minimum set of documents that must be made available to coders to support quality data collection. The following table provides a list of documents, pertinent for each type of case, that CIHI recommends be available for ICD-10-CA/CCI classification and data collection. While facilities may not use the same terminology to identify the same component of the clinical record, coders will know what record or document is required.

Source Documents Recommended to Support Quality
ICD-10-CA/CCI Classification and Data Collection

Type of Case	Documentation Requirements
Surgical	<ul style="list-style-type: none"> • Discharge/Case summary (for complex cases) • Report of history and physical exam • Progress notes • Operation report (with postoperative diagnosis recorded) • Anesthesia report (for OR time data elements) • Pathology report • Consultation reports • Diagnostic imaging reports (for specificity)

**Source Documents Recommended to Support Quality
ICD-10-CA/CCI Classification and Data Collection (cont'd)**



Type of Case	Documentation Requirements
Medical	<ul style="list-style-type: none"> • Discharge/Case summary (final diagnoses must be recorded) • Report of history and physical exam • Progress notes • Consultation reports • Interventional reports (e.g. cardiac catheterization, mechanical ventilation) • Diagnostic imaging reports (for specificity)
Death	<ul style="list-style-type: none"> • Discharge/Case summary (final diagnoses must be recorded) • Provisional autopsy report (when applicable) • Report of history and physical exam • Progress notes • Consultation reports • Diagnostic imaging reports (for specificity)
Obstetrical	<ul style="list-style-type: none"> • Prenatal record • Labor summary and delivery/operative record • Anesthesia report
Newborn	<ul style="list-style-type: none"> • Mother's record or copy of delivery record • Newborn physical exam
ED/outpatient visits	<ul style="list-style-type: none"> • Emergency/Outpatient record (final diagnoses must be recorded) • Reports of diagnostic testing
Day surgery	<ul style="list-style-type: none"> • Outpatient record (final diagnoses must be recorded) • Report of history and physical exam • Operation report (with postoperative diagnosis recorded) • Anesthesia report (for OR time data elements) • Pathology report

Using the PDF Version of the Coding Standards

When used in electronic form, the PDF document of the standards is easily searchable. To facilitate searching, this document has been published using American spelling (with the exception of code titles which are written as they appear in the classifications). This is consistent with the alphabetical index for ICD-10-CA, which uses American spelling and the tabular version of ICD-10-CA, which is published using British spelling (i.e. haemorrhage rather than hemorrhage).

You can search the PDF using the following methods:

- Expand the table of contents to list and hyperlink to each standard by title.
- Select the binoculars near the top of the window (Find) to search by phrase or by code.

You can copy portions of text from the PDF by using the select  and snapshot  tools.

Hyperlinks have been inserted into the document to allow quick navigation to other related standards. Selecting “Click here for description of change” beneath the standard title, when available, will take you to the appropriate place in Appendix C that describes changes made to the standard.

General Coding Standards for ICD-10-CA

Main and Other Problem Definitions for NACRS

In effect 2002, amended 2007, 2008, 2009

Main Problem (MP)

The main problem is the problem that is deemed to be the clinically significant reason for the client's visit, and which requires evaluation and/or treatment or management. This can be a diagnosis, condition, problem or circumstance.

The main problem is assigned by the health care provider at the end of the visit. This may be the physician or another health care professional responsible for the client's care (e.g. allied health professional).

When multiple problems are considered as the main reason for the provision of ambulatory care services, the main problem is that which is responsible for the greatest use of resources.

The entry must be a valid ICD-10-CA code.

For patients who have left without being seen, the main problem is the presenting complaint. This can occur at any point in the patient's visit.

Other Problem (OP)

An ICD-10-CA code is assigned as an other problem when:

- the condition or circumstance exists at the time of the client's visit and is significant to the client's treatment or care;
 - Determination of significance: requires monitoring and/or treatment.
- the direction is provided within another coding standard and/or within the classification itself.

Note: Documentation from allied health professionals, such as nurses, crisis team workers, physiotherapists who are not the main service provider can be used for assignment of other problem(s).

The entry must be a valid ICD-10-CA code.

Other problems include External Causes of Morbidity and Mortality (V01–Y98) and Place of Occurrence (U98) codes.

See also the coding standards entitled [External Cause Codes](#) and [Place of Occurrence](#).

Example: A patient presents to the emergency department with a cough and fever and is treated for pneumonia. The nurse has recorded he has had type 2 diabetes mellitus for many years. He also has coronary artery disease.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
J18.9	MP	Pneumonia, unspecified
E11.52	OP	Type 2 diabetes mellitus with certain circulatory complications

Rationale: E11.52 is assigned as an other problem because the coding standard entitled [Diabetes Mellitus](#) provides the direction to assign a code from E10–E14, mandatory, whenever diabetes is documented. See also the coding standard entitled [Use Additional Code/Code Separately Instructions](#).

Example: Patient presents to the oncology clinic for chemotherapy session for active left main bronchus malignancy.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z51.1	MP	Chemotherapy session for neoplasm
C34.01	OP	Malignant neoplasm of left main bronchus

Rationale: It is mandatory to assign an additional code for the malignant neoplasm as an other problem. See also the coding standard entitled [Admission for Administration of Chemotherapy, Pharmacotherapy, and Radiation Therapy](#).

Example: Patient presented to the emergency department with chest pain. After observation and diagnostic testing, it was determined that the chest pain was non-cardiac in nature. The emergency department discharge diagnosis was non-cardiac chest pain, suspected GERD.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
R07.4	MP	Chest pain, unspecified
(Q) K21.9	OP	Gastro-oesophageal reflux disease without oesophagitis

Rationale: Suspected, questionable, rule out, possible, diagnoses may be recorded as other problems. Assign the prefix “Q” in such circumstances. See also the coding standard entitled [Query Diagnosis \(Q\)/Etiology](#).

Coding of Main and Other Problems for NACRS

In effect 2002, amended 2008, 2009

Diagnoses must be supported by physician or primary care provider documentation to be classified as a **main problem** (MP). NACRS recognizes that allied health professionals, such as nurses, crisis team workers, physiotherapists, etc. can be the main and/or only service providers. When a physician is **not** the main service provider, documentation from allied health professionals may be used for selection of the main problem. When a physician is the main service provider, documentation from allied health professionals may be used for other problem code selection.

Diagnoses listed only on death certificates, history and physical or pre-operative anesthetic consults qualify as other problems when they meet the definition of an **other problem** (OP).

Conditions documented in nurses' notes, pathology reports, medication profiles, radiological investigations, nuclear imaging and other similar investigations are valuable tools when they clearly add specificity in identifying the appropriate diagnosis code for conditions documented in the physician/primary care provider notes.

- N** Determine the main problem from the documentation by identifying either:
 - The definitive (formulated) diagnostic statement
 - A symptom, sign or abnormal test result in the absence of a definitive diagnostic statement
 - The specific reason for encounter (e.g. follow-up exam, treatment, observation for suspected condition or pre-operative assessment)
- N** List the main problem as the first diagnosis code on the abstract.
- N** Always code to the greatest degree of specificity supported by the documentation.

See also the coding standards entitled *Diagnoses of Equal Importance, Specificity* and *Query Diagnosis (Q)/Etiology*.

Definitive (Formulated) Diagnostic Statement

Example: A woman presents with hematemesis, which on investigation, is found to be due to an acute gastric ulcer (with hemorrhage). She is taking NSAID for an unrelated condition. Physician documented “NSAID related gastric bleed.”

N

<u>Code</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
K25.0	MP	A	Gastric ulcer, acute with haemorrhage
Y45.3	OP	A	Other nonsteroidal ant-inflammatory drugs [NSAID] causing adverse effects in therapeutic use

Rationale: The external cause code is mandatory to assign as an other problem when classifying an adverse effect in therapeutic use. See also the coding standard entitled [Adverse Reactions in Therapeutic Use Versus Poisonings](#).

N Assign an external cause code from Chapter XX—*External causes of morbidity and mortality (V01–Y98)*, mandatory, as an other problem with any condition classifiable to Chapter XIX—*Injury, Poisoning and Certain Other Consequences of External Causes*.

N With any accident or poisoning classifiable to W00–Y34, excluding Y06 and Y07, assign a code from U98 *Place of occurrence*, mandatory, as an other problem.

See also the coding standards entitled [External Cause Codes](#) and [Place of Occurrence](#).

Example: An interior decorator falls from a ladder while painting a client’s living room. She sustains a closed fracture to her distal humerus.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
S42.490	MP	Fracture of unspecified part of lower part of humerus, closed
W11	OP	Fall on and from ladder
U98.0	OP	Place of occurrence, home
U99.2	OP	Activity, while working for an income (optional)

Symptom, Sign or Abnormal Test Result

Example: A man who has recently argued with his wife presents to the emergency department complaining of acute dizziness. Upon examination, the physician finds elevated blood pressure readings and notes this as the cause of the dizziness. He has not been diagnosed with hypertension. Follow-up is arranged for him with his family physician and his social worker.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
R03.0	MP	Elevated blood-pressure reading, without diagnosis of hypertension
Z63.0	OP	Problems in relationship with spouse or partner (optional)

Specific Reason for Encounter

- **Follow up examinations**—See also the coding standard entitled [Admission for Follow-Up Examination](#).
- **Encounters for specific forms of treatment** such as dialysis, radiation therapy, adjustment of prosthesis, stoma appliances, pacemakers, etc. are assigned codes from Chapter XXI—*Factors Influencing Health Status and Contact with Health Services*.
- **Observation**—See also the coding standard entitled [Admission for Observation](#).
- **Preoperative assessment**—See also the coding standard entitled [Pre-treatment Assessment](#).
- **Diagnostic tests**—See also the coding standard entitled [Using Diagnostic Test Results in Coding](#).

Diagnosis Typing Definitions for DAD

[Click here for description of change.](#)

In effect 2001, amended 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2012

Diagnosis typing applies to all data submitted to the Discharge Abstract Database (DAD). The assignment of a diagnosis type to a condition is meant to signify the impact that the condition had on the patient's care as evidenced in the physician documentation. When the primary responsibility for care has been designated to certain allied health care providers (e.g. midwife, nurse practitioner), the documentation of this primary care provider is used for code selection and determination of significance for diagnosis type assignment. All diagnoses or conditions identified on the DAD abstract must be assigned a diagnosis type.

There are multiple diagnosis types:

- Most responsible diagnosis (Type M)
- Comorbidity diagnoses (Types 1 and 2)
- Secondary diagnoses (Type 3)
- Morphology codes (Type 4)
- Admitting diagnoses (Type 5)
- Proxy most responsible diagnosis (Type 6)
- Service transfer diagnoses (Types W, X and Y)
- External cause of injury codes (Type 9)
- Diagnoses restricted to newborn abstracts only (Type 0)

Diagnosis types M, 1, 2, 6, W, X and Y are considered significant diagnosis types.



Assign an ICD-10-CA code, mandatory, for any diagnosis/condition meeting the definition of a significant/comorbid diagnosis type (M, 1, 2, 6, W, X and Y).

Definition of Comorbidity

A comorbidity is a condition that coexists at the time of admission or develops subsequently and demonstrates at least one of the following:

- Requires treatment beyond maintenance of the preexisting condition;
- Increases the length of stay (LOS) by at least 24 hours;
- Significantly affects the treatment received.
 - To determine significance, there must be documented evidence in the physician documentation (or primary care provider documentation as described above) that the condition required at least one of the following:
 - A consultation to assess a previously undiagnosed condition;
 - A consultation to assess a previously diagnosed condition in which a new or amended course of treatment is recommended and instituted (excludes a pre-operative anesthetic assessment);
 - A diagnostic or therapeutic intervention identified as mandatory for code assignment in the coding standards entitled *Selection of Interventions to Code for Ambulatory Care* and *Selection of Interventions to Code for Acute Inpatient Care*; or
 - An extended length of stay (LOS) by at least 24 hours.

Diagnoses must be supported by physician (or primary care provider) documentation as identified in the criteria listed above to be classified as comorbidities. However, nurses' notes, pathology reports, autopsy reports, medication profiles, radiological investigations, nuclear imaging, and other similar investigations are valuable tools for identifying specificity in assigning the appropriate diagnosis code. Conditions documented in these reports may be captured as a diagnosis type (3) when there is no physician documentation to support capture as a comorbidity.

Diagnosis Type (M)—Most Responsible Diagnosis (MRDx)ⁱ

Diagnosis type (M) is the one diagnosis or condition that can be described as being most responsible for the patient's stay in hospital. If there is more than one such condition, the one held most responsible for the greatest portion of the length of stay or greatest use of resources (e.g. operating room time, investigative technology) is selected.

- If no interventions have been performed select the first-listed diagnosis as the most responsible diagnosis.
- If no definite diagnosis was made, select the main symptom, abnormal finding or problem as the MRDx.

i. World Health Organization, "Rules and Guidelines for Mortality and Morbidity Coding," *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Volume 2, Second Edition* (Geneva, Switzerland: World Health Organization, 2004), p. 113.

Diagnosis Type (1)—Pre-Admit Comorbidity

A diagnosis type (1) is a condition that existed prior to admission, has been assigned an ICD-10-CA code, and satisfies the requirements for determining comorbidity.

Diagnosis Type (2)—Post-Admit Comorbidity

A diagnosis type (2) is a condition that arises post-admission, has been assigned an ICD-10-CA code and satisfies the requirements for determining comorbidity.

If a post-admit comorbidity qualifies as the MRDx, it must be recorded as both the MRDx and as a diagnosis type (2).

Prefix 5 and 6

Prefix 5 and 6 describe the chronological relationship between a diagnosis type (2) (post-admit comorbidity) and the first qualifying intervention occurring in (the):

- Main operating room at the reporting facility; or
- Cardiac catheterization room at the reporting facility; or
- Another facility (Out-of-hospital [OOH]) for select cardiac interventions:
 - 3.IP.10.^Xray, heart with coronary arteries
 - 1.IJ.50.^Dilation, coronary arteries
 - 1.IJ.57.^Extraction, coronary arteries

D Assign prefix 5, mandatory, to a diagnosis type (2) (post-admit comorbidity) that arose before the first qualifying intervention.

D Assign prefix 6, mandatory, to a diagnosis type (2) (post-admit comorbidity) that arose during or after the first qualifying intervention.

Exception: Prefix 5 and 6 do not apply to obstetrical conditions classified in Chapter XV—*Pregnancy, childbirth and the puerperium (O00-O99)*.

Note: Prefix 5 and 6 apply to acute care inpatients only.

Prefix 5 and 6 take precedence over diagnosis prefixes Q, C or facility defined diagnosis prefixes.

Example: On the day of admission a patient had a bronchoscopy performed in the endoscopy suite for ongoing respiratory symptoms and abnormal radiological findings. Following bronchoscopy, the patient developed cardiac dysrhythmia requiring observation and treatment by cardiology service. On day six, an open lung biopsy was performed in the main OR following which the patient developed persistent postoperative atelectasis treated with physiotherapy and bronchodilators.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
5	I49.9	(2)	A	Cardiac arrhythmia, unspecified
	Y83.8	(9)	A	Surgical procedure, unspecified, as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
6	J98.10	(2)	B	Atelectasis
	Y83.8	(9)	B	Surgical procedure, unspecified, as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The first qualifying intervention in this example is the open lung biopsy performed in the main OR. Prefix 5 is assigned to the post-admit comorbidity that arose before the first qualifying intervention. Prefix 6 is assigned to the post-admit comorbidity that arose after the first qualifying intervention.

Example: Patient delivered by Cesarean section for obstructed labor due to breech presentation of the baby. Prior to discharge, a Cesarean wound dehiscence was diagnosed.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
	O64.101	(M)	Obstructed labour due to breech presentation, delivered, with or without mention of antepartum condition
	O90.002	(2)	Disruption of caesarean section wound, delivered, with mention of postpartum complication
	Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: Prefix 5 and 6 do not apply to obstetrical codes.

Diagnosis Type (3)—Secondary Diagnosis

A diagnosis type (3) is a secondary diagnosis or condition for which a patient may or may not have received treatment, has been assigned an ICD-10-CA code and does not satisfy the requirements for determining comorbidity. Diagnoses that are **only listed** on the Front Sheet, Discharge Summary, Death Certificate, History and Physical or Pre-operative Anesthetic Consults qualify as a diagnosis type (3)—secondary diagnosis. If there is physician documentation elsewhere in the chart that the condition affected the treatment received or required treatment beyond maintenance of the preexisting condition or increased the length of stay (LOS) by at least 24 hours it then must be determined if it is a diagnosis type (1) or type (2) comorbidity.

A diagnosis type (3) is also used for ICD-10-CA codes that are assigned to provide detail that in themselves do not represent a comorbidity.

Note: Documentation of ongoing medication for treatment of a preexisting condition does not in itself denote significance. Conditions not qualifying as comorbidities are assigned diagnosis type (3).

Diagnosis type (3) is not allowed when the entry code is N—Newborn.

See [Appendix F1—References to Mandatory Diagnosis Type 3/Other Problem in Directive Statements](#) and [Appendix F2—References to Optional Diagnosis Type 3/Other Problem in Directive Statements](#).

Diagnosis Type (W), (X), (Y)—Service Transfer Diagnosis

A service transfer diagnosis, type (W), (X), (Y) is an ICD-10-CA code associated with the first/second/third service transfer. The use of this diagnosis type is determined at the jurisdictional or facility level. Service transfer diagnoses are optional with the exception of service transfer to alternate level of care (ALC).

Note: When a diagnosis is recorded with a service transfer diagnosis type, it is equivalent to a diagnosis type (1); therefore, it is not necessary to repeat it on the abstract as a diagnosis type (1).

When a diagnosis is recorded as a diagnosis type (2), and also qualifies as a service transfer diagnosis type (W), (X), or (Y), facilities choosing to capture service transfer diagnoses must record the condition twice. First, mandatory, as a diagnosis type (2) and second, optional, as a service transfer diagnosis type (W), (X), or (Y).

Example: Patient is admitted with a cerebral infarction. Patient has a history of severe COPD. The neurologist deems the patient ready for discharge on day three of his admission. However, he begins exhibiting signs of a cold and a chest X-ray reveals that he has pneumonia. His respiratory status rapidly worsens. He is started on antibiotics and requires intubation and mechanical ventilation. He is transferred to ICU under the service of an internist. He is discharged 10 days later.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
J44.0	(M)	Chronic obstructive pulmonary disease with acute lower respiratory infection
J18.9	(2)	Pneumonia, unspecified
I63.9	(W) or (1)	Cerebral infarction, unspecified

Rationale: The COPD with acute lower respiratory infection meets the criteria for MRDx; therefore, cerebral infarction may be a service transfer diagnosis or a diagnosis type (1).

Example: Patient is admitted with a non ST elevation myocardial infarction. The cardiologist deems the patient ready for discharge on day four of his admission. However, he begins exhibiting respiratory distress and is diagnosed with pneumonia. He is transferred to respirology under care of a respirologist. He is discharged three days later.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I21.4	(M)	Acute subendocardial myocardial infarction
R94.31	(3)	Abnormal cardiovascular function studies (biomarkers or ECG) suggestive of non ST segment elevation myocardial infarction [NSTEMI]
J18.9	(2)	Pneumonia, unspecified
J18.9	(W)	Pneumonia, unspecified (optional)

Rationale: The pneumonia meets the criteria for diagnosis type (2). For those facilities choosing to capture pneumonia as a service transfer diagnosis, the code for pneumonia is repeated with a diagnosis type (W).

Diagnosis Type (4)—Morphology Codes

Diagnosis type (4), morphology codes are derived from ICD-O (International Classification of Diseases—Oncology) codes describing the type and behavior of neoplasm. These codes are found in Chapter XXII—*Morphology of Neoplasms*.

Diagnosis Type (5)—Admitting Diagnosis

Diagnosis type (5) can be used to code the admitting diagnosis when it differs from the most responsible diagnosis code. Its use is determined at the jurisdictional or facility level. Refer to the DAD manual and facility policies to determine the jurisdictional or facility requirement for use of this diagnosis type.

Diagnosis Type (6)—Proxy Most Responsible Diagnosis (MRDx)

A diagnosis type (6) is assigned to a designated asterisk code in a dagger/asterisk convention when the condition it represents fulfills the requirements stated in the definition for diagnosis type (M)—most responsible diagnosis (MRDx). In morbidity coding, asterisk codes are manifestations of an underlying condition and according to the World Health Organization (WHO) rules, must be sequenced following the code for the underlying cause. The underlying cause codes are identified with a dagger symbol (†) in the ICD-10-CA classification. Diagnosis type (6) is used on the **second line** of the diagnosis field of the abstract to indicate that the manifestation is the condition most responsible for the patient's stay in hospital. When the underlying condition meets the criteria for MRDx, or when it would be difficult to delineate whether it is the underlying condition or the manifestation that meets the criteria for MRDx, the asterisk code is assigned diagnosis type (3).

See also the coding standard entitled [Dagger/Asterisk Convention](#).

Note: Only one asterisk code is allowed as a diagnosis type (6).

Example: Patient with advanced Crohn's disease. He was on a maintenance dose of medications for his regional enteritis. This time, he presented with pain, swelling, and inflammation of the lower back. He was admitted for treatment of sacro-iliac joint arthritis, a complication of the enteritis.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
K50.9†	(M)	Crohn's disease, unspecified
M07.4*	(6)	Arthropathy in Crohn's disease [regional enteritis]

Rationale: The arthropathy code is an asterisk code thus it must be sequenced in the second diagnosis location on the abstract. However, since it is the arthropathy that meets the criteria for MRDx (and not Crohn's disease), it is assigned diagnosis type (6). Note that K50.9 is not always a dagger code. However, in this disease combination the alphabetical index directs that it be used as such with M07.4.

Example: Patient with known systemic lupus erythematosus presented with hematuria and fever. He was diagnosed with nephritis and admitted for treatment of his renal condition.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M32.1†	(M)	Systemic lupus erythematosus with organ or system involvement
N08.5*	(6)	Glomerular disorders in systemic connective tissue disorders

Rationale: The glomerular disorder code is an asterisk code thus it must be sequenced in the second diagnosis location on the abstract. However, since it is the nephritis that meets the criteria for MRDx (and not systemic lupus erythematosus), it is assigned diagnosis type (6).

Example: Patient admitted for meningococcal meningitis.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
A39.0†	(M)	Meningococcal meningitis
G01*	(3)	Meningitis in bacterial diseases classified elsewhere

Rationale: This patient has an infectious disorder involving the nervous system and a dagger/asterisk convention applies. However, since it would be difficult to delineate whether it is the underlying condition or the manifestation that meets the criteria for MRDx, the asterisk code is assigned diagnosis type (3).

Example: Patient is known to have type 1 diabetes mellitus with diabetic retinopathy. He is admitted by an ophthalmologist for management of his retinopathy.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
E10.30†	(M)	Type 1 diabetes mellitus with background retinopathy
H36.0*	(6)	Diabetic retinopathy

Rationale: Retinopathy is an asterisk code thus it must be sequenced in the second diagnosis location on the abstract. However, since it is the retinopathy that meets the criteria for MRDx (and not diabetes mellitus), it is assigned diagnosis type (6).

Diagnosis Type (7), (8)—Restricted to CIHI—DO NOT USE

Diagnosis Type (9)—External Cause of Injury Code

A diagnosis type (9) is an external cause of injury code (Chapter XX—*External causes of morbidity and mortality*), place of occurrence code (U98.—*Place of occurrence*) or activity code (U99.—*Activity*). Chapter XX codes are mandatory for use with codes in the range S00–T98 *Injury, poisoning and certain other consequences of external causes*. Category U98 *Place of occurrence* is mandatory with codes in the range W00–Y34, with the exception of Y06 and Y07, and category U99 *Activity* is optional.

Diagnosis Type (0)—Newborn

Diagnosis Type (0) is restricted to newborn codes only (admit category N).

In a **healthy** infant where a code from category Z38 *Liveborn infants according to place of birth* is the MRDx, any other codes entered on the newborn abstract must be a diagnosis type (0).

Note: Diagnosis type (3) cannot be assigned to any code on a newborn's abstract.

In an **unhealthy** infant where a code from the range P00 to P96, or any other code from another chapter within ICD-10-CA, indicating a significant condition (i.e. any condition that meets the criteria for a comorbidity), is the MRDx, then Z38.— must be a diagnosis type (0). In this circumstance, diagnosis type (0) can be used to record any additional insignificant conditions that do not affect the newborn's treatment or length of stay and do not satisfy the requirements for determining comorbidity. Additional conditions that meet the criteria of comorbidity are assigned diagnosis types (1), (2), (W), (X) or (Y) as indicated by the documentation in the chart.

Note: It is mandatory to assign a code from category Z38 *Liveborn infants according to place of birth* on a newborn's abstract.

A newborn is considered “unhealthy” and Z38.— is assigned diagnosis type (0), when a **documented condition** in the newborn meets one of the criteria below.

- Required supervision and/or specific monitoring (e.g. Admission to NICU. Excludes routine admission to NICU following Cesarean section.)
- Put the baby's health and/or life at risk
- Prematurity (gestational age of the newborn less than 37 completed weeks)
- Low birth weight (less than 2500 grams)
- Required a medical and/or surgical consultation
- Required further investigation, for example, therapeutic or diagnostic interventions
- Requires further treatment or follow up (beyond routine postnatal check up) after discharge (e.g. Congenital malformations, deformations and chromosomal abnormalities)

Exception: Consultation for circumcision and/or the intervention does not qualify a newborn as “unhealthy.” Z41.2 *Routine and ritual circumcision*, when assigned on the newborn abstract, is always a diagnosis type (0).

Example: Newborn female delivered vaginally at 34 weeks with birth weight of 2400 grams. She was transferred to the NICU with a diagnosis of prematurity and request for a cardiology consultation. Following consultation, she was diagnosed with a patent ductus arteriosus (PDA) which spontaneously closed after 5 days. She was discharged home at 21 days of age.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P07.1	(M)	Other low birth weight
P07.3	(1)	Other preterm infants
Q25.0	(1)	Patent ductus arteriosus
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: This baby is unhealthy due to a low birth weight and PDA. See also the coding standard entitled [Low Birth Weight and/or Preterm Infant](#).

Example: Term infant delivered by operative vaginal delivery using forceps. On the newborn physical examination report, the physician has noted that there is cephalhematoma.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z38.000	(M)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception
P12.0	(0)	Cephalhaematoma due to birth injury
P03.2	(0)	Fetus and newborn affected by forceps delivery

Rationale: The newborn is healthy as there is no documentation indicating the cephalhematoma was complicated. If a code for cephalhematoma is assigned, it must be a diagnosis type (0).

Example: Newborn male delivered vaginally at 40 weeks. On initial assessment, the physician documents the infant as having left talipes equinovarus. There are no consultations during the hospital stay, but the discharge note indicates the mother is to make an appointment with an orthopedic surgeon for follow-up.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Q66.0	(M)	Talipes equinovarus
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: This infant is considered an unhealthy newborn. The club foot is a condition that will require subsequent follow-up and treatment.

Example: A baby girl was born at term, spontaneous vaginal delivery, with a birth weight of 3,928 grams. It is documented in the chart that the infant's discharge was delayed because mom developed a postpartum fever and required further investigation and treatment. Mom continued breast feeding and caring for the baby.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z38.000	(M)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: This is a healthy infant even though there was a prolonged length of stay. An additional code to describe the extended LOS would depend on physician documentation.

More Examples of Diagnosis Typing for Comorbid and Secondary Conditions

Example: A patient is admitted for inguinal hernia repair. The discharge summary states that he has chronic atrial fibrillation and is on Digoxin, Propranolol and long-term Coumadin. The post-op orders are to: hold warfarin tonight, give warfarin 2.5 mg tomorrow morning and evening, INR daily X 3 days. While in hospital the patient has a cardiology consult and his Digoxin and Propranolol medications are adjusted. It is also stated in the discharge summary that the patient was kept in the ICU for 24 hours in order to monitor his atrial fibrillation closely.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
K40.9	(M)	Unilateral or unspecified inguinal hernia, without obstruction or gangrene
I48.02	(1)	Chronic atrial fibrillation

Rationale: Atrial fibrillation is a comorbidity as it warranted a consult, adjustment of his medication, and admission to ICU. Note that "coagulopathy" or "acquired coagulopathy" is not coded. Adjusting warfarin dosage and checking INR values are part of the normal course of treatment for any patient on anticoagulation medication.

Example: A patient is admitted with a non Q-wave myocardial infarction (MI) of the anterior wall. It states in the history and physical that he has osteoarthritis and pain in his left knee. While recovering in hospital, an X-ray of his left knee is done but no treatment is undertaken and there is no further documentation.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I21.4	(M)	Acute subendocardial myocardial infarction
R94.38	(3)	Other and unspecified abnormal results of cardiovascular function studies
M17.9	(3)	Gonarthrosis, unspecified (optional)

Rationale: The physician has documented osteoarthritis in the history and physical. A simple X-ray was taken to assess a previously-diagnosed condition, but there was no treatment beyond maintenance of this pre-existing condition. There was also no additional documentation indicating the condition prolonged the stay. If assigned, M17.9 is recorded as a diagnosis type 3. A code from subcategory R94.3– as a diagnosis type 3 is mandatory with a diagnosis from category I21. Since there is no documentation in this example to support the selection of R94.30 or R94.31, the code R94.38 is assigned.

Example: A patient is admitted with congestive heart failure (CHF) and an acute exacerbation of chronic obstructive pulmonary disease (COPD). Treatment and progress is documented in the discharge summary and progress notes. He is treated with IV Lasix, oxygen and local pharmacotherapy (Ventolin and Combivent). He recovers quickly. Hypokalemia is documented in the physician's progress notes and the patient is kept in hospital for an additional 24 hours to deliver KCL boluses x 2. The patient is sent home on KCL Elixir p.o.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I50.0	(M)	Congestive heart failure
J44.1	(1)	Chronic obstructive pulmonary disease with acute exacerbation, unspecified
E87.6	(2)	Hypokalemia

Rationale: J44.1 is a diagnosis type (1) because it was present prior to the patient's admission and both the discharge summary and the progress notes confirm its significance. E87.6 is a diagnosis type (2) because it was not present on admission to hospital (post-admission comorbidity) and the progress notes clearly reflect the increased LOS for treatment and stabilization.

Example: Patient is admitted with congestive heart failure (CHF) and an acute exacerbation of chronic obstructive pulmonary disease (COPD). Treated with IV Lasix, oxygen and local pharmacotherapy (Ventolin and Combivent). Treatment for the CHF and COPD and the patient's response are clearly documented in the progress notes. She recovers quickly but low potassium is noted on a lab report and an order for a KCL bolus is given. Following this, her potassium level returns to normal. There is no mention of hypokalemia in the progress notes.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I50.0	(M)	Congestive heart failure
J44.1	(1)	Chronic obstructive pulmonary disease with acute exacerbation, unspecified

Rationale: Unless hypokalemia is documented by the physician, no code is assigned.

Diagnosis Cluster

[Click here for description of change.](#)

In effect 2012

A diagnosis cluster is a group of two or more ICD-10-CA codes that relate to one another. Assigning the same diagnosis cluster character (upper case alpha character A to Y) to each of the codes in the cluster is the mechanism that links these codes together on the abstract.



Apply a diagnosis cluster, mandatory, when a code from the following categories is assigned:

- external causes related to complications of medical and surgical care (Y40–Y84); and
- resistance to antibiotics (U82 and U83) and other antimicrobial drugs (U84).



Assign the same diagnosis cluster character (upper case alpha character A to Y) to all codes within the same diagnosis cluster.

Note: Ensure application of a diagnosis cluster is used only for adverse effects in therapeutic use (Y40–Y59), post-intervention conditions (Y60–Y84) and infections from drug-resistant microorganisms (U82–U84). Application of a diagnosis cluster in any other circumstance is not permitted.

Note: When there are two or more diagnosis clusters on the abstract, each must make use of a different upper case alpha character A–Y for the codes within the cluster.

Note: There is no limit to the number of codes assigned to the same diagnosis cluster.

Note: The diagnosis type for each code within a cluster is based on the diagnosis typing/problem definitions and/or direction found within another coding standard.

Creating a Diagnosis Cluster for a Drug-Resistant Microorganism Infection(s)

Note: The purpose of the diagnosis cluster for a drug-resistant microorganism infection is to link resistance to a specific drug with the microorganism and site of infection(s) to which the drug resistance is associated.

Create one diagnosis cluster for:

- a single infection associated with a drug resistant microorganism; or
- two or more infections associated with the same drug resistant microorganism.

Create two or more diagnosis clusters when there is more than one infection and each is associated with a different drug resistant microorganism.

The set of codes in the drug-resistant microorganism diagnosis cluster identify the:

- type of drug resistance (U82–U84); and
- infectious organism; and
- site(s) of the infection.

See also the coding standard entitled [*Drug-Resistant Microorganisms*](#).

Example: Patient presents to hospital with septic arthritis of the left shoulder that is MRSA positive. Arthroscopy was performed to thoroughly irrigate and debride the shoulder.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
M00.01	(M)	MP	A	Staphylococcal arthritis and polyarthritis, shoulder region
B95.6	(3)	OP	A	Staphylococcus aureus as the cause of diseases classified to other chapters
U82.1	(1)	OP	A	Resistance to methicillin

Rationale: Application of a diagnosis cluster is mandatory for drug-resistant microorganism infections. The same diagnosis cluster character is assigned to all codes describing the single drug-resistant microorganism infection. Diagnosis cluster “A” links the drug resistance (methicillin) to the related microorganism (staph aureus) and site of the infection (shoulder). [This example demonstrates creating one diagnosis cluster for a single infection associated with a drug resistant microorganism.]

Example: Patient is admitted with a urinary tract infection and pneumonia which are both due to staphylococcus aureus that is resistant to methicillin.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
J15.2	(M)	MP	A	Pneumonia due to Staphylococcus
N39.0	(1)	OP	A	Urinary tract infection, site not specified
B95.6	(3)	OP	A	Staphylococcus aureus as the cause of diseases classified to other chapters
U82.1	(1)	OP	A	Resistance to methicillin

Rationale: Application of a diagnosis cluster is mandatory for drug-resistant microorganism infections. The same diagnosis cluster character is assigned to all codes describing the two infections that are associated with the same drug resistance. Diagnosis cluster "A" links the drug resistance (methicillin) to the related organism (staph aureus) and sites of the infection (lung and urinary tract). [This example demonstrates creating one diagnosis cluster for two or more infections associated with the same drug resistant microorganism.]

Creating a Diagnosis Cluster for a Post-Intervention Condition(s)

Note: The purpose of the diagnosis cluster for a post-intervention condition is to link the external cause code denoting the nature of the post-intervention condition with the condition(s) to which that complication of surgical and medical care is associated.

The nature of the post-intervention condition pertains to the type of post-intervention condition per the external cause code that is assigned. The post-intervention condition(s) is either:

- a misadventure (Y60–Y69);
- an adverse incident associated with a medical device (Y70–Y82)
- an abnormal reaction/later complication (Y83–Y84)

Note: Y83–Y84 includes both abnormal reactions and later complications.

Create one diagnosis cluster for:

- a single post-intervention condition; or
- two or more post-intervention conditions of the same nature (misadventure, medical device associated with adverse incident or abnormal reaction/later complication) which are related to the same intervention episode.

Create two or more diagnosis clusters when:

- there are two or more post-intervention conditions of the same nature and each is related to a different intervention episode; and/or
- there are two or more post-intervention conditions of a different nature and each is related to the same intervention episode.

The set of codes included in the post-intervention condition diagnosis cluster identify the:

- nature of the complication of surgical and medical care (Y60–Y84); and
- related condition(s); and
- additional code(s) for specificity (when required and available).

See also the coding standard entitled [Post-Intervention Conditions](#).

Note: It is mandatory to apply a diagnosis cluster each time a post-intervention condition is classified. This includes when a post-intervention condition is captured:

- during the episode of care;
- on readmission;
- when the patient is transferred from another facility.

Example: Patient had a total hip replacement and was discharged. The next day the patient returned to the hospital with a dislocated left total hip replacement with no associated trauma. A closed reduction was performed.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T84.03	(M)	MP	A	Mechanical complication of hip prosthesis
Y83.1	(9)	OP	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Application of a diagnosis cluster is mandatory for post-intervention conditions. The same diagnosis cluster character is assigned to all codes describing the single post-intervention condition. Diagnosis cluster “A” links the external cause (abnormal reaction/later complication) to the related condition (mechanical complication). [This example demonstrates creating one diagnosis cluster for a single post-intervention condition. It also demonstrates applying a diagnosis cluster when a post-intervention condition is captured on readmission.]

Example: Patient had a carpal tunnel release and briefly exhibited mild confusion in the recovery room which quickly cleared on its own.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
G56.0	(M)	MP		Carpal tunnel syndrome
R41.0	(3)	OP	A	Disorientation, unspecified (optional)
Y83.8	(9)	OP	A	Other surgical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure (optional)

Rationale: Application of a diagnosis cluster is mandatory for post-intervention conditions regardless of diagnosis type assignment. The postoperative confusion does not meet the criteria for significance in this case. If it is captured it is assigned diagnosis type (3). The same diagnosis cluster character is assigned to all codes describing the single post-intervention condition. Diagnosis cluster “A” links the external cause (abnormal reaction/later complication) to the related condition (confusion). [This example demonstrates creating one diagnosis cluster for a single post-intervention condition. It also demonstrates that the diagnosis type for each code within a cluster is based on the diagnosis typing/problem definitions and/or direction found within another coding standard.]

Example: Patient is admitted for a revision arthroplasty due to metallosis, abrasion of the metal components. The original surgery was 10 years ago.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T84.03	(M)	MP	A	Mechanical complication of hip prosthesis
Y83.1	(9)	OP	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Application of a diagnosis cluster is mandatory for post-intervention conditions regardless of when the intervention took place. The same diagnosis cluster character is assigned to all codes describing the single post-intervention condition. Diagnosis cluster “A” links the external cause (abnormal reaction/late complication) to the related condition (mechanical complication). [This example demonstrates creating one diagnosis cluster for a single post-intervention condition. It also demonstrates applying a diagnosis cluster when a post-intervention condition is captured on readmission.]

Example: This patient was admitted for a partial excision of the colon due to cancer. During the intervention an accidental tear to the spleen resulted in an unplanned splenectomy. The patient also had ongoing issues with hypotension postoperatively.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
C18.9	(M)		Malignant neoplasm colon, unspecified
T81.2	(2)	A	Accidental puncture and laceration during a procedure, not elsewhere classified
S36.091	(3)	A	Haematoma NOS, laceration NOS, injury to spleen NOS, with open wound into cavity
Y60.0	(9)	A	Unintentional cut, puncture, perforation or haemorrhage, during surgical operation
I95.9	(2)	B	Hypotension, unspecified
Y83.9	(9)	B	Surgical procedure, unspecified as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Application of a diagnosis cluster is mandatory for post-intervention conditions. Since there are post-intervention conditions related to the same intervention episode, that are of a different nature, two diagnosis clusters are applied and each makes use of a different upper case alpha character. Diagnosis cluster “A” links the external cause (misadventure) to the related condition (accidental laceration) and the additional code for specificity (laceration of spleen). Diagnosis cluster “B” links the external cause (abnormal reaction/late complication) to the related condition (hypotension). [This example demonstrates creating two or more diagnosis clusters for post-interventions conditions of a different nature (misadventure and abnormal reaction/late complication) that are related to the same intervention episode.]

Example: Patient undergoes a vaginal hysterectomy for uterovaginal prolapse. On the second day following the intervention, she is diagnosed with urinary retention and atelectasis requiring further treatment and monitoring. An indwelling urinary catheter had been inserted at the end of surgery and the patient subsequently developed catheter-related cystitis.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
N81.4	(M)		Uterovaginal prolapse, unspecified
R33	(2)	A	Retention of urine
J98.10	(2)	A	Atelectasis
Y83.6	(9)	A	Removal of other organ (partial) (total) as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
T83.5	(2)	B	Infection and inflammatory reaction due to prosthetic device, implant and graft in urinary system
N30.0	(3)	B	Acute cystitis
Y84.6	(9)	B	Urinary catheterization as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Application of a diagnosis cluster is mandatory for post-intervention conditions. Since there are post-intervention conditions related to different intervention episodes, two diagnosis clusters are applied and each makes use of a different upper case alpha character. Diagnosis cluster “A” links the external cause (abnormal reaction/late complication) to the related conditions (retention of urine and atelectasis) associated with the same intervention episode (hysterectomy). Diagnosis cluster “B” links the external cause (abnormal reaction/late complication) to the related condition (cystitis) associated with a different intervention episode (catheterization). [This example demonstrates creating two or more diagnosis clusters for two or more post-intervention conditions of the same nature (abnormal reaction/late complication) that are related to a different intervention episode (hysterectomy/catheterization).]

Example: Patient had a total knee replacement in Hospital A and was transferred to Hospital B one day after surgery for convalescence. On admission to Hospital B the patient was diagnosed with anemia for which she was transfused with two units of washed red blood cells.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
Z54.0	(M)		Convalescence following surgery
D64.9	(1)	A	Anaemia, unspecified
Y83.1	(9)	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The same diagnosis cluster character is assigned to all codes describing the single post-intervention condition. Diagnosis cluster “A” links the external cause (abnormal reaction/late complication) to the related condition (anemia). [This example demonstrates creating one diagnosis cluster for a single post-intervention condition. It also demonstrates applying a diagnosis cluster when a post-intervention condition arises following transfer during an uninterrupted continuous episode of care.]

Example: Patient with known coronary atherosclerosis is admitted for a coronary artery bypass graft. Two days after surgery the patient suffers a cerebral infarction which significantly affected the length of stay and qualified as the MRDx.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
I63.9	(M)	A	Cerebral infarction, unspecified
I63.9	(2)	A	Cerebral infarction, unspecified
Y83.2	(9)	A	Surgical operation with anastomosis, bypass or graft as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
I25.10	(1)		Atherosclerotic heart disease of native coronary artery

Rationale: Application of a diagnosis cluster is mandatory for post-intervention conditions. Since the cerebral infarction is a post-admit comorbidity that also qualifies as the MRDx, it is captured twice on the abstract; as MRDx and as diagnosis type (2). The same diagnosis cluster character is assigned to all codes describing the single post-intervention condition. Diagnosis cluster "A" links the external cause (abnormal reaction/after complication) to the related condition (cerebral infarction). Since there is only one cerebral infarction associated with a single intervention episode, the external cause code is recorded once. The same diagnosis cluster character is applied to all three codes thereby indicating that the cerebral infarction occurred following the intervention and became the MRDx. [This example demonstrates creating one diagnosis cluster for a single post-intervention condition that is a post-admit comorbidity and becomes the MRDx.]

Example: Patient is admitted with sepsis due to hernia repair (without tissue) performed two weeks ago. He was treated for five days for the infection and was ready to go home when he coughed and suffered a wound dehiscence for which he had to be taken to the operating room for closure. He remained in hospital for another 25 days.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.3	(M)	A	Disruption of operation wound, not elsewhere classified
T81.3	(2)	A	Disruption of operation wound, not elsewhere classified
T81.4	(1)	A	Infection following a procedure, not elsewhere classified
A41.9	(3)	A	Sepsis, unspecified
Y83.4	(9)	A	Other reconstructive surgery as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Application of a diagnosis cluster is mandatory for post-intervention conditions. Although one post-intervention condition is present on admission and the other arises following admission, both the sepsis and the wound dehiscence are of the same nature (abnormal reaction/after complication) and are related to the same intervention episode (hernia repair), thus only one diagnosis cluster is applied. The same diagnosis cluster ("A") is assigned to all codes describing the post-intervention conditions. [This example demonstrates creating one diagnosis cluster for two or more post-intervention conditions of the same nature (abnormal reaction/after complication) that relate to the same intervention episode even when one is present on admission (pre-admit comorbidity) and another arises following admission (post-admit comorbidity). It also demonstrates applying a diagnosis cluster for a post-admit comorbidity that becomes the MRDx.]

Example: The patient was admitted for evaluation of deep painful abscesses on the back of her neck. She also had a fever and abdominal pain. Culture and sensitivity of the pus taken from the boils showed that it was MRSA. She was placed in isolation. Ultrasound of the abdomen revealed appendicitis and an appendectomy was performed. Surgical drainage of the neck abscess was done during the same operative episode. Post appendectomy, patient had an infection of the incision site which was treated.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
K35.8	(M)		Acute appendicitis, other and unspecified
L02.1	(1)	A	Cutaneous abscess, furuncle and carbuncle of neck
B95.6	(3)	A	Staphylococcus aureus as the cause of diseases classified to other chapters
U82.1	(1)	A	Resistance to methicillin
T81.4	(2)	B	Infection following a procedure, not elsewhere classified
Y83.6	(9)	B	Removal of other organ (partial) (total) as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Application of a diagnosis cluster is mandatory for drug-resistant microorganism infections and post-intervention conditions. Diagnosis cluster “A” links the drug resistance (methicillin) to the related organism (staphylococcus aureus) and site of infection (cutaneous abscess). Diagnosis cluster “B” links the external cause (abnormal reaction/late complication) to the related condition (wound infection).
[This example demonstrates creating separate diagnosis clusters for a single infection associated with drug resistance and a single post-intervention condition when neither of the conditions relate to one another.]

Example: This patient previously had a partial colectomy with anastomosis performed for colon cancer. The patient is readmitted with an infection of the abdominal incision which is positive for MRSA. The wound infection was successfully treated and the patient was discharged home.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.4	(M)	A	Infection following a procedure, not elsewhere classified
U82.1	(1)	A	Resistance to methicillin
B95.6	(3)	A	Staphylococcus aureus as the cause of diseases classified to other chapters
Y83.2	(9)	A	Surgical operation with anastomosis, bypass or graft as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Application of a diagnosis cluster is mandatory for drug-resistant microorganism infections and post-intervention conditions. Diagnosis cluster “A” links the external cause (abnormal reaction/late complication) to the related condition (MRSA wound infection). [This example demonstrates creating one diagnosis cluster for a single post-intervention condition that involves an infection associated with drug resistance.]

Example: Patient was admitted for removal and replacement of an infected knee prosthesis that had been implanted six months ago. Following the revision procedure, the patient develops pneumonia and remains in hospital for six more days.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T84.54	(M)	A	Infection and inflammatory reaction due to knee prosthesis
Y83.1	(9)	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
J18.9	(2)	B	Pneumonia, unspecified
Y83.1	(9)	B	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Application of a diagnosis cluster is mandatory for post-intervention conditions. Diagnosis cluster "A" links the external cause (abnormal reaction/after complication) to the related condition (infection of knee prosthesis) following the insertion of the knee joint prosthesis. Diagnosis cluster "B" links the external cause (abnormal reaction/after complication) to the related condition (pneumonia) following the revision of the knee joint prosthesis. The two identical external cause codes (Y83.1) reflect that there are two different intervention episodes with one or more related post-intervention conditions. [This example demonstrates creating two or more diagnosis clusters for two or more post-intervention conditions of the same nature (abnormal reaction/after complication) that are related to a different intervention episode (insertion of knee prosthesis/replacement of knee prosthesis) even when the external cause code for the different episodes is the same.]

Example: Trauma patient admitted and taken emergently to the operating room where he undergoes repair of a large laceration on the arm, partial resection, with primary anastomosis, of the small bowel related to his injury and application of an external fixator to an open fracture of the tibia (intervention episode 1). On day 3, patient develops respiratory failure. On day 10, the patient is taken back to the operating room for tracheostomy (intervention episode 2). The following day patient returns to the operating room for control of hemorrhage around the tracheostomy site (intervention episode 3). On day 13, patient develops postoperative renal failure.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
J95.2	(2)	A	Acute pulmonary insufficiency following nonthoracic surgery
Y83.9	(9)	A	Surgical procedure as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
T81.0	(2)	B	Haemorrhage and haematoma complicating a procedure, not elsewhere classified
Y83.3	(9)	B	Surgical operation with formation of external stoma as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
N99.0	(2)	C	Postprocedural renal failure
N17.9	(3)	C	Acute renal failure, unspecified
Y83.9	(9)	C	Surgical procedure as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Application of a diagnosis cluster is mandatory for post-intervention conditions. Diagnosis cluster "A" links the external cause (abnormal reaction/after complication) to the related condition (respiratory failure) following the first intervention episode in which multiple types of interventions were performed (Y83.9). Diagnosis cluster "B" links the external cause (abnormal reaction/after complication) to the related condition (hemorrhage around tracheostomy site) which is clearly related to the tracheostomy intervention episode. In this example, since it is unknown to which intervention episode the renal failure pertains (or it could be a cumulative effect), a third diagnosis cluster "C" is necessary as this post-intervention condition cannot be included in a diagnosis cluster identifying a post-intervention condition that is related to a given intervention episode.

Noteworthy, is that the two identical external cause codes (Y83.9) in two separate diagnosis clusters have different meanings. The first Y83.9 represents a single intervention episode during which there were different types of interventions performed. The second Y83.9 represents multiple intervention episodes where different types of interventions were performed.

[This example demonstrates creating multiple diagnosis clusters when all of the post-intervention conditions are of the same nature (abnormal reaction/after complication) and some are clearly related to different intervention episodes (intervention episode 1 and intervention episode 2) and for another the related intervention episode is unknown (unknown whether related to intervention episode 1, 2 or 3 or a combination of these).]

Creating a Diagnosis Cluster for Adverse Effect(s) in Therapeutic Use

Note: The purpose of the diagnosis cluster for adverse effect in therapeutic use is to link the drug(s), medicament(s) or biological substance(s) causing the adverse effect to the specific adverse effect(s) with which it is associated.

Create one diagnosis cluster for:

- a single adverse effect of a drug, medicament or biological substance in therapeutic use; or
- two or more adverse effects resulting from the same drug, medicament or biological substance in therapeutic use; or
- a single or multiple adverse effect(s) resulting from a combination of drugs, medicaments or biological substances in therapeutic use.

Create two or more diagnosis clusters when there are two or more adverse effects that are the result of a different drug, medicament or biological agent in therapeutic use.

The set of codes included in the adverse effect in therapeutic use diagnosis cluster identify the:

- drug(s), medicament(s) or biological substance(s) causing the adverse effect (Y40–Y59); and
- adverse effect(s).

See also the coding standard entitled [Adverse Reactions in Therapeutic Use Versus Poisonings](#).

Example: Patient is admitted for treatment of chemotherapy-induced neutropenia. The patient is receiving a combination of chemotherapy agents, as an outpatient, for treatment of cancer of the left lower lobe of the lung.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
D70.0	(M)	A	Neutropenia
Y43.3	(9)	A	Other antineoplastic drugs causing adverse effects in therapeutic use
C34.31	(3)		Malignant neoplasm of lower lobe, left bronchus or lung (optional)

Rationale: Application of a diagnosis cluster is mandatory for adverse effects in therapeutic use. The same diagnosis cluster character is assigned to all codes describing the single adverse effect from one drug in therapeutic use. Diagnosis cluster “A” links the drug causing the adverse effect (antineoplastic drugs) to the related adverse effect (neutropenia). [This example demonstrates creating one diagnosis cluster for a single adverse effect of a single drug in therapeutic use.]

Example: Patient presents to hospital with hives and swelling of the face. The patient has been taking Keflex to treat a urinary tract infection for the past 24 hours. The discharge diagnosis is drug reaction. The patient is advised to stop the Keflex and a new antibiotic is introduced.



<u>Code</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
L50.0	MP	A	Allergic urticaria
R22.0	OP	A	Localized swelling, mass and lump, head
Y40.1	OP	A	Cephalosporins and other β -lactam antibiotics causing adverse effects in therapeutic use

Rationale: Application of a diagnosis cluster is mandatory for adverse effects in therapeutic use. Diagnosis cluster “A” links the drug causing the adverse effect (cephalosporin antibiotics) to the related adverse effects (urticaria and localized swelling). [This example demonstrates creating one diagnosis cluster for two or more adverse effects resulting from the same drug in therapeutic use.]

Example: Patient is admitted to hospital with ventricular tachycardia due to Digoxin toxicity. On day three the patient develops pneumonia and is started on Amoxicillin. The patient develops confusion documented as due to the Amoxicillin. The Amoxicillin is stopped and a new antibiotic is introduced. The pneumonia extends the patient’s stay in hospital by another eight days.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
J18.9	(M)		Pneumonia, unspecified
J18.9	(2)		Pneumonia, unspecified
I47.2	(1)	A	Ventricular tachycardia
Y52.0	(9)	A	Cardiac-stimulant glycosides and drugs of similar action causing adverse effects in therapeutic use
R41.0	(2)	B	Disorientation, unspecified
Y40.0	(9)	B	Penicillins causing adverse effects in therapeutic use

Rationale: Application of a diagnosis cluster is mandatory for adverse effects in therapeutic use. Diagnosis cluster “A” links the one drug causing an adverse effect (cardiac-stimulant glycosides) to the related adverse effect (ventricular tachycardia). Diagnosis cluster “B” links a second drug causing an adverse effect (penicillin) to the related adverse effect (confusion). [This example demonstrates creating two or more diagnosis clusters when there are two or more adverse effects that are the result of different drugs in therapeutic use.]

Example: Patient presents to hospital with spontaneous bruising on the skin. The patient is on Coumadin therapy and has also been taking tetracycline to treat a urinary tract infection for the past eight days. The discharge diagnosis is “enhanced anticoagulation effect” from an interaction between these two drugs. The patient is advised to stop both drugs and a new antibiotic is introduced.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
D68.3	(M)	MP	A	Haemorrhagic disorder due to circulating anticoagulants
Y44.2	(9)	OP	A	Anticoagulants causing adverse effects in therapeutic use
Y40.4	(9)	OP	A	Tetracyclines causing adverse effects in therapeutic use

Rationale: Application of a diagnosis cluster is mandatory for adverse effects in therapeutic use. Diagnosis cluster “A” links the combination of drugs causing the adverse effect (anticoagulants and tetracyclines) to the related adverse effect (hemorrhagic disorder). [This example demonstrates creating one diagnosis cluster when there are single or multiple adverse effects resulting from a combination of drugs in therapeutic use.]

Diagnoses of Equal Importanceⁱⁱ

In effect 2001, amended 2006



When two or more diagnoses of equal importance are listed with no clear indication in the health record as to which one is the MRDx/main problem, select the condition for which a definitive (as opposed to diagnostic) surgical or non-surgical procedure has been performed. If no surgery has been performed select the first-listed diagnosis as the MRDx/main problem.

Example: Patient discharged home with a diagnosis of bronchopneumonia treated with antibiotics and upper gastrointestinal hemorrhage due to esophageal varices, which were sclerosed, endoscopically, using a laser.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I85.0	(M)	Oesophageal varices with bleeding
J18.0	(1)	Bronchopneumonia, unspecified
1.NA.13.BA-AG		Control of bleeding, esophagus, using endoscopic per orifice approach and laser

ii. World Health Organization, “Rules and Guidelines for Mortality and Morbidity Coding,” *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Volume 2, Second Edition* (Geneva, Switzerland: World Health Organization, 2004), p. 113.

Example: Patient has a five day stay in hospital to further investigate and conservatively manage her chronic obstructive pulmonary disease with acute exacerbation and a bowel obstruction.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
J44.1	(M)	Chronic obstructive pulmonary disease with acute exacerbation, unspecified
K56.6	(1)	Other and unspecified intestinal obstruction

Rationale: Both diagnoses are of equal importance. Neither was treated surgically. COPD is selected as the MRDx because it is listed first.

Example: Patient admitted with a stroke and spends 20 days on Neurology. He develops urinary retention and is assessed by a urologist who diagnoses benign prostatic hyperplasia and recommends a resection of the prostate. While remaining on the Neurology service, the patient continues to receive physiotherapy and occupational therapy for hemiplegia. He is also taken to the O.R. for a transurethral resection of the prostate that is carried out without incident.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I64	(M)	Stroke, not specified as haemorrhage or infarction
G81.99	(1)	Hemiplegia of unspecified type of unspecified [unilateral] side
N40	(1)	Hyperplasia of prostate

Rationale: Although the prostatic hyperplasia is the condition for which the patient received surgical care, the stroke is still the MRDx. The stroke has consumed more resources in terms of time and attention devoted to its treatment. (There will not always be a direct match between the MRDx and the principal intervention.)

Example: An elderly female patient presents to the emergency department. She had a chest X-ray performed and was transferred to the medical unit with the diagnoses of pneumonia and CHF.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
J18.9	MP	Pneumonia, unspecified
I50.0	OP	Congestive heart failure

Rationale: Pneumonia and CHF are of equal importance and as pneumonia is listed first, it is selected as the main problem.

Specificityⁱⁱⁱ

In effect 2001, amended 2003



When one diagnosis describes a condition in general terms, but a more descriptive term providing more precise information about the site or nature of the condition is reported among the other listed diagnoses, select the most specific condition.

Example: The physician lists both cerebrovascular accident and cerebral hemorrhage as diagnoses.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
I61.9	(M)	MP	Intracerebral haemorrhage, unspecified

Rationale: Intracerebral hemorrhage is a type of cerebrovascular accident and is more specific, only a code for intracerebral hemorrhage is assigned.

Example: The physician has noted that the patient has developed a decubitus ulcer that is delaying discharge (the ulcer was not present on admission). The nurse specialist has documented the ulcer as stage 3.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
L89.2	(2)	Stage III decubitus [pressure] ulcer

Rationale: Since the ulcer is documented in the physician's notes, the nursing documentation can be used to add specificity.

Using Diagnostic Test Results in Coding

In effect 2003, amended 2006, 2009



Use X-ray, pathology and other diagnostic results when they clearly add specificity in identifying the appropriate diagnosis code for conditions documented in the physician/primary care provider notes.

Example: Patient tripped and fell in a grocery store and physician recorded a closed fracture of the neck of femur. The X-ray result showed a "cervicotrochanteric" fracture.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S72.010	(M)	MP	Fracture of base of femoral neck (cervicotrochanteric), closed
W01	(9)	OP	Fall on same level from slipping, tripping and stumbling
U98.5	(9)	OP	Place of occurrence, trade and service area

Example: Patient's chart documentation showed that she was admitted for removal of a skin lesion, the pathology report showed "solar keratosis."



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
L57.0	(M)	MP	Actinic keratosis

iii. World Health Organization, "Rules and Guidelines for Mortality and Morbidity Coding," *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Volume 2, Second Edition* (Geneva, Switzerland: World Health Organization, 2004), p. 113.

Example: The physician has recorded the diagnosis of intracranial hemorrhage. The CT scan confirmed subarachnoid hemorrhage.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
I60.9	(M)	MP	Subarachnoid haemorrhage, unspecified



When a condition is suggested by diagnostic test results, assign a code only when the condition has been confirmed by physician/primary care provider documentation.

Example: Microbiology reports suggest a urinary tract infection and medication reports indicate the patient received antibiotics. There is no documentation relating to this in the physician notes.



<u>Code</u>	<u>Code Title</u>
	No code is assigned

Rationale: Clinical interpretation is required to confirm the diagnosis.

Example: A patient has lower abdominal pain. A CT scan reveals adhesions of the abdomen, but there is no documentation in physician notes identifying the adhesions as the cause of pain.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
R10.39	(M)	MP	Lower abdominal pain, unspecified

Rationale: Clinical interpretation is required to confirm the cause of pain.

Dagger/Asterisk Convention^{iv}

In effect 2006

In ICD-10-CA, the dagger symbol (†) is used to indicate a code that represents the etiology or underlying cause of a disease. The asterisk symbol (*) is used to indicate a code that represents the manifestation of a disease.



Assign an asterisk code whenever indicated in ICD-10-CA.



Assign diagnosis type (6) or diagnosis type (3) to asterisk codes in accordance with the diagnosis typing definitions (see also the coding standard entitled *Diagnosis Typing Definitions for DAD*).

iv. World Health Organization, "How to Use the ICD," *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Volume 2, Second Edition* (Geneva, Switzerland: World Health Organization, 2004), pp. 23–25.

In the tabular portion of the classification, the dagger represents the different applications of the convention stipulated by WHO as shown below:

- (i) If the dagger symbol and asterisk code both appear in the code title, all terms classifiable to that code are subject to dual classification and all have the same alternative code, e.g.

A17.0† Tuberculous meningitis (G01*)

Tuberculosis of meninges (cerebral)(spinal)
Tuberculous leptomeningitis

- (ii) If the symbol appears in the code title but the asterisk code does not, all terms classifiable to that code are subject to dual classification but they have different asterisk codes (which are listed for each term) e.g.

A18.0† Tuberculosis of bones and joints

Tuberculosis of:

- hip (M01.1*)
- knee (M01.1*)
- vertebral column (M49.0*)

Tuberculosis:

- arthritis (M01.1*)
- mastoiditis (H75.0*)
- necrosis of bone (M90.0*)
- osteitis (M90.0*)
- osteomyelitis (M90.0*)
- synovitis (M68.0*)
- tenosynovitis (M68.0*)

- (iii) If neither the symbol nor the asterisk code appears in the title, the rubric as a whole is not subject to dual classification but individual inclusion terms may be; if so, these terms will be marked with the dagger symbol and their asterisk codes given, e.g.

A54.8 Other gonococcal infections

Gonococcal:

- brain abscess† (G07*)
- endocarditis† (I39.8*)
- meningitis† (G01*)
- myocarditis† (I41.0*)
- pericarditis† (I32.0*)
- peritonitis† (K67.1*)
- pneumonia† (J17.0*)
- sepsis
- skin lesions

- (iv) There are some instances where the direction to use dual classification appears only in the index, e.g.

Pneumonia

- in (due to)
- – sepsis A41.-† J17.0*
- – – streptococcal A40.-† J17.0*

Example: A patient presents for management of herpes viral meningoencephalitis.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
B00.4†	(M)	MP	Herpesviral encephalitis
G05.1*	(3)	OP	Encephalitis, myelitis and encephalomyelitis in viral diseases classified elsewhere

Rationale: Since the dagger symbol and asterisk code both appear in the code title, all inclusion terms are subject to dual classification and both codes are assigned. In this case, the asterisk code applies to encephalitis. Since it would be difficult to delineate whether it is the underlying condition or the manifestation that meets the criteria for MRDx, the asterisk code is assigned diagnosis type (3).

Example: A patient is seen for meningococcal pericarditis.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
A39.5†	(M)	MP	Meningococcal heart disease
I32.0*	(3)	OP	Pericarditis in bacterial diseases classified elsewhere

Rationale: The dagger symbol appears in the code title making all terms classifiable to A39.5 subject to dual classification, but the asterisk codes vary depending on the condition. Since it would be difficult to delineate whether it is the underlying condition or the manifestation that meets the criteria for MRDx, the asterisk code is assigned diagnosis type (3).

Example: A patient is seen for balanitis due to an amoebic infection.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
A06.8†	(M)	MP	Amoebic infection of other sites
N51.2*	(3)	OP	Balanitis in diseases classified elsewhere

Rationale: Neither the dagger symbol nor the asterisk symbol appears in the code title. Only the inclusion term “balanitis” is subject to dual classification, in which case A06.8 becomes a dagger code and N51.2 is the corresponding asterisk code. The dagger/asterisk convention does not apply to amoebic appendicitis. Since it would be difficult to delineate whether it is the underlying condition or the manifestation that meets the criteria for MRDx, the asterisk code is assigned diagnosis type (3).

Example: A patient has carcinoma of the lung and has developed anemia as a result of her neoplastic disease. She is admitted for management of the anemia.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C34.99†	(M)	MP	Malignant neoplasm bronchus or lung, unspecified, unspecified side
D63.0*	(6)	OP	Anaemia in neoplastic disease

Rationale: In this case, the Alphabetic Index directs the coder to D48.9 and D63.0*. This indicates that the code to describe the patient's neoplastic disorder becomes a dagger code. D48.9 is assigned when the neoplasia is unspecified. Since it is specified in this example, the more specific neoplasia code is the dagger code. Note that the full range of codes C00–D48 are identified as dagger codes following the code title at D63.0 in the Tabular Listing. D63.0 is an asterisk code, thus it must be sequenced in the second diagnosis location on the abstract. However, since it is the condition that meets the criteria for MRDx (and not the malignancy of the lung), it is assigned diagnosis type (6).

Example: Discharge diagnosis is hemolytic uremic syndrome encephalopathy



<u>Code</u>	<u>Code Title</u>
D59.3	Haemolytic-uraemic syndrome
G93.4	Encephalopathy, unspecified

Rationale: There is no dagger/asterisk convention applied to this disorder. Each condition is classified separately. Diagnosis type and sequence will depend on circumstances documented in the record.

Acute and Chronic Conditions^v

In effect 2001, amended 2006, 2007



When a condition is described as being both acute (or subacute) and chronic, and ICD-10-CA provides separate categories or subcategories for each, but not for the combination, assign a code for the acute condition.

- Assign a code for the chronic condition, optional, as a diagnosis type (3)/other problem.



When an appropriate combination code is provided for both the acute and chronic condition, assign only the combination code.

Example: Patient was admitted for a total cholecystectomy because of chronic cholecystitis. The physician noted in the discharge summary that acute and chronic cholecystitis were noted on the pathology report.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
K81.0	(M)	MP	Acute cholecystitis
K81.1	(3)	OP	Chronic cholecystitis

v. World Health Organization, "Rules and Guidelines for Mortality and Morbidity Coding," *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Volume 2, Second Edition* (Geneva, Switzerland: World Health Organization, 2004), p. 111.

Example: Patient was admitted to hospital with a diagnosis of acute exacerbation of chronic obstructive pulmonary disease.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J44.1	(M)	MP	Chronic obstructive pulmonary disease with acute exacerbation, unspecified



A condition described as recurrent cannot be assumed to be chronic. Follow the Alphabetic Index for a sub-term of “recurrent.” If no sub-term exists for “recurrent” classify the condition to the NOS category.

Exception: When a patient is admitted for tonsillectomy with a diagnosis of “recurrent” tonsillitis, select the code for chronic tonsillitis.

Impending or Threatened Conditions

In effect 2003, amended 2006



Assign a code for impending or threatened conditions only when indexed as such in ICD-10-CA.

Example: Patient has a stage 4 decubitus ulcer. Documentation within the physician’s notes states “impending gangrene.”



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
L89.3	(M)	MP	Stage IV decubitus [pressure] ulcer

Rationale: In the case of impending gangrene of the leg which did not progress within the episode of care due to prompt treatment, the coder must look for an index entry such as “gangrene, impending.” If no index entry is found, this case must be classified to the documented precursor condition.

Example: Threatened Abortion.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O20.003	(M)	MP	Threatened abortion, antepartum condition or complication

Underlying Symptoms or Conditions^{vi}

[Click here for description of change.](#)

In effect 2001, amended 2003, 2009, 2012

See also the coding standards entitled [Query Diagnosis \(Q\)/Etiology](#) and [Admission for Observation](#).



When a patient presents with a symptom or condition, and during that episode of care the underlying disease or disorder is identified, assign the underlying disease or disorder as the MRDx/main problem.

- Assign an additional code for the symptom or condition, optional, as a diagnosis type (3)/other problem based on the facility's data needs.



When no definite diagnosis has been established by the end of an episode of health care, code the information that permits the greatest degree of specificity and knowledge about the condition that necessitated care or investigation. This may be a sign, an abnormal test result or a symptom.

Example: Patient presents to the emergency department with a seizure. There is no history of a previous seizure documented. CT scan taken reveals a large brain tumor. The patient is then admitted for a stereotactic biopsy of the brain.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
D43.2	MP	Neoplasm of uncertain or unknown behaviour of brain, unspecified
R56.88	OP	Other and unspecified convulsions (optional)
3.AN.20.WA		Computerized tomography [CT], brain, without enhancement (contrast)

Example: The above emergency patient is admitted for a stereotactic biopsy of the brain after CT scan revealed a large brain tumor. Physician documentation stated "no previous history of seizures." A stereotactic burr hole biopsy of the brain revealed a benign neoplasm and the patient was scheduled for further surgery.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
D33.2	(M)	Benign neoplasm of brain, unspecified
R56.88	(3)	Other and unspecified convulsions (optional)
2.AN.71.SE		Biopsy, brain, using burr hole approach
3.AN.94.ZC		Imaging intervention NEC, brain, using stereotaxis (without computer guidance)

vi. World Health Organization, "Rules and Guidelines for Mortality and Morbidity Coding," *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Volume 2, Second Edition* (Geneva, Switzerland: World Health Organization, 2004), p. 113.

Example: Patient presents to the emergency department with right lower quadrant abdominal pain. After thorough investigations are completed the physician documents that both an ovarian cyst and appendicitis are ruled out. The patient is discharged with instructions to follow-up with her family physician.



Final diagnosis is recorded by physician as: Right-sided lower abdominal pain.

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
R10.30	MP	Right lower quadrant pain

Rationale: The suspected causes were ruled out; therefore, the patient is discharged without knowing the underlying cause of the abdominal pain. All that is known with certainty is that the patient had abdominal pain which will be further investigated by her family physician.



When a patient presents with a manifestation of an underlying disease or disorder that is known at the time of admission, and management is directed solely to the manifestation, assign the manifestation as the MRDx/main problem.

- Assign a code for the underlying disease as a diagnosis type (3)/other problem.

Example: A 45-year-old patient presents with unstable angina. He has known coronary atherosclerosis at the time of admission. During this current admission, symptomatic treatment is directed only towards the unstable angina. Patient to see his physician to discuss surgical options.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
I20.0	(M)	MP	Unstable angina
I25.19	(3)	OP	Atherosclerotic heart disease of unspecified type of vessel, native or graft

Example: A patient suffering from advanced colon cancer was admitted with bowel obstruction and an entero-enterostomy was performed.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
K56.6	(M)	Other and unspecified intestinal obstruction
C18.9	(3)	Malignant neoplasm colon, unspecified

Query Diagnosis (Q)/Etiology

[Click here for description of change.](#)

In effect 2001, amended 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2012

When a definitive diagnosis has not been made at the time of discharge, the assignment of a diagnosis code is determined by the specific manner in which the physician/primary care provider has documented the conclusions.

See also the coding standard entitled [Admission for Observation](#).

BN When the diagnosis is recorded by the physician as *suspected, questionable, rule out, possible*, and there is no further information or clarification, code the suspected diagnosis as if it were established:

- assign the prefix “Q” in such circumstances.

BN When more than one query diagnosis is recorded as the final diagnosis, and there is no further information or clarification, assign the first listed query diagnosis as the MRDx/main problem and all other query diagnoses as diagnosis type (3)/other problem.

BN When a sign or symptom and a query diagnosis are recorded as the final diagnosis, and there is no further information or clarification, assign the sign or symptom as the MRDx/main problem and the query diagnosis as diagnosis type (3)/other problem.

Exception: Neonatal sepsis. See also the coding standard entitled [Confirmed Sepsis and Risk of Sepsis in the Neonate](#).

Note: The prefix “Q” is applied when the health care provider has documented uncertainty in the diagnosis; not when the coder is uncertain of the diagnosis.

Note: The prefix “Q” to identify query diagnoses is used with diagnosis codes only and is not used with external cause codes. See Group 10, Field 01 in the Discharge Abstract Database (DAD) Abstracting Manual, and Data Element 43 in the National Ambulatory Care Reporting System (NACRS) Manual.

Note: Prefix 5 and 6 take precedence over prefix “Q”. See also the coding standard entitled [Diagnosis Typing Definitions for DAD](#).

Example: The final diagnosis is recorded by the physician as: query pneumonia. COPD is also recorded in the documentation.

BN

<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
(Q) J44.0	(M)	MP	Chronic obstructive pulmonary disease with acute lower respiratory infection
(Q) J18.9	(1)	OP	Pneumonia, unspecified

Rationale: The diagnoses are coded as if established. COPD with pneumonia is classified using two codes. Subcategory J44.0 indicates “with lower respiratory infection” (pneumonia), which in this patient is questionable. Therefore, prefix “Q” is applied to both J44.0 and J18.9.

Example: The patient is being investigated for tingling and numbness in her right hand. The final diagnosis is recorded by the physician as: query carpal tunnel syndrome. The documentation states the patient has type 1 diabetes mellitus.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
(Q) E10.40†	MP	Type 1 diabetes mellitus with mononeuropathy
(Q) G59.0*	OP	Diabetic mononeuropathy

Rationale: The diagnoses are coded as if established. Carpal tunnel syndrome in a patient with diabetes mellitus is classified using two codes (dagger/asterisk convention). Subcategory E10.40 indicates “with mononeuropathy” (carpal tunnel syndrome) which in this patient is questionable. Therefore, prefix “Q” is applied to both E10.40 and G59.0.

Example: Final diagnosis is recorded by physician as:
Right lower abdominal pain. Query acute appendicitis.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
R10.30	(M)	MP	Right lower quadrant pain
(Q) K35.8	(3)	OP	Acute appendicitis, other and unspecified

Rationale: Since the physician has recorded the final diagnosis as a symptom followed by a query diagnosis, the symptom is the MRDx/main problem and the query diagnosis is a diagnosis type (3)/other problem.

Example: Final diagnosis is recorded by physician as: Query peptic ulcer.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
(Q) K27.9	(M)	MP	Peptic ulcer, unspecified as acute or chronic, without haemorrhage or perforation

Rationale: Since the physician has documented the final diagnosis as query peptic ulcer it is coded as if it was confirmed with prefix "Q".

Example: A young woman presents with severe abdominal pain; the final diagnoses listed on the chart are query dysmenorrhea and query constipation.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
(Q) N94.6	(M)	MP	Dysmenorrhoea, unspecified
(Q) K59.0	(3)	OP	Constipation

Rationale: Since the health care provider has documented the final diagnosis as two possible query diagnoses, both are coded; the first listed as the MRDx/main problem and the second as diagnosis type (3)/other problem.

Example: A young woman presents with severe abdominal pain; the final diagnoses listed on the chart are severe abdominal pain, query dysmenorrhea and query constipation.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
R10.0	(M)	MP	Acute abdomen
(Q) N94.6	(3)	OP	Dysmenorrhoea, unspecified
(Q) K59.0	(3)	OP	Constipation

Rationale: Since the health care provider has documented the final diagnosis as a symptom and two possible query diagnoses; the symptom is the MRDx/main problem and the two query diagnoses are diagnosis type (3)/other problem.



When a condition is recorded with more than one possible comparative or contrasting etiology, assign the code for the condition due to an unspecified cause.

Note: Do not assign prefix "Q" to the condition.
Do not assign a code for the query etiologies.

Example: Final diagnosis is recorded by physician as:
Iron deficiency anemia versus simple chronic anemia.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
D64.9	(M)	MP	Anaemia, unspecified

Rationale: A diagnosis of anemia has been confirmed; it is the etiology which is questionable. Therefore, the code for anemia unspecified is assigned.

Use Additional Code/Code Separately Instructions

In effect 2006, amended 2007, 2009



When a “use additional code” instruction is provided in ICD-10-CA, assign the additional code as instructed, mandatory.



When a “code separately” instruction is provided in ICD-10-CA, assign the additional code, mandatory, when the condition meets the criteria for significance.

See also the coding standards entitled [Diagnosis Typing Definitions for DAD, Main and Other Problem Definitions for NACRS](#) and [Dagger/Asterisk Convention](#).

Exception: The instruction to “Use additional code (B95–B98) to identify infectious agent” is optional, when it is not a drug-resistant infectious organism. See also the coding standard entitled [Drug-Resistant Microorganisms](#).

Example: A patient presents for investigation of abnormal hematology tests. It was determined that he had aplastic anemia due to occupational exposure to insecticides at the dairy farm where he works.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
D61.2	(M)	MP	Aplastic anaemia due to other external agents
X48	(9)	OP	Accidental poisoning by and exposure to pesticides
U98.7	(9)	OP	Place of occurrence, farm

Rationale: Follow the “use additional code” instruction to identify the external cause code.

Example: A 70-year-old male patient is diagnosed with epididymitis due to E. coli.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
N45.90	(M)	MP	Epididymitis
B96.2	(3)	OP	Escherichia coli [E. coli] as the cause of diseases classified to other chapters (optional)

Rationale: Assignment of codes from B95–B98 is optional. Assignment of codes from B95–B98 is mandatory for infectious agents due to drug-resistant organisms only.

Example: A 54-year-old patient presents with a vitreous hemorrhage for a vitrectomy. The physician notes that he has had type 2 diabetes mellitus, well controlled, for many years.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
H43.1	(M)	MP	Vitreous hemorrhage
E11.33†	(3)	OP	Type 2 diabetes mellitus with other retinopathy
H36.0*	(3)	OP	Diabetic retinopathy

Rationale: Vitreous hemorrhage meets the criteria for significance in this example; therefore, the “code separately” instruction is followed at E11.33†.

Example: A patient presents to the emergency department with a cough and fever and is admitted for treatment of pneumonia. She has had type 2 diabetes mellitus for many years. She also has coronary artery disease and has had an MI three years ago.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J18.9	(M)	MP	Pneumonia, unspecified
E11.52	(3)	OP	Type 2 diabetes mellitus with certain circulatory complications

Rationale: Since neither the coronary artery disease nor the history of the MI meet the criteria for significance during this visit, it is not mandatory to follow the code separately direction.

Sequelae

[Click here for description of change.](#)

In effect 2001, amended 2005, 2006, 2012

A “sequela” or “late effect” of a disease is a current condition under investigation or treatment that was caused by a previously occurring condition or injury. There is no universal timeframe for a condition to be considered a sequela. The residual condition (sequela) may be apparent early in the process, such as neurological deficits occurring following a cerebral infarction.^{vii} A scar or cicatrix is a sequela of a third degree burn that develops remote to the burn incident itself.



When a patient presents with a sequela of a previously treated condition, assign a code for the current condition under investigation or treatment as a significant diagnosis type.

- Assign codes from categories entitled “Sequelae of...” (B90–B94, E64, E68, I69, O97, T90–T98), optional, as a diagnosis type (3)/other problem to identify the current problem as a sequela.

Example: Unequal leg length (acquired). Late effect of poliomyelitis.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M21.7	(M)	MP	Unequal limb length (acquired)
B91	(3)	OP	Sequelae of poliomyelitis (optional)

vii. Extracted from NCCH ICD-10-AM, July 2000, General Standards for Diseases.

Example: Osteoarthritis of hip joint due to an old hip fracture from a motor vehicle accident 20 years ago.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M16.5	(M)	MP	Other post-traumatic coxarthrosis
T93.1	(3)	OP	Sequelae of fracture of femur (optional)
Y85.0	(9)	OP	Sequelae of motor-vehicle accident (optional)

Example: Patient admitted for release of skin contracture and fibrosis, old burn of hand (due to a hot oil spill two years ago).



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
L90.5	(M)	MP	Scar conditions and fibrosis of skin
T95.2	(3)	OP	Sequelae of burn, corrosion and frostbite of upper limb (optional)
Y86	(9)	OP	Sequelae of other accidents (optional)

Example: Patient presents with pain of the knee joint due to old injury of the knee.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M25.56	(M)	MP	Pain in joint, lower leg
T93.9	(3)	OP	Sequelae of unspecified injury of lower limb (optional)
Y89.9	(9)	OP	Sequelae of unspecified external cause (optional)

Note: Coders are reminded to read and follow all notes at block headings and chapter headings where guidance is provided regarding timeframes, i.e. I69, O97 and T90-T98.

See also the coding standard entitled [Current Versus Old Injuries](#).

Admissions From Emergency Department

In effect 2003, amended 2006, 2007

Patients often move from one setting to another as their condition is being treated. Treatment begun in the emergency department may culminate in the inpatient setting.



Select the diagnosis(es) for each level of care (e.g. ambulatory care, acute care inpatient) to accurately reflect the circumstances for the treatment provided during that episode of care.

Example: An 87-year-old man was seen in the emergency department for a fractured rib. He had slipped and fallen down in the grocery store that morning.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
S22.300	MP	Fracture of rib, closed
W01	OP	Fall on same level from slipping, tripping and stumbling
U98.5	OP	Place of occurrence, trade and service area

Example: The patient in the example above was subsequently admitted from the emergency department for overnight care as he lived alone. He was discharged the next morning in the care of his daughter.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z60.2	(M)	Living alone
S22.300	(3)	Fracture of rib, closed
W01	(9)	Fall on same level from slipping, tripping and stumbling
U98.5	(9)	Place of occurrence, trade and service area



When a patient is admitted as an inpatient to complete treatment started in the emergency department, assign the MRDx according to the diagnosis typing definitions (see also the coding standard entitled *Diagnosis Typing Definitions for DAD*).

- When definitive treatment for an injury or a condition occurs in the emergency department and no reason is given for why the patient had subsequently been admitted, assume that it was for continuation of treatment of the presenting condition.

Example: A patient with known CAD was brought to the emergency department complaining of chest pain. ECG showed ST elevation; therefore, thrombolytics were administered. Diagnosis on the emergency department record is STEMI.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
R94.30	MP	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]
1.ZZ.35.HA-1C		Pharmacotherapy, total body, percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] using thrombolytic agent

Example: The patient in the above example was subsequently admitted from the emergency department for continued treatment and care. Final diagnosis on the inpatient record is averted myocardial infarction.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I24.0	(M)	Coronary thrombosis not resulting in myocardial infarction
R94.30	(3)	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]
1.ZZ.35.HA-1C		Pharmacotherapy, total body, percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] using thrombolytic agent

Rationale: The patient's myocardial infarction was successfully averted with administration of the thrombolytics. As there was evidence of elevated ST segments found on the ECG, assign R94.30 on the inpatient abstract as a diagnosis type (3).

Example: A 4-year-old child was brought into the emergency department with an anterior dislocation of the shoulder having fallen from the jungle gym in the day care play area. Patient was admitted following a closed reduction in the emergency department. The child was discharged in the care of the mother the following morning.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S43.000	(M)	MP	Anterior dislocation of shoulder, closed
W09.08	(9)	OP	Fall involving other playground equipment
U98.2	(9)	OP	Place of occurrence, school other institution and public area

Cancelled Interventions

[Click here for description of change.](#)

In effect 2001, amended 2007, 2008, 2009, 2012

A scheduled or planned intervention may sometimes be cancelled for reasons such as staffing, another emergency case taking precedence, or even contraindications such as the patient developing flu-like symptoms.

When “CANCELLED” is entered in the intervention field, it means the patient was discharged with no interventions performed.



When a patient presents to a day surgery unit for a scheduled intervention that does not occur, enter the word “CANCELLED,” in the intervention field of the abstract. Check with your provincial/territorial department/ministry of health for any policies that might apply to the coding of cancelled day surgery procedures submitted to the DAD. Ensure that “CANCELLED” is never entered on an inpatient abstract.



When a patient presents to a day surgery unit, clinic or emergency department for a scheduled intervention that does not occur, enter the word “CANCELLED,” mandatory, in the intervention code section of the abstract.



When an intervention, other than the one originally booked is performed, assign intervention codes in accordance with standards for selection of intervention codes.

Note: There is no status attribute in CCI to identify a cancelled intervention and it is incorrect to code such cases to the planned intervention with a status attribute “A.”

See also the coding standard entitled [Abandoned Interventions](#).



When an intervention is cancelled due to administrative reasons assign Z53.8 *Procedure not carried out for other reasons*, as the MRDx/main problem.

Example: A patient is scheduled as a day surgery case for coronary angiogram. The procedure is cancelled due to staffing problems (snowstorm).



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z53.8	(M)	MP	Procedure not carried out for other reasons
I25.19	(3)	OP	Atherosclerotic heart disease of unspecified type of vessel, native or graft

CANCELLED



When a cancellation is due to a contraindication and the patient is discharged without treatment for the contraindication, assign Z53.0 *Procedure not carried out because of contraindication*, as the MRDx/main problem.

Example: Patient admitted for coronary artery bypass graft. Surgery cancelled due to respiratory symptoms and influenza. Patient to go home and make another appointment.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z53.0	(M)	Procedure not carried out because of contraindication
I25.19	(3)	Atherosclerotic heart disease of unspecified type of vessel, native or graft
J11.1	(3)	Influenza with other respiratory manifestations, virus not identified

Rationale: Since this is an inpatient visit, the intervention field is left blank and the word “cancelled” is not entered in the abstract.

Example: Patient with breast cancer arrives for chemotherapy and her blood work identifies neutropenia. The chemotherapy is cancelled and the patient is discharged home with no treatment for the neutropenia.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z53.0	MP	Procedure not carried out because of contraindications
D70.0	OP	Neutropenia
C50.99	OP	Malignant neoplasm of breast, part unspecified, unspecified side

CANCELLED



When an intervention is cancelled due to a contraindication and the patient is treated for the contraindication:

- assign the contraindication as the MRDx/main problem and Z53.0 *Procedure not carried out because of contraindication* as a diagnosis type (3)/other problem, mandatory.



For an inpatient admission, when the contraindication meets the definition of a post admit comorbidity, assign a code for the contraindication as the MRDx and as a diagnosis type (2).

Example: Patient admitted for elective hip replacement for osteoarthritis (coxarthrosis), but developed acute chest pain prior to surgery. A cardiologist was called to see the patient and STEMI was documented. The patient was transferred to CCU on thrombolytic therapy. The surgery was cancelled. The final diagnosis was recorded as acute anterior wall myocardial infarction.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I21.0	(M)	Acute transmural myocardial infarction of anterior wall
I21.0	(2)	Acute transmural myocardial infarction of anterior wall
R94.30	(3)	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]
Z53.0	(3)	Procedure not carried out because of contraindication
M16.9	(3)	Coxarthrosis, unspecified
1.ZZ.35.HA-1C		Pharmacotherapy, total body, percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] using thrombolytic agent

Rationale: The contraindication is assigned as the MRDx and a diagnosis type (2). Z53.0 is a mandatory type (3). Only a code for thrombolytic therapy is assigned.

Example: Patient with breast cancer arrives for chemotherapy and her blood work identifies neutropenia. The chemotherapy is cancelled and a red blood cell blood transfusion is started to treat the neutropenia.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
D70.0	MP	Neutropenia
Z53.0	OP	Procedure not carried out because of contraindications
C50.99	OP	Malignant neoplasm of breast, part unspecified, unspecified side

Rationale: The chemotherapy was cancelled because of neutropenia; therefore, it is assigned as the main problem. Z53.0 is a mandatory other problem. A blood transfusion was performed rather than the originally booked chemotherapy; however, in ambulatory care a code for blood transfusions is only mandatory to assign when the patient is admitted solely for the purpose of a transfusion. Since this is not the case no CCI code is assigned.


General Coding Standards for CCI

Selection of Interventions to Code for Ambulatory Care (Emergency, Clinic and Day Surgery Visits)

[Click here for description of change.](#)

In effect 2012

See also the coding standard entitled [Selection of Interventions to Code from Section 5](#).

This coding standard applies to day surgery cases submitted to the DAD and all cases submitted to NACRS. The  icon refers to ambulatory cases submitted to DAD and NACRS.

Codes from all sections of CCI may be applicable in an ambulatory care setting.

Not every action carried out during an episode of care requires code assignment (See the coding standard entitled [Multiple Codes in CCI](#)). **This standard identifies the minimum requirements** for ambulatory care submitted to the DAD and NACRS; however, Provincial/Territorial and local standards may specify additional requirements.

Additionally, certain interventions that may not fall into criteria relating to intervention room, anesthesia or operative approach must also be captured. These are listed in the table entitled *Additional Mandatory CCI Codes for Ambulatory Care*.

Clinic Visits

Clinic visits may include audiology, dietetics, mental health, occupational therapy, physiotherapy, recreational therapy, respiratory therapy, speech therapy and social work.



Assign a code from any Section (including Sections 6 and 7) in CCI for each intervention performed.

All Other Ambulatory Care Visits

Other ambulatory care visits include scheduled and non-scheduled emergency visits and day surgery.



Assign a code from any Section in CCI for interventions that meet one or more of the following criteria:

- specified as mandatory elsewhere in these Standards;
- an intervention included in the table *Additional Mandatory CCI Codes for Ambulatory Care*.

Note: When applying the directive statements below reference in *CCI Appendix A—CCI Code Structure—Qualifier 1—Section—Approach/Technique* as needed for more detail about operative approaches.



Assign a code for interventions classified in Section 1 of CCI that meet one or more of the following criteria:

- a generic intervention number of 50 or higher (excluding per orifice catheter interventions for bladder drainage and IV insertion using percutaneous approach);
- performed in an operating/intervention room (e.g. endoscopy room, cardiac catheterization room);
- performed under anesthesia (any anesthesia, including local);
- performed using one of the following approaches:
 - open
 - endoscopic
 - percutaneous transluminal/transarterial.



Assign a code for interventions classified in Section 2 of CCI that meet one or more of the following criteria:

- an inspection that is the sole intervention performed at a given anatomical site using one of the following approaches:
 - open
 - endoscopic
 - percutaneous transluminal/transarterial;
- a biopsy that is the sole intervention performed at a given anatomical site;
- the sole intervention performed under anesthesia (any anesthesia, including local).



Assign a code for interventions classified in Section 3.

Exception: It is optional to assign a code for the use of an operating microscope, 3.^.^94.ZA *Imaging intervention NEC using microscope*.

Note: As per the direction in CCI (3.^.^12.^.^ *Fluoroscopy* excludes that with xray (see 3.^.^10.^.^ *Xray*)) when a fluoroscopy is performed during the same intervention episode as an X-ray assign a code from 3.^.^10.^.^ *Xray* only.

Additional Mandatory CCI Codes for Ambulatory Care

CCI Code	Intervention
1.ZX.07.KS-KK	Hyperthermy, multiple body sites, using extracorporeal blood warming device
1.AN.09.^	Stimulation, brain
1.HZ.09.^	Stimulation, heart NEC
1.ET.13.CA-HB	Control of bleeding, nose, using per orifice approach and diathermy or thermal device
1.ET.13.CA-GX	Control of bleeding, nose, when using per orifice approach and electrocautery
1.FJ.13.JA-GX	Control of bleeding, tongue, when using electrocautery
1.FR.13.JA-GX	Control of bleeding, tonsils and adenoids, when using electrocautery
1.FX.13.JA-GX	Control of bleeding, oropharynx, when using electrocautery
1.LZ.19.^	Transfusion, circulatory system NEC when the patient is admitted solely for the purpose of a transfusion
1.LZ.20.^	Apheresis, circulatory system NEC
1.^21.^	Dialysis, any site
1.^26.^	Brachytherapy, any site
1.^27.^	Radiation, any site
1.GZ.30.JH	Resuscitation, respiratory system NEC, using external manual compression technique
1.HZ.30.JN	Resuscitation, heart NEC, by external manual compression with or without concomitant ventilation
1.GZ.31.^	Ventilation, respiratory system NEC
1.^35.HH-T9	Any pharmacotherapy when delivered via drug eluting balloon
1.^35.HZ-^	Any pharmacotherapy delivered via drug eluting stent
1.^35.^-1C	Any infusion/injection of thrombolytic agent
1.NF.35.^	Pharmacotherapy (local), stomach (includes gastric lavage)
1.OT.35.^	Pharmacotherapy (local), abdominal cavity
1.HZ.37.JA-NN	Installation of external appliance, heart NEC, of temporary (external) cardiac pacemaker
2.HZ.08.^	Test, heart
2.AX.13.^	Specimen collection (diagnostic), spinal canal and meninges
2.AN.24.^	Electrophysiological measurement, brain
2.CZ.24.^	Electrophysiological measurement, eye
2.HZ.24.GP.^	Electrophysiological measurement, heart, using percutaneous transluminal [cardiac catheterization] insertion
2.CZ.25.^	Potential (evoked) measurement, eye
2.CZ.28.^	Pressure measurement, eye
2.NM.28.CA-PL	Pressure measurement, large intestine, using per orifice approach with pressure measuring device
2.CZ.58.^	Function study, eye
2.AN.59.^	Other study, brain

Example: Open reduction internal fixation of a bimalleolar fracture of the left ankle. Fixation was performed using screws. Intraoperative fluoroscopy images of the ankle demonstrated fixation of the fracture. Postoperative X-ray confirmed satisfactory reduction and internal fixation.

- | | |
|---------------|---|
| 1.WA.74.LA-NW | Fixation, ankle joint, using screw, plate and screw fixation device alone |
| 3.WA.10.VA | Xray, ankle joint, without contrast (e.g. plain film) (with or without fluoroscopy) |

Rationale: 3.WA.12.^ ^ *Fluoroscopy, ankle joint* excludes “that with xray (see 3.WA.10.^ ^)”. Both the fluoroscopy and X-ray were performed during the same intervention episode; therefore, assign only the code for the X-ray.

Example: Patient is admitted with an injury of the right hand. An initial X-ray reveals a fracture involving the mid shaft of the 4th metacarpal. The physician reduces the fracture and applies a cast. The right hand is X-rayed post reduction to confirm alignment.

- | | |
|------------|--|
| 1.UF.73.JA | Reduction, other metacarpal bones, using closed (external) approach |
| 3.UL.10.VA | Xray, joints of fingers and hand NEC, without contrast (e.g. plain film) (with or without fluoroscopy) |
| 3.UL.10.VA | Xray, joints of fingers and hand NEC, without contrast (e.g. plain film) (with or without fluoroscopy) |

Rationale: Assign a code for interventions classified to Section 3. Two X-rays of the finger were performed (pre and post reduction); therefore, 3.UL.10.VA is assigned twice even though they are the exact same code.

Example: Patient was admitted with epistaxis. The nose was packed but the patient continued to bleed from the left side of her nose. The packing was removed and both sides of her nose were decongested and anesthetized with topical Xylocaine as well as cocaine. A posterior pack was done after examining the left nose for some time and the actual site of bleeding could not be identified. Using a #14 Foley catheter, 10 cc of water had been placed in the balloon. The left anterior nose was packed with a Vaseline gauze pack. Bleeding was eventually controlled.

No code assigned

Rationale: The interventions performed do not meet any of the criteria for assigning a code for interventions classified in Section 1. While the Standard indicates that a code must be assigned for interventions performed under anesthesia (including local) this case presents a unique, but common, circumstance. In the case of epistaxis, topical (local) anesthetics, such as Xylocaine, are used as a means to control the bleeding rather than achieving anesthesia itself. For this reason, the criteria “performed under anesthesia” does not apply in this case.

The table *Additional Mandatory CCI Codes for Ambulatory Care* directs to assign a code when control of bleeding of the nose is performed using diathermy/thermal device or electrocautery only; therefore, it is not mandatory to assign a code for the packing, nasal balloon or use of Xylocaine and cocaine.

Example: Patient is admitted for elective PCI for in-stent restenosis of the right coronary artery (RCA). Coronary angiogram is performed and the Pantera-Lux drug eluting balloon is deployed at the site of the two in-stent restenotic segments of the RCA. The intervention is performed in the cardiac catheterization room.

1.IJ.50.GQ-BD	Dilation, coronary arteries, percutaneous transluminal approach [e.g. with angioplasty alone] using balloon or cutting balloon dilator without stent insertion
Status: P	
Extent: DG	
3.IP.10.VX	Xray, heart with coronary arteries of left heart structures, using percutaneous transluminal arterial (retrograde) approach
Status: I	
Location: U	
I.IL.35.HH-T9	Pharmacotherapy (local), vessels of heart, percutaneous infusion approach of pharmacological agent NEC

Rationale: A code for the dilation is mandatory for several reasons 1) dilation is classified to the generic intervention number 50, 2) it is performed in a cardiac catheterization room, and 3) it is performed using a percutaneous transluminal approach.

The coronary angiogram is classified to Section 3; therefore, it is mandatory to assign.

The pharmacotherapy delivered via drug eluting balloon is assigned because it is included in the table *Additional Mandatory CCI Codes for Ambulatory Care*.

Example: A young woman is brought to the emergency department following a witnessed seizure at home. An electroencephalogram (EEG) was performed.

2.AN.24.JA-JA	Electrophysiological measurement, brain, using externally applied electrodes
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Rationale: A code for EEG is assigned because it is included in the table *Additional Mandatory CCI Codes for Ambulatory Care*.

Example: A young man is brought to the emergency department and undergoes incisional drainage of a peritonsillar abscess and insertion of an intravenous line for infusion of Clindamycin.

1.FR.52.LA	Drainage, tonsils and adenoids, using open (incisional) approach
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Rationale: A code is assigned for the drainage because it meets two of the criteria 1) drainage is classified to the generic intervention number 52, and 2) the drainage was performed using an open approach. The infusion of antibiotics is not coded because it does not meet the criteria for interventions classified in Section 1 and is not listed in the table *Additional Mandatory CCI Codes for Ambulatory Care*.

In addition to the General Coding Standards for CCI see also the following coding standards which provide direction for mandatory CCI code assignment:

[*Cancelled Interventions*](#)

[*Interventions Relevant to Neoplasm Coding*](#)

[*Brachytherapy*](#)

[*Intracranial Resection of Lesions or Neoplasms*](#)

[*Thrombolytic Therapy*](#)

[*Chronic Ischemic Heart Disease*](#)

[*Cardiac Arrest*](#)

[*Invasive Ventilation*](#)

[*Arthrectomy and Arthroplasty*](#)

[*Interventions Associated With Delivery*](#)

[*Vital Signs Absent \(VSA\)*](#)



[*Admission for Administration of Chemotherapy, Pharmacotherapy and Radiation Therapy*](#)

Selection of Interventions to Code for Acute Inpatient Care

[*Click here for description of change.*](#)

In effect 2012

See also the coding standard entitled [*Selection of Interventions to Code from Section 5*](#).

This coding standard applies to acute inpatient cases submitted to the DAD. The  icon in this coding standard reflects inpatient cases only. For day surgery cases submitted to the DAD see the coding standard entitled [*Selection of Interventions to Code for Ambulatory Care*](#) where the  icon refers to ambulatory cases submitted to either DAD or NACRS.

Not every action carried out during an episode of care requires code assignment (See the coding standard entitled [*Multiple Codes in CCI*](#)). **This standard identifies the minimum requirements** for acute inpatient care submitted to the DAD; however, Provincial/Territorial and local standards may specify additional requirements.

Interventions that are invasive to the patient and/or require significant resources must be captured for inpatient cases. Generally CCI interventions from Section 1 with a generic intervention over 50 describe interventions that are invasive and/or require significant resources. Interventions classified to a generic intervention over 50 from Section 1 which do not meet any of the criteria in the directive statements below are not required for acute inpatient care in the DAD. Conversely, interventions with a generic intervention less than 50 from Section 1 that meet any of the criteria in the directive statements below are required for acute inpatient care in the DAD.

Additionally, certain interventions that may not fall into criteria relating to intervention room, presence of anesthetist or operative approach must also be captured. These are listed in the table entitled *Additional Mandatory CCI Codes for Acute Inpatient Care*.



Assign a code from any Section in CCI for interventions that meet one or more of the following criteria:

- specified as mandatory elsewhere in these Standards;
- an intervention included in the table entitled *Additional Mandatory CCI Codes for Acute Inpatient Care*.

Note: When applying the directive statements below in CCI reference *Appendix A—CCI Code Structure—Qualifier 1—Section—Approach/Technique* as needed for more detail about operative approaches.



Assign a code for interventions classified in Section 1 of CCI that would require one or more of the following criteria:

- performance in an operating/intervention room (e.g. endoscopy room, cardiac catheterization room);
- performance in the presence of an anesthetist (i.e. anesthetic record on the chart);
- performance using the following approaches:
 - open
 - endoscopic
 - percutaneous transluminal/transarterial.



Assign a code for interventions classified in Section 2 of CCI that meet one or more of the following criteria:

- an inspection that is the sole intervention performed at a given anatomical site using one of the following approaches:
 - open;
 - endoscopic;
 - percutaneous transluminal/transarterial;
- a biopsy that is the sole intervention performed at a given anatomical site;
- the sole intervention performed in the presence of an anesthetist (i.e. anesthetic record on the chart).



Assign a code for interventions classified in Section 3 of CCI that meet one or more of the following criteria:

- performed in a cardiac catheterization room (even when performed with a therapeutic intervention at the same anatomical site);
- the sole intervention performed in the presence of an anesthetist (i.e. anesthetic record on the chart).

Note: When diagnostic imaging studies are performed in conjunction with therapeutic interventions it is optional to assign a code for the diagnostic imaging intervention (excluding 3.IP.10.VX *Xray, heart with coronary arteries, of left heart structures using percutaneous transluminal arterial (retrograde) approach*).

When diagnostic imaging studies are coded optionally, there may be a status attribute “I” available for Intraoperative. Facilities are free to define its use as required to meet internal reporting needs.

Note: It is mandatory to assign a code for coronary angiogram, 3.IP.10.VX, when performed with any therapeutic intervention regardless of whether the coronary angiogram is diagnostic or intraoperative in nature.

The status and location attributes at 3.IP.10.^Xray, heart with coronary arteries are mandatory.

Example: **Diagnosis:** Acute inferior ST elevation myocardial infarction
Intervention: Primary angioplasty of right coronary artery (RCA) with stent insertion

Patient was taken immediately to the catheterization laboratory and on coronary angiography (via the left femoral artery) was found to have a culprit RCA lesion which was angioplastied and stented. A BMW wire was used to cross the occlusion. A 3.0 balloon was used to pre-dilate the lesion. A Pronto catheter was used to aspirate the thrombus. Further pre-dilation was carried out with a 2.5 balloon. A bare metal stent was deployed.

1.IJ.50.GU-OA	Dilation, coronary arteries, percutaneous transluminal approach
Status: N	with thrombectomy using balloon or cutting balloon dilator with
Extent: DG	(endovascular) stent insertion
3.IP.10.VX	Xray, heart with coronary arteries, of left heart structures using
Status: DX	percutaneous transluminal arterial (retrograde) approach
Location: FY	

Rationale: It is mandatory to assign 3.IP.10.VX when performed with a therapeutic intervention. The status attribute is “DX” because the angiogram was performed to assess (diagnose) the extent and location of coronary artery disease prior to proceeding to the dilation procedure.

Example: Patient underwent angioplasty of the distal right coronary artery (RCA) two years previously. Recent angiogram revealed restenosis and the patient was admitted electively for PCI. An angioplasty with stent insertion of the distal right coronary artery was performed following coronary angiogram via the femoral artery. A BMW wire was used to cross the occlusion. A 3.0 balloon was used to pre-dilate the lesion. A bare metal stent was deployed.

1.IJ.50.GQ-OA	Dilation, coronary arteries, percutaneous transluminal approach
Status: P	using balloon or cutting balloon dilator with (endovascular)
Extent: DG	stent insertion
3.IP.10.VX	Xray, heart with coronary arteries, of left heart structures using
Status: I	percutaneous transluminal arterial (retrograde) approach
Location: FY	

Rationale: It is mandatory to assign 3.IP.10.VX when performed with a therapeutic intervention. The status attribute is “I” because it was performed for visualization purposes during the dilation procedure; the disease and the artery affected was already diagnosed on a previous diagnostic coronary angiogram.

Additional Mandatory CCI Codes for Acute Inpatient Care

CCI Code	Intervention
1.^.^03.HA-KC	Immobilization using percutaneous external fixator
1.AN.09.^.	Stimulation, brain
1.HZ.09.^.	Stimulation, heart NEC
1.LZ.19.HH-U7-^	Transfusion, circulatory system NEC of stem cells
1.LZ.19.HH-U8-^	Transfusion, circulatory system NEC of cord blood stem cells
1.WY.19.HH-^.	Transfusion, bone marrow
1.PZ.21.^.	Dialysis, urinary system NEC
1.^.^26.^.	Brachytherapy, any site
1.^.^27.^.	Radiation, any site
1.HZ.30.JN	Resuscitation, heart NEC, by external manual compression with or without concomitant ventilation
1.GZ.31.CA-^. 1.GZ.31.CR-ND 1.GZ.31.GP-ND	Ventilation, respiratory system NEC, invasive approach (excluding when an inherent part of the administration of a general anesthetic, and the patient is extubated prior to leaving the operating room)
1.HZ.34.^.	Compression, heart NEC
1.^.^35.HH-T9	Any pharmacotherapy when delivered via drug eluting balloon
1.^.^35.HZ-^.	Any pharmacotherapy delivered via drug eluting stent
1.^.^35.^.-1C	Any infusion/injection of thrombolytic agent
1.^.^35.^.-M^	Pharmacotherapy using antineoplastic and immunomodulating agents
1.LZ.35.^.-C6	Pharmacotherapy (local), circulatory system NEC of parenteral nutrition
1.GV.52.^.	Drainage, pleura
1.OT.52.^.	Drainage, abdominal cavity
1.NF.53.^.	Implantation of internal device, stomach excluding 1.NF.53.CA-TS Implantation of (gastric) tube using per orifice approach
1.NK.53.^.	Implantation of internal device, small intestine
1.IS.53.^.	Implantation of internal device, vena cava (superior and inferior)
1.^.^73.^.	Reduction, fracture or dislocation
1.GJ.77.^.	Bypass with exteriorization, trachea
2.AN.24.LA-JA	Electrophysiological measurement, brain, using insertional electrodes [e.g. sphenoidal, nasopharyngeal] by open approach
2.RF.58.^.	Function study, fallopian tube

Example: Insertion of a urinary catheter performed on the nursing unit without anesthetic.

No code assigned

Rationale: Insertion of a urinary catheter is classified to a generic intervention over 50 from Section 1, 1.PM.52.CA-TS *Drainage, bladder, using per orifice approach and drainage catheter*. However, the intervention performed in this example does not meet any of the criteria in the above directive statements; therefore, it is not mandatory to assign.

Example: Injection of antihemorrhagic agent into burr hole to control bleeding of the meninges of the brain.

1.AA.13.SE-C2 Control of bleeding, meninges and dura mater of brain, using injection of antihemorrhagic agent into burr hole

Rationale: Control of bleeding of the meninges of the brain is classified to a generic intervention under 50 from Section 1, 1.AA.13.^ *Control of bleeding, meninges and dura mater of brain*. However, the intervention in this example was performed using an open approach; therefore, it is mandatory to assign. Referring to *Appendix A-CCI Code Structure Qualifier 1 Approach/Technique* in CCI for Section 1 confirms that burr hole is an open approach, SE is defined as “using open approach with burr hole technique.”

Example: Closed elbow reduction performed on the nursing unit.

1.TM.73.JA Reduction, elbow joint, using closed (external) approach

Rationale: 1.^73.^ *Reduction, fracture or dislocation* is included on the list of *Additional Mandatory CCI Codes for Acute Inpatient Care*; therefore, it is mandatory to assign 1.TM.73.JA.

In addition to the General Coding Standards for CCI see also the following coding standards which provide direction for mandatory CCI code assignment:

Interventions Relevant to Neoplasm Coding

Brachytherapy

Intracranial Resection of Lesions or Neoplasms

Thrombolytic Therapy

Chronic Ischemic Heart Disease

Cardiac Arrest

Invasive Ventilation

Arthrectomy and Arthroplasty

Interventions Associated With Delivery

Vital Signs Absent (VSA)

Admission for Administration of Chemotherapy, Pharmacotherapy and Radiation Therapy

Selection of Interventions to Code From Section 5

[Click here for description of change.](#)

In effect 2002, amended 2008, 2012

This standard identifies the minimum requirements for code selection from Section 5 for both acute inpatient care and ambulatory care; however, Provincial/Territorial and local standards may specify additional requirements.

When selecting codes from Section 5 pay careful attention to the block titles:

- Interventions performed on the fetus prior to delivery are classified to 5.FD.^-5.FT.^ *Interventions on the Fetus*.
- Interventions that occur during the intrapartum phase (from the time labor begins until complete expulsion of the fetus) are classified to 5.LB.^ - 5.MD.^ *Interventions During Labour and Delivery*.
- Interventions performed on the neonate after delivery are classified to Section 1 with the exception of 5.MD.11.^ *Cord blood sampling* and 5.PB.01.AC *Postpartum care, follow up visit, mom and baby (first post natal visit)*.



Assign a code for all interventions classified in Section 5 of CCI that meet one or more of the following criteria:

- the generic intervention number is ≥ 40 ;
- the intervention is included in the table entitled *Additional Mandatory CCI Codes from Section 5*.

Additional Mandatory CCI Codes From Section 5

CCI Code	Intervention
5.AB.02.^	Amniocentesis
5.AB.09.^	Antepartum diagnostic interventions, biopsy
5.CA.20.^	Pharmacotherapy (in preparation for), termination of pregnancy
5.CA.24.^	Preparation by dilating cervix (for), termination of pregnancy
5.LD.25.^	Removal of device, cervix, during active labour
5.PC.25.^	Removal of device, postpartum
5.AC.30.^	Induction of labour
5.LD.31.^	Augmentation of labour

Composite Codes in CCI

[Click here for description of change.](#)

In effect 2001, amended 2012



When available, use one CCI code to describe complex health interventions by selecting the appropriate qualifier(s).



When one CCI code is not available to describe complex health interventions, code additionally any associated concomitant interventions.

Every attempt has been made to reduce the need for multiple code assignment to describe a complex health intervention. In most cases, it is possible to use a single code to definitively describe, in generic terms, the intent and means of accomplishing an intervention. When an intervention commonly or frequently involves a sequence of associated concomitant actions in order to reach its goal, this will be described—wherever possible—by a single code. The qualifiers provide options that describe the alternate techniques involved.

Example: A partial gastrectomy may be performed alone or with a vagotomy. When the vagotomy is performed with the gastrectomy, a qualifier is selected to identify this. A second code for the vagotomy is not recorded.

1.NF.87.GX Excision partial, stomach, endoscopic [laparoscopic] approach with vagotomy and esophagogastric anastomosis

Rationale: Vagotomy would only be a separate code when it is performed alone.

Even more common as an example, is the excision of (lesion of) an anatomy site with a concomitant repair involving a graft or a flap to close the surgical defect. A qualifier is selected to describe the concomitant repair.

Example: Patient with breast malignancy underwent a simple total mastectomy. The defect was repaired using a local flap.

1.YM.89.LA-XX-E Excision, total breast, using open approach and local flap

Location: U

Rationale: Both the mastectomy and repair of the surgical defect using a flap are assigned to 1.YM.89.LA-XX-E.

Multiple Codes in CCI

[Click here for description of change.](#)

In effect 2001, amended 2006, 2007, 2008, 2012

Multiple Codes From Different Rubrics



When more than one intervention is performed during the same intervention episode, assign multiple codes from different rubrics when there is no composite code (qualifier) to cover this combination.



When an intervention is performed using robotic assistance, assign 7.SF.14.ZX *Robotic assisted telemanipulation of tools, service, using system NEC*, mandatory, as an additional code.

Note: Not every action carried out during an intervention needs to be coded. Many smaller actions are carried out during an intervention episode that are an inherent part of an overall intervention and do not need to be coded separately. Additionally, the closure of the operative site is included in the intervention code.

Example: Closed reduction fracture of right humerus and open reduction with screw fixation left humerus.

1.TK.74.LA-NW

Fixation, humerus, open approach, using plate, screw, no tissue used

1.TK.73.JA

Reduction, humerus, using closed [external] approach

Rationale: Different generic interventions are performed on bilateral sites; fixation of the left humerus and closed reduction of the right humerus. Therefore, multiple codes are assigned.

Example: Robotic assisted supraglottic laryngectomy for carcinoma in situ of the supraglottis.

1.GE.87.NZ

Excision partial, larynx NEC, open approach [e.g. apron flap incision] with horizontal technique no tissue used

7.SF.14.ZX

Robotic assisted telemanipulation of tools, service, using system NEC

Rationale: It is mandatory to assign 7.SF.14.ZX when an intervention is performed using robotic assistance.

Note: In CCI, explanatory “notes” are provided to clarify what is classified to a rubric or code.

When these notes describe various components of a complex intervention that may or may not be performed in a given case, additional codes for these components are not assigned. These notes are intended to eliminate assigning multiple codes. They do not purport to describe the exact nature of all possible interventions that may be correctly classified to the rubric or code.

Example: Patient previously had a total colectomy with rectal sparing and creation of ileostomy. Patient presents to hospital for elective takedown of the ileostomy, completion proctectomy, ileo-anal J-pouch and defunctioning loop ileostomy.

- 1.NQ.84.LA-XX-G Construction or reconstruction, rectum, using open approach with ileum (to construct pouch)
- 1.NK.77.EN Bypass with exteriorization, small intestine, endoscopic [laparoscopic] approach, end enterostomy [e.g. terminal, end or loop ileostomy]

Rationale: There is a note at 1.NQ.84.^ “Usually involves takedown of ileostomy to construct a functional pseudo-rectum using distal ileum. This may involve conversion of a Hartmann rectal closure by excising remaining rectal and anal tissue [e.g. anorectal mucosectomy].” The note provides the information that the takedown of the existing ileostomy is included in this rubric; therefore, one code, 1.NQ.84.LA-XX-G, is required to capture the creation of the pelvic pouch and the concomitant takedown of the ileostomy. An additional code is required for creation of the temporary ileostomy because this is not implicit with construction of the ileo-anal J-pouch.

Note: In CCI, the “code also” instruction means that the rubric does not include the intervention(s) in the “code also” instruction. When the intervention in the “code also” instruction was performed, an additional code is mandatory when it meets the requirements for mandatory code selection specified in these Standards.

While “code also” notes have been included throughout CCI, they do not cover every possible circumstance where multiple codes are required.

Example: Patient is admitted for a lumpectomy and sampling of the axillary lymph nodes.

- 1.YM.87.LA Excision partial, breast, using open approach with simple apposition of tissue (e.g. suturing)
- 1.MD.87.LA Excision partial, lymph node(s), axillary, using open approach

Rationale: Sampling of the axillary lymph nodes is not included at rubric 1.YM.87.^ The “code also” instruction directs to also assign a code from 1.MD.87.^ if a sampling of the axillary lymph nodes was also performed. 1.MD.87.^ is assigned because it is mandatory based on the coding standards entitled [Selection of Interventions to Code for Acute Inpatient Care](#) and [Selection of Interventions to Code for Ambulatory Care](#).

Example: A patient suffered a trauma resulting in bone loss to the anterior maxilla. The patient is admitted for a repair of the maxilla using autograft from the mandible of the patient, allograft and screws.

- 1.ED.80.LA-NW-Q Repair, maxilla, open approach using plate, screw device (with/without wire/mesh) with combined sources of tissue
- 1.EE.58.LA-XX-A Procurement, mandible, using open approach of (bone) autograft

Rationale: The procurement of bone from the mandible is not included at rubric 1.ED.80.^ While no “code also” note is included in this rubric another code is required to cover this combination. See also the coding standard entitled [Procurement or Harvesting of Tissue for Closure, Repair or Reconstruction](#).

Multiple Codes From the Same Rubric

As a general rule, multiple codes from the same rubric are not assigned for the same intervention episode, unless the codes within a rubric identify separate operative approaches. Multiple codes from the same rubric are not assigned to show different devices used at the same operative site. A hierarchy for orthopedic devices is provided below and in all other cases, select the qualifier that is most significant or important for the reporting facility.

Example: Patient had both an esophagogastroduodenoscopy (EGD) and ileoscopy.

- | | |
|---------------|---|
| 2.NK.70.BA-BL | Inspection, small intestine, using endoscopic per orifice approach (or via stoma) and gastroscope |
| 2.NK.70.BD-BK | Inspection, small intestine, using retrograde (via rectum) endoscopic per orifice approach and (double) balloon enteroscope |

Rationale: EGD and ileoscopy are distinct interventions because they require a different operative approach and involve different sites that happen to be classified to the same rubric; therefore, multiple codes are assigned.

Note: In many orthopedic procedures the surgeon may use more than one device to stabilize the bone. Make the code selection based on the following hierarchy of devices (from highest to lowest):

- Endoprosthesis
- Intramedullary nail
- Screws and plates
- Pins and nails
- Wire, staples and mesh
- No device

Make the code selection based on the following hierarchy of devices used to repair ligament or soft tissue (from highest to lowest):

- biodegradable binding devices (e.g. bioscrews and biodegradable anchors)
- screw (and washer)
- endobutton or staple
- sutures, suture anchors

Example: Patient suffered a hip fracture and is admitted for repair. An intramedullary nail and screws were used for fixation.

- | | |
|---------------|--|
| 1.VA.74.LA-LQ | Fixation, hip joint, open approach, using intramedullary nail, fixation device alone |
|---------------|--|

Rationale: The fixation was performed at one operative site; therefore, only one code is assigned. Using the orthopedic hierarchy of devices, the code identifying the fixation using intramedullary nail is selected.



When the same generic intervention is performed on bilateral sites and there is no variation in any component of the CCI code assign:

- a single code from the rubric; and
- the location attribute “bilateral”, mandatory, when available.

Example: A woman had a bilateral total mastectomy using free flap for breast cancer.

1.YM.90.LA-XX-F Excision total with reconstruction, breast, with no implanted
Location: B device, using free flap

Rationale: Exactly the same intervention was performed on both sides; therefore, only one code is assigned with the mandatory location attribute to identify bilateral reconstruction.

Note: When the location attribute “bilateral” is not available a single code is still assigned.

Example: A patient had an open reduction with internal fixation using a combination of plates and screws for bilateral maxilla fractures.

1.ED.74.LA-NW Fixation, maxilla, using plate, screw device (with/without
 wire/mesh) no tissue used [device only]

Rationale: Exactly the same intervention was performed on both sides; therefore, only one code is assigned. There is no location attribute available at 1.ED.74.^ because the maxilla is a single bone.



When the same generic intervention is performed on bilateral sites and there is a variation in any component of the CCI code assign:

- separate codes for each intervention from the same rubric; and
- the applicable location attribute to each code, mandatory, when available.

Example: A patient had bilateral inguinal hernias repaired at the same intervention episode. Both were repaired laparoscopically through separate groin incisions; the left side required mesh in the repair and the right side used simple suturing.

1.SY.80.DA-XX-N Repair, muscles of the chest and abdomen, endoscopic
Location: LW [laparoscopic] approach, using synthetic tissue [e.g. mesh,
Status: 0 sponge]
 1.SY.80.DA Repair, muscles of the chest and abdomen, endoscopic
Location: LW [laparoscopic] approach, without tissue [e.g. suturing or stapling]
Status: 0

Rationale: When interventions are performed on bilateral sites and there is a variation in any component of the CCI code, multiple codes are assigned to identify these as different interventions. In this example, the variation is with the tissue qualifier—one side used synthetic tissue (mesh) and the other used no tissue. The mandatory location attributes identify that each repair was unilateral.

Example: Closed reduction fracture of right humerus and open reduction fracture of left humerus.

1.TK.73.JA Reduction, humerus, using closed [external] approach

Location: R

1.TK.73.LA Reduction, humerus, using open approach

Location: L

Rationale: A reduction was performed on the left and right humerus with different approaches; therefore, multiple codes are assigned to identify these as different interventions. The mandatory location attributes identify that each reduction was unilateral.

Procurement or Harvesting of Tissue for Closure, Repair or Reconstruction

In effect 2002, amended 2008



When a separate incision is made to obtain the tissue, assign the appropriate CCI code for procurement of tissue.

Procurements are coded to reflect the existence of a separate surgical defect (wound), which usually requires its own post-surgical care and monitoring. If an incision is simply enlarged to obtain the tissue, there is no need to code the procurement. A local flap (for advancement, rotation, and realignment) does not usually involve a separate incision for procurement of the flap.

See also [Appendix A—Definitions Flaps and Grafts](#) for clinical information.

Example: A fasciocutaneous free flap from the thigh is harvested to repair a serious facial burn.

1.YF.80.LA-XX-F Repair, skin of face, using free flap [e.g. microvascular free flap]

1.YV.58.LA-XX-F Procurement, skin of leg, of free flap using open approach

Example: A high tibial osteotomy with patellar tendon transfer.

1.VQ.80.LA-KD Repair, tibia and fibula, using wire, mesh, staple, no tissue used (for repair)

1.VS.80.LA-XX-E Repair, tendons of lower leg [around knee], using apposition technique [tendon sutured to tendon] with tendon transfer for realignment [e.g. advancement, transposition]

Rationale: Procurement is not coded since a separate incision at another site on the body was not made.

Note: When the tissue qualifier is “E,” this usually means that you do not need a procurement code.

Exception: Whenever a segment of the intestine is harvested, a procurement code is assigned. This happens most often for repairs and reconstructions of the urinary tract and the esophagus. Because the creation of a defect along the gastrointestinal tract always requires careful post-surgical monitoring, the procurement of intestine must be coded.

Combined Diagnostic and Therapeutic Interventions

[Click here for description of change.](#)

In effect 2001, amended 2006, 2008, 2009, 2012



When both a diagnostic intervention from Section 2 and a therapeutic intervention from Section 1 are performed at the same anatomical site, assign a code for the therapeutic intervention, mandatory. Assign a code for the diagnostic intervention, optional, as required to meet facility reporting requirements.

Exception: In order to distinguish whether a therapeutic intervention was performed by sigmoidoscopy or colonoscopy, assign an additional code, mandatory, to identify the inspection (see also the coding standard entitled [Endoscopic Interventions](#)).

Example: Patient is brought into hospital to investigate a suspicious lump in her right breast. The surgeon performs an excisional biopsy of breast, which is sent to pathology for examination.

1.YM.87.^ ^ Excision partial, breast
Location: R

Note: The intent of an excisional biopsy is therapeutic as well as diagnostic. The lesion has to be excised and a diagnosis established by pathology. The therapeutic intervention takes precedence and a code from section 2 is not assigned. An excisional biopsy is classified to a “partial excision” at the appropriate anatomy site.

Example: Patient is brought into hospital for a lumpectomy of her left breast. A sentinel node biopsy is performed followed by an axillary node dissection.

1.YM.87.^ ^ Excision partial, breast
Location: L
 1.MD.89.LA Excision total, lymph node(s), axillary, using open approach
 2.MD.71.LA Biopsy, axillary lymph nodes, using open approach (optional)
Extent: SN (optional)

Rationale: When a biopsy and a therapeutic intervention are performed at the same site, during the same operative episode, a code for the biopsy is not mandatory. The sentinel node biopsy may be coded to meet facility data requirements.

Example: A frozen section of a biopsy of thyroid, performed on this patient revealed malignancy and a total thyroidectomy was performed.

1.FU.89.^ ^ Excision total, thyroid gland
Location: U

Rationale: When a biopsy and a therapeutic intervention are performed at the same site, during the same operative episode, a code for the biopsy is not mandatory.

Example: A trauma victim is taken to the operating room for an explorative laparotomy. A ruptured spleen is identified upon opening the abdominal cavity. A total splenectomy is performed.

1.OB.89.LA Excision total, spleen, using open [abdominal] approach

Rationale: When the planned intervention was a diagnostic one but was subsequently changed to a therapeutic intervention, only the therapeutic component of the procedure is coded.

Example: Patient is experiencing severe shortness of breath. A CAT scan of the chest reveals significant pleural effusion. A pleurocentesis is performed and the fluid is sent to pathology for analysis. Pathology reported a malignant pleural effusion.

1.GV.52.^ ^ Drainage, pleura

Rationale: Aspiration of fluids from a body cavity may have both a diagnostic and a therapeutic value. Procedures such as pleurocentesis are coded to the therapeutic intervention of “drainage.” Note: 3.GY.20.WA *Computerized tomography [CT], thoracic cavity, without enhancement (contrast)* would be assigned on the ambulatory care abstract.



Classify incisional biopsies in Section 2 to the generic intervention “Biopsy” at the appropriate anatomy site. Incisional biopsies involve removal of a tissue sample for diagnostic purposes only.

Example: Patient is being followed by a nephrologist for elevated creatinine and BUN. He is now being admitted for a renal biopsy to rule out glomerulonephritis.

2.PC.71.^ ^ Biopsy, kidney

Example: Patient admitted for investigation of a suspicious lung lesion. A lung biopsy is done by percutaneous needle aspiration.

2.GT.71.HA Biopsy, lung, using percutaneous (needle) approach

See also the coding standard entitled [Endoscopic Interventions](#).

Endoscopic Interventions

In effect 2001, amended 2003, 2009

Endoscopic interventions are widely performed and may be either diagnostic or therapeutic in their intent.



When the intent of an endoscopy is diagnostic only, classify the intervention to “Inspection” of the anatomical site.



Select the anatomical site based on the furthest site inspected through the endoscope.

Example: Esophagogastroduodenoscopy (EGD) done for screening.

2.NK.70.BA-BL Inspection, small intestine, using endoscopic per orifice approach (or via stoma) and gastroscope



When a biopsy and an inspection are performed at the same anatomical site, assign a code only for the biopsy.

Example: Colonoscopy with biopsy of lesion in transverse colon.

2.NM.71.BA-BJ Biopsy, large intestine, using endoscopic per orifice approach (or via stoma) and colonoscope



When an inspection goes beyond the site of the biopsy, assign codes for both the biopsy and the inspection, sequencing the biopsy first.

Example: Esophagogastroduodenoscopy (EGD) with biopsy of stomach lesion.

- | | |
|---------------|---|
| 2.NF.71.BA | Biopsy, stomach, using endoscopic per orifice approach (or via stoma) |
| 2.NK.70.BA-BL | Inspection, small intestine, using endoscopic per orifice approach (or via stoma) and gastroscope |



When both an inspection and a therapeutic intervention are performed at the same anatomical site, assign a code only for the therapeutic intervention.

Exception: In order to distinguish whether a therapeutic intervention was performed by sigmoidoscopy or colonoscopy, assign an additional code, mandatory, to identify the inspection.

Example: Cystoscopy with fulguration of bladder tumor.

- | | |
|---------------|---|
| 1.PM.59.BA-GX | Destruction, bladder, endoscopic per orifice approach using device NEC (for tissue ablation or lithotripsy) |
|---------------|---|

Rationale: Inspection by cystoscopy is inherent in the device qualifier (BA) at destruction, bladder; therefore, a code for cystoscopy is not assigned separately.

Example: Colonoscopy with polypectomy of large intestine.

- | | |
|--------------------|---|
| 1.NM.87.BA | Excision partial, large intestine, endoscopic per orifice approach, simple excisional technique |
| Location: U | |
| 2.NM.70.BA-BJ | Inspection, large intestine, using endoscopic per orifice approach (or via stoma) and colonoscope |

Rationale: A code for the inspection is assigned along with the therapeutic intervention to identify that a colonoscopy versus a sigmoidoscopy was performed.

Example: Colonoscopy to cecum with polypectomy of sigmoid colon and random biopsies of ascending colon.

- | | |
|--------------------|---|
| 1.NM.87.BA | Excision partial, large intestine, endoscopic per orifice approach, simple excisional technique |
| Location: U | |
| 2.NM.71.BA-BJ | Biopsy, large intestine, using endoscopic per orifice approach (or via stoma) and colonoscope |

Rationale: In this example, colonoscopy is inherent in the device qualifier (BA) for the biopsy code; therefore, a code for inspection is not assigned separately.



When separate anatomical sites are biopsied during one operative episode, sequence the biopsy of the deepest site first.

Example: Esophagogastroduodenoscopy (EGD) with biopsy of stomach lesion and biopsy of a duodenal lesion.

2.NK.71.BA-BL	Biopsy, small intestine, using endoscopic per orifice approach (or via stoma) and gastroscope
Location: D	
2.NF.71.BA	Biopsy, stomach, using endoscopic per orifice approach (or via stoma)

See also the coding standards entitled [Combined Diagnostic and Therapeutic Interventions](#), [Diagnostic Esophagogastroduodenoscopy \(EGD\)](#), [Diagnostic Colonoscopic Interventions](#) and [Diagnostic Endoscopic Intervention Performed on the Lower Gastrointestinal Tract](#).

Interventions to Manage Bleeding

[Click here for description of change.](#)

In effect 2002, amended 2006, 2012

See also the coding standards entitled [Selection of Interventions to Code for Acute Inpatient Care](#) and [Selection of Interventions to Code for Ambulatory Care](#).

Interventions to manage bleeding can be classified to 1.^13.^ Control of bleeding, 1.^51.^ Occlusion, 1.^59.^ Destruction, or 1.^80.^ Repair, depending upon:

- The anatomy site;
 - For example, some organs are only ever “repaired” to manage bleeding. In order not to duplicate categories in CCI, there are no Repair (80) interventions available for the tonsil/adenoid, thyroid, spleen, and liver anatomy sites. The management of bleeding of these organs is included in intervention Control of bleeding (13) ;
- The method used to manage the bleeding (e.g. vessel occlusion, local area destruction or organ repair);
- Whether or not the bleeding is a result of a damaged artery/vein or within a solid organ.

Note: It is essential to follow the includes/excludes notes in CCI in order to determine the correct rubric for interventions to manage bleeding.

Example: During his hospital admission, the patient required control of an episode of intractable epistaxis. This was accomplished with the clipping of the ethmoid artery via a transantral open approach.

1.JX.51.LA-FF	Occlusion, other vessels of head, neck and spine NEC, open approach [e.g. transantral, Caldwell Luc] using clips
Extent: 0	

Rationale: The excludes note at the rubric 1.ET.13.^ excludes ligation of the ethmoidal artery and directs the coder to assign 1.JX.51.^.



When a solid organ is damaged and is bleeding from within, or the bleeding is due to internal pathology, assign 1.^13.^ Control of bleeding, by organ anatomy site.

Example: A stabbing victim has surgery to control bleeding to an internal wound of the liver. An open approach was used to apply fibrin glue to repair the damage and stem the bleeding.

1.OA.13.LA-W3 Control of bleeding, liver, open approach using fibrin glue
Extent: 0

Example: Patient was admitted for uterine embolization for control of heavy uterine bleeding due to fibroids. This was accomplished via uterine artery embolization with two coils.

1.RM.13.GQ-GE Control of bleeding, uterus and surrounding structures, using
Extent: 02 percutaneous (transarterial) approach and [detachable] coils

Example: During his hospital stay, the patient required control of an episode of intractable epistaxis. A transarterial embolization of the ethmoid artery was accomplished using microspheres.

1.ET.13.GQ-W0 Control of bleeding, nose, using percutaneous [transarterial]
Extent: 0 approach and other synthetic material
 [e.g. gelfoam, microspheres, polystyrene, polyvinyl alcohol,
 contour particles]

DN When a blood vessel outside of an organ has been transected and is being repaired to control hemorrhage, assign a code from 1.^.^80.^.^ *Repair of the blood vessel*.

Example: A stabbing victim has surgery to control internal bleeding caused by a transected hepatic artery, which is repaired with simple suturing through a laparotomy approach.

1.KE.80.LA Repair, abdominal arteries NEC, using open approach

DN When an intervention to manage bleeding is done to a skin site via destruction of tissue, assign a code from 1.^.^59.^.^ *Destruction, skin by site*. Omit the code when the management of bleeding is part of a more invasive procedure.

Example: A patient with a bleeding laceration of the skin of his forehead had the bleeding controlled via cauterization only, with light dressing applied.

1.YB.59.JA-GX Destruction, skin of forehead, using device NEC

Example: A patient with a bleeding laceration of the skin of the forehead had the bleeding points cauterized prior to suturing of the laceration.

1.YB.80.LA Repair, skin of forehead, using apposition technique
 [e.g. suturing, stapling]

Rationale: While both cauterization and sutures were performed to manage the bleeding, the sutures are more invasive; therefore, only 1.YB.80.LA is assigned.

Destruction or Excision of Aberrant/Ectopic Tissue

In effect 2006



Classify the excision or destruction of aberrant (or ectopic) tissue of a gland or an organ to the anatomy site of origin even though the tissue is found outside the site of origin and at a distance from it.

The most common types of aberrant tissue found away from a gland or organ are adrenal, endometrial and parathyroid. A location attribute indicating that the tissue is aberrant “AT” may be selected to accompany the intervention code.

Example: Laparoscopic destruction by electrocautery of endometrial tissue found within the pelvic cavity—on ovary and intestine.

1.RM.59.DA-GX

Location: AT

Destruction, uterus and surrounding structures, endoscopic [laparoscopic] approach using device NEC [e.g. electrocautery, rollerball diathermy]

Rationale: The destruction is of endometrial tissue even though it is found on the ovary and intestine. No intervention is assigned to indicate surgery on the ovaries or intestines.

Debulking of a Space-Occupying Lesion

In effect 2006

For various reasons, it is not always possible to completely excise a lesion. For example, in an intracranial lesion, the neurological defect could be so severe as to outweigh the benefits of total eradication of the neoplasm. A surgeon may, however, choose to excise or destroy the bulk of the lesion to alleviate symptoms or to facilitate subsequent radiation or chemotherapy. When an intramarginal excision or destruction of a lesion is performed it is frequently termed a “debulking” of a tumor. Excisional debulking procedures should not be confused with a biopsy procedure where the intent is to remove a small piece of the tumor for diagnostic purposes only.

Debulking procedures of intracranial lesions may be performed using an ultrasonic aspirator. Common names for this frequently used tool are “Cavitron” and Cavitronic ultrasonic aspirator [CUSA].

Following this intralesional excision, chemotherapy may be used to further retard the growth of (and shrink) the neoplasm. A planned second resection done to complete surgical management of the lesion may be flagged with a status attribute “staged.” Because this is a completion procedure, this would never be described as a “revision.” This holds true even if a person returns for a neoplasm resection at the same site years later. In such a situation, the resection would be coded without the use of an attribute at all.

If, however, a re-visitation to the original site of the resection is required to evacuate a hematoma or to débride an abscess, the status attribute “revision” must be used to describe this (see also the coding standard entitled [Revised Interventions](#)).



Classify debulking procedures to the generic CCI interventions of “destruction” or “partial excision,” by site, according to the procedure performed.

Example: The surgeon performed a debulking of a tracheal tumor using laser via bronchoscopy.

1.GJ.59.BA-AG Destruction, trachea, using endoscopic per orifice approach and laser

Example: The surgeon performed a craniotomy to debulk a cerebral neoplasm using a CUSA device.

1.AN.87.SZ-AZ Excision partial, brain, craniotomy [or craniectomy] flap technique for access, with ultrasonic aspirator [e.g. CUSA]

Abandoned Interventions

In effect 2001, amended 2005, 2006, 2008

An abandoned intervention describes a situation in which a planned intervention, classifiable to Section 1 or Section 5, is begun and due to circumstances, usually unanticipated, nothing more than an incision, inspection, biopsy or anesthetization can be completed.



When a planned intervention from Section 1 or Section 5 cannot be completed beyond incision, inspection, biopsy, or anesthetization, assign a CCI code from one of the following:

- Incision (1.^^.70)
- Inspection (2.^^.70)
- Biopsy (2.^^.71)
- Anesthetization (1.^^.11)



Immediately following, sequence the CCI code for the planned intervention from Section 1 or Section 5, optional. If the code is assigned, it is mandatory to assign the status attribute “A.”

Note: An attribute for “abandoned” does not exist in Section 2 and 3. When a planned intervention from Section 2 or 3 is attempted beyond anesthetization, but the expected outcome is either poor or not achieved entirely, code the intervention in the same manner as an intervention with successful results.

See also the coding standards entitled [Failed Interventions](#) and [Cancelled Interventions](#).

Example: The intended intervention was to excise the large intestine for a malignancy, but at laparotomy, it was discovered that the neoplasm was so extensive that removal was impossible. The surgeon simply conducted an inspection and then closed the abdomen without attempting the colon resection.

2.OT.70.^.^ Inspection, abdominal cavity
1.NM.89.^.^ Excision total, large intestine

Status: A

Note: There are a limited number of anatomy sites where an incision into the site may be coded (e.g. 1.OT.70.LA *Incision NOS, abdominal cavity using open approach*).

Example: Patient is admitted to the Day Surgery Unit for tonsillectomy. The patient was taken to the operating room and given general anesthesia. The surgeon notes that because the patient has a very large neck, he could not position the Boyle Davis gag to allow access to the tonsils. The procedure was terminated.

1.ZZ.11.HA-P1 Anesthetization, total body, using percutaneous (needle) approach and general anesthetic agent
1.FR.89.LA Excision total, tonsils and adenoids, tonsillectomy alone using device NEC
Status: A

Example: Patient presents for bronchoscopy. Her throat was sprayed with Xylocaine but the physician was called off to an emergency before the procedure was started.

CANCELLED

Rationale: The planned intervention is not from Section 1 or Section 5; therefore, the above standard does not apply. The intervention was not started and meets the criteria of a cancelled intervention. The Xylocaine may be captured in the anesthetic abstract field (Data Element 53).

Failed Interventions

In effect 2002, amended 2003, 2006

DN Classify a failed intervention in the same manner as one that is successful.

For the purposes of classification, an intervention is considered “failed” if on termination of the procedure, the expected outcome is either poor or not achieved entirely.

Example: A failed cholangiogram could mean that the common bile duct was explored but that the dye could not pass, as expected, into the duct. As a result, the expected outcome (viewing of the common bile duct using a dye) was not adequately achieved.

Code the cholangiogram.

3.OE.10.WZ Xray, bile ducts, following endoscopic (retrograde) injection of contrast

Example: A failed coronary angioplasty could be one during which the balloon catheter could not be advanced beyond the stenosis in the artery. The expected dilation of the coronary artery could not be performed to the satisfaction of the surgeon.

Code the coronary angioplasty.

1.IJ.50.GQ-BD Dilation, coronary arteries, percutaneous transluminal approach [e.g. with angioplasty alone] using balloon or cutting balloon dilator without stent insertion
Status: U
Extent: DG

Assign also:

3.IP.10.VX Xray, heart with coronary arteries, of left heart structures using percutaneous transluminal arterial (retrograde) approach
Status: UN
Location: U

Note: In such a case scenario, the responsible physician will sometimes attempt to clear the plaque or thrombus formation by injection of a thrombolytic agent directly into the coronary artery. This is classified to 1.IL.35.HA-1C *Pharmacotherapy (local), vessels of heart, percutaneous injection approach of thrombolytic agent*. When a drug is administered via a venous approach it must be considered as systemic pharmacotherapy. When the drug is injected into an artery, it is always classified to local pharmacotherapy.

Example: The patient is prepped for an endoscopic retrograde cholangiopancreatography (ERCP). The procedure is started and the ampulla appears inflamed, as though it may have been traumatized. The pancreatic duct was easily opacified and seen to be normal. Despite good positioning and trying various papillotomes, it was not possible to get deep cannulation of the bile duct even using a wire. The procedure was aborted.

3.OG.10.WZ Xray, biliary ducts with pancreas, following endoscopic (retrograde) injection of contrast [ERCP]

Example: Failed closed reduction of the shoulder joint is one in which the responsible physician could not reduce the displaced bone to its normal anatomical location despite efforts in that direction. **Code the closed reduction**, even though the desired outcome was not achieved. Patient went on to have an open reduction and internal fixation at a later operative episode.

1.TA.73.JA Reduction, shoulder joint, using closed (external) approach

Exception: Failed trial of labor following previous Cesarean section (subcategory O66.4) and failed application of vacuum extractor and forceps (subcategory O66.5) are captured by ICD-10-CA codes and do not lend themselves to this coding standard. See also the coding standard entitled *Interventions Associated with Delivery*.

See also the coding standard entitled *Abandoned Interventions*.

Change of Plans During an Intervention

In effect 2001, amended 2007



When an intervention is performed that is different than the one originally intended, code only the intervention that was actually performed.

The intended therapeutic intervention has no clinical significance and must not be recorded on the abstract. Coding of therapeutic interventions reflect what was actually done.

Example: Patient was admitted with abdominal pain. Appendicitis was suspected and patient was taken to the operating room for an appendectomy. At laparotomy, it was clear that patient had a ruptured ovarian cyst and a normal appendix. Unilateral oophorectomy was performed.

1.RB.89.LA Excision total, ovary, using open approach
Location: U

Converted Interventions

In effect 2001



When an intervention is begun as an endoscopic approach, but is changed to an open approach, select the qualifier to indicate open approach and assign the status attribute “C” (converted).

CCI allows for the capture of information regarding interventions that are begun as endoscopic procedures, but for some reason, must be changed to an open approach. The status attribute “C” (converted) is currently available at the most common interventions where this may occur. The intervention is coded with the appropriate qualifier designating the open approach, and followed by the use of the status attribute “C.”

Example: Patient is admitted for a laparoscopic cholecystectomy. While attempting to perform the cholecystectomy extensive adhesions are encountered so the intervention is switched to an open cholecystectomy.

1.OD.89.LA

Status: C

Excision total, gallbladder, open approach, cholecystectomy alone without extraction (of calculi)

Revised Interventions

[Click here for description of change.](#)

In effect 2003, amended 2009, 2012

Describing a therapeutic intervention as a “revision” in CCI requires the use of the status attribute “R.”

Note: The status attribute “R” (revision) is currently activated as mandatory (i.e. status attribute box is pink) at the most common interventions where a “revision” intervention may occur. However, when the attribute box is yellow, it is mandatory to assign the status attribute “R” whenever the criteria stated in the directive box below are met.



Assign the status attribute “R” when the current intervention is a complete or a partial “redo” of an intervention performed previously for any problem; whether expected (e.g. end-of-life of device) or unexpected (e.g. complication).

Note: The following interventions are not classified as revisions:

- Re-insertion of stents, catheters and shunt systems (1.^52.^)—the replacement of stents and catheters is such a routine activity that it is considered a reasonable expectation, especially when in situ long term.
- Management of any internal device (1.^54.^)—devices such as cardiac pacemaker, lens prosthesis, chest tube, or penile prosthesis will always involve going back to the site of the original implant. Hence, it is redundant to code these as revisions and the attribute is unavailable at this generic intervention.
- Control of bleeding using local application of antihemorrhagic agent, packing, diathermy or thermal device, electrocautery or external manual compression or direct compression to the site (1.^13.^ and not requiring re-apposition by suture, staple etc.).
- Management of operative wounds, e.g. first repair of an incisional hernia, wound debridement, scar revision.
- Implantation of internal device (1.^53.^) when it is the initial (first) implantation of an internal device at a site where an intervention was previously performed.
- A second resection at the same anatomic site—this is usually done to take care of additional diseased tissue and must be considered a “new” resection each time it is performed.
- Any intervention on a surgically created site, (i.e. anatomic sites OW Surgically Constructed Sites in Digestive and Biliary Tract, PV Surgically Created Sites in Urinary Tract and KY Artery with Vein) as these are always, by nature, revisions in themselves and attribute “R” is not available.
- Repeat diagnostic interventions such as biopsies performed to discover if any new pathology has returned to a site or inspections with no further intervention (e.g. a post-operative exploratory laparoscopy) are not “revisions” because they result in no real definitive change to the previous intervention at that anatomy site.


Example:



Diagnosis: Loose left hip arthroplasty
 Previous procedure: Total left hip replacement
 Current intervention: Replacement of acetabular cup using a bone graft and cement

<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T84.03	(M)	A	Mechanical complication of hip prosthesis
Y83.1	(9)	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
1.SQ.53.LA-PM-Q			Implantation of internal device, pelvis, prosthetic device single component [e.g. cup] using combined sources of tissue [e.g. bone, graft, cement/paste]
Status: R			
Location: L			


Rationale: This example meets the criteria for revision because it is a partial redo of an intervention performed previously. It is mandatory to assign the status attribute “R”. The redo is for an unexpected reason.

Example:  Diagnosis: End-of-life of pacemaker
Previous procedure: Implantation of a dual chamber rate responsive pacemaker (DDD)
Current intervention: Total replacement of dual chamber rate responsive pacemaker (DDD) which includes replacement of battery/generator pack and replacement of ventricular and atrial leads

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z45.0	(M)	Adjustment and management of cardiac pacemaker

1.HZ.53.GR-NK Status: R Extent: AV	Implantation of internal device, heart NEC, percutaneous transluminal [transvenous] approach or approach NOS, dual chamber rate responsive pacemaker [DVI, DDD, DDDR modes]
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Rationale: This example meets the criteria for revision because it is a complete redo of an intervention performed previously. It is mandatory to assign the status attribute "R" despite the fact that the status attribute box is yellow. The redo is for an expected reason.

Example:  Diagnosis: Pain in the left knee. Patient had left knee repair with menisectomy two years ago and has developed osteoarthritis now requiring a total knee replacement.
Previous procedure: Knee repair with menisectomy
Current intervention: Total replacement of the knee prosthesis, uncemented, using a tri component prosthetic device

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M17.9	(M)	Gonarthrosis, unspecified

1.VG.53.LA-PP Status: 0 Location: L Extent: 3	Implantation of internal device, knee joint, uncemented, tri component prosthetic device
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Rationale: This example does not meet the criteria for revision because it is not a redo of a previous intervention for the meniscus problem. This is the first implantation of a joint prosthesis.

Example: Diagnosis: Leaking left breast implant
 Previous procedure: Insertion of bilateral silicone breast implants
 Current intervention: Replacement of the left breast prosthesis with a saline implant using open approach and no graft required



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T85.4	(M)	MP	A	Mechanical complication of breast prosthesis and implant
Y83.1	(9)	OP	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
1.YM.79.LA-PM				Repair by increasing size, breast, open approach with implantation of prosthesis without tissue
Status: R				
Location: L				

Rationale: This example meets the criteria for revision because it is a complete redo of an intervention performed previously. It is mandatory to assign the status attribute "R". The redo is for an unexpected reason.

Example: Diagnosis: Incisional hernia in upper abdominal region
 Previous procedure: Cholecystectomy
 Current intervention: Herniorrhaphy with mesh and autograft, open approach



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
K43.2	(M)	MP	Incisional hernia without obstruction or gangrene
1.SY.80.LA-XX-Q			Repair, muscles of the chest and abdomen, open approach using combined sources of tissue [e.g. mesh with autograft]
Status: 0			
Location: UP			

Rationale: This example does not meet the criteria for revision because it is a first time repair of an incisional hernia (i.e. it is not a recurrent incisional hernia that was previously repaired).

Example: Diagnosis: Continued symptoms of nerve entrapment following left carpal tunnel release performed two years previously
 Previous procedure: Carpal tunnel release, left wrist
 Current intervention: Carpal tunnel release, left wrist



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
G56.0	(M)	MP	Carpal tunnel syndrome
1.BN.72.LA			Release, nerve(s) of forearm and wrist, using open approach
Status: R			
Location: L			

Rationale: This example meets the criteria for revision because it is a complete redo of an intervention performed previously. It is mandatory to assign the status attribute "R" despite the fact that the status attribute box is yellow. This redo is for an unexpected reason.

Example: One year after fixation of the 2nd and 3rd metatarsal bones of the right foot, the patient returns for surgery due to excessive pain and migration of the pins (noted on X-ray). The surgeon elects to fuse the MTP joints because of malunion and fixation is not a good option for this obese man. This time, wire is used and an iliac crest bone graft is harvested.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
M84.07	(M)		Malunion of fracture, ankle and foot
T84.15	(1)	A	Mechanical complication of internal fixation device of bones of foot
Y83.1	(9)	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
1.WJ.75.LA-KD-A			Fusion, tarsometatarsal joints, other metatarsal bones and other metatarsophalangeal joints
Status: R			[forefoot], using wire, staple, with bone autograft
Location: R			Procurement, pelvis, of [bone] autograft [e.g. iliac crest bone graft] using open approach
1.SQ.58.LA-XX-A			

Rationale: This example meets the criteria for revision because it is a complete redo of a correction of the fracture, albeit a different intervention to accomplish this. It is mandatory to assign the status attribute “R” despite the fact that the status attribute box is yellow. This redo is for an unexpected reason.

A Staged Intervention Versus Revision of an Intervention

Staged interventions involve a complex course of treatment planned right from the onset. Revisions represent a problem requiring a complete or partial “redo.”



Apply the status attribute “S” to all (initial and subsequent) surgical interventions that are part of the complex course of treatment. Currently capturing staged interventions is optional, but facilities may elect to code this based on their data needs.

Note: At times it may be difficult to tell whether a second procedure is a revision or part of a planned series of steps (stages) to reach the desired outcome. When in doubt, discuss the decision to use the staged or revision attribute with the surgeon.

Example: A child with a cleft face has had the major portion of her face repaired but is now presenting for cleft palate repair.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Q35.9	(M)	Cleft palate, unspecified
1.FB.86.LA-XX-E		Closure, fistula, hard palate, using local flap [e.g. levator veli palatini sling reconstruction; VY advancement flap, vomer flap]
Status: S (optional)		

Example: A child who had her cleft palate repaired is admitted to undergo a reclosure of her palate due to a palatal fistula.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.82	(M)	A	Persistent postoperative fistula
Y83.4	(9)	A	Other reconstructive surgery as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
1.FB.86.LA-XX-E			Closure, fistula, hard palate, using local flap [e.g. levator veli palatini sling reconstruction; VY advancement flap, vomer flap]
Status: R			

Rationale: This is a revision procedure and not a staged procedure. The palatal fistula is a complication of the original repair and was not planned. It is mandatory to assign the status attribute “R” despite the fact that the status attribute box is yellow.

Chapter I—Certain Infectious and Parasitic Diseases

Infections

In effect 2001, amended 2005, 2006



When coding an infection and the causative organism is not known, code the infection by site.

Example: Patient presented with abdominal pain, which was later shown to be due to a urinary tract infection.



<u>Code</u>	<u>Code Title</u>
N39.0	Urinary tract infection, site not specified



When the causative organism is known, classify the case in one of the following three ways as indicated by the classification:

- use the dual classification (dagger/asterisk) with a code specifying the infectious organism followed by the manifestation. Both codes must be used together to identify the infectious disease.
- use a combination code.
- use two codes, the first identifying the locally manifesting disease and the second identifying the infectious organism. The infectious agent is classified to categories B95–B98. Assignment of codes from categories B95–B98 is optional; if coded, they must be assigned diagnosis type (3)/other problem.

Example: Patient was diagnosed with a candidal infection of the vulva and vagina.



<u>Code</u>	<u>Code Title</u>
B37.3†	Candidiasis of vulva and vagina
N77.1*	Vaginitis, vulvitis and vulvovaginitis in infectious and parasitic diseases classified elsewhere

Rationale: This is an example of the first bullet above.

Example: Young patient was diagnosed with streptococcal pharyngitis.



<u>Code</u>	<u>Code Title</u>
J02.0	Streptococcal pharyngitis

Rationale: This is an example of the second bullet above.

Example: After laboratory investigation, the physician confirmed acute cystitis due to E.coli.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
N30.0	(M)	MP	Acute cystitis
B96.2	(3)	OP	Escherichia coli [E. coli] as the cause of diseases classified to other chapters (optional)

Rationale: This is an example of the third bullet above. Assignment of B96.2 is optional.



When only the organism is known and the site is not specified, classify as infection by the organism of unspecified site.

Example: The chart documentation only states: “Staph infection.”



<u>Code</u>	<u>Code Title</u>
A49.0	Staphylococcal infection, unspecified site

See also the coding standard entitled [Drug-Resistant Microorganisms](#).

Drug-Resistant Microorganisms

Click here for description of change.

In effect 2003, amended 2006, 2009, 2012

See also [Appendix A—Drug-Resistant Microorganisms](#) for clinical information.



When there is documentation of a current infection due to a drug-resistant organism, assign, mandatory, the appropriate code combination to identify the:

- site of the infection, as a comorbid diagnosis type/main problem or other problem
- infectious organism, from categories B95–B98 Bacterial, viral and other infectious agents, as a diagnosis type (3)/other problem, when it is not included in a combination code
- drug-resistance, as a comorbid diagnosis type (1) or type (2)/other problem from category:
 - U82 Resistance to betalactam antibiotics; or
 - U83 Resistance to other antibiotics; or
 - U84 Resistance to other antimicrobial drugs.

Note: Ensure that a code from categories U82–U84 is never assigned as the MRDx/main problem.

Note: It is mandatory to apply the diagnosis cluster to the set of codes that describe a drug-resistant microorganism infection. See also the coding standard entitled [Diagnosis Cluster](#).

Example: This patient with primary, bilateral osteoarthritis of the hip was admitted for a left total hip replacement. Five days post surgery, the physician documented that the patient had an infected hip prosthesis with the presence of MRSA in the wound. The patient was started on antibiotics and was placed in isolation. A consult with the infection control nurse resulted in initiation of the MRSA protocol.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
M16.0	(M)		Primary coxarthrosis, bilateral
T84.53	(2)	A	Infection and inflammatory reaction due to hip prosthesis
B95.6	(3)	A	Staphylococcus aureus as the cause of diseases classified to other chapters
U82.1	(2)	A	Resistance to methicillin
Y83.1	(9)	A	Surgical operation as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure with implant of artificial internal device

Example: This patient with known Crohn's disease was experiencing multiple episodes of diarrhea. She was started on a course of vancomycin and metronidazole to treat what was thought to be an exacerbation of her Crohn's disease. The physician documented that the stool cultures came back positive for *Clostridium difficile*, resistant to multiple antibiotics. In the progress notes it stated that the patient was placed in isolation because of enterocolitis due to *Clostridium difficile*. The infection control nurse was consulted and the drug-resistant infection protocol was initiated.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
A04.7	(M)	A	Enterocolitis due to <i>Clostridium difficile</i>
U83.7	(1)	A	Resistance to multiple antibiotics



Assign Z22.30—Carrier of drug-resistant microorganism, mandatory, as a diagnosis type (3)/other problem to identify carriers of drug-resistant microorganisms (i.e. patients who do not have a documented current infection).

What Is the Difference Between Colonization and Infection?

Colonization means that MRSA or VRE is present on or in the body without causing illness. Patients will have no signs or symptoms of infection caused by the organism. A microbiology report may indicate the presence of MRSA or VRE, but the patient will not have an actual infection, however, they are carriers. Treatment of carriers without symptoms of infection is not usually necessary, but they may sometimes be treated with special antibiotic ointments to the nose and/or washing with special antibacterial preparations.

On the other hand, if a patient has a MRSA or VRE infection it means that MRSA or VRE is making the person sick.

Example: This patient presented with congestive heart failure. The physician documented that the swab taken from the patient at the time of admission came back MRSA+. There is no documentation indicating that the patient has a current infection. As a precautionary measure the patient was placed in isolation.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
I50.0	(M)	MP	Congestive heart failure
Z22.300	(3)	OP	Carrier of drug-resistant staphylococcus

Septicemia/Sepsis

[Click here for description of change.](#)

In effect 2001, amended 2005, 2006, 2008, 2009, 2012

A response to infection, sepsis can be a serious condition calling for immediate medical care. If sepsis becomes severe, it can result in extensive tissue damage, organ failure or death. Sepsis can be caused by a number of bacterial, fungal or viral infections that progress into the blood stream. While sepsis can develop from minor infections, such as the flu or a urinary tract infection, it is most likely to develop in people who have serious wounds, extremely weakened immune systems and open or exposed areas from catheters.ⁱ

See also the coding standards entitled [Confirmed Sepsis and Risk of Sepsis in the Neonate](#), [Systemic Inflammatory Response Syndrome \(SIRS\)](#) and [Post-Intervention Conditions](#).



Assign a code for septicemia/sepsis only when the physician has documented the diagnosis. It cannot be assumed nor ruled out on the basis of laboratory values alone.

- When the underlying localized infection is documented, assign an additional code, mandatory, as a significant diagnosis type.
- When septic shock is documented, also assign R57.2 *Septic shock*, mandatory.

Exception: When sepsis and the underlying localized infection are classified using the dagger/asterisk coding convention, the localized infection is either assigned diagnosis type (3) or (6).

i. Canadian Institute for Health Information, *Canadian Hospitals Aim to Reduce Mortality Rates, but Severe Infections Remain a Challenge* (media release), last updated December 10, 2009, accessed on April 13, 2010, from http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=media_20091210_e.
For more information, please refer to the CIHI report *In Focus: A National Look at Sepsis* (Ottawa, Ont.: CIHI, 2009).

Example: The history and physical states that the patient had been seen in the emergency department on January 1 and sent home with a diagnosis of E.coli UTI. The patient returned on January 3, complaining of feeling unwell. He was admitted to ICU with a diagnosis of sepsis.



Final diagnosis: E.coli sepsis due to UTI.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
A41.50	(M)	Sepsis due to Escherichia coli [E.coli]
N39.0	(1)	Urinary tract infection, site not specified
B96.2	(3)	Escherichia coli [E. coli] as the cause of diseases classified to other chapters (optional)

Rationale: When the underlying localized infection is documented in cases of generalized sepsis, codes identifying both sepsis and the localized infection are assigned as significant diagnosis types.

Example: Patient was being treated in ICU for Staphylococcus aureus septicemia due to pneumonia.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
A41.0†	(M)	Sepsis due to Staphylococcus aureus
J17.0*	(3)	Pneumonia in bacterial diseases classified elsewhere

Rationale: Sepsis is documented so A41.0 is assigned. It meets the definition of MRDx and since pneumonia in sepsis is classified using the dagger/asterisk convention, J17.0 cannot be assigned a significant diagnosis type.

Example: A 35-year-old trauma patient was in ICU for several days and developed an E.coli urinary tract infection that progressed to E.coli septicemia. He continued to deteriorate with signs of acute renal failure and hepatic failure and went into septic shock. Despite aggressive treatment the patient died.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
A41.50	(2)	Sepsis due to Escherichia coli [E.coli]
N17.9	(2)	Acute renal failure, unspecified
K72.9	(2)	Hepatic failure, unspecified
R57.2	(2)	Septic shock
N39.0	(2)	Urinary tract infection, site not specified
B96.2	(3)	Escherichia coli [E. coli] as the cause of diseases classified to other chapters (optional)
R65.1	(3)	Systemic inflammatory response syndrome of infectious origin with acute organ failure (optional)

Note: Sometimes physicians will use the term sepsis to describe a localized infection; therefore, care must be taken in code assignment. When the term “sepsis” is used to mean a localized infection, search the lead term “*Infection*” rather than “*Sepsis*.”

Example: Patient underwent an abdominal hysterectomy and was subsequently diagnosed with fever two days following the surgery. The incision site was noted to be reddened and there was purulent drainage. Physician documented that the patient had wound sepsis due to staph epidermidis.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.4	(2)	A	Infection following a procedure, not elsewhere classified
B95.7	(3)	A	Other staphylococcus as the cause of diseases classified to other chapters (optional)
Y83.6	(9)	A	Removal of other organ (partial) (total) as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The physician has used the term “sepsis” to describe a localized infection (redness and purulent drainage). There is no documentation describing an illness affecting the body as a whole; therefore, a code for septicemia/sepsis is not assigned. As this is a post-intervention condition, it is mandatory to assign the diagnosis cluster to all the codes assigned related to this condition. See also the coding standard entitled [Post-Intervention Conditions](#).



When septicemia/sepsis is classified to one of the following:

- O03–O05** *Pregnancy with abortive outcome (with a fourth character .0 or .5)*
 - O07.3** *Failed attempted abortion, complicated*
 - O08.0–** *Genital tract and pelvic infection following abortion and ectopic and molar pregnancy*
 - O75.3–** *Other infection during labour*
 - O85.–** *Puerperal sepsis*
 - O98.–** *Maternal infectious and parasitic diseases complicating pregnancy, childbirth and the puerperium (with a fourth character of .2, .5 or .8)*
 - T80.2** *Infections following infusion, transfusions and therapeutic injection*
 - T81.4** *Infection following a procedure, not elsewhere classified*
 - T88.0** *Infection following immunization*
 - T82–T85** *Infections and inflammatory reaction due to prosthetic devices, implants and grafts*
- assign the appropriate code from the list above as a significant diagnosis type/main or other problem; and
 - assign an additional code, mandatory, to identify the type of sepsis, as a diagnosis type (3)/other problem.

Note: Categories T82–T85 *Infections and inflammatory reaction due to prosthetic devices, implants and grafts* are used only when an infected device, implant or graft is documented as causing the sepsis. Otherwise T81.4 *Infection following a procedure, not elsewhere classified*, is assigned. See also the coding standard entitled [Complications of Devices, Implants and Grafts](#).

Example: Patient had an incomplete spontaneous abortion with candidial septicemia diagnosed during the current episode of care.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O03.0	(M)	MP	Spontaneous abortion, incomplete, complicated by genital tract and pelvic infection
B37.7	(3)	OP	Candidial sepsis

Example: Patient developed postoperative E. coli septicemia following total colectomy with stoma creation.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.4	(2)	A	Infection following a procedure, not elsewhere classified
A41.50	(3)	A	Sepsis due to Escherichia coli [E.coli]
Y83.3	(9)	A	Surgical operation with formation of external stoma as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Example: Patient developed postoperative staphylococcal sepsis documented as due to a prosthetic cardiac valve replacement.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T82.6	(2)	A	Infection and inflammatory reaction due to cardiac valve prosthesis
A41.2	(3)	A	Sepsis due to unspecified staphylococcus
Y83.1	(9)	A	Implant of artificial internal device, as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure



When more than one causative organism of septicemia/sepsis is documented, assign a code for each.

Example: Patient has septicemia documented as due to E. coli and staphylococcus bacteria.



<u>Code</u>	<u>Code Title</u>
A41.50	Sepsis due to Escherichia coli [E.coli]
A41.2	Sepsis due to unspecified staphylococcus

Human Immunodeficiency Virus (HIV) Disease

[Click here for description of change.](#)

In effect 2001, amended 2005, 2006, 2007, 2008, 2012

DN When a patient with AIDS/HIV disease presents for management of a manifestation(s) of AIDS/HIV disease, assign:

- B24 Human immunodeficiency virus [HIV] disease as the MRDx/main problem; and
- an additional code as a diagnosis type (1)/other problem in the second position for the manifestation being treated.

DN When AIDS or HIV disease is recorded as a diagnosis, assume that a *documented* condition, classified to the code ranges below, is a manifestation of AIDS/HIV disease:

- Infectious and viral diseases: A00–B19, B25–B34, B99;
- Mycoses: B35–B49;
- Protozoal diseases: B58–B64;
- Neoplasms: C46.–, C81–C96; or
- Pneumonia (viral, bacterial and infectious): J12–J18.ⁱⁱ

Note: The above directives apply when AIDS or HIV disease is recorded; it does not apply when the diagnosis is “HIV positive”.

AIDS manifestations are not limited to the code ranges above. The list above shows the “assumed” manifestations if no connection is provided in the documentation. When a condition is documented as *resulting from* HIV disease or AIDS, classify that condition as a manifestation.

Note: B24 *Human Immunodeficiency virus [HIV] disease* cannot appear as the MRDx/main problem without an additional code for at least one manifestation.

Note: B24 *Human Immunodeficiency virus [HIV] disease* must not be recorded as a post-admit comorbidity (diagnosis type (2)).

Example: Patient with AIDS admitted for treatment of Kaposi’s sarcoma of the soft palate. Patient also has lymphoma, which is not actively treated at this admission.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
B24	(M)	Human immunodeficiency virus [HIV] disease
C46.2	(1)	Kaposi’s sarcoma of palate
C85.9	(3)	Non-Hodgkin’s lymphoma, unspecified type

ii. World Health Organization, “Rules and Guidelines for Mortality and Morbidity Coding,” *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Volume 2, Second Edition* (Geneva, Switzerland: World Health Organization, 2004), p. 42.

Example: A patient with AIDS is treated for PCP pneumonia.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
B24	(M)	MP	Human Immunodeficiency virus [HIV] disease
B59†	(1)	OP	Pneumocystosis
J17.3*	(3)	OP	Pneumonia in parasitic diseases

Example: A patient with AIDS encounters the health care system for treatment of wasting syndrome due to HIV.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
B24	(M)	MP	Human Immunodeficiency virus [HIV] disease
R64	(1)	OP	Cachexia



When the diagnosis is recorded as “HIV Positive” with no documentation of AIDS or HIV disease and the patient:

- has an indicator disease as listed on the *National Surveillance Case Definitions for AIDS-Indicator Disease* (provided below), assign B24 *Human immunodeficiency virus [HIV] disease*.
- does not have an indicator disease as listed on the *National Surveillance Case Definitions for AIDS-Indicator Disease* (provided below), assign Z21 *Asymptomatic human immunodeficiency virus [HIV] infection status*.

National Surveillance, Case Definition for Acquired Immunodeficiency Syndrome (AIDS), Indicator Diseases for Adults and Adolescents ≥15 Years of Ageⁱⁱⁱ

Bacterial pneumonia, recurrent
Candidiasis, bronchi, trachea or lungs
Candidiasis, esophageal
Cervical cancer, invasive
Coccidioidomycosis, disseminated or extrapulmonary
Cryptococcosis, extrapulmonary
Cryptosporidiosis chronic intestinal, >1 month duration
Cytomegalovirus diseases, other than in liver, spleen or nodes
Cytomegalovirus retinitis, with loss of vision
Encephalopathy, HIV-related dementia
Herpes simplex: chronic ulcer(s), >1 month duration, or bronchitis, pneumonitis or esophagitis
Histoplasmosis, disseminated or extrapulmonary
Isosporiasis, chronic intestinal >1 month duration
Kaposi's sarcoma
Lymphoma, Burkitt's or equivalent term
Lymphoma, immunoblastic or equivalent term
Lymphoma, primary in brain
Mycobacterium avium complex or *Mycobacterium kansasii*, disseminated or extrapulmonary
Mycobacterium of other species or unidentified species
Mycobacterium tuberculosis, disseminated or extrapulmonary
Mycobacterium tuberculosis, pulmonary
Pneumocystis carinii pneumonia
Progressive multifocal leukoencephalopathy
Salmonella sepsis, recurrent
Toxoplasmosis of brain
Wasting syndrome due to HIV

Indicator Diseases for Pediatric Cases Only (<15 Years Old)

Bacterial infections, multiple or recurrent, excluding recurrent bacterial pneumonia
Lymphoid interstitial pneumonia and/or pulmonary lymphoid hyperplasia

iii. Advisory Committee on Epidemiology and the Division of Disease Surveillance, Bureau of Infectious Diseases, Laboratory Centre for Disease Control, Health Protection Branch, Health Canada, (2000). *Case Definitions for Diseases Under National Surveillance*. Retrieved from the World Wide Web: <<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/00pdf/cdr26s3e.pdf>> (2000). Page 61.

Example: A patient with a diagnosis of “HIV Positive” is admitted for treatment of disseminated histoplasmosis.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
B24	(M)	Human immunodeficiency virus [HIV] disease
B39.3	(1)	Disseminated histoplasmosis capsulati

Rationale: When a patient presents to hospital with one (or more) conditions from the National Surveillance Case Definitions for AIDS list, (i.e. an “indicator disease”) and the clinical documentation only states the patient is “HIV positive” then it is assumed the patient has HIV disease classifiable to B24, not simply Z21 *Asymptomatic human immunodeficiency virus [HIV] infection status*.

Example: A patient is admitted for treatment of Staphylococcus pneumonia. The documentation also states that the patient is “HIV positive.”



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J15.2	(M)	MP	Pneumonia due to Staphylococcus
Z21	(3)	OP	Asymptomatic human immunodeficiency virus [HIV] infection status

Rationale: In this example, the documentation is stated as “HIV positive.” Staphylococcus pneumonia is not recorded as recurrent; therefore, documentation does not support that this patient has an indicator disease for AIDS. Z21 *Asymptomatic human immunodeficiency virus [HIV] infection status* is assigned for the diagnosis of “HIV positive.”



Ensure that the following mutually exclusive codes are not assigned for the same episode of care:

- R75 *Laboratory evidence of human immunodeficiency virus [HIV]*
- Z21 *Asymptomatic human immunodeficiency virus [HIV] infection status*
- B24 *Human immunodeficiency virus [HIV] disease*



Ensure that R75 is not assigned as the MRDx/main problem as it relates to patients who have an inconclusive HIV test.



When patients are admitted and discharged on the same day for primary prophylactic chemotherapy for HIV infection, select Z29.2 *Other prophylactic chemotherapy* as the MRDx/main problem with Z21 *Asymptomatic human immunodeficiency virus [HIV] infection status* as an additional diagnosis type (3)/other problem.

Example: HIV infected patient with no symptoms attends for anti-retroviral therapy on a same day basis.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z29.2	(M)	MP	Other prophylactic chemotherapy
Z21	(3)	OP	Asymptomatic human immunodeficiency virus [HIV] infection status



When a patient who has previously been identified as having AIDS presents with a condition that is unrelated to the HIV disease, and that condition fulfils the criteria for MRDx/main problem, assign the presenting condition as the MRDx/main problem for that admission.

Example: Patient suffered a Colles fracture of the right arm due to a fall on ice on a sidewalk. The patient also has active HIV disease. His fracture was treated and he was discharged two days later.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
S52.500	(M)	Colles' fracture, closed
W00	(9)	Fall on same level involving ice and snow
U98.4	(9)	Place of occurrence, street and highway
U99.9	(9)	During unspecified activity (optional)
B24	(3)	Human immunodeficiency virus [HIV] disease

Viral Hepatitis

In effect 2002

See also [Appendix A—Viral Hepatitis](#) for clinical information.



Classify a diagnostic statement of “hepatitis B positive,” without any indication of an infectious process, to Z22.50 *Carrier of viral hepatitis B*.



When a “history of hepatitis B” is documented, clarify the diagnosis with the physician. Do not assume the patient is a carrier of hepatitis B nor that the patient has current acute or chronic hepatitis B.

Example: Patient’s chart indicates only that he is “hepatitis B positive.” There is no indication of an infective process.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z22.50	(3)	OP	Carrier of viral hepatitis B



When “history of hepatitis C” is documented, clarify the diagnosis with the physician. Where consultation is not possible, assign Z22.51 *Carrier of viral hepatitis C*.



When ambiguous terms such as “hepatitis C” or “hepatitis C positive” are recorded on the chart and the patient has symptoms of hepatitis C, clarify the diagnosis with the physician to determine if the disease is in the acute or chronic stage. Where consultation is not possible, assign B18.2 *Chronic viral hepatitis C*.



When the patient is asymptomatic and ambiguous terms such as “hepatitis C” or “hepatitis C positive” are recorded, assign Z22.51 *Carrier of viral hepatitis C*.

Example: Patient’s condition is documented as “hepatitis C.” Physician consultation regarding whether this was at an acute or chronic stage is not possible.



<u>Code</u>	<u>Code Title</u>
B18.2	Chronic viral hepatitis C

Chapter II—Neoplasms

Primary and Secondary Neoplasms

In effect 2001, amended 2005, 2006, 2007, 2009

- DN** When a patient is diagnosed with a primary neoplasm with metastasis, and treatment is directed equally toward both the primary and secondary sites, sequence the primary site before the secondary site.
- DN** When metastasis is diagnosed during an episode of care, assign diagnosis type (1)/other problem for the specified metastatic sites.

Note: Codes from the range C00–D48 are never assigned diagnosis type (2).

Example: Patient is diagnosed with right lower lobe lung cancer with vertebral metastasis. Chemotherapy is initiated for the primary lesion and radiotherapy sessions given to treat the bony metastasis.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C34.30	(M)	Malignant neoplasm of lower lobe, right bronchus or lung
C79.5	(1)	Secondary malignant neoplasm of bone and bone marrow
1.ZZ.35.HA-M0		Pharmacotherapy, total body, percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] using antineoplastic agent NOS
1.SC.27.JA		Radiation, spinal vertebrae, using external beam

Example: Patient is admitted for modified radical mastectomy. Pathology report shows infiltrating ductal carcinoma of the right breast. Three axillary lymph nodes are positive for metastases.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C50.90	(M)	Malignant neoplasm of right breast, part unspecified
C77.3	(1)	Secondary malignant neoplasm of axillary and upper limb lymph nodes

Rationale: Metastasis to the axillary lymph nodes was diagnosed during the episode of care and qualifies as a diagnosis type (1).

- DN** When a patient is diagnosed with a secondary neoplasm, assign an additional code, mandatory, to identify the primary site; either a code from Chapter II—*Neoplasms* or category Z85 *Personal history of malignant neoplasm*.

See also the coding standard entitled [Personal and Family History of Malignant Neoplasms](#).

Example: Patient with an inoperable malignant neoplasm of the sigmoid colon is admitted for aspiration of malignant ascites with drainage tube. No treatment is directed toward the colon cancer.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C78.6	(M)	Secondary malignant neoplasm of retroperitoneum and peritoneum
C18.7	(3)	Malignant neoplasm of sigmoid colon
1.OT.52.HA-TS		Drainage, abdominal cavity, using percutaneous (needle) approach and leaving drainage tube in situ

Example: Patient presents to day surgery for bronchoscopy and lung biopsy. The morphology revealed metastatic carcinoma from the patient's primary breast malignancy. Patient had a radical mastectomy five years ago.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C78.0	(M)	MP	Secondary malignant neoplasm of lung
Z85.3	(3)	OP	Personal history of malignant neoplasm of breast
2.GT.71.BA			Biopsy, lung, using endoscopic per orifice approach



When a **primary site is specified** and “carcinomatosis” is recorded as a final diagnosis:

- without mention of the specific secondary sites, assign **C79.9 Secondary malignant neoplasm, unspecified site**.
- with mention of the specific secondary sites, assign individual codes for the secondary sites.



When the **primary site is unspecified** and “carcinomatosis” is recorded as a final diagnosis, assign two codes: **C80.9 Malignant neoplasm, primary site unspecified** and **C79.9 Secondary malignant neoplasm, unspecified site**.

Example: Patient diagnosed with primary malignancy of his sigmoid colon “with carcinomatosis.” The metastatic sites are not documented.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C18.7	(M)	Malignant neoplasm of sigmoid colon
C79.9	(1)	Secondary malignant neoplasm, unspecified site

Rationale: The primary site is known; therefore, a statement of “carcinomatosis” is referable to metastatic spread from the primary site. There is no mention of the secondary sites so C79.9 is assigned to identify metastatic cancer.

Example: Patient was brought in complaining of severe abdominal pain. She was admitted by the general surgeon. Exploratory laparotomy revealed extensive carcinomatosis.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C80.9	(M)	Malignant neoplasm, primary site unspecified
C79.9	(1)	Secondary malignant neoplasm, unspecified site

Rationale: When a patient is diagnosed with a secondary neoplasm, it is mandatory to identify the primary site. In this example, the primary site is unspecified therefore C80.9 is assigned.

Example: Patient is investigated during the admission and the pathology report identifies primary carcinoma of the pancreas with metastases to the lung, bone and brain. The final diagnosis is stated as “carcinomatosis.”



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C25.9	(M)	Malignant neoplasm pancreas part unspecified
C78.0	(1)	Secondary malignant neoplasm of lung
C79.3	(1)	Secondary malignant neoplasm of brain and cerebral meninges
C79.5	(1)	Secondary malignant neoplasm of bone and bone marrow

Rationale: The primary and metastatic sites are known and specifically documented; therefore, a code for each site is assigned.

Multiple Independent Primary Neoplasms

[Click here for description of change.](#)

In effect 2001, amended 2005, 2006, 2012



When a patient is diagnosed with multiple independent primaries, assign a code to identify the site of each primary neoplasm.

- In addition, assign C97 *Malignant neoplasms of independent (primary) multiple sites, optional*, as a diagnosis type (3)/other problem.

Example: Patient had an exploratory laparoscopy in which her left ovary and colon were biopsied. Pathology report revealed separate primary malignancies of the ovary and the colon.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C56.0	(M)	MP	Malignant neoplasm of ovary, unilateral
C18.9	(1)	OP	Malignant neoplasm of colon, unspecified
C97	(3)	OP	Malignant neoplasms of independent (primary) multiple sites (optional)



When a patient is diagnosed with documented separate primary invasive neoplasms in the same organ, but of non-contiguous sites, code each separate primary neoplasm.

- In addition, assign **C97 Malignant neoplasms of independent (primary) multiple sites, optional**, as a diagnosis type (3)/other problem.

Example: Patient has investigation and diagnosis of transitional cell carcinoma of the posterior wall of the bladder, and a separate non-contiguous transitional cell carcinoma of the trigone of the bladder.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C67.4	(M)	MP	Malignant neoplasm of posterior wall of bladder
C67.0	(1)	OP	Malignant neoplasm of trigone of bladder
C97	(3)	OP	Malignant neoplasms of independent (primary) multiple sites (optional)

Example: The pathology report describes two malignant primary neoplasms of the right breast, both in the 12 o'clock position, but non-contiguous (one is superior to the other).



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C50.80	(M)	MP	Overlapping malignant lesion of right breast
C50.80	(1)	OP	Overlapping malignant lesion of right breast
C97	(3)	OP	Malignant neoplasms of independent (primary) multiple sites (optional)

Rationale: The fourth character .8 has been selected because the 12 o'clock position overlaps the outer and inner quadrant. This case is **not** one of a contiguous neoplasm whose point of origin cannot be determined. Even though these fall to the same code, it is listed twice to describe the circumstances of two separate primaries.



When a patient has separate primary invasive neoplasms and in situ neoplasia at separate non-contiguous locations within the same organ, assign a code for each.

Note: **C97 Malignant neoplasms of independent (primary) multiple sites applies to multiple primary invasive neoplasms only. An in situ neoplasm is not an invasive neoplasm; it is defined by the absence of invasion of surrounding tissues. C97 is not assigned in such cases of multiple in situ OR a single invasive and an in situ neoplasm.**

Example: The patient was admitted for left mastectomy for carcinoma of the upper outer quadrant of the breast. The pathology report describes infiltrating duct carcinoma and a non-contiguous carcinoma in situ in the 2 o'clock position.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C50.41	(M)	Malignant neoplasm of upper-outer quadrant of left breast
D05.1	(1)	Intraductal carcinoma in situ

Rationale: Two codes are assigned; one for the infiltrating duct carcinoma and one for the carcinoma in situ. There is only one primary invasive neoplasm present, therefore C97 is not assigned.

Neoplasms Arising in Lymphoid, Hematopoietic and Related Tissue

In effect 2001, amended 2006



When there is documentation of more than one site of malignancy in lymphatic and hematopoietic tissues, (i.e. one in each system) code each site as a separate primary neoplasm.

Example: Patient admitted with multiple myeloma also determined to have developed leukemia.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C90.0	(M)	MP	Multiple myeloma
C95.9	(1)	OP	Leukemia, unspecified



When a primary of the lymphoid hematopoietic or related tissues (categories C81–C96) are documented to have metastasized, do not assign a secondary malignancy neoplasm code.

Unlike solid tumors of other sites, neoplasms that arise in lymphatic and hematopoietic tissues do not metastasize to secondary sites. The malignant cells circulate within the lymphatic or hematopoietic circulation and may occur in other sites within these tissues, but they are considered to be part of the primary disease rather than metastatic spread.

The physician documentation may describe the extent of these malignancies using terminology such as “spread to” or “metastasis to”; however, these are included in the appropriate code from C81–C96.ⁱ

Example: Patient with multiple myeloma is stated to have metastatic spread to pelvis and spine.



<u>Code</u>	<u>Code Title</u>
C90.0	Multiple myeloma

Example: Patient with non-Hodgkin’s lymphoma is stated to have metastatic spread to the inguinal nodes.



<u>Code</u>	<u>Code Title</u>
C85.9	Non-Hodgkin lymphoma, unspecified



When documentation indicates “leukemia in remission,” assign a code from categories C91 to C95.

Example: Patient is stated to have leukemia in remission for six months.



<u>Code</u>	<u>Code Title</u>
C95.9	Leukemia, unspecified

Rationale: Leukemia described as “in remission” cannot be specifically identified in ICD-10-CA. “In remission” means the disease activity has abated, but the condition is still present. Diagnosis type will depend on the circumstances documented in the record.

i. Joy Fletcher, *ICD10-CA/CCI Classification Primer*, third edition, p. 5.16 et 5.17.

Neoplasms Extending Into Adjacent Tissue

In effect 2002

DN Classify neoplasms to the point of origin when documented as “invading into” or “extending into” adjacent sites.

Example: Pancreatic malignancy extending into the duodenum.



Code
C25.9

Code Title
Malignant neoplasm pancreas part unspecified

Neoplasms of Ectopic Tissue

In effect 2006

DN Classify neoplasms of ectopic or aberrant tissue to the anatomy site of origin.

Example: A 54-year-old woman presents with evidence of an anterior mediastinal mass suspicious for parathyroid adenoma. She was taken to the OR for removal of the mass by a partial sternotomy. Pathology report diagnosis states ectopic nodular parathyroid adenoma.



Code
D35.1

DAD
(M)

Code Title
Benign neoplasm of parathyroid gland

1.FV.87.PZ
Location: AT

Excision partial, parathyroid gland, open substernal approach, using device NEC

Rationale: Although the lesion was in the mediastinum, it is of parathyroid tissue and classified as a benign lesion of the parathyroid. The removal of the lesion is also classified to the organ of origin. See also the coding standard entitled [Destruction or Excision of Aberrant/Ectopic Tissue](#).

Neoplasms With Overlapping Boundaries (Contiguous Sites)

In effect 2001, amended 2006

DN Classify a neoplasm that overlaps two or more contiguous sites within a three character category and whose point of origin cannot be determined to the subcategory .8 (overlapping lesion), unless the combination is specifically indexed elsewhere.

Example: Patient has a carcinoma of the tip and ventral surface of the tongue, no point of origin determined or documented.



Code
C02.8

Code Title
Overlapping malignant lesion of tongue

Example: Patient has a carcinoma of the tip of the tongue documented as “with invasion” or “spreading to” the ventral surface of the tongue.



Code
C02.1

Code Title
Malignant neoplasm of border of tongue

Rationale: The point of origin is known, and stated as the tip of the tongue.

Example: Patient has a malignant neoplasm which overlaps the junction of the esophagus and stomach.



<u>Code</u>	<u>Code Title</u>
C16.0	Malignant neoplasm of cardia

Rationale: This site of overlap (of sites next to each other) is indexed separately.



Classify a neoplasm that overlaps two or more contiguous sites of separate three character categories and whose point of origin cannot be determined to a distinct single code listed in ICD-10-CA at the beginning of Chapter II—Neoplasms (C00–D48) at Note #5.

Example: Patient has a malignant neoplasm, which is stated as overlapping the pylorus and duodenum.



<u>Code</u>	<u>Code Title</u>
C26.8	Overlapping malignant lesion of digestive system

Rationale: Malignant neoplasm of the pylorus is classified to C16.4 and malignant neoplasm of the duodenum is classified to C17.0. Since the neoplasm overlaps the two sites otherwise classified at different three character categories, and its point of origin cannot be determined, the code for overlapping lesion of the digestive tract is assigned. Coders are directed to the notes at the beginning of Chapter II—Neoplasms, where they will find a list of applicable .8 categories.

Admissions Following Diagnosis of Cancer

In effect 2001, amended 2006



When a patient is admitted for definitive surgery to remove tissue from the site of a neoplasm that has previously been excised, assign a code for the primary malignancy as the MRDx/main problem. This is the case even when the pathology report for the current episode is negative for malignancy.

Example: Patient had a skin lesion removed from her shoulder area as an outpatient. The pathology report showed malignant melanoma. Patient returned for wider excision. Pathology was negative for malignancy.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C43.6	(M)	MP	Malignant melanoma of upper limb, including shoulder

Rationale: Definitive surgery includes removal of a neoplasm and/or surrounding tissue. As in this example, the physician most often documents the diagnosis as malignancy in accordance with the initial biopsy or excision. The coder should accept this diagnosis, even though the pathology report shows no malignancy remaining, since the surgery is part of the treatment plan for the malignant condition.

Complications of Malignant Disease

In effect 2001, amended 2003, 2006

DN When a patient is admitted for treatment of a specific complication of the malignancy, without treatment directed towards the malignancy itself, assign the code for the complication as the MRDx/main problem.

- Assign the code for the malignancy as a diagnosis type (3)/other problem.

Exception: When the complication is captured as an asterisk code, assign the malignancy as the MRDx and the asterisk code as a diagnosis type (6).

Example: Family members brought the patient to the emergency department. He is complaining of lethargy, fever, and generalized pain. The emergency department physician admits the patient for treatment of his streptococcal septicemia. He has chronic myeloid leukemia.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
A40.9	(M)	MP	Streptococcal sepsis, unspecified
C92.1	(3)	OP	Chronic myeloid leukaemia [CML], BCR/ABL-positive

Example: Patient has primary adenocarcinoma of the lung and is admitted for management of resulting anemia.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C34.99†	(M)	Malignant neoplasm bronchus or lung, unspecified, unspecified side
D63.0*	(6)	Anaemia in neoplastic disease

DN When a patient is admitted for management of a side effect of cancer treatment, assign a code for the side effect as the MRDx/main problem.

- Assign the code for the malignancy as a diagnosis type (3)/other problem.

Example: Patient is admitted for treatment of chemotherapy-induced neutropenia. The patient is receiving a combination of chemotherapy agents, as an outpatient, for treatment of cancer of the left lower lobe of the lung.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
D70.0	(M)	A	Neutropenia
Y43.3	(9)	A	Other antineoplastic drugs causing adverse effects in therapeutic use
C34.31	(3)		Malignant neoplasm of lower lobe, left bronchus or lung

Example: Patient is undergoing outpatient radiotherapy sessions for advanced carcinoma of the prostate. He presents to the emergency department complaining of the inability to urinate for the past 12 hours. The emergency department physician orders blood tests, urinalysis, X-ray of the kidney with IV contrast and urinary catheterization. The patient is transferred to urology service with the admitting diagnosis of urinary retention.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
R33	MP	Retention of urine
C61	OP	Malignant neoplasm of prostate
3.PC.10.VC		Xray, kidney, following intravenous injection of contrast (with or without fluoroscopy)



Assign diagnosis type (2), post-admit comorbidity, to side effects of chemotherapy arising during a patient's admission for diagnosis and initial treatment for cancer, when the condition satisfies the criteria for post-admit comorbidity.

Example: A patient newly diagnosed with acute lymphoblastic leukemia, has his initial chemotherapy treatment while in hospital. He experiences significant nausea and vomiting requiring IV therapy.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
C91.0	(M)		Acute lymphoblastic leukaemia [ALL]
R11.3	(2)	A	Nausea with vomiting
Y43.3	(9)	A	Other antineoplastic drugs causing adverse effects in therapeutic use
1.ZZ.35.HA-M0			Pharmacotherapy, total body, percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] using antineoplastic agent NOS

See also the coding standard entitled [Adverse Reactions in Therapeutic Use Versus Poisonings](#).

Recurrent Malignancies

In effect 2002, amended 2008



Assign a code from categories C00–C75 when a primary malignancy, eradicated from the same organ or tissue, has recurred.

- **Assign an additional code, mandatory, from category Z85 *Personal history of malignant neoplasm*, as a diagnosis type (3)/other problem to identify the primary site.**

Example: Patient was diagnosed with infiltrating ductal carcinoma of the right breast and underwent a lumpectomy with removal of the entire lesion. A year later, she came in with a nodule in the same breast at the site of the previous lumpectomy. Needle biopsy showed infiltrating ductal carcinoma. This is a recurrence of the primary malignancy.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C50.90	(M)	MP	Malignant neoplasm of right breast, part unspecified
Z85.3	(3)	OP	Personal history of malignant neoplasm of breast

Example: Patient was diagnosed with infiltrating ductal carcinoma of the right breast and underwent a mastectomy with removal of the entire breast. A year later she came in with a nodule at the site of the previous mastectomy. Needle biopsy showed infiltrating ductal carcinoma. Physician documentation and pathology report stated that there was recurrence of the infiltrating ductal carcinoma in the right chest wall (after the mastectomy).



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C50.90	(M)	MP	Malignant neoplasm of right breast, part unspecified
Z85.3	(3)	OP	Personal history of malignant neoplasm of breast

Example: Patient was diagnosed with infiltrating ductal carcinoma of the right breast and underwent a lumpectomy with removal of the entire lesion. A year later she came in with a nodule in the same breast at the site of the previous lumpectomy. Physician documentation and pathology report stated metastatic infiltrating ductal carcinoma in skin of lumpectomy scar.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C79.2	(M)	MP	Secondary malignant neoplasm of skin
Z85.3	(3)	OP	Personal history of malignant neoplasm of breast

Rationale: This is not classified as a recurrent malignancy of the primary site because it has metastasized to a different organ/tissue.

Example: A patient with a primary malignant neoplasm of the brain underwent a debulking procedure. A year later he returns to hospital for further debulking.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C71.9	(M)	Malignant neoplasm of brain unspecified

Rationale: A debulking procedure does not eradicate the lesion; malignant tissue would have been left at the site and continued to grow. This is not a recurrent malignancy and Z85.– is not assigned.

See also the coding standards entitled [Personal and Family History of Malignant Neoplasms](#) and [Debulking of a Space-Occupying Lesion](#).

Interventions Relevant to Neoplasm Coding

[Click here for description of change.](#)

In effect 2001, amended 2006, 2007, 2012

Generally speaking, in the Canadian Classification of Interventions the therapeutic interventions performed on body sites are hierarchical in nature and this means that the higher the number in the third field (intervention), the more extensive or complex the intervention. The destruction and excisional interventions are of particular relevance in neoplasm treatment.



When no body tissue is removed, only destroyed, select a code from 1.^.^59.^.^ Destruction.

1.^.^59.^.^ *Destruction* includes ablation of tissue, often using extreme heat (laser, cautery), extreme cold (cryoprobe) or chemicals (chemical cautery). There is no tissue removed, just destroyed. Sometimes debulking of a neoplasm may be done in this way if none of the actual body parts is being removed.

Example: Patient with malignant neoplasm of the large intestine has an endoscopic debulking of the neoplasm using a laser device.

1.NM.59.BA-AG Destruction, large intestine, using endoscopic per orifice approach and laser



When a neoplasm is excised locally, with a margin of normal tissue, with or without grafting to the surgical defect, select a code from 1.^.^87.^.^ *Excision, partial.*

Example: Lumpectomy of the breast.

1.YM.87.LA Excision partial, breast, using open approach with simple apposition of tissue (e.g. suturing)

Note: There is no separate generic intervention for excisional biopsy in CCI. This intervention is classified as a partial excision of the anatomic site involved.

Example: Lumpectomy of the breast with autograft to fill in defect.

1.YM.87.LA-XX-A Excision partial, breast, using open approach and autograft (to close defect)



When a neoplasm is excised by removing an entire body part (except amputations), with or without grafting to the surgical defect, select a code from 1.^.^89.^.^ *Excision, total.*

Example: Patient with breast malignancy underwent a simple total mastectomy with grafting of defect.

1.YM.89.LA-XX-A Excision total, breast, using open approach and autograft



For the four anatomic sites Eyelid (CX), Esophagus (NA), Vulva (RW) and Breast (YM), select a code from 1.^.^88.^.^ *Excision, partial, with reconstruction* when the intervention includes an excision that is not as extensive as total or radical excision, but includes reconstruction and/or prosthetic implants.

Example: Patient with malignant neoplasm of the eyelid has a partial excision of the eyelid with a local flap reconstruction performed at the same episode.

1.CX.88.UD-XX-E Excision, partial, with reconstruction, eyelid NEC, full thickness excision of major lesion, with local flap



When an excision of tissue includes removal of adjacent body structures, with or without complex repair of the wide surgical defect, select a code from 1.^.^91.^.^ *Excision, radical.*

Example: A patient with osteosarcoma of the humeral head is treated with a “limb sparing” radical excision of the humerus with prosthetic implants.

1.TK.91.LA-PM Excision radical, humerus, using endoprosthesis [humeral head], no tissue used (for closure of defect)

Rationale: In CCI, a radical excision does not require a total excision of a body part. It usually means organs from multiple body systems are involved in the excision. There may be partial or total excision of the multiple sites. This intervention is often used for definitive surgical treatment of large malignant neoplasms.

See also the coding standards entitled [Brachytherapy](#) and [Admission for Administration of Chemotherapy, Pharmacotherapy, and Radiation Therapy](#).

Brachytherapy

[Click here for description of change.](#)

In effect 2012



When a patient is admitted for brachytherapy, assign a code for the malignant disease as the MRDx/main problem.



Assign separate intervention codes for the preparation for brachytherapy and the administration of brachytherapy.

Admissions for brachytherapy should not be confused with admissions for radiation therapy.

There are typically two distinct phases required to complete the process of brachytherapy. The first phase involves the insertion of non-radioactive applicators or conduits [e.g. hollow needles, catheters, stents, etc.] that receive or transmit the radioactive material into the body. The second phase involves the after loading of the radioactive material [e.g. seeds, pellets, wires, etc.] into the applicator or conduit. These stages may occur at the same operative episode or in separate episodes.

Example: Cancer of the prostate gland. Patient admitted for percutaneous transcatheter interstitial implantation of radioactive material. Brachytherapy applicator implanted at same episode.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C61	(M)	MP	Malignant neoplasm of prostate
1.QT.26.HA			Brachytherapy, prostate, using percutaneous (transcatheter or trans-needle) approach
1.QT.53.HA-EM			Implantation of internal device, prostate, of brachytherapy applicator using percutaneous approach

Example: Patient admitted for brachytherapy treatment of cancer of the uterus. Hysteroscopic approach was used to insert the brachytherapy applicator in a separate episode on day one and the sealed radiation source after-loaded on the second day.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C54.9	(M)	Malignant neoplasm corpus uteri NOS
1.RM.53.BA-EM (First episode)		Implantation of internal device, uterus and surrounding structures, of brachytherapy applicator using endoscopic per orifice (hysteroscopic) approach
1.RM.26.BA (Second episode)		Brachytherapy, uterus and surrounding structures, using endoscopic per orifice (hysteroscopic) approach

Example: Patient is admitted to have brachytherapy catheters inserted for breast cancer of the upper outer quadrant of the right breast.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C50.40	(M)	Malignant neoplasm of upper-outer quadrant of right breast
1.YM.53.HA-EM		Implantation of internal device, breast, of brachytherapy applicator using percutaneous approach

Example: Same patient as above, presented to the chemotherapy clinic for brachytherapy (i.e. afterloading of brachytherapy catheters) for breast cancer of the upper outer quadrant of the right breast.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
C50.40	MP	Malignant neoplasm of upper-outer quadrant of right breast
1.YM.26.HA		Brachytherapy, breast, using percutaneous (transcatheter or transneedle) approach

Other Standards Related to Neoplasm Coding

- *Admission for Observation;*
- *Admission for Follow-Up Examination;*
- *Screening for Specific Disease;*
- *Prophylactic Organ Removal;*
- *Admission for Administration of Chemotherapy, Pharmacotherapy, and Radiation Therapy;* and
- *Personal and Family History of Malignant Neoplasms.*

Chapter III—Diseases of the Blood and Blood-Forming Organs and Certain Disorders Involving the Immune Mechanism

Acute Blood Loss Anemia

[Click here for description of change.](#)

In effect 2012

Acute blood loss is the sudden loss of blood. It can be due to many factors including trauma such as a ruptured spleen; a ruptured blood vessel (e.g. ruptured abdominal aortic aneurysm); a postpartum hemorrhage; an acute gastrointestinal hemorrhage; or as the result of the loss of blood during a surgical intervention. Acute blood loss anemia is anemia resulting from or due to an episode of acute loss of blood and is classified to D62 *Acute posthaemorrhagic anaemia*. The physician can diagnose acute blood loss anemia based on hematological analysis. The amount of blood loss that leads to a diagnosis of anemia is dependent on individual patient characteristics. Other factors such as body mass index and the presence or absence of comorbidities that are taken into consideration when establishing a diagnosis of anemia apply also to acute blood loss anemia.



When anemia is documented as resulting from or due to an episode of acute blood loss or acute hemorrhage assign D62 *Acute posthaemorrhagic anaemia*.

Note: When a link between an episode of acute blood loss and unspecified anemia is not established in the documentation, do not assume it is anemia due to acute blood loss. For example, a diagnosis documented as “postoperative anemia” is classified to D64.9 *Anaemia, unspecified* with the appropriate external cause code and diagnosis cluster data element.

See also the coding standards entitled [Misadventures During Surgical and Medical Care](#) and [Post-Intervention Conditions](#).

Note: Do not assume the administration of blood or blood products following acute blood loss means the patient has anemia. There must be documentation of “anemia” or “low hemoglobin.”

Example: Patient is admitted with an acute gastrointestinal tract bleed. An EGD confirms a Mallory-Weiss tear. The physician documents in the progress notes that there was an abrupt fall in the patient's hemoglobin following the acute hemorrhage. During the admission the patient receives an intravenous bolus of saline and a transfusion to restore the patient's volume and hemoglobin level.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
K22.6	(M)	MP	Gastro-oesophageal laceration-haemorrhage syndrome
D62	(1)	OP	Acute posthaemorrhagic anaemia

Rationale: The patient experienced an acute and significant blood loss. He was then diagnosed with subsequent anemia. The physician has documented the link between the abrupt fall in hemoglobin and the episode of acute blood loss. Therefore, anemia is classified to D62 *Acute posthaemorrhagic anemia*.

Example: Patient has a long history of iron deficiency anemia related to chronic bleeding peptic ulcer. Patient is admitted for blood transfusion.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z51.3	(M)	Blood transfusion without reported diagnosis
D50.0	(3)	Iron deficiency anaemia secondary to blood loss (chronic) (optional)
K27.4	(3)	Peptic ulcer, chronic or unspecified with haemorrhage (optional)

Rationale: There is no documentation linking anemia to acute blood loss. The anemia is linked to a chronic bleeding peptic ulcer; therefore, it is classified to D50.0. See also the coding standard entitled [Admission for Blood Transfusion](#).

Example: Patient is admitted for a cholecystectomy for chronic cholecystitis with cholelithiasis. "Postoperative anemia" is documented on the summary sheet. The patient was given one unit of blood. Iron supplements were prescribed and the patient's discharge was delayed until his hemoglobin began to rise.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
	K80.10	(M)		Calculus of gallbladder with other cholecystitis
6	D64.9	(2)	A	Anaemia, unspecified
	Y83.6	(9)	A	Removal of other organ (partial) (total), as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: There is no documentation linking anemia to acute blood loss; therefore, it is classified to D64.9.

Example: Patient is admitted with primary osteoarthritis of the right knee for an elective total knee replacement. The physician documents in the progress notes that the patient's pre-operative hemoglobin was within normal limits but that her hemoglobin is low post-operatively due to the blood loss that occurred during the procedure. On postoperative day three the patient was given two units of blood.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
	M17.1	(M)		Other primary gonarthrosis
6	D62	(2)	A	Acute posthaemorrhagic anaemia
	Y83.1	(9)	A	Surgical operation with implant of artificial internal device, as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The physician has documented the link between the abrupt fall in hemoglobin and the episode of acute blood loss. Therefore, anemia is classified to D62 *Acute posthaemorrhagic anemia*. See also the coding standard entitled [Misadventures During Surgical and Medical Care](#).

Example: Patient is admitted with primary osteoarthritis of the left hip for an elective total hip replacement. The physician documents that two units of packed red cells were transfused intraoperatively.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M16.1	(M)	Other primary coxarthrosis

Rationale: A diagnosis of anemia is not assumed based on administration of blood or blood products alone; therefore, a code for anemia is not assigned for this example.

Anemia of Chronic Disease

[Click here for description of change.](#)

In effect 2012

Anemia of chronic disease is a multifactorial anemia resulting from an underlying chronic condition that has an effect on the production and/or lifespan of red blood cells. Certain conditions such as chronic infections, inflammation and cancer, have been commonly linked to anemia of chronic disease and as such are identified in ICD-10-CA by utilizing the dagger and asterisk convention; for example, neoplastic disease, chronic kidney disease, malaria, myxedema. Anemia of chronic disease is a manifestation of an underlying chronic condition; therefore, it is an asterisk code in the classification.

There are a number of underlying chronic conditions that the literature associates with anemia of chronic disease. Sometimes the condition and the anemia of chronic disease are specifically linked in the classification using the dagger/asterisk convention. Anemia of chronic disease can also be found in the classification, using an adjective form of the disease, e.g. brickmaker's, Egyptian, malarial, syphilitic, tuberculous, etc. or by the terms "anemia", "in", e.g. anemia "in" chronic kidney disease, anemia "in" neoplastic disease. Sometimes the underlying chronic condition and anemia of chronic disease are not linked in the classification at all.

When the underlying chronic condition and the anemia of chronic disease are not specifically linked in the classification, D63.8* *Anaemia in other chronic diseases classified elsewhere*, is assigned when the health care provider specifically and clearly establishes a connection between the underlying chronic condition and “anemia of chronic disease”.

See also the coding standard entitled [Dagger/Asterisk Convention](#).



When documentation clearly establishes a connection between “anemia of chronic disease” and a chronic condition that is not linked in the classification, assign:

- a code for the underlying chronic condition; and
- D63.8* *Anaemia in other chronic diseases classified elsewhere*.

Note: When the connection between anemia and the chronic condition is not documented, classify the anemia to D64.9 *Anaemia, unspecified*.

Example: Patient is admitted to treat his rheumatoid arthritis. The physician documents that the patient has associated anemia of chronic disease. During this episode of care the patient received a blood transfusion.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M06.9	(M)	MP	Rheumatoid arthritis, unspecified
D63.8*	(3)	OP	Anaemia in other chronic diseases classified elsewhere

Rationale: The physician has linked the anemia of chronic disease to rheumatoid arthritis, so D63.8* is assigned.

Example: Patient is admitted to treat an acute exacerbation of his chronic obstructive lung disease. The physician documents that the patient has anemia. During this episode of care the patient received a blood transfusion.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J44.1	(M)	MP	Chronic obstructive pulmonary disease with acute exacerbation, unspecified
D64.9	(1)	OP	Anaemia, unspecified

Rationale: D63.8* does not apply because anemia and chronic obstructive lung disease are not linked in the classification; and the physician has not described it as “anemia of chronic disease.”



When the type of anemia is not specified in a patient with chronic kidney disease (N18.3 – N18.5, N18.9) or neoplasia (C00-D48) follow the alphabetical index lookup by using the lead term “anemia” and the secondary term “in” and assign:

- the indexed dagger code for either the chronic kidney disease or neoplasia; and
- the code from category D63* *Anaemia in chronic diseases classified elsewhere*.

Note: Do not confuse anemia described as “chronic” with anemia “due to” or “of” chronic disease.

Note: When the type of anemia is specified (e.g. blood loss anemia, iron deficiency anemia) in a patient with chronic kidney disease or neoplastic disease, the anemia is classified to the specific type of anemia. D63* is not assigned.

When multiple types of anemia (e.g. anemia of chronic disease and iron deficiency anemia) are documented assign a code for each type of anemia.

Example: Patient is admitted with end-stage chronic kidney disease and during this episode of care received a blood transfusion for his documented anemia.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
N18.5	(M)	MP	Chronic kidney disease, stage 5
D63.8*	(3)	OP	Anaemia in other chronic diseases classified elsewhere

Rationale: A specific type of anemia is not documented and the alphabetical index links the anemia in chronic kidney disease; therefore, anemia is classified to D63.8*.

Example: Patient is admitted for treatment of his colon cancer. He also has anemia documented as due to chronic blood loss for which he received two units of blood.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C18.9	(M)	Malignant neoplasm colon, unspecified
D50.0	(1)	Iron deficiency anaemia secondary to blood loss (chronic)

Rationale: Anemia is specified as due to chronic blood loss; therefore, the anemia is classified to D50.0.

Example: Patient is admitted with end-stage chronic kidney disease and during this episode of care received a blood transfusion for his documented “anemia of chronic disease” and “iron deficiency anemia.”



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
N18.5	(M)	MP	Chronic kidney disease, stage 5
D63.8*	(3)	OP	Anaemia in other chronic diseases classified elsewhere
D50.9	(1)	OP	Iron deficiency anaemia, unspecified

Rationale: Anemia of chronic disease and a specific type of anemia are documented; therefore, the anemia is classified to D63.8* and D50.9.

Chapter IV—Endocrine, Nutritional and Metabolic Diseases

Diabetes Mellitus

[Click here for description of change.](#)

In effect 2006, amended 2007, 2008, 2009, 2012

Diabetes is a serious disease, which, if not controlled, can be life threatening. It is often associated with long-term complications that can affect every system and part of the body. Diabetes can contribute to eye disorders and blindness, heart disease, stroke, kidney failure, amputation, and nerve damage. It can also affect pregnancy and cause birth defects.

The code titles in block E10–E14 *Diabetes Mellitus* in ICD-10-CA clearly state diabetes mellitus *with* a complication. Therefore, a cause-effect relationship does not have to be specifically documented to classify cases to these categories.

See also the coding standard entitled [Use Additional Code/Code Separately Instructions](#) and [Appendix A—Diabetes Mellitus](#) for clinical information.



Assign a code for diabetes mellitus whenever the condition is documented.

Note: The intent is not that an exhaustive search of all ancillary documentation for reference of diabetes be made, but to assign a code for diabetes mellitus when noted on routine review of the record.

Example: Patient was seen in the emergency department for treatment of renal colic which was diagnosed as left ureteric stone. Type 2 diabetes mellitus was noted on the emergency department sheet by the triage nurse. No further details regarding diabetic complications or glycemic control were available in the chart.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
N20.1	MP	Calculus of ureter
E11.9	OP	Type 2 diabetes mellitus without (mention of) complications

Rationale: Diabetes must be coded whenever it is documented. It is acceptable to use nursing documentation in order to fulfill this mandatory coding requirement.

Example: A 68-year-old female patient is admitted with pneumonia. The history and physical documents that the patient has type 2 diabetes mellitus with mononeuropathy.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J18.9	(M)	MP	Pneumonia, unspecified
E11.40†	(3)	OP	Type 2 diabetes mellitus with mononeuropathy
G59.0*	(3)	OP	Diabetic mononeuropathy

Rationale: It is mandatory to assign a code for diabetes mellitus when it is documented. Since diabetes with mononeuropathy is a dagger/asterisk combination, both codes are mandatory to assign. See also the coding standard entitled [Dagger/Asterisk Convention](#).

Example: Patient was seen in the emergency department for “kidney failure” without further specification as to type or cause. Patient has type 2 diabetes mellitus.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
N19	MP	Unspecified kidney failure
E11.9	OP	Type 2 diabetes mellitus without (mention of) complications

Rationale: Unspecified renal failure is not classified as a complication of diabetes mellitus. The alphabetical index does not associate unspecified renal failure and diabetes mellitus.



When there are complications of diabetes mellitus, assign a code from E10–E14 to describe each complication meeting the criteria for significance.



When there are multiple complications of diabetes mellitus affecting separate body systems and none meet the criteria for significance, assign the one code E1–.78 *Type ~ diabetes mellitus with multiple other complications*.

Example: A 51-year-old woman known to have type 2 diabetes mellitus, is admitted to the hospital for treatment of her diabetic nonproliferative retinopathy. She is also seen by a nephrologist to evaluate signs of diabetic nephropathy noted by her family physician. The nephrologist recommended and began appropriate treatment. She has no other known complications related to diabetes.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
E11.30†	(M)	Type 2 diabetes mellitus with background retinopathy
H36.0*	(6)	Diabetic retinopathy
E11.23†	(1)	Type 2 diabetes mellitus with established or advanced kidney disease
N08.39*	(3)	Unspecified glomerular disorders in diabetes mellitus

Rationale: The diabetic retinopathy and nephropathy both meet the criteria for significance; therefore, codes are assigned to describe each complication.

Example: A 45-year-old female patient with type 1 diabetes mellitus was admitted for treatment of preproliferative diabetic retinopathy. She also has diabetic nephropathy and mononeuropathy for which she received no treatment during this admission.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
E10.31†	(M)	MP	Type 1 diabetes mellitus with preproliferative retinopathy
H36.0*	(6)	OP	Diabetic retinopathy

Rationale: Since only the diabetic retinopathy is significant to this visit, only E10.31† is assigned with the corresponding asterisk code.

Example: A patient with type 2 diabetes mellitus, known end-stage kidney disease and congestive heart failure presents to hospital. The patient presents with increased shortness of breath, poor appetite and excessive thirst, symptoms of the CHF and kidney disease. The final diagnosis is congestive heart failure and diabetic end-stage kidney disease and appropriate treatment was given.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
I50.0	(M)	MP	Congestive heart failure
E11.52	(3)	OP	Type 2 diabetes mellitus with certain circulatory complications
E11.23†	(1)	OP	Type 2 diabetes mellitus with established or advanced kidney disease
N08.35*	(3)	OP	Glomerular disorders in diabetes mellitus, chronic kidney disease, stage 5

Rationale: The CHF and kidney disease both meet the criteria for significance; therefore, codes are assigned to describe each complication.

Example: Patient is registered for his biweekly hemodialysis session. He has type 2 diabetes with end-stage kidney disease. He has diabetic maculopathy and sensorimotor peripheral neuropathy.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z49.1	MP	Extracorporeal dialysis
E11.23†	OP	Type 2 diabetes mellitus with established or advanced kidney disease
N08.35*	OP	Glomerular disorders in diabetes mellitus, chronic kidney disease, stage 5

Rationale: Although this patient has multiple diabetic complications, only the kidney disease meets the criteria for significance and is the only code required.

Example: A patient with type 2 diabetes mellitus is admitted to hospital due to acute symptoms of known Crohn's disease of the large intestine. The history and physical documents that the patient has CHF and multi-infarct dementia. Neither of these conditions is significant to the patient's stay in hospital.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
K50.1	(M)	MP	Crohn's disease of large intestine
E11.52	(3)	OP	Type 2 diabetes mellitus with certain circulatory complications

Rationale: E11.78 does not apply in this example since CHF and multi-infarct dementia are complications affecting the same body system. Although neither condition meets the criteria for significance it is mandatory to code diabetes mellitus whenever it is documented and E11.52 satisfies this requirement.

Example: A patient with type 2 diabetes mellitus is admitted for treatment of a fractured wrist due to a fall out of bed at home. The patient has a history of peripheral vascular disease and cardiomyopathy.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S62.800	(M)	MP	Fracture of other and unspecified parts of wrist and hand, closed
W06	(9)	OP	Fall involving bed
U98.0	(9)	OP	Place of occurrence, home
E11.52	(3)	OP	Type 2 diabetes mellitus with certain circulatory complications

Rationale: E11.78 does not apply in this example since peripheral vascular disease and cardiomyopathy are complications affecting the same body system. Both are classified to separate 4th character subcategories and although neither meet the criteria for significance, it is mandatory to code diabetes mellitus whenever documented. To satisfy this requirement, assign either E11.52 or E11.50†/I79.2*.

Example: A patient with type 2 diabetes mellitus is admitted due to an acute exacerbation of COPD. It is documented that on admission the patient's diabetes mellitus is uncontrolled. The history documents that the patient has peripheral vascular disease and retinopathy; however these complications did not impact the patient's hospital stay.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
J44.1	(M)	Chronic obstructive pulmonary disease with acute exacerbation, unspecified
E11.64	(1)	Type 2 diabetes mellitus with poor control, so described

Rationale: Uncontrolled diabetes mellitus is always captured as a significant diagnosis type. This patient has multiple complications of diabetes, but only E11.64 meets the criteria for significance. It satisfies the mandatory requirement to code diabetes mellitus, and E11.78 is not assigned.

Example: Patient came to the emergency department after slipping and falling on ice, sustaining a closed bimalleolar fracture of her left ankle. She has type 2 diabetes with known nephropathy and retinopathy.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
S82.800	MP	Bimalleolar fracture of ankle, closed
W00	OP	Fall on same level involving ice and snow
U98.9	OP	Unspecified place of occurrence
E11.78	OP	Type 2 diabetes mellitus with multiple other complications

Rationale: The nephropathy and retinopathy are not significant to the emergency visit; E11.78 is assigned to identify the diabetes mellitus.



When the type of diabetes mellitus is not evident from the documentation, seek clarification from the physician/primary care provider or assign to E14.– *Unspecified diabetes mellitus*.



When diabetes mellitus is described as poorly controlled by the physician/primary care provider at admission or at any time during the episode of care, assign E1–.64 *Type ~diabetes mellitus with poor control, so described as a significant diagnosis type/main problem or other problem*.

Note: E1-.64 *Type ~diabetes mellitus with poor control, so described* identifies diabetes mellitus with poor control. The code R73.8-2 *Other evidence of elevated blood glucose level, greater than or equal to 14.0 mmol/L* is not required.

E1-.64 *Type ~diabetes mellitus with poor control, so described* must not be assigned a diagnosis type (2).

Terminology that indicates poor control includes: out of control, uncontrolled, unstable, inadequately controlled or that with secondary treatment failure. Patients requiring stabilization of poorly controlled diabetes include individuals for initiation of insulin therapy who are considered “secondary treatment failure” to oral hypoglycemic agents. It should be noted that the use of a sliding scale insulin regimen does not imply uncontrolled diabetes.ⁱ

Example: A 54-year-old patient is admitted in congestive heart failure. He has had type 2 diabetes for many years and is on oral hypoglycemic medication. Lately his blood sugars have been consistently on the high side and the physician noted that his diabetes was out of control and appropriate treatment was given.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I50.0	(M)	Congestive heart failure
E11.52	(3)	Type 2 diabetes mellitus with certain circulatory complications
E11.64	(1)	Type 2 diabetes mellitus with poor control, so described

Example: A 62-year-old patient with type 2 diabetes was admitted for elective radical prostatectomy for carcinoma of the prostate. Following surgery the patient was in ICU and physician's notes stated that the patient's diabetes was out of control. Insulin dosage was adjusted and the patient was kept two extra days in ICU.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C61	(M)	Malignant neoplasm of prostate
E11.64	(1)	Type 2 diabetes mellitus with poor control, so described

Rationale: Postoperatively, patients with diabetes may experience temporary poor control of their diabetes. Diabetes is a chronic condition and must not be assigned a diagnosis type (2).

Note: Diabetes mellitus with poor control is inherent with coma and acidosis associated with diabetes and as such the code E1-.64 *Type ~diabetes mellitus with poor control, so described* is not assigned with codes E1-.0 *Type ~diabetes mellitus with coma* or E1-.1- *Type ~diabetes mellitus with acidosis*. There is an exclusion note at E1-.64 *Type ~diabetes mellitus with poor control, so described* providing this direction.

i. The *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification* (ICD-10-AM)—Tabular list of diseases and Alphabetic index of diseases. Sixth edition, Standard 0401 Diabetes Mellitus and Impaired Glucose Regulation.

Example: The patient is a 56-year-old man, brought to the hospital by the ambulance. His wife said that the patient appeared to be semi conscious. His diabetes was documented as uncontrolled with blood glucose of 46 mmol/L. The patient was admitted with dehydration and hyperosmolality. With IV rehydration and other treatment the patient's condition improved significantly.



Final diagnosis: Hyperosmolar hyperglycemic nonketotic coma, type 2 diabetes mellitus

<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
E11.0	(M)	MP	Type 2 diabetes mellitus with coma
E87.0	(1)	OP	Hyperosmolality and hypernatraemia
E86.0	(1)	OP	Dehydration

Note: It is important to be aware that coma, a state of unconsciousness can be due to a number of problems such as traumatic brain injury, stroke, brain tumour, an infection such as encephalitis besides extremely high or low blood sugar in diabetes mellitus. Use physician/primary care provider documentation to verify diabetes mellitus as the cause of the coma prior to assigning a code from categories E10–E14 to record the coma.

Example: Patient was an 18-year-old who went swimming in the lake with some friends. The lifeguard noticed that the young man was in trouble and immediately rushed in and brought him to the beach where resuscitation was performed. EMS was called and transported the youth to hospital. Though resuscitation was successful, the patient remained in a coma. History and physical examination reported the patient had type 1 diabetes. He died two days after admission. Final diagnosis: Accidental drowning



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
T75.1	(M)	MP	Drowning and nonfatal submersion
W69	(9)	OP	Drowning and submersion while in natural water
U98.8	(9)	OP	Other specified place of occurrence
R40.29	(1)	OP	Coma, unspecified
E10.9	(3)	OP	Type 1 diabetes mellitus without (mention of) complication

Rationale: This patient with type 1 diabetes was in a coma related to lack of blood flow and oxygen to the brain during his near drowning experience. There was no documentation linking the coma to his type 1 diabetes mellitus.



Classify diabetic foot ulcer to E1–.70 Type ~diabetes mellitus with foot ulcer or E1–.71 Type ~diabetes mellitus with foot ulcer with gangrene identifying the absence or presence of gangrene.

- Assign an additional code for abscess, cellulitis or osteomyelitis associated with the ulcer.

Example: Patient has had type 2 diabetes for many years with multiple diabetes related complications. She is admitted with a diabetic (right) foot with ulcer and gangrene. During her stay she underwent amputation of her second and third toes of her right foot with drainage of the associated abscess.



Final diagnosis: Diabetic foot abscess with gangrenous toes

Pathology Report: Necrotic second and third toes with ulcer

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
E11.71	(M)	Type 2 diabetes mellitus with foot ulcer (angiopathic) (neuropathic) with gangrene
L02.4	(1)	Cutaneous abscess, furuncle and carbuncle of limb

Rationale: An additional code is assigned for the abscess. An additional code for the ulcer is not assigned.

DN When assigning the mandatory asterisk code N08.3—* *Glomerular disorders in diabetes mellitus*, select the fifth character based on documentation of the stage of chronic kidney disease (CKD) and not based on the glomerular filtration rate (GFR).

DN When the stage of chronic kidney disease (CKD) is not documented, assign N08.39* *Unspecified glomerular disorders in diabetes mellitus*.

Example: Diagnosis: Type 2 diabetes with chronic kidney disease
Nephropathy stage 4



<u>Code</u>	<u>Code Title</u>
E11.23†	Type 2 diabetes mellitus with established or advanced kidney disease
N08.34*	Glomerular disorders in diabetes mellitus, chronic kidney disease, stage 4

Example: Diagnosis: Type 2 diabetes with chronic kidney disease with documented GFR of 35.



<u>Code</u>	<u>Code Title</u>
E11.23†	Type 2 diabetes mellitus with established or advanced kidney disease
N08.39*	Unspecified glomerular disorders in diabetes mellitus

Rationale: Since the stage of the chronic kidney disease is not documented N08.39* is assigned despite documentation of the GFR.

Example: Diagnosis: Type 2 diabetes with end-stage kidney disease (ESKD)
Nephropathy stage 4



<u>Code</u>	<u>Code Title</u>
E11.23†	Type 2 diabetes mellitus with established or advanced kidney disease
N08.35*	Glomerular disorders in diabetes mellitus, chronic kidney disease, stage 5

Rationale: If the health care provider documents both a stage of chronic kidney disease (CKD) and end-stage kidney disease (ESKD), assign the code N08.35* for the ESKD. ESKD is always classified as stage 5.

DN When a diagnostic statement of “borderline diabetes” is recorded, seek further information from the physician/primary care provider to determine whether the patient has type 2 diabetes (E11.—) or impaired glucose tolerance/pre-diabetes (R73.0).

See also [Appendix A—Borderline Diabetes](#) for clinical information.

DN Assign E1-.63 *Type ~diabetes mellitus with hypoglycaemia* to identify a hypoglycemic episode in a patient with diabetes.

Note: Ensure that code E1-.63 *Type ~ diabetes mellitus with hypoglycaemia* does not appear on the same abstract with a code for hypoglycemia, from the range E16.0–E16.2, as these codes are mutually exclusive.

Example: A 51-year-old man with type 1 diabetes mellitus was brought to hospital and the physician noted that his diabetes was poorly controlled. The patient was admitted with a glucometer reading of 14.1 mmol/L and he was given insulin as per the physician's orders. The next day, he had only a light breakfast and complained of feeling dizzy and weak. The physician documented "hypoglycemia" in the progress notes and the patient was treated appropriately.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
E10.64	(M)	Type 1 diabetes mellitus with poor control, so described
E10.63	(2)	Type 1 diabetes mellitus with hypoglycaemia

Rationale: It is possible to have a high blood sugar reading and hypoglycemia in the same episode of care.

See also [Appendix A—Hypoglycemia in Diabetes Mellitus](#) for clinical information.

DN Classify diabetes that is first diagnosed during pregnancy to O24.8– *Diabetes mellitus arising in pregnancy (gestational)*.

DN Sequence codes from Chapter XV—*Pregnancy, Childbirth and the Puerperium* before any applicable diabetes code from E10–E14 *Diabetes mellitus*.

Example: Patient presents at 39 weeks gestation and was first diagnosed with diabetes mellitus at the first prenatal visit (10 weeks gestation). She spontaneously delivers a healthy baby girl.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O24.801	(M)	Diabetes mellitus arising in pregnancy [gestational], delivered with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Example: Patient with type 1 diabetes mellitus, with nephropathy, is admitted at 39 weeks gestation. She delivers a healthy baby girl. She was seen by a nephrologist for evaluation and recommendations for treatment of her renal condition.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O24.501	(M)	Pre-existing type 1 diabetes mellitus in pregnancy, delivered, with or without mention of antepartum condition
E10.23†	(1)	Type 1 diabetes mellitus with established or advanced kidney disease
N08.39*	(3)	Unspecified glomerular disorders in diabetes mellitus
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Example: A patient with type 1 diabetes, who is pregnant, was brought to the hospital with a history of nausea and vomiting for a few days. Blood sugars were tested during this visit and the physician diagnosed uncontrolled glucose levels and gravidarum emesis with dehydration.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O21.103	(M)	MP	Hyperemesis gravidarum with metabolic disturbance, antepartum condition or complication
O24.503	(1)	OP	Pre-existing type 1 diabetes mellitus in pregnancy, antepartum condition or complication
E10.64	(1)	OP	Type 1 diabetes mellitus with poor control, so described



When total or partial pancreatectomy causes diabetes mellitus, the resulting diabetes mellitus is classified to E89.1 *Postprocedural hypoinsulinaemia*, for the episode of care during which the surgery was performed.

- For all subsequent encounters any resulting diabetes mellitus is assigned to category E13 *Other specified diabetes mellitus*.

Example: A non-diabetic patient was admitted for a Whipple's procedure and part of her pancreas was removed. She was being monitored in ICU following surgery. She went into acute hyperglycemia and was put on insulin for controlling the hypoinsulinemia.



First Visit: Final diagnosis was recorded as benign pancreatic tumour and acquired diabetes mellitus with postoperative hyperglycemia.

<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
D13.6	(M)		Benign neoplasm of pancreas
E89.1	(2)	A	Postprocedural hypoinsulinaemia
Y83.6	(9)	A	Removal of other organ (partial) (total) as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Following a pancreatectomy, loss of beta cells results in a decrease in insulin production. This condition may sometimes be transient and as such for the current episode of care only assign E89.1 *Postprocedural hypoinsulinaemia*.

Example: Patient was readmitted to hospital four days after discharge. She had developed a staphylococcus aureus wound infection. The physician notes stated that the patient had acquired diabetes and was on insulin as a result of the pancreatectomy.



Second Visit:

<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.4	(M)	A	Infection following a procedure, not elsewhere classified
B95.6	(3)	A	Staphylococcus aureus as the cause of diseases classified to other chapters
Y83.6	(9)	A	Removal of other organ (partial) (total) as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
E13.9	(3)		Other specified diabetes mellitus without (mention of) complication

Rationale: When the condition is established as diabetes mellitus in any subsequent admissions, assign a code from category E13 *Other specified diabetes mellitus* since this is neither type 1 or 2 diabetes mellitus. An external cause code is not assigned with E13.9 for diabetes resulting from pancreatectomy.

D When a patient develops steroid induced diabetes after admission, assign a code from category E13 *Other specified diabetes mellitus* as a diagnosis type (2).

D When lactic acidosis or a hypoglycemic event meet the criteria for a post-admit comorbidity, assign the appropriate codes as a diagnosis type (2).

Example: Patient was in hospital undergoing treatment for pemphigus. She was given high doses of steroids. She developed steroid-induced diabetes and was put on oral hypoglycemic medication.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
L10.9	(M)		Pemphigus, unspecified
E13.9	(2)	A	Other specified diabetes mellitus without (mention of) complication
Y42.0	(9)	A	Glucocorticoids and synthetic analogues causing adverse effects in therapeutic use

Example: A 36-year-old woman with type 1 diabetes mellitus was brought to hospital because her diabetes was poorly controlled. The next day, she complained of feeling dizzy and weak. The physician documented “hypoglycemia” in the progress notes and the patient was given orange juice.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
E10.64	(M)	Type 1 diabetes mellitus with poor control, so described
E10.63	(2)	Type 1 diabetes mellitus with hypoglycaemia

Dehydration

In effect 2002, amended 2005, 2006, 2009



Assign a code for documented dehydration as a significant diagnosis type/main problem or other problem when it is either:

- a condition in its own right without any documented underlying cause; or
- noted to be severe enough to warrant rehydration with intravenous (IV) fluids.

See also the coding standard entitled [Gastroenteritis and Diarrhea](#).

When there is a documented underlying cause and dehydration is managed by increased oral intake of fluids alone, it must not be assigned a significant diagnosis type; if coded assign a diagnosis type (3).

Note: The presence of an IV in itself is not an indicator of rehydration. IV lines may be started for other purposes including administration of medications and stabilization of the patient.

Example:

An elderly man, living alone, is found in a state of confusion and dehydration. He improves significantly following aggressive intravenous fluid treatment and is sent home with homecare to visit three times a week.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
E86.0	(M)	MP	Dehydration
R41.0	(3)	OP	Disorientation, unspecified (optional)

Rationale: Dehydration must be clearly documented before it can be coded. Dehydration is a condition in its own right in this example and is treated with IV fluids. Disorientation is a symptom of dehydration, and if coded, it must be assigned diagnosis type (3)/other problem.

Example:

A patient with type 1 diabetes mellitus is admitted to stabilize his condition. His blood sugars had been spiraling and not staying in the acceptable range. His family doctor referred him for an urgent admission. He is given insulin twice and responds to this treatment nicely with fasting and random blood sugar levels well within the adequate range. The physician documents dehydration and prescribes an increase in oral fluids.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
E10.64	(M)	Type 1 diabetes mellitus with poor control, so described
E86.0	(3)	Dehydration (optional)

Rationale: Dehydration treated with an increase in oral intake of fluids is not a significant comorbidity and, if assigned, is an optional type (3) diagnosis.

Chapter VI—Diseases of the Nervous System

Intracranial Resection of Lesions or Neoplasms

In effect 2001, amended 2006

Duraplasty and Cranioplasty Following Intracranial Resection

To gain access to the brain, the cranium and dura must be incised. Raising/closing of a cranial flap and incising/re-approximating dura are considered an integral part of any invasive intracranial intervention.



Assign an additional CCI code for a concomitant cranial dural repair only when:

- the cranioplasty is so extensive it involves the use of a plate or screw device; this is classified to 1.EA.80.^ ^ *Repair, cranium; or*
- the duraplasty is so extensive it involves a dural graft; this is classified to 1.AA.80.^ ^ *Repair, meninges and dura mater of brain.*

Neither of these situations is a normal expectation of intracranial surgery. To properly reflect the defect closure, separate codes are required when applicable.

See also the coding standard entitled [Debulking of a Space-Occupying Lesion](#).

Example: A 59-year-old man with a history of low-grade astrocytoma (subtotal resection 8 years ago) now presents with seizure activity due to the recurrence of the neoplasm. A craniotomy is performed through the original craniotomy incision to remove the recurrent astrocytoma. The dura is adhesive and tears during surgery. Following removal of the tumor, a duraplasty using the patient's own temporalis fascia is performed. Finally, the defect was repaired by performing a cranioplasty using bone from the bone bank and plates and screws to secure the graft.

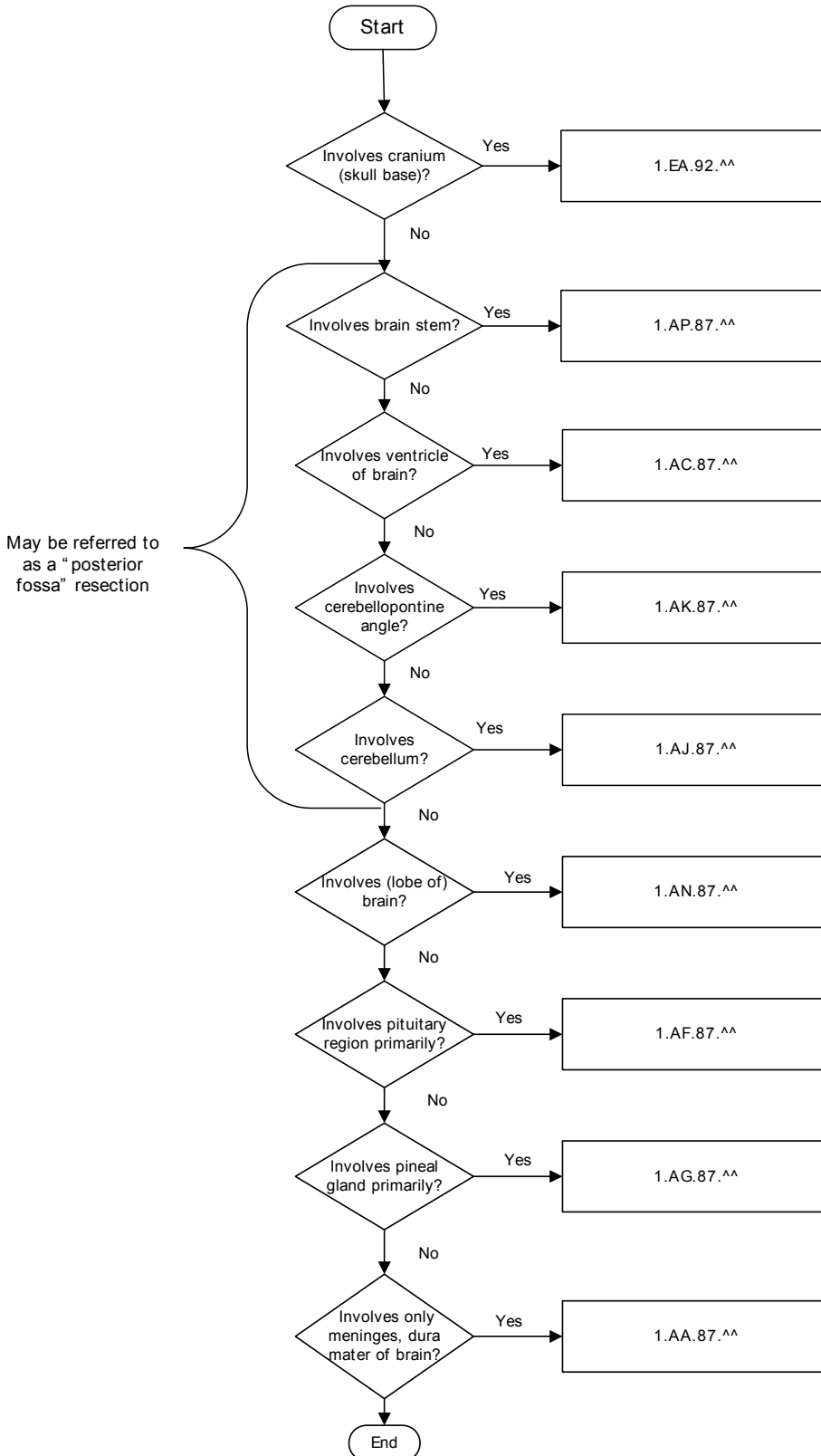
1.AN.87.SZ-GX	Excision partial, brain, craniotomy [or craniectomy] flap technique for access, with device NEC
1.AA.80.SZ-XX-A	Repair, meninges and dura mater of brain, using autograft [e.g. pericranium, fascia lata]
1.EA.80.LA-NW-K	Repair, cranium, using plate, screw device (with/without wire/mesh), with homograft
1.EP.58.LA	Procurement, muscles of head and neck, of autograft using open approach

Coding Hierarchy for Intracranial Lesion Resection

To avoid multiple code assignment in the description of the surgical management of intracranial resections, a coding hierarchy has been factored into CCI, which considers the severity of the neurological defect and surgical complexity in order to determine the single most appropriate code for the type of resection. Necessary guidance for code selection is provided in the inclusions, exclusions and notes at the excision codes.

The following code finder is also provided as a quick reference during coding of resections that overlap regions of the brain:

Hierarchy for Classifying Intracranial Lesion Resection



Revision of CSF Shunt Systems (Ventricle, Brain Stem, Spinal Canal)

In effect 2001, amended 2006

Partial Revision



When the replacement of a part of a shunt system is documented as a revision, select one of the following codes depending on the originating site of drainage (where the blockage lies):

1.AC.54.^ *Management of internal device, ventricles of brain*

1.AP.54.^ *Management of internal device, brain stem*

1.AX.54.^ *Management of internal device, spinal canal and meninges*

The qualifier portion of the code identifies the region of the body in which the shunt terminates.

Example: Patient had a ventriculoperitoneal shunt because of hydrocephalus. He was admitted on this occasion for changing the valve.

1.AC.54.ME-SJ Management of internal device, ventricles of brain, open approach, shunt system terminating in abdominal cavity [e.g. ventriculoperitoneal, gallbladder]

Complete Revision



When there is removal and concomitant reinstallation of an entire shunt system, select one of the following code sets depending on the originating site of drainage (i.e. where the blockage lies). The qualifier portion of the code identifies the region of the body in which the shunt terminates.

1.AC.52.^ *Drainage, ventricles of brain*

1.AC.55.^ *Removal of device, ventricles of brain*

1.AP.52.^ *Drainage, brain stem*

1.AP.55.^ *Removal of device, brain stem*

1.AX.52.^ *Drainage, spinal canal and meninges*

1.AX.55.^ *Removal of device, spinal canal and meninges*

The insertion of the new system is sequenced as the principal intervention followed by the removal of the old system.

Example: Patient had a previous insertion of a syringopleural shunt for syringomyelia. On this occasion she is admitted for a complete removal and replacement of the syringopleural shunt due to shunt failure.

1.AP.52.MQ-SJ Drainage, brain stem, using shunt system terminating in thoracic cavity [e.g. syringopleural]

1.AP.55.SE-SJ Removal of device, brain stem, of shunt catheter system, burr hole technique for access

As with any other indwelling catheterization for continuous drainage, in CCI there is no status attribute to indicate “Revision” at the drainage codes as there is a reasonable expectation that there may be a need to replace valves, unblock shunts and reposition catheters over the course of its installation. With any long-term indwelling catheter system it is quite common to replace it in its entirety, especially in a growing child.

Seizures

In effect 2001, amended 2003, 2006, 2008, 2009

BN When there is documentation of a recurrent seizure that is not associated with an acute medical illness or psychoactive drug withdrawal, use the alphabetical index lead term “Epilepsy.”

BN When there is documentation of a seizure provoked by:

- psychoactive drug withdrawal, use the alphabetical index lead term “Withdrawal.”
- acute medical illness, assign a code for the medical illness.

BN When there is documentation of “seizure disorder”:

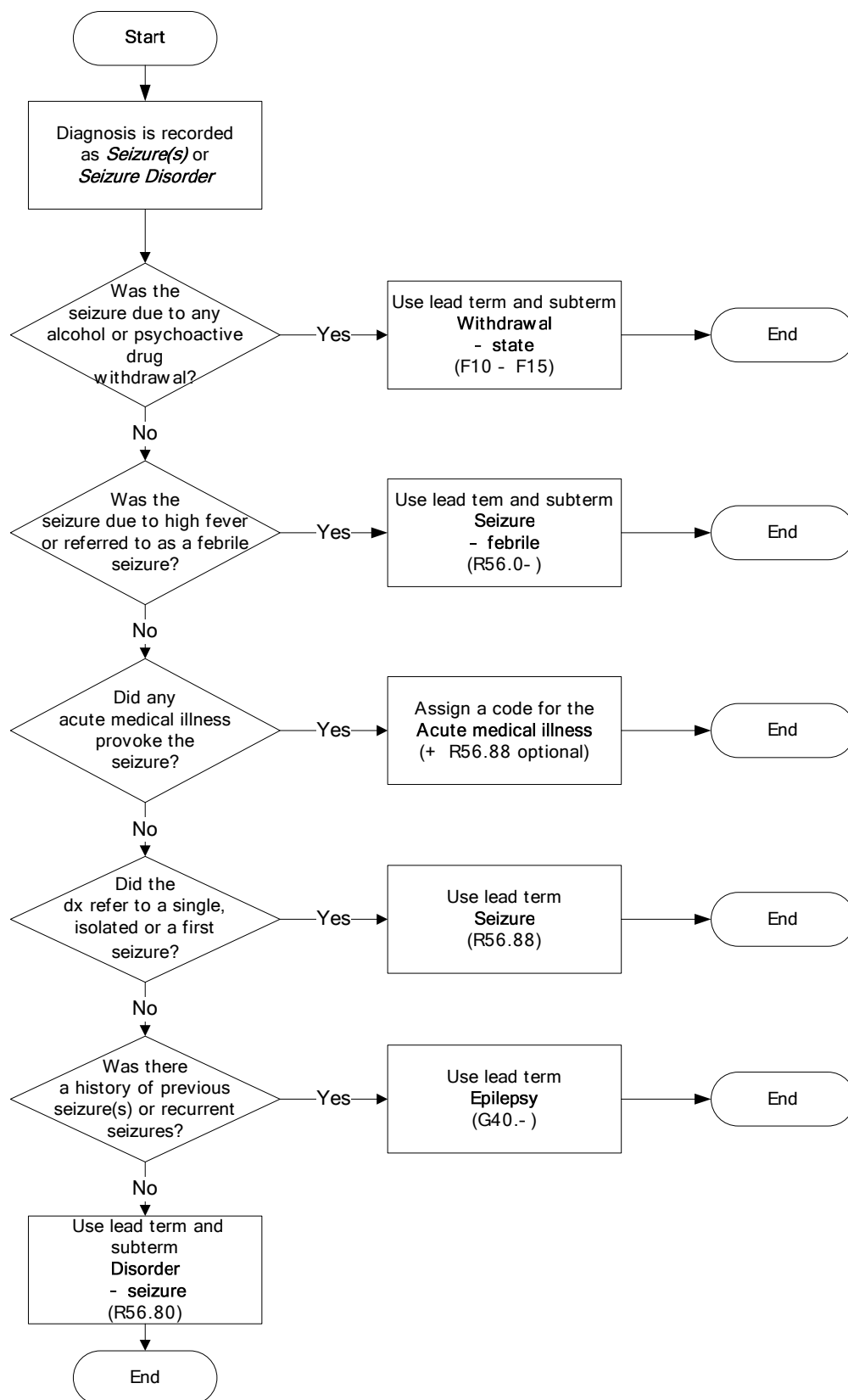
- described as febrile, use the alphabetical index lead term and subterm “Seizure, febrile.”
- with no further specification, assign R56.80 *Seizure disorder, so described*.

Note: Examples of acute medical illnesses that may provoke a seizure are hyponatremia, hypomagnesemia, hypocalcemia, hypoglycemia, nonketotic hyperglycemia, hypoxia, renal or hepatic failure and sepsis.

Note: A single, isolated (no history of previous seizure), or first time seizure is not classified to epilepsy. See the exclusion note at category G40 *Epilepsy*.

Note: For assistance in determining the correct lead term for documentation of seizure or seizure disorder, the following flowchart is provided.

Correct Index Search for Seizure(s) and Seizure Disorder



Example: A 65-year-old male patient was brought in by ambulance having suffered a seizure. The physician described a tonic-clonic seizure and noted the patient had three such seizures in the past. The final diagnosis is recorded as tonic-clonic seizure.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
G40.60	MP	Grand mal seizures, unspecified (with or without petit mal), not stated as intractable

Rationale: The patient has a history of seizures. The current seizure was not caused by an acute medical illness or withdrawal from psychoactive drugs; therefore, this case is classified as epilepsy. Based upon the further detail of tonic-clonic seizure, G40.60 is assigned.

Example: A 5-year-old child is admitted following a seizure not associated with any fever. The physician documents that the child has had at least two previous seizures and records the final diagnosis as "Seizure Disorder."

N

<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
G40.90	(M)	MP	Epilepsy, unspecified, not stated as intractable

Rationale: A final diagnosis of seizure disorder with a history of previous seizures is classified as epilepsy. R56.80 *Seizure disorder, so described* is not assigned because there is documentation of previous seizures.

Example: A 4-year-old child is admitted following a febrile convulsion. The physician documents that he has had a previous febrile convulsion. Final diagnosis is recorded as "Febrile Convulsion."

N

<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
R56.09	(M)	MP	Febrile convulsions, unspecified

Rationale: The correct code is found by following the alphabetical index lookup "Convulsions, febrile."

Example: This 57-year-old woman had a grand mal seizure in the shopping mall. She was taken to the hospital by ambulance. History and physical revealed that she had no previous history of seizures. Final diagnosis is recorded as grand mal seizure.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
R56.88	MP	Other and unspecified convulsions

Rationale: An isolated seizure, even when described using terminology such as "grand mal," "tonic-clonic," "petit mal," is assigned to R56.88. The category G40 *Epilepsy* excludes an isolated (first) seizure.

Example: Patient is a known alcoholic. He was enrolled in an alcohol rehab program but quit. He went back to drinking heavily. His wife called 911 when he began convulsing in the afternoon after having consumed several drinks. The emergency physician notes that this patient has a history of alcoholic seizures with multiple emergency visits in the past. The emergency department record documented “Alcohol poisoning and seizures”. Patient was admitted to ICU.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
T51.0	MP	Toxic effect of ethanol
G40.50	OP	Special epileptic syndromes, not stated as intractable
X45	OP	Accidental poisoning by and exposure to alcohol
U98.9	OP	Unspecified place of occurrence

Rationale: Recurrent seizures induced by alcohol, drugs, stress, sleep deprivation, or photosensitivity are classified as epilepsy. There is no documentation of withdrawal to classify this as a withdrawal seizure. To assign the correct code use the alphabetical index lookup “Epilepsy, related to, alcohol.”

Example: A 17-year-old male is brought to the emergency department following a seizure. He had consumed an excessive amount of alcoholic beverages throughout the evening. History revealed no previous seizures. The diagnosis is recorded as seizure due to alcohol poisoning.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
T51.0	MP	Toxic effect of ethanol
R56.88	OP	Other and unspecified convulsions
X45	OP	Accidental poisoning by and exposure to alcohol
U98.9	OP	Unspecified place of occurrence

Rationale: The seizure is an isolated event and assigned to R56.88.

Example: A 3-day-old female, was brought to the emergency department of Children’s Hospital because she had a seizure. Tests were done and the child was treated with anticonvulsive medication. The baby was released and the parents were to take her to the pediatrician for monitoring and follow-up.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
P90	MP	Convulsions of newborn

Rationale: The correct code is found by using the alphabetical index lookup “Seizure, newborn.”

Example: A patient known to have epilepsy was admitted through the emergency department. The admitting diagnosis was “status epilepticus.”

DN

<u>Code</u>	<u>Code Title</u>
G41.9	Status epilepticus, unspecified
G40.90	Epilepsy, unspecified, not stated as intractable

Rationale: The *Use additional code* instruction at category G41 *Status epilepticus* directs to assign a code to identify any underlying convulsions, seizures or epileptic syndromes. Diagnosis typing definitions must be applied to individual cases. No sequencing rules apply.

Neurological Deficits Following a Stroke

In effect 2002, 2006, amended 2008

- D** Code as comorbid conditions all neurological deficits documented by the physician, e.g. paralysis, dysphagia, aphasia, urinary incontinence and fecal incontinence when they affect the management and treatment of the patient during the acute care phase of the stroke.
- Criteria:**
- R13.– *Dysphagia* must be assigned a diagnosis type (1) when requiring nasogastric tube/enteral feeding or still requiring treatment more than 7 days after the stroke occurred.
- R15 *Fecal incontinence* must be assigned a diagnosis type (1) when it is still present at discharge or persists for at least 7 days.
- R32 *Unspecified urinary incontinence* must be assigned as a diagnosis type (1) when it is still present at discharge or persists for at least 7 days.
- D** For all other neurological deficits following a stroke, apply diagnosis types according to the diagnosis typing definitions.

See also the coding standards entitled [Strokes, Cerebrovascular Accidents \(CVA\) and Transient Ischemic Attacks \(TIA\)](#) and [Sequelae](#).

Example: On admission a patient experienced left-sided weakness. He was diagnosed as having suffered an acute cerebral infarction and tissue plasminogen activator (TPA) was administered. On admission this patient had difficulty swallowing. On day 8 following the stroke the patient was transferred to a facility closer to home for continued stroke care with a nasogastric tube in place.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I63.9	(M)	Cerebral infarction, unspecified
R13.8	(1)	Other and unspecified dysphagia

Hemiplegia

- BN** Assign a code from category G81 *Hemiplegia* as a most responsible diagnosis/main problem only when it is reported without further specification or it is stated to be old or longstanding but of unspecified cause.ⁱ
- BN** Assign a code from category G81 *Hemiplegia* as an additional code to identify types of hemiplegia resulting from any cause.

i. International Classification of Diseases and Related Health Problems (ICD-10), tenth revision, second edition, Volume 1, page 395.

Example: Patient seen in day surgery for excision of multiple skin lesions of basal cell carcinoma—lower leg. Examination revealed residual hemiparesis from a previous stroke. No specific treatment was directed to the residual hemiparesis in this episode of care.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C44.7	(M)	MP	Malignant neoplasm skin of lower limb, including hip
G81.99	(3)	OP	Hemiplegia of unspecified type of unspecified [unilateral] side (optional)
I69.4	(3)	OP	Sequelae of stroke, not specified as haemorrhage or infarction (optional)

Example: A right-handed patient has suffered a CVA due to an embolism of a cerebral artery. He has left sided hemiplegia which was a focus of this treatment and he received physiotherapy.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I63.4	(M)	Cerebral infarction due to embolism of cerebral arteries
G81.91	(1)	Hemiplegia of unspecified type of non-dominant side

Chapter IX—Diseases of the Circulatory System

Hypertension and Associated Conditions

In effect 2001, amended 2002, 2005, 2006, 2007, 2009

Hypertensive Heart and Hypertensive Renal Disease

DN Assign I11 *Hypertensive heart disease*, I12 *Hypertensive renal disease* or I13 *Hypertensive heart and renal disease*, only when the physician specifically documents a cause/effect relationship between the cardiac or renal condition due to hypertension. A causal relationship must not be assumed.

DN Assign an additional code to identify any associated conditions due to hypertension (e.g. congestive heart failure, chronic renal failure). Sequence I11, I12 or I13 first.

Note: Ensure that codes from categories I10–I13 are never recorded as a post admit comorbidity (diagnosis type (2)) on an inpatient abstract and are never used together on one abstract as they are mutually exclusive.

Example: This obese patient with longstanding hypertension complained of exertional and non-exertional dyspnea, ankle edema and weight gain. A transthoracic echocardiography (TTE) was performed. He was admitted in congestive heart failure.



Diagnosis: Hypertensive heart disease
Congestive heart failure

<u>Code</u>	<u>Code Title</u>
I11	Hypertensive heart disease
I50.0	Congestive heart failure

Rationale: When heart failure is caused by essential hypertension, physicians commonly use terminology such as “due to hypertension” or “hypertensive” to link the two. When diagnostic statements on the chart mention both conditions independently, a causal relationship must not be assumed. Since “hypertensive” is used in this example, a causal relationship is indicated.

Example: Chronic renal failure and hypertension



<u>Code</u>	<u>Code Title</u>
N18.9	Chronic kidney disease, unspecified
I10.0	Benign hypertension

Rationale: I12 *Hypertensive renal disease* is not assigned because a causal relationship cannot be presumed.

Example: **Diagnosis:** Type 2 diabetes mellitus with chronic renal failure Hypertension



<u>Code</u>	<u>Code Title</u>
E11.23†	Type 2 diabetes mellitus with established or advanced kidney disease
N08.39*	Unspecified glomerular disorders in diabetes mellitus
I10.0	Benign hypertension

Rationale: I12 *Hypertensive renal disease* is not assigned because a causal relationship cannot be assumed between hypertension and kidney disease. Classify each condition separately.

Example: A patient is admitted for treatment of congestive heart failure and chronic renal failure documented as secondary to long-standing pre-existing hypertension. Treatment consisted of aggressive diuresis and dialysis.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I13	(M)	Hypertensive heart and renal disease
I50.0	(1)	Congestive heart failure
N18.9	(1)	Chronic kidney disease, unspecified

Rationale: Causal effect has been documented between heart failure and renal failure due to hypertension. Diagnosis type (1) is assigned with I50.0 and N18.9 because treatment was directed towards the congestive heart failure and kidney failure.

Hypertension With Cerebrovascular Disease

 **Sequence the code for cerebrovascular disease first when it is present with hypertension.**

Example: Occlusion of basilar artery with hypertension



<u>Code</u>	<u>Code Title</u>
I65.1	Occlusion and stenosis of basilar artery
I10.0	Essential (primary) hypertension

Acute Coronary Syndrome (ACS)

[Click here for description of change.](#)

In effect 2001, amended 2003, 2006, 2007, 2008, 2009, 2012

See also [Appendix A—Acute Coronary Syndrome \(ACS\) and Related Interventions](#) for clinical information.



When any code from category I21 *Acute myocardial infarction*, I22 *Subsequent myocardial infarction*, or code I24.0 *Coronary thrombosis not resulting in myocardial infarction* is assigned, assign an additional code from subcategory R94.3—*Abnormal results of cardiovascular function studies*, mandatory, as diagnosis type (3)/other problem.

Note: For inpatient and day surgery abstracts, R94.30 and R94.31 are reserved for the purpose of adding STEMI and NSTEMI information to acute myocardial infarction or aborted myocardial infarction. These codes are to be used only when a code from category I21 *Acute myocardial infarction*, I22 *Subsequent myocardial infarction* or code I24.0 *Coronary thrombosis not resulting in myocardial infarction* is assigned. R94.30 and R94.31 are not used with any other diagnosis.

For emergency department encounters, R94.30 and R94.31 may be used without a code from category I21, I22 or code I24.0; however, they must only be used for the purpose of indicating a discharge diagnosis of STEMI or NSTEMI.

Note: Do not refer to the ECG or laboratory reports for assignment of R94.3–. Use the physician statement of the ECG findings. If no such statement is found use R94.38 *Other and unspecified abnormal results of cardiovascular function studies*.

Example: A 74-year-old female was seen in the emergency department and subsequently admitted with chest discomfort, pain radiating down both arms and a general sense of feeling unwell. Symptoms had been present for about three days before the patient came to hospital. Upon admission to hospital, the physician noted her ECG was normal but her troponin and CK-MB were elevated.



Final diagnosis: Non-Q-wave myocardial infarction.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I21.4	(M)	Acute subendocardial myocardial infarction
R94.31	(3)	Abnormal cardiovascular function studies (biomarkers or ECG) suggestive of non ST segment elevation myocardial infarction [NSTEMI]

Rationale: R94.31 is assigned because the physician documented the diagnosis as an MI and there was documentation indicating that there was no ST segment elevation (i.e. the ECG was normal) but there were positive biomarkers.

Example:



Patient presented with episodes of syncope. An admission ECG documented ST depression in leads V4 to V6 with nonspecific ST changes in the high lateral leads. His biomarkers were positive. Impression: NSTEMI. Plan: NSTEMI management. His first troponin was 0.18. The second was 0.16 and the CK-MB was negative. This pointed to a noncardiac cause of troponin leak. He had a CT pulmonary angiogram study which confirmed pulmonary embolism and he was started on Heparin and Warfarin. Final diagnosis: Pulmonary embolism

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I26.9	(M)	Pulmonary embolism without mention of acute cor pulmonale

Rationale: As the final diagnosis is not a myocardial infarction, R94.3– is not assigned.

The diagnosis of ST elevation myocardial infarction (STEMI) or non ST elevation myocardial infarction (NSTEMI) clinically represents the early picture of acute coronary syndrome (ACS) on presentation. The evolution or outcome of the condition may not be determined until after further investigation or treatment.

In the emergency department setting, a diagnosis written as STEMI, for example, is classified to R94.30 alone to reflect that the outcome is yet to be determined. However, when a physician records the diagnosis in the emergency department in terms such as “acute MI,” it is interpreted to mean that the outcome has been determined and the appropriate code from I21 is assigned.

In the inpatient setting, the evolution or outcome of the condition is expected to be determined by the time of discharge. The usual evolution of STEMI is Q-wave myocardial infarction. Therefore, a myocardial infarction documented as STEMI is classified to the appropriate code from I21.0–I21.3 unless there is documentation to support that the final outcome is a non-Q-wave MI or an averted MI. The usual evolution of NSTEMI is non-Q-wave myocardial infarction. Therefore, a myocardial infarction documented as NSTEMI is classified to I21.4 unless there is documentation to support that the final outcome is a Q-wave myocardial infarction.

- N** When the emergency department (ED) discharge diagnosis is documented as ST elevation myocardial infarction (STEMI), or non ST elevation myocardial infarction (NSTEMI) assign the appropriate code from subcategory R94.3– *Abnormal results of cardiovascular function studies*, as the main problem.
- N** When the emergency department (ED) discharge diagnosis is documented in terms of an acute myocardial infarction, assign the appropriate code from category I21 *Acute myocardial infarction* as the main problem.

Example: This patient presented to the emergency department with crushing chest pain and associated jaw pain. ECG initially showed depression in anterior and inferior leads and afterwards developed right bundle branch block, and ST depression in anterolateral and inferior leads. The patient was transferred to CCU with a diagnosis of NSTEMI.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
R94.31	MP	Abnormal cardiovascular function studies (biomarkers or ECG) suggestive of non ST segment elevation myocardial infarction [NSTEMI]

Rationale: In the emergency department, the working diagnosis of NSTEMI represents the greatest degree of specificity known at the time of transfer to CCU.

Example: The patient was received in the emergency department from Hospital A by air ambulance with a diagnosis of STEMI. On examination the patient was ashen and there were no peripheral pulses. Patient was sent directly to the catheterization lab with an emergency department discharge diagnosis of acute MI.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
I21.9	MP	Acute myocardial infarction, unspecified
R94.30	OP	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]

Rationale: Always assign codes to the greatest degree of specificity documented. The documentation states this patient was brought to hospital with a diagnosis of STEMI so R94.30 is assigned. I21.9 is selected as the code for the main problem as the final outcome or type of myocardial infarction has not yet been established.

D Classify a myocardial infarction with ST segment elevation to subcategory I21.0–I21.3 *Acute transmural myocardial infarction* by site unless there is documentation to support that the final outcome was a non-Q-wave myocardial infarction or aborted myocardial infarction.

Example: A 61-year-old man was transferred in from another hospital with an acute inferior wall ST segment elevation myocardial infarction having failed thrombolytic therapy. Physician noted that ECGs done on admission at the referring hospital showed ST elevation. No previous history of coronary artery disease. PCI performed on day one to the right coronary artery.



Discharge diagnosis: ST elevation MI, inferior wall

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I21.1	(M)	Acute transmural myocardial infarction of inferior wall
R94.30	(3)	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]

Rationale: CAD was not documented in this example; therefore, a code for CAD has not been assigned. However, this must be confirmed by review of the complete record or by seeking clarification from the physician.

Example: A 54-year-old male presented with chest pain. The physician noted his admitting ECG showed ST segment elevation. He was admitted to CCU with thrombolytic therapy initiated immediately. ECG appeared normal following treatment, but troponin levels documented as elevated. Final diagnosis documented as non-Q-wave myocardial infarction.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I21.4	(M)	Acute subendocardial myocardial infarction
R94.30	(3)	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]

Rationale: Although this case presented as a STEMI, thrombolytic therapy was successful in preventing this MI from evolving into a Q-wave myocardial infarction; therefore, a code from subcategory I21.0—I21.3 is not assigned.



Classify a myocardial infarction presenting with ST segment elevation, but aborted or averted by successful treatment to I24.0 *Coronary thrombosis not resulting in myocardial infarction*.

Example: A 57-year-old male with known CAD, presented with chest pain. The physician noted his admitting ECG showed ST segment elevation. A primary PCI was performed. Final diagnosis documented as aborted myocardial infarction.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I24.0	(M)	Coronary thrombosis not resulting in myocardial infarction
R94.30	(3)	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]
I25.19	(1)	Atherosclerotic heart disease of unspecified type of vessel, native or graft



Classify a myocardial infarction without ST segment elevation to I21.4 *Acute subendocardial myocardial infarction* unless there is documentation to support that the final outcome was a Q-wave myocardial infarction.

Example: A 45-year-old male presented with a clinical picture and subsequent ECG and enzyme documentation of a small ACS event. A non ST segment elevation myocardial infarction was documented. Subsequent coronary angiogram indicated triple-vessel coronary artery disease. Surgical consultation was obtained and bypass procedure will be scheduled. Discharge medications included aspirin, Plavix and Ramipril.



Final diagnosis: Non ST segment elevation myocardial infarction.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I21.4	(M)	Acute subendocardial myocardial infarction
R94.31	(3)	Abnormal cardiovascular function studies (biomarkers or ECG) suggestive of non ST segment elevation myocardial infarction [NSTEMI]
I25.10	(1)	Atherosclerotic heart disease of native coronary artery

Rationale: CAD qualifies as a diagnosis type (1) because it was investigated and diagnosed during this admission. In this case the myocardial infarction is the focus of care and; therefore, the MRDx.



Whenever a myocardial infarction is within the acute phase (i.e. within 28 days) assign a comorbid diagnosis type (M), (1), (2), (W), (X) or (Y) as appropriate for the case.



When a patient presents with any condition in the spectrum of ACS and undergoes emergent or urgent percutaneous coronary intervention (PCI) during the same admission, assign a code for the ACS diagnosis as the most responsible diagnosis (MRDx)/main problem. Assign an additional code for any documented underlying coronary artery disease as a diagnosis type (1)/other problem. This applies to in-hospital and out-of-hospital PCIs and to both the transferring and receiving hospitals.



When a patient who has a myocardial infarction that is still in the acute phase presents for elective PCI, assign a code for the underlying coronary artery disease as the MRDx/main problem and assign an additional code for the MI as a significant diagnosis type/other problem.

Exception: When a patient is readmitted with a diagnosis classifiable to category I22 *Subsequent myocardial infarction*, a code from category I21 *Acute myocardial infarction* may be assigned as an optional diagnosis type (3)/other problem to indicate the site of the original MI.

Example:



Patient choked on some custard earlier this week. She then went on to develop a cough and a fever. Chest X-ray confirmed that she had aspiration pneumonia. The physician noted in the discharge summary that she had an acute myocardial infarction two weeks ago.

Final diagnosis: Aspiration pneumonia

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
J69.0	(M)	Pneumonitis due to food and vomit
I21.9	(1)	Acute myocardial infarction, unspecified
R94.38	(3)	Other and unspecified abnormal results of cardiovascular function studies

Rationale: The myocardial infarction was still within the acute phase so it is assigned a comorbid diagnosis type. Since a code from I21 is assigned, R94.38 *Other and unspecified abnormal results of cardiovascular function studies*, is mandatory.

Example:



Patient was received in transfer from Hospital A with diagnosis of STEMI, having failed thrombolytic therapy. He had been treated with TNK, but chest pain continued and he was referred to Hospital B for coronary angiography and possible intervention.

Final Diagnosis: Acute inferior wall ST segment elevation myocardial infarction with failed thrombolytic therapy. Successful rescue PCI.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I21.1	(M)	Acute transmural myocardial infarction of inferior wall
R94.30	(3)	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]

Rationale: As this is not an elective PCI for Hospital B, I21.1 is assigned as the MRDx. In the acute phase of a myocardial infarction, a PCI is most often a life saving event. The focus of care is the myocardial infarction, and secondarily the underlying coronary artery disease. Had there been documentation of underlying CAD, it would be a diagnosis type (1).

Example: A 52-year-old male presented with chest pain and shortness of breath. Physician documented possible ACS. ECG documented as showing no significant ischemia and no acute infarction. Troponin levels documented as negative for infarction. Final diagnosis on angiogram report: Non ST elevation acute coronary syndrome (Non-STEACS) with diffuse coronary artery disease.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I20.0	(M)	Unstable angina
I25.19	(1)	Atherosclerotic heart disease of unspecified type of vessel, native or graft

Rationale: **Note:** For this example, Non-STEACS = unstable angina because of the normal ECG and the negative troponin. Unstable angina is part of the spectrum of ACS and qualifies as the MRDx. The coronary artery disease is a diagnosis type (1) since it was diagnosed during this admission. R94.3– is not assigned in this case as the MRDx is not from category I21, I22 nor I24.0.



When a transmural [Q-wave] myocardial infarction is classifiable to more than one code in category I21, assign I21.2 *Acute transmural myocardial infarction of other sites*.



Assign a code from the category I22 *Subsequent myocardial infarction* to capture a repeat myocardial infarction within the acute phase (i.e. within 28 days) of the initial infarction or an extension of the initial infarct occurring within the 28 day period. Assign diagnosis type according to the diagnosis typing definitions.



When a code from category I22 *Subsequent myocardial infarction* is assigned, assign an additional code from subcategory R94.3- *Abnormal results of cardiovascular function studies*, mandatory, as a diagnosis type (3)/other problem.

See also the coding standard entitled [Diagnosis Typing Definitions for DAD](#).

Example: Acute Q-wave myocardial infarction involving the anterolateral and inferolateral wall. Progress notes stated ECGs showed ST elevation.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
I21.2	(M)	MP	Acute transmural myocardial infarction of other sites
R94.30	(3)	OP	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]

Example: A 63-year-old woman presented to the hospital by ambulance because of ongoing chest pain since midnight. ECG showed non-specific ST-T wave changes. There were no ST segment elevations. Her cardiac markers were abnormal with troponin peaking at 1.42. Patient has a known history of coronary artery disease (CAD) and had a previous angioplasty in 2001. Patient admitted to CCU.



Impression: NSTEMI.

On her third day in CCU, patient started to have severe chest pain. The physician noted that a stat ECG taken during that time showed that she was having ST segment elevations in 2, 3, and AVF which did not settle down within 5–10 minutes. Therefore, patient was immediately taken to the cardiac catheterization lab for primary PCI for STEMI. Coronary angiograms showed that the patient had a 95% stenosis of the proximal circumflex artery and a 75% stenosis of the distal circumflex artery. She went on to have primary angioplasty with deployment of two stents to her circumflex artery.

Final diagnosis: acute myocardial infarction.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I22.9	(M)	Subsequent myocardial infarction of unspecified site
R94.30	(3)	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]
I21.4	(1)	Acute subendocardial myocardial infarction
R94.31	(3)	Abnormal cardiovascular function studies (biomarkers or ECG) suggestive of non ST segment elevation myocardial infarction [NSTEMI]
I22.9	(2)	Subsequent myocardial infarction of unspecified site
I25.10	(1)	Atherosclerotic heart disease of native coronary artery

Rationale: Both I21.4 and I22.9 are required. In this case, I22.9 meets the definition of the MRDx. Since the subsequent MI occurred after admission, it is also assigned a diagnosis type (2). An additional code from subcategory R94.3– is mandatory for both I21.4 (i.e. R94.31, to show the original MI was a NSTEMI) and I22.9 (i.e. R94.30 to show the subsequent MI was a STEMI).

Example: Patient was treated and discharged from hospital with an acute Q-wave myocardial infarction of the inferolateral wall. Two days following discharge, he was readmitted with an acute myocardial infarction of the posterolateral and posteroseptal wall.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I22.8	(M)	Subsequent myocardial infarction of other sites
R94.38	(3)	Other and unspecified abnormal results of cardiovascular function studies
I21.1	(3)	Acute transmural myocardial infarction of inferior wall (optional)
R94.38	(3)	Other and unspecified abnormal results of cardiovascular function studies

Rationale: I22.8 is assigned because the previous MI was <28 days old. The fact that the patient had a recent myocardial infarction is inherent in the I22.8 code. In the case of a readmission for a subsequent myocardial infarction, it is optional to assign a code from category I21 *Acute myocardial infarction*, to indicate the site of the original MI. If I21 is assigned it is a diagnosis type (3)/other problem and a code from subcategory R94.3– must also be assigned. In this case, since it is not documented whether the (initial or subsequent) myocardial infarctions were STEMI or NSTEMI, R94.38 is assigned.



Assign a code from the category I23 *Certain current complications following acute myocardial infarction* for specified complications that occur during the acute phase (i.e. within 28 days) of a myocardial infarction.

These complications usually occur within 2–7 days post acute myocardial infarction (AMI). However, this does not preclude the use of these codes when the condition is documented as a current complication following AMI or when the MI is in the acute stage (i.e. within 28 days). When complications occur simultaneously with the infarction, they are included in the acute myocardial infarction code.

Example: Patient was admitted from the emergency department with a diagnosis of STEMI and received thrombolytics. She was admitted directly to the coronary care unit. Based on documented ST elevations noted on ECG, she was diagnosed with an inferior STEMI. Two days later she suffered postmyocardial infarction angina.



Diagnosis: Acute myocardial infarction of inferior wall
Postmyocardial infarction angina

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I21.1	(M)	Acute transmural myocardial infarction of inferior wall
R94.30	(3)	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]
I23.82	(2)	Postmyocardial infarction angina as current complication following acute myocardial infarction



Assign I25.2 *Old myocardial infarction* (i.e. “history of MI”), optional, as a diagnosis type (3), only when BOTH of the following criteria apply:

- The previous myocardial infarction occurred more than 4 weeks (28 days) ago, and
- The patient is not currently receiving observation, evaluation, or treatment for the previous myocardial infarction.ⁱ

Example: The patient was admitted for a hemicolectomy. Physician documented a past history of myocardial infarction based on ECG investigations. No treatment was directed towards the healed infarct.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I25.2	(3)	Old myocardial infarction (optional)

i. Extracted from NCCH ICD-10-AM, July 2002, Circulatory System.

Selection of Status Attribute for Percutaneous Coronary Intervention (PCI)

[Click here for description of change.](#)

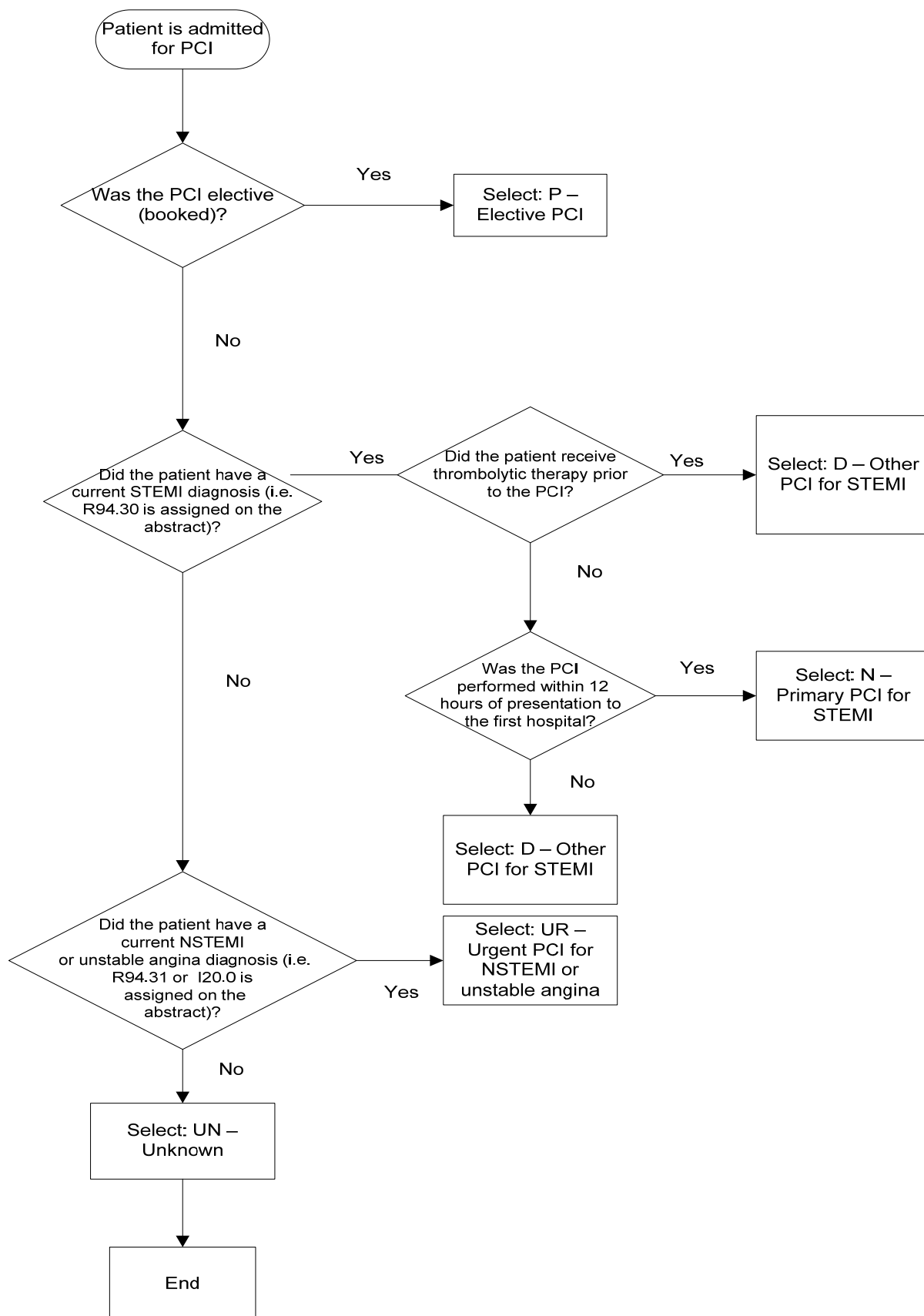
In effect 2012

The main purpose of the mandatory status attribute at rubric 1.IJ.50.^[^] *Dilation, coronary arteries* is to distinguish primary PCI for STEMI from other PCI.



When a percutaneous coronary intervention (PCI) classifiable to rubric 1.IJ.50.^[^] *Dilation, coronary arteries* is performed, assign, mandatory, the status attribute (see flowchart below).

Note: Ensure status attribute N—Primary PCI for STEMI or D—Other PCI for STEMI is selected only with a diagnosis of STEMI (i.e. R94.30 must be assigned on the abstract).



Thrombolytic Therapy

In effect 2006, amended 2007, 2008, 2009

Thrombolytics act on plasminogen, converting it into the active enzyme plasmin. Plasmin then breaks down the fibrin in a blood clot, to “bust” the clot.ⁱⁱ

Some examples of thrombolytic agents currently used (sometimes referred to as reperfusion therapy) include: streptokinase (Streptase®), alteplase or tissue plasminogen activator—tPA (Activase®), anistreplase (Eminase®), reteplase (Retavase®), urokinase or urokinase-type plasminogen activator—uPA (Abbokinase®), and tenecteplase (TNKase®). The intent is to achieve a reperfusion by thrombolysis.

- DN** Assign a code for thrombolytic therapy, mandatory, whenever it is administered regardless of the diagnosis.
- N** When thrombolytic therapy is administered in the emergency department or prior to arrival, for example by a paramedic, assign a code for thrombolytic therapy, mandatory, on the NACRS emergency department abstract.
- D** Assign a code for thrombolytic therapy, mandatory, on the abstract of the first inpatient encounter of the current, uninterrupted episode of care, even when administered:
 - prior to arrival to emergency department (e.g. by a paramedic); or
 - in the emergency department of the same facility or transfer facility.
- DN** Classify administration of a thrombolytic agent by intravenous infusion to 1.ZZ.35.HA-1C *Pharmacotherapy, total body, percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal], using thrombolytic agent*.
- DN** Classify injection of a thrombolytic agent into an artery to 1.^.^35.^.^ *Pharmacotherapy (local), vessel, by site*. For example:
 - 1.JW.35.HA-1C *Pharmacotherapy (local), intracranial vessels, percutaneous injection approach, using thrombolytic agent*
 - 1.IL.35.HA-1C *Pharmacotherapy (local), vessels of heart, percutaneous injection approach, of thrombolytic agent*
 - 1.IM.35.HA-1C *Pharmacotherapy (local), pulmonary artery, percutaneous injection approach, of thrombolytic agent*

Note: The intent of assigning a code for thrombolytic therapy is to identify a specific patient population (i.e. those who received thrombolytic therapy) and not to capture the number of occurrences of the administration of thrombolytic therapy.

Note: Use the *Intervention Pre-Admit Flag* to indicate when thrombolytic therapy was administered prior to admission, during an encounter of the current, uninterrupted episode of care. See Group 11, Field 20 in the Discharge Abstract Database (DAD) Abstracting Manual for specific instructions for applying the flag for interventions initiated prior to admission.

ii. American Heart Association. *What are Thrombolytics*. CPR Works. [Online], cited July 30, 2008, from <<http://www.cprworks.com/thrombolytics.html#20>>.

Example: The patient was admitted with left hemiparesis, slurred speech and facial drooping. He was diagnosed with a cerebral infarction. Intravenous streptokinase was immediately administered.

1.ZZ.35.HA-1C Pharmacotherapy, total body, percutaneous approach
[intramuscular, intravenous, subcutaneous, intradermal],
using thrombolytic agent

Example: The patient was admitted from the emergency department with STEMI for possible PCI. Two culprit arteries, LAD and Cx, were dilated and stented. Following PCI, intracoronary thrombolytic injection was performed for clot in the artery. Femoral artery approach and coronary angiograms taken.

1.IJ.50.GQ-OA Dilation, coronary arteries, percutaneous transluminal approach
Status: N [e.g. with angioplasty alone] using balloon or cutting balloon dilator
Extent: DF with (endovascular) stent insertion
1.IL.35.HA-1C Pharmacotherapy (local), vessels of heart, percutaneous injection
approach, of thrombolytic agent
3.IP.10.VX Xray, heart with coronary arteries, of left heart structures using
Status: DX percutaneous transluminal arterial (retrograde) approach
Location: FY

Example: The patient was admitted to facility A with STEMI. Streptokinase was administered in the emergency department and the patient was admitted to the ICU. When a bed was available at Facility B (a tertiary facility), the patient was transferred.

1.ZZ.35.HA-1C Pharmacotherapy, total body, percutaneous approach
[intramuscular, intravenous, subcutaneous, intradermal],
using thrombolytic agent

Note: Apply *Intervention Pre-Admit Flag*

Rationale: Facility A would capture thrombolytic therapy on both the NACRS emergency abstract (if a NACRS reporting facility) and the DAD inpatient abstract. Facility B would not capture the administration of the thrombolytic agent on their inpatient abstract.

Many facilities in Canada do not report to the NACRS; therefore, to ensure that thrombolytic therapy given prior to admission as an inpatient is not lost, it must be captured on the abstract of the first inpatient encounter. In this scenario, thrombolytic therapy would be captured on the DAD inpatient abstract of Facility A; therefore, it is not necessary to report it again on the DAD inpatient abstract of Facility B.

Example: The patient is brought to the emergency department at Facility A and receives TNK. The patient is immediately transferred to Facility B where he is admitted directly to CCU.

1.ZZ.35.HA-1C Pharmacotherapy, total body, percutaneous approach
[intramuscular, intravenous, subcutaneous, intradermal],
using thrombolytic agent

Note: Apply *Intervention Pre-Admit Flag*

Rationale: Facility A would capture thrombolytic therapy on the NACRS emergency abstract (if a NACRS reporting facility). Facility B MUST capture the administration of the thrombolytic agent on their inpatient abstract.

Many facilities in Canada do not report to the NACRS; therefore, to ensure that thrombolytic therapy that is given prior to admission as an inpatient is not lost, it must be captured on the abstract of the first inpatient encounter. In this scenario, the first inpatient DAD abstract would be generated at Facility B; therefore, it must be captured on the DAD abstract of Facility B.

A patient presenting with NSTEMI, may be treated with anti-thrombotics (e.g. Heparin) to inhibit the coagulation process. Medical management following a myocardial infarction may include platelet aggregation inhibitorsⁱⁱⁱ (e.g. Plavix, Reopro, Integrillin), ACE inhibitors and acetylsalicylic acid (ASA) to prevent further atherothrombotic events. It is optional to capture pharmacotherapy using anti-thrombotics or platelet aggregation inhibitors.

Example: This is an 81-year-old gentleman, admitted with acute coronary syndrome. He had been having chest pain on and off for several days leading up to his admission. He had ischemic looking T-wave changes laterally in his ECG, associated with an elevation of his troponin T. He was admitted to the ICU with a diagnosis of NSTEMI and treated in the usual fashion with beta blockers, and subcutaneous Lovenox, etc.

Note: Lovenox is in a class of antithrombotic agents known as low-molecular-weight heparins.

1.ZZ.35.HA-C1 Pharmacotherapy, total body, percutaneous approach
[intramuscular, intravenous, subcutaneous, intradermal], using
antithrombotic agent (optional)

Rationale: Since Lovenox is an antithrombotic, assignment of 1.ZZ.35.HA-C1 is optional; it is only mandatory to capture thrombolytic therapy.




iii. Anderson, J. L. et al. Journal of American College of Cardiology. *ACC/AHA 2007 Guidelines for the Management of Patients with Unstable Angina/Non-ST-Elevation Myocardial Infarction*, 50 (August 6, 2007): pp.652–726. [Online], cited August 1, 2008, from <<http://content.onlinejacc.org/cgi/content/full/50/7/652>>.

Angina

In effect 2001, amended 2002, 2006, 2007

Angina pectoris (I20) is a clinical syndrome due to myocardial ischemia characterized by precordial discomfort or pressure, typically precipitated by exertion and relieved by rest or sublingual nitroglycerin. Unstable angina is characterized by a progressive increase in anginal symptoms, new onset of rest or nocturnal angina, or onset of prolonged angina and is part of the spectrum of conditions in acute coronary syndrome.

See also the coding standards entitled [Chronic Ischemic Heart Disease](#) and [Acute Coronary Syndrome \(ACS\)](#).

-  **Classify angina as a significant diagnosis type (M), (1) or (2) only when it is documented as occurring during the current episode of care.**
-  **When a patient is admitted with angina that progresses to a myocardial infarction in the same episode of care, assign a code for the myocardial infarction only.**
-  **When a coronary artery bypass (CABGs) is performed, select I25.1– *Atherosclerotic heart disease* as the MRDx.**

Example: Patient who was known to have coronary atherosclerosis, presented to the emergency department with unstable angina. She was subsequently admitted to undergo coronary artery bypass grafting (CABG). Patient has had no previous bypass procedure.



Final Diagnosis: CAD with unstable angina

Procedure: CABG (x3)

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I25.10	(M)	Atherosclerotic heart disease of native coronary artery
I20.0	(1)	Unstable angina

Rationale: Since the unstable angina occurred during the current episode of care and was present on admission, it is assigned a diagnosis type (1).

Example: Patient has had a longstanding history of CAD with exertional angina that has been worsening in severity. He was admitted for elective PCI with stent insertion. He experienced no episodes of angina during the current episode of care.



Final Diagnosis: CAD with history of angina

<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
I25.10	(M)	MP	Atherosclerotic heart disease of native coronary artery
I20.88	(3)	OP	Other forms of angina pectoris (optional)

Rationale: Treatment was aimed at the underlying disease. While the patient had angina prior to admission, there was no episode of angina during the current episode of care. A history of angina with no documented episode occurring during the patient's stay in hospital describes a risk factor and may be recorded at the facility's discretion with a diagnosis type (3)/ other problem.

Example: A patient with known CAD presents with unstable angina. He was stabilized and transferred to another hospital for coronary angiogram and possible CABG.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
I20.0	(M)	MP	Unstable angina
I25.10	(3)	OP	Atherosclerotic heart disease of native coronary artery

Rationale: Treatment at the first hospital was aimed at the unstable angina only.

Chronic Ischemic Heart Disease

In effect 2001, amended 2002, 2005, 2006, 2007

Chronic ischemic heart disease is also described as arteriosclerotic heart disease, atherosclerotic heart disease (ASHD), coronary artery disease (CAD) or coronary atherosclerosis and is classified to I25.1– *Atherosclerotic heart disease*. I25.0 *Atherosclerotic cardiovascular disease, so described* is used only for atherosclerotic cardiovascular disease (ASCVD) when it is so documented by the physician. In advanced disease, ASHD is often manifested by angina or manifested by an acute myocardial infarction (MI).

See also the coding standards entitled [Angina](#) and [Acute Coronary Syndrome \(ACS\)](#).



When the patient is admitted with an acute MI and undergoes coronary artery bypass during the same admission, select a code from I25.1– *Atherosclerotic heart disease* as the MRDx, and assign diagnosis type (1) to the code for myocardial infarction.

Example: This patient presented to the emergency department on August 17 with crushing chest pain and associated jaw pain. ECG initially showed depression in anterior and inferior leads and afterwards developed slight bundle branch block, and ST depression. Troponin 0.57, CK-MB 5.5. Diagnosed as NSTEMI and admitted to CCU on ASA, Plavix, B-blocker, ACE-I. He was booked for coronary angiography on August 18 that showed severe 3 vessel CAD, amenable to bypass. August 19 patient had CABG. He was discharged on August 27.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I25.10	(M)	Atherosclerotic heart disease of native coronary artery
I21.4	(1)	Acute subendocardial myocardial infarction
R94.31	(3)	Abnormal cardiovascular function studies (biomarkers or ECG) suggestive of non ST segment elevation myocardial infarction [NSTEMI]

Rationale: In this case, the CAD meets the criteria for MRDx.

Related Interventions

Coronary Artery Bypass Graft (CABG) is classified in CCI to the rubric 1.IJ.76.^^{^^} *Bypass, coronary arteries*. The tissue used for the bypass is captured as the qualifier. The saphenous vein is considered a free graft whereas the internal mammary artery is a pedicled graft. When both pedicled and free autografts are used, the qualifier for combined grafts is selected.

Harvesting of the vessel used for the bypass is coded (e.g. saphenous vein or radial artery) whenever a separate incision is made to obtain it.

See also the coding standard entitled [Procurement or Harvesting of Tissue for Closure, Repair or Reconstruction](#).

Note: A mandatory extent attribute is required to record the number of arteries bypassed.



When cardiopulmonary bypass, endarterectomy, or intraoperative cell saver is performed with coronary artery bypass graft, assign an additional CCI code to capture these procedures.

Procedures such as hypothermia, cardioplegia, cardioversion, insertion of pacing wires and chest tube insertions are an inherent part of the bypass surgery and do not need to be coded separately.

Example: Internal mammary artery bypass graft of the left anterior ascending artery and saphenous vein bypass graft of the proximal posterior descending artery. Extracorporeal heart-lung bypass was used and cardioplegia was achieved. Epicardial pacing wires were placed and a chest tube was inserted.

1.IJ.76.LA-XX-Q	Bypass, coronary arteries, open approach, using combined
Extent: 2	sources of tissue [e.g. graft/pedicled flap]
1.LZ.37.LA-GB	Installation of external appliance, circulatory system NEC,
	open approach, cardio-pulmonary bypass (intraoperative)
1.KR.58.LA	Procurement, veins of leg NEC, using open approach

Rationale: Codes for extracorporeal bypass are mandatory, but pacing wires and chest tube insertion are not.

Occlusion Following Coronary Artery Bypass Grafts (CABG)




In effect 2002, amended 2006

The success of coronary artery bypass graft varies depending on whether the revascularization was performed using saphenous vein graft or a pedicled artery. Saphenous vein grafts are prone to occlusive disease. By 10 years after surgery, 50% have closed, mainly because of atherosclerosis. In contrast, the internal mammary artery is less affected by atherosclerosis and has a 90% patency rate after 10 years.

Different processes can cause saphenous vein graft occlusion. These processes include:

- Thrombosis accounts for graft failure within the first month but continues to occur as long as one year after surgery. Graft thrombosis is classified in ICD-10-CA to T82.8 *Other complications of cardiac and vascular prosthetic devices, implants and grafts*.
- Vein graft atherosclerosis may begin as early as the first year but is fully developed after about five years. Saphenous vein graft atherosclerosis is classified to I25.11 *Atherosclerotic heart disease of autologous vein bypass graft*.^{iv}

CIHI has sought clinical advice for classification of occluded coronary artery bypass grafts when documentation is ambiguous.

- | | |
|---|---|
|  | When coronary artery bypass graft occlusion is stated as due to thrombosis or when it occurs within one month of surgery, assign T82.8 <i>Other complications of cardiac and vascular prosthetic devices, implants and grafts</i> . |
|  | When coronary artery bypass graft occlusion is stated as due to atherosclerosis (or atheroma) or occurs one year after surgery, assign a code from I25.1– <i>Atherosclerotic heart disease</i> . |
|  | When the cause of coronary artery bypass graft occlusion is not stated and occlusion occurs between one month and one year after surgery, seek clarification from the physician. |

See also the coding standard entitled [Post-Intervention Conditions](#).

Example: Patient is admitted for occlusion of his previous saphenous vein coronary artery bypass graft. The graft surgery was done almost 6 years previously.



Code
I25.11

DAD
(M)

Code Title
Atherosclerotic heart disease of autologous vein bypass graft

iv. Nwasokwa, Obi N. (October 1995). *Coronary Artery Bypass Graft Disease*. *Annals of Internal Medicine*, Vol 123, No 7, pages 528–533.

Example: Patient is readmitted two weeks following CABG due to a thrombus within the newly placed graft.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T82.8	(M)	A	Other specified complications of cardiac and vascular prosthetic devices, implants and grafts
I24.0	(3)	A	Coronary thrombosis not resulting in myocardial infarction
R94.38	(3)	A	Other and unspecified abnormal results of cardiovascular function studies
Y83.2	(9)	A	Surgical operation with anastomosis, bypass or graft as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Cardiac Arrest

[Click here for description of change.](#)

In effect 2002, amended 2005, 2006, 2008, 2009



Assign I46.0 *Cardiac arrest with successful resuscitation* or I46.9 *Cardiac arrest, unspecified* when cardiac arrest is documented by the physician and a resuscitative intervention is undertaken, regardless of outcome.



Assign, mandatory, codes to identify cardiac resuscitative intervention(s) undertaken.



When cardiac arrest occurs as an expected terminal event in hospital and no resuscitation is attempted, code only the underlying condition.



Assign I46.1 *Sudden cardiac death, so described* only when specifically documented as such by the physician.

Cardiac resuscitative interventions include:

- codes from rubric 1.HZ.30.^ *Resuscitation, heart NEC*; and
- codes from rubric 1.HZ.09.^ *Stimulation, heart NEC*.

Note: Do not confuse a statement of vital signs absent (VSA) with cardiac arrest. Cardiac arrest must be clearly documented as such before assigning I46.0 or I46.9. A diagnosis of cardiac arrest cannot be assumed on the basis of administration of cardiocerebral resuscitation (CCR) or cardiopulmonary resuscitation (CPR) alone.

Note: Cardiocerebral resuscitation (CCR) is chest compressions only, without artificial respiration.

See also the coding standard entitled [Vital Signs Absent \(VSA\)](#).

Example: An 80-year-old woman called 911. When the paramedics arrived, she was found vital signs absent. At the hospital, the emergency department physician pronounced her dead and documented “sudden cardiac death” on the emergency record.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
I46.1	MP	Sudden cardiac death, so described

Example: A patient with AIDS with disseminated aspergillosis was terminally ill. There was a “do not resuscitate” (DNR) order on the chart. The physician documented that the patient arrested at 11:45 and he was subsequently pronounced dead.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
B24	(M)	Human Immunodeficiency virus [HIV] disease
B44.7	(1)	Disseminated aspergillosis

Rationale: As the arrest is an expected terminal event, only the underlying condition is coded.

Example: This 58-year-old female presented to the emergency department with chest pain. The physician noted that the ECG showed ST segment elevation. The patient was admitted to the CCU with a diagnosis of acute myocardial infarction. The patient subsequently went into cardiac arrest. Cardiopulmonary resuscitation was initiated but was unsuccessful. The patient was pronounced expired at 17:10.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I21.3	(M)	Acute transmural myocardial infarction of unspecified site
R94.30	(3)	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]
I46.9	(2)	Cardiac arrest, unspecified
1.HZ.30.JN		Resuscitation, heart NEC, by external manual compression with or without concomitant ventilation
1.GZ.31.CB-EP		Ventilation, respiratory system NEC, non-invasive approach
Extent: 0		manual hand assisted (e.g. ambu bag) (optional)

Rationale: Cardiac arrest was documented and a cardiac resuscitation intervention was undertaken; therefore, it is mandatory to assign a code for the cardiac arrest, regardless of the outcome. It is also mandatory to assign a code for the cardiac resuscitation intervention. Note: it is optional to assign a code for non-invasive ventilation in acute inpatient care.

Example: A 40-year-old man presented to the hospital with chest pain and had a documented cardiac arrest in the emergency department. An endotracheal tube was inserted, cardiopulmonary resuscitation (CPR) was initiated and was successful. The patient reverted to normal sinus rhythm.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
I46.0	MP	Cardiac arrest with successful resuscitation
1.HZ.30.JN		Resuscitation, heart NEC, by external manual compression with or without concomitant ventilation
1.GZ.31.CA-EP		Ventilation, respiratory system NEC, using invasive per orifice approach by endotracheal intubation manual hand assisted
Extent: CN		(e.g. ambu bag)

Rationale: Cardiac arrest was documented and a cardiac resuscitation intervention was undertaken; therefore, it is mandatory to assign a code for the cardiac arrest, regardless of the outcome. It is also mandatory to assign codes for the cardiac resuscitation and invasive ventilation.

Example: A 52-year-old lady admitted with pneumonia had a cardiac arrest after admission. Code blue was called. CPR was started and the defibrillator was used. Resuscitation efforts were subsequently stopped and the patient was declared dead at 21:00 hours.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
J18.9	(M)	Pneumonia, unspecified
I46.9	(2)	Cardiac arrest, unspecified

1.HZ.09.JA-FS Stimulation, heart NEC, external approach, using electrode converter/defibrillator

Rationale: Cardiac arrest was documented and a cardiac resuscitation intervention was undertaken; therefore, it is mandatory to assign a code for the cardiac arrest, regardless of the outcome. It is also mandatory to assign a code for the cardiac resuscitation intervention.

Example: A 55-year-old gentleman collapsed at home while shoveling snow in his driveway. His wife called the ambulance and they found the patient pulseless. Cardiopulmonary resuscitation (CPR) was initiated and continued en route to the closest emergency department. The patient was immediately taken to the trauma room with paramedics still performing CPR. The physician examined the patient and pronounced him deceased. Final diagnosis was cardiac arrest.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
I46.9	MP	Cardiac arrest, unspecified

1.HZ.30.JN Resuscitation, heart NEC, by external manual compression with or without concomitant ventilation

1.GZ.31.CB-EP Ventilation, respiratory system NEC, non-invasive approach
Extent: 0 manual hand assisted (e.g. ambu bag)

Rationale: Cardiac arrest was documented and a cardiac resuscitation intervention was undertaken; therefore, it is mandatory to assign a code for the cardiac arrest, regardless of the outcome. It is also mandatory to assign a code for the cardiac resuscitation intervention. Note: for ambulatory care it is mandatory to assign a code from 1.GZ.31.^ *Ventilation, respiratory system NEC*, including non-invasive ventilation. See also the coding standard entitled [Selection of Interventions to Code for Ambulatory Care](#).

Example: A 65-year-old male was brought to the emergency department by ambulance. Paramedics were performing cardiocerebral resuscitation (CCR) which was stopped shortly after arrival. The emergency department physician pronounced the death and documented the diagnosis as vital signs absent (VSA).



Note: Cardiocerebral resuscitation (CCR) is chest compressions only, without artificial respiration.

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
R99	MP	Other ill-defined and unspecified causes of mortality

1.HZ.30.JN Resuscitation, heart NEC, by external manual compression with or without concomitant ventilation

Rationale: Cardiac arrest cannot be assumed on the basis of CCR. It is mandatory to assign a code for the resuscitation intervention.

Strokes, Cerebrovascular Accidents (CVA) and Transient Ischemic Attacks (TIA)

In effect 2001, amended 2002, 2003, 2005, 2006, 2008

This standard addresses the difference between a current stroke episode and one that is considered treatment of sequelae of stroke.

See also the coding standard entitled [Neurological Deficits Following a Stroke](#).

See also [Appendix A—Strokes, Cerebrovascular Accidents \(CVA\) and Transient Ischemic Attacks \(TIA\)](#) for clinical information.

Current Stroke

DN Assign the code for current stroke, classifiable to I60–I64, during the initial episode of care for the stroke. This includes both the acute care hospitalization and any subsequent transfer for rehabilitation to another facility to continue treatment of the associated neurological deficits, during the current, uninterrupted episode of care.

D When there is documentation of a second stroke, re-infarction, or re-stroke, following admission, assign a code from I60–I64 as a diagnosis type (2).

Note: The diagnosis type assigned to the current stroke, classifiable to I60–I64, depends on the circumstances of the episode of care.

A stroke may continue to worsen or progress several hours to a day or two as a steadily enlarging area of brain tissue dies (stroke in evolution). When a stroke is described as progressing or evolving, an additional code is not assigned.

Note: When any code from the range I60–I64 is recorded on an abstract, the code G45.9 *Transient cerebral ischemic attack, unspecified* is typically not recorded on the same abstract unless occurring as separate events.

Example: A person is admitted through the emergency department with a cerebral infarction.

DN	<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
	I63.9	(M)	MP	Cerebral infarction, unspecified

Example: The same person is now transferred from acute care to rehabilitation to regain activities of daily living (ADL) and to improve speech. Deficits are dominant-sided hemiplegia and aphasia.

D	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
	Z50.9	(M)	Care involving use of rehabilitation procedure, unspecified
	I63.9	(3)	Cerebral infarction, unspecified (for cerebral infarction occurring two weeks ago)
	G81.90	(1)	Hemiplegia of unspecified type of dominant side
	R47.0	(1)	Dysphasia and aphasia

Example: Patient was admitted with a cerebral infarction due to an embolism. She was seen by a cardiologist and found to have atrial fibrillation and anticoagulants were started. She was receiving intense physiotherapy for left-sided hemiplegia (patient is right-handed). On the 10th day after admission, she suffered a second stroke due to an embolism of the cerebral arteries.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I63.4	(M)	Cerebral infarction due to embolism of cerebral arteries
I48.90	(1)	Atrial fibrillation, unspecified
G81.91	(1)	Hemiplegia of unspecified type of non-dominant side
I63.4	(2)	Cerebral infarction due to embolism of cerebral arteries

Sequelae of Cerebrovascular Disease



Assign a code from I69 *Sequelae of cerebrovascular disease*, optional, to classify conditions in I60–I67.1 and I67.4–I67.9 as the cause of sequelae (i.e. a continuing neurological deficit).



Assign Z86.78 *Personal history of other diseases of the circulatory system*, optional, as a diagnosis type (3)/other problem, when there are no longer any neurological deficits present.

See also the coding standard entitled [Sequelae](#).

Example: Six months post-stroke, a person is admitted to hospital with aspiration pneumonia secondary to dysphagia which is present despite rehabilitation efforts.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
J69.0	(M)	Pneumonitis due to food and vomit
R13.8	(3)	Other and unspecified dysphagia
I69.4	(3)	Sequelae of stroke, not specified as haemorrhage or infarction (optional)

Example: Three months post-stroke a person presents to hospital with a broken right hip due to a stumble in the house. This person still has residual hemiparesis. She is subsequently admitted for further treatment and care.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S72.090	(M)	MP	Unspecified fracture of neck of femur, closed
W01	(9)	OP	Fall on same level from slipping, tripping and stumbling
U98.0	(9)	OP	Place of occurrence, home
G81.99	(3)	OP	Hemiplegia of unspecified type of unspecified [unilateral] side
I69.4	(3)	OP	Sequelae of stroke, not specified as haemorrhage or infarction (optional)

Example: Patient admitted for treatment of recurrent focal seizures (simple partial seizures)—a late effect of his stroke.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
G40.10	(M)	Localization-related (focal)(partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not stated as intractable
I69.4	(3)	Sequelae of stroke, not specified as haemorrhage or infarction (optional)

Related Interventions

Once stroke is suspected, a computerized tomography (CT) scan or magnetic resonance imaging (MRI) scan may be performed to distinguish a stroke caused by blood clot from one caused by hemorrhage, a critical distinction that guides therapy.

Emergency treatment of stroke from a blood clot is aimed at dissolving the clot. Thrombolytic therapy is coded in CCI using 1.ZZ.35.HA-1C *Pharmacotherapy, total body NEC, percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal], using thrombolytic agent*.

See also the coding standard entitled [Thrombolytic Therapy](#).

Other aggressive treatment options include:

Intracranial angioplasty	1.JW.50.^ ^{^^} <i>Dilation, intracranial vessels;</i>
Intracranial thrombectomy	1.JW.57.^ ^{^^} <i>Extraction, intracranial vessels; or</i>
Bypass, IC to IC vessels	1.JW.76.^ ^{^^} <i>Bypass, intracranial vessels.</i>

When the cause of stroke is hemorrhage, an evacuation procedure may be carried out (e.g. 1.AA.52.^^{^^} *Drainage, meninges and dura mater of brain*).

Vascular Syndromes of Brain in Cerebrovascular Diseases



Whenever a vascular syndrome is the cause of the stroke, follow the dagger/asterisk convention.

When a vascular syndrome is the cause of a stroke, all the codes in the range I60–I67† become dagger codes requiring the selection of an asterisk code from the category G46.—* *Vascular syndromes of brain in cerebrovascular diseases*.

See also the coding standard entitled [Dagger/Asterisk Convention](#).

Example: Stroke due to brain stem hemorrhage resulting in Millard-Gubler syndrome.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
I61.3†	(M)	MP	Intracerebral haemorrhage in brain stem
G46.3*	(3/6)	OP	Brain stem stroke syndrome (I60–I67†)

Rationale: Millard-Gubler syndrome is an inclusion term under G46.3.

Peripheral Vascular Disease

[Click here for description of change.](#)

In effect 2001, amended 2005, 2006

Peripheral vascular disease (PVD) (or peripheral arterial disease) is a nonspecific term. However, research indicates that this phrase is used to describe atherosclerotic disease of the peripheral arteries. Common manifestations of advanced/occlusive atherosclerosis of the extremities may be ischemia of the limbs, ulcers and gangrene. Peripheral atherosclerosis is a common complication of diabetes mellitus.

See also the coding standard entitled [Diabetes Mellitus](#).

Classify a diagnostic statement of “peripheral vascular disease” to I70.2– *Atherosclerosis of arteries of extremities* unless there is documentation to indicate anything else was intended.

Note: Atherosclerotic gangrene is an inclusion at I70.2– *Atherosclerosis of arteries of extremities*.

Example: A 65-year-old patient presents to the hospital electively for arteriography of the lower limbs. He had been experiencing dull cramping pain in his thigh and he noticed that his symptoms were precipitated by walking and were relieved by rest. He had a history of hypertension and no history of diabetes. The physician documented the diagnosis as “PVD.” The arteriogram demonstrated occlusions within the left femoral artery system.

Code	DAD	NACRS	Code Title
I70.20	(M)	MP	Atherosclerosis of arteries of extremities without gangrene

Exception: Peripheral vascular disease without gangrene in a patient with diabetes is classified to E10–E14 with fourth and fifth characters .50 and the asterisk code I79.2* *Peripheral angiopathy in diseases classified elsewhere*.

Peripheral vascular disease with gangrene in a patient with diabetes is classified to E10–E14 with fourth and fifth characters .51 and the asterisk code I79.2* *Peripheral angiopathy in diseases classified elsewhere*.

Follow the alphabetical index lookup for Angiopathy, peripheral, diabetic.

Example: A patient with type 2 diabetes was admitted for treatment of peripheral vascular disease (PVD). He underwent iliac artery angioplasty and stenting.

Code	DAD	NACRS	Code Title
E11.50†	(M)	MP	Type 2 diabetes mellitus with peripheral angiopathy
I79.2*	(6)	OP	Peripheral angiopathy in diseases classified elsewhere

Related Interventions

Percutaneous transluminal angioplasty (PTA) with or without stent insertion is classified at “dilation” by site.

Endarterectomy is sometimes done locally to improve outflow and is classified at “extraction” by site.

Bypass grafting may also be performed for revascularization of a limb. When an artery is bypassed, it is coded to the anatomic site in which it originates. The terminating site of the graft is captured in the qualifier component of the code.

See also the coding standard entitled *Procurement or Harvesting of Tissue for Closure, Repair or Reconstruction*.

Example: Aorto-femoral bypass graft using saphenous vein—originates in the aorta



1.KA.76.MZ-XX-A

Bypass, abdominal aorta, bypass terminating at lower limb vessels [e.g. iliac, femoral, popliteal, tibial], using autograft [e.g. saphenous vein]

1.KR.58.LA

Procurement, veins of leg NEC, using open approach

Amputation (93) may be performed if attempts at revascularization fail. The intervention is classified to “amputation” when an incision is made through a bone and to “disarticulation” when the incision is made through a joint.

Debridement of bone performed at a previous amputation site is coded to amputation of the same site with a status attribute “R” for revision.

Aneurysms

In effect 2001, amended 2006

An aneurysm is an abnormal local dilatation in the wall of a blood vessel, causing an abnormal widening or ballooning of a blood vessel, usually an artery, due to a defect, disease, or injury.

Aneurysms may be treated surgically in one of five ways:

1. Repair (reinforcement of the aneurysm wall)—Repair (80)
2. Repair with graft insertion—Repair (80)
3. Resection with graft replacement—Excision, partial (87)
4. Clipping and using [detachable] coils—Occlusion (51)
5. Filippuncture or wiring—Destruction (59)

D When an aortic aneurysm is incised and a Dacron (or other) tubular or bifurcated graft is inserted into the vessel and then covered with the residual sac of the aneurysm (aneurysmorrhaphy), assign the appropriate CCI code indicating “repair with graft insertion.” These are:

- 1.KA.80.^ ^ *Repair, abdominal aorta*
- 1.ID.80.^ ^ *Repair, aorta NEC*
- 1.IC.80.^ ^ *Repair, thoracic [descending] aorta or to another site, depending on the location of the graft/aneurysm.*

Example: The patient was admitted with an abdominal aortic aneurysm. It was repaired by opening up the aneurysmal sac and sewing a prosthetic Dacron graft into position within the aorta. The wall of the aneurysm was then sewn over the graft to protect it.

1.KA.80.LA-XX-N Repair, abdominal aorta, using open approach with synthetic material [e.g. Teflon felt, Dacron, Nylon, Orlon]

D When an aortic aneurysm is excised and the aortic segment is replaced with a tubular or bifurcated Dacron (or other) graft (aneurysmectomy), assign the appropriate CCI code indicating “excision partial of the aortic segment with graft replacement.” These are:

- 1.KA.87.^ ^ *Excision partial, abdominal aorta*
- 1.ID.87.^ ^ *Excision partial, aorta NEC*
- 1.IC.87.^ ^ *Excision partial, thoracic [descending] aorta depending on the location of the graft/aneurysm.*

Example: The patient came in to hospital for an elective repair of a thoracoabdominal aortic aneurysm. The aneurysm was excised and a synthetic graft was inserted to replace the excised portion of the thoracoabdominal aorta.

1.ID.87.LA-XX-N Excision partial, aorta NEC, open approach (for aorta NOS), using synthetic material

D When aneurysms of cerebral and precerebral arteries are treated by clipping or clamping, select the CCI generic intervention of “occlusion” (51).

Clips are applied externally to the artery in order to clamp it. Coils are inserted internally into an artery to occlude an artery. The mandatory extent attribute applies to the number of coils deployed during an occlusion. When occlusion is performed using technique/device other than coils, select “0.”

Example: A 45-year-old patient was admitted with epistaxis. Radiological studies showed an external carotid artery aneurysm. The patient was taken to the operating room for clipping of the aneurysm.

1.JE.51.LA-FF Occlusion, carotid artery, open approach using clips
Extent: 0

Chapter X—Diseases of the Respiratory System

See also [Appendix A—Adult Respiratory Distress Syndrome](#) for clinical information.

Lobar Pneumonia

In effect 2006

DN When a diagnosis is recorded by the physician as pneumonia, with no stated organism, and X-ray reports document complete consolidation of a lobe, assign J18.1 *Lobar pneumonia, unspecified*.

DN When a specific organism is stated as the cause of pneumonia, select the code indicating pneumonia due to the organism.

See also [Appendix A—Lobar Pneumonia](#) for clinical information.

When the physician documents pneumonia, radiology reports may be used to add specificity. See also the coding standard entitled [Using Diagnostic Test Results in Coding](#).

When pneumonia is stated as “RLL pneumonia,” one cannot assume that this means lobar pneumonia unless there is physician or X-ray documentation to CLEARLY indicate involvement of the entire lobe. Right lower lobe (RLL) pneumonia may simply mean that there is a patchy area or segment of pneumonia within the lower lobe of the lung. Terms such as catarrhal, confluent, diffuse, disseminated (focal), lobular (segmental) and patchy are indicative of bronchopneumonia (J18.0) as per the alphabetical index lookups under Pneumonia. The terms apical, basilar and massive are indicative of lobar pneumonia (J18.1) as per the alphabetical index lookups.

When documentation does not specifically state the organism and neither lobar pneumonia nor bronchopneumonia is recorded, then J18.9 *Pneumonia, unspecified* must be selected.

Example: A 28-year-old male presented with chest pain and the discharge diagnosis is documented as pneumonia. The patient is a heavy smoker of one to two packs daily. His CT scan of the lungs demonstrated he had developed complete consolidation of the left lower lobe and there is also consolidation and partial collapse of the right lower lobe.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J18.1	(M)	MP	Lobar pneumonia, unspecified

Example: An elderly patient is brought in from a retirement home with fever, chills and dyspnea. X-ray demonstrated complete consolidation of the left lower lobe. Sputum cultures were done and the physician records the diagnosis as pneumococcal pneumonia.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J13	(M)	MP	Pneumonia due to <i>Streptococcus pneumoniae</i>

Example: An elderly patient is brought in from a retirement home with fever, chills and dyspnea. X-ray demonstrated complete consolidation of the left lower lobe. Sputum cultures were done showing heavy growth of pneumococcus. There was no physician documentation acknowledging the C & S results. Final diagnosis: Pneumonia



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J18.1	(M)	MP	Lobar pneumonia, unspecified

Rationale: An X-ray is the report of an interpretation of an MD whereas most lab reports are not. Microbiology results are open to interpretation and include factors such as source of specimen, capture methodology, storage of specimen, length of time between capture and analysis, specific gravity (in the case of urine), etc. A physician's interpretation of the results is required.

Pneumonia in Patients With Chronic Obstructive Pulmonary Disease (COPD)

In effect 2002, amended 2005, 2006, 2008

When COPD is present with pneumonia or any other acute lower respiratory tract infection and is the major reason for hospitalization, assign J44.0 *Chronic obstructive pulmonary disease with acute lower respiratory infection*.

- When the infection is a significant condition in its own right, such as pneumonia, acute bronchitis or acute bronchiolitis, assign an additional code, as a comorbid diagnosis type/other problem, to specify the type of infection.

Sequence the code for COPD first.

Exception: When the patient has the combination of pneumonia, COPD and sepsis, the pneumonia is captured at J17.0* *Pneumonia in bacterial diseases classified elsewhere* and assigned diagnosis type (3) or (6) as it is an asterisk code associated with sepsis. Sequencing of the code for COPD (J44.0) will depend on circumstances of the specific case. See also the coding standards entitled [Septicemia/Sepsis](#) and [Dagger/Asterisk Convention](#).

Patients with COPD are generally considered a high risk for pneumonia. When a person with COPD gets a cold, it could develop into bronchitis or pneumonia. The infection could damage the bronchial linings creating a safe haven for bacteria to grow.

Example: A 68-year-old man with severe COPD contracted the common cold. He was being treated by the family physician for exacerbation of COPD. His condition worsened and he was brought into the emergency department. Chest X-ray revealed pneumonia. He was subsequently admitted for treatment of COPD exacerbation and pneumonia.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J44.0	(M)	MP	Chronic obstructive pulmonary disease with acute lower respiratory infection
J18.9	(1)	OP	Pneumonia, unspecified

Example: A patient from a nursing home presented to the emergency department with aspiration pneumonia. He has a long-standing history of COPD.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
J69.0	MP	Pneumonitis due to food and vomit
J44.9	OP	Chronic obstructive pulmonary disease, unspecified

Rationale: Pneumonia due to aspiration is not classified as an acute infective exacerbation of COPD (i.e. J44.0); therefore, the above directive statements do not apply.

Example: A woman with COPD is admitted and treated with antibiotics for pneumonia due to streptococcal pneumoniae. She also receives oxygen and has her corticosteroidal regimen adjusted to manage the obstructive airway changes.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
J44.0	(M)	Chronic obstructive pulmonary disease with acute lower respiratory infection
J13	(1)	Pneumonia due to <i>Streptococcus pneumoniae</i>

Example: A woman with COPD is admitted and treated with antibiotics for acute bronchitis.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
J44.0	(M)	Chronic obstructive pulmonary disease with acute lower respiratory infection
J20.9	(1)	Acute bronchitis, unspecified

Example: Final diagnosis is recorded as acute exacerbation COPD. The physician also documents that the patient has chronic bronchitis.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J44.1	(M)	MP	Chronic obstructive pulmonary disease with acute exacerbation, unspecified

Rationale: J44.0 is not assigned in this example as it cannot be assumed that the acute exacerbation in a patient with obstructive chronic bronchitis is due to acute bronchitis. Follow the alphabetical index lookup Bronchitis, chronic, obstructive which leads to J44.8. This code is not assigned as per the excludes note “with acute exacerbation.”

Asthma

In effect 2002, amended 2003, 2005, 2006, 2009



Classify asthma with onset during childhood (typically to age 16 years) to J45.0–
Predominantly allergic asthma unless otherwise specified by the physician.

Note: Ensure that asthma is not reported as a post-admit comorbidity, diagnosis type (2).

See also [Appendix A—Asthma](#) for clinical information.

Example: A 14-year-old was brought to hospital suffering from an asthmatic attack.
He was placed on bronchodilators.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J45.00	(M)	MP	Predominantly allergic asthma without stated status asthmaticus

Example: A 12-year-old was brought to hospital suffering from shortness of breath with wheezing.
No previous history of asthma. The final diagnosis was reactive airway disease.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J98.8	(M)	MP	Other specified respiratory disorders

Rationale: A final diagnosis of reactive airways disease is not classified to asthma. The alphabetical index leads to J98.8.

Example: A 19-year-old man was brought to hospital suffering from shortness of breath with wheezing. The young man had no previous history of asthma. The patient was placed on bronchodilators. The diagnosis noted in the chart was asthma.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J45.90	(M)	MP	Asthma, unspecified, without stated status asthmaticus

Status Asthmaticus

Status asthmaticus is a severe asthma attack where there is profound and intractable bronchospasm. It is a life-threatening condition with prolonged bronchiolar spasm that cannot be reversed with medication.

Terms that denote status asthmaticus include:

- acute severe asthma
- severe acute asthma
- intractable asthma attack
- refractory asthma
- severe intractable wheezing
- airway obstruction not relieved by bronchodilators

Note: The diagnostic statements of “acute asthma” or “severe asthma” do not qualify as status asthmaticus.

Example: An 18-year-old was brought to hospital suffering from a severe acute asthmatic attack. He was placed on bronchodilators. It was noted in the chart that the young man has had asthma since childhood.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J45.01	(M)	MP	Predominantly allergic asthma with stated status asthmaticus

Rationale: In this example, asthma has been present since childhood and is documented using one of the terms denoting status asthmaticus; therefore, a code from category J45.0– is assigned with the fifth character “1.”

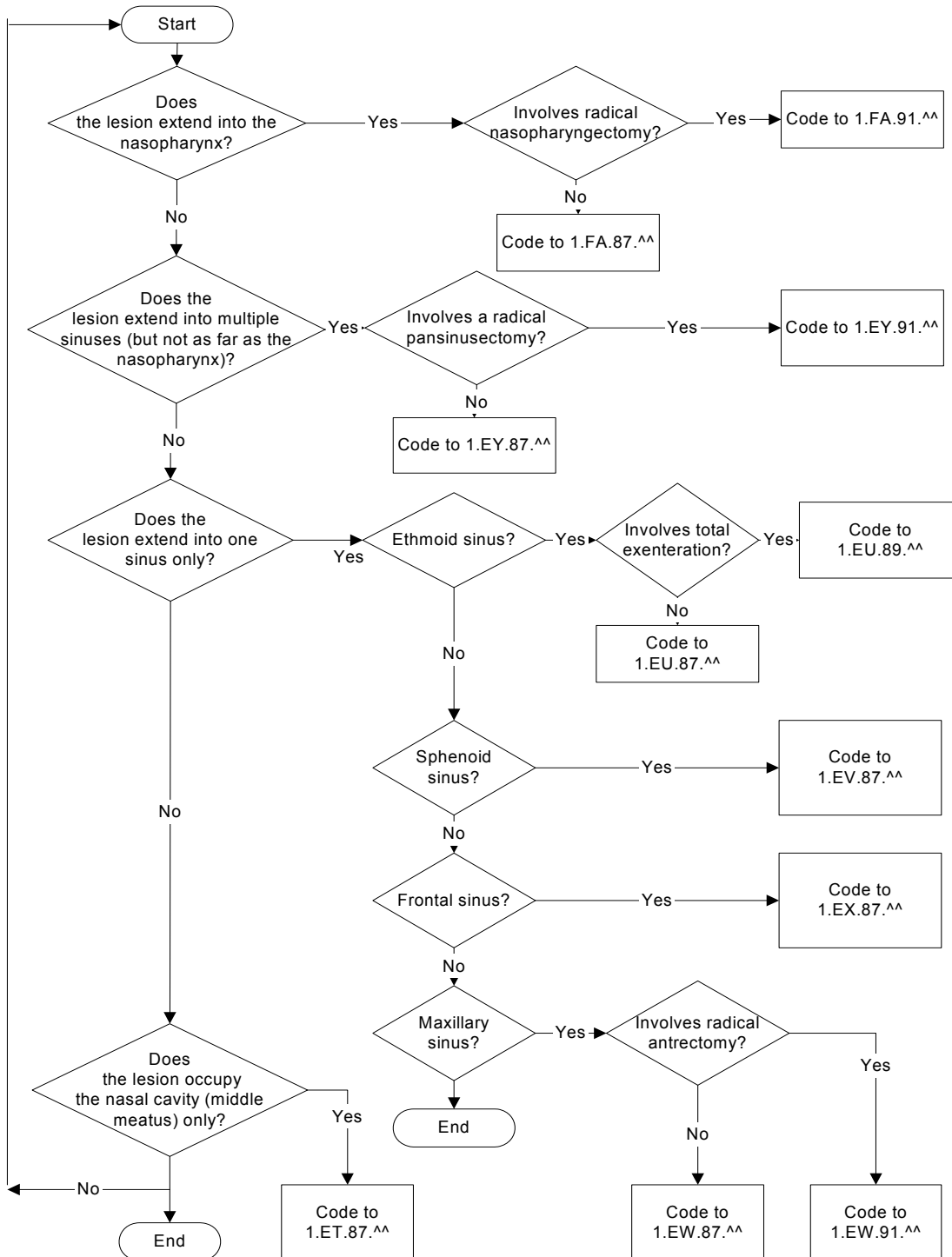
Note: As long as asthma onset is documented as having begun during childhood follow this coding standard. This applies to the adult with chronic asthma that began in childhood and now presents for treatment of asthmatic attacks.

Resection of Space-Occupying Lesion (Polyps) of Nose

In effect 2002



Classify resections of space occupying lesions according to the deepest anatomical site from which the lesion is removed. This may be different from the site in which the lesion originates.



Septoplasty for Deviated Nasal Septum

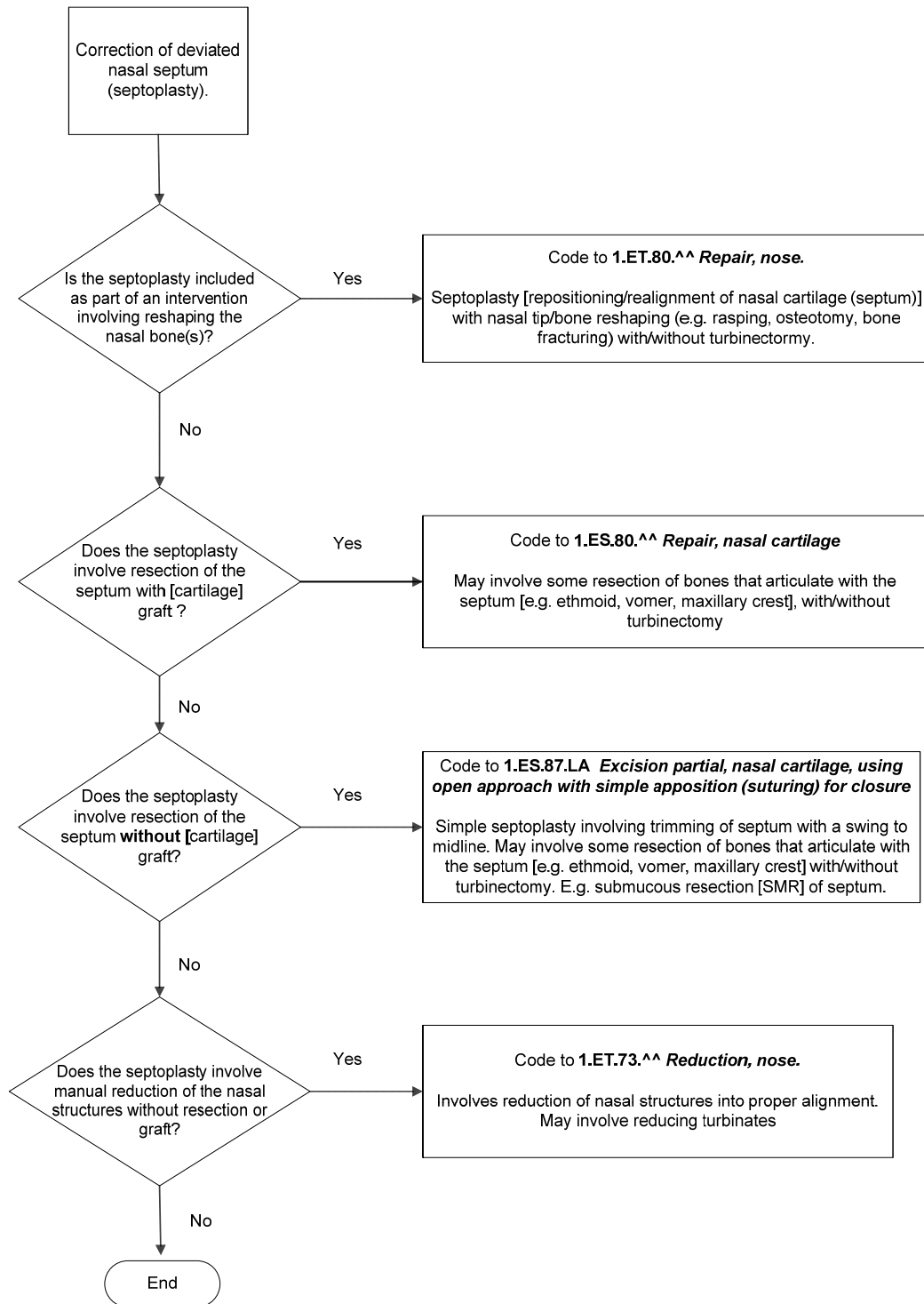
[Click here for description of change.](#)

In effect 2002, amended 2012

Selection of the correct CCI code for surgeries involving straightening of a deviated nasal septum depends on whether the intervention is with or without excision, with or without grafting and with or without additional interventions to reshape other aspects of the nose. The flowchart has been provided to assist in making the correct selection.



Classify interventions involving a septoplasty for correction of deviated nasal septum according to the anatomical site and the intent of the intervention.



Example: Patient has a major displacement of his septum with a dorsal nasal hump deformity due to previous trauma. He is admitted for a reconstructive septoplasty by a columellar incision nasal approach. During the procedure, the deflected cartilage is excised, the nasal bone is readjusted and a rasp is used to reduce the hump. The cartilage is replaced with a prosthetic implant. The septum is returned to its original midline position.

1.ET.80.WK-PM Repair, nose using columellar incision approach with prosthetic implant

Rationale: Since reshaping the nasal bone by rasping (i.e. rhinoplasty) was performed with the septoplasty to correct the deviation of the septum, a code from 1.ET.80.^[^] *Repair, nose* is assigned.

Example: A 26-year-old female suffers from recurrent sinus infections due to a deviated nasal septum and is now admitted for a septoplasty. During the procedure a wedge of cartilage was removed along with a small fragment from the maxillary crest. The cartilage was morselized and replaced.

1.ES.80.LA-XX-A Repair, nasal cartilage, using autograft [e.g. cartilage, skin]

Rationale: Since the correction of the septal deviation involved resection of cartilage with replacement of morselized cartilage (i.e. a graft) and did not involve reshaping of the nasal bone, a code from 1.ES.80.^[^] *Repair, nasal cartilage* is assigned.

Example: A 45-year-old male has been suffering from sleep apnea, which is exacerbated by a significant displacement of his septum. He is admitted for a septoplasty. A submucous resection of the septum is performed. There is no documentation indicating replacement of cartilage.

1.ES.87.LA Excision partial, nasal cartilage, using open approach with simple apposition (suturing) for closure

Rationale: Since the correction of the septal deviation involved resection of cartilage without a graft and did not involve reshaping of the nasal bone, a code from 1.ES.87.^[^] *Excision partial, nasal cartilage* is assigned.

Example: A 19-year-old male was accidentally hit by a hockey stick when playing hockey and brought to the emergency department. Upon examination, there is apparent deformity of the septum and an X-ray confirms a nasal fracture. A manual reduction of the fracture is performed.

1.ET.73.JA Reduction, nose, using manual [reduction] technique
3.ET.10.VA Xray, nose, without contrast (e.g. plain film) (with or without fluoroscopy)

Rationale: Since the repair of the deviated nasal septum (i.e. septoplasty) was performed by manual reduction without reshaping of the nasal bone, or resection of cartilage with/without a graft, a code from 1.ET.73.^[^] *Reduction, nose* is assigned.

Invasive Ventilation

[Click here for description of change.](#)

In effect 2006, amended 2007, 2008, 2012

- DN** Assign a code from 1.GZ.31.^[^] *Ventilation, respiratory system NEC*, mandatory, to describe invasive ventilation.
- D** When a patient is extubated and subsequently requires another episode of the same invasive ventilation, at a minimum, record the one episode which reflects the longest duration (i.e. extent attribute).
- DN** When one invasive approach (e.g. endotracheal intubation) is changed to another invasive approach (e.g. tracheostomy), assign multiple codes from 1.GZ.31.^[^] *Ventilation, respiratory system NEC* to describe each approach.

See also the coding standard entitled [Selection of Interventions to Code for Ambulatory Care](#).

Exception: When invasive ventilation is an inherent part of the administration of a general anesthetic, and the patient is extubated prior to leaving the operating room, 1.GZ.31.^[^] *Ventilation, respiratory system NEC* is not assigned.

Note: The extent attribute is mandatory, regardless of duration, for all codes at 1.GZ.31.^[^] *Ventilation, respiratory system NEC*. Use “0” when the ventilation is non-invasive.

To calculate the number of hours (duration) of continuous invasive ventilation during a hospitalization, begin the count from the time of the tracheal access (e.g. endotracheal intubation or transtracheal jet). The duration ends with extubation or when the ventilator is turned off. Disregard intermittent attempts at weaning from ventilation support; include these periods in the total hours.

- When a patient is intubated prior to admission, begin counting the duration from the time of admission.
- When a patient dies, is transferred or discharged while intubated, calculate the duration ending with the time of death, transfer or discharge.
- When one invasive approach is changed to another invasive approach, assign a code for each approach and calculate the duration for each separately.
- When a patient is extubated and subsequently requires another episode of the same invasive ventilation, calculate the duration for each episode separately. Do not add the durations together because the calculation of duration ends with extubation.
- When invasive ventilation extends beyond the time the patient leaves the operating room, calculate the duration from the time of intubation in the operating room to the time of extubation.

Example: Patient admitted with pneumonia and an acute exacerbation of chronic obstructive pulmonary disease. Her respirations were severely compromised. An endotracheal tube was inserted and she was connected to SIMV. On day three she was extubated.

1.GZ.31.CA-ND

Extent: CN

Ventilation, respiratory system NEC, invasive per orifice approach by endotracheal intubation, positive pressure (e.g. CPAP, BIPAP)

Rationale: It is mandatory to code invasive ventilation regardless of duration (extent). The patient was successfully extubated prior to 96 hours of continuous invasive ventilation therefore, the extent attribute “CN” *Continuous but less than 96 hours of invasive ventilation*, applies.

Example: A patient was taken to the operating room for repair of an incisional abdominal hernia. General anesthetic was administered and intubation and ventilation was begun. The patient was extubated at completion of the procedure and transferred to the recovery room before being transferred back to the nursing unit.

Rationale: The intubation and ventilation is an inherent part of the administration of the general anesthetic and is included in the capture of the anesthetic technique on the abstract. 1.GZ.31.^[^] *Ventilation, respiratory system NEC* is not assigned.

Example: Patient admitted for a coronary artery bypass graft. General anesthetic was administered and he was intubated and ventilated. He was transferred to the recovery room and then to the surgical intensive care unit. He was extubated the next day and transferred to the nursing unit to continue his recovery.

1.GZ.31.CA-ND

Extent: CN

Ventilation, respiratory system NEC, invasive per orifice approach by endotracheal intubation, positive pressure (e.g. CPAP, BIPAP)

Rationale: It is mandatory to code invasive ventilation regardless of duration (extent). When invasive ventilation is an inherent part of the administration of a general anesthetic, it is not coded. However, when the invasive ventilation extends beyond the operating room, it is coded. In this example the patient was ventilated for less than 96 hours from the time of intubation in the OR to the time of extubation; therefore, the extent attribute “CN” *Continuous but less than 96 hours of invasive ventilation*, applies.

Example: A patient is ventilated via ETT using positive pressure for ten days and then extubated. Two days later, the patient develops complications and is re-intubated and ventilated using the same ventilation (positive pressure). The patient is subsequently transferred to another facility the same day.

1.GZ.31.CA-ND Extent: EX	Ventilation, respiratory system NEC, invasive per orifice approach by endotracheal intubation, positive pressure (e.g. CPAP, BIPAP)
1.GZ.31.CA-ND Extent: CN	Ventilation, respiratory system NEC, invasive per orifice approach by endotracheal intubation, positive pressure (e.g. CPAP, BIPAP) (optional)

Rationale: When a patient receives the same invasive ventilation more than once (i.e. extubated and re-intubated), it is only mandatory to record the occurrence received for the longest duration (extent). It is optional to record the same CCI code to describe invasive ventilation of a shorter duration. The duration is calculated separately for each episode because the patient was extubated and re-intubated (do not add times together).

Example: A patient is intubated and ventilated via ETT using positive pressure for two days. Due to complications, the patient is taken to the operating room to have an open tracheostomy for long-term ventilation. The patient remained in hospital for an additional 10 days.

1.GZ.31.CR-ND Extent: EX	Ventilation, respiratory system NEC, invasive per orifice with incision approach for intubation through tracheostomy, positive pressure (e.g. CPAP, BIPAP)
1.GJ.77.LA Status: 0	Bypass with exteriorization, trachea, using open approach (e.g. collar incision)
1.GZ.31.CA-ND Extent: CN	Ventilation, respiratory system NEC, invasive per orifice approach by endotracheal intubation, positive pressure (e.g. CPAP, BIPAP)

Rationale: Different invasive approaches were used for ventilation; therefore, separate codes from 1.GZ.31.^[^] *Ventilation, respiratory system NEC* are assigned to describe each approach. The extent attribute reflects the duration of each.

Example: Patient sustained significant trauma and multiple facial fractures in a motor vehicle accident. At the time of presentation, respirations were six per minute and shallow. An attempt to intubate was unsuccessful. Pressurized oxygen was administered via a large bore needle inserted into the cricothyroid membrane. A short time later, endotracheal intubation was achieved and she was connected to CMV. She remained ventilated until she was stabilized for transfer to the provincial trauma centre. She was air lifted on post MVA day eight.

1.GZ.31.CA-ND Extent: EX	Ventilation, respiratory system NEC, invasive per orifice approach by endotracheal intubation, positive pressure (e.g. CPAP, BIPAP)
1.GZ.31.GP-ND Extent: CN	Ventilation, respiratory system NEC, invasive percutaneous transluminal approach, positive pressure (e.g. CPAP, BIPAP)

Rationale: Different invasive approaches were used for ventilation; therefore, separate codes from 1.GZ.31.^[^] *Ventilation, respiratory system NEC* are assigned to describe each approach. The extent attribute reflects the duration of each.

Chapter XI—Diseases of the Digestive System

Gastroenteritis and Diarrhea

In effect 2001, amended 2002, 2005, 2006, 2009

Most cases of gastroenteritis are infectious, even in industrialized countries, thus ICD-10-CA classifies gastroenteritis NOS as infectious (A09.9 *Gastroenteritis and colitis of unspecified origin*).

- DN** Assign gastroenteritis as the MRDx/main problem in admissions for treatment of gastroenteritis and dehydration.
- DN** Assign a code for any associated dehydration as a significant pre-admit comorbidity/other problem only when the electrolyte imbalance is severe enough to warrant treatment with intravenous fluids and the physician clearly documents these fluids are intended to treat the dehydration.

See also the coding standard entitled [Dehydration](#).

Example: A 4-year-old child is seen with infectious gastroenteritis and dehydration. The entire family is affected: mom and dad with three older siblings. She needs input/output monitoring and is prescribed increased oral fluids. No intravenous fluids are administered.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
A09.0	(M)	MP	Other and unspecified gastroenteritis and colitis of infectious origin

Example: A 74-year-old woman is admitted to hospital from a nursing home after three days of gastroenteritis. She is quite dehydrated on admission and receives intravenous fluids for two days with close monitoring of her input and output status. Stool culture returns negative for organisms.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
A09.9	(M)	Gastroenteritis and colitis of unspecified origin
E86.0	(1)	Dehydration

Rationale: Unspecified gastroenteritis is classified to A09.9 *Gastroenteritis and colitis of unspecified origin*.

Example: A 20-year-old man is seen for gastroenteritis. The final diagnosis is “noninfectious gastroenteritis”.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
K52.9	(M)	MP	Noninfective gastroenteritis and colitis, unspecified

Rationale: Gastroenteritis must be documented as noninfectious to assign K52.9.

Bleeding Esophageal Varices

In effect 2003, amended 2005, 2006



Follow the dagger/asterisk convention when coding bleeding esophageal varices associated with liver disorders classified to K70.– *Alcoholic liver disease*, K71.– *Toxic liver disease* and K74.–*Fibrosis and cirrhosis of liver*.

Example: Patient with known alcoholic cirrhosis of the liver was admitted with hematemesis. Endoscopy showed bleeding esophageal varices. He was treated with sclerotherapy.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
K70.3†	(M)	Alcoholic cirrhosis of liver
I98.3*	(6)	Oesophageal varices with bleeding in diseases classified elsewhere
1.NA.13.BA-X7		Control of bleeding, esophagus, using endoscopic per orifice approach and chemical agent [e.g. ethanolamine, murrhate sodium, polidocanol, sclerosants, tetradecyl sulfate]

Example: Patient had chronic persistent hepatitis that resulted in fibrosis of the liver. She presented with an upper GI bleed. Endoscopy showed bleeding esophageal varices.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
K74.0†	(M)	MP	Hepatic fibrosis
I98.3*	(6)	OP	Oesophageal varices with bleeding in diseases classified elsewhere
K73.0	(1)	OP	Chronic persistent hepatitis, not elsewhere classified

Rationale: While chronic persistent hepatitis (K73.0) in this case did lead to the formation of fibrosis of the liver (K74.0) causing bleeding esophageal varices (I98.3*), only codes from categories K70, K71 and K74 are designated with the dagger symbol at I98.3*. Therefore, the pair K74.0† with I98.3* is sequenced first and K73.0 is assigned separately.



Select the asterisk code I98.3* *Oesophageal varices with bleeding in diseases classified elsewhere* when the physician records bleeding esophageal varices as a preoperative diagnosis but active bleeding is not evident at endoscopy.

Example: Patient with known alcoholic cirrhosis of the liver presented for urgent endoscopy and banding of varices following an episode of upper gastrointestinal bleeding. Physician documented "bleeding esophageal varices." Endoscopy showed esophageal varices but no active bleeding was noted. Several varices were banded.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
K70.3†	(M)	MP	Alcoholic cirrhosis of liver
I98.3*	(6)	OP	Oesophageal varices with bleeding in diseases classified elsewhere
1.NA.13.BA-FA			Control of bleeding, esophagus, using endoscopic per orifice approach and banding (varices)

Related Interventions

In endoscopic therapy, the health care provider may directly inject the varices with a clotting agent, or may place a rubber band around the bleeding veins. This procedure is used in acute bleeding episodes and as prophylactic (preventive) therapy.

Prophylactic endoscopic sclerotherapy (injection of varices with sclerosant) is done regularly, usually every 1 to 3 weeks, until varices are obliterated, then at 3 to 6 month intervals to maintain obliteration.

Select code: 1.NA.13.BA-X7 *Control of bleeding, esophagus, using endoscopic per orifice approach and chemical agent [e.g. ethanolamine, murrhate sodium, polidocanol, sclerosants, tetradecyl sulfate]*

Endoscopic sclerotherapy (injection of varices with sclerosant) is also used for controlling acute hemorrhage from the esophageal varices.

Select code: 1.NA.13.BA-X7 *Control of bleeding, esophagus, using endoscopic per orifice approach and chemical agent [e.g. ethanolamine, murrhate sodium, polidocanol, sclerosants, tetradecyl sulfate]*

Esophageal variceal rubber band ligation controls active bleeding and eradicates varices as effectively as sclerotherapy.

Select code: 1.NA.13.BA-FA *Control of bleeding, esophagus, using endoscopic per orifice approach and banding (varices)*

Sengstaken-blakemore double balloon tube or Linton single balloon tube tamponade

Gastric balloon placement needs X-ray confirmation. Acute bleeding may be treated by a balloon tamponade—a tube that is inserted through the nose into the stomach and inflated with air to produce pressure against the bleeding veins.

Select code: 1.NA.13.BA-BD *Control of bleeding, esophagus, using endoscopic per orifice approach and balloon (or Sengstaken) tube tamponade*

Transjugular intrahepatic portosystemic shunt (TIPS) or Distal spleno-renal shunt (DSRS)

consists of a catheter that is extended through a vein into the liver where it connects the portal system to the systemic venous system and decreases portal venous pressure.

Select code: 1.KQ.76.^[^] *Bypass, abdominal veins NEC*

Gastrointestinal Bleeding

In effect 2001, amended 2003, 2005, 2006, 2008

DN When hemorrhage or bleeding is not clearly expressed in the title of the code for the underlying cause, assign an additional code:

- K92.0 *Haematemesis*
- K92.1 *Melaena*
- K92.2 *Gastrointestinal haemorrhage, unspecified*

Example: Patient's final diagnosis noted as "acute gastritis with hemorrhage."

DN	<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
	K29.0	(M)	MP	Acute haemorrhagic gastritis

Example: Patient diagnosed with melena due to diverticulitis of the large bowel. Colonoscopy was carried out and she was treated with antibiotics and Ferrous gluconate.

DN	<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
	K57.3	(M)	MP	Diverticular disease of large intestine without perforation or abscess
	K92.1	(3)	OP	Melaena

DN When a patient presents for investigations following an episode of gastrointestinal bleeding and no active hemorrhage is manifest on endoscopy, select an ICD-10-CA combination code indicating "with bleeding" or "with hemorrhage" in the disease/condition.

DN Alternately, if such combination codes are non-existent, code the underlying condition and an additional code to indicate the presence of bleeding (i.e. K92.0, K92.1 or K92.2).

Example: Patient presented for urgent colonoscopy following an episode of lower gastro-intestinal bleeding. Physician documented "ulcerative colitis." Endoscopy report indicated no active bleeding but ulcerated lesions noted with prominent vessels.

<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
K51.9	(M)	MP	Ulcerative colitis, unspecified
K92.2	(3)	OP	Gastrointestinal haemorrhage, unspecified

D When a patient is admitted for investigation or treatment of hemorrhage and has documented episodes of GI bleeding while in hospital, do not assign diagnosis type (2) to the ICD-10-CA code indicating GI bleeding.

Example: Patient admitted through the emergency department following an episode of hematemesis. His wife reported that he threw up about ½ cup of bright red blood. During his stay he had another episode of hematemesis. Several diagnostic tests and investigations were carried out and the final diagnosis on the chart was recorded as Mallory-Weiss syndrome.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
K22.6	(M)	Gastro-oesophageal laceration-haemorrhage syndrome

Diagnostic Esophagogastroduodenoscopy (EGD)

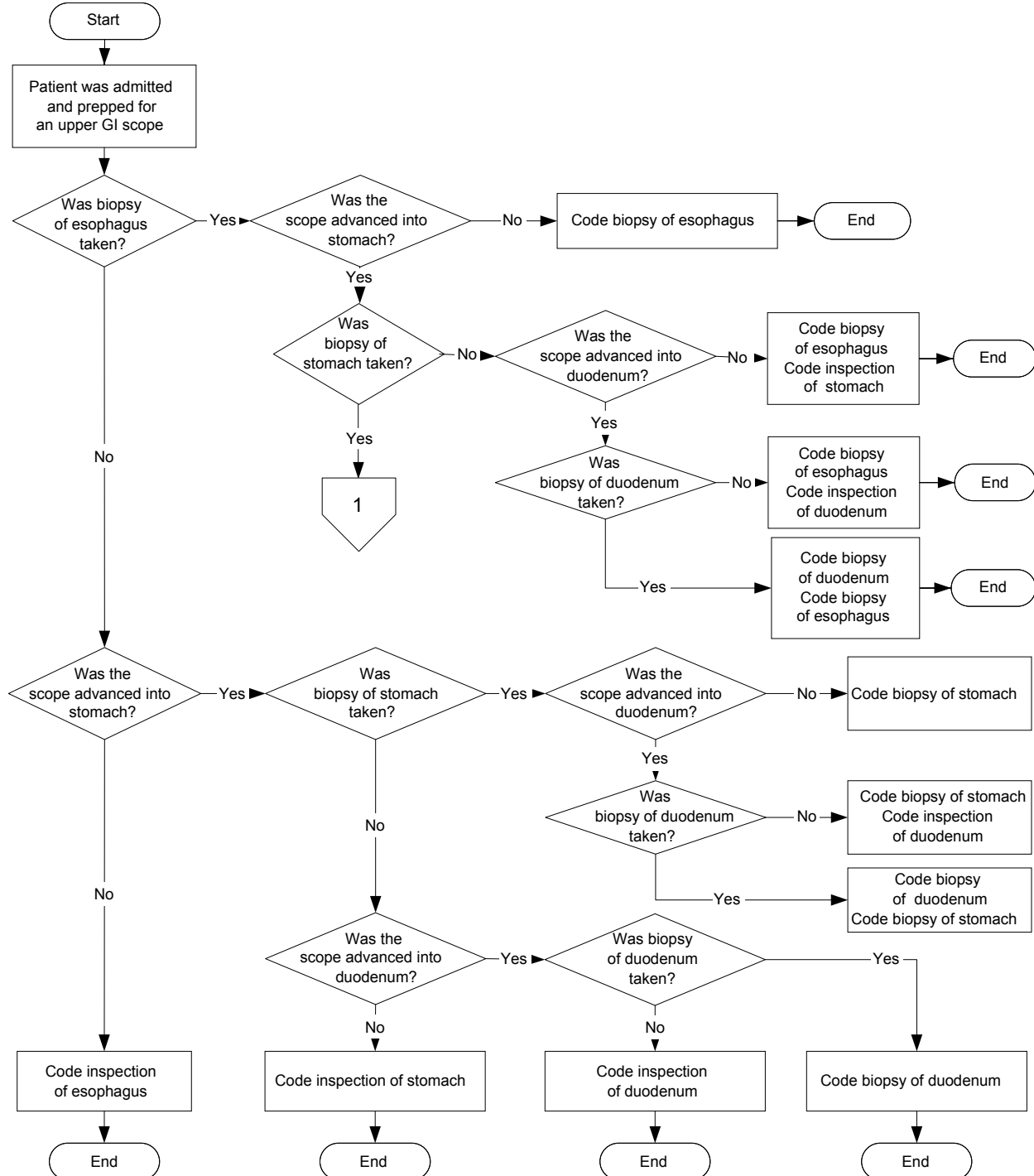
In effect 2003, amended 2008

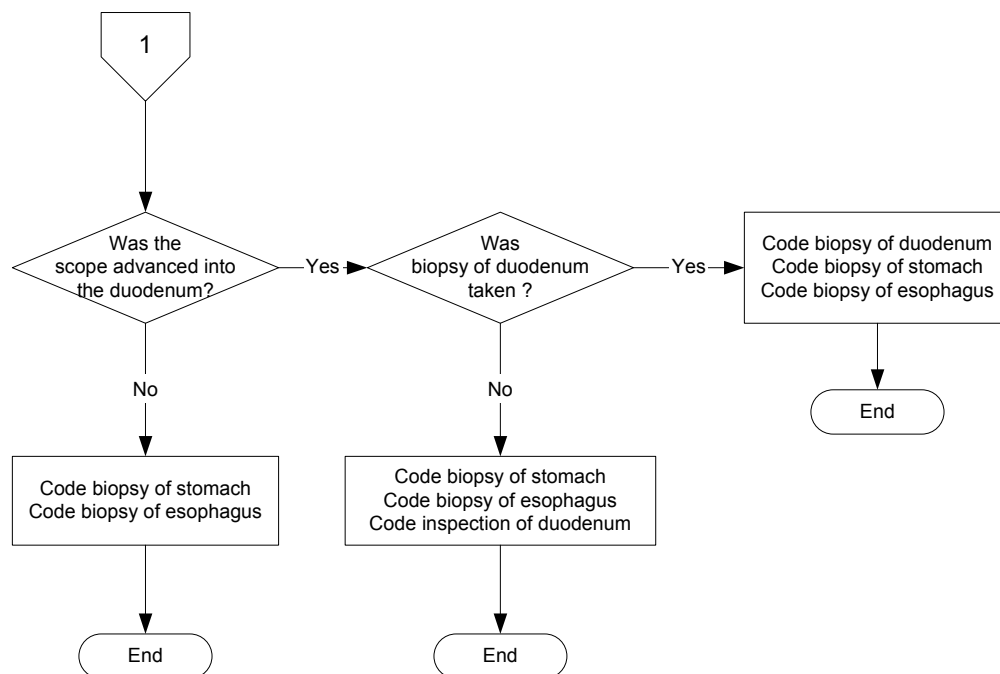


When separate anatomic sites are biopsied at one operative episode, assign a CCI code for each site.

- Sequence the biopsy of the deepest site first.

See also the coding standard entitled [Endoscopic Intervention](#).





CCI Rubrics to be used with this flowchart:
2.NA.70 Inspection, esophagus
2.NA.71 Biopsy, esophagus
2.NF.70 Inspection, stomach
2.NF.71 Biopsy, stomach
2.NK.70 Inspection, small intestine (duodenum)
2.NK.71 Biopsy, small intestine (duodenum)

Diagnostic Colonoscopic Interventions

In effect 2003, amended 2006, 2007, 2008, 2009

See also the coding standards entitled *Endoscopic Interventions* and *Combined Diagnostic and Therapeutic Interventions*.

See also *Appendix A—Diagnostic Colonoscopic Interventions* for clinical information.



At 2.NM.70.^ ^ Inspection, large intestine and 2.NM.71.^ ^ Biopsy, large intestine, select the device qualifier based on the intent of the intervention (i.e. sigmoidoscopy versus colonoscopy).

A colonoscopy and sigmoidoscopy are very different interventions in terms of risk, complication, preparation and anesthetic.

The device qualifiers at both 2.NM.70.^ ^ *Inspection, large intestine* and 2.NM.71.^ ^ *Biopsy, large intestine*, are meant to distinguish a colonoscopy from a sigmoidoscopy.

Note: In some facilities, a colonoscope may be used when the intent is to perform a sigmoidoscopy; however, the device qualifier sigmoidoscope is selected because the codes reflect the intent of the intervention. When the documentation is unclear as to the intent of the procedure, refer to the consent form to identify the planned intervention that the patient has consented to.

Example: Patient presents for a flexible sigmoidoscopy. The inspection is successful to the descending colon and no biopsies are taken.



Code

2.NM.70.BA-BH

Code Title

Inspection, large intestine, using endoscopic per orifice approach (or via stoma) and flexible sigmoidoscope

Rationale: A sigmoidoscopy is an inspection of the rectum, sigmoid and descending colon up to the splenic flexure.

Example: Patient presents for a colonoscopy. At the time of inspection, the physician is only able to proceed as far as the sigmoid colon due to an obstruction. It is biopsied and the scope is withdrawn.

Code

2.NM.71.BA-BJ

Code Title

Biopsy, large intestine, using endoscopic per orifice approach (or via stoma) and colonoscope

Rationale: This is considered a **failed intervention** because upon termination of the procedure the expected outcome was not entirely achieved. Classify a failed intervention in the same manner as one that is successful.

Example: Patient is booked for a colonoscopy. The endoscope is inserted and maneuvered through the colon. The ileocecal valve is visualized and the scope is withdrawn.

<u>Code</u>	<u>Code Title</u>
2.NM.70.BA-BJ	Inspection, large intestine, using endoscopic per orifice approach (or via stoma) and colonoscope

Rationale: The intent of this procedure was a colonoscopy. The scope was inserted up to the ileocecal valve but the terminal ileum was not intubated. Visualization of the ileocecal valve in this case is the landmark that tells the physician he has successfully reached the end of the colon and that the colonoscopy has been completed.

BN When the terminal ileum is entered during a colonoscopy, assign 2.NK.70.^[^] *Inspection, small intestine.*

BN When a biopsy is taken of the terminal ileum, assign 2.NK.71.^[^] *Biopsy, small intestine.*

Example: The physician documents that the colonoscope was passed through the colon and the terminal ileum was intubated.

<u>Code</u>	<u>Code Title</u>
2.NK.70.BA-BJ	Inspection, small intestine, using endoscopic per orifice approach (or via stoma) and colonoscope

Rationale: In this example, the inspection has gone beyond the large intestine (NM) and has entered the small intestine (NK); therefore, the correct CCI anatomy site is NK. See also the coding standard entitled [Endoscopic Interventions](#).

Example: Patient is booked for a colonoscopy. The endoscopy report documents that a colonoscope was inserted and a suspicious lesion was seen in the ascending colon; it was biopsied. There is also documentation that the terminal ileum was intubated. The scope was then withdrawn.

<u>Code</u>	<u>Code Title</u>
2.NM.71.BA-BJ	Biopsy, large intestine, using endoscopic per orifice approach (or via stoma) and colonoscope
2.NK.70.BA-BJ	Inspection, small intestine, using endoscopic per orifice approach (or via stoma) and colonoscope

Rationale: When an inspection goes beyond the anatomical site of a biopsy, assign codes for both the biopsy and the inspection, sequencing the biopsy first.

Example: The colonoscope was advanced through the colon and into the terminal ileum. Biopsies were taken of the rectum, colon and ileum.

2.NK.71.BA-BJ	Biopsy, small intestine, using endoscopic per orifice approach (or via stoma) and colonoscope
2.NM.71.BA-BJ	Biopsy, large intestine, using endoscopic per orifice approach (or via stoma) and colonoscope
2.NQ.71.BA	Biopsy, rectum, using endoscopic per orifice approach

Rationale: When separate anatomic sites are biopsied, a code for each site is assigned; the deepest site is sequenced first.

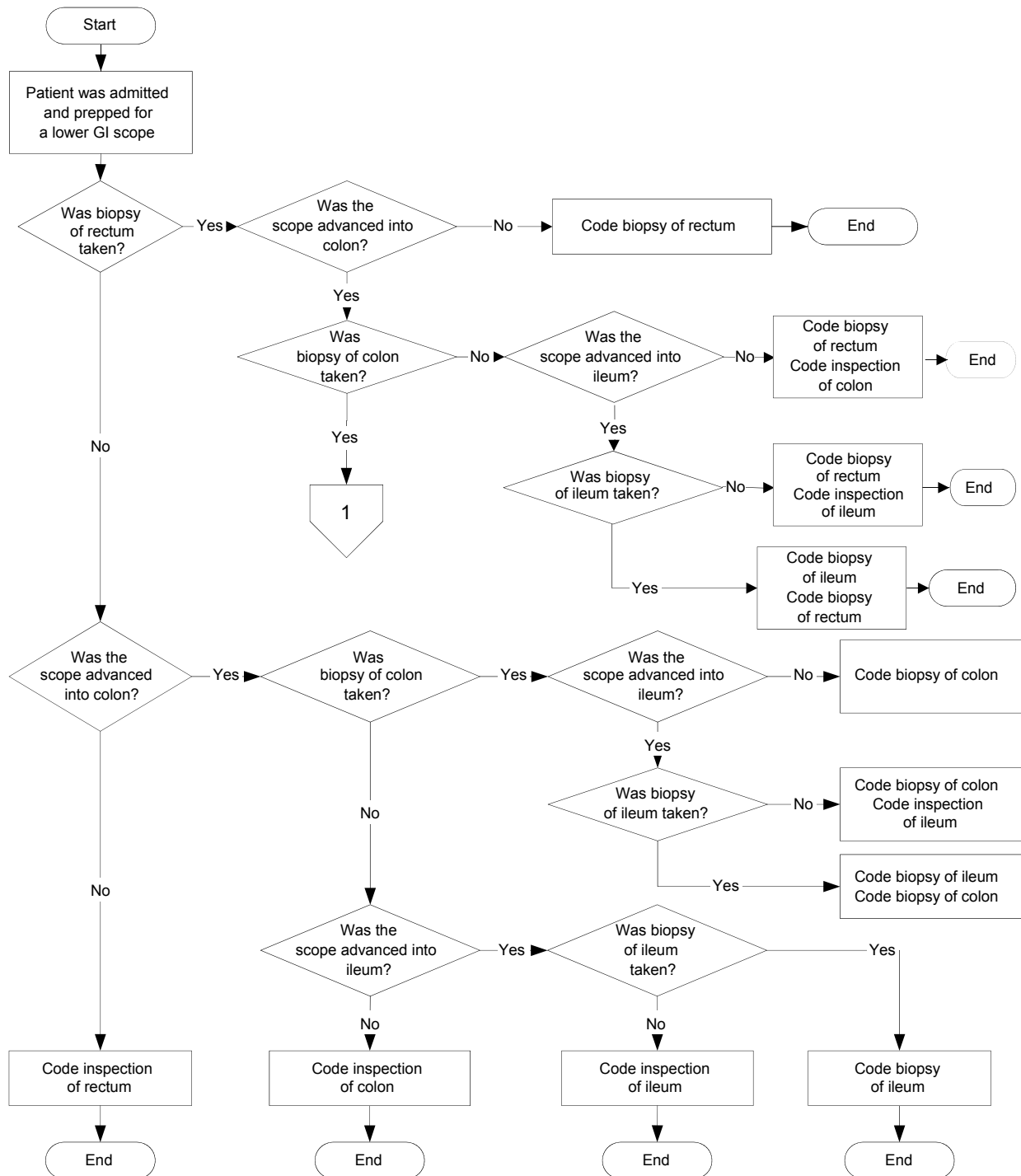
Example: The patient had an esophagogastroduodenoscopy (EGD) and a colonoscopy. The gastroscope was advanced to the duodenum. The colonoscopy was advanced into the terminal ileum and the physician noted findings of ileitis in the terminal ileum.

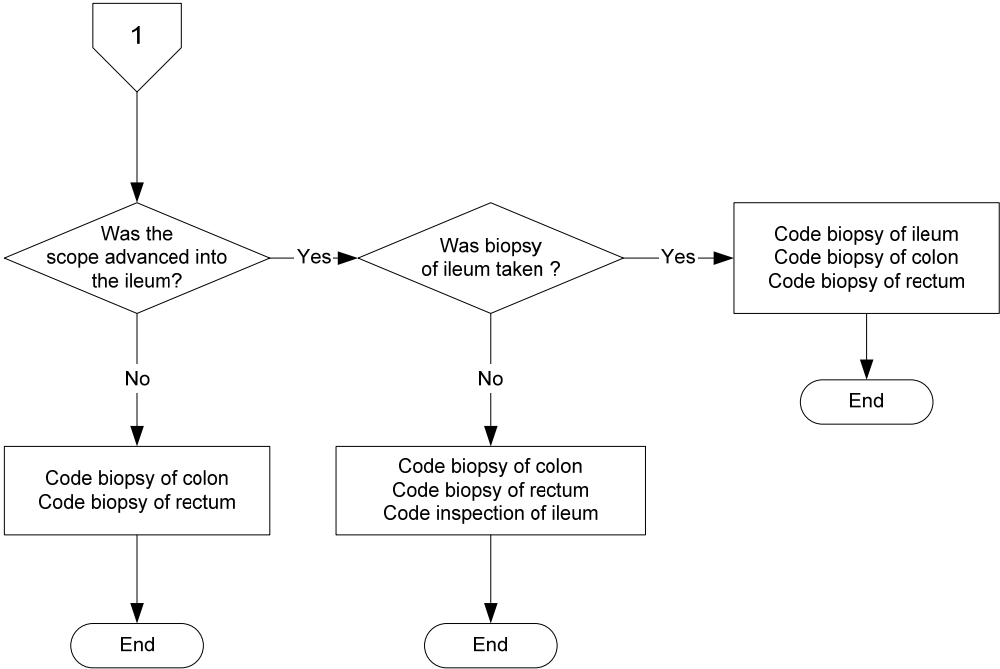
2.NK.70.BA-BJ Inspection, small intestine, using endoscopic per orifice approach (or via stoma) and colonoscope

2.NK.70.BA-BL Inspection, small intestine, using endoscopic per orifice approach (or via stoma) and gastroscope

Rationale: Although two codes from the same rubric are not normally assigned, in this example there are two distinct interventions performed.

Diagnostic Endoscopic Interventions Performed on the Lower Gastrointestinal Tract





Rubrics for use with this flowchart

2.NQ.70—Inspection, rectum

2.NQ.71—Biopsy, rectum

2.NM.70—Inspection, large intestine (colon)

2.NM.71—Biopsy, large intestine (colon)

2.NK.70—Inspection, small intestine (ileum)

2.NK.71—Biopsy, small intestine (ileum)

Selection of Attributes at Hernia Repair

[Click here for description of change.](#)

In effect 2001, amended 2003, 2005, 2006, 2008



When the diagnosis does not reflect a hernia classifiable to categories K40–K43 and K45–K46, select “0” *Not Applicable*, for the mandatory location attribute at 1.SY.80.^[^] *Repair, muscles of the chest and abdomen.*

The location attribute at 1.SY.80.^[^] *Repair, muscles of the chest and abdomen* is mandatory because it is the only way to identify the intervention as a hernia repair. The location attribute for ventral and incisional hernias will vary depending on the location of the hernia.

Example: Patient was admitted by the trauma team. He had sustained a penetrating wound to the abdominal wall during a fight at a youth centre. The victim was attacked with a knife. Internal organs were not injured. The patient was taken to the operating room where the defect in the abdominal wall was closed with sutures.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
S31.190	(M)	Open wound of unspecified site of abdominal wall, uncomplicated
X99	(9)	Assault by sharp object
U98.2	(9)	Place of occurrence, school other institution and public area
1.SY.80.LA		Repair, muscles of the chest and abdomen, open approach, without tissue [e.g. suturing or stapling]
Status: 0		
Location: 0		

Rationale: This was not a hernia repair as the MRDx is an injury code; therefore, location attribute is 0.

Example: Patient admitted for suture repair of an incisional hernia at the site of a previous cholecystectomy.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
K43.2	(M)	MP	Incisional hernia without obstruction or gangrene
1.SY.80.LA			Repair, muscles of the chest and abdomen, open approach, without tissue [e.g. suturing or stapling]
Status: 0			
Location: UP			

Rationale: Location attribute is mandatory when the diagnosis is hernia classifiable to K40–K43 and K45–K46. A cholecystectomy incision is located in the upper abdominal region.

Chapter XII—Diseases of the Skin and Subcutaneous Tissue

Cellulitis

In effect 2001, amended 2003, 2006, 2007

- DN** Classify an open wound with associated cellulitis to a “complicated” open wound.
- DN** When the course of treatment involves *intravenous antibiotics*, sequence cellulitis as the MRDx/main problem and record the soft tissue injury as an additional diagnosis/other problem.
- DN** When the course of treatment involves only *oral antibiotics*, sequence the soft tissue injury as the MRDx/main problem and the cellulitis as a comorbid condition/other problem.
- DN** Assign an additional code, optional, as a diagnosis type (3)/other problem, from range B95–B98 *Bacterial, viral and other infectious agents* when a causative agent is identified.

See also [Appendix A—Cellulitis](#) for clinical information.

See also the coding standards entitled [Drug-Resistant Microorganisms](#) and [Open Wounds](#).

Example: Patient lacerated her left index finger at home while using a kitchen knife about three days prior to this visit. She presented to the emergency department with cellulitis. She was given a prescription for oral antibiotics.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
S61.01	MP	Open wound of finger(s) without damage to nail, complicated
L03.00	OP	Cellulitis of finger
W26	OP	Contact with knife, sword or dagger
U98.0	OP	Place of occurrence, home

Example: Approximately 36 hours ago, a woman received a dog bite to her right hand. She had intervened in an altercation between two dogs. She now presents with cellulitis spreading up her arm and is admitted to hospital for a course of intravenous antibiotics.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
L03.10	(M)	Cellulitis of upper limb
S61.91	(3)	Open wound of wrist and hand part, part unspecified, complicated
W54	(9)	Bitten or struck by dog
U98.9	(9)	Unspecified place of occurrence

Example: On a hiking trip in the woods, a young man fell down a ravine sustaining minor lacerations to his lower leg two days ago. He presents to the emergency department with cellulitis and is treated with a wound debridement, topical dressing and a course of oral antibiotics.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
S81.91	MP	Open wound of lower leg, part unspecified, complicated
L03.11	OP	Cellulitis of lower limb
W17	OP	Other fall from one level to another
U98.8	OP	Other specified place of occurrence

Chapter XIII—Diseases of the Musculoskeletal System and Connective Tissue

Osteoarthritis

In effect 2006, amended 2008, 2009

- DN** Classify arthrosis as primary when the physician/primary care provider documents:
- the arthrosis is idiopathic; or
 - “no known underlying cause”; or
 - bilateral disease at the same anatomical site if not identified as secondary or post-traumatic.
- DN** Classify arthrosis as secondary when the physician/primary care provider documents:
- the arthrosis is secondary; or
 - is known to be “caused by” another condition.
- DN** Classify arthrosis as post-traumatic when the physician/primary care provider documents a connection between the arthrosis and a previous injury.
- DN** Classify arthrosis as unspecified when the physician/primary care provider does not document the condition as either bilateral, primary, secondary or post-traumatic according to the above (e.g. the documentation is osteoarthritis with no further specification).

Example: A 53-year-old man with idiopathic osteoarthritis of the left knee was admitted electively for a total knee replacement.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M17.1	(M)	Other primary gonarthrosis

Example: A 22-year-old man was admitted for a left total knee replacement due to osteoarthritis documented as secondary to Ehlers-Danlos syndrome.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M17.5	(M)	Other secondary gonarthrosis
Q79.6	(3)	Ehlers-Danlos syndrome

Example: A 75-year-old man was admitted electively for a left total knee replacement due to left knee osteoarthritis documented as secondary to a sports injury in the remote past.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M17.3	(M)	Other post-traumatic gonarthrosis
T93.9	(3)	Sequelae of unspecified injury of lower limb (optional)
Y86	(9)	Sequelae of other accidents (optional)

Example: A 75-year-old lady was admitted electively for a total knee replacement. The diagnosis was recorded as “OA right knee.”



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M17.9	(M)	Gonarthrosis, unspecified

Rationale: All that is documented is “OA right knee”; therefore, assign unspecified arthrosis. Primary arthrosis cannot be assumed just because there is no documentation of a known cause.

Example: A 75-year-old lady with osteoarthritis of both hips was scheduled for a right hip arthroplasty. She is now admitted for the right hip intervention. The left hip will be replaced in six months time.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M16.0	(M)	Primary coxarthrosis, bilateral

Rationale: Bilateral disease not specified as due to any other cause is presumed to be primary disease.



When a patient who has had a previous unilateral joint replacement for osteoarthritis (OA), is admitted for treatment of the contralateral joint due to OA of the same type (primary, secondary, post-traumatic), select the appropriate code to indicate bilateral disease.

Clinical input has indicated that even though a joint has been replaced, the joint replacement is not curative, and the patient is still considered to have bilateral disease on subsequent admissions. Bilateral disease not specified as due to any other cause is presumed to be primary disease.

See also [Appendix A—Osteoarthritis](#) for clinical information.

Example: A 53-year-old man with primary osteoarthritis of both knees was admitted electively for arthroscopic debridement of the left knee. The OA in the right knee was treated five years ago with a total knee replacement.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M17.0	(M)	Primary gonarthrosis, bilateral
Z96.61	(3)	Presence of artificial knee (optional)

Example: A 64-year-old man with primary osteoarthritis of both hips had a left hip replaced a year ago. He is now admitted electively for a right hip arthroplasty.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M16.0	(M)	Primary coxarthrosis, bilateral
Z96.60	(3)	Presence of artificial hip (optional)

Related Interventions

Cortisone injections—a steroid, may be injected into the joint to relieve severe inflammation and swelling.

Select code: 1.^.^35.^.^ *Pharmacotherapy (local)*

Viscosupplementation, is a procedure in which a clear gel-like substance is injected into the knee. This substance lubricates the cartilage (much like oil lubricates an engine), reducing pain and allowing greater movement of the knee.

Select code: 1.^.^35.^.^ *Pharmacotherapy (local)*

Surgical treatment for OA ranges from debridement (select code 1.^.^87.^.^ *Excision, partial*) to replacement of a joint with an artificial or a man-made joint (select code 1.^.^53.^.^ *Implantation*ⁱ).

See also the coding standards entitled [Selection of Interventions to Code for Ambulatory Care](#) and [Selection of Interventions to Code for Acute Inpatient Care](#).

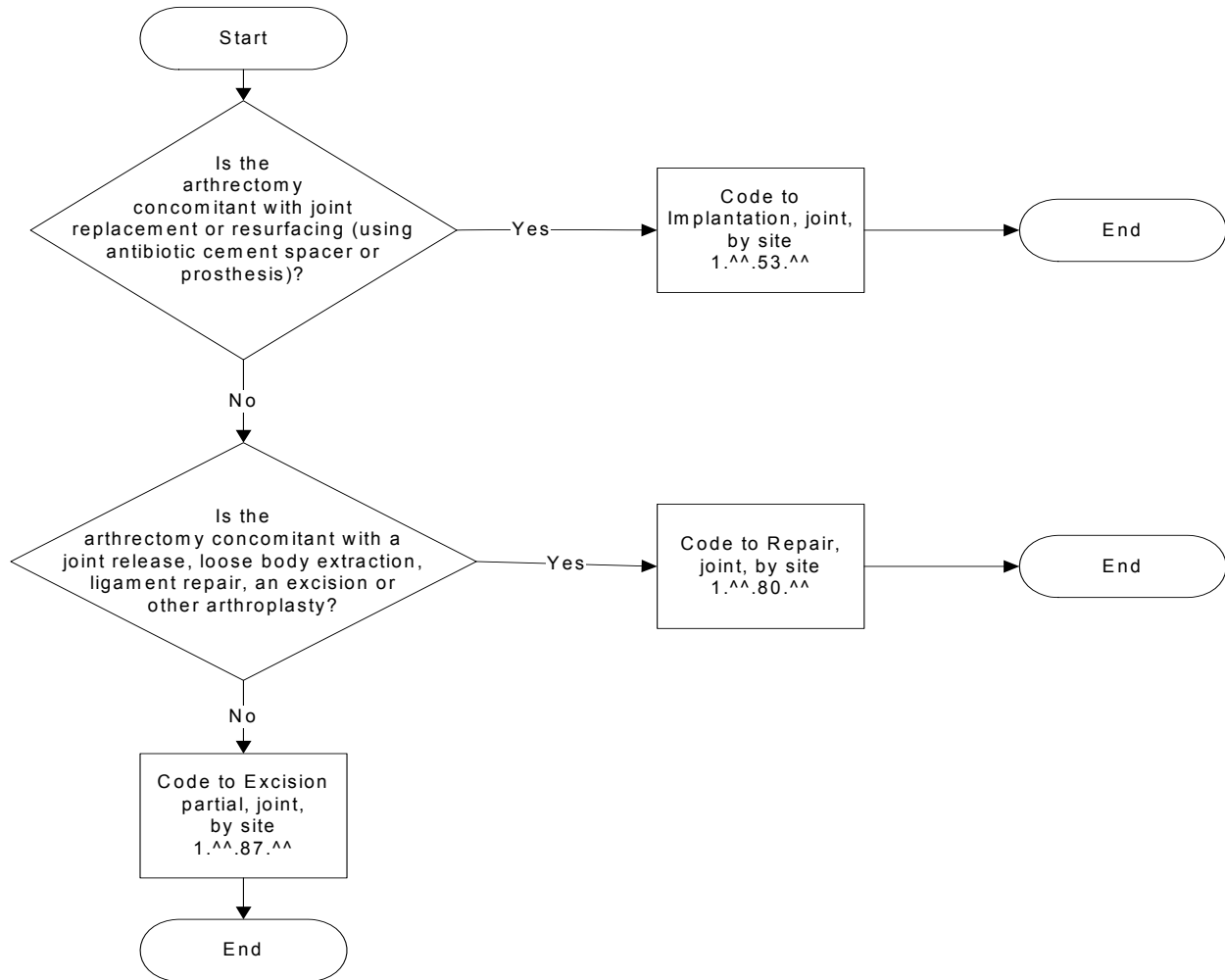
i. <<http://www.arthritis.ca>> March 2005.

Arthrectomy and Arthroplasty

In effect 2001



Assign a code for arthrectomy as a separate intervention only when it is not part of an arthroplasty or joint repair.



Fractures

[Click here for description of change.](#)

In effect 2001, amended 2006, 2012

Pathological Fractures

Pathological fractures are also known as “compression” or “spontaneous” fractures and occur in bones and joints weakened by pre-existing disease.

- BN** When there is no known traumatic injury to account for a fracture or when the physician clearly states the fracture is a result of an underlying disease (such as neoplasm, osteoporosis, Paget’s disease, endocrine disorder or genetic disorder e.g. Osteogenesis imperfecta) classify the fracture as pathological.
- BN** When a combination category is not available or when a dagger/asterisk convention is not applicable, assign separate codes for the pathological fracture and the underlying disease that precipitated the fracture.
- Sequence the code for the pathological fracture first followed by the code for the underlying disease as a mandatory diagnosis type (3)/other problem.

Example: Patient diagnosed with a pathological fracture of the femur due to Paget’s disease.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M84.45	(M)	MP	Pathological fracture, not elsewhere classified, pelvic region and thigh
M88.8	(3)	OP	Paget’s disease of other bones

BN Apply the dagger/asterisk convention when coding a fracture in neoplastic disease.

See also the coding standard entitled [Dagger/Asterisk Convention](#).

Example: Patient diagnosed with osteosarcoma of the leg two years ago. He is now admitted with a pathological fracture of the left tibia. He was treated with internal fixation of the tibia.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C40.2†	(M)	Malignant neoplasm long bones of lower limb
M90.7*	(6)	Fracture of bone in neoplastic disease

Example: Patient was brought to hospital in acute distress due to collapsed vertebrae. She has known bone metastases. She had left breast cancer, treated three years ago with mastectomy.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C79.5†	(M)	MP	Secondary malignant neoplasm of bone and bone marrow
M49.5*	(6)	OP	Collapsed vertebrae in diseases classified elsewhere
Z85.3	(3)	OP	Personal history of malignant neoplasm of breast



Assign a code from the combination category **M80 Osteoporosis with pathological fracture**, for fractures documented as due to osteoporosis.



When a fracture is documented as traumatic and occurs in a patient with osteoporosis, assign a code from Chapter XIX—*Injury, poisoning and certain other consequences of external causes*.

- Assign an additional code from category **M81 Osteoporosis without pathological fracture** to identify the existing osteoporosis.

The osteoporotic pathological fracture is uniquely identified with a single code under the category **M80 Osteoporosis with pathological fracture**. The codes in this category explicitly state the causal relationship between the disease and the fracture.

Example: An 80-year-old man presents with a fractured hip due to osteoporosis with no known significant traumas.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M80.95	(M)	MP	Unspecified osteoporosis with pathological fracture, pelvic region and thigh

Example: A 70-year-old lady with known osteoporosis slipped and fell down several stairs in her home. X-rays demonstrated a fracture of L1.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S32.000	(M)	MP	Fracture of lumbar vertebra, L1 level, closed
W10	(9)	OP	Fall on and from stairs and steps
U98.0	(9)	OP	Place of occurrence, home
M81.9	(3)	OP	Osteoporosis, unspecified

Rationale: Even though the patient has osteoporosis, there was a significant traumatic event documented.

Stress Fractures

Stress fractures are also known as “fatigue” or “march” fractures and occur most commonly in metatarsals, hips, heels and fibula/tibia. Long distance runners, military personnel, people with cavus foot and those wearing shoes without proper shock absorption are most susceptible. This type of fracture is due to overexertion causing a crack in otherwise healthy bone and it frequently is not diagnosed until after callus formation at the site of the fracture.



When a stress fracture occurs in the vertebra, assign **M48.4– Fatigue fracture of vertebra**. For any other site, assign **M84.3– Stress fracture, not elsewhere classified**.

Example: A 45-year-old lady was admitted when, on X-ray, it was discovered she had a stress fracture located in the lumbar region of the vertebrae.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M48.46	(M)	MP	Fatigue fracture of vertebra, lumbar region

Example: A 25-year-old long distance runner was admitted when, on X-ray, it was discovered he had a stress fracture located in his right fibula.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M84.36	(M)	MP	Stress fracture, not elsewhere classified, lower leg



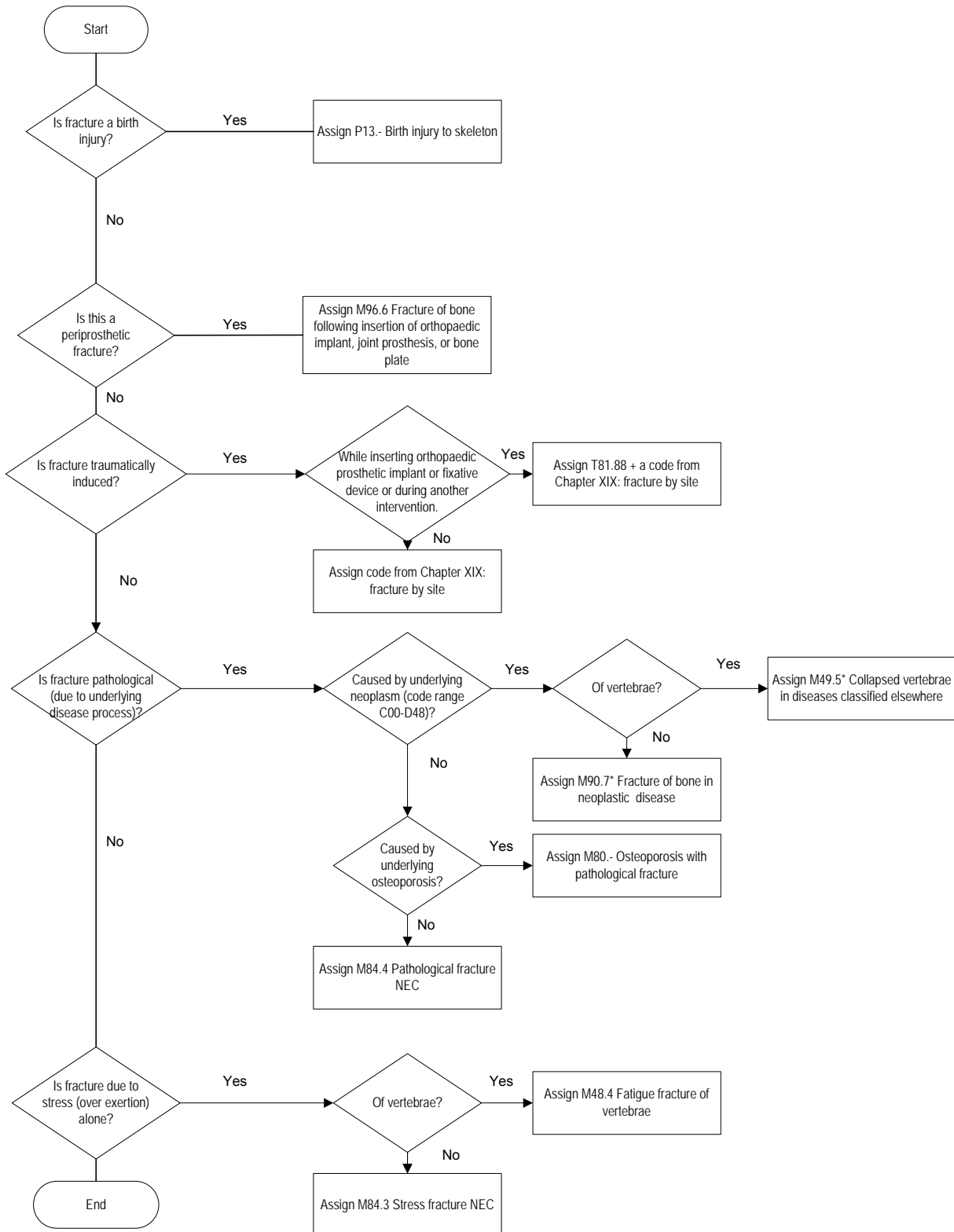
Assign stress fractures in osteoporotic bone to category M80 *Osteoporosis with pathological fracture* (do not assign M84.3– *Stress fracture, not elsewhere classified*).

Example: A 65-year-old lady with osteoporosis of the vertebrae is found, on X-ray, to have stress fractures of T11–T12.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M80.98	(M)	MP	Unspecified osteoporosis with pathological fracture, other site

Fractures



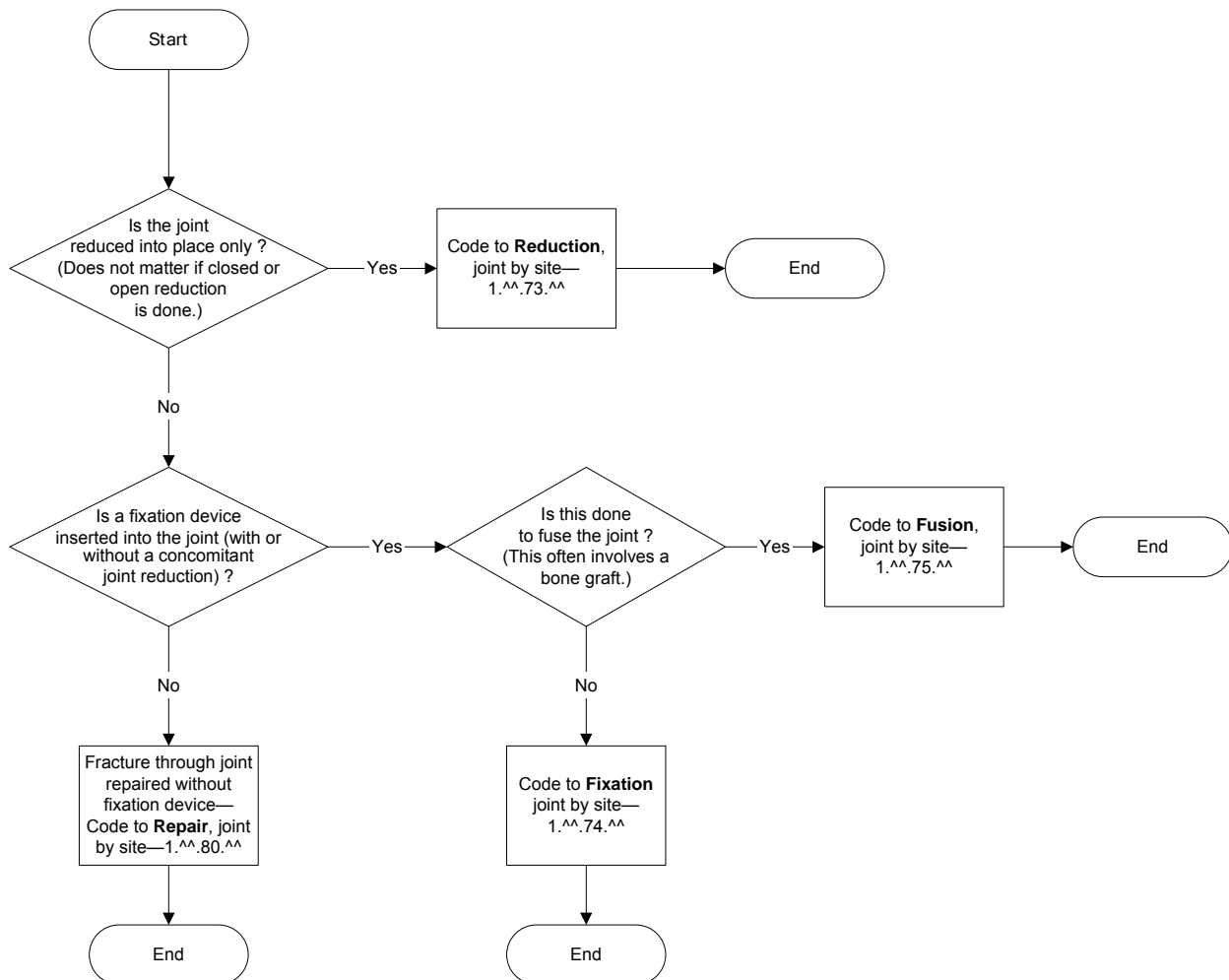
* These codes are manifestation codes and require the use of an additional code for the underlying disease (dagger code).

Joint Fracture Reduction, Fixation and Fusion

In effect 2001, amended 2002



When an intervention is performed to amend a fracture and the fracture involves a portion of a bone that forms a joint, assign a CCI code where the anatomical site indicates a joint.



Note: This coding standard applies to all joints including the spinal vertebrae.

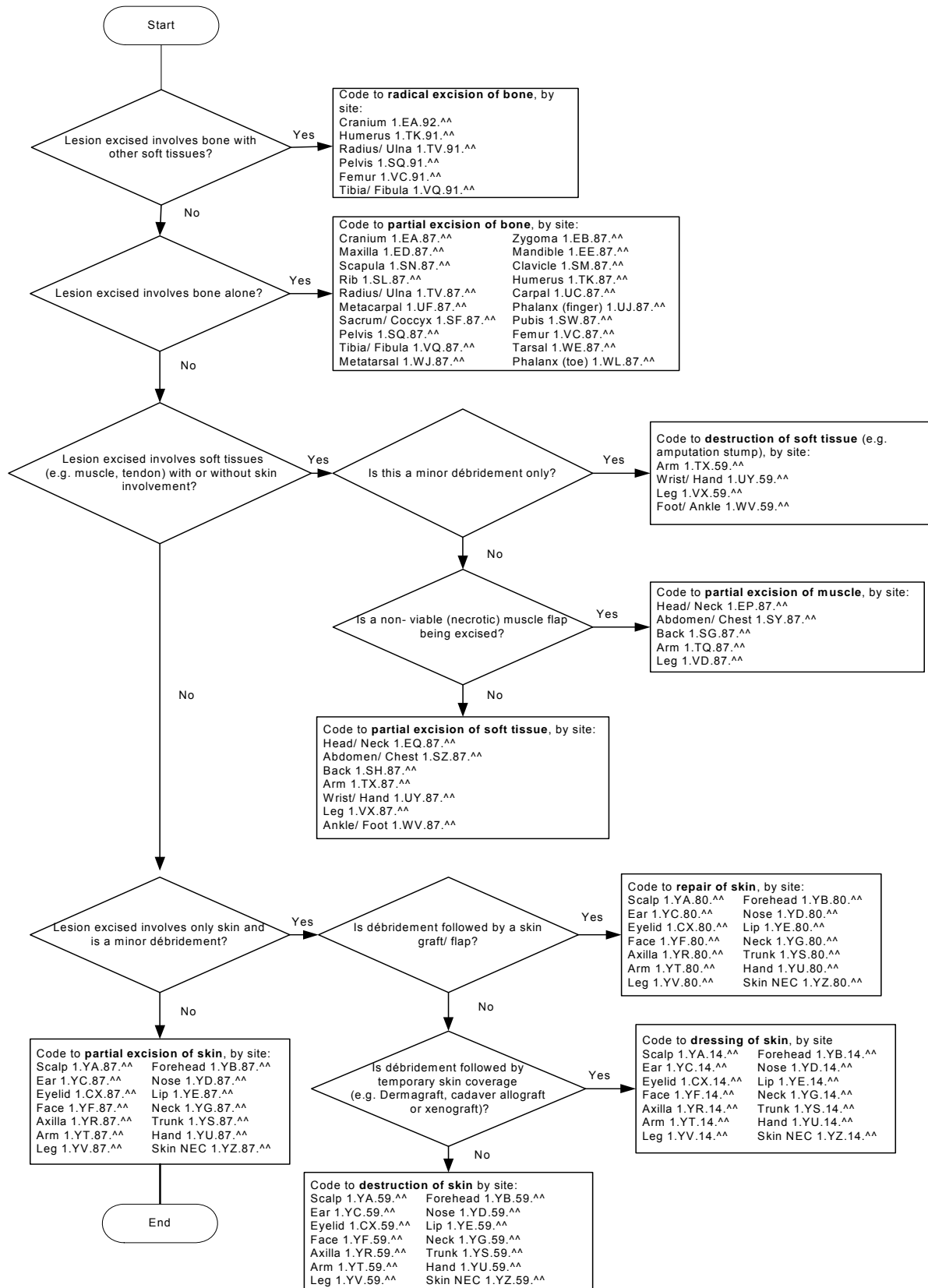
Excision (of Lesion) of Bone, Soft Tissue and Skin

In effect 2001, amended 2006

- DN** When a lesion excision involves removal of soft tissue and bone, assign a CCI code with a generic intervention indicating radical excision of bone.
- DN** When an intervention involves skin and soft tissue, assign a CCI code indicating the anatomic site of soft tissue.
- DN** When the intent of a soft tissue excision of lesion is minor debridement only, assign a CCI code with a generic intervention indicating destruction of soft tissue.
- DN** When the intent of a soft tissue excision of lesion is removal of the lesion, assign a CCI code with a generic intervention indicating partial excision of soft tissue.

In CCI, an excision confined to muscle alone is presumed to be a removal of a previously placed and nonviable muscle flap and is classified to partial excision of muscle by site. Any other excision of a muscle lesion is presumed to involve other soft tissues (e.g. skin, subcutaneous tissues, fascia, and tendon) and classified accordingly.

Excision (of Lesion) of Bone, Soft Tissue and Skin



Spinal Stenosis

In effect 2008

- DN** When the diagnosis is recorded as spinal or foraminal stenosis and the underlying cause is documented, assign a code for the underlying cause; do not assign M48.0– *Spinal stenosis*.
- DN** When the final diagnosis is recorded as spinal or foraminal stenosis and the underlying cause is not documented, assign M48.0– *Spinal stenosis*.
- DN** Assign an additional code from the category G55* *Nerve root and plexus compressions in diseases classified elsewhere*, for any documented radiculopathy, including the terms:
- Neuritis
 - Radiculitis
 - Sciatica
 - Nerve root compression
- DN** Assign an additional code G99.2* *Myelopathy in diseases classified elsewhere* for documented myelopathy.
- DN** Do not use category M99 *Biomechanical lesions, not elsewhere classified* for entry into the DAD or NACRS databases. See note, in ICD-10-CA, at category M99 *Biomechanical lesions, not elsewhere classified*.

See also [Appendix A–Spinal Stenosis](#) for clinical information.

Example: Patient was diagnosed with spinal stenosis resulting from degeneration of the lumbar facet joints. He also had signs of radiculopathy in his lower limbs.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M47.26	(M)	MP	Other spondylosis with radiculopathy, lumbar region
G55.2*	(3)	OP	Nerve root and plexus compressions in spondylosis

Rationale: The patient's spinal stenosis was identified as due to the degeneration of the facet joints (spondylosis). As the underlying cause was documented, the code M48.0– *Spinal stenosis* is not required.

Example: Patient was admitted for a foraminotomy to decompress his documented lumbosacral spinal stenosis. He also had documented sciatica. Final diagnosis was foraminal stenosis with sciatica.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M48.07	(M)	Spinal stenosis, lumbosacral region
G55.3*	(3)	Nerve root and plexus compressions in other dorsopathies

Rationale: There was no physician documentation to identify the underlying cause of the patient's foraminal stenosis. In the presence of spinal stenosis, sciatica is classified to radiculopathy.

Note: When an underlying cause for the spinal stenosis is not documented, it is recommended that the physician be queried for clarification.

Chapter XIV—Diseases of the Genitourinary System

See also the coding standard entitled [Hypertension and Associated Conditions](#).

See also [Appendix A—Stages of Chronic Kidney Disease \(CKD\)](#) and [Pelvic Relaxation](#) for clinical information.

Stages of Chronic Kidney Disease (CKD)

In effect 2009



When assigning a code from category N18 *Chronic kidney disease*, base the diagnosis code selection upon clinical documentation of the stage of the disease, not the glomerular filtration rate (GFR).

- When the stage of chronic kidney disease is not documented, assign N18.9 *Chronic kidney disease, unspecified*.

Note: The stages of chronic kidney disease (CKD) are based on a clinical diagnosis that includes monitoring glomerular filtration rates (GFR) over months of time. Classification of CKD is, therefore, based on the clinical diagnosis of the stage of the disease and not a specific GFR value.

Example: A patient with advanced stage 3 chronic kidney disease is admitted with worsening symptoms. Her GFR was noted to be 17 mL/min.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
N18.3	(M)	OP	Chronic kidney disease, stage 3

Rationale: N18.3 is assigned based on documentation of stage 3. While the GFR of 17 mL/min is a value included under N18.4 *Chronic kidney disease, stage 4*, the stage as documented (stage 3) is used for code assignment.

Example: Patient admitted with signs and symptoms of worsening kidney disease. Physician records final diagnosis as “chronic renal failure.”



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
N18.9	(M)	MP	Chronic kidney disease, unspecified

Continuous Ambulatory Peritoneal Dialysis (CAPD) Peritonitis

In effect 2001, amended 2002, 2003, 2006, 2009

- DN** When peritonitis follows a dialysis procedure and is not attributable to the dialysis catheter (device), classify the infection to T80.2 *Infection following infusion, transfusion and therapeutic injection*.
- DN** When a causal relationship indicating peritonitis due to a dialysis catheter is documented by the physician, classify the peritonitis to T85.7 *Infection and inflammatory reaction due to other internal prosthetic device, implants and grafts*.
- DN** Assign an additional code from category K65 *Peritonitis*, mandatory, as a diagnosis type (3)/other problem, to specify the infection.

See also the coding standard entitled [Drug-Resistant Microorganisms](#).

An exit site infection at the site of the dialysis catheter for continuous ambulatory peritoneal dialysis (CAPD) may not be presumed to be the cause of peritonitis and does not always result in peritonitis. Physician documentation specifying a causal relationship between the two conditions is required to substantiate coding both conditions. The cause of peritonitis may be the introduction of bacteria into the peritoneum by the dialysis procedure, but it is not always related to an exit site infection. It is usually related to a breach in the patient's sterile technique. It is true however, that if the patient has a chronic exit site infection, he will be more prone to get an episode of peritonitis caused by the same organism. Pneumococcus and staphylococcus are the most common organisms.

Example: Acute peritonitis in a peritoneal dialysis patient (CAPD peritonitis). There is no documentation of an infection relating to the catheter.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T80.2	(M)	MP	A	Infections following infusion, transfusion and therapeutic injection
K65.0	(3)	OP	A	Acute peritonitis
Y84.1	(9)	OP	A	Kidney dialysis without mention of misadventure at the time of procedure, as the cause of abnormal reaction of patient or of later complication

Example: Peritonitis due to peritoneal dialysis catheter exit site infection. The physician ordered skin and peritoneal fluid cultures (positive for staphylococcus) to confirm the causative agent of the peritonitis.



<u>Code</u>	<u>DAD</u> (M)	<u>NACRS</u> MP	<u>Cluster</u> A	<u>Code Title</u>
T85.7		MP	A	Infection and inflammatory reaction due to other internal prosthetic devices, implants and grafts
K65.9	(3)	OP	A	Peritonitis, unspecified
B95.8	(3)	OP	A	Unspecified staphylococcus as the cause of diseases classified to other chapters (optional)
Y84.1	(9)	OP	A	Kidney dialysis without mention of misadventure at the time of procedure, as the cause of abnormal reaction of patient or of later complication

Menorrhagia as the Most Responsible Diagnosis (MRDx)

In effect 2006

Menorrhagia (uterine bleeding) can be related to a variety of causes (e.g. hormonal) and in the great majority of cases the cause is unknown or not fully explained. It can be the main reason a hysterectomy is performed.

Even when large, fibroids may produce no symptoms. Symptoms depend on the number of fibroids, their size, and their location in the uterus, as well as their status (i.e. whether they are growing or degenerating). Symptoms may include heavy or prolonged menstrual bleeding or bleeding between periods, pain, pressure or heaviness in the pelvic area during or between periods, need to urinate more frequently, and swelling in the abdomen.

The Society of Obstetricians and Gynecologists of Canada (SOGC) indicated that fibroids in and of themselves are not a reason for hysterectomy or embolization. The percentage of symptomatic fibroids is very low and fibroids are often just an incidental finding on pathology. When it has been documented that the fibroid is the cause of the excessive uterine bleeding or pain then the fibroid would be the most responsible diagnosis.



When a patient presents for a hysterectomy due to menorrhagia, select the MRDx based on the final diagnosis as stated by the attending physician. Do not assume that diagnoses listed on the pathology report are the underlying cause of the menorrhagia. These diagnoses may be incidental findings.

Example: Patient presents with menorrhagia and a hysterectomy is performed. Pathology report shows uterine fibroids. The physician documents menorrhagia as the final diagnosis on the front sheet.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
N92.0	(M)	Excessive and frequent menstruation with regular cycle
D25.9	(3)	Leiomyoma of uterus, unspecified

Rationale: The leiomyoma were identified on the pathology report only and not included in the final diagnosis recorded by the physician. It is optional to code and assigned diagnosis type (3).

Chapter XV—Pregnancy, Childbirth and the Puerperium

See also [Appendix A—Length of Gestation](#) and [Trimesters](#) for clinical information.

See also the coding standard entitled [Diabetes Mellitus](#).

Recognizing that births typically take place as inpatients, all of the directive statements and examples are shown for DAD abstracts. Obstetric cases with abortive outcome have been identified as applicable to DAD and NACRS.

Selection of the Sixth-Digit in Obstetrical Coding

In effect 2001, amended 2006, 2007

The sixth-digit that is applied to all codes in the range O10–O99 identifies the period (i.e. antepartum, intrapartum or postpartum) in which the patient is receiving care, and whether or not the delivery occurs within that episode of care.

D Select the sixth-digit “1”—**Delivered**, with or without mention of antepartum condition, when delivery occurs during the current episode of care and the condition occurred prior to or during delivery of the baby.

Example: The patient is admitted, at 38 weeks gestation, with gestational diabetes. She delivers a healthy baby boy and is discharged home.

D	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
	O24.801	(M)	Diabetes mellitus arising in pregnancy [gestational], delivered, with or without mention of antepartum condition
	Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

D Select the sixth-digit “2”—**Delivered**, with mention of postpartum condition when the delivery occurred during the current episode of care and the condition occurred after delivery of the baby.

Example: The patient is admitted, at 39 weeks gestation. She delivers a healthy baby boy, via spontaneous vaginal delivery. There is postpartum hemorrhage due to retained placenta. She is discharged home on her fourth postpartum day.

D	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
	O72.002	(M)	Third-stage haemorrhage, delivered, with mention of postpartum complication
	Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

D Select the sixth-digit “3”—**Antepartum** condition or complication when the patient is admitted for management of an antepartum condition. The patient does not deliver during the current episode of care and is still pregnant on discharge.

Example: A patient at 14 weeks gestation, presents to hospital with hyperemesis gravidarum. She is discharged home, undelivered.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O21.003	(M)	Mild hyperemesis gravidarum, antepartum condition or complication



Select the sixth-digit “4”—Postpartum condition or complication when the patient is admitted for management of a postpartum condition or complication following delivery. The delivery having occurred during a previous episode of care or outside the hospital and the mother is subsequently admitted for observation or care.

The postpartum period is six weeks from delivery unless specified otherwise in the documentation. In other words, if physician documentation states a condition to be a postpartum problem, but the time period is beyond six weeks, it is still classified as a postpartum condition.

Example: This patient delivered a healthy baby boy via spontaneous vaginal delivery, with episiotomy, at 38 weeks gestation. She was discharged home on postpartum day two. She now presents for readmission, with dehiscence of the episiotomy.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O90.104	(M)	Disruption of perineal obstetric wound, postpartum condition or complication



Select the sixth-digit “9”—Unspecified as to episode of care, or not applicable, only when the outcome of the pregnancy is abortive. In these cases, assign the code from O10 to O99 as an additional code to describe any obstetrical condition present with an abortion.

Example: A patient presents requesting a medical abortion because of known fetal anomalies. Ultrasound identified spina bifida with hydrocephalus.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O04.9	(M)	Medical abortion, complete or unspecified, without complication
O35.039	(1)	Maternal care for (suspected) fetal spina bifida with hydrocephalus, unspecified as to episode of care, or not applicable

Allowable Sixth-Digit Combinations

Multiple coding is commonly used with obstetrical cases because a patient often has more than one condition that affects the obstetrical experience. Differing sixth-digits may be used on the obstetric codes when a patient delivers and has both an antepartum or intrapartum condition and a postpartum condition. However, there are certain combinations of sixth-digits that are illogical for the same episode of care.



Permit only the following combinations of sixth digits on an abstract:

<u>Sixth-Digit</u>	<u>Use:</u>	<u>Never Use:</u>
1	- alone or with “2”	- with “3,” “4,” or “9”
2	- alone or with “1”	- with “3,” “4,” or “9”
3	- alone	- with any other sixth-digit
4	- alone	- with any other sixth-digit
9	- alone	- with any other sixth-digit

Note: Certain obstetric conditions occur only at one point within an obstetric period. For example, placenta previa occurs only in the antepartum period (sixth-digits 1, 3 or 9 would only apply). Other obstetric conditions, such as hypertension, may be present at any time throughout the pregnancy and persist into the puerperium (any sixth-digit may apply).

Coders are reminded to read all inclusion and exclusion notes carefully. In some circumstances, ICD-10-CA has separate categories for conditions that occur either antepartum or postpartum (e.g. phlebothrombosis).

The following are examples of the correct usage of the sixth-digits “1” and “2.”

Example: Patient admitted in labor. Twins delivered. Subsequent postpartum hemorrhage on the second day followed by deep phlebothrombosis.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O30.001	(M)	Twin pregnancy, delivered, with or without mention of antepartum condition
O72.202	(2)	Delayed and secondary postpartum haemorrhage, delivered with mention of postpartum complication
O87.102	(2)	Deep phlebothrombosis in the puerperium, delivered with mention of postpartum complication
Z37.200	(3)	Twins, both liveborn, pregnancy resulting from both spontaneous ovulation and conception

Example: Patient delivered by Cesarean section due to obstructed labor due to breech presentation of the baby. Prior to discharge, Cesarean wound dehiscence was diagnosed.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O64.101	(M)	Obstructed labour due to breech presentation, delivered, with or without mention of antepartum condition
O90.002	(2)	Disruption of caesarean section wound, delivered, with mention of postpartum complication
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Sixth-digit “3”—Antepartum condition or complication, must only be used alone.

Example: Patient is at 30 weeks gestation. She is admitted with gestational diabetes. She was monitored for three days and discharged home in good condition, undelivered.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O24.803	(M)	Diabetes mellitus arising in pregnancy (gestational), antepartum condition or complication

Sixth-digit “4”—Postpartum condition or complication, must only be used alone.

Example: Patient delivered a healthy baby boy two weeks ago. She was discharged home postpartum day two. She is breastfeeding. She now presents with an abscess of the right breast.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O91.104	(M)	Abscess of breast associated with childbirth, postpartum condition or complication

The sixth-digit “9”—Unspecified as to episode of care, or not applicable, must only be used alone.

Example: A patient was diagnosed with ovarian cancer at eight weeks gestation. She underwent a series of radiotherapy sessions to shrink the tumor. Following discussion with her radiation oncologist, regarding the possible risk the radiation presented to her fetus, the patient opted to have a medical termination of the pregnancy. She now presents for a medical abortion.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O04.9	(M)	MP	Medical abortion, complete or unspecified, without complication
O35.609	(1)	OP	Maternal care for (suspected) damage to fetus by radiation, unspecified as to episode of care, or not applicable

See also the coding standard entitled [Pregnancy With Abortive Outcome](#).

Sequencing Obstetrical Diagnosis Codes

In effect 2001, amended 2006, 2007

When selecting the MRDx in obstetrical cases, the diagnosis typing definition for most responsible diagnosis applies (see also the coding standard entitled [Diagnosis Typing Definitions for DAD](#)). The following directives are provided to assist in applying the MRDx definition in certain obstetrical cases.



When an episode of care includes non-instrumental, spontaneous, vaginal delivery of an infant but the mother was admitted for an antepartum condition that required treatment for more than five days before the birth, sequence the antepartum condition as the MRDx.

An antepartum condition that prolongs stay prior to delivery by at least five days is considered to consume greater resources than the delivery itself when the delivery is a routine vaginal delivery.

Example: Patient admitted with gestational hypertension, treated with bed rest and delivered a baby boy, manually assisted without episiotomy, on day six of admission. Patient had a first-degree laceration of the perineum which was repaired.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O13.001	(M)	Gestational [pregnancy-induced] hypertension, delivered, with or without mention of antepartum condition
O70.001	(1)	First degree perineal laceration during delivery, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception
5.MD.50.AA		Manually assisted vaginal delivery (vertex), without episiotomy
5.PC.80.JP		Surgical repair, postpartum, of current obstetric laceration of pelvic floor, perineum, vagina or vulva

Rationale: O13.001 is selected as the MRDx as it is most responsible for the patient's length of stay.

Example: Patient admitted at term with pregnancy-induced hypertension. Labor was induced by intravenous oxytocin. She delivered a baby boy, manually assisted without episiotomy. A first-degree laceration of the perineum was repaired.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O13.001	(M)	Gestational [pregnancy-induced] hypertension, delivered, with or without mention of antepartum condition
O70.001	(1)	First degree perineal laceration during delivery, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception
5.MD.50.AA		Manually assisted vaginal delivery (vertex), without episiotomy
5.PC.80.JP		Surgical repair, postpartum, of current obstetric laceration of pelvic floor, perineum, vagina or vulva
5.AC.30.HA-I2		Induction of labour, using percutaneous injection of oxytocic agent

Rationale: Even though the antepartum condition in this example did not require a lengthy predelivery stay of >five days, it can still be the MRDx. In this case it is the condition for which an induction was performed. The perineal tear is minor and consumed minimal resources.




In cases within the expected length of stay, where a Cesarean section or instrumentation has been used (i.e. forceps or vacuum), assign the diagnosis stating the indication for the intervention as the MRDx.




In cases where there is failed vacuum and/or forceps leading to subsequent Cesarean section, assign the underlying maternal or fetal condition that was the indication for the forceps or vacuum as the MRDx.

When a case is within an expected length of stay for an instrumental delivery, it is presumed that no other condition contributed to a greater consumption of resources than the condition that indicated the delivery method.

Example:  Primigravida patient was admitted with gestational diabetes. On day one of her admission, she went into labor. After seven hours of labor, it was determined that she could not deliver vaginally because of cephalopelvic disproportion. She was taken to the labor and delivery operative suite and delivered a healthy baby girl by Cesarean section.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O65.401	(M)	Obstructed labour due to fetopelvic disproportion, unspecified, delivered, with or without mention of antepartum condition
O24.801	(1)	Diabetes mellitus arising in pregnancy (gestational), delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception
5.MD.60.AA Status: N5		Cesarean section delivery, lower segment transverse incision, without instrumentation

Example:  Primigravida patient admitted with gestational hypertension, treated with bed rest. On the seventh day, she went into spontaneous labor. After eight hours of labor, it was determined that she could not deliver vaginally because of cephalopelvic disproportion. Signs of fetal distress (heart rate anomaly) were noted and the mother's blood pressure was continuing to rise. She was taken to the labor and delivery operative suite and delivered a healthy baby girl by Cesarean section.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O13.001		Gestational [pregnancy-induced] hypertension, delivered, with or without mention of antepartum condition
O65.401		Obstructed labour due to fetopelvic disproportion, unspecified, delivered, with or without mention of antepartum condition
O68.001		Labour and delivery complicated by fetal heart rate anomaly, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception
5.MD.60.AA Status: N5		Cesarean section delivery, lower segment transverse incision, without instrumentation

Rationale: As will be true in many obstetrical cases, this patient's circumstances are unique and the above directives do not relate to this case. Selection of MRDx must be determined on the basis of the documentation of this case.

Example: Mother is fully dilated and fetus is noted to be in left occipitotransverse position, station +1. Forceps are used in an attempt to rotate and deliver the fetal head. After the third contraction, and with no further fetal descent, it is decided to abandon the forceps and move to a primary lower uterine segment Cesarean section.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O64.001	(M)	Obstructed labour due to incomplete rotation of fetal head, delivered, with or without mention of antepartum condition
O66.501	(1)	Failed application of vacuum extractor and forceps, unspecified, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception
5.MD.60.JW Status: N5		Cesarean section delivery, lower segment transverse incision, with use of forceps

Rationale: The Cesarean section is performed to address the obstructed labor due to malposition, therefore, O64.001 is selected as the MRDx. The indication for the Cesarean section does not become failed application of vacuum extractor and forceps. Forceps traction delivery is not captured separately; it is captured in the qualifier of the Cesarean section.

Intrauterine Death

In effect 2001, amended 2006



Classify late intrauterine fetal death when the fetal demise occurs at or after 20 completed weeks of gestation to O36.4— *Maternal care for intrauterine death*.



Classify early intrauterine fetal death when the fetal demise occurs before 20 completed weeks of gestation with retention of the fetus to O02.1 *Missed abortion*.

Example: Patient noticed decreased fetal movement at 23 weeks gestation. On examination, no fetal heart rate could be detected. She now presents at 25 weeks gestation, in labor. She delivered a dead male fetus.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O36.421		Maternal care for intrauterine death, second trimester, delivered, with or without mention of antepartum condition
Z37.100	(3)	Single stillbirth, pregnancy resulting from both spontaneous ovulation and conception

Example: An ultrasound examination diagnosed fetal demise at 19 weeks. She was sent home to await labor. Labor began 10 days later and she delivered a macerated male fetus weighing 150 grams.



<u>Code</u>	<u>Code Title</u>
O02.1	Missed abortion

Rationale: Gestational age is determined at the time of fetal death.

Pregnancy With Abortive Outcome

[Click here for description of change.](#)

In effect 2001, amended 2004, 2006, 2009, 2012

See also the coding standard entitled [Continuing Pregnancy After Abortion/Selective Fetal Reduction in Multiple Gestation](#).

O03–O08 Pregnancy With Abortive Outcome

The primary axis is the type of abortion with the fourth character indicating any associated complication(s).

Example: Spontaneous abortion, incomplete, without complication, treated by dilation and curettage.



Code	DAD	NACRS	Code Title
O03.4	(M)	MP	Spontaneous abortion, incomplete, without complication

5.PC.91.GA

Dilation and curettage (following delivery or abortion)

O04 Medical Abortion

This is a broad category encompassing the diagnosis code for both surgical and pharmacologically induced abortions; the diagnosis code does not indicate the method used to terminate the pregnancy.



Classify all medical abortions (intended terminations of pregnancy), regardless of the gestational age, fetal weight, or outcome of the fetus (i.e. products of conception, stillborn or liveborn) to category O04 *Medical abortion*.

- When applicable, assign an additional code, mandatory, as a significant diagnosis type (1)/other problem from:
 - category O35 *Maternal care for known or suspected fetal abnormality and damage*, to identify any fetal reason for the medical abortion (e.g. anencephalic fetus) ; and/or
 - Chapter XV—*Pregnancy, childbirth and the puerperium (O10-O99)*, to identify any maternal medical illness as the reason for the medical abortion (e.g. maternal toxoplasmosis).

Note: An encounter for extraction/expulsion where fetal demise has occurred before 20 weeks gestation is classified as a missed abortion, even when extraction/expulsion of the fetus occurs after 20 weeks.

Note: When a multiple pregnancy continues following a medical abortion, follow the direction in the coding standard entitled [Continuing Pregnancy After Abortion/Selective Fetal Reduction in Multiple Gestation](#).

Example: Medical abortion for unwanted pregnancy treated with a suction curettage at 10 weeks.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O04.9	(M)	MP	Medical abortion, complete or unspecified, without complication
5.CA.89.GC			Surgical termination of pregnancy, vaginal approach, aspiration and curettage

Rationale: Neither a fetal nor a maternal reason for medical abortion was documented; therefore, the case is classified to O04.9 only.

Medical Abortion at or After 20 Weeks Resulting in a Stillborn

Terminations performed later in gestation are classified as a medical abortion on the mother's abstract as described above. A stillborn abstract is created as per provincial/territorial direction.

Note: See the section entitled *Stillborn Abstracting* in the Discharge Abstract Database (DAD) Abstracting Manual for the criteria for completion of a stillborn abstract.



When a medical abortion is performed at or after 20 weeks gestation resulting in a stillborn, assign P96.4 *Termination of pregnancy, affecting fetus and newborn* as the MRDx/main problem on the stillborn abstract.

- When applicable, assign an additional code(s), mandatory, as a diagnosis type (3)/other problem to describe any associated congenital anomaly.

Note: When a medical abortion occurs at or after 20 weeks gestation, do not assign a code from category Z37 *Outcome of delivery* for a stillbirth on the mother's abstract. Direction for classifying a medical abortion at or after 20 weeks gestation resulting in a livebirth is addressed in the following section "Medical Abortion Resulting in a Liveborn."

Example: An expectant mother presented at 26 weeks gestation. During her last pre-natal visit, an ultrasound and amniocentesis were ordered. The results of the amniocentesis demonstrated that the fetus had Trisomy 21. She decided that she did not wish to carry this pregnancy to term. She was admitted for a medical termination of the pregnancy by vaginal insertion of prostaglandin.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O04.9	(M)	MP	Medical abortion, complete or unspecified, without complication
O35.109	(1)	OP	Maternal care for (suspected) chromosomal abnormality in fetus, unspecified as to episode of care, or not applicable
5.CA.88.CK-I2			Pharmacological termination of pregnancy, per orifice approach, oxytocins

Rationale: A medical abortion was performed and the reason for the medical abortion was documented; therefore, the case is classified to O04.9 and a code for the fetal anomaly is assigned. The intent was to terminate the pregnancy; therefore, a delivery code from rubric 5.MD.50.^ to 5.MD.60.^ is not assigned.

**Stillborn's
abstract**



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
P96.4	(M)	MP	Termination of pregnancy
Q90.9	(3)	OP	Down's syndrome, unspecified

Rationale: A medical abortion was performed and the reason for the medical abortion was documented; therefore, the case is classified to P96.4 and a code for the fetal anomaly is assigned.

Example: A patient is admitted at 21 weeks for an unplanned pregnancy in which the mother was desirous for termination. Dilation & evacuation (D&E) is performed. The physician documents the diagnosis as "delivery of a stillborn."



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O04.9	(M)	MP	Medical abortion, complete or unspecified, without complication
5.CA.89.GD			Surgical termination of pregnancy, vaginal approach, dilation and evacuation [D & E]

Rationale: A medical abortion was performed; therefore, this case is classified to O04.9. Even though the physician documented "delivery of stillbirth," the intent was to terminate the pregnancy; therefore, a delivery code from rubric 5.MD.50.^ to 5.MD.60.^ is not assigned.

**Stillborn's
abstract**



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
P96.4	(M)	MP	Termination of pregnancy, affecting fetus and newborn

Rationale: A medical abortion was performed; therefore, the case is classified to P96.4.

Medical Abortion Resulting in a Liveborn



When a medical abortion performed at or after 20 weeks gestation results in a liveborn, assign:

- on the mother's abstract, a code from:
 - category **O04 Medical abortion**, as the MRDx/main problem; and
 - category **Z37 Outcome of delivery**, as a diagnosis type (3)/other problem, to indicate that the abortion resulted in a liveborn; and
 - category **O35 Maternal care for known or suspected fetal abnormality and damage**, to identify any fetal reason for the medical abortion (e.g. anencephalic fetus); and/or
 - Chapter XV—*Pregnancy, childbirth and the puerperium (O10-O99)*, to identify any maternal medical illness as the reason for the medical abortion (e.g. maternal toxoplasmosis).
- on the newborn's abstract:
 - **P96.4 Termination of pregnancy, affecting fetus and newborn** as the MRDx/main problem; and
 - a code from category **Z38 Liveborn infants according to place of birth**, as a diagnosis type (0); and
 - when applicable, a code to describe any associated congenital anomaly, mandatory, as a significant diagnosis type (1)/other problem.

Example: A patient presented at 20 weeks gestation, requesting a therapeutic abortion.
Mother's abstract She was started on misoprostol, intravenously. The fetus was successfully expelled. A heart beat and respirations were detected at birth.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O04.9	(M)	MP	Medical abortion, complete or unspecified, without complication
Z37.000	(3)	OP	Single live birth, pregnancy resulting from both spontaneous ovulation and conception
5.CA.88.HA-A2			Pharmacological termination of pregnancy, percutaneous approach [e.g. intravenous, injection into intraamniotic or extraamniotic sac], antacid treatment

Rationale: The medical abortion resulted in a liveborn; therefore, the case is classified to O04.9; and Z37.000 is assigned to show that the result was a liveborn. The intent was to terminate the pregnancy; therefore, a delivery code from rubric 5.MD.50.^ to 5.MD.60.^ is not assigned.

Newborn's abstract The outcome of the intended termination was delivery of a liveborn fetus.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
P96.4	(M)	MP	Termination of pregnancy, affecting fetus and newborn
Z38.000	(0)	OP	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: The medical abortion resulted in a liveborn; therefore, the case is classified to P96.4; and Z38.000 is assigned to show that the result was a liveborn.

Example: Medical abortion at 23 weeks gestation for fetal anencephaly. Labor induced with intravenous Syntocinon. Fetus was born alive and survived for one hour.

Mother's abstract



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O04.9	(M)	MP	Medical abortion, complete or unspecified, without complication
O35.009	(1)	OP	Maternal care for (suspected) fetal anencephaly, unspecified as to episode of care, or not applicable
Z37.000	(3)	OP	Single live birth, pregnancy resulting from both spontaneous ovulation and conception
5.CA.88.HA-I2			Pharmacological termination of pregnancy, percutaneous approach [e.g. intravenous, injection into intraamniotic or extraamniotic sac], oxytocins

Rationale: The medical abortion resulted in a liveborn. Therefore, the case is classified to O04.9; and Z37.000 is assigned to show that the result was a liveborn. The reason for the medical abortion was documented so a code for the fetal anomaly is assigned. The intent was to terminate the pregnancy; therefore, a delivery code from rubric 5.MD.50.^ to 5.MD.60.^ is not assigned.

Newborn's abstract The outcome of the intended termination was delivery of a liveborn fetus with anencephaly.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
P96.4	(M)	MP	Termination of pregnancy, affecting fetus and newborn
Q00.0	(1)	OP	Anencephaly
Z38.000	(0)	OP	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: The medical abortion resulted in a liveborn. Therefore, the case is classified to P96.4; and Z38.000 is assigned to show that the result was a liveborn. The reason for the medical abortion was documented so a code for the fetal anomaly is assigned.

Note: A liveborn resulting from a medical abortion prior to 20 weeks is considered pre-viable for the purposes of classification; therefore, a code from category Z37 *Outcome of delivery* is not assigned on the mother's abstract and a newborn abstract is not created.

Vital Statistics Act requirements for registration of a liveborn are not the same as those for classification of a newborn in the Discharge Abstract Database (DAD). Consequently liveborn registrations for **Vital Statistics** will not always match newborn data submitted to the DAD.

Example: A patient presented at 19 weeks gestation for a therapeutic abortion. She was started on misoprostol intravenously. The fetus was expelled. A heart beat was detected. The fetus expired 7 minutes later.



Mother's abstract

Code
O04.9

DAD
(M)

NACRS
MP

Code Title

Medical abortion, complete or unspecified, without complication

5.CA.88.HA-A2

Pharmacological termination of pregnancy, percutaneous approach [e.g. intravenous, injection into intraamniotic or extraamniotic sac], antacid treatment

Rationale:

A medical abortion prior to 20 weeks is considered pre-viable for the purposes of classification; therefore, a code from category Z37 is not assigned on the mother's abstract and a newborn abstract is not created.

O05 Other Abortion



Assign O05.— Other abortion for self-inflicted abortion or abortion following amniocentesis or trauma.

Example: A patient, at 18 weeks gestation, while driving in her car, is hit broadside by a gentleman who came through a stop sign. She sustains a fractured (ischium) pelvis and subsequently goes on to spontaneously deliver a dead fetus.



Code
S32.800

DAD
(M)

NACRS
MP

Code Title

Fracture of other and unspecified parts of lumbar spine and pelvis, closed

V43.5

(9)

OP

Car occupant injured in collision with car, pick-up truck or van, driver of car, traffic accident

O05.9

(1)

OP

Other abortion, complete or unspecified, without complication

O07 Failed Attempted Abortion



When an intervention intended to terminate pregnancy does not result in terminating the pregnancy, assign O07 *Failed attempted abortion*. To use this category, there must be a live fetus within the uterus at the time of discharge.

- **Assign O07.4 *Failed attempted abortion, without complication* when no complication occurs within the same episode of care as the failed abortion.**
- **Assign O07.3 *Failed attempted abortion, complicated* when a complication occurs within the same episode of care as the failed abortion.**

Note: When a complication follows a failed abortion a code from category O08 *Complications following abortion and ectopic and molar pregnancy* is not assigned. The patient is pregnant at the time of discharge so the codes for complication following abortion do not apply for this episode of care or any subsequent episode of care.

A readmission for a complication following a failed attempted abortion is classified to a code from O10-O99 because the patient is pregnant.

See also the coding standard entitled [Complications Following Abortion and Ectopic and Molar Pregnancy](#).

Example: Patient admitted at 19 weeks gestation for a medical abortion. Prostin gel was inserted to initiate labor, but no labor ensued. Patient declined any further intervention and was discharged home.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O07.4	(M)	Failed attempted abortion, without complication
5.CA.88.CK-I2		Pharmacological termination of pregnancy, per orifice approach, oxytocins

Example: Patient admitted at 19 weeks gestation for a medical abortion. Prostin gel was inserted to initiate labor, but no labor ensued. Patient was taken to the operating room for a dilation and curettage. Blood was noted on the pad in the recovery room. After examination it was determined the patient was still pregnant and she was taken back to the operating room for a second dilation and curettage.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O04.9	(M)	MP	Medical abortion, complete or unspecified, without complication
5.CA.89.GA			Surgical termination of pregnancy, vaginal approach , dilation and curettage [D & C]
5.CA.88.CK-I2			Pharmacological termination of pregnancy, per orifice approach, oxytocins
5.CA.89.GA			Surgical termination of pregnancy, vaginal approach , dilation and curettage [D & C]

Rationale: This was not a "failed abortion" because the patient was not pregnant at the time of discharge. Neither a fetal nor a maternal reason for medical abortion was documented; therefore, the case is classified to O04.9 only. The expected outcome for the first dilation and curettage performed during this episode of care was unsuccessful; however, a failed intervention is classified in the same manner as one that is successful; therefore, an intervention code is assigned for both the unsuccessful and the successful dilation and curettage. See also the coding standard entitled [Failed Interventions](#). A diagnosis code is not assigned to show the first dilation and curettage was unsuccessful.

Continuing Pregnancy After Abortion/Selective Fetal Reduction in Multiple Gestation

In effect 2001, amended 2006, 2008, 2009

When there is loss of one fetus or more, whether it is spontaneous or due to an intervention, the case is classified to category O31 *Complications specific to multiple gestation* and not from O00 to O08 *Pregnancy with abortive outcome*.

- DN** When a multiple pregnancy continues after an abortion/selective fetal reduction (any condition in O00–O08) of one fetus or more, classify this to O31.11– *Continuing pregnancy after spontaneous abortion of one fetus or more* or O31.12– *Continuing pregnancy after selective fetal reduction of one fetus or more*.
- DN** When a fetal anomaly or other condition is the reason for selective fetal reduction, assign an additional code, as a comorbid diagnosis type, for the fetal anomaly/other condition on both the selective fetal reduction and obstetrics delivered episodes.
- DN** Assign an additional code from O30 *Multiple gestation*, mandatory, as a comorbid diagnosis type:
- On the abortive encounter, to describe the number of fetuses existing prior to the abortive outcome of one or more fetuses.
 - On the delivery encounter, to describe the number of live fetuses remaining in the pregnancy, when applicable (i.e. when there is more than one fetus at the time of delivery).

See also the coding standard entitled [Multiple Gestation](#).

Example: Patient presented with a twin pregnancy, at 18 weeks gestation. She had some mild cramping and intermittent spotting. In spite of bed rest, she spontaneously aborted one fetus.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O31.113	(M)	Continuing pregnancy after spontaneous abortion of one fetus or more, antepartum condition or complication
O30.003	(1)	Twin pregnancy, antepartum condition or complication

Rationale: Continuing pregnancy after spontaneous abortion of one or more fetuses is classified to O31.11– rather than O03 *Spontaneous abortion*. The patient remains pregnant; therefore, this is an antepartum condition rather than an abortive outcome.

Example: The same patient is now at 37 weeks, 2 days gestation, presenting in labor. She delivered a healthy female baby at 05:45 hours.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O31.111	(M)	Continuing pregnancy after spontaneous abortion of one fetus or more, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: O30 *Multiple gestation* code is not assigned because only a singleton fetus remains.

Example: Patient with quadruplet multiple gestation pregnancy assisted by in vitro fertilization, presents at 12 weeks for selective fetal reduction to a twin pregnancy, via ligation of the umbilical cords. Patient tolerates the procedure well and is discharged, retaining the reduced fetuses.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O31.123	(M)	MP	Continuing pregnancy after selective fetal reduction of one fetus or more, antepartum condition or complication
O30.203	(1)	OP	Quadruplet pregnancy, antepartum condition or complication

5.CA.90.FM Selective fetal reduction, using vascular occlusion

Extent: 2

Rationale: Selective fetal reduction is classified to O31.12– rather than O04 *Medical abortion*. Patient presented with quadruplet multiple gestation, a code from category O30 *Multiple gestation* must be used to show presenting status of the pregnancy. The fourth digit is selected to describe the number of fetuses existing prior to the selective fetal reduction.

Example: The same patient, who had selective fetal reduction at 12 weeks gestation, now presents at 38 weeks gestation with severe preeclampsia necessitating an emergency primary Cesarean section. She delivers healthy twin newborns. The previously reduced, retained fetuses were delivered as well.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O14.101	(M)	Severe pre-eclampsia, delivered, with or without mention of antepartum condition
O31.121	(1)	Continuing pregnancy after selective fetal reduction of one fetus or more, delivered, with or without mention of antepartum condition
O30.001	(1)	Twin pregnancy, delivered, with or without mention of antepartum condition
Z37.201	(3)	Twins livebirth, pregnancy resulting from assisted reproductive technology (ART)

5.MD.60.AA Cesarean section delivery, lower segment transverse incision, without instrumentation

Status: N5

Rationale: O31.121 *Continuing pregnancy after selective fetal reduction of one fetus or more* covers the abortive outcome for these two fetuses. If another condition warrants assignment as MDRx the code from O31.12– *Continuing pregnancy after selective fetal reduction of one fetus or more* does not have to be the MRDx.

Example: Patient is admitted at 19 weeks gestation for selective fetal reduction of one fetus of a twin pregnancy, due to fetus-to-fetus transfusion syndrome. The selective fetal reduction was accomplished via ligation of the umbilical cord.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O31.123	(M)	Continuing pregnancy after selective fetal reduction of one fetus or more, antepartum condition or complication
O43.013	(1)	Fetus to fetus transfusion syndromes, antepartum condition or complication
O30.003	(1)	Twin pregnancy, antepartum condition or complication
5.CA.90.FM		Selective fetal reduction, using vascular occlusion
Extent: 1		

Rationale: Selective fetal reduction is classified to O31.12– rather than to O04 *Medical abortion*.

Example: The same patient, who had selective fetal reduction of one fetus at 19 weeks gestation, is now admitted at 38 weeks gestation in labor. She delivers a healthy newborn girl and the demised fetus.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O31.121	(M)	Continuing pregnancy after selective fetal reduction of one fetus or more, delivered, with or without mention of antepartum condition
O43.011	(1)	Fetus to fetus transfusion syndromes, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: The delivery of the demised fetus is taken into consideration with the code O31.121. This is not a stillbirth nor is it retained products of conception.

Complications Following Abortion and Ectopic and Molar Pregnancy

Click here for description of change.

In effect 2001, amended 2003, 2012

ICD-10-CA makes a distinction between an episode of care at which the abortion or ectopic and molar pregnancy and any resulting complications are **treated together** (code from O00–O05 is MRDx/main problem) and an episode of care for a complication of the abortion or ectopic and molar pregnancy **treated previously** (category O08 is the MRDx/main problem). The inclusion terms provided at the subcategories of O08 should be referenced when assigning the fourth character subcategories of O03–O05.



When the episode of care is solely for the treatment of a complication, the abortion itself having been performed and completed at a previous episode of care, assign a code from category O08 *Complications following abortion and ectopic and molar pregnancy*, as the MRDx/main problem.

Example: Patient had a spontaneous abortion and underwent a dilation and curettage (D&C) in the first episode of care. She was brought to the emergency department two days after discharge because she had developed a fever. She was treated with antibiotics for endometritis.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
O08.02	MP	Genital tract and pelvic infection following spontaneous abortion

Rationale: No other code is required since the abortion was performed during a previous episode of care.



When a complication and the abortion occur during the same episode of care, select a code from O00–O05 as the MRDx/main problem.

- Assign an additional code, mandatory, from category O08 *Complications following abortion and ectopic and molar pregnancy*, to identify associated complications with a code from O00–O02 or to provide further details with a code from O03–O05, as per the use additional code instruction.

Example: Ruptured tubal pregnancy with shock. (Initial episode of care)



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O00.1	(M)	MP	Tubal pregnancy
O08.30	(1)	OP	Shock following ectopic pregnancy

Rationale: The complication (shock) and the ruptured tubal pregnancy occurred during the same episode of care. O00.1 is assigned as the MRDx/main problem and O08.30 is assigned to further specify the associated complication, as per the use additional code instruction.

Example: Incomplete spontaneous abortion with perforation of uterus. (Initial episode of care)



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
O03.3	(M)	MP	Spontaneous abortion, incomplete, with other and unspecified complications
O08.62	(3)	OP	Damage to pelvic organs and tissues following spontaneous abortion

Rationale: The complication (perforation of uterus) and the spontaneous abortion occurred during the same episode of care. O03.3 (other and unspecified complication) is assigned as the MRDx/main problem and O08.62 is assigned to further specify the associated complication, as per the use additional code instruction.

Streptococcal Group B Infection/Carrier in Pregnancy

In effect 2003, amended 2006, 2008

Infections due to Group B Streptococcus (GBS) in pregnant women are quite rare. Often a low vaginal swab will identify GBS, however, the woman will have no symptoms and is simply a carrier of the bacteria. Prophylactic antibiotic treatment may be given following premature rupture of membranes or during labor to ensure that the organism is not passed onto the baby during birth.

- D** Assign O23.90– *Other and unspecified genitourinary tract infection in pregnancy only* when there is documented evidence of an active infection.
- When there is active infection, assign B95.1 *Streptococcus, Group B, as the cause of diseases classified to other chapters*, optional, as a diagnosis type (3), to identify the organism.
- D** Assign Z22.38 *Carrier of other specified bacterial diseases*, optional, as a diagnosis type (3), to identify GBS carrier state.
- D** When antibiotics are given for prophylaxis in a GBS carrier patient, assign Z29.2 *Other prophylactic chemotherapy*, optional, as a diagnosis type (3).

Example: Patient had a vaginal swab that was positive for Group B Streptococcus. On presentation, she had no symptoms. It was decided that no prophylactic treatment was necessary.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z22.38	(3)	Carrier of other specified bacterial diseases (optional)

Example: The vaginal swab came back positive for Group B Streptococcus. No documentation indicating an active infection. The patient received a course of antibiotics, as a prophylactic measure.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z22.38	(3)	Carrier of other specified bacterial diseases (optional)
Z29.2	(3)	Other prophylactic chemotherapy (optional)

Example: A patient presents with a genitourinary tract infection due to Streptococcus Group B. She has a Cesarean section delivery of a female infant. There are no other documented complications of pregnancy or delivery.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O23.901	(M)	Other and unspecified genitourinary tract infection in pregnancy, delivered, with or without mention of antepartum condition
B95.1	(3)	Streptococcus, group B, as the cause of diseases classified to other chapters (optional)
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Delivery in a Completely Normal Case

[Click here for description of change.](#)

In effect 2001, amended 2006, 2007, 2012



Assign a code from category Z37 *Outcome of delivery*, mandatory, for all deliveries.

- Select a code from subcategory Z37.0–*Single live birth* as the MRDx when a single, spontaneous vaginal delivery without any conditions complicating the pregnancy, childbirth or puerperium occurs.
- When any other code from Chapter XV *Pregnancy, Childbirth and the Puerperium* applies to the case, assign the appropriate code from category Z37, mandatory, as a diagnosis type (3).

The following terms, when used in the absence of any other documentation to suggest otherwise, are indicators of a spontaneous delivery without complication

- Spontaneous vertex delivery
- Left occiput anterior [LOA]
- Right occiput anterior [ROA]
- Single term liveborn
- Healthy mother delivered
- Occiput transverse position during labor that spontaneously rotates to OA at delivery
- Occiput posterior position during labor that spontaneously rotates to OA at delivery
- No fetal manipulation or instrumentation (e.g. forceps)
- Periurethral, first degree, or second degree unsutured perineal lacerations
- Chorioamnionitis or funisitis as an incidental placental pathological finding only without documentation of a diagnosis of fever or other symptoms of infection
- Nuchal cord (loose) or other cord entanglement without mention of compression or intervention

Note: For the purposes of the classification, “slipping the cord over the head/body” of the infant or other simple manipulation of the cord during a delivery is not classified as an intervention.

The following presentations/positions are regarded as abnormal and are not considered a completely normal case. Code the listed condition when it requires care during pregnancy or is present during labor or at delivery:

- Breech presentation
- Brow presentation
- Compound presentation (nuchal arm/hand)
- Cord presentation
- Deep transverse arrest
- Face presentation

- Persistent occipitoposterior position (face-to-pubes, direct OP)
- Persistent occipitotransverse position
- Prolapsed arm
- Transverse/oblique lie
- Unstable lie

See also the coding standards entitled *Maternal Care Related to the Fetus, Amniotic Cavity and Possible Delivery Problems, Obstructed Labor* and *Interventions Associated with Delivery*.

Example: Patient delivered a healthy newborn male, vaginally, left occiput posterior presentation, without complication.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z37.000	(M)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

5.MD.50.AA	Manually assisted vaginal delivery (vertex), without episiotomy
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Rationale: There is no mention of persistent OP, direct OP (face-to-pubes), fetal manipulation or instrumentation; therefore, spontaneous rotation of the fetal head to an OA position occurred prior to delivery.

Example: Patient delivered, vaginally, a healthy female baby, in the breech position. An obstetrician was in attendance.




<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O32.101	(M)	Maternal care for breech presentation, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

5.MD.56.AA	Breech delivery, spontaneous breech delivery, without episiotomy, with spontaneous delivery of head
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Rationale: Breech presentation is an abnormal presentation and is never considered to be a completely normal case. There is no mention of any special maneuvers or instrumentation to indicate that labor was obstructed; therefore, this is classified to O32.101.

Note: Certain obstetrical interventions do not preclude the use of a code from subcategory Z37.0— *Single live birth* as the MRDx (e.g. induction for convenience, artificial rupture of membranes and/or episiotomy). In a case where a Cesarean section is requested by a mother who has not had a previous Cesarean section, and done in the absence of any indications, a code from subcategory Z37.0— may still be used as the MRDx.

Example:  Primigravida patient does not want a vaginal delivery so requested an elective Cesarean section. She had no complications of her pregnancy or delivery. The obstetrician performed a low segment section with no forceps.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z37.000	(M)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

5.MD.60.AA Status: N3	Cesarean section delivery, lower segment transverse incision, without instrumentation
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Example:  Patient had a Cesarean section delivery of her first child. The obstetrician has noted that she is a candidate for vaginal birth after Cesarean (VBAC) but the patient does not want a vaginal delivery and has requested an elective Cesarean section. She had no complications of her pregnancy or delivery. The obstetrician performed a low segment section with no forceps.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O34.201	(M)	Uterine scar due to previous Caesarean section, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

5.MD.60.AA Status: N4	Cesarean section delivery, lower segment transverse incision, without instrumentation
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Delivery With History of Previous Cesarean Section

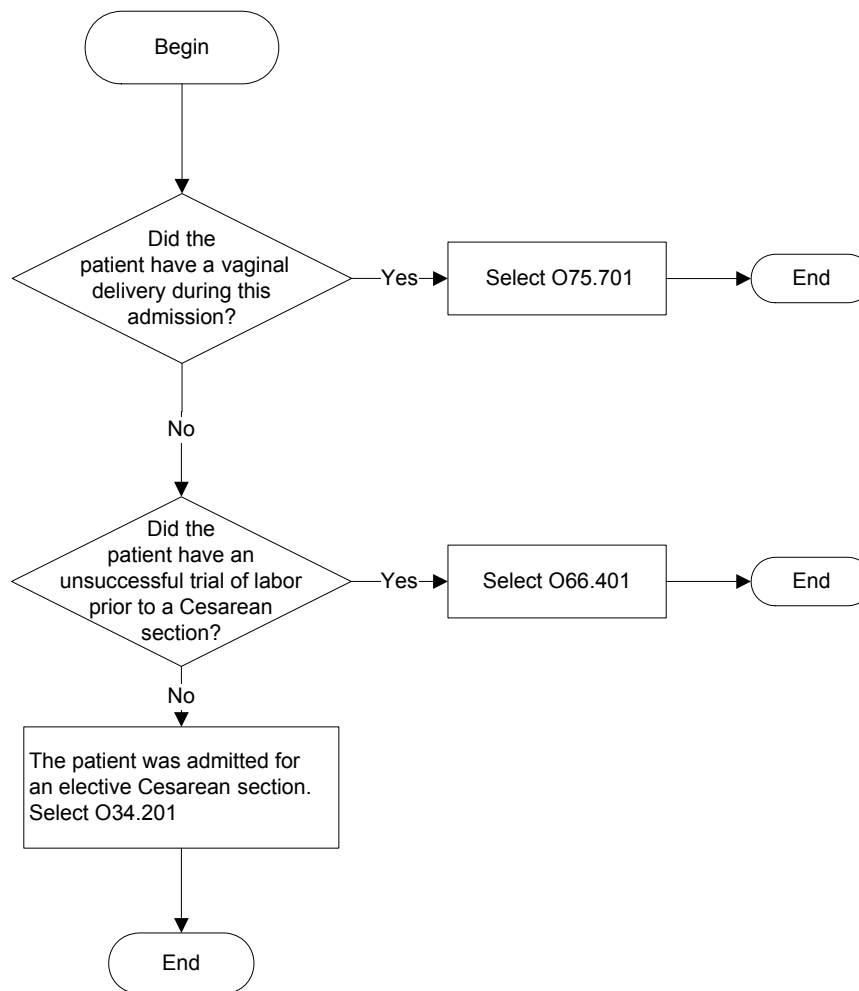
Click here for description of change.

In effect 2003, amended 2005, 2006, 2012

 Ensure that the following codes never appear together on the same abstract as they are mutually exclusive:

- **O75.701** *Vaginal delivery following previous caesarean section, delivered, with or without mention of antepartum condition*
- **O66.401** *Failed trial of labour following previous caesarean, delivered, with or without mention of antepartum condition and*
- **O34.201** *Uterine scar due to previous Caesarean section, delivered, with or without mention of antepartum condition.*

Exception: In the circumstance of a multiple gestation, O75.701 and O66.401 may appear together on the same abstract where one baby is born vaginally and another is born via Cesarean section due to an unexpected complication.



D When a patient who is booked for an elective repeat Cesarean section is admitted early in labor and proceeds immediately to Cesarean section, assign O34.201 *Uterine scar due to previous Caesarean section, delivered, with or without mention of antepartum condition*.

Example: Patient has had a previous Cesarean section. In this current pregnancy the fetus is found to be in breech presentation; therefore, the mother is booked for an elective repeat Cesarean section. Mother presents in early labor prior to the planned date and proceeds immediately to Cesarean section.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O34.201	(M)	Uterine scar due to previous Caesarean section, delivered, with or without mention of antepartum condition
O32.101	(1)	Maternal care for breech presentation, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: Uterine scar and breech presentation are both indications for the planned repeat Cesarean section; therefore, either qualifies as the MRDx.

Multiple Gestation

In effect 2008

D Whenever there is multiple gestation, even when there are no other problems with the pregnancy or delivery, assign a code from category O30 *Multiple gestation, mandatory*.

Exception: A code from O30 *Multiple gestation* is optional for cases classifiable to O00–O08 *Pregnancy with abortive outcome*.

Example: Normal spontaneous vaginal delivery of twins at 38 weeks gestation.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O30.001	(M)	Twin pregnancy, delivered, with or without mention of antepartum condition
Z37.200	(3)	Twins, both liveborn, pregnancy resulting from both spontaneous ovulation and conception

Rationale: Multiple gestation is always considered high risk or having the potential to complicate pregnancy or delivery. These cases are not considered normal delivery.

Example: A 19-year-old primigravida with known twin pregnancy admitted for elective Cesarean section due to frank breech presentation of one twin.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O32.501	(M)	Maternal care for multiple gestation with malpresentation of one fetus or more, delivered with or without mention of antepartum condition
O32.101	(1)	Maternal care for breech presentation, delivered, with or without mention of antepartum condition
O30.001	(1)	Twin pregnancy, delivered, with or without mention of antepartum condition
Z37.200	(3)	Twins, both liveborn, pregnancy resulting from both spontaneous ovulation and conception

Rationale: Even in cases where a complication specific to multiple gestation has been coded, an additional code from category O30 is assigned.

Maternal Care Related to the Fetus, Amniotic Cavity and Possible Delivery Problems

In effect 2001, amended 2007



Select a code from the range O32–O34 when:

- the condition is noted prior to the onset of labor and an elective Cesarean section is performed,
- interventions to correct a potentially obstructing factor (i.e. rotation, version) are performed prior to the onset of labor,
- a malpresentation or malposition delivers via a spontaneous vaginal delivery (e.g. without any fetal manipulation or instrumentation) even if the malpresentation or malposition is not noted until after the onset of labor.



When labor has begun, but medical intervention is required due to malpresentation/malposition, disproportion or abnormality of maternal pelvic organs, assign a code from the range O64–O66 to classify as obstructed labor.

See also the coding standards entitled [Delivery in a Completely Normal Case](#) and [Obstructed Labor](#).

Example: 26-year-old primigravida with known twin pregnancy admitted for Cesarean section due to breech presentation of one twin. Patient underwent lower segment Cesarean section with successful delivery of twin boys.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O32.501	(M)	Maternal care for multiple gestation with malpresentation of one fetus or more, delivered, with or without mention of antepartum condition
O32.101	(1)	Maternal care for breech presentation, delivered, with or without mention of antepartum condition
O30.001	(1)	Twin pregnancy, delivered with or without mention of antepartum condition
Z37.200	(3)	Twins, both liveborn, pregnancy resulting from both spontaneous ovulation and conception

Rationale: This mother was admitted for a planned Cesarean section, she did not go into labor, hence code selection is from O32–O34 and not from O64–O66.

Example: 26-year-old primigravida with known twin pregnancy admitted in early labor. She progressed well until almost fully dilated when it became apparent that twin A was in breech presentation. Patient underwent lower segment Cesarean section with successful delivery of twin boys.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O64.101	(M)	Obstructed labour due to breech presentation, delivered with or without mention of antepartum condition
O30.001	(1)	Twin pregnancy, delivered with or without mention of antepartum condition
Z37.200	(3)	Twins, both liveborn, pregnancy resulting from both spontaneous ovulation and conception

Example: 27-year-old multigravida admitted for elective Cesarean section due to past history of two previous sections. Single live male delivered.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O34.201	(M)	Uterine scar due to previous Caesarean section, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Example: 27-year-old P1, G2, admitted in active labor at 6 cm dilation. This patient has a history of a previous Cesarean section but wished for a trial of labor in the hope of delivering vaginally. After several hours of labor, persistent occipitoposterior was diagnosed and a Cesarean section was carried out.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O64.001	(M)	Obstructed labour due to incomplete rotation of fetal head, delivered, with or without mention of antepartum condition
O66.401	(1)	Failed trial of labour following previous caesarean, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Example: 27-year-old multigravida admitted in active labor at 6 cm dilation. This patient has a history of a previous Cesarean section but wished for a trial of labor. After two more hours of labor, she successfully delivered a female fetus vaginally.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O75.701	(M)	Vaginal delivery following previous caesarean section, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Example: Patient presents to hospital in early labor. Fetal position is noted to be right occipitoposterior (OP). At full dilation, the position is noted to be direct OP. Mom is placed in stirrups in lithotomy position and encouraged to push. Spontaneous vaginal delivery occurs from a direct OP position.



Final Diagnosis: POP, Prolonged 1st and 2nd stage of labor.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O32.801	(M)	Maternal care for other malpresentation of fetus, delivered, with or without mention of antepartum condition
O63.001	(1)	Prolonged first stage (of labour), delivered, with or without mention of antepartum condition
O63.101	(1)	Prolonged second stage (of labour), delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: It is possible for a spontaneous vaginal delivery to occur from a direct occipitoposterior position; however, this is not considered a normal delivery. There is no fetal manipulation or instrumentation to indicate obstruction; therefore, the correct code is O32.801.

Prolonged Pregnancy/Post-Dates Pregnancy

Click here for description of change.

In effect 2012

See also [Appendix A—Length of Gestation](#) for clinical information.



When pregnancy has reached 42 completed weeks (42 +0), assign a code from category O48 *Prolonged pregnancy*.

Example: Patient delivers a healthy newborn. The gestational age on the delivery record is recorded as 42 completed weeks.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O48.001	(M)	Prolonged pregnancy, delivered, with or without mention of antepartum condition
Z37.000	(3)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: A documented gestation of 42 completed weeks is indicative of “prolonged pregnancy”; therefore, O48.001 is assigned.



When pregnancy has reached 41 completed weeks (41+0) and “post-dates” or “post-term” is documented as the indication for induction of labor, assign a code from category O48 *Prolonged pregnancy*.

Note: According to the definition, when the pregnancy has not reached 41 completed weeks, it is not post-term or post-dates; therefore, when the diagnosis is stated as “post-dates” or “post-term” and the gestation has not reached 41 completed weeks, the chart should be returned to the physician for verification of the diagnosis. When this is not possible, classify the case as documented.

Example: Patient is admitted for induction of labor. The delivery record documents the gestational age as 41+2 and the reason for induction is documented as "post dates."



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O48.001	(M)	Prolonged pregnancy, delivered, with or without mention of antepartum condition
Z37.000	(3)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: The gestation is more than 41 completed weeks and is documented as the reason for induction; therefore, O48.001 is assigned.

Example: Patient is admitted at 41 +2 weeks gestation and spontaneously delivers a healthy newborn with no complications.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z37.000	(M)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: Although the gestation is more than 41 completed weeks, it was not an indication for an intervention.

Example: Patient is admitted for induction of labor. The delivery record documents the gestational age as 40+2 and the reason for induction is documented as "post dates."



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O48.001	(M)	Prolonged pregnancy, delivered, with or without mention of antepartum condition
Z37.000	(3)	Singleton, delivered vaginally, product of both spontaneous ovulation and conception

Rationale: This case should be referred to the physician for clarification of the diagnosis. When this is not possible, classify the case as documented.

Premature Rupture of Membranes

[Click here for description of change.](#)

In effect 2001, amended 2005, 2006, 2009



Assign a code from category O42 *Premature rupture of membranes* when there is spontaneous rupture of the amniotic sac for more than one hour prior to the onset of labor. Select codes within the category O42 according to the length of time between rupture of the membranes and the onset of labor with a second axis of term or preterm gestational age at the time of rupture.

Note: To determine the onset of labor, use the time that is documented on the delivery record.

See also the coding standard entitled *Interventions Associated with Delivery*.

Example: Patient presented to hospital at 35 weeks gestation with spontaneous rupture of membranes. She was not having any contractions or tightenings. Labor began six hours after her PROM. She delivered a healthy baby boy two hours after her labor began.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O42.011	(M)	Preterm premature rupture of membranes, onset of labour within 24 hours, preterm, delivered, with or without mention of antepartum condition
O60.101	(1)	Preterm spontaneous labour with preterm delivery, with or without mention of antepartum condition
O62.301	(1)	Precipitate labour, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception



When delivery occurs more than 24 hours after premature rupture of membranes, assign as an additional code, O75.601 *Delayed delivery after spontaneous or unspecified rupture of membranes*.

Example: 24-year-old primigravida at 39 weeks gestation admitted at 0200 hours with documented rupture of membranes at 1900 hours on the night before admission. She was observed for several hours as due to the shortage of available staff, induction could not be started until 1800 hours. Time of onset of labor was documented as 1930 hours and a healthy male infant was delivered at 2200 hours. Membranes were ruptured for a total of 24.5 hours prior to the onset of labor.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O42.121	(M)	Premature rupture of membranes, onset of labour after 24 hours, full term, delivered with or without mention of antepartum condition
O75.601	(1)	Delayed delivery after spontaneous or unspecified rupture of membranes, delivered with or without mention of antepartum condition
O62.301	(1)	Precipitate labour, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Pre-Term Labor

In effect 2001, amended 2006



When labor occurs before completion of 37 weeks of pregnancy, assign a code from category O60 *Preterm labour and delivery*. Labor can be spontaneous or induced and followed by vaginal or surgical delivery.

See also the coding standards entitled [Pregnancy with Abortive Outcome](#) and [Premature Rupture of Membranes](#).

Example: Patient presents in spontaneous labor. Patient delivers a healthy baby girl at 36 weeks gestation.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O60.101	(M)	Preterm spontaneous labour with preterm delivery, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Long Labor


In effect 2001, amended 2006, 2007, 2009



Assign a code from category O63 *Prolonged labour*, when the length of time of the stages of labor meet the following criteria:


O63.0– Prolonged first stage	<ul style="list-style-type: none"> • >18 hours for primipara • >12 hours for multipara
O63.1– Prolonged second stage	<ul style="list-style-type: none"> • >2 hours for primipara • >3 hours for primipara who has received an epidural anesthetic • >1 hour for multipara • >2 hours for multipara who has received an epidural anesthetic
O63.2– Delayed delivery of second twin, triplet, etc.	<ul style="list-style-type: none"> • a time lapse of >15 minutes between births

Note: To calculate the duration of labor, use the times as recorded on the delivery record.

Example:  Primipara patient presents to hospital in labor. After 20 hours of labor her obstetrician recommends proceeding to Cesarean section because her cervix remains at 6 cm dilation. She delivered a healthy baby girl by Cesarean section.


<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O63.001	(M)	Prolonged first stage (of labour), delivered, with or without mention of antepartum condition
O62.101	(1)	Secondary uterine inertia, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: There has been arrest of the active phase of labor (i.e. dilation has reached 6 cms and then stops); therefore, this is classified to secondary uterine inertia. Both conditions are present; therefore, both codes are assigned. Sequencing does not matter in this case, either one can be MRDx.

Example:  Multipara patient presents to hospital in active labor and an epidural anesthetic is administered. Upon examination her cervix is 10 cm dilated and 100% effaced. She pushes for two hours and five minutes. Her obstetrician applies a vacuum. A healthy baby girl is delivered vaginally assisted by low vacuum traction.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O63.101	(M)	Prolonged second stage (of labour), delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: Once the patient is 10 cm dilated she is in the second stage.

Example:  Primipara patient presented in labor at 38 weeks, with a twin gestation. Following one hour of pushing, she successfully delivers a healthy baby boy (twin A). She continues to push and 18 minutes later, her obstetrician applies a vacuum to facilitate the delivery of a healthy baby girl (twin B).

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O63.201	(M)	Delayed delivery of second twin, triplet, etc., delivered, with or without mention of antepartum condition
O30.001	(1)	Twin pregnancy, delivered, with or without mention of antepartum condition
Z37.200	(3)	Twins, both liveborn, pregnancy resulting from both spontaneous ovulation and conception

Precipitate Labor

In effect 2007, 2009



Assign O62.3– *Precipitate labour* when the total duration of labor is ≤3 hours or the physician documents rapid delivery or rapid second stage.

Note: To calculate the duration of labor, use the times as recorded on the delivery record.

Example: This 26-year-old female, gravida 4, was admitted at 41+2 weeks gestation for induction of labor due to postdates. Induction with IV syntocinon was started at 1315 on the day of admission. Labor started at 1400 hours and mom was fully dilated at 1532 hours. She began pushing at 1539 and delivered a live male infant at 1613 hours.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O48.001	(M)	Prolonged pregnancy, delivered, with or without mention of antepartum condition
O62.301	(1)	Precipitate labour, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Obstructed Labor

In effect 2001, amended 2002, 2007



Classify labor as obstructed when abnormalities occur that prevent a spontaneous vaginal delivery.

- Ensure there is documentation that the patient is in labor before assigning a code from the range O64–O66.
- Code obstructed labor when the physician states that labor was obstructed or when the alphabetical index leads to an obstructed labor code (e.g. shoulder dystocia, persistent occipitotransverse position).
- Look for documentation of obstructed labor when emergency Cesarean section is performed for maternal indications.

Note: Failure to progress NOS, is not necessarily an indication that labor is obstructed. It is an inclusion term at O62.2– *Abnormalities of forces of labour, other uterine inertia*.

See also the coding standards entitled [Maternal Care Related to the Fetus, Amniotic Cavity and Possible Delivery Problems](#) and [Delivery in a Completely Normal Case](#).

Example: Pregnancy, at term delivered, with obstructed labor due to transverse lie.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O64.801	(M)	Obstructed labour due to other malposition and malpresentation, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Example: A female infant is delivered vaginally with significant shoulder dystocia lasting for one minute. Apgars are 7 and 9. There is no documentation of any specific maneuvers being performed.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O66.001	(M)	Obstructed labour due to shoulder dystocia, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception
5.MD.50.AA		Manually assisted vaginal delivery (vertex), without episiotomy

Rationale: The alphabetical index for shoulder dystocia leads to an obstructed labor code only; therefore, O66.001 is correct even though there is no documentation of any special maneuvers being performed (e.g. McRobert's, Rubin or Wood's).

Example: Pregnancy, at term delivered, with obstructed labor due to breech presentation. A Cesarean section is performed (unplanned).



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O64.101	(M)	Obstructed labour due to breech presentation, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Example: Patient is booked for an elective Cesarean section due to breech presentation. She presents in spontaneous labor prior to the booked date and proceeds immediately to Cesarean section.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O32.101	(M)	Maternal care for breech presentation, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: Cesarean section was planned prior to the onset of labor; therefore, maternal care for known or suspected breech presentation is selected.

Example: Patient is admitted for induction of labor due to post-dates. She is induced with IV oxytocin and labor begins. Shortly after labor begins it is discovered that the fetus is in breech presentation. The physician gives the mother the option of proceeding with labor or having a Cesarean section. Mother opts for Cesarean section.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O64.101	(M)	Obstructed labour due to breech presentation, delivered, with or without mention of antepartum condition
O48.001	(1)	Prolonged pregnancy, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: Breech presentation is not known prior to the onset of labor and Cesarean section was unplanned; therefore, obstructed labor due to breech presentation is selected.



When maternal care is administered prior to the commencement of labor for a potentially obstructing factor, assign a code from the range O31–O34.

Example: A patient is known to have a breech presentation diagnosed on ultrasound. She is admitted for an elective Cesarean section (planned). She never went into labor.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O32.101	(M)	Maternal care for breech presentation, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Note: An obstructed labor may sometimes end in a vaginal delivery.



When an obstructing factor is resolved by version and/or rotation at time of delivery or by certain other maneuvers, resulting in a vaginal delivery, assign a code:

- from the range O64–O66; and
- a code for the intervention leading to the resolution of the obstruction.

Example: Patient is admitted in active labor at 37 weeks gestation. Labor was obstructed due to breech presentation. The physician successfully performed an external cephalic version and the infant was born vaginally in cephalic presentation.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O64.101	(M)	Obstructed labour due to breech presentation, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception
5.MD.50.AA		Manually assisted vaginal delivery (vertex), without episiotomy
5.LD.40.JA		Version during labour, by external cephalic version

Labor and Delivery Complicated by Fetal Stress

[Click here for description of change.](#)

In effect 2001, amended 2006

The codes in category O68 *Labour and delivery complicated by fetal stress [distress]* identify the presence of possible indicators that the fetus may be in danger of developing asphyxia. Delivery interventions may be based on the presence of these indicators. Fortunately, despite the pre-delivery concerns, the delivery most often results in a completely normal infant. Codes in the range O68.0– to O68.2– may be assigned on the mother's abstract even when the fetus is delivered with no substantial evidence of asphyxia. Assignment of O68.3– *Labour and delivery complicated by evidence of fetal asphyxia*, however, cannot be assigned without lab evidence that the condition is present.



When a diagnosis of fetal asphyxia has been substantiated by a documented abnormal acid-base (i.e. SOGC pH value for fetal asphyxia), assign O68.3– *Labour and delivery complicated by evidence of fetal asphyxia*.

Note: When signs of fetal asphyxia are present prior to commencement of labor, assign a code from O36.3– *Maternal care for signs of fetal asphyxia*.

Note: The Society of Obstetricians and Gynecologists of Canada (SOGC) values for fetal asphyxia:

- umbilical cord arterial pH ≤ 7.0 ; and/or
- umbilical cord arterial base deficit ≥ 12 mmol/L.

For further information, see also the coding standard entitled [Fetal Asphyxia and Birth Asphyxia](#).

Example: Patient is admitted in active labor at 37 weeks gestation. During labor, a non-reassuring fetal heart rate is identified. Fetal scalp sampling indicates an arterial pH of 6.7. The obstetrician recommends an emergency Cesarean section for fetal distress.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O68.301	(M)	Labour and delivery complicated by evidence of fetal asphyxia, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Postpartum Hemorrhage

Click here for description of change.

In effect 2001, amended 2006, 2007, 2012

"**Postpartum hemorrhage** describes an event rather than a diagnosis, and when encountered, its etiology must be determined."ⁱ Classification of postpartum hemorrhage (PPH) in ICD-10-CA is based on its etiology (cause). Blood loss that is the result of uterine atony or retained products during or following delivery is classified to category *O72 Postpartum haemorrhage*. Blood loss occurring in the postpartum period due to causes other than the aforementioned is not classified to category *O72 Postpartum haemorrhage* (e.g. injury such as tear of the uterine artery during Cesarean section or a sulcus tear during vaginal delivery).

Preventative measures (to avoid excessive blood loss) are part of the routine management of the third stage of labor and are not an indication that postpartum hemorrhage has occurred. These measures include administration of oxytocin and/or uterine massage to assist with contraction of the uterus.

Treatment measures (to control excessive blood loss) are an indication that postpartum hemorrhage has occurred. These measures include speculum examination, removal of clots, introduction of intrauterine Foley catheter, manual revision of uterus and administration of Hemabate.

When treatment measures are performed, and there is no diagnosis of postpartum hemorrhage, the chart should be referred back to the physician for documentation.



Assign a code from category *O72 Postpartum haemorrhage* when at least one of the following criteria is met:

- **blood loss is excessive:**
 - vaginal delivery ≥ 500 cc blood loss during third stage of labor, in immediate postpartum period or after 24 hours following delivery,
 - Cesarean delivery ≥ 1000 cc blood loss;
- **documentation indicates uterine atony following delivery or bleeding in the presence of retained products, regardless of the amount blood loss recorded;**
- **physician documents postpartum hemorrhage, regardless of measures taken and/or the amount of blood loss recorded.**

i. F. G. Cunningham et al., "Chapter 35: Obstetrical Hemorrhage", in *Williams Obstetrics 23rd Edition*, eds. F. G. Cunningham et al. (New York, New York: McGraw-Hill, 2010), accessed November 21, 2011, from <http://www.accessmedicine.com/content.aspx?aID=6034497>

Selection of the code from category O72 *Postpartum haemorrhage* is based on etiology and time frame:

Etiology	Time frame	Code
Retained, trapped or adherent placenta	During the third stage of labor	O72.0– Third-stage haemorrhage
	Anytime other than during the third stage of labor (regardless of time frame)	O72.2– Delayed and secondary postpartum haemorrhage
Uterine atony or unknown/not documented (i.e. PPH NOS)	During the first 24 hours following the delivery	O72.1– Other immediate postpartum haemorrhage
	Between 24 hours and 6 weeks following delivery	O72.2– Delayed and secondary postpartum haemorrhage

Note: When the amount of blood loss recorded includes blood loss from sources not associated with uterine atony, retained products or coagulation defects (i.e. an injury) do not assign a code from category O72 *Postpartum haemorrhage*.

Example: Patient starts to hemorrhage during the third stage of labor due to retained placenta. She is taken to the operating room where a manual removal of retained placenta is performed under general anesthetic.



Code	Code Title
O72.002	Third-stage haemorrhage, delivered, with mention of postpartum complication

Rationale: A postpartum hemorrhage has occurred during the third stage of labor due to retained placenta; therefore, O72.002 is assigned.

Example: Patient delivers a healthy male baby by Cesarean section. The obstetrician documents that there is brisk bleeding and that the uterus appears atonic. Bimanual compression is performed and the patient is given 40 units of Syntocinon in 1 liter of ringers lactate X2 as well as an intramuscular dose of Hemabate. The estimated blood loss is recorded as 900 cc.



Code	Code Title
O72.102	Other immediate postpartum haemorrhage, delivered, with mention of postpartum complication

Rationale: Uterine atony is documented; therefore, O72.102 is assigned regardless of the amount of blood loss.

Example: Approximately four hours following vaginal delivery, patient starts to bleed very actively per vagina. She is taken to the operating room for manual exploration of the uterus. Portions of placental and decidual tissue are found and removed.



Code	Code Title
O72.202	Delayed and secondary postpartum haemorrhage, delivered, with mention of postpartum complication

Rationale: Bleeding due to retained portions of placenta not during the third stage of labor is classified to delayed and secondary hemorrhage regardless of the time frame.

Example: Patient delivered a healthy baby boy two weeks ago. She presents to hospital today with vaginal bleeding. She is taken to the operating room, where a dilation and curettage is performed. Retained products of conception are removed.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O72.204	(M)	Delayed and secondary postpartum haemorrhage, postpartum condition or complication

Rationale: Bleeding due to retained products of conception not during the third stage of labor is classified to delayed and secondary hemorrhage, regardless of the time frame.

Example: Patient delivers a female infant via forceps secondary to arrest in the second stage of labor. During the delivery, a RML episiotomy is performed. The physician documents that the delivery was complicated by significant second degree vaginal lacerations. The subsequent repair was complicated. Estimated blood loss was 1000 cc which in large part was due to the complicated vaginal lacerations.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O70.101	(1)	Second degree perineal laceration during delivery, delivered, with or without mention of antepartum condition
O67.801	(1)	Other intrapartum haemorrhage, delivered, with or without mention of antepartum condition

Rationale: The amount of blood loss is documented as 1000 cc; which justifies classifying this blood loss as a hemorrhage. The physician has documented the blood loss as due to the injury (second degree vaginal lacerations); therefore, a code from category O72 *Postpartum haemorrhage* is not assigned. The hemorrhage is classified to O67.801 based on the following alphabetical index lookup: hemorrhage, complicating delivery, due to, trauma.

Complications of Anesthesia During Labor and Delivery

In effect 2001, amended 2006



Assign a code to classify complications arising from the administration of a general or local anesthetic, analgesic or other sedation during pregnancy or the puerperium on the basis of the stage of the pregnancy at the time of the administration of the agent.

Example: Patient receives an epidural anesthetic during labor and delivery. Within 24 hours she complains of a headache. A diagnosis of post-epidural headache is made.



<u>Code</u>	<u>Code Title</u>
O74.502	Spinal and epidural anesthesia-induced headache during labour and delivery, delivered, with mention of postpartum complication

Interventions Associated With Delivery

[Click here for description of change.](#)

In effect 2001, amended 2002, 2006, 2007, 2009, 2012



Assign an intervention code from the range 5.MD.50.^ to 5.MD.60.^ inclusive, for every delivery including each delivery in a multiple gestation.

Exception: When the deliveries in a multiple gestation result in assignment of the same CCI code, assign the code only once.

Example: Patient spontaneously delivered a healthy female baby at 04:15 hours. The physician had not yet arrived, however, nursing staff were in attendance.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z37.000	(M)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

5.MD.50.AA	Manually assisted vaginal delivery (vertex), without episiotomy
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Example: 24-year-old mother delivered this tiny, preterm fetus in her bed without any health care personnel present.

5.MD.51.ZZ	Unassisted spontaneous vaginal delivery, using approach/ technique NOS
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Example: Twin gestation at 36 weeks delivered by elective repeat lower segment Cesarean section.

5.MD.60.AA	Cesarean section delivery, lower segment transverse incision, without instrumentation
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Status: N4

Example: Twin gestation—mother admitted fully dilated. First twin in vertex presentation and successfully delivered with low forceps over a mediolateral episiotomy. Second twin in breech presentation and required a partial breech extraction.

5.MD.53.KL	Forceps traction and rotation delivery, low forceps (i.e. Pajot maneuver), with episiotomy (including midline or mediolateral)
5.MD.56.PA	Breech delivery, partial breech extraction [assisted breech delivery], with spontaneous delivery of head, with episiotomy

Rationale: The episiotomy is only done once. However, as it was done prior to the delivery of the first twin, both intervention codes selected should be that with episiotomy. This allows for retrieval of all deliveries done with an episiotomy regardless of whether or not it was a multiple birth.

Induction and Augmentation of Labor

- D** When active labor does not begin spontaneously and requires initiation by artificial methods, assign a code, mandatory, from the rubric 5.AC.30.^[^] *Induction of labour*. Code all methods that apply including those that were initiated or performed prior to admission.
- D** When active labor begins spontaneously, or has been induced, and an intervention is required to ensure that labor continues to progress, assign a code, mandatory, from the rubric 5.LD.31.^[^] *Augmentation of labour*. Code all methods that apply.

Note: To determine the onset of labor, use the time that is documented on the delivery record. This time is understood to be the start of active labor; the patient may be experiencing some contractions prior to this time (latent labor).

Note: Use the *Intervention Pre-Admit Flag* to capture that induction of labor was performed prior to admission. See Group 11, Field 20 in the Discharge Abstract Database (DAD) Abstracting Manual for specific instructions for applying the flag for interventions initiated prior to admission.

Example: Patient presents to hospital at 42 weeks gestation with no signs of labor. The decision is made to induce her by performing an artificial rupture of membranes. She goes into labor and delivers a healthy baby girl.

5.AC.30.AP Induction of labour, using artificial rupture of membranes

Example: Patient presents for outpatient antepartum assessment at 40 weeks gestation. Her pregnancy has been complicated by mild PIH and the physician opts to proceed with induction of labor at this time. Her cervix is unfavorable; therefore, Prepidil is inserted into the cervix and the patient is sent home. She presents to hospital later that day in labor and delivers via a spontaneous vaginal delivery.

5.AC.30.CK-I2 Induction of labour, using per orifice (intra cervical/vaginal) administration of oxytocic agent

Note: Apply *Intervention Pre-Admit Flag*

Rationale: It is mandatory to record induction of labor that is initiated or performed prior to admission. Using the *Intervention Pre-Admit Flag* identifies that the induction was performed prior to admission.

Example: Patient is given Prepidil on an outpatient basis to begin labor induction for post-dates. The patient is told to return when labor begins or in 12 hours if labor has not begun. The patient does not go into labor; therefore, patient is admitted and IV Syntocinon induction is begun. She goes into labor and delivers a healthy baby boy.

5.AC.30.HA-I2 Induction of labour, using percutaneous injection of oxytocic agent

5.AC.30.CK-I2 Induction of labour, using per orifice (intra cervical/vaginal) administration of oxytocic agent

Note: Apply *Intervention Pre-Admit Flag*

Rationale: Methods to induce labor are sometimes initiated on an outpatient basis. It is mandatory to code all methods used for induction even those that are initiated or performed prior to admission. Do not assign 5.AC.30.AL-I2 *Induction of labour using oxytocic agent with combined approaches of administration* for this case. Since one method is performed prior to admission and one after admission, each method is coded separately. Using the *Intervention Pre-Admit Flag* identifies that one method was performed prior to admission. Note: This is not a failed induction.

Example: Patient presents to hospital in spontaneous labor on May 13 and delivers a healthy baby girl. The admission note mentions that the patient had previously been admitted as an inpatient for Oxytocin induction due to proteinuria and edema but was discharged home following a diagnosis of failed induction of labor.

Note: The pre-admission induction of labor is NOT captured on the subsequent admission for delivery.

Rationale: The pre-admission induction of labor was documented as failed; therefore, this patient's labor was spontaneous not induced. The purpose of capturing pre-admission induction is to assist in distinguishing induced labor from spontaneous labor. Capturing the pre-admission induction on the delivery admission would tell the incorrect story of induced labor for this patient.



When an induction of labor procedure is performed and no labor begins, and the patient is either discharged or a Cesarean section is performed, assign a code from O61 *Failed induction of labour*.



When there is a failed induction and the patient proceeds to Cesarean section, sequence the indication for the induction before O61 *Failed induction of labour*.

Multiple attempts at induction during a single admission that eventually result in labor and vaginal delivery are not classified as failed induction.

Example: A primigravida patient with pre-eclampsia is admitted for induction of labor. She is given prostaglandin gel intravaginally and intravenous (IV) oxytocin. After five hours, no labor ensues and due to increasing concerns of rising blood pressure in the mother, she is taken to the operating room for a Cesarean section. The patient had no previous history of hypertension.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O14.901	(M)	Pre-eclampsia, unspecified, delivered, with or without mention of antepartum condition
O61.001	(1)	Failed medical induction of labour, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception
5.MD.60.AA Status: N5		Cesarean section delivery, lower segment transverse incision, without instrumentation
5.AC.30.AL-I2		Induction of labor, using oxytocic agent with combined approaches of administration (e.g. oral with intra-vaginal)

Rationale: The Cesarean section is performed because of increasing concerns of rising blood pressure; therefore, pre-eclampsia is selected as the MRDx. The indication for the Cesarean section does not become failed medical induction of labor.

Example: A primigravida patient with pre-eclampsia is admitted for induction of labor. She is given prostaglandin gel intravaginally and IV oxytocin. Labor begins, but after eight hours she is not fully dilated and her blood pressure is continuing to rise. She is taken to the operating room for emergency Cesarean section. The patient had no previous history of hypertension.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O14.901	(M)	Pre-eclampsia, unspecified, delivered, with or without mention of antepartum condition
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception
5.MD.60.AA Status: N5		Cesarean section delivery, lower segment transverse incision, without instrumentation
5.AC.30.AL-I2		Induction of labour, using oxytocic agent with combined approaches of administration (e.g. oral with intra-vaginal)

Rationale: Even though this patient was delivered by Cesarean section, induction did result in labor thus this is not considered a failed induction.

Labor that has been induced, either surgically or medically, can at times require further augmentation—the same as labor that begins naturally. When this is the case, the codes for induction of labor and augmentation of labor may be used together on the same abstract.

Example: Patient presents to hospital at 42 weeks gestation with no sign of labor. The decision is made to induce her by performing an artificial rupture of membranes. At 5 cm dilation, her contractions slowed and a Syntocinon drip was started.

5.AC.30.AP	Induction of labour, using artificial rupture of membranes
5.LD.31.HA-I2	Augmentation of labour, using injection of oxytocic agent

Postpartum Interventions



Assign a code from the block 5.PB.^ to 5.PD.^ *Postpartum interventions* when an intervention unique to obstetrics is performed during the third stage of labor until 42 days after delivery.

The third stage of labor includes the time from delivery of the fetus to delivery of the placenta. The postpartum period includes the third stage of labor to 42 days after delivery. Repairs of obstetrical lacerations are included in postpartum interventions as are dilation and curettage procedures.

Example: During delivery of a healthy baby boy, the patient sustains a third degree perineal laceration. The delivery physician repairs the obstetrical laceration in the labor and delivery unit before the patient is transferred to the obstetrical nursing unit.

5.PC.80.JQ	Surgical repair, postpartum, of current obstetric laceration of rectum and sphincter ani
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Dilation and Curettage

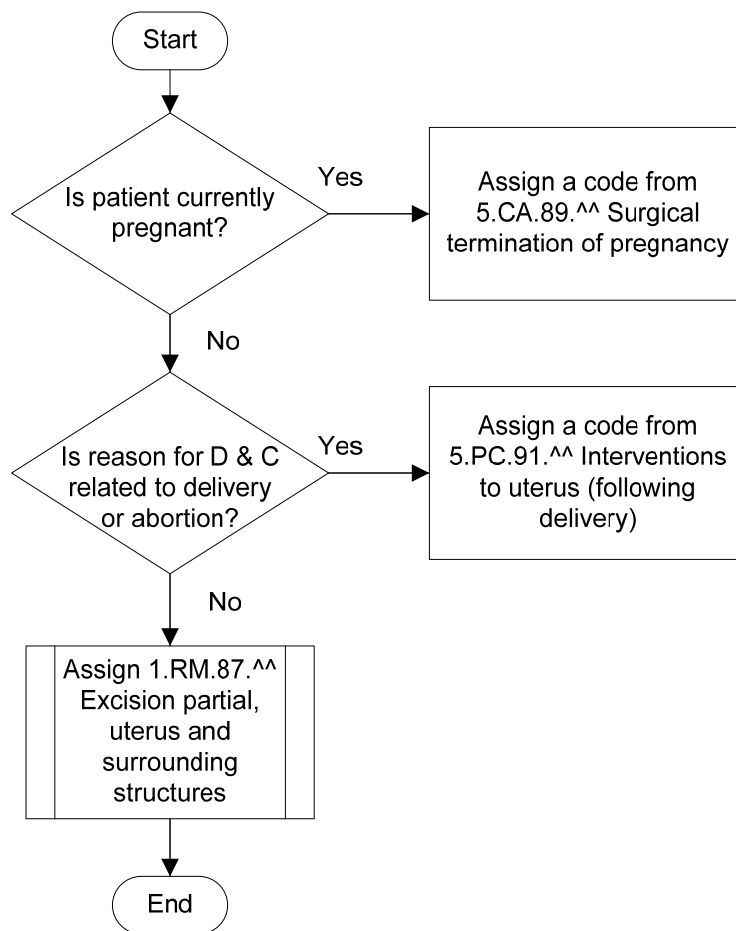
In effect 2001

The dilation and curettage (D&C) intervention is the only intervention in CCI that is found in more than one section and in more than one rubric within Section 5.



Assign the CCI code for dilation and curettage of the uterus based on the gravid status of the uterus.

See also the section on Postpartum Interventions in the coding standard entitled [Interventions Associated with Delivery](#).



Chapter XVI—Certain Conditions Originating in the Perinatal Period

Low Birth Weight and/or Preterm Infant

[Click here for description of change.](#)

In effect 2001, amended 2005, 2006, 2012

Low birth weight may result from a preterm birth (less than 37 weeks of gestation) or occur in a term birth. Low birth weight increases the risk of infant death, physical and cognitive disabilities and chronic health problems later in life.

Similarly, preterm birth, regardless of birth weight, is a major determinant of neonatal mortality and morbidity and has long-term adverse consequences for health. Children who are born prematurely have higher rates of cerebral palsy, sensory deficits, learning disabilities and respiratory illnesses compared with children who are born at term. The morbidity associated with preterm birth often extends to later life, resulting in enormous physical, psychological and economic costs.ⁱ

See also the coding standard entitled [Diagnosis Typing Definitions for DAD](#), Diagnosis Type (0)-Newborn.

- D** When birth weight is less than 2500 grams, assign, mandatory, as a significant diagnosis type, either:
 - P07.0 *Extremely low birth weight, birth weight 999 g or less; or*
 - P07.1 *Other low birth weight, birth weight 1000–2499 g.*
- D** When fetal malnutrition or intrauterine growth restriction (i.e. light or small for gestational age) is documented, assign, mandatory, as a significant diagnosis type, either:
 - P05.2 *Fetal malnutrition without mention of light or small for gestational age; or*
 - a code from category P05.9– *Slow fetal growth, unspecified.*
- D** When gestational age of the newborn is less than 37 completed weeks, assign, mandatory, as a significant diagnosis type, either:
 - P07.2 *Extreme immaturity; or*
 - P07.3 *Other preterm infants.*

Note: This standard does not imply that low birth weight or prematurity must be selected as the MRDx. When a serious condition other than low birth weight or prematurity qualifies as the MRDx then that condition is selected as such.

i. <http://www.who.int/bulletin/volumes/88/1/08-062554.pdf>—Published online: 25 September 2009, accessed online December 7th 2009.

Notes:

- Use the gestational age recorded on the newborn physical exam at birth record as the first source documentation. When the gestational age by physical assessment is not documented on the physical exam at birth record nor the discharge/delivery summary, default to the gestational age by dates as recorded on the labor and delivery record.
- Assignment of P07.2 and P07.3 must align with the gestational age data element on the DAD abstract. According to the Discharge Abstract Database (DAD) Abstracting Manual, the gestational age recorded in the data element for a newborn or neonate refers to the physical assessment to determine the newborn's gestational age at the time of birth as per the *Algorithm for the Estimation of Gestational Age, Canadian Perinatal Surveillance System, 2010*.
- The gestational age recorded on the newborn's abstract may not match the gestational age on the mother's abstract since one reflects the weeks of pregnancy in the mother, while the other reflects a physical assessment of the newborn.
- Ensure P07.2 *Extreme immaturity* is assigned on a newborn or neonate abstract when the value recorded in the gestational age data element is less than 28.
- Ensure P07.3 *Other preterm infants* is assigned on a newborn or neonate abstract when the value recorded in the gestational age data element is between 28 to 37.

Sequencing Low Birth Weight, Fetal Malnutrition, Poor Fetal Growth and/or Prematurity

Use the following table to determine the sequence of codes for low birth weight, fetal malnutrition, poor fetal growth and/or prematurity.

Associated Conditions	Weight ≤999 grams	Weight 1000 to 2499 grams	Weight ≥2500 grams
Term infant ≥37 completed weeks gestation			
Fetal malnutrition	n/a	P07.1 P05.2	P05.2
Intrauterine growth restriction	n/a	P07.1 P05.9–	P05.9–
Nil	n/a	P07.1	n/a
Preterm infant ≥28 completed weeks but <37 completed weeks gestation			
Fetal malnutrition	P07.0 P05.2 P07.3	P07.1 P05.2 P07.3	P05.2 P07.3
Intrauterine growth restriction	P07.0 P05.9– P07.3	P07.1 P05.9– P07.3	P05.9– P07.3
Nil	P07.0 P07.3	P07.1 P07.3	P07.3
Extremely preterm infant <28 completed weeks gestation			
Fetal malnutrition	P07.0 P05.2 P07.2	P07.1 P05.2 P07.2	P05.2 P07.2
Intrauterine growth restriction	P07.0 P05.9– P07.2	P07.1 P05.9– P07.2	P05.9– P07.2
Nil	P07.0 P07.2	P07.1 P07.2	P07.2

Example: Baby born vaginally at 30 weeks gestation with birth weight 2300 grams. Arterial cord blood pH at birth is 7.5. The infant fails to sustain respirations and the physician documents asphyxia. Arterial blood gases taken 30 minutes after birth show a pH of 6.9. Final diagnosis is documented as newborn asphyxia.



Code	DAD	Code Title
P21.9	(M)	Newborn asphyxia, unspecified
P07.1	(1)	Other low birth weight
P07.3	(1)	Other preterm infants
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: Low birth weight is sequenced before a code for prematurity and since there is another condition that qualifies as the MRDx, both low birth weight and prematurity are assigned diagnosis type (1).

Example: Infant delivered vaginally at 38 weeks gestation with evidence of symmetrical growth restriction. Birth weight is 2400 grams.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P07.1	(M)	Other low birth weight
P05.90	(1)	Symmetric intrauterine growth restriction [IUGR]
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Example: Infant delivered by cesarean section at 28 weeks gestation weighing 950 grams. Along with the prematurity, there is evidence of fetal growth restriction.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P07.0	(M)	Extremely low birth weight
P05.99	(1)	Unspecified intrauterine growth restriction [IUGR]
P07.3	(1)	Other preterm infants
Z38.010	(0)	Singleton, delivered by caesarean, product of both spontaneous (NOS) ovulation and conception

Example: Infant delivered by Cesarean section at 28 weeks gestation weighing 1700 grams.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P07.1	(M)	Other low birth weight
P07.3	(1)	Other preterm infants
Z38.010	(0)	Singleton, delivered by caesarean, product of both spontaneous (NOS) ovulation and conception

Rationale: Low birth weight is sequenced before a code for prematurity and since there is no other condition that qualifies as the MRDx, low birth weight becomes the MRDx.

Example: Obstetrical patient is admitted in active labor at 37 weeks gestation. Delivered, vaginally, a healthy newborn weight 3110 grams. Discharge summary mentions that the newborn was assessed at physical examination as closer to 36 weeks gestational age.

Mother's abstract



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z37.000	(M)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: The mother's record reflects a term delivery. Even though there is documentation of the gestational age of the newborn which reflects prematurity, do not assign O60.101 *Preterm spontaneous labour with preterm delivery, with or without mention of antepartum condition*.

Example: Discharge summary of the newborn states the baby was delivered, weighing 3110 grams, to a primigravida patient at 37 weeks gestation. The gestational age recorded on the newborn physical examination is 36 weeks.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P07.3	(M)	Other preterm infants
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: The gestational age is documented as 36 weeks on the newborn physical examination. P07.3 is mandatory to assign as a significant diagnosis type. Use the gestational age documented on the newborn physical exam at birth as the first source document when determining code assignment. In some circumstances the mother's record will be coded as a term delivery and the baby's record will be coded as a preterm delivery.

Fetal Asphyxia and Birth Asphyxia

[Click here for description of change.](#)

In effect 2001, amended 2006, 2007, 2012

See also [Appendix A—Fetal Asphyxia and Birth Asphyxia](#) for clinical information.



When values for asphyxia, as established by the Society of Obstetricians and Gynecologists of Canada (SOGC), are documented on the chart, assign a code from:

- P20.— *Fetal Asphyxia*;
- or assign
- P21.9 *Newborn asphyxia, unspecified*.



When these values are not met, code a documented diagnosis of asphyxia as “suspected” asphyxia.



Assign additional code(s) to identify any mention of neonatal findings indicative of neonatal harm such as hypoxic ischemic encephalopathy (HIE), and/or organ failure.

Note: The Society of Obstetricians and Gynecologists of Canada (SOGC) values are:

Fetal asphyxia (P20.—):


- Umbilical cord arterial pH ≤ 7.0 ; and/or
- Umbilical cord arterial base deficit ≥ 12 mmol/L.

Newborn asphyxia (P21.9):

- Capillary or arterial (not umbilical cord) pH ≤ 7.0 ; and/or
- Capillary or arterial (not umbilical cord) base deficit ≥ 12 mmol/L.


Blood gases can be reported as base excess in negative values or base deficit in positive values. The actual values are unchanged.

When the diagnosis is stated as asphyxia and the above values are not met, it is strongly recommended that the chart be returned to the physician for confirmation of diagnosis. If the physician wishes the diagnosis to remain as asphyxia, it must be coded as a “query” fetal asphyxia (i.e. assign prefix “Q”).

Example:  Electronic fetal monitoring during active labor shows late decelerations. Infant delivered by emergency Cesarean section due to late decelerations during active labor. Cord blood gases showed arterial pH of 6.5. Diagnosis documented as asphyxia.


<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P20.1	(M)	Intrapartum fetal asphyxia first noted during labour and delivery
Z38.010	(0)	Singleton, delivered by caesarean, product of both spontaneous (NOS) ovulation and conception

Rationale: The cord blood pH met the value for fetal asphyxia and signs that the fetus was in distress were first noted during active labor; therefore, P20.1 is assigned.

Example:  Baby delivered by emergency Cesarean section due to prolonged fetal bradycardia noted during first stage of labor. Baby did not breathe spontaneously at delivery and required resuscitation with bag and mask. Apgar scores were 3 at one minute and 8 at five minutes. Cord gases showed arterial pH of 6.74. The baby did not show any neurologic sequelae during the stay. Final diagnosis is documented as prolonged fetal bradycardia and low cord blood gases.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P20.1	(M)	Intrapartum fetal asphyxia first noted during labour and delivery
Z38.010	(0)	Singleton, delivered by caesarean, product of both spontaneous (NOS) ovulation and conception

Rationale: Cord blood pH values met the established values for fetal asphyxia as set out by the SOGC and signs that the fetus was in distress were first noted during labor; therefore, it is correct to assign P20.1. Selection of this code simply captures the fact that the newborn suffered an asphyxial episode as evidenced by the low cord blood value. It does not mean that the newborn suffered any harm from this asphyxial episode.

Example:  Mom presents in labor and fetal heart rate tracing is initially reassuring. Several hours into labor the fetal heart rate becomes non-reassuring with loss of variability and decelerations. It was therefore elected to perform an emergency Cesarean section. The infant initially experiences breathing problems requiring resuscitation by the neonatology team. Apgar scores are 2 and 5 at one minute and five minutes respectively. Arterial cord blood pH is 7.15. Final diagnosis is documented as perinatal asphyxia and severe metabolic acidosis.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
(Q) P20.1	(M)	Intrapartum fetal asphyxia first noted during labour and delivery
Z38.010	(0)	Singleton, delivered by caesarean, product of both spontaneous (NOS) ovulation and conception

Rationale: Fetal asphyxia is not substantiated by the cord blood pH value; therefore, asphyxia can only be suspected and must be recorded as a query diagnosis. A query or questionable diagnosis is indicated with a diagnosis prefix of (Q). Note: when cord blood values do not support a documented diagnosis of asphyxia, it is strongly recommended that the chart be returned to the physician for confirmation of diagnosis.

Example:

Male infant delivered vaginally with an absent heart beat. Apgar score at one minute and at five minutes was 0. The fetal heart tracing had been reassuring throughout the entire course of labor. Extensive resuscitation ensued for 40 minutes and the baby was eventually revived. Blood gases performed on cord blood revealed a pH of 5.0 and a base excess of -21. Throughout the day, the neurological status of the child was not reassuring and he began having seizures. The kidney function was also non-reassuring. A Foley catheter was placed and there was only 1 cc of urine output over the entire course of the day. Final diagnosis is documented as hypoxic ischemic encephalopathy (HIE), anuria.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P20.1	(M)	Intrapartum fetal asphyxia first noted during labour and delivery
P91.6	(1)	Hypoxic ischaemic encephalopathy of newborn
P96.0	(1)	Congenital renal failure
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: Fetal asphyxia is substantiated by cord blood pH values and absent heart beat was first noted at delivery; therefore, P20.1 is assigned. Any associated neonatal signs are coded separately. HIE is manifested by convulsions; therefore, the convulsions are not coded separately.

Example:

Infant, delivered vaginally, exhibiting initial respiratory depression requiring bag and mask resuscitation. Apgar scores are 4 at one minute and 9 at five minutes. Arterial cord blood pH is 7.32.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P28.5	(M)	Respiratory failure of newborn
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: The physician does not document asphyxia nor do the cord blood pH values meet the criteria for fetal asphyxia; therefore, this case is not coded to category P20.– or P21.9. Insufficient or poor respiration in the newborn is classified to P28.5.

Example:

Baby born vaginally at 30 weeks gestation. Arterial cord blood pH at birth is 7.5. The infant fails to sustain respirations and the physician documents asphyxia. Arterial blood gases taken 30 minutes after birth show a pH of 6.9.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P21.9	(M)	Newborn asphyxia, unspecified
P07.3	(1)	Other preterm infants
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: Routine cord blood pH was normal proving an asphyxia episode did not occur during labor and delivery; however, the infant failed to sustain good respirations prompting another blood gas analysis. The arterial blood gases met the values of newborn asphyxia as established by the SOGC; therefore, P21.9 is assigned. P21.9 will be rarely assigned.

Neonatal Jaundice

In effect 2002, amended 2006

D Classify neonatal jaundice as the MRDx or a significant comorbidity only when there is documented evidence of jaundice and/or elevated bilirubin with associated treatment by phototherapy or exchange transfusion.

Example: Term infant delivered vaginally. Physician documents “jaundice” and phototherapy was administered.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P59.9	(M)	Neonatal jaundice, unspecified
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Example: Preterm infant delivered at 35 weeks by Cesarean section. Birth weight is 2000 grams. Infant has hyperbilirubinemia that is treated with phototherapy.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P07.1	(M)	Other low birth weight
P07.3	(1)	Other preterm infants
P59.0	(1)	Neonatal jaundice associated with preterm delivery
Z38.010	(0)	Singleton, delivered by caesarean, product of both spontaneous (NOS) ovulation and conception

Example: Term infant delivered vaginally. The physician has documented mild jaundice. No other abnormalities are noted. Phototherapy was not administered.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z38.000	(M)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception
P59.9	(0)	Neonatal jaundice, unspecified (optional)

Rationale: Jaundice that is documented but not actively treated, i.e. no phototherapy was administered, may only be coded as a type (0) diagnosis. Coding jaundice in this instance is optional.

Confirmed Sepsis and Risk of Sepsis in the Neonate

In effect 2006, amended 2007, 2008

Neonatal sepsis may be defined as an invasive bacterial infection occurring in the first 28 days of life. Early-onset neonatal sepsis is clinically apparent within 6 hours of birth in over 50% of cases; the great majority present within the first 72 hours of life. Late-onset neonatal sepsis usually presents after four days of age and includes nosocomial-acquired infections.

Risk factors for invasive neonatal infection include:

- preterm labor
- premature rupture of membranes
- signs of maternal infection
- multiple birth with delay in delivery of subsequent infant(s)

- prolonged rupture of membranes
- maternal carriage of group B streptococcus infection
- previous baby with invasive group B streptococcal disease

Neonates who have one or more of the above risk factors may require additional resources such as observation in a special care nursery and/or prophylactic antibiotic treatment (generally for 2–3 days) until such time as sepsis can be definitively ruled out.



When sepsis has been confirmed in a neonate, assign a code from P36.— *Bacterial sepsis of newborn.*

- **Assign an additional code, optional, as a diagnosis type (0), from block P00–P04 *Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery* if the infection is a result of a maternal condition.**



When the diagnosis is documented by the physician as “probable sepsis,” “presumed sepsis,” “clinical sepsis” or “culture-negative sepsis,” at the time of discharge, code the condition as confirmed sepsis.

Example: Mom has prolonged rupture of membranes with chorioamnionitis. Infant is delivered vaginally at term and admitted to the neonatal intensive care unit (NICU) for observation. Blood cultures are drawn and antibiotics are started. Blood cultures come back positive for streptococcus. Diagnosis is documented as streptococcal septicemia.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P36.1	(M)	Sepsis of newborn due to other and unspecified streptococci
P02.7	(0)	Fetus and newborn affected by chorioamnionitis
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Example: Infant delivered vaginally at 37 weeks. Mom had premature rupture of membranes for greater than 24 hours prior to the delivery. Baby was febrile and; therefore, admitted to NICU for two days for probable sepsis. He was started on a course of antibiotics for seven days. The result of a blood culture was negative.



Discharge Diagnosis: “Probable sepsis”

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P36.9	(M)	Bacterial sepsis of newborn, unspecified
P01.1	(0)	Fetus and newborn affected by premature rupture of membranes
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: A “Q” is not placed in front of the code in this case as a diagnosis of “probable” in neonatal sepsis is an indication that the diagnosis is made on the basis of clinical findings only. Lab results may not provide confirmation in all cases of neonatal sepsis.

- D** Ensure that a code from category P36 *Bacterial sepsis of newborn* is not assigned when the sepsis is “ruled out.”
- D** When any of the following descriptors for sepsis are used on the record of a neonate:
 - ? Sepsis;
 - Questionable sepsis;
 - Query sepsis;
 - Possible sepsis; or
 - Rule out sepsis;

return the record to the responsible physician for clarification prior to code assignment as these statements cannot be coded as sepsis.
- D** Base code decisions on physician documentation and not on blood culture results. Sepsis cannot be assumed nor ruled out on the basis of blood culture results alone.
- D** When neonatal sepsis was suspected but ruled out, classify the case as follows:
 - If the neonate is observed *only* and prophylactic antibiotic treatment for sepsis is not initiated, assign Z03.8 *Medical observation and evaluation for other suspected diseases and conditions* as a significant diagnosis type (M, 1, 2, W, X or Y).
 - If the neonate is given prophylactic antibiotic treatment, assign Z29.2 *Need for other prophylactic chemotherapy* as a significant diagnosis type (M, 1, 2, W, X or Y).
- D** Do not assign Z03.8 on the basis of risk factors alone. When any of the above codes apply on the birth admission, assign Z38.– *Liveborn infants according to place of birth* as diagnosis type (0).


Note: The requirement to return the record to the physician for clarification as indicated above is an exception to the coding standard entitled *Query Diagnosis (Q)/Etiology*. In the case of neonatal sepsis, seek physician clarification to determine if the case should be classified as confirmed or probable sepsis versus a case of observation for a suspected condition.

Z03.8 *Observation for other suspected diseases and conditions* is for use in limited circumstances on records of otherwise healthy newborns who are at risk for an abnormal condition, which requires study, but after examination and observation, it is determined that there is no need for further treatment or medical care.

Example: Infant delivered vaginally at 38 weeks. Mom is noted to be Group B Streptococcus positive. Baby was observed in the NICU for “possible sepsis” as documented by the neonatologist. Blood cultures were negative; and the infant was discharged with mom.




<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z03.8	(M)	Observation for other suspected diseases and conditions
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Example:  Infant delivered vaginally at 37 weeks. Mom had premature rupture of membranes. The physician documents “observe for sepsis.” Blood was drawn for culture and baby was given prophylactic antibiotics. Blood culture results were negative; and the infant was discharged with mom.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z29.2	(M)	Other prophylactic chemotherapy
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: When antibiotics are given, assign Z29.2.

Example:  Infant delivered vaginally at 39 weeks after prolonged rupture of membranes. The infant is sent to normal nursery, antibiotic therapy is not instituted, there is no documentation of suspected sepsis and the infant is discharged home on day two.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z38.000	(M)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: Z03.8 is not assigned based on the presence of risk factors alone. In this example, no additional resources were utilized to either confirm or rule out sepsis.

Birth Trauma

In effect 2007

The process of birth is a blend of compression, contractions, torques, and traction. When fetal size, presentation, or neurologic immaturity complicates this event, such intrapartum forces may lead to tissue damage, edema, hemorrhage, or fracture in the neonate. The use of obstetric instrumentation may further amplify the effects of such forces or may induce injury alone.ⁱⁱ

Most birth traumas are self-limiting and have a favorable outcome. Risk factors include:

- Large-for-dates infants, especially larger than 4500 grams
- Instrumental deliveries, especially mid-cavity forceps or vacuum
- Vaginal breech delivery
- Abnormal or excessive traction during delivery

ii. EMedicine. *Birth Trauma*. [Online], cited October 2006, from <<http://www.emedicine.com/ped/topic2836.htm>>.



When the following birth injuries occur, assign the appropriate code from block P10–P15 *Birth Trauma*, as the MRDx or a diagnosis type (1):

- Intracranial laceration and hemorrhage
- Cerebral edema
- Cranial and spinal nerve injury
- Peripheral nerve injury
- Cephalhematoma that becomes infected or is severe enough to cause anemia, shock, hemolytic jaundice requiring phototherapy, meningitis, or osteomyelitis
- Subgaleal hematoma (epicranial subaponeurotic hemorrhage)
- Superficial abrasion and laceration that requires sutures or becomes infected
- Fracture including those of skull, long bones or clavicle
- Dislocation
- Intraabdominal injury
- Sternomastoid injury



Assign an additional code, optional, as a diagnosis type (0), from block P00–P04 *Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery* to describe the maternal factor or intervention causing the birth trauma.

Note: The following birth injuries are not considered significant comorbidities and, if coded, must be assigned a diagnosis type (0) unless documentation supports that they have become complicated or require observation in a special care unit:

- Cephalhematoma NOS—rarely become complicated
- Chignon (artificial caput) due to vacuum—is of no consequence and resolves spontaneously within a few hours
- Caput succedaneum—does not usually become complicated and resolves within the first few days
- Superficial abrasions and lacerations—usually of no consequence
- Monitoring injuries—have a low incidence of hemorrhage, infection or abscess
- Subcutaneous fat necrosis—of no consequence and requires no treatment
- Subconjunctival hemorrhage—of no consequence and requires no treatment

Example: Term male infant delivered vaginally. There is significant shoulder dystocia resulting in fracture of the clavicle during delivery.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
P13.4	(M)	Fracture of clavicle due to birth injury
P03.1	(0)	Fetus and newborn affected by other malpresentation, malposition and disproportion during labour and delivery
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: Fractures are always considered a significant birth injury; therefore, fractured clavicle is selected as the MRDx.

Example: Term infant delivered by operative vaginal delivery using forceps. On the newborn physical examination report, the physician has noted that there is cephalhematoma.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z38.000	(M)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception
P12.0	(0)	Cephalhaematoma due to birth injury
P03.2	(0)	Fetus and newborn affected by forceps delivery

Rationale: There is no indication that the cephalhematoma is complicated; therefore, if captured, it is assigned a diagnosis type (0).

Chapter XVII—Congenital Malformations, Deformations and Chromosomal Abnormalities

Congenital Anomaly Syndromes and Specific Manifestations

In effect 2009

The causes of congenital anomalies are:

- chromosomal abnormalities (e.g. Down's syndrome),
- genetic inheritance (e.g. cystic fibrosis),
- environmental (exogenous) factors (e.g. fetal alcohol syndrome),
- multifactorial, and
- unknown causes.

For the purposes of classification in ICD-10-CA, anomalies are generally classified according to their manifestations on structure, function or body metabolism. However, unless a specific code is provided elsewhere, separate categories are provided for those where the cause is specified as chromosomal (Q99) or exogenous (Q86). Codes for congenital anomalies are found in Chapter XVII—*Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)*, categories within Chapter IV—*Endocrine, nutritional and metabolic diseases (E00–E90)* and categories within Chapter III—*Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)*.ⁱ

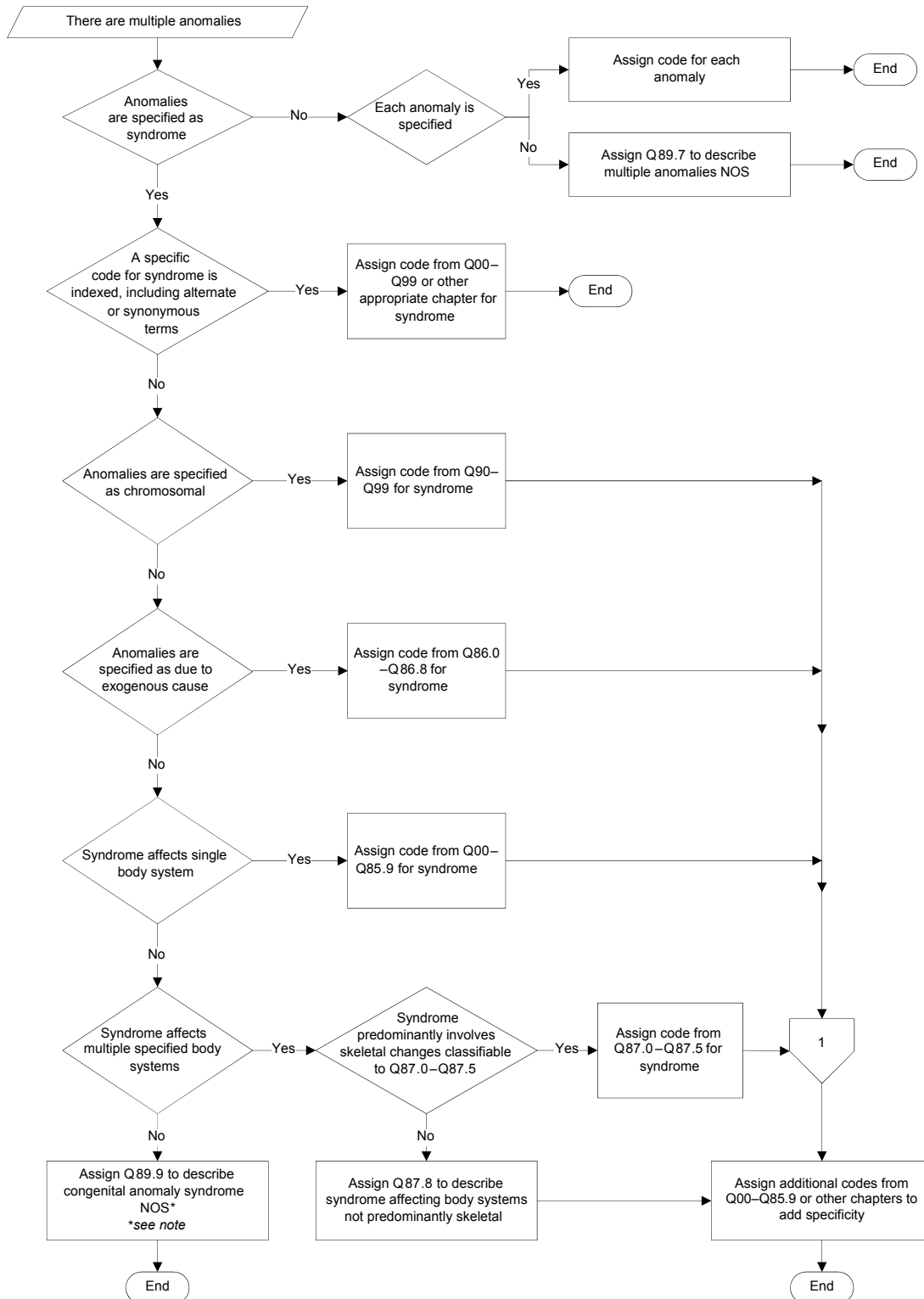


When a patient is diagnosed with multiple congenital anomalies described as a syndrome that cannot be classified to a more specific code (see flow chart below), assign Q87.8 *Other specified congenital malformation syndromes, not elsewhere classified*.

- **Assign additional codes from Q00–Q85.9 or other appropriate chapter to provide further specificity, mandatory, when meeting the criteria for significance, optional when not meeting the criteria for significance.**

i. Public Health Agency of Canada, *Congenital Anomalies in Canada: A Perinatal Health Report, 2002*, cited September 15, 2008, from <<http://www.phac-aspc.gc.ca/publicat/cac-acc02/index-eng.php>>.

Primary Code Selection for ICD-10-CA Classification of Multiple Congenital Anomalies



Note: Congenital anomaly syndrome NOS will rarely be seen in hospital documentation.

Example: Discharge diagnosis is Costello syndrome. Physician describes the patient as having the typical distinctive features of low-set ears, thick earlobes and lips, and cutis laxa of the hands and feet. The patient is also known to have a congenital heart defect.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Q87.8	(M)	MP	Other specified congenital malformation syndromes, not elsewhere classified
Q24.9	(3)	OP	Congenital malformation of heart, unspecified
Q17.4	(3)	OP	Misplaced ear
Q18.6	(3)	OP	Macrocheilia
Q17.8	(3)	OP	Other specified congenital malformations of ear
Q82.8	(3)	OP	Other specified congenital malformations of skin

Rationale: Research indicates this syndrome is a genetic disorder affecting multiple systems. As there is not a more specific code for the syndrome, it is classified to Q87.8. In this example, additional codes are added optionally to provide specificity regarding the manifestations.

Example: Newborn is discharged with a final diagnosis of uniparental disomy 16. This baby had a number of congenital manifestations: VSD, micrognathia, abnormal elbow, camptodactyly, micropenis, right-sided cryptorchidism and hypospadias. The baby was born at 34 weeks. Baby also had IUGR, weighing 1200 grams on admission. The baby was discharged after several weeks stay.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Q99.8	(M)	Other specified chromosome abnormalities
P05.99	(1)	Unspecified intrauterine growth restriction [IUGR]
P07.1	(1)	Other low birth weight
P07.3	(1)	Other preterm infants
Q21.0	(0)	Ventricular septal defect
K07.09	(0)	Anomaly of jaw size, unspecified
Q68.8	(0)	Other specified congenital musculoskeletal deformities
Q68.1	(0)	Congenital deformity of hand
Q55.60	(0)	Hypoplasia of penis
Q53.1	(0)	Undescended testicle, unilateral
Q54.9	(0)	Hypospadias, unspecified
Z38.000	(0)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: These multiple anomalies are described as due to a chromosomal anomaly that can be classified to Q99.—. The code Q87.8 is not assigned in this case.

Example: Diagnosis is KBG (Hermann-Pallister) syndrome. Physician documents this as a rare genetic disorder. The child has the typical facial dysmorphism, macrodontia of the upper central incisors and costovertebral skeletal anomalies.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Q87.0	(M)	MP	Congenital malformation syndromes predominantly affecting facial appearance
K00.2	(3)	OP	Abnormalities of size and form of teeth
Q76.4	(3)	OP	Other congenital malformations of spine, not associated with scoliosis

Rationale: References in the literature describe the condition as predominantly affecting facial appearance; therefore, this condition can be classified to a more specific code. Other manifestations may be coded separately and assigned diagnosis type (3)/other problem.



When a patient presents solely for management of a specific manifestation of a congenital anomaly syndrome, assign a code for the manifestation as the MRDx/main problem.

- **Assign an additional code, optional, as a diagnosis type (3)/other problem to describe the syndrome.**

Example: A young male patient with Goldenhar Syndrome and cleft palate is admitted for a revision of the cleft palate repair.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Q35.9	(M)	Cleft palate, unspecified
Q87.0	(3)	Congenital malformation syndromes predominantly affecting facial appearance

Rationale: In the classification there is a specific code to identify the Goldenhar syndrome. However the cleft palate is the condition described as the reason for the patient's stay in hospital and is the MRDx.

Chapter XVIII—Symptoms, Signs and Abnormal Clinical and Laboratory Findings, not Elsewhere Classified

Systemic Inflammatory Response Syndrome (SIRS)

In effect 2006, amended 2008, 2009

ICD-10-CA provides a separate category, R65 *Systemic inflammatory response syndrome [SIRS]* to classify systemic inflammatory response syndrome (SIRS).

Underlying causes include infection, trauma (e.g. burns), or other insult (e.g. pancreatitis, ischemia).

Systemic inflammatory response syndrome (SIRS) of an infectious origin progresses through stages of severity beginning with an infection → SIRS → sepsis → severe sepsis → multi organ dysfunction (MODS) → septic shock. The term “sepsis” means SIRS due to infectious origin; therefore, SIRS is inherent in the term “sepsis” and R65.0 *Systemic inflammatory response syndrome of infectious origin without organ failure* does not have to be assigned separately. The term “severe sepsis” describes a patient who has progressed to at least one acute organ failure as a result of the systemic inflammatory response to infection. In such cases, additional codes to describe each documented acute organ failure associated with sepsis are assigned rather than R65.1 *Systemic inflammatory response syndrome of infectious origin with organ failure*. However, a patient with “severe sepsis” may progress very quickly to septic shock and ultimately death; therefore, sufficient documentation may not be available to assign separate codes for each acute organ failure. A diagnosis of “severe sepsis” without further specification is classified to R65.1.

See also [Appendix A—Systemic Inflammatory Response Syndrome](#) for clinical information.



When SIRS of an infectious origin is present without organ failure, assign:

- first, the code identifying the type of sepsis; and
- assign, R65.0 *Systemic inflammatory response syndrome of infectious origin without organ failure*, optional, as a diagnosis type (3)/other problem.



When the diagnosis is stated as “severe sepsis” and there is no documentation of the specified acute organ failure, assign R65.1 *Systemic inflammatory response syndrome of infectious origin with acute organ failure*, mandatory, as a diagnosis type (1), (2)/other problem.



When septic shock is documented assign, R57.2 *Septic shock*, mandatory.

Note: When the acute organ failure is specified in a diagnosis of “severe sepsis,” the combination of codes assigned (i.e. a code for sepsis plus a code for the associated acute organ failure) equates to the code R65.1 *Systemic inflammatory response syndrome of infectious origin with acute organ failure*.

Notes:

- Codes from category R65 *Systemic inflammatory response syndrome [SIRS]* are never assigned the MRDx/main problem because the underlying cause (i.e. infectious origin or noninfectious origin) is always assigned first.
- R65.0 *Systemic inflammatory response syndrome of infectious origin without organ failure* is only allowed as a diagnosis type (3)/other problem because SIRS is inherent in a diagnosis of sepsis.
- R65.1 *Systemic inflammatory response syndrome of infectious origin with organ failure* is assigned either a diagnosis type (1), (2), or (3) or other problem depending on the circumstances of the case.
- R65.2 *Systemic inflammatory response syndrome of noninfectious origin without organ failure* and R65.3 *Systemic inflammatory response syndrome of noninfectious origin with organ failure* is assigned either a diagnosis type (1) or (2) or other problem because SIRS of a noninfectious origin is recognized as a separate condition in these cases.
- R65.9 *Systemic inflammatory response syndrome, unspecified* is not expected to appear on an abstract of an inpatient or ambulatory care case because the underlying cause (i.e. infectious origin or noninfectious origin) should be documented.

Example: Patient is diagnosed with SIRS due to E. coli and staphylococcus aureus sepsis.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
A41.50	(M)	MP	Sepsis due to Escherichia coli [E.coli]
A41.0	(1)	OP	Sepsis due to Staphylococcus aureus
R65.0	(3)	OP	Systemic inflammatory response syndrome of infectious origin without organ failure (optional)

Rationale: R65.0 is optional because a diagnosis of sepsis (without organ failure) includes systemic inflammatory response syndrome.


Example: Patient presents to hospital with high fever and hypoxia.



Final Diagnosis: Severe sepsis.


<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
A41.9	(M)	MP	Sepsis, unspecified
R65.1	(1)	OP	Systemic inflammatory response syndrome of infectious origin with acute organ failure

Rationale: R65.1 is assigned diagnosis type (1) because the specified organ failure is not known; therefore, R65.1 represents a comorbidity in this patient. Had the individual organ failure been known, individual codes to identify the specified organ failure would have been assigned as a comorbidity and R65.1 would have been optional diagnosis type (3).

Example:  An 85-year-old female presents to the emergency department (ED) with increasing shortness of breath, productive cough and progressive weakness. She acutely deteriorated in the ED and was emergently admitted to the intensive care unit (ICU) with a diagnosis of sepsis due to *Haemophilus influenza pneumonia* and respiratory failure. In the ICU, she was intubated, mechanically ventilated and started on broad-spectrum antibiotics.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
A41.3†	(M)	Sepsis due to <i>Haemophilus influenzae</i>
J17.0*	(3)	Pneumonia in bacterial diseases classified elsewhere
J96.09	(1)	Acute respiratory failure, type unspecified
R65.1	(3)	Systemic inflammatory response syndrome of infectious origin with acute organ failure (optional)

Rationale: As the acute organ failure is specified and meets the criteria of comorbidity, R65.1 is optional.

Example:  A 35-year-old trauma patient was in ICU for several days and developed an *E.coli* urinary tract infection that progressed to *E.coli* septicemia. He continued to deteriorate with signs of acute renal failure and hepatic failure and went into septic shock. Despite aggressive treatment the patient died.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
A41.50	(2)	Sepsis due to <i>Escherichia coli</i> [<i>E.coli</i>]
N17.9	(2)	Acute renal failure, unspecified
K72.9	(2)	Hepatic failure, unspecified
R57.2	(2)	Septic shock
N39.0	(2)	Urinary tract infection, site not specified
B96.2	(3)	<i>Escherichia coli</i> [<i>E. coli</i>] as the cause of diseases classified to other chapters
R65.1	(3)	Systemic inflammatory response syndrome of infectious origin with acute organ failure (optional)

Rationale: As the acute organ failure is specified and meets the criteria of comorbidity, R65.1 is optional. Septic shock indicates the last stage of severity in the continuum of sepsis and is classified to R57.2. See also the coding standard entitled [Septicemia/Sepsis](#).

Whereas a diagnosis of sepsis (without organ failure) includes systemic inflammatory response syndrome, the diagnosis of SIRS of a noninfectious origin identifies a separate comorbidity in the patient. Therefore, SIRS of a noninfectious origin always requires two codes; one for the cause and one for the systemic response.

- DN** When SIRS of a noninfectious origin is present without organ failure, assign:
- first the code identifying the cause (e.g. trauma, burn, pancreatitis); and
 - **R65.2 Systemic inflammatory response syndrome of noninfectious origin without organ failure**, mandatory, as diagnosis type (1) or (2)/other problem.
- DN** When SIRS of a noninfectious origin is present with associated acute organ failure, assign:
- first the code identifying the cause (e.g. trauma, burn, pancreatitis); and
 - **R65.3 Systemic inflammatory response syndrome of noninfectious origin with acute organ failure**, mandatory, as diagnosis type (1), (2)/other problem.
- DN** Assign additional codes identifying the specific acute organ failure(s) according to diagnosis typing or main/other problem definitions.

Example: Patient is a 45-year-old woman admitted to Internal Medicine with acute pancreatitis. She was transferred to ICU four days later with signs of systemic reaction. The ICU physician documented systemic inflammatory response syndrome; however, timely treatment prevented the patient from progressing to associated acute organ failure.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
K85.9	(M)	Acute pancreatitis, unspecified
R65.2	(2)	Systemic inflammatory response syndrome of noninfectious origin without organ failure

Rationale: R65.2 is assigned diagnosis type (2) because SIRS of a noninfectious origin represents a separate comorbidity.

Example: Patient is a 52-year-old man admitted to the burn ICU with his trunk being severely burned when his house burned down. He had 25% body surface area involved in the burn with 15% of the body surface area having third degree burns. Patient was sleeping in the basement at the time of the fire. A week after admission, the patient showed signs of systemic inflammatory response syndrome with acute renal failure. The patient was started on dialysis.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
T21.3	(M)	Burn of third degree of trunk
T31.22	(1)	Burns involving 20–29% of body surface with 10–19% third degree burns
X00	(9)	Exposure to uncontrolled fire in building or structure
U98.0	(9)	Place of occurrence, home
R65.3	(2)	Systemic inflammatory response syndrome of noninfectious origin with acute organ failure
N17.9	(2)	Acute renal failure, unspecified

Rationale: R65.3 is assigned diagnosis type (2) because SIRS of a noninfectious origin represents a separate comorbidity.

Vital Signs Absent (VSA)

In effect 2009

Vital signs absent (VSA) denotes that an individual is demonstrating no evidence of life, that is, they have no respirations, no pulse, no blood pressure and their pupils are fixed and dilated (on neurological assessment). VSA is not a diagnosis per se and cardiac arrest is not assumed to be the diagnosis. Do not confuse a statement of vital signs absent (VSA) with cardiac arrest.

DN When vital signs absent (VSA) is the only documentation provided by the physician, without an underlying cause, assign R99 *Other ill-defined and unspecified causes of mortality*.

DN Assign, mandatory, codes to identify cardiac resuscitative intervention(s) undertaken.

Cardiac resuscitative interventions include:

- codes from rubric **1.HZ.30.^** *Resuscitation, heart NEC*; and
- codes from rubric **1.HZ.09.^** *Stimulation, heart NEC*.

Note:

- On an inpatient chart it is not expected that VSA would be documented without an underlying cause; therefore, it is not expected that the code R99 *Other ill-defined and unspecified causes of mortality* would be assigned on a DAD abstract.
- Cardiac arrest must be clearly documented as such before assigning a code from I46.0 *Cardiac arrest with successful resuscitation* or I46.9 *Cardiac arrest, unspecified*. A diagnosis of cardiac arrest cannot be assumed on the basis of administration of cardiocerebral resuscitation (CCR)/cardiopulmonary resuscitation (CPR) alone.
- Cardiocerebral resuscitation (CCR) is chest compressions only, without artificial respiration.

See also the coding standard entitled [Cardiac Arrest](#).

Example: A 45-year-old obese female had a non-witnessed collapse. Upon arrival at the scene paramedics took over doing cardiopulmonary resuscitation (CPR) which was initiated by a bystander and continued by emergency staff on arrival to the hospital. The doctor assessed the patient after 10 minutes of CPR and documented the patient as vital signs absent.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
R99	MP	Other ill-defined and unspecified causes of mortality
1.HZ.30.JN		Resuscitation, heart NEC, by external manual compression with or without concomitant ventilation
1.GZ.31.CB-EP		Ventilation, respiratory system NEC, non-invasive approach, manual hand assisted (e.g. ambu bag)
Extent: 0		

Rationale: The physician documented that this patient was vital signs absent (VSA). No underlying cause was documented.

Example: A 45-year-old previously healthy male was driving to work when witnesses reported that for no apparent reason his car swerved suddenly and veered off the highway. Paramedics arrived at the scene and began cardiopulmonary resuscitation (CPR). Upon arrival at the emergency department the patient was diagnosed as vital signs absent. The patient sustained no visible injuries as a result of the motor vehicle crash.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
R99	MP	Other ill-defined and unspecified causes of mortality
1.HZ.30.JN		Resuscitation, heart NEC, by external manual compression with or without concomitant ventilation
1.GZ.31.CB-EP		Ventilation, respiratory system NEC, non-invasive approach, manual hand assisted (e.g. ambu bag)
Extent: 0		

Rationale: The physician documented that this patient was vital signs absent (VSA). No underlying cause was documented.

Example: This 16-year-old male was the front seat passenger in a car involved in a non-collision motor vehicle crash. The driver was pronounced expired at the scene. The patient was vital signs absent but paramedics began cardiocerebral resuscitation (CCR) at the scene. CCR was discontinued upon arrival at the emergency department. The physician documented that the patient was VSA. The following obvious injuries were documented: open fracture of base of skull, flail chest, and an open fracture of the shaft of the right femur. The coroner was notified. The patient will have a complete autopsy.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
S02.101	MP	Fracture of base of skull, open
S22.500	OP	Flail chest, closed
S72.301	OP	Fracture of shaft of femur, open
V48.6	OP	Car occupant injured in noncollision transport accident
1.HZ.30.JN		Resuscitation, heart NEC, by external manual compression with or without concomitant ventilation

Rationale: The physician documented that this patient was vital signs absent (VSA). The patient suffered major trauma following a motor vehicle crash. Codes are assigned for the documented injuries. No code is assigned for VSA.

Example: This 87-year-old female was admitted to hospital for end-stage renal failure. On routine nursing rounds the patient was found vital signs absent. The attending physician was paged and arrived 30 minutes later to pronounce the patient expired.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
N18.5	(M)	Chronic kidney disease, stage 5

Rationale: In this example the underlying cause is known; therefore, R99 is not assigned.

Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes

Adverse Reactions in Therapeutic Use Versus Poisonings

[Click here for description of change.](#)

In effect 2002, amended 2006, 2008, 2009, 2012

- | | |
|-----------|---|
| DN | Classify an “adverse effect in therapeutic use” or a “poisoning” based on the criteria in the table below. |
| DN | Presume poisonings to be accidental unless specified as intentional self-harm or undetermined intent. |
| DN | Classify poisonings from illicit drug use as accidental unless there is clear documentation of intentional self-harm or undetermined intent. |
| DN | When multiple drugs are involved in a poisoning, assign a code for each documented drug. |
| DN | When a compound drug (e.g. Tylenol #3 which is acetaminophen, codeine and caffeine) is involved in a poisoning, assign a code for each drug separately. |

Note: It is mandatory to apply the diagnosis cluster to the set of codes that describe an adverse effect in therapeutic use (Y40–Y59). See also the coding standard entitled [Diagnosis Cluster](#).

Notes:

- Only one code is required for multiple drugs classified to the same ICD-10-CA code.
- When a drug is documented using the brand name, use a Canadian drug reference to find the generic name(s) or active ingredients to further search the Table of Drugs and Chemicals.
- When the generic name(s) or active ingredients cannot be found in the Table of Drugs and Chemicals, assign a code from the general drug category to which the drug belongs (e.g. antibiotic, diuretic, analgesic, narcotic).

Adverse Effect in Therapeutic Use	Poisonings
<p>An adverse reaction may occur when a substance (i.e. drug, medicament or biological agent) is taken or administered correctly in therapeutic use.</p> <p>Correct administration of a substance in therapeutic use includes:</p> <ul style="list-style-type: none"> • Correct substance given or taken • Correct dosage of a drug given or taken (includes prescribed and self-prescribed) • 2 or more prescribed drugs taken in combination • 2 or more self-prescribed drugs taken as recommended <p>Generally, the following terms are used to describe adverse effects in therapeutic use. When these terms are used, but it is clear that a substance was used incorrectly, classify as a poisoning.</p> <ul style="list-style-type: none"> • Allergic reaction (Note: In the case of an allergic reaction to a substance not in therapeutic use, see the coding standard entitled <i>Allergic Reaction in Non-Therapeutic Use</i>) • Accumulative effect (toxicity) • Hypersensitivity • Iatrogenic reaction • Idiosyncratic reaction • Interaction between 2 medications • Paradoxical reaction • Synergistic reaction <p>Instructions for coding: Assign a code to describe the reaction/manifestation. Sequence the reaction/manifestation code first followed by an external cause code (Y40–Y59) taken from the Table of Drugs and Chemicals under the column “adverse effect in therapeutic use.”</p> <p>Apply the diagnosis cluster, mandatory.</p> <p>When the specific reaction/manifestation is not documented, select the applicable code, either:</p> <ul style="list-style-type: none"> • T80.6 <i>Other serum reactions</i>; or • T80.9 <i>Unspecified complication following infusion, transfusion and therapeutic injection</i>; or • T88.7 <i>Unspecified adverse effect of drug or medicament</i>. 	<p>A poisoning may occur when a substance (i.e. drug, medicament, or biological agent) is taken incorrectly.</p> <p>Incorrect use includes:</p> <ul style="list-style-type: none"> • Wrong drug given or taken • Wrong dosage of a drug • Self-prescribed drug taken in combination with a prescribed drug • Self-prescribed drug not taken as recommended • Any drug taken in combination with alcohol <p>The following terms are used to describe a poisoning:</p> <ul style="list-style-type: none"> • Drug overdose • Accidental ingestion • Intentional self-harm • Suicide attempt <p>Instructions for coding: Locate the poisoning codes from Chapter XIX and the external cause code (Accidental, Intentional self-harm or Undetermined intent) from the Table of Drugs and Chemicals.</p> <p>Sequence the poisoning code first followed by the manifestation code (when applicable), the external cause code and the place of occurrence code.</p> <p>Note: When a poisoning also meets the criteria of a misadventure (e.g. accidental overdose of drug or wrong drug given in error within the health care setting), assign an additional external cause code from category Y60–Y69 <i>Misadventures to patients during surgical and medical care</i>.</p> <p>Note: Do not apply the diagnosis cluster when classifying a poisoning unless the poisoning is also a misadventure and a code from Y60–Y69 is assigned.</p> <p>Note: The diagnosis type assigned for the manifestation resulting from a poisoning is based on the diagnosis typing definitions.</p>

See also the coding standards entitled *Allergic Reaction in Non-Therapeutic Use* and *Misadventures During Surgical and Medical Care*.

Example: Patient presents to the emergency department with a rash. Physician documented that patient had a CT scan two days ago with injection of contrast dye. Final diagnosis: Allergic reaction to contrast dye.



<u>Code</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
L27.0	MP	A	Generalized skin eruption due to drugs and medicaments
Y57.5	OP	A	Xray contrast media causing adverse effect in therapeutic use

Rationale: This manifestation occurred from a substance taken correctly in therapeutic use; therefore, it is classified following the instruction in the above table for adverse effect in therapeutic use.

Example: Patient diagnosed with gastritis due to aspirin. Documentation indicates that the patient takes aspirin once daily.



<u>Code</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
K29.7	MP	A	Gastritis, unspecified
Y45.1	OP	A	Salicylates causing adverse effects in therapeutic use

Rationale: A manifestation occurring from a self-prescribed drug taken as directed is classified as an adverse effect in therapeutic use.

Example: Patient was newly diagnosed with cervical spondylosis. His physician prescribed “Painfree” (a nonsteroidal anti-inflammatory drug) 25 mg tablet to be taken once daily. Patient presented at emergency the following day complaining of nausea and vomiting that started 30 minutes after the first dose was taken. The emergency physician noted the reaction and changed his medication.



<u>Code</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
R11.3	MP	A	Nausea with vomiting
Y45.3	OP	A	Other nonsteroidal anti-inflammatory drugs [NSAID] causing adverse effects in therapeutic use

Rationale: This manifestation occurred from a substance taken correctly in therapeutic use; therefore, it is classified following the instruction in the above table for adverse effect in therapeutic use.

Example: Digoxin toxicity—Patient experienced ventricular tachycardia



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
I47.2	(M)	MP	A	Ventricular tachycardia
Y52.0	(9)	OP	A	Cardiac-stimulant glycosides and drugs of similar action causing adverse effects in therapeutic use

Rationale: Although physicians often record “digoxin toxicity” as a diagnosis, there is usually additional documentation indicating the specific manifestation of the toxicity. Classify the case to the more specific condition (See also the coding standard entitled *Specificity*). When more specific documentation is not provided, assign T88.7 *Unspecified adverse effect of drug or medicament*.

Example: Following infusion of blood products while in ICU, patient develops symptoms that are documented as a mild transfusion reaction.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T80.9	(3)	A	Unspecified complication following infusion, transfusion and therapeutic injection
Y44.6	(9)	A	Natural blood and blood products causing adverse effects in therapeutic use

Rationale: A diagnosis of “mild transfusion reaction” is an example of adverse effect in therapeutic use in which the specific reaction/manifestation is not documented; therefore, T80.9 is assigned.

Example: Hematemesis due to taking Coumadin (prescribed) and aspirin (self-prescribed) in combination.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
T45.5	(M)	MP	Poisoning by anticoagulants
T39.0	(1)	OP	Poisoning by salicylates
K92.0	(3)	OP	Haematemesis
X44	(9)	OP	Accidental poisoning by and exposure to other and unspecified drugs, medicaments and biological substances
X40	(9)	OP	Accidental poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics
U98.9	(9)	OP	Unspecified place of occurrence

Rationale: Any combination of a prescribed drug taken with a self-prescribed drug is classified as a poisoning.

Example: Patient presents after her husband noted her to be quite drowsy. On review it was noted that she had taken her regular prescribed dose of Ativan and consumed three glasses of wine. Final diagnosis: Toxic effect from Ativan and alcohol consumption.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
T42.4	(M)	MP	Poisoning by benzodiazepines
T51.0	(1)	OP	Toxic effect of ethanol
R40.0	(3)	OP	Somnolence
X41	(9)	OP	Accidental poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified
X45	(9)	OP	Accidental poisoning by and exposure to alcohol
U98.9	(9)	OP	Unspecified place of occurrence

Rationale: When a condition is the result of an interaction between alcohol and any drug, it is classified as a poisoning.

Example: Mother found her 8-year-old son playing at home with candy coated ibuprofen tablets. A count of the tablets showed 10 tablets were missing. He admitted swallowing the “candy.” He was taken to the emergency department where his chief complaint was stomachache. Final diagnosis: Ibuprofen ingestion.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
T39.3	(M)	MP	Poisoning by other nonsteroidal anti-inflammatory drugs [NSAID]
R10.19	(3)	OP	Upper abdominal pain, unspecified
X40	(9)	OP	Accidental poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics
U98.0	(9)	OP	Place of occurrence, home

Rationale: A manifestation occurring from accidental ingestion is classified as a poisoning.

Example: Patient in a coma due to attempted suicide by drug overdose from a combination of heroin, Xanax, Valium and acetaminophen. He was found at home. Patient was admitted to the ICU for close monitoring of his level of consciousness; a central venous line was inserted for dialysis.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
T40.1	(M)	MP	Poisoning by heroin
T42.4	(1)	OP	Poisoning by benzodiazepines
T39.1	(1)	OP	Poisoning by 4-Aminophenol derivatives
R40.29	(1)	OP	Coma, unspecified
X62	(9)	OP	Intentional self-poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified
X61	(9)	OP	Intentional self-poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified
X60	(9)	OP	Intentional self-poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics
U98.0	(9)	OP	Place of occurrence, home

Rationale: When multiple drugs are classified to separate categories, a code must be assigned for each. The generic names for Xanax and Valium, as listed in the Compendium of Pharmaceuticals and Specialties (CPS), are alprazolam and diazepam, respectively, and both are classified in the Table of Drugs and Chemicals to T42.4.

Example: Drug overdose from Pamprin.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
T39.1	(M)	MP	Poisoning by 4-Aminophenol derivatives
T45.0	(1)	OP	Poisoning by antiallergic and antiemetic drugs
T50.2	(1)	OP	Poisoning by carbonic-anhydrase inhibitors, benzothiadiazides and other diuretics
X40	(9)	OP	Accidental poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics
X44	(9)	OP	Accidental poisoning by and exposure to other and unspecified drugs, medicaments and biological substances
U98.0	(9)	OP	Place of occurrence, home

Rationale: Pamprin is a compound drug consisting of acetaminophen, pyrilamine maleate, and pamabrom; therefore, each is coded separately. Since pamabrom is a diuretic and the generic name is not listed in the Table of Drugs and Chemicals, it is classified to the diuretic category. Pyrilamine and pamabrom are classified to the same external cause code; therefore, X44 is only assigned once.

Example: Patient presented in labor. An epidural was administered to the patient. When it was noted that the epidural was not working, it was discovered that penicillin G had been administered into the epidural space rather than the usual anesthetic mixture (incorrect IV bag). No treatment was given to the patient, other than close observation for signs and/or symptoms of an allergic reaction, which did not occur.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T36.0	(3)	A	Poisoning by penicillins
X44	(9)	A	Accidental poisoning by and exposure to other and unspecified drugs, medicaments and biological substances
Y65.1	(9)	A	Wrong fluid used in infusion
U98.2	(9)	A	Place of occurrence, school other institution and public area

Rationale: The administration of penicillin G in this case meets the criteria for a poisoning (wrong substance) and a misadventure (adverse event during the provision of care, patient is recipient, potential harm exists and adverse event documented). Since the poisoning did not meet the criteria for significance in this case, T36.0 is optional. If assigned, it is diagnosis type (3). When T36.0 is assigned, the complete code assignment for poisonings and a misadventure (which includes applying the diagnosis cluster) is required. See also the coding standard entitled [Misadventures During Surgical and Medical Care](#).

Example: Patient was admitted with shingles and placed on acyclovir. Unfortunately, there was a transcription error in the medication orders, and a double dose of acyclovir was given. Creatinine level subsequently rose to over 400. Patient was seen by the Nephrology service and was diagnosed with acyclovir-induced crystal acute tubular necrosis (ATN). After six days of intravenous hydration and discontinuation of the acyclovir, renal function returned to normal and the patient was discharged home.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T37.5	(2)	A	Poisoning by antiviral drugs
N14.1	(3)	A	Nephropathy induced by other drugs, medicaments and biological substances
X44	(9)	A	Accidental poisoning by and exposure to other and unspecified drugs, medicaments and biological substances
Y63.8	(9)	A	Failure in dosage during surgical and medical care
U98.2	(9)	A	Place of occurrence, school other institution and public area

Rationale: When a condition is the result of wrong dosage, it is classified as a poisoning. In this example, the criteria for a misadventure is also met: there was an adverse event (double dose of acyclovir); the patient was the recipient of the adverse event (patient was given double dose of medication); harm or potential for harm exists (tubular necrosis) and the adverse event is clearly documented. Application of a diagnosis cluster is mandatory for misadventures. Note that while there is an exclusion at Y63 for accidental overdose of drug or wrong drug given in error (X40–X44) this does not preclude using these two external codes on the same abstract. One describes that there was an accidental poisoning and the other describes that there was a misadventure. See also the coding standard entitled *Misadventures During Surgical and Medical Care*.



Classify conditions resulting from noncompliance with therapy to a code describing the manifestation followed by Z91.1 *Personal history of noncompliance with medical treatment and regimen* as a diagnosis type (3)/other problem.

When a condition is documented as due to noncompliance with therapy or self-directed discontinuance of a drug, it is neither a poisoning nor an adverse effect.

Example: A 17-year-old patient, who has had asthma for several years, developed status asthmaticus due to failure of the patient to comply with his medication regimen.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
J45.01	(M)	MP	Predominantly allergic asthma with stated status asthmaticus
Z91.1	(3)	OP	Personal history of noncompliance with medical treatment and regimen

Allergic Reaction in Non-Therapeutic Use

In effect 2009



When a manifestation is documented as due to an allergy or allergic reaction to a substance (excluding substances in therapeutic use or allergy to food), search the alphabetical index for the manifestation.



When the index:

- provides the subterm “allergy” or “allergic,” assign the applicable code from A00–R99.
- does not provide a subterm “allergy” or “allergic,” assign:
 - T78.4 *Allergy, unspecified*; and
 - an additional code identifying the manifestation as a diagnosis type (3)/other problem; and
 - an external cause code, (either X58 *Exposure to other specified factors*, when the causative agent is known; or X59.9 *Exposure to unspecified factor causing other and unspecified injury*, when the causative agent is unknown).

Note: Do not search the Table of Drugs and Chemicals to locate an external cause code when it is an allergic reaction to a substance not used in therapeutic use. External cause codes found in the Table of Drugs and Chemicals are only used to describe an adverse effect in therapeutic use, or a poisoning. See also the coding standard entitled [Adverse Reactions in Therapeutic Use Versus Poisonings](#).

Example: Patient presents to the emergency department and is diagnosed with allergic contact dermatitis after exposure to poison ivy.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
L23.7	MP	Allergic contact dermatitis due to plants, except food

Rationale: Searching the alphabetical index as follows leads to the correct code.

Dermatitis

- due to
- – plants NEC (contact) L25.5
- – – allergic L23.7

An external cause code is not necessary.
(Note: Contact with poison ivy is classified as an allergic contact dermatitis.)

Example: Patient presents with localized swelling of the face. Final diagnosis documented as allergic reaction.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
T78.4	(M)	MP	Allergy, unspecified
R22.0	(3)	OP	Localized swelling, mass and lump, head
X59.9	(9)	OP	Exposure to unspecified factor causing other and unspecified injury
U98.9	(9)	OP	Unspecified place of occurrence

Rationale: The manifestation is specified as swelling; however, the index search does not provide a descriptor subterm for “allergic”; therefore, T78.4 *Allergy, unspecified* is assigned. If T78.4 is not assigned for this example, it would not be identified as an allergic reaction. X59.9 is assigned because the causative agent of the allergic reaction is unknown.

Example: Patient presents with lymph edema of her eyelids after applying a hair dye color treatment at home. Final diagnosis: Hair dye allergy.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
T78.4	MP	Allergy, unspecified
H02.8	OP	Other specified disorders of eyelid
X58	OP	Exposure to other specified factors
U98.0	OP	Place of occurrence, home

Rationale: In this example, the causative agent is identified as hair dye. Even though “Dye NEC” can be found by searching the Table of Drugs and Chemicals, this is not an allergic reaction resulting from an adverse effect of a substance in therapeutic use; therefore, do not search the Table of Drugs and Chemicals for the external cause code. Note: If T78.4 is not assigned for this example, it would not be identified as an allergic reaction.

Current Versus Old Injuries

[Click here for description of change.](#)

In effect 2001, amended 2002, 2006, 2012

Code assignment is based upon physician documentation which then directs how the alphabetical index is searched and how the coder determines when to apply the notes in the tabular listing. In the case of some injuries there are occurrences when the classification requires the coder to make a choice between classifying the injury as a current injury (Chapter XIX - *Injury, poisoning and certain other consequences of external causes (S00–T98)*) or an old injury (body system chapter, e.g. Chapter XIII - *Diseases of the musculoskeletal system and connective tissue (M00–M99)*).

An example from the alphabetical index is:

Tear, torn (traumatic) (see also Wound, open) T14.1

– meniscus (knee) (**current injury**) S83.2-

– – **old** (anterior horn) (lateral) (medial) (posterior horn) M23.2

An example from the tabular listing is:

G56 Mononeuropathies of upper limb

Excludes: **current** traumatic nerve disorder—see nerve injury by body region



When an injury is documented as being related to a traumatic event and the classification provides a choice of a condition being classified as current or old, select a code from either the body system chapter or Chapter XIX based on the time frames indicated below:

- A current injury is one which occurred within one year (365 days) prior to the date of the visit. Select a code from Chapter XIX.
- An old injury is one which occurred more than one year (365 days) from the date of the visit. Select a code from the body system chapter.
- When the date of injury is not specified (e.g. patient cannot remember the date, physician does not state an approximate date, or the injury is documented as “long ago”) classify as an old injury. Select a code from the body system chapter.

Example:
FIRST
VISIT

Patient fell twisting his knee while skiing on a commercial ski hill. A week later he presented to the emergency department because of continued pain and swelling. He was diagnosed with a tear of his medial meniscus and was discharged to await surgical booking.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
S83.20	MP	Tear of medial meniscus of knee, current
W02.01	OP	Fall involving skis
U98.3	OP	Place of occurrence, sports and athletics area

Rationale: The injury is related to a traumatic event and when searching the alphabetical index (lead term “Tear”, subterm “meniscus”) the classification provides a choice between a current injury (S83.2–) and an old injury (M23.2). Since there is documentation of the injury having occurred within one year, the tear of the meniscus is classified as a current injury.

Example:
SECOND
VISIT

The same patient in the above example returned to the hospital for meniscectomy. It is now 21 days since the original injury.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S83.20	(M)	MP	Tear of medial meniscus of knee, current
W02.01	(9)	OP	Fall involving skis
U98.3	(9)	OP	Place of occurrence, sports and athletics area

Rationale: The injury is related to a traumatic event and when searching the alphabetical index (lead term “Tear”, subterm “meniscus”) the classification provides a choice between a current injury (S83.2–) and an old injury (M23.2). Since there is documentation of the injury having occurred within one year, the tear of the meniscus is classified as a current injury.

Example: Six months ago, the patient fell twisting her knee while skiing on a commercial ski hill. At that time she was seen in emergency and diagnosed with a partial tear of the medial meniscus. She was discharged with instructions for rest and ice to the injured area. She now complains of pain in her knee with certain activity and is admitted for meniscectomy. Final diagnosis is torn posterior horn, medial meniscus.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S83.20	(M)	MP	Tear of medial meniscus of knee, current
W02.01	(9)	OP	Fall involving skis
U98.3	(9)	OP	Place of occurrence, sports and athletics area

Rationale: The injury is related to a traumatic event and when searching the alphabetical index (lead term “Tear”, subterm “meniscus”) the classification provides a choice between a current injury (S83.2–) and an old injury (M23.2). Since there is documentation of the injury having occurred within one year, the tear of the meniscus is classified as a current injury.

Example: Patient presents to hospital with right femoral nerve dysfunction. He was struck in the inguinal area with a hockey puck two months previously when playing a game in a hockey arena. The physician states the patient obviously had an injury to his femoral nerve at the time he was struck by the hockey puck as he has had numbness in the distribution of the nerve plus slight weakness of the quadriceps muscle ever since. Final diagnosis is femoral nerve dysfunction.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S74.18	(M)	MP	Other and unspecified injury of femoral nerve at hip and thigh level
W21.03	(9)	OP	Striking against or struck by hockey puck
U98.3	(9)	OP	Place of occurrence, sports and athletics area

Rationale: The injury is related to a traumatic event and when searching the alphabetical index there is no subterm for “nerve” under the lead term “Dysfunction”. The alphabetical index lookup “Disorder”, subterms “nerve”, “femoral” leads to G57.2 *Lesion of femoral nerve*. Referring to the tabular listing the category G57 *Mononeuropathies of lower limb* “excludes current traumatic nerve disorder” and the coder is directed to “see nerve injury by body region”. Since there is documentation of the injury having occurred within one year, the exclusion at G57 is applicable and therefore, the diagnosis of nerve dysfunction is classified as a current injury.

Example: This patient had a twisting and hyperflexion injury to her knee just over a year ago. She initially had significant pain that improved over time until a few months ago. Patient is admitted for surgery which identifies a left knee lateral meniscal tear. Meniscectomy is performed.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M23.26	(M)	MP	Derangement of other and unspecified lateral meniscus due to old tear or injury

Rationale: The injury is related to a traumatic event and when searching the alphabetical index (lead term “Tear”, subterm “meniscus”) the classification provides a choice between a current injury (S83.2–) and an old injury (M23.2). Since there is documentation of the injury having occurred more than one year ago, the tear of the meniscus is classified as an old injury.

Note: Careful attention must be used when injuries are not related to a traumatic event. When the alphabetical index leads to a code describing either a current or old injury, but the diagnosis is not related to a traumatic injury, do not assign that code. Rather, search the alphabetical index for a more appropriate lead term to fit the diagnosis given. For example, conditions described as “repetitive”, “degenerative” or “from overuse” are unrelated to a traumatic event and thus, must not be classified as traumatic injuries (either current or old).

Example: Patient is admitted for knee arthroscopy. The lateral compartment was evaluated and a small tear in the lateral meniscus was found. This was identified as a degenerative horizontal tear.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
M23.36	(M)	MP	Other derangement of other and unspecified lateral meniscus

Rationale: The alphabetical index (lead term “Tear”, subterm “meniscus”) provides subterms for current (S83.2–) or old (M23.2) injury; however, the diagnosis “degenerative tear of meniscus” is not a traumatic injury, thus these subterms are not applicable in this case. Note: it is important to always search both the alphabetical index and the tabular listing as it may not be evident from the alphabetical index that M23.2 refers to a tear related to an injury. The code title description for M23.2 is “Derangement due to an old tear or injury”.

Since neither S82.2– nor M23.2 is appropriate for this case, the coder must try different applicable lead terms for searching the alphabetical index. Searching the lead term “Degeneration, degenerative”, subterm “meniscus” leads to M23.3 *Other derangement of other and unspecified lateral meniscus*, which is the correct code choice for the diagnosis of “degenerative tear of meniscus”.



When a patient presents with a condition that is a sequela/late effect resulting from a previous injury, assign a code for the current condition under investigation or treatment.

- Assign a code from *Sequelae of injuries, of poisoning and of other consequences of external causes (T90–T98)*, optional, as a diagnosis type (3)/other problem to identify the current condition as a sequela of an injury.

Example: This patient had a stab wound to the palm of her left hand while cooking at home. The patient has had loss of sensation in the ring and middle fingers. Procedure performed is neurolysis of common digital nerve. Final diagnosis: Scarring of nerves of left hand.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
G56.8	(M)	MP	Other mononeuropathies of upper limb
T92.4	(3)	OP	Sequelae of injury of nerve of upper limb (optional)
Y86	(9)	OP	Sequelae of other accidents (optional)

Rationale: Scarring of the nerves in this example is a sequela of the stab wound. The alphabetical index (lead term “Scar, scarring”) does not provide a subterm for “nerve” and L90.5 is specific to “scarring of the skin”. Since L90.5 is not appropriate for this case, the coder must try different applicable lead terms for searching the alphabetical index. Searching the lead term “Disorder”, subterms “nerve” “specified NEC” “upper limb” leads to G56.8. On review of the tabular, while category G56 *Mononeuropathies of upper limb* “excludes: current traumatic nerve disorder - see nerve injury by body region” this exclusion is not applicable since the diagnosis “scarring of the nerve” is not describing a current or old injury but rather a sequela of an injury.

See also the coding standards entitled [Sequelae](#) and [Admission for Follow-up Examination](#).

Early Complications of Trauma

In effect 2001, amended 2006



When a trauma complication, such as a hemorrhage or infection, follows medical/surgical procedures intended to repair the injured site, assign the appropriate code from the range of categories T80–T88 *Complications of surgical and medical care, not elsewhere classified*.

See also the coding standard entitled [Post-Intervention Conditions](#).

Example: Patient was seen at the hospital with a dehiscence of the surgically repaired open wound of his forearm.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T81.3	(M)	MP	A	Disruption of operation wound, not elsewhere classified
Y83.8	(9)	OP	A	Other surgical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The complication occurred following medical/surgical treatment and is therefore classified to T80–T88 *Complications of surgical and medical care*.

Note: In a patient with multiple traumas, shock may be assumed to be due to the trauma. Assign T79.4 *Traumatic shock* unless the physician clearly states another cause.

Example: Patient with severe multiple injuries experiences shock from the administration of anesthetic for repair of injuries interventions.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T88.2	(2)	A	Shock due to anaesthesia
Y48.4	(9)	A	Anaesthetic, unspecified causing adverse effects in therapeutic use

Intracranial Injury NOS Versus Head Injury NOS

[Click here for description of change.](#)

In effect 2008, amended 2009, 2012

For the purpose of the ICD-10-CA classification, a final diagnosis of “head injury” is classified as an intracranial injury (brain injury) when any of the following is documented within the encounter:

- altered state of awareness,
- altered cognition,
- altered mentation,
- altered state of consciousness,
- Glasgow Coma Scale score of 3–12



When the final diagnosis is recorded as “head injury” and further documentation indicates a brain injury as per the above criteria, assign a code from category S06 *Intracranial Injury*.



When the final diagnosis is recorded as “head injury” without further specification, assign S09.9 *Unspecified injury of head*.

See also the coding standard entitled [Specificity](#).

Example: Patient was injured in a fall from a horse. The final diagnosis is recorded as “head injury.” The history identifies she was unconscious for 10 minutes immediately after the head injury.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S06.0	(M)	MP	Concussion
V80.0	(9)	OP	Animal-rider or occupant of animal-drawn vehicle injured by fall from or being thrown from animal or animal-drawn vehicle in noncollision accident

Rationale: As the documentation (i.e. loss of consciousness) provides further specificity, the final diagnosis of “head injury” is classified to category S06 *Intracranial Injury* and not S09.9 *Unspecified injury of head*.

Example: A 15-year-old girl walking down the sidewalk while talking on her cell phone struck her head on a post. She complained of a headache. The final diagnosis is recorded as “minor head injury.” There is no documented Glasgow Coma Scale score.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S09.9	(M)	MP	Unspecified injury of head
W22.08	(9)	OP	Striking against or struck by other objects in non-sports
U98.4	(9)	OP	Place of occurrence, street and highway

Rationale: When there is no documented evidence to indicate a brain injury (per the criteria above), do not classify the diagnosis as an intracranial brain injury. A headache or sore head in the absence of other signs of neurological impairment is not classified as a brain injury.

Skull Fracture and Intracranial Injuryⁱ

In effect 2001



For fractures of the skull associated with an intracranial injury, sequence the intracranial injury first followed by an additional code for the fracture.

Example: Traumatic subarachnoid hemorrhage with closed fracture of base of skull. Patient suffered a brief loss of consciousness. No other injuries.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S06.6	(M)	MP	Traumatic subarachnoid haemorrhage
S02.100	(1)	OP	Fracture of base of skull, closed

Open Wounds

In effect 2001, amended 2006

Open wounds include animal bites, cuts, lacerations, avulsion of skin and subcutaneous tissue and puncture wounds with or without penetrating foreign body. They do not include traumatic amputations or avulsions that involve deeper tissue, e.g. muscle.

See also the coding standard entitled [Code Assignment for Multiple Superficial Injuries](#).



Classify an open wound communicating with a fracture to the open fracture. Do not assign an additional code for the open wound.

Example: Patient suffered a large open wound of the thigh with a fracture of the shaft of the femur visible in the wound.



<u>Code</u>	<u>Code Title</u>
S72.301	Fracture of shaft of femur, open

i. World Health Organization, “Rules and guidelines for mortality and morbidity coding” in *International Statistical Classification of Diseases and Related Health Problems (ICD-10), tenth revision, Volume 2, Second edition*, (Geneva, Switzerland: World Health Organization, 2004) p. 129.



Classify an open wound as “complicated” when it includes any of the following:

- Delayed healing
- Delayed treatment
- Foreign body
- Major infection (except that following treatment)

Example: Patient had an open wound to his forearm due to being struck in the arm by a hockey stick while playing street hockey in his driveway. He delayed seeking treatment and a significant infection has set in.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S51.91	(M)	MP	Open wound of forearm, part unspecified, complicated
W21.02	(9)	OP	Striking against or struck by hockey stick
U98.0	(9)	OP	Place of occurrence, home

Rationale: Both an infection and delayed treatment are present in this case.



Once a wound has been definitively treated (cleansed and sutured), classify a subsequent infection at the site to T81.4 *Infection following a procedure, not elsewhere classified*. This is true regardless of the cause of infection.

See also the coding standards entitled [Early Complications of Trauma](#) and [Post-Intervention Conditions](#).

Example: A patient presents for treatment of a wound infection. He had suffered an open wound of his arm that was treated by cleansing and suturing one day previously.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T81.4	(M)	MP	A	Infection following a procedure, not elsewhere classified
Y83.8	(9)	OP	A	Other surgical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Primary closure of a wound is not performed if the physician believes that the level of contamination from the injury is likely to result in an infection. This is a judgment call that is affected by many factors including the length of time between injury and treatment. Since the patient’s open wound was definitively treated (cleansed and sutured) and now the patient presents with a wound infection, this is classified as an infection following a procedure.

Fractures—Closed Versus Open

In effect 2001, amended 2006

DN Classify a fracture not documented as closed or open as closed.

Example: Documentation of injury says only “fracture humerus.”

DN

<u>Code</u>	<u>Code Title</u>
S42.390	Fracture of unspecified part of humerus, closed

DN Classify separately, any open wound in the vicinity of a closed fracture.

See also the coding standard entitled [Open Wounds](#).

An open fracture involves an open wound down into and exposing the fracture site, or the broken bone end extends through the skin surface. When an open wound occurs at the vicinity of a fracture without exposed bone, the fracture is considered closed.

Example: Patient sustained a closed fracture of the shaft of the femur, as well as a surface laceration of the thigh.

DN

<u>Code</u>	<u>Code Title</u>
S72.300	Fracture of shaft of femur, closed
S71.10	Open wound of thigh, uncomplicated

Treatment of Fractures

In effect 2001

DN When a fracture site involves a joint, select the appropriate intervention code from the joint site, not from the bone site.

See also the coding standard entitled [Joint Fracture Reduction, Fixation and Fusion](#).

Example: Fixation of an intertrochanteric fracture of the femur with an intramedullary nail—open approach.

1.VC.74.LA-LQ	Fixation, femur, open approach using intramedullary nail, no tissue used
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Example: Fixation of a fracture of the neck of femur with an intramedullary nail—open approach.

1.VA.74.LA-LQ	Fixation, hip joint, open approach using intramedullary nail, fixation device alone
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Dislocations

In effect 2001

- DN** Classify dislocations not indicated as closed or open as closed.
- DN** Classify a “fracture dislocation” of a site, as a fracture.
- DN** Classify simple dislocation of vertebrae, as follows:
 - S13.1 *Dislocation of cervical vertebra*
 - S23.1 *Dislocation of thoracic vertebra*
 - S33.1 *Dislocation of lumbar vertebra*
- DN** For any multiple dislocations of a single type of vertebrae use the code only once.

Example: Dislocation of second and third cervical vertebrae.

DN	<u>Code</u>	<u>Code Title</u>
	S13.1	Dislocation of cervical vertebra

Injury to Blood Vessels

In effect 2001

- DN** When there is an injury to blood vessels due to a fracture, open wound or other injury, assign an additional code to indicate the injury to the blood vessel.

See also the coding standard entitled [Sequencing Multiple Injuries for Severity](#).

Example: Patient sustained closed fracture of shaft of femur with rupture of the common femoral artery.

DN	<u>Code</u>	<u>Code Title</u>
	S72.300	Fracture of shaft of femur, closed
	S75.0	Injury of femoral artery

Rationale: Sequencing will depend on the circumstances documented in the chart.

Significant Injuries

In effect 2006, amended 2008

DN For classification purposes, consider the following types of injuries to be significant:

- fractures,
- dislocations,
- amputations,
- second and third degree burns,
- first degree burns meeting the criteria for a significant diagnosis type or main/other problem,
- frostbite superficial or with tissue necrosis,
- injuries to nerves, blood vessels, muscles/tendons and internal organs.

D Assign a diagnosis type (M), (1), (2), (W), (X) or (Y) to significant injuries.

This list is not intended to indicate a hierarchy of severity. See also the coding standard entitled [Sequencing Multiple Injuries for Severity](#).

Crush Injuries

In effect 2006

DN Assign all significant injuries associated with a crush injury as comorbid conditions or main/other problem.

- Assign an additional code, as a diagnosis type (3)/other problem, to identify the crushing injury. When multiple body regions are involved in a crush injury, select the crushing injury code from the category T04 *Crushing injuries involving multiple body regions*.

DN When crush syndrome is documented with compromised renal function, assign T79.5 *Traumatic anuria* as a comorbid diagnosis type or main/other problem.

See also the coding standard entitled [Code Assignment for Multiple Types of Significant Injuries Involving Multiple Body Regions](#).

Example: Patient had his hand crushed between two heavy objects in a hotel kitchen, sustaining open fractures of his second and third metacarpals.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S62.491	(M)	MP	Multiple fractures unspecified site of other metacarpal bones, open
S67.8	(3)	OP	Crushing injury of other and unspecified parts of wrist and hand
W23	(9)	OP	Caught, crushed, jammed or pinched in or between objects
U98.5	(9)	OP	Place of occurrence, trade and service area

Example: Patient sustained a closed Grade IV injury to his liver, as well as a shattered spleen due to a crushing injury to his abdomen sustained when he was crushed against a wall by a van as it backed up.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S36.130	(M)	MP	Parenchymal liver disruption involving 25 to 75% hepatic lobe, or 1 to three segments (Grade IV) without open wound into cavity
S36.040	(1)	OP	Hilar vascular laceration resulting in completely shattered spleen (Grade V), without open wound into cavity
S38.1	(3)	OP	Crushing injury of other and unspecified parts of abdomen, lower back and pelvis
V03.0	(9)	OP	Pedestrian injured in collision with car, pick-up truck or van, nontraffic accident

Example: Patient was a passenger crushed in a train derailment accident sustaining an open fracture of the shaft of the humerus, open fracture of three ribs, contusion of the heart with open thoracic wound, closed contusion of the liver and spleen, as well as a closed fracture of the ilium.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S26.801	(M)	MP	Contusion and haematoma of heart with open wound into thoracic cavity
S42.301	(1)	OP	Fracture of shaft of humerus NOS, open
S22.401	(1)	OP	Multiple fractures of 2–4 ribs, open
S36.150	(1)	OP	Liver haematoma NOS, laceration NOS, injury to liver NOS, without open wound into cavity
S36.090	(1)	OP	Haematoma NOS, laceration NOS, injury to spleen NOS, without open wound into cavity
S32.300	(1)	OP	Fracture of ilium, closed
T04.7	(3)	OP	Crushing injuries of thorax with abdomen, lower back and pelvis with limb(s)
T06.8	(3)	OP	Other specified injuries involving multiple body regions
V81.7	(9)	OP	Occupant of railway train or railway vehicle injured in derailment without antecedent collision

Bilateral Injuries

In effect 2002, amended 2006, 2008



When identical significant injuries occur bilaterally, classify the injuries using the same ICD-10-CA code twice.

Exception: Do not code identical burns of bilateral sites twice; the category T31 *Burns classified according to extent of body surface involved* encompasses this aspect.

Example: Patient had lacerations to his quadriceps muscles of both thighs due to a sharp ceremonial sword falling from a museum display into his lap.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S76.10	(M)	MP	Laceration of quadriceps muscle and tendon
S76.10	(1)	OP	Laceration of quadriceps muscle and tendon
W26	(9)	OP	Contact with knife, sword or dagger
U98.2	(9)	OP	Place of occurrence, school other institution and public area

Example: Closed fracture of shaft of femur, right and left.



<u>Code</u>	<u>Code Title</u>
S72.300	Fracture of shaft of femur, closed
S72.300	Fracture of shaft of femur, closed

Assign also:

- external cause code
- place of occurrence code



Classify bilateral fractures to bones of which there is only one in the body (e.g. mandible, maxilla) to one code indicating multiple fractures.

Example: Fracture of ramus (mandible) left side and right side.



<u>Code</u>	<u>Code Title</u>
S02.670	Multiple mandibular fracture sites, closed

Burns and Corrosions

In effect 2001, amended 2005, 2006, 2007

The term “burn” covers thermal burns, friction burns and scalds by non-caustic liquids and vapors. Also included are burns caused by electrical heating appliances, electricity, flame, hot objects, lightening and radiation. Corrosions are burns caused by caustic substances like acids or alkalis. Sunburns are classified in L55.

In ICD-10-CA, burns and corrosions are described as occurring in “degrees.” This terminology relates to the thickness of the burn. First degree equates to erythema only. It is also called a superficial burn. A second degree burn involves epidermal loss and blistering. It is also called a partial thickness burn. Third degree burns involve full thickness skin loss and/or deep necrosis of any underlying tissue.

Burns and corrosions of the external body surface are specified by site in categories T20–T25. Inclusion terms at each category level will help to ensure accurate code selection. Burns confined to the eye and internal organs are classified in block T26–T28.

T29 category classifies burns and corrosions of multiple body regions and T30 is used to classify burns and corrosions of body region, unspecified. T31 and T32 are categories used to capture the extent of the body surface area involved in the burn or corrosion.



Classify burns of varying degrees at one site to the deepest degree at that site.

Example: First, second and third degree burns of the chest wall.



<u>Code</u>	<u>Code Title</u>
T21.3	Burn of third degree of trunk

Assign also:

- extent of the body surface involved
- external cause code
- place of occurrence code



Classify an evolving burn to the greatest degree to which it progresses.

Review of documentation will show that sometimes a burn initially stated to be a second degree burn may evolve and within a few days the physician will change his documentation to say that the burn is one of a third degree. This burn will then be coded to the degree it has evolved to, i.e. to the third degree.

Example: Patient presented with second degree burns to the left arm (ten percent body surface area) due to scalding with boiling water from a cooking pot while at home. Documentation reveals the burn evolved to third degree burn.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
T22.3	(M)	MP	Burn of third degree of shoulder and upper limb, except wrist and hand
T31.12	(1)	OP	Burns involving 10–19% body surface and 10 to 19% proportion of burn is third degree
X12	(9)	OP	Contact with other hot fluids
U98.0	(9)	OP	Place of occurrence, home



Classify burns described as “non-healing” or “necrotic” as current burns.



When a patient presents for burn treatment that includes grafting or debridement, classify the burn as a current burn.



When a patient presents for a complication of a burn that has healed, assign a code for the subsequent problem resulting from the burn, e.g. scar contractures.



When a patient presents for reconstructive surgery for a healed burn assign Z42.—*Follow-up care involving plastic surgery.*



When a patient presents for change of burn dressings, assign as the MRDx/main problem Z48.0 *Attention to surgical dressings and sutures.*

- Assign an additional code, optional, as a diagnosis type (3)/other problem, to identify the burn itself.

See also the coding standards entitled [Current Versus Old Injuries](#) and [Admission for Follow-up Examination](#).

Example: A patient suffered multiple burns to his body in a house fire seven months previously. He now presents for z-plasty of a scar contracture of his right wrist. He also still has an area of non-healing, third degree burn with necrosis of his left buttock, which accounts for less than 1% of body surface.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
L90.5	(M)	MP	Scar conditions and fibrosis of skin
T95.2	(3)	OP	Sequelae of burn, corrosion and frostbite of upper limb (optional)
Y86	(9)	OP	Sequelae of other accidents (optional)
T21.3	(1)	OP	Burn of third degree of trunk
T31.01	(1)	OP	Burns involving less than 10% of body surface with less than 10% third degree burns
X00	(9)	OP	Exposure to uncontrolled fire in building or structure
U98.0	(9)	OP	Place of occurrence, home



When failure or rejection of a xenograft or homograft occurs at a treated burn site, assign a code from category T86.84 *Failure and Rejection of soft tissue (skin, muscle, fascia, tendon, mucosa) graft/flap.*



When rejection or failure of a patient’s own grafted tissue (autograft) to a burn site occurs, assign T85.8 *Other complications of internal prosthetic devices, implants and grafts, not elsewhere classified.*

Extent of Body Surface Area Involved in Burn Injury

In effect 2001, amended 2006



When a code from T20–T25, T29 is assigned, assign a mandatory additional code, as a comorbid diagnosis type/other problem, from the category:

- T31 *Burns classified according to extent of body surface involved*; or
- T32 *Corrosions classified according to extent of body surface involved*.



Ensure that the diagnosis type for T31.– or T32.– matches the diagnosis type of the code for the burn or corrosion in terms of pre-admit/post-admit comorbidity or other problem.



Select only one code from within the categories T31 and T32.

Categories T31 and T32 may both apply to a single case, but only one code from each category may be used.

Example: First (5% Body surface affected [BSA]), second (10% BSA) and third (15% BSA) degree burns of the trunk.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
T21.3	(M)	MP	Burn of third degree of trunk
T31.32	(1)	OP	Burns involving 30–39% of body surface with 10–19% third degree burns

Assign also:

- external cause code
- place of occurrence code

Rationale: T31.32 is mandatory with T21.3. Diagnosis type for T31.32 is assigned a pre-admit comorbidity type. If the burn was a post-admit comorbidity, T31.32 would also be assigned a post-admit comorbidity diagnosis type. Only one code can be selected from T31.–.

Note: Burn diagrams that describe the patient's total injury may help coders to select the appropriate code from these categories.

Assignment of Most Responsible Diagnosis/Main Problem in Multiple Burns

In effect 2001, amended 2008

- DN** In the presence of multiple burns of several sites, select the burn site of the most severe degree as the MRDx/main problem.
- DN** In the case of burns of multiple sites of the same degree, select the site with the larger body surface as the MRDx/main problem.
- DN** All parameters remaining the same, select burns requiring grafting over burns not requiring grafting, as the MRDx/main problem.

Example: Second degree burns of forearm and palm of hand and first degree burn of face.

DN	<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
	T22.2	(M)	MP	Burn of second degree of shoulder and upper limb, except wrist and hand
	T23.2	(1)	OP	Burn of second degree of wrist and hand
	T20.1	(1)	OP	Burn of first degree of head and neck

Assign also:

- extent of body surface involved
- external cause code
- place of occurrence code

Rationale: Burns of the forearm is selected as the MRDx/main problem over the first degree burn of face due to greater severity and selected over the burn of palm of hand due to larger body surface area.

Burns of Multiple Body Regions

In effect 2001

- DN** When documentation of specific sites of burns is provided, assign separate codes for each burn site.
- DN** Assign T29.— *Burns and corrosions of multiple body regions*, as a comorbid diagnosis type/other problem only when specific documentation of sites is not provided.
- DN** Assign T29.— *Burns and corrosions of multiple body regions*, optional, as a diagnosis type (3)/other problem, to facilitate data retrieval.

Example: Burn of third degree of left thigh and foot.

DN	<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
	T24.3	(M)	MP	Burn of third degree of hip and lower limb, except ankle and foot
	T25.3	(1)	OP	Burn of third degree of ankle and foot
	T29.3	(3)	OP	Burns of multiple regions, at least one burn of third degree mentioned

Assign also:

- extent of body surface involved
- external cause code
- place of occurrence code

Sequencing Multiple Injuries for Severity

In effect 2001, amended 2006, 2008

DN When there are multiple injuries, sequence the most severe (or life threatening) first.

See also the coding standard entitled [Diagnoses of Equal Importance](#).

Example: Patient was admitted following a motor vehicle accident with third degree burns of his head and neck (body surface area 11%) requiring extensive skin grafting, along with a lacerated muscle of the wrist requiring debridement and suturing, and traumatic amputation of two fingers.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
T20.3	(M)	Burn of third degree of head and neck
T31.12	(1)	Total body surface involved in burn (any degree) 10–19%, percentage that was third degree, 10–19%
S66.90	(1)	Injury of unspecified muscle and tendon at wrist and hand level, laceration
S68.2	(1)	Traumatic amputation of two or more fingers alone (complete) (partial)

Assign also:

- external cause code

Rationale: Third degree burns would be considered the most severe and life threatening.

DN When superficial (skin) injuries occur concomitantly with more severe injuries of the same body region, code only the more severe injuries.

Example: Patient presented with a fracture of the olecranon process. There was also multiple bruising and abrasions in the area.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S52.000	(M)	MP	Fracture of olecranon process of ulna, closed

Assign also:

- external cause code
- place of occurrence code

DN Classify significant injuries to the greatest level of specificity possible, even if this requires selection of more than one code from the same category.

See also the coding standards entitled [Significant Injuries](#) and [Specificity](#).

Exception: Do not assign the same diagnosis code more than once to capture multiple fractures located at the same site of a bone (e.g. fracture of shaft in two places) or for multiple/bilateral fractures of bones of which there is only one in the body (e.g. bilateral fractures of mandible). See also the coding standard entitled [Bilateral Injuries](#).

Example: Patient was admitted following open fracture of bones of his hand, specified as neck of first metacarpal, the proximal phalanx of the thumb, and a closed fracture of the shaft of his third metacarpal.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S62.221	(M)	MP	Fracture of neck of first metacarpal bone, open
S62.501	(1)	OP	Fracture of proximal phalanx, open
S62.310	(1)	OP	Fracture of shaft of other metacarpal bone, closed

Assign also:

- external cause code
- place of occurrence code

Rationale: The sites of each fracture are specified and therefore coded to the greatest level of specificity even though the codes are from the same three character category.

Code Assignment for Multiple Superficial Injuries

In effect 2006, amended 2008



Use combination categories to describe multiple and/or bilateral superficial injuries or open wounds of the same body region.

Unlike significant injuries, multiple injuries classified in the categories listed in the tables below do not need to be classified individually. They may be captured individually to meet facility or provincial/territorial data reporting requirements.

Use just one code to identify multiple open wounds.

Choose from the following:

- S01.7–** of head
- S11.7–** of neck
- S21.7–** of thorax
- S31.7–** of lower back and pelvis
- S41.7–** of shoulder and upper arm
- S51.7–** of forearm
- S61.7–** of wrist and hand
- S71.7–** of hip and thigh
- S81.7–** of lower leg
- S91.7–** of ankle and foot
- T01.–** of multiple body regions (see fourth character for body site combinations)

Example: Patient sustained lacerations to his thumb, palm and middle finger following a construction site accident where his hand was caught in machinery.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S61.70	(M)	MP	Multiple open wounds of wrist and hand, uncomplicated
W31	(9)	OP	Contact with other and unspecified machinery
U98.6	(9)	OP	Place of occurrence, industrial and construction area

Rationale: The multiple open wounds are all classifiable to the S61 category. Since these are not significant injuries, they can be captured using the combination code S61.70.

Use just one code to identify multiple superficial injuries.

Choose from the following:

- S00.7–** of head
- S10.7–** of neck
- S20.7–** of thorax
- S30.7–** of lower back and pelvis
- S40.7–** of shoulder and upper arm
- S50.7–** of forearm
- S60.7–** of wrist and hand
- S70.7–** of hip and thigh
- S80.7–** of lower leg
- S90.7–** of ankle and foot
- T00.–** of multiple body regions (see fourth character for body site combinations)

Code Assignment for Multiple Types of Significant Injuries Involving a Single Body Region

In effect 2001, amended 2006, 2008



When there are two or more significant types of injuries involving a single body region, classify each injury to the greatest level of specificity indicated in the documentation and sequence in order of severity.

See also the coding standard entitled [Significant Injuries](#).

The following codes can be used as a flag to identify cases with multiple significant injuries. If used, they must be assigned diagnosis type (3):

- S09.7 (3) Multiple injuries of head
Injuries classified to more than one of the categories (S02–S09.2)
- S19.7 (3) Multiple injuries of neck
Injuries classified to more than one of the categories (S12–S18)
- S29.7 (3) Multiple injuries of thorax
Injuries classified to more than one of the categories (S22–S29.0)

- S36.7 (3) Multiple injuries of intra-abdominal organs
Injuries classified to more than one of the categories (S36.0–S36.9)
- S37.7 (3) Multiple injuries of pelvic organs
Injuries classified to more than one of the categories (S37.0–S37.9)
- S39.7 (3) Multiple injuries of intra-abdominal with pelvic organs
Injuries classified to more than one of the categories (S32–S39)
- S49.7 (3) Multiple injuries of shoulder and upper arm
Injuries classified to more than one of the categories (S42–S48)
- S59.7 (3) Multiple injuries of forearm
Injuries classified to more than one of the categories (S52–S58)
- S69.7 (3) Multiple injuries of wrist and hand
Injuries classified to more than one of the categories (S62–S68)
- S79.7 (3) Multiple injuries of hip and thigh
Injuries classified to more than one of the categories (S72–S78)
- S89.7 (3) Multiple injuries of lower leg
Injuries classified to more than one of the categories (S82–S88)
- S99.7 (3) Multiple injuries of ankle and foot
Injuries classified to more than one of the categories (S92–S98)

More than one type of significant injury occurring in the same body region is considered “multiple” injuries of that body region.

Example: Patient admitted following snowmobile accident where he was the driver.
He sustained an open trochanteric fracture of the femur, a non-contiguous laceration of the gluteus maximus, injury to several blood vessels and the sciatic nerve at the thigh level.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S72.191	(M)	MP	Unspecified trochanteric fracture, open
S74.00	(1)	OP	Laceration of sciatic nerve at hip and thigh level
S76.00	(1)	OP	Laceration of muscle and tendon of hip
S75.7	(1)	OP	Injury of multiple blood vessels at hip and thigh level
S79.7	(3)	OP	Multiple injuries of hip and thigh
V86.50	(9)	OP	Driver of snowmobile injured in nontraffic land accident

Rationale: These injuries are all considered significant for assignment of the multiple injuries code for a single body region. Since the documentation does not provide further specification of the blood vessel injuries, S75.7 is assigned.



Ensure that the S–9.7 *Multiple injuries of*—codes are not assigned to identify multiple injuries when one significant injury occurs with one or more superficial wounds.

Example: Patient was admitted following a construction site accident where his hand was injured in machinery. He sustained a closed fracture of the distal phalanx of his index finger and lacerations of his thumb, palm and middle finger.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S62.610	(M)	MP	Fracture of distal phalanx of finger, closed
S61.70	(3)	OP	Multiple open wounds of wrist and hand, uncomplicated
W31	(9)	OP	Contact with other and unspecified machinery
U98.6	(9)	OP	Place of occurrence, industrial and construction area

Rationale: The multiple superficial injuries are captured using the combination code S61.70 (see also the coding standard entitled [Code Assignment for Multiple Superficial Injuries](#)). However, S69.7 *Multiple injuries of wrist and hand* is not assigned since there is only one type of significant injury in this case.

Code Assignment for Multiple Types of Significant Injuries Involving Multiple Body Regions

In effect 2001, amended 2006, 2008



Whenever there are two or more significant types of injuries involving multiple body regions, classify each injury to the greatest level of specificity indicated in the documentation and sequence injuries in order of severity.

See also the coding standards entitled [Significant Injuries](#) and [Sequencing Multiple Injuries for Severity](#).

T06.8 *Other specified injuries involving multiple body regions*, can be used as a flag to identify cases with multiple significant injuries involving multiple body regions. If used, it must be assigned diagnosis type (3).

When T06.8 is assigned, a code from S—9.7 *Multiple injuries of—* is not required.

Example: The driver of a snowmobile injured in a traffic accident sustained multiple injuries to multiple body regions: a LeFort 3 fractured maxilla, subdural hematoma with a 65 minute loss of consciousness, open wound of abdomen with contusion of the pancreas, laceration of duodenum and bile duct, closed fracture C6 vertebra, open fractures of upper end of humerus and of clavicle.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S06.5	(M)	MP	Traumatic subdural haemorrhage
S36.201	(1)	OP	Haematoma of pancreas (without pancreatic duct injury), with open wound into cavity
S36.421	(1)	OP	Laceration of duodenum with bile duct or duodenopancreatic complex injury, with open wound into cavity
S02.431	(1)	OP	Fracture of malar and maxillary bones, LeFort 3, unilateral, open
S12.210	(1)	OP	Fracture of C5–C7 vertebra, closed
S42.281	(1)	OP	Fracture of other part of upper end of humerus, open
S42.011	(1)	OP	Fracture of shaft of clavicle, open
T06.8	(3)	OP	Other specified injuries involving multiple body regions
V86.00	(9)	OP	Driver of snowmobile injured in traffic accident

Note: Any abstract where multiple codes begin with the letter “S” and the second character changes indicate the code T06.8 may be assigned because the second character refers to the different body regions. For instance, S06 + S44 = multiple types of significant injury involving multiple body regions.

Neither superficial injuries (third character = “0”) nor open wounds (third character = “1”) are considered significant types of injury for the purposes of assignment of this multiple injury code. However, certain open wounds or superficial injuries could qualify as comorbid conditions.

Coding Nonspecific Multiple Injuries for Emergency Department Visits

In effect 2001, amended 2002, 2006



When documentation does not permit assignment of specific injury codes for significant injuries, assign a multiple injury code as the main problem for emergency department visit abstraction.

See also the coding standard entitled [Sequencing Multiple Injuries for Severity](#).

Example: A passenger of a car was injured when a bus struck the vehicle in which she was riding. She sustained severe multiple injuries to several body regions. Patient was transferred to a trauma centre before the diagnostic work-up was completed.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
T06.8	MP	Other specified injuries involving multiple body regions
V44.6	OP	Car occupant, passenger, injured in collision with heavy transport vehicle or bus, traffic accident

Post-Intervention Conditions

[Click here for description of change.](#)

In effect 2009, amended 2012

Post-Intervention Condition Code Assignment

The code assignment for a post-intervention condition consists of:

- A primary code which, when following the alphabetical index classifies the condition or symptom to one of the following:
 - a code from T80–T88 *Complications of surgical and medical care, not elsewhere classified* (T-code),
 - a post-procedural disorder code found in most body system chapters (PP-code),
 - the regular code (the usual code in the classification).
- An additional code to provide specificity, mandatory when available.
- An external cause code to identify the nature of the post-intervention condition, mandatory.

Note: It is mandatory to apply a diagnosis cluster to the set of codes that describe a post-intervention condition. See also the coding standard [Diagnosis Cluster](#).

Note: Diagnosis typing/problem definitions apply to post-intervention conditions. When a post-intervention condition does not meet the criteria for significance, it is optional to assign codes; however, when codes are assigned, the following directive statements apply.



Classify a condition or symptom as a post-intervention condition when:

- a condition or symptom that is not attributable to another cause arises during an uninterrupted continuous episode of care within 30 days following an intervention (including transfers from one facility to another); or
- a cause/effect relationship is documented, regardless of timeline.



Assign a minimum of two codes:

- either a T-code, PP-code or regular code upon following the alphabetical index; and
- one external cause code from either:
 - (Y60–Y69) *Misadventures to patients during surgical and medical care, or*
 - (Y70–Y82) *Medical devices associated with adverse incidents in diagnostic and therapeutic use, or*
 - (Y83–Y84) *Surgical and other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure.*

Note: The 30 day timeline does not apply when a patient has been discharged. This is considered an interruption in care (no longer continuous episode of care). On re-admission, a condition must be clearly documented as post-procedural to be classified as a post-intervention condition.

Note: The 30 day timeline includes direct transfers between the same level of care at different facilities (e.g. acute to acute) and different levels of care at the same or different facility (e.g. ambulatory care to acute). A direct transfer constitutes an uninterrupted continuous episode of care and the 30 day timeline rule still applies.

Example: Patient is admitted with a diagnosis of pneumonia. The history mentions that the patient had a radical hysterectomy eight days ago.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
J18.9	(M)	Pneumonia, unspecified

Rationale: The pneumonia is not classified as a post-intervention condition because there is no clear documentation by the physician that a cause/effect exists between the pneumonia and the previous intervention. Once a patient is discharged, the 30 day timeline is no longer in effect.

Note: When it is clear from the chart documentation that a condition or symptom occurring in the post-intervention period of 30 days is attributable to another cause it is not classified as a post-intervention condition. This includes:

- a condition that represents a worsening of the very condition being treated;
- an exacerbation of a pre-existing condition;
- a condition that is due to another cause, for example:
 - a condition that is the result of an accident;
 - an adverse effect of a drug, medicament or biological agent in therapeutic use.

Example: Patient was admitted with congestive heart failure and subsequently had a cardiac catheterization performed during the admission. Five days later, while still an inpatient, the patient experienced acute respiratory failure. The physician documents that the respiratory failure is due to congestive heart failure.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
J96.09	(2)	Acute respiratory failure, type unspecified

Rationale: The respiratory failure has been documented as due to congestive heart failure; therefore, it is not classified as a post-intervention condition. It is due to another cause.

Example: A patient with known atrial fibrillation was admitted for coronary artery bypass surgery. On postoperative day two he had an episode of atrial fibrillation and was monitored in CCU.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I48.90	(1)	Atrial fibrillation, unspecified

Rationale: Atrial fibrillation was a known condition prior to surgery; therefore, it is not classified as a post-intervention condition. It is an exacerbation of a pre-existing condition and is assigned diagnosis type (1).

Example On postoperative day one, the patient gets out of the hospital bed without assistance and falls resulting in a fractured hip.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
S72.090	(2)	Unspecified fracture of neck of femur, closed
W06	(9)	Fall involving bed
U98.2	(9)	Place of occurrence, school other institution and public area

Rationale: Although the injury occurred within 30 days following an intervention, the fracture is due to another cause (fall); therefore, it is not classified as a post-intervention condition.

Example: Patient presented to the emergency department after a fall at home onto their colostomy bag. Blood from the blunt trauma to the stoma was present in the colostomy bag.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
K91.40	MP	Haemorrhage from colostomy stoma
W19	OP	Unspecified fall
U98.0	OP	Place of occurrence, home

Rationale: A condition resulting from an accident is not classified as a post-intervention condition because it is due to another cause (accident). Hemorrhage from colostomy is classified to K91.40 per the alphabetical index. Assigning an external cause code for the accident distinguishes a colostomy hemorrhage that is the result of an accident from one that is a post-intervention condition (cause/effect with the stoma itself).

Example: Patient tripped and fell while at a physiotherapy clinic and suffered a fracture of the femur at the lower end where the bone plate and screws were in-situ following a previous fracture repair. The final diagnosis is periprosthetic fracture.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
M96.6	(M)	Fracture of bone following insertion of orthopaedic implant, joint prosthesis, or bone plate
W01	(9)	Fall on same level from slipping, tripping and stumbling
U98.2	(9)	Place of occurrence, school other institution and public area

Rationale: A condition resulting from an accident is not classified as a post-intervention condition because it is due to another cause (accident). A periprosthetic fracture is classified to M96.6 per the classification. Assigning an external cause code for the accident distinguishes a periprosthetic fracture that is the result of an accident from one that is a post-intervention condition (cause/effect with the implant itself).

Example: Patient had a previous fracture of the left femoral neck with fixation using screws. In the nursing home, the patient experienced hip pain and an X-ray confirmed a displaced fracture of the femoral neck. Patient was admitted for hemiarthroplasty for management of this periprosthetic fracture.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
M96.6	(M)	A	Fracture of bone following insertion of orthopaedic implant, joint prosthesis, or bone plate
S72.090	(3)	A	Unspecified fracture of neck of femur, closed
Y83.1	(9)	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: A periprosthetic fracture is classified to M96.6 per the classification. This condition is classified as a post-intervention condition (cause/effect with the implant itself) as it was not associated with an accident (external cause). M96.6 does not identify the type of fracture; therefore, S72.090 is assigned to add this specificity.

Note: Complications of postoperative wounds (e.g. wound hemorrhage, wound dehiscence, wound infection) are always classified as a post-intervention condition because the relationship to the intervention is inherent in the diagnosis. There may be contributing factors; however, a wound complication cannot be said to be attributable to another cause (e.g. accident).

Example: A patient who had a knee replacement 8 days ago presents to the hospital with bleeding from the operative wound after bumping his knee. The diagnosis is wound hematoma.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T81.0	(M)	MP	A	Haemorrhage and haematoma complicating a procedure, not elsewhere classified
Y83.1	(9)	OP	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Wound hematoma is classified as a post-intervention condition because a relationship to the intervention is inherent in the diagnosis. Assignment of an additional external cause code (W22.08) is not required in spite of the contributing external factors.

Note: When a condition arises following an intervention to administer a substance, the condition can be related to the substance that was administered or be related to the act of administering the substance. A condition that is related to the substance that was administered is an adverse effect in therapeutic use and is classified according to the standard entitled *Adverse Reactions in Therapeutic Use Versus Poisonings*. A condition that is related to the act of administering the substance is a post-intervention condition.

Example: Following infusion of blood products while in ICU, patient develops symptoms that are documented as a mild transfusion reaction.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T80.9	(3)	A	Unspecified complication following infusion, transfusion and therapeutic injection
Y44.6	(9)	A	Natural blood and blood products causing adverse effects in therapeutic use

Rationale: “Transfusion reaction” relates to the substance (blood product) that was administered and not to the act of administering the substance (transfusing); therefore, this is classified as an adverse effect in therapeutic use and not a post-intervention condition. Transfusion reaction without further specification is assigned to T80.9. Assigning an external cause code for the substance causing the adverse effect distinguishes a complication following transfusion that is the result of the substance from one that is a result of the intervention.

Example: Patient is seen in consultation for transfusion-related phlebitis of the forearm.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T80.1	(2)	A	Vascular complications following infusion, transfusion and therapeutic injection
I80.8	(3)	A	Phlebitis and thrombophlebitis of other sites
Y84.8	(9)	A	Other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The phlebitis is related to the act of administering the substance and not to the substance that was administered; therefore, is classified as a post-intervention condition.

Note: When a condition can reasonably be assumed to be unrelated to a particular intervention or to an intervention at all, it is not classified as a post-intervention condition, for example:

- it can reasonably be assumed that pneumonia would be unrelated to a diagnostic imaging intervention.
- it can reasonably be assumed that acquiring a communicable disease would be unrelated to an intervention at all.

Example

Patient admitted with advanced breast cancer with metastases to lung, brain and bone. Additional diagnoses on admission include pulmonary embolism and MRSA cellulitis of chest wall. The patient's course in hospital was complicated by non ST elevation myocardial infarction (MI) and congestive heart failure (CHF) which initially improved but subsequently the patient deteriorated and expired on day 25. Multiple diagnostic imaging interventions including ultrasound and magnetic resonance imaging (MRI) and palliative radiotherapy to the breast and lumbar spine were performed prior to the presentation of the MI and CHF.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
I21.4	(2)	Acute subendocardial myocardial infarction
R94.31	(3)	Abnormal cardiovascular function studies (biomarkers or ECG) suggestive of non ST segment elevation myocardial infarction [NSTEMI]
I50.0	(2)	Congestive heart failure

Rationale: Based on what we know about MI and CHF, the interventions that were performed and this patient's overall condition, it is reasonable to assume that the MI and CHF are unrelated to the diagnostic imaging interventions or radiation therapy. Additionally, there is no mention in the documentation of such a relationship. Therefore, these conditions are not classified as a post-intervention condition.

Note: When post-intervention conditions related to obstetrical cases are classified to Chapter XV—*Pregnancy, childbirth and the puerperium (O00–O99)* the directives pertaining to post-intervention conditions do not apply.

Example:

Patient delivered by Cesarean section for obstructed labor due to breech presentation of the baby. Prior to discharge, Cesarean wound dehiscence was diagnosed.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O64.101	(M)	Obstructed labour due to breech presentation, delivered, with or without mention of antepartum condition
O90.002	(2)	Disruption of caesarean section wound, delivered, with mention of postpartum complication
Z37.000	(3)	Single live birth, pregnancy resulting from both spontaneous ovulation and conception

Rationale: Cesarean wound dehiscence is classified to Chapter XV- *Pregnancy, childbirth and the puerperium (O00–O99)*. The directives for post-intervention conditions do not apply.

Example:

Patient admitted with a diagnosis of complete spontaneous abortion attributed to recent amniocentesis.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
O05.9	(M)	Other abortion, complete or unspecified, without complication

Rationale: Abortion following amniocentesis is classified to Chapter XV – *Pregnancy, childbirth and the puerperium (O00–O99)*. The directives for post-intervention conditions do not apply.

Example: Patient at 28 weeks gestation is admitted with a fracture of the humerus following a motor vehicle accident. Following open reduction internal fixation, there was disruption of the wound that prolonged the stay.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.3	(2)	A	Disruption of operation wound, not elsewhere classified
Y83.1	(9)	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: While this is an obstetrical patient, disruption of an operation wound from an ORIF is not classified to Chapter XV—*Pregnancy, childbirth and the puerperium (O00–O99)*; it is classified to *Complications of surgical and medical care, not elsewhere classified (T80–T88)* and the directives for post-intervention conditions apply.

Example: Patient with postpartum hemorrhage due to retained products one day following delivery is taken to the operating room for a D&C during which there is a tear to the cervix which is repaired with a suture.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.2	(2)	A	Accidental puncture and laceration during a procedure, not elsewhere classified
S37.610	(3)	A	Laceration of uterus, without open wound into cavity
Y60.0	(9)	A	Unintentional cut, puncture, perforation or haemorrhage during surgical and medical care during surgical operation

Rationale: While this is an obstetrical patient, tear of the cervix during D&C following delivery is not classified to Chapter XV—*Pregnancy, childbirth and the puerperium (O00–O99)*; it is classified to *Complications of surgical and medical care, not elsewhere classified (T80–T88)* and the directives for post-intervention conditions apply.

Searching the Alphabetical Index for the Primary Code for a Post-Intervention Condition

The steps for locating the primary code for a post-intervention condition have been revised to help clarify the intent of each step and to better address all of the variables that are encountered.

Searching the Alphabetical Index

Step 1: Locate lead term.

- a. **Misadventure**—Condition or circumstance meets the criteria for a misadventure. Search the lead term “Misadventure” and the applicable subterm and assign the code per the classification. See also the coding standard entitled *Misadventures During Surgical and Medical Care*. **END**
- b. **Select Interventions Group A**—Condition is related to (associated with) one of the following interventions:
 - **Artificial fertilization** (N98)
 - **Immunization (includes vaccination)** (T88.0, T88.1)
 - **Infusion, transfusion, therapeutic injection (includes dialysis, extracorporeal circulation and perfusion)** (T80)

Search the lead term “Complication, complications (from) (of)” and a subterm denoting the specific intervention and assign the code per the classification. **END**
- c. **All others:**
Search the specific condition or symptom. **GO TO STEP 2**

Step 2: Look for a subterm denoting “post-procedural”.

- a. **No post-procedural subterm:**
When there is no post-procedural subterm. **GO TO STEP 3**
- b. **Single subterm:**
When a single subterm denoting post-procedural exists, assign the code per the classification. **END**
- c. **Two or more subterms:**
When there are two or more “post-procedural” subterms
 - one leading to a code specific to one of the select interventions listed in Group B at Step 3a; and
 - one leading to a code from category T81 *Complications of procedures, not elsewhere classified*

assign the code specific to the select intervention in Group B when the condition is attributed (due to) or clearly related to/associated with the outcome of the intervention, otherwise, assign the code from category T81 *Complications of procedures, not elsewhere classified*. **END**

Step 3: Assign Regular Code or a Code for Select Intervention.

- a. **Select Interventions Group B**—Condition is attributed (due to) or clearly related to/associated with the outcome of one of the following select interventions:
 - **Amputation** (T87.3–, T87.4–, T87.5–, T87.6–)
 - the condition is directly related to the amputation stump itself
 - **Device, implant or graft** (T82–T85)
 - the condition is directly related to the in situ device, implant or graft itself

Searching the Alphabetical Index (cont'd)

- **Lumbar puncture** (G97.1)
– the condition is directly related to the effects of cerebrospinal fluid loss
- **Mastoidectomy** (H95.0, H95.1)
– the condition is directly related to the postmastoidectomy cavity
- **Reattached extremity/body part** (T87.0–, T87.1–, T87.2–)
– the condition is directly related to the reattached limb itself
- **Stoma** (J95.0–, K91.4–, K91.6–, N99.5–)
– the condition is directly related to the established (healed) stoma

Search the lead term “Complication, complications (from) (of)” and a specific subterm for the select intervention and assign the code per the classification. **END**

b. All others:

Assign the regular code per the classification. **END**

Example: Surgical sponge left in operative wound.

Misadventure (prophylactic) (therapeutic) (see also Complications) T88.9

- during
- – procedure (surgical or medical) T81.9
- – – foreign body accidentally left in body cavity or operation wound T81.5–

Rationale: The condition meets the criteria of a misadventure, thus, search lead term “Misadventure” and the applicable subterm and select T81.5–.

Example: Deltoid bursitis following administration of vaccine.

Complication, complications (from) (of)

- vaccination T88.1

Rationale: The condition is related to one of the Group A select interventions (Step 1b), thus search the lead term “Complication, complications (from)(of)” and a subterm denoting the specific intervention and select T88.1.

Example: Wound infection following mastectomy six weeks previously.

Infection

- postoperative wound T81.4 (select this T-code)

Rationale: There is a single subterm denoting post-procedural, thus T81.4 is selected.

Example: Abdominopelvic abscess three days following surgery.

Abscess (embolic) (infective) (metastatic) (multiple) (pyogenic) (septic) L02.9

- abdominopelvic K65.0
- postoperative (any site) T81.4 (select the T-code)

Rationale: There is a single subterm denoting post-procedural; therefore, T81.4 is selected. Note that the “post-procedural” subterm takes precedence over the regular code that specifies the site of the abscess.

Searching the Alphabetical Index (cont'd)

Example: Extensive pelvic adhesions following radical oophorectomy two years ago.

Adhesions, adhesive (postinfective)

- pelvic (peritoneal)
- – female N73.6
- – – postprocedural N99.4 (select this PP-code)
- postoperative
- – pelvic peritoneal N99.4 (select this PP-code)

Rationale: There are two subterms denoting post-procedural but since each leads to the same code, it is equivalent to a single subterm, thus N99.4 is selected.

Example: Postoperative pleural effusion occurring on day two following hepatectomy.

Effusion

- pleura, pleurisy, pleuritic, pleuropericardial J90 (select the regular code)

Rationale: There is no subterm denoting post-procedural and the intervention is not one of the identified Group B select interventions (Step 3a); therefore, select J90.

Example: Postoperative pleural effusion occurring on day two following coronary artery bypass graft (CABG).

Effusion

- pleura, pleurisy, pleuritic, pleuropericardial J90 (select the regular code)

Rationale: There is no subterm denoting post-procedural. The intervention is one of the Group B select interventions (Step 3a); however, the pleural effusion is not directly related to the in situ graft itself; therefore, select J90.

Example: Streptococcal sepsis diagnosed three days following formation of tracheostomy stoma.

Sepsis (generalized) (see also Infection) A41.9

- due to device, implant or graft (see also Complications, by site and type, infection or inflammation) T85.7
- Streptococcus, streptococcal A40.9
- postprocedural T81.4 (select the T-code)
- tracheostomy stoma J95.01
- – site of current (healing) surgical wound T81.4

Rationale: There are two or more post-procedural subterms in the index lookups:

1. Sepsis—postprocedural (T81.4); and
2. Sepsis—tracheostomy stoma J95.01.

Since sepsis is not directly related to the outcome of tracheostomy (i.e. an established (healed) stoma), T81.4 is selected.

Searching the Alphabetical Index (cont'd)

Example: Vertigo following lumbar puncture.
 Vertigo R42
 Complication, complications (from) (of)
 – lumbar puncture G97.1 (select G97.1)

Rationale: There is no subterm denoting post-procedural under the lead term “vertigo”. Since the condition is directly related to the outcome of the Group B select intervention lumbar puncture (effects of cerebrospinal fluid loss), search using the lead term “Complication, complications (from)(of)” and a specific subterm for the select intervention.

Note: Do not classify a post-intervention condition arising in a neonate to Chapter XVI—*Certain conditions originating in the perinatal period (P00-P96)*. Post-intervention conditions in a neonate are classified in the same manner as other post-intervention conditions.

Example: A newborn with congenital diaphragmatic hernia had the hernia repair with simple closure at eight days of age. Five days following surgery, the baby developed pleural effusion which required a thoracentesis.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
J90	(2)	A	Pleural effusion, not elsewhere classified
Y83.4	(9)	A	Other reconstructive surgery as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The pleural effusion arose during an uninterrupted continuous episode of care within the 30 day timeline; therefore, it is classified as a post-intervention condition. There is no subterm denoting post-procedural for pleural effusion and hernia repair is not a select intervention; therefore, the regular code is selected. The subterm for fetus or newborn (P28.8) is not selected as the pleural effusion is not considered a naturally-occurring respiratory condition originating in the perinatal period.

Example: Patient diagnosed with streptococcal sepsis three days following left side oophorectomy for ovarian malignancy.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.4	(2)	A	Infection following a procedure, not elsewhere classified
A40.9	(3)	A	Streptococcal sepsis, unspecified
Y83.6	(9)	A	Removal of other organ (partial) (total), as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Streptococcal sepsis arose during an uninterrupted continuous episode of care within the 30 day timeline and is not attributable to another cause; therefore, it is classified as a post-intervention condition. In the alphabetical index, a single subterm denoting post-procedural exists under the lead term “sepsis”; therefore, T81.4 is assigned. An additional code, A40.9, is mandatory to further specify the type of infection.

Example: The patient was admitted for a mechanical valve replacement. As the incision was being closed, she arrested on the operating table. An open cardiac massage was performed but was unsuccessful and the patient died in the operating room.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
I46.9	(2)	A	Cardiac arrest, unspecified
Y83.1	(9)	A	Surgical operation with implant of artificial internal device, as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Cardiac arrest is classified as a post-intervention condition because it occurred during an uninterrupted continuous episode of care within the 30 day timeline and is not attributable to another cause. On searching the alphabetical index for cardiac arrest, there is no subterm denoting post-procedural and the cardiac arrest is not directly related to the in situ device; therefore, the regular code I46.9 is assigned.

Example: A patient had an abdominal hysterectomy and was discharged home. She returned to hospital with a wound infection.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T81.4	(M)	MP	A	Infection following a procedure, not elsewhere classified
Y83.6	(9)	OP	A	Removal of other organ (partial) (total), as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Wound infection is classified as a post-intervention condition because a relationship to the intervention is inherent in the diagnosis. The alphabetical index leads to T81.4.

Example: Patient presents to hospital for lysis of extensive pelvic adhesions due to previous radical oophorectomy.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
N99.4	(M)	MP	A	Postprocedural pelvic peritoneal adhesions
Y83.6	(9)	OP	A	Removal of other organ (partial) (total), as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The pelvic adhesions are classified as a post-intervention condition because there is a documented cause/effect relationship. A single subterm denoting post-procedural exists under the lead term “Adhesions”; therefore, N99.4 is assigned.

Example: Patient had a tonsillectomy and was discharged without any apparent problems. She returned to the hospital the next day complaining of significant pain. Physician prescribed ibuprofen for the “postoperative pain” and advised the patient to return if any further problems.

N

<u>Code</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
R52.0	MP	A	Acute pain
Y83.6	OP	A	Removal of other organ (partial) (total), as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure.

Rationale: On readmission, cause/effect must be clearly documented. In this example, the physician has described the pain as postoperative thereby establishing the relationship. This example also illustrates that a symptom that meets the definition equally qualifies as a post-intervention condition. On searching the alphabetical index for pain, there is a single subterm denoting post-procedural; therefore, R52.0 is assigned.

Example: Patient has had a relatively uneventful postoperative course following single-lung transplantation for primary pulmonary hypertension; however, on postoperative day 32 of the admission, she develops pleural effusion requiring thoracentesis. CT scans are suspicious for fungal lung infection but no definite infectious cause was documented. The discharge summary reads in part “post-transplant pleural effusion of undetermined cause.”

D

<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
J90	(2)	A	Pleural effusion, not elsewhere classified
Y83.0	(9)	A	Surgical operation with transplant of whole organ or tissue as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Although the pleural effusion arose after 30 days, it is documented as having a cause/effect relationship and, therefore, classified as a post-intervention condition. On searching the alphabetical index for pleural effusion, there is no subterm denoting post-procedural and transplant is not a select intervention; therefore, the regular code J90 is assigned.

Example: On day five following surgery for pinning of a fracture of the femur, this elderly patient was transferred from Hospital A to Hospital B to be closer to family. On postoperative day ten in Hospital B the patient developed atelectasis requiring fiberoptic bronchoscopy to aspirate secretions.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
J98.10	(2)	A	Atelectasis
Y83.1	(9)	A	Surgical operation with implant of artificial internal device, as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The atelectasis is classified as a post-intervention condition at Hospital B because it arose within 30 days of the intervention during an uninterrupted continuous inpatient episode of care and is not attributable to another cause. On searching the alphabetical index for atelectasis, there is no subterm denoting post-procedural and the atelectasis is not directly related to the in situ device itself; therefore, the regular code J98.10 is assigned.

Example: Patient had an inguinal hernia repair and developed nausea and vomiting following surgery which settled quickly on its own.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
R11.3	(3)	OP	A	Nausea and vomiting
Y83.4	(9)	OP	A	Other reconstructive surgery as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Although nausea and vomiting do not meet the criteria for significance in this example, when codes are assigned to describe a post-intervention condition, the directive statements related to post-intervention condition code assignment apply.

Example: Two days following elective surgery for graft replacement of an abdominal aortic aneurysm (AAA), patient develops respiratory failure requiring ventilator support.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
J95.2	(2)	A	Acute pulmonary insufficiency following nonthoracic surgery
Y83.2	(9)	A	Surgical operation with anastomosis, bypass or graft as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Per the alphabetical index, respiratory failure following surgery is classified to a code in category J95 based on whether it is acute or chronic and, if it is acute, whether the surgery was thoracic surgery or nonthoracic surgery. The documentation does not specify acute respiratory failure; however, it was of abrupt onset and in need of decisive, prompt treatment as compared to respiratory failure that persists or recurs over a long period of time with little or no change which is considered chronic. Repair of an abdominal aortic aneurysm is nonthoracic surgery, thus J95.2 is selected. While the code title says “acute pulmonary insufficiency”, respiratory failure is included here per the exclusion at J96 and the index lookup.


Residual Codes

Always follow the alphabetical index to locate the appropriate code. Residual codes (.8 codes) in the body system chapters and the injury chapter are used primarily to classify unique conditions that exist only as a result of an intervention, thus are not classifiable elsewhere. It is important that only conditions classified to these codes per the alphabetical index or tabular be assigned to these codes.

Note: When a condition does not have a subterm denoting post-procedural, do not default to a residual T-code (e.g. T81.88 *Other complications of procedures, not elsewhere classified*) or residual PP-code (e.g. K91.8 *Other postprocedural disorders of digestive system, not elsewhere classified*). In these circumstances, assign the regular code, unless the condition is directly related with a select intervention identified in the section Searching the Alphabetical Index for the Primary Code for a Post-Intervention Condition.

Note: Since residual categories primarily capture conditions that are not classifiable elsewhere, typically an additional code is not assigned. See also the section in this standard entitled [Assignment of Additional Codes for Specificity](#).

Example: Patient presents to hospital for management of afferent loop syndrome.

	<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
	K91.8	(M)	MP	A	Other postprocedural disorders of digestive system, not elsewhere classified
	Y83.9	(9)	OP	A	Surgical procedure, unspecified, as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Afferent loop syndrome is a unique post-intervention condition that is specifically indexed and classified to a residual (.8) code. It is found in the alphabetical index as follows:
 Syndrome (see also Disease)
 – afferent loop NEC K91.8
 An additional code to identify the nature of this post-procedural disorder is not assigned as there is no other place in the classification where afferent loop syndrome is classified. This unique condition is classified to K91.8.

Example: Patient in ICU develops ventilator-associated pneumonia four days after having been intubated and started on mechanical ventilation.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
J95.88	(2)	A	Other postprocedural respiratory disorders
J18.9	(3)	A	Pneumonia, unspecified
Y84.8	(9)	A	Other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Ventilator-associated pneumonia (VAP) is not a unique post-intervention condition but it is specifically indexed and classified to a residual (.8) code. It is found in the alphabetical index as follows:

Pneumonia

– ventilator-associated (VAP) J95.88

There is a “use additional code” instruction at J95.88 to identify the specific type of pneumonia and J18.9 is assigned.

Assignment of Additional Codes for Specificity



When a post-intervention condition is classified to a code that does not fully describe the condition, assign an additional code (when available), mandatory, as a diagnosis type (3)/other problem, to provide more detail regarding the nature of the condition.

Note: A mandatory additional code for specificity does not include:

- symptoms associated with the post-intervention condition;
- situations where codes or clinical concepts are mutually exclusive;
- any additional or subsequent post-intervention condition(s). Additional and subsequent post-intervention conditions are conditions in and of themselves and are subject to diagnosis typing/problem definitions.

See also the coding standard entitled *Underlying Symptoms or Conditions*.

Note: An additional code is assigned when required and when available whether or not a “use additional code” instruction exists at the code.

Example: Patient seen in the cardiology clinic is started on antibiotics for symptoms related to subacute infective endocarditis. On the referral to hospital for admission, the patient's condition is described as PVE (prosthetic valve endocarditis).



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T82.6	(M)	A	Infection and inflammatory reaction due to cardiac valve prosthesis
I33.0	(3)	A	Acute and subacute infective endocarditis
Y83.1	(9)	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The alphabetical index leads to T82.6 for infection due to or resulting from a heart valve prosthesis. This code does not identify the type of infection associated with the prosthesis; therefore, I33.0 is assigned to add this specificity.

Example: Post spinal tap headache treated with blood patch.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
G97.1	(2)	OP	A	Other reaction to spinal and lumbar puncture
R51	(3)	OP	A	Headache
Y84.4	(9)	OP	A	Aspiration of fluid as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The alphabetical index leads to G97.1 which does not specify the type of reaction to the spinal tap; therefore, R51 is assigned to add this specificity.

Example: A patient presents for treatment of a wound infection. He had suffered an open wound of his arm that was treated by cleansing and suturing one day previously.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T81.4	(M)	MP	A	Infection following a procedure, not elsewhere classified
Y83.8	(9)	OP	A	Other surgical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: T81.4 does not specify the type of infection; however, an additional code is not available to describe a wound infection.

Example: Patient is readmitted for closed reduction of a dislocated left total hip replacement with no preceding trauma.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T84.03	(M)	A	Mechanical complication of hip prosthesis
Y83.1	(9)	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The alphabetical index leads to T84.03 for mechanical complication of orthopedic joint prosthesis of the hip. This code does not identify the type of mechanical complication but there is no additional code available to describe it as a dislocation. Using a code from category S73.0 *Dislocation of hip* is not appropriate because these codes relate to mutually exclusive concepts. One code (T84.03) is for a problem with a prosthetic hip (an implant) and the other (S73.0) is for a problem with a natural hip (bones that make up the hip joint).

Assignment of External Cause Code



When more than one post-intervention condition of the same nature is related (attributable) to the same intervention episode, assign the external cause code only once.



When there are post-intervention conditions associated with separate intervention episodes, assign an external cause code for each episode even when it means repeating the external cause code.

Note: A post-intervention condition “of the same nature” pertains to the external cause code. The post-intervention conditions are either:

- all misadventures (Y60–Y69);
- all adverse incidents associated with medical devices (Y70–Y82); or
- all abnormal reactions/late complications (Y83–Y84). Note that Y83–Y84 includes both abnormal reactions and later complications.

Example: Patient was admitted for an abdominal hysterectomy. On postoperative day two, she experienced urinary retention and atelectasis requiring further treatment and monitoring.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
R33	(2)	A	Retention of urine
J98.10	(2)	A	Atelectasis
Y83.6	(9)	A	Removal of other organ (partial) (total), as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: A single external cause code is assigned because both conditions are of the same nature (abnormal reactions) and were related to the same intervention episode.

Example: Patient was admitted for removal and replacement of an infected knee prosthesis that had been implanted 6 months ago. Following the revision procedure, the patient developed deep vein thrombosis (DVT) which prolonged the stay by more than one week.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T84.54	(M)	A	Infection and inflammatory reaction due to knee prosthesis
Y83.1	(9)	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
T81.7	(2)	B	Vascular complications following a procedure, not elsewhere classified
I80.2	(3)	B	Phlebitis and thrombophlebitis of other deep vessels of lower extremities
Y83.1	(9)	B	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: These post-intervention conditions are related to separate intervention episodes. An external cause code is assigned for each intervention episode, even though it is the same Y83 code (both the original intervention and the revision are classified to implant of a device). Repeating the identical external cause code indicates that there were multiple intervention episodes of this type (implant of device) that resulted in a post-intervention condition.



When different types of interventions are performed during the same intervention episode and it is unclear to which intervention the post-intervention condition is related (attributable), select the (.9) unspecified subcategory for the external cause code.

Example: Patient underwent an abdominal hysterectomy with A&P repair. On postoperative day two, she experienced urinary retention and atelectasis requiring treatment and monitoring.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
R33	(2)	A	Retention of urine
J98.10	(2)	A	Atelectasis
Y83.9	(9)	A	Surgical procedure, unspecified as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: It is unclear from the documentation whether the urinary retention and atelectasis are related to the A&P repair (Y83.4) or to the hysterectomy (Y83.6); therefore, the unspecified code Y83.9 is assigned.

See also [Appendix B—Y83–Y84 Inclusion List](#) and the coding standards entitled:

- [Diagnosis Cluster](#)
- [Complications of Devices, Implants or Grafts](#)
- [Early Complications of Trauma](#)
- [Misadventures During Surgical and Medical Care](#)
- [Occlusion Following Coronary Artery Bypass Grafts \(CABG\)](#)
- [Rejection/Failure of Transplanted Organs, Grafts and Flaps](#)

Rejection/Failure of Transplanted Organs, Grafts and Flaps

In effect 2002, amended 2006

N When the source of an organ or tissue is another person (homograft) or animal (xenograft) and a complication of the organ, graft or flap is failure or absolute rejection, assign a code from the category T86 *Failure and rejection of transplanted organs and tissues*.

N Do not use category T86 when the original source of the graft or flap is the patient's own body (autograft).

Note: For rejection/failure and complications of grafts for treatment of burns, see also the coding standard entitled [Burns and Corrosions](#).

Example: Patient admitted with kidney transplant (homograft) rejection.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T86.100	(M)	A	Kidney transplant rejection
Y83.0	(9)	A	Surgical operation with transplant of whole organ as the cause of abnormal reaction of the patient, or later complication, without mention of misadventure at the time of the procedure

Example: Patient is seen in hospital for management of necrosis of a myocutaneous breast flap.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T85.8	(M)	MP	A	Other complications of internal prosthetic devices, implants and grafts, not elsewhere classified
R02	(3)	OP	A	Gangrene, not elsewhere classified
Y83.2	(9)	OP	A	Surgical operation with anastomosis, bypass or graft, as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Category T86 is not used when a flap is sourced from the patient's own body.



When a condition is documented as affecting the transplanted organ or tissue, but cannot be classified as either failure or rejection, assign a code from category Z94 *Transplanted organ and tissue status*.



When it is unclear from the documentation whether the condition is a result of failure/rejection or a disease process, seek clarification from the physician.

Certain conditions, such as pre-existing chronic hepatitis C virus infection, may affect the transplanted organ and not be a result of the transplant itself. Other conditions, such as cancer arising in a transplanted organ or tissue may be due to long term immunosuppression of the patient. These are not classified as failure or rejection of the transplanted organ.

Example: Patient had a liver transplant due to damage from chronic hepatitis C virus infection two years ago. He has developed hepatitis C infection damage in his transplanted liver.



<u>Code</u>	<u>Code Title</u>
B18.2	Chronic viral hepatitis C
Z94.4	Liver transplant status

Example: Patient developed renal cell carcinoma in a transplanted kidney five years post transplant.



<u>Code</u>	<u>Code Title</u>
C64	Malignant neoplasm of kidney, except renal pelvis
Z94.0	Kidney transplant status

Complications of Devices, Implants or Grafts

[Click here for description of change.](#)

In effect 2001, amended 2002, 2006, 2008, 2012

Internal devices, implants and grafts used for diagnostic and therapeutic purposes may themselves fail to perform as intended or may produce undesirable effects. When a problem with the product or a problem that is caused by the product is the result of intrinsic (internal) forces, it is considered a post-intervention condition. When a problem with the product or a problem that is caused by the product is the result of extrinsic (external) forces (V01–X59 *Accidents*), it is not considered a post-intervention condition. This coding standard addresses the code assignment for a variety of circumstances that are encountered for patients with internal devices, implants and grafts and is organized by circumstances involving intrinsic (internal) forces and those involving extrinsic (external) forces (V01–X59 *Accidents*).

See also the coding standards entitled [Occlusion Following Coronary Artery Bypass Grafts \(CABG\)](#), [Rejection/Failure of Transplanted Organs, Grafts and Flaps](#) and [Post-Intervention Conditions](#).

There are three major categories to classify complications of internal devices:

Mechanical Complications	Infection/Inflammation	Other Complications
Breakdown (mechanical) Broken (device) (e.g. fractured) Displacement Leakage Malfunction Malposition Obstruction Perforation Protrusion Retention (retained)*	Assign an additional code to identify any documented septicaemia, mandatory. See also coding standard entitled Septicemia/Sepsis Assign an additional code, optional, to identify the organism, as applicable.	Embolism Fibrosis Hemorrhage Pain Stenosis Stricture Thrombosis Assign an additional code, mandatory, to identify the specific complication.

*** Notes:**

- An intact device that was intended (expected) to be left in the body (e.g. IUD) that is described as retained is classified as a mechanical complication. It is not classified as a foreign body.
- An intact device that was not intended (expected) to be left in the body (e.g. guidewire) that is retained following a procedure is classified to T81.5– *Foreign body accidentally left in body cavity or operation wound following a procedure*. See the coding standard entitled [Misadventures During Surgical and Medical Care](#).

Intrinsic Forces: Complications Excluding Malfunction and Breakage

Complications involving intrinsic (internal) forces are ones that arise from within; that is, they are not attributable to an external force. Extrinsic (external) forces include events classified to V01–X59 *Accidents*. These events (due to extrinsic forces) and malfunction and breakage due to intrinsic forces are addressed separately.



When a complication of an internal device, implant or graft (excluding malfunction and breakage) is attributed to intrinsic forces, assign:

- a code from categories T82–T85 for the specific complication,
 T82.– *Complications of cardiac and vascular prosthetic devices, implants and grafts*,
 T83.– *Complications of genitourinary prosthetic devices, implants and grafts*,
 T84.– *Complications of internal orthopedic devices, implants and grafts*,
 T85.– *Complications of other internal devices, implants and grafts*,
 and
- an external cause code from the range Y83–Y84 *Surgical and other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure*.

Example: Patient is admitted for revision of his total hip replacement prosthesis due to loosening and displacement of the hardware.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T84.03	(M)	A	Mechanical complication of hip prosthesis
Y83.1	(9)	A	Surgical operation with implant of artificial internal device, as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Loosening and displacement are considered a “mechanical complication”. Y83.1 is assigned as the loosening and displacement of the device is not related to malfunction or breakage or associated with an extrinsic force (V01–X59 *Accidents*). In most cases it is attributable to the normal wear and tear of the implant surfaces and the subsequent weakening (osteolysis) of the surrounding bone.

Example: Patient developed staphylococcal septicemia documented as due to infection from a PICC line.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T82.7	(M)	A	Infection and inflammatory reaction due to other cardiac and vascular devices, implants and grafts
A41.2	(3)	A	Sepsis due to unspecified staphylococcus
Y84.8	(9)	A	Other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: When an infective process is attributable to a device, a code for “infection and inflammatory reaction” is assigned. Y84.8 is assigned as the infective process is not related to malfunction or breakage or associated with an extrinsic force (V01–X59 *Accidents*).

Example: Pain in right hip due to hip prosthesis. No dislocation or displacement identified on X-rays.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T84.8	(M)	MP	A	Other complications of internal orthopaedic prosthetic devices, implants and grafts
M25.55	(3)	OP	A	Pain in joint, pelvic region and thigh
Y83.1	(9)	OP	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: Pain that is directly attributable to a device, implant or graft is assigned to “other complications”. Y83.1 is assigned as the pain is not related to malfunction or breakage or associated with an extrinsic force (V01–X59 *Accidents*).

Example: Patient presents for removal of retained IUD.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T83.3	(M)	MP	A	Mechanical complication of intrauterine contraceptive device
Y84.8	(9)	OP	A	Other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: A medical device intended (expected) to be in the body that is described as retained is classified as a mechanical complication. It is not classified as a foreign body. Y84.8 is assigned in this case as the mechanical complication is not related to malfunction or breakage or associated with an extrinsic force (V01–X59 *Accidents*).

Intrinsic Forces: Malfunction or Breakage

Complications involving intrinsic (internal) forces are ones that arise from within; that is, they are not attributable to an external force. Extrinsic (external) forces include events classified to V01–X59 *Accidents* and are addressed in another directive box below.



When an internal device unexpectedly malfunctions or breaks and is attributed to an intrinsic force, assign:

- a code for mechanical complication from the applicable category T82–T85; and
- an external cause code from the range Y70–Y82 *Medical devices associated with adverse incidents in diagnostic and therapeutic use*.

Note: External cause codes from the range Y70–Y82 *Medical devices associated with adverse incidents in diagnostic and therapeutic use* are assigned exclusively for unexpected malfunctioning or breakage of a device.

Example: Patient presents for urgent replacement of pacemaker lead due to fracture of the right ventricular lead.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T82.1	(M)	A	Mechanical complication of cardiac electronic device
Y71.2	(9)	A	Cardiovascular devices associated with adverse incidents, prosthetic and other implants, materials and accessory devices

Rationale: A broken device (fractured lead) is classified as a mechanical complication. When a broken (or malfunctioning) device is not associated with an extrinsic force (V01–X59 *Accidents*) the external cause code is selected from Y70–Y82.

Example: This 85-year-old gentleman had an implanted defibrillator to control ventricular tachycardia that went off while he was walking home. It continued going off more than six times prior to admission. The doctor's final diagnosis was ventricular tachycardia due to malfunctioning defibrillator. The malfunctioning defibrillator was replaced.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T82.1	(M)	MP	A	Mechanical complication of cardiac electronic device
Y71.2	(9)	OP	A	Cardiovascular devices associated with adverse incidents, prosthetic and other implants, materials and accessory devices.
I47.2	(1)	OP		Ventricular tachycardia

Rationale: The defibrillator failed to perform properly (malfunctioned). When a malfunctioning (or broken) device is not associated with an extrinsic force (V01–X59 *Accidents*) the external cause code is selected from Y70–Y82.

Extrinsic Forces: Mechanical Complication

Complications involving extrinsic (external) forces are ones that include events classified to V01–X59 *Accidents*.



When a mechanical complication (any type) of an internal device is attributed to an extrinsic force assign:

- a code for mechanical complication from the applicable category T82–T85; and
- an external cause code from the range V01–X59 *Accidents*.

Note: Do not classify a mechanical complication of a device that is attributed to an extrinsic force as a post-intervention condition. This includes not assigning a diagnosis cluster.

Example: Patient fell off chair at home and dislocated hip prosthesis.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T84.03	(M)	MP		Mechanical complication of hip prosthesis
W07	(9)	OP		Fall involving chair
U98.0	(9)	OP		Place of occurrence, home

Rationale: The mechanical complication of the hip prosthesis was the result of an extrinsic force (fall). The external cause code describing the extrinsic force (V01–X59 *Accidents*) is assigned (W07). As this is not a post-intervention condition no diagnosis cluster is assigned.

Example: In the nursing home, patient trips on urinary catheter line and accidentally pulls out the catheter which results in a laceration to the urethra.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T83.0	(M)	MP		Mechanical complication of urinary (indwelling) catheter
S37.310	(3)	OP		Laceration of urethra, without open wound into cavity
W49	(9)	OP		Exposure to other and unspecified inanimate mechanical forces
U98.1	(9)	OP		Place of occurrence, residential institution

Rationale: The laceration of the urethra by the catheter is a mechanical complication (all injuries caused by a device are a mechanical complication). The external cause code describing the extrinsic force (inanimate mechanical force) is assigned (W49). As this is not a post-intervention condition no diagnosis cluster is assigned.

Example: During his hospital admission a patient intentionally pulls out his inflated Foley catheter which results in an injury to the urethra causing bleeding and clots. Following his injury, the patient is monitored for urethral bleeding for three days.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T83.0	(2)	MP		Mechanical complication of urinary (indwelling) catheter
S37.390	(3)	OP		Injury NOS of urethra, without open wound into cavity
W49	(9)	OP		Exposure to other and unspecified inanimate mechanical forces
U98.2	(9)	OP		Place of occurrence, school other institution and public area

Rationale: The injury to the urethra by the catheter is a mechanical complication (all injuries caused by a device are a mechanical complication). The external cause code describing the extrinsic force (inanimate mechanical force) is assigned (W49). As this is not a post-intervention condition, no diagnosis cluster is assigned.

Misadventures During Surgical and Medical Care

[Click here for description of change.](#)

In effect 2006, amended 2008, 2009, 2012

A misadventure is a subset (one type) of complications of surgical and medical care and is identifiable by the assignment of an external cause code in the range Y60—Y69. For purposes of classification, a misadventure is a complication of surgical and medical care related to an adverse event to which the patient was the recipient. The misadventure may be apparent at the time of the provision of care or be noticed following the provision of care. A misadventure can relate to an event that did occur during the provision of care (e.g. unintentional laceration, incorrect dilution of fluid used during infusion) or an event that did not occur (e.g. failure to introduce or to remove tube or instrument).

Code assignment for misadventures is not intended to be an incident reporting mechanism. Nor does code assignment for a misadventure either denote or imply negligence. Determination of negligence is a legal process. Code assignment pertains to the collection of data; in this case a subset of data that contributes to the analysis and reporting of issues related to misadventures during patient care.

This coding standard addresses:

- Applying the definition for misadventure;
- Basic code assignment for misadventures; and
- Particular requirements related to three specific types of misadventures - hemorrhage, puncture/laceration/perforation and foreign body.

See also the coding standard entitled [Post-Intervention Conditions](#).

Misadventure Code Assignment

Code assignment for a misadventure consists of:

- a primary code from one of seven specific categories or blocks,
- an additional code for specificity when applicable, and
- an external cause code from the misadventures block.



When a complication of surgical and medical care meets the criteria for a misadventure as described below, use the alphabetical index lead term “Misadventure”, and applicable subterm for the particular type of intervention to assign the primary code from one of the following categories:

- **N98** *Complications associated with artificial fertilization; or*
 - **T20–T32** *Burns and corrosions of external body surface, specified by site; or*
 - **T36–T50** *Poisoning by drugs, medicaments and biological substances; or*
 - **T66** *Unspecified effects of radiation or a code for the specific effect; or*
 - **T80** *Complications following infusion, transfusion and therapeutic injection; or*
 - **T81** *Complications of procedures, not elsewhere classified; or*
 - **T88** *Other complications of surgical and medical care, not elsewhere classified*
- and
- Assign an external cause code, mandatory, from categories Y60–Y69 *Misadventures to patients during surgical and medical* as per the external causes alphabetical index lead term “Misadventure”.

Note: All four of the following criteria must be present before classifying a complication of surgical and medical care as a misadventure:

- an adverse event occurred; and
- the patient was the recipient of the adverse event; and
- harm or potential for harm exists from the adverse event; and
- the adverse event is clearly documented.

Note: A misadventure may be apparent at the time of the provision of care or be noticed following the provision of care.

Note: Diagnosis typing, main/other problem definitions apply to all post-intervention conditions. When a misadventure does not meet the definition of comorbidity or the criteria for significance related to intraoperative hemorrhage and puncture/laceration/perforation, it is optional to assign codes (as diagnosis type (3)); however, when codes are assigned, all the above directive statements apply.

Example: Patient is admitted for right oophorectomy and after the patient left the operating room it became apparent that a left oophorectomy had been inadvertently performed. This was confirmed on diagnostic imaging and the physician progress notes outline the discussion with the patient.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T88.8	(2)	A	Other specified complications of surgical and medical care, not elsewhere classified
Y65.5	(9)	A	Performance of inappropriate operation during surgical and medical care

Rationale: The removal of the wrong ovary meets all four criteria for classifying as a misadventure: there was an adverse event (wrong organ removed); the patient was the recipient of the adverse event (patient has had normal ovary removed and diseased ovary remains); harm or potential for harm exists (per normal ovary removed, diseased ovary remains); and the adverse event is clearly documented. The alphabetical index lookup for the primary code (lead term “Misadventure,” subterm “during care, specified NEC”) leads to T88.8. The subterm “during care” is selected instead of “during procedure” as there was not a misadventure during the procedure itself; the misadventure relates to the overall provision of surgical care (e.g. plans related to the procedure). The alphabetical index lookup for the external cause code (lead term “Misadventure”, subterm “inappropriate operation performed”) leads to Y65.5.

Example: Patient presented in labor. An epidural was administered to the patient. When it was noted that the epidural was not working, it was discovered that penicillin G had been administered into the epidural space rather than the usual anesthetic mixture (incorrect IV bag). No treatment was given to the patient, other than close observation for signs and/or symptoms of an allergic reaction, which did not occur.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T36.0	(3)	A	Poisoning by penicillins
X44	(9)	A	Accidental poisoning by and exposure to other and unspecified drugs, medicaments and biological substances
Y65.1	(9)	A	Wrong fluid used in infusion
U98.2	(9)	A	Place of occurrence, school other institution and public area

Rationale: The poisoning meets all four criteria for classifying as a misadventure: there was an adverse event (wrong drug given); the patient was the recipient of the adverse event (patient received the wrong drug via infusion); harm or the potential for harm exists (per inappropriate drug given); and the adverse event is clearly documented. The alphabetical index lookup for the primary code is lead term “Misadventure,” subterm “during, care, adverse effect of drugs or chemicals (see Table of drugs and chemicals)”. Wrong drug given (incorrect use) of a medication meets the definition of a “poisoning” as described in the coding standard *Adverse Reactions in Therapeutic Use Versus Poisonings*; therefore, T36.0 is selected from the poisoning column along with the corresponding external cause code X44 from the column heading “Accidental”. The alphabetical index lookup for the external cause code (lead term “Misadventure”, subterm “wrong fluid in infusion”) leads to Y65.1. Since the poisoning did not meet the criteria for significance, T36.0 is optional to assign as a diagnosis type (3). When T36.0 is assigned, the complete code assignment for the misadventure is required.

Example: Patient was admitted with shingles and placed on acyclovir. There was a transcription error in the medication orders and a double dose of acyclovir was given. Creatinine level subsequently rose to over 400. Patient was seen by the Nephrology service and was diagnosed with acyclovir-induced crystal acute tubular necrosis (ATN). After six days of intravenous hydration and discontinuation of the acyclovir, renal function returned to normal and the patient was discharged home.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T37.5	(2)	A	Poisoning by antiviral drugs
N14.1	(3)	A	Nephropathy induced by other drugs, medicaments and biological substances
Y63.8	(9)	A	Failure in dosage during surgical and medical care
X44	(9)	A	Accidental poisoning by and exposure to other and unspecified drugs, medicaments and biological substances
U98.2	(9)	A	Place of occurrence, school other institution and public area

Rationale: The poisoning meets all four criteria for classifying as a misadventure: there was an adverse event (double dose of acyclovir); the patient was the recipient of the adverse event (patient was given double dose of medication); harm or potential for harm exists (tubular necrosis); and the adverse event is clearly documented. The alphabetical index lookup for the primary code is lead term “Misadventure,” subterm “during, care, adverse effect of drugs or chemicals (see Table of drugs and chemicals)”. Double dose (incorrect use) of a medication meets the definition of a “poisoning” as described in the coding standard *Adverse Reactions in Therapeutic Use Versus Poisonings*; therefore, T37.5 is selected from the poisoning column along with the corresponding external cause code X44 from the column heading “Accidental”. The alphabetical index lookup for the external cause code (lead term “Misadventure”, subterm “overdose, specified procedure NEC”) leads to Y63.8. Note that while there is an exclusion at Y63 for accidental overdose of drug or wrong drug given in error (X40–X44) this does not preclude using these two external codes on the same abstract. One describes that there was an accidental poisoning and the other describes that there was a misadventure.

Example: Patient experienced an unexpected burn to chest wall as a result of radiation therapy for lung cancer. The documentation reveals that the exposure time was inadvertently prolonged. Cold compresses were applied to relieve the patient’s discomfort.



<u>Code</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T21.0	OP	A	Burn of unspecified degree of trunk
T31.00	OP	A	Burns involving less than 10% of body surface with 0% or unspecified third degree burns
Y63.2	OP	A	Overdose of radiation given during therapy

Rationale: The radiation burn meets all four criteria for classifying as a misadventure: there was an adverse event (prolonged exposure time); the patient was the recipient of the adverse event (patient subject to prolonged exposure); harm or potential for harm exists (burn); and the adverse event is clearly documented. The alphabetical index lookup for the primary code (lead term “Misadventure,” subterm “radiotherapy”) leads to T66 where the exclusion leads to burn, by site. The alphabetical index lookup for the external cause code (lead term “Misadventure”, subterm “overdose, radiation, in therapy”) leads to Y63.2.

Example: Patient experienced burn to chest wall as a result of radiation therapy for lung cancer, during the current episode of care.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T21.0	(2)	A	Burn of unspecified degree of trunk
T31.00	(2)	A	Burns involving less than 10% of body surface with 0% or unspecified third degree burns
Y84.2	(9)	A	Radiological procedure and radiotherapy as a cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: The burn is a result of the radiation therapy and is classified as a post-intervention condition because it occurred during an uninterrupted episode of care within the 30 day timeline and there is a documented cause/effect relationship to the intervention (abnormal reaction/late complication). Do not assign external cause code Y63.2 *Inadvertent exposure of patient to radiation during medical care* unless the criteria of a misadventure is met.

Example: Three days following mitral valve replacement, patient develops fluid overload and management of this condition prolongs the stay.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
E87.7	(2)	A	Fluid overload
Y83.1	(9)	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: There is no documentation to support that there was a misadventure during the provision of care. Fluid overload in patients who have had cardiac surgery cannot be assumed to be due to excessive amounts of fluid given unintentionally. Typically, fluid overload is an expected result of receiving large quantities of fluid during the perioperative period that is required to manage fluid status and blood pressure. The result of receiving these fluids depends on how the individual patient processes the fluid. The external cause code Y63.0 *Excessive amount of blood or other fluid given during transfusion or infusion* is assigned only when an obvious documented error has occurred in the amount of blood or fluid that is given.

Example: Patient sustains multiple rib fractures associated with chest compressions during cardiopulmonary resuscitation.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T81.88	(2)	OP	A	Other complications of procedures, not elsewhere classified
S22.490	(3)	OP	A	Multiple fractures of unspecified number of ribs, closed
Y65.8	(9)	OP	A	Other specified misadventures during surgical and medical care

Rationale: The rib fractures meet all four criteria for classifying as a misadventure: there was an adverse event (injury [other than cut, puncture, and perforation]); the patient was the recipient of the adverse event (patient's ribs fractured); harm or potential harm exists from the adverse event (fractured ribs); and the adverse event is clearly documented that there was a misadventure. The alphabetical index lookup for the primary code (lead term "Misadventure," subterm "during, procedure, specified NEC") leads to T81.88. The alphabetical index lookup for the external cause code (lead term "Misadventure," subterm "specified type NEC") leads to Y65.8.

Example: Patient had laparoscopic oophorectomy for an ovarian cyst. Postoperatively, she reported an area of numbness along her left lateral thigh which the surgeon diagnosed as postoperative sensory neurapraxia secondary to position compression at the time of her surgery.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T81.88	(2)	OP	A	Other complications of procedures, not elsewhere classified
S74.28	(3)	OP	A	Other and unspecified injury of cutaneous sensory nerve at hip and thigh level
Y65.8	(9)	OP	A	Other specified misadventures during surgical and medical care

Rationale: This scenario meets all four criteria for classifying as a misadventure: there was an adverse event (injury [other than cut, puncture, and perforation]); the patient was the recipient of the adverse event (patient's nerve injured); harm or potential for harm exists (neurapraxia); and the adverse event is clearly documented. The alphabetical index lookup for the primary code (lead term "Misadventure," subterm "during, procedure, specified NEC") leads to T81.88. The alphabetical index lookup for the external cause code (lead term "Misadventure," subterm "specified type NEC") leads to Y65.8.

Example: Following hip replacement surgery, this patient has femoral palsy which is documented as being secondary to a retractor used during the surgery. The femoral palsy affects the recovery period and extends the length of stay.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.88	(2)	A	Other complications of procedures, not elsewhere classified
S74.18	(3)	A	Other and unspecified injury of femoral nerve at hip and thigh level
Y65.8	(9)	A	Other specified misadventures during surgical and medical care

Rationale: The femoral palsy meets all four criteria for classifying as a misadventure: there was an adverse event (injury [other than cut, puncture, perforation]); the patient was the recipient of the adverse event (patient's nerve injured); harm or potential for harm exists from the adverse event (femoral palsy); and the adverse event is clearly documented. The alphabetical index lookup for the primary code (lead term "Misadventure," subterm "during, procedure, specified NEC") leads to T81.88. The alphabetical index lookup for the additional code to describe the ill effect (lead term "Palsy, nerve") leads to G58.8; however, the exclusion note at the block G50–G59 provides the direction to see nerve injury by body region for a current traumatic nerve disorder. Femoral palsy is the symptom through which the injury became apparent and is optional to capture. The alphabetical index lookup for the external cause code (lead term "Misadventure", subterm "specified type NEC") leads to Y65.8.

Hemorrhage Complicating a Procedure

While a hemorrhage that occurs intraoperatively is a misadventure; the hemorrhage must meet select criteria to assign a significant diagnosis type. A hemorrhage that occurs postoperatively is not a misadventure, it is classified as a later complication.



Assign T81.0 *Haemorrhage and haematoma complicating a procedure, not elsewhere classified*, as a significant diagnosis type/ main or other problem when blood loss/hemorrhage meets the criteria for significance as described below.

Note: Blood loss/hemorrhage meets the criteria for significance when it:

- Is described by the physician as substantial, massive, torrential, difficult to control, or similar terminology; or
- Requires consultation by another surgeon/specialty; or
- Requires an intervention for control of bleeding; or
- Requires postoperative monitoring and/or investigation impacting length of stay.

Note: A diagnosis of postoperative hemorrhage is also classified to T81.0 *Haemorrhage and haematoma complicating a procedure, not elsewhere classified* and the same criteria for significance, as above, applies. Since postoperative hemorrhage does not meet the criteria for misadventure of surgical or medical care, the external cause code is selected from categories Y83-Y84 *Surgical and other medical procedures as the cause of abnormal reaction of the patient or of later complication without mention of misadventure at the time of the procedure*.

Note: Do not assign T81.0 *Haemorrhage and haematoma complicating a procedure, not elsewhere classified* when:

- documentation does not indicate there is an intraoperative or postoperative hemorrhage regardless of amount of blood loss documented;
- intraoperative or postoperative blood loss is a direct result of disease or trauma (e.g. bleeding ulcers, bleeding varices, ruptured aneurysm)

Exception: See also the coding standard entitled [Postpartum Hemorrhage](#).

Note: Do not assume that administration of blood or blood products during surgery, or that anemia following surgery is an indication that a hemorrhage has occurred. Blood or blood products are often given during surgery to prevent anemia or after surgery to treat anemia in patients where significant blood loss is expected. See also the coding standard entitled [Acute Blood Loss Anemia](#).

Example: Patient was admitted to hospital for an abdominal hysterectomy. During the intervention, a hemorrhage occurred that was documented on the operative report as being substantial and with an estimated blood loss of 800 cc. The hemorrhage was controlled and patient stabilized: the intervention was completed without further incident.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.0	(2)	A	Haemorrhage and haematoma complicating a procedure, not elsewhere classified
Y60.0	(9)	A	Unintentional cut, puncture, perforation or haemorrhage during surgical operation

Rationale: The physician describes the hemorrhage as “substantial”; therefore, T81.0 meets the criteria for significance and is assigned a significant diagnosis type. Hemorrhage in this example meets the criteria for classifying as a misadventure; thus, Y60.0 is assigned.

Example: Patient sustained a traumatic abdominal aortic disruption with significant blood loss as a result of a single gunshot wound to the abdomen following a hunting accident. The aorta was repaired with a tube graft and the patient received 20 units of packed red blood cells during the intervention. Despite aggressive resuscitation, the patient continued to have significant hemorrhage from the abdomen and died.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
S35.0	(M)	Injury of abdominal aorta
W33	(9)	Rifle, shotgun and larger firearm discharge
U98.9	(9)	Other specified place of occurrence

Rationale: The intraoperative blood loss is a direct result of the traumatic aortic injury; therefore, do not assign T81.0.

Example: Patient is admitted to hospital for a total hip arthroplasty. Following the intervention, the patient develops a surgical site bleed and is returned to the operating room for exploration and resuturing. Postoperative anemia is also diagnosed during the hospital stay and requires 2 units of blood.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
T81.0	(2)	A	Haemorrhage and haematoma complicating a procedure, not elsewhere classified
D64.9	(2)	A	Anaemia, unspecified
Y83.1	(9)	A	Surgical operation with implant of artificial internal device as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure

Rationale: T81.0 meets the criteria for significance (i.e. patient returned to the operating room to control the bleeding); therefore, T81.0 is assigned a significant diagnosis type. As the hemorrhage does not meet the criteria of a misadventure; it is classified as a later complication and Y83.1 is assigned. See also the coding standard entitled [Acute Blood Loss Anemia](#) for direction specific to the diagnosis “postoperative anemia”.

Puncture/Laceration/Perforation During a Procedure

While any puncture/laceration/perforation during a procedure is considered a misadventure, the puncture/laceration/perforation must meet the select criteria to assign a significant diagnosis type.



Assign T81.2 *Accidental puncture and laceration during a procedure, not elsewhere classified* as a significant diagnosis type/main or other problem when the puncture/laceration/perforation meets one of the criteria for significance as described below.

Note: An accidental puncture/laceration/perforation meets the criteria for significance when it:

- Requires consultation by another surgeon/specialty; or
- Requires a return to the operating room; or
- Requires repair or removal of the damaged organ which would not have otherwise been repaired/removed; or
- Is a dissection during cardiac catheterization/angioplasty which requires stenting for repair; or
- Is a reason for readmission to hospital; or
- Requires postoperative monitoring and/or investigation impacting length of stay; or
- Requires an additional different intervention.

Note: Do not assign T81.2 when a laceration occurs to a diseased organ that is being removed as part of the original planned surgery.

Note: For the purposes of assigning an additional code to identify the site of the laceration/puncture/perforation, select:

- the 6th character “without open wound into cavity” when the approach to the intervention performed does not involve an incision; for example, an endoscopic per orifice approach
- the 6th character “with open wound into cavity” when the approach to the intervention performed involves an incision; for example, “open” cholecystectomy and endoscopic approach that includes an incision.

Example: Patient has a cholecystectomy during which a tear in the gallbladder occurs with spillage of gallstones. Routine removal with cleanup of gallstones done.



Nil Do not code the tear to the gallbladder. It is being removed as part of the surgery.

Example: A 54-year-old patient was admitted for cancer of the sigmoid colon. During colectomy, laceration of the splenic capsule was noted and a splenectomy was required.



<u>Code</u>	<u>DAD</u>	<u>Cluster</u>	<u>Code Title</u>
C18.7	(M)		Malignant neoplasm of sigmoid colon
T81.2	(2)	A	Accidental puncture and laceration during a procedure, not elsewhere classified
S36.091	(3)	A	Haematoma NOS, laceration NOS, injury to spleen NOS, with open wound into cavity
Y60.0	(9)	A	Unintentional cut, puncture, perforation or haemorrhage during surgical operation

Rationale: The splenic laceration meets the criteria for significance because it required removal of an organ which would not have otherwise been removed; therefore, T81.2 is assigned a significant diagnosis type. The 6th character “with open wound” is selected for the additional code S36.091 because the approach for the colectomy is an open approach (via incision).

Example: Patient presents for lysis of abdominal adhesions. During the procedure an intraoperative laceration to the kidney occurred requiring an intraoperative consult to ensure viability of the organ. The kidney was subsequently repaired with suturing.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
K66.0	(M)	MP		Peritoneal adhesions
T81.2	(2)	OP	A	Accidental puncture and laceration during a procedure, not elsewhere classified
S37.011	(3)	OP	A	Laceration of kidney (without urinary extravasation), with open wound into cavity
Y60.0	(9)	OP	A	Unintentional cut, puncture, perforation or haemorrhage during surgical operation

Rationale: T81.2 meets the criteria for significance because the laceration was repaired. Even if it had not been repaired, it would have met the criteria for significance because there was an intraoperative consult. The 6th character “with open wound” is selected for the additional code S37.011 because the approach for the lysis of adhesions is an open approach (via incision).

Example: Patient sustains an intraoperative laceration to the bowel during laparoscopic tubal ligation. The surgeon placed two sutures in the bowel for repair with no further consequences or monitoring.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
Z30.2	(M)	MP		Sterilization
T81.2	(2)	OP	A	Accidental puncture and laceration during a procedure, not elsewhere classified
S36.511	(3)	OP	A	Laceration of colon, with open wound into cavity
Y60.0	(9)	OP	A	Unintentional cut, puncture, perforation or haemorrhage during surgical operation

Rationale: T81.2 meets the criteria for significance because the laceration was repaired. The 6th character “with open wound” is selected for the additional code S36.511 because the approach for the tubal ligation is an endoscopic approach that includes an incision.

Example: During colonoscopy in day surgery, a polypectomy of the large intestine was performed, and an inadvertent puncture was made in the large intestine. Four clips were applied and India ink was used to mark the area. The physician documented that the patient will be admitted as an inpatient overnight because of the perforation to the bowel. Pathology report revealed benign neoplasm of large intestine.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
D12.6	(M)	MP		Benign neoplasm of colon, unspecified
T81.2	(2)	OP	A	Accidental puncture and laceration during a procedure, not elsewhere classified
S36.510	(3)	OP	A	Laceration of colon, without open wound into cavity
Y60.4	(9)	OP	A	Unintentional cut, puncture, perforation or haemorrhage during endoscopic examination

Rationale: T81.2 meets the criteria for significance on the day surgery abstract because the puncture was repaired. Even if it had not been repaired it would have met the criteria for significance because it required postoperative monitoring impacting the length of stay. The 6th character “without open wound” is selected for the additional code because the approach for the polypectomy is endoscopic per orifice.

Foreign Body Accidentally Left Following a Procedure



When an intact device not intended to remain in the body is inadvertently left behind following a procedure, assign:

- a code from subcategory T81.5– *Foreign body accidentally left in body cavity or operation wound following a procedure*; and
- an external cause code from category Y61 *Foreign object accidentally left in body during surgical or medical care*.

Note: When an intact device that was intended (expected) to be left in the body (e.g. IUD) is described as retained, it is classified as a mechanical complication. See the coding standard entitled *Complications of Devices, Implants or Grafts*.

Example: Patient had left hip replacement performed. The operative report documents that after closure of the wound and while the patient was still in the operating room, one small surgical sponge was noted to be missing in the sponge count. Intraoperative X-ray confirmed a sponge marker within the acetabulum; therefore, the patient was fully repped and draped and the incision reopened to remove the sponge.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T81.57	(2)	OP	A	Foreign body accidentally left in body cavity or operation wound following a procedure, without mention of any complication
Y61.0	(9)	OP	A	Foreign object accidentally left in body during surgical and medical care during surgical operation

Rationale: The sponge was inadvertently left behind; thus it is classified as a foreign body. T81.57 is selected as no complication subsequent to the foreign body has been documented. T81.57 meets the criteria for classifying as a misadventure and also meets the criteria for significance.

Example: During a laparoscopic cholecystectomy one large ligature clip fell within the patient and the surgeon was unable to retrieve it and opted to leave it in place. There is no other documentation about the clip and the patient was discharged home the following day after the surgery.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T81.57	(3)	OP	A	Foreign body accidentally left in body cavity or operation wound following a procedure, without mention of any complication
Y61.0	(9)	OP	A	Foreign object accidentally left in body during surgical and medical care during surgical operation

Rationale: The ligature clip was inadvertently left behind; thus it is classified as a foreign body. While an attempt was made to retrieve the clip and it was known to have remained, nonetheless it was unintentionally left behind (there was no intention to leave it there). T81.57 is selected as no complication subsequent to the foreign body has been documented. T81.57 meets the criteria for classifying as a misadventure; however, since it did not meet the criteria for significance T81.57 is optional to assign as a diagnosis type (3). When T81.57 is assigned, the complete code assignment for the misadventure is required.

Example: Patient had a central line insertion and the guidewire used to introduce the catheter was inadvertently left behind in the superior vena cava. Under ultrasound guidance, the guidewire was removed using a gooseneck snare inserted into the internal jugular vein by the radiologist.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
T81.57	(2)	OP	A	Foreign body accidentally left in body cavity or operation wound following a procedure without mention of any complication
Y61.6	(9)	OP	A	Foreign object accidentally left in body during aspiration, puncture and other catheterization

Rationale: The guidewire was inadvertently left behind, thus it is classified as a foreign body and since it required a separate intervention during the same intervention episode to remove the guidewire, T81.57 meets the criteria for significance. T81.57 is selected as no complication subsequent to the foreign body has been documented.

Chapter XX—External Causes of Morbidity and Mortality

External Cause Codes

In effect 2001

See also [Appendix B—Y83-Y84 Inclusion List](#).

Assign an external cause code from V01–Y98, mandatory, as a diagnosis type (9)/other problem, with any condition classifiable to S00–T98.

Example:

<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S88.1	(M)	MP	Traumatic amputation at level between knee and ankle
W58	(9)	OP	Bitten or struck by crocodile or alligator



When an external cause can be attributed to any condition classifiable to Chapter I to XVIII, assign an additional code from V01–Y98 as a diagnosis type (9)/other problem.

Example:

<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Cluster</u>	<u>Code Title</u>
K29.0	(M)	MP	A	Acute haemorrhagic gastritis
Y45.3	(9)	OP	A	Other nonsteroidal anti-inflammatory drugs [NSAID] causing adverse effects in therapeutic use

Place of Occurrence

In effect 2001, amended 2006



With any accident or poisoning classifiable to W00–Y34, excluding Y06 and Y07, assign a code from U98.– *Place of occurrence*, mandatory, as a diagnosis type (9)/other problem.

Example: 4-year-old child ingested approximately 10 candy-coated ibuprofen tablets at home.

<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
T39.3	(M)	MP	Poisoning by other nonsteroidal anti-inflammatory drugs [NSAID]
X40	(9)	OP	Accidental poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics
U98.0	(9)	OP	Place of occurrence, home

Type of Activity

In effect 2001, amended 2006

DN With any external cause code from V01–Y98, assign a code from U99.– *Activity*, optional, as a diagnosis type (9)/other problem, to indicate the activity of the injured person at the time the event occurred.

Example: Patient fell off the ladder at work and sustained a fracture to his distal humerus.

DN	<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
	S42.490	(M)	MP	Fracture of unspecified part of lower end of humerus, closed
	W11	(9)	OP	Fall on and from ladder
	U98.5	(9)	OP	Place of occurrence, trade and service area
	U99.2	(9)	OP	While working for an income (optional)

Chapter XXI—Factors Influencing Health Status and Contact With Health Services

Pre-Treatment Assessment

In effect 2002, amended 2007, 2008

- DN** Assign Z01.8 *Other specified special examination* to describe an encounter for a pre-treatment assessment.
- DN** When a significant condition diagnosed during the pre-treatment assessment requires further treatment or investigation, assign a code for the significant condition as the MRDx/main problem.
- Assign Z01.8 *Other specified special examination*, mandatory, as a diagnosis type (3)/other problem.
- DN** Assign an additional code to describe the underlying reason for the assessment, optional, as diagnosis type (3)/other problem.

Example: A woman visits the pre-admission clinic for a pre-treatment assessment for carpal tunnel release scheduled in two weeks time.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z01.8	MP	Other specified special examinations
G56.0	OP	Carpal tunnel syndrome (optional)
2.ZZ.02.ZZ		Assessment (examination), total body, general NEC
Status: P1		(e.g. multiple reasons)

Example: Patient visits the oncology clinic for a pre-chemotherapy assessment for treatment of breast cancer.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z01.8	MP	Other specified special examinations
C50.99	OP	Malignant neoplasm of breast, part unspecified, unspecified side (optional)
2.ZZ.02.ZZ		Assessment (examination), total body, general NEC
Status: P1		(e.g. multiple reasons)

FIRST
VISIT

Example: The same patient attends the cancer clinic for an interim assessment during the course of her chemotherapy treatment following mastectomy. She is scheduled to receive her fifth chemotherapy treatment the next day. There is no documentation as to the outcome of the assessment.



INTERIM VISIT

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z51.88	MP	Other specified medical care NEC
C50.99	OP	Malignant neoplasm of breast, part unspecified, unspecified side (optional)
2.ZZ.02.ZZ		Assessment (examination), total body, general NEC
Status: N1		(e.g. multiple reasons)

Rationale: This is not an example of a pre-treatment assessment, therefore Z01.8 is not assigned. It is also not a follow-up visit. This is an interim assessment. As there is no condition in the patient necessitating a change in the treatment plan, assign Z51.88. (If a condition was found, assign a code for the condition as the main problem).

Example: A morbidly obese patient is seen in the day surgery unit for esophagogastroduodenoscopy as a pre-treatment assessment of her GI tract prior to undergoing gastric bypass surgery; there were no unexpected findings.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z01.8	(M)	MP	Other specified special examinations
E66.8	(3)	OP	Other obesity (optional)
2.NK.70.BA-BL			Inspection of small intestine, using endoscopic per orifice approach (or via stoma) and gastroscope

Example: A patient presented for coronary angiography via the femoral artery as a pre-treatment assessment prior to undergoing lung transplant due to emphysema. The X-ray revealed the patient has severe three vessel coronary artery disease, amenable to bypass.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
I25.10	(M)	MP	Atherosclerotic heart disease of native coronary artery
Z01.8	(3)	OP	Other specified special examinations (mandatory)
J43.9	(3)	OP	Emphysema, unspecified (optional)
3.IP.10.VX			Xray, heart with coronary arteries, of left heart structures using percutaneous transluminal (retrograde) approach
Status: DX			
Location: FY			

Rationale: When a condition is found during a pre-treatment assessment, the condition is coded as the MRDx/main problem. The underlying reason for the encounter is coded as a **mandatory** diagnosis type (3)/other problem.

Admission for Observation

In effect 2003, amended 2006, 2007, 2009



Assign a code from category Z03 *Medical observation and evaluation for suspected diseases and conditions*, as the MRDx/main problem, when the suspected condition has been ruled out and no further treatment or medical care is planned.

Codes from Z03 are assigned as the MRDx/main problem when a patient is investigated for a suspected condition and is considered to have no disease/problem. These patients will have a sign or symptom, but after investigation, it is determined that the condition for which they are being examined has been ruled out and no further treatment or investigation is required. When the plan is to further investigate the cause of the sign or symptom, a code for the sign or symptom is assigned (see also the coding standards entitled *Underlying Symptoms or Conditions* and *Query Diagnosis (Q)/Etiology*). The fact that the patient may be scheduled to return for a repeat screening test (e.g. six months for PSA or one year for a mammogram) following observation does not limit the use of codes from category Z03.

Note: Do not assign codes from category Z03 *Medical observation and evaluation for suspected diseases and conditions* as a diagnosis type (3)/other problem when a diagnosis is established or when further follow-up to investigate the cause of the sign or symptom is recommended or planned.

Example: Patient presents with an elevated prostate specific antigen (PSA) test and undergoes biopsy of the prostate for suspected prostate malignancy. After investigation, no evidence of neoplasm or other pathology is detected and no further action is required at this time.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z03.1	(M)	MP	Observation for suspected malignant neoplasm


Rationale: The underlying cause has been ruled out and no further follow-up is planned.

Example: Child was found by mother next to an empty pill bottle. Mother was uncertain about the number of tablets that were in the bottle. After observation in the emergency department, it was determined the child had not swallowed any pills.




<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z03.6	MP	Observation for suspected toxic effect from ingested substance

Rationale: Poisoning was suspected and at the end of the visit was ruled out.


Example:  Newborn, delivered vaginally, is monitored in the special care nursery for investigation because the mother used morphine during most of her pregnancy. The outcome of the investigation was negative but the stay was extended by two days due to additional monitoring in the special care nursery.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z03.8	(M)	Observation for other suspected diseases and conditions
Z38.000	(O)	Singleton, delivered vaginally, product of both spontaneous (NOS) ovulation and conception

Rationale: Z03.8 *Observation for other suspected diseases and conditions* is assigned as a comorbidity in limited circumstances on records of otherwise healthy newborns who are at risk for an abnormal condition, which requires study, but after examination and observation it is determined that there is no need for further treatment or medical care (i.e. the abnormal condition has been ruled out).


 **When the purpose of the encounter is for examination and observation after an accident, alleged rape, sexual assault or physical abuse and following examination/observation:**

- an injury is documented, classifiable to categories S00–T19, assign a code for the specified injury as the MRDx/main problem.
- no injury is documented, assign a code from category Z04 *Examination and observation for other reasons* as the MRDx/main problem.

Example:  A patient involved in an MVA was brought to emergency department for examination and observation. Following X-rays it was determined the patient suffered no injuries and was discharged.

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z04.1	MP	Examination and observation following transport accident

Rationale: No external cause code is assigned, as there were no injuries.

Example:  A young woman presents to the emergency department after waking up in bed without her clothes. She has no memory of what occurred the night previously because of alcohol intoxication. She is concerned that she was sexually assaulted and is requesting an examination. Following examination, there is no physical evidence of any sexual assault and no documented injuries. Final diagnosis: Sexual Assault, rape kit completed.

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z04.4	MP	Examination and observation following alleged rape and seduction

Rationale: The purpose of this ambulatory visit was for examination following an alleged rape and when there are no documented injuries Z04.4 is assigned as the main problem.

Example: A patient presented to hospital for examination following an attack. She was walking home from the cinema when she was grabbed around the neck, from behind. She became unconscious and does not recall the subsequent events. She awoke from this attack partially clothed. Upon examination, she was found to have a torn hymen and perineal bruising indicating a sexual assault occurred. She also had significant bruising around her neck.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
S31.400	(M)	MP	Open wound of vagina and vulva, uncomplicated
S30.28	(1)	OP	Contusion of other external genital organs
S10.9	(1)	OP	Superficial injury of neck, part unspecified
Y05	(9)	OP	Sexual assault by bodily force

Rationale: Z04.4 is not assigned as the MRDx/main problem in this example because specified injuries were found. The external cause code identifies the injuries occurred as a result of a sexual assault.

Admission for Follow-Up Examination

[Click here for description of change.](#)

In effect 2003, amended 2006, 2007, 2008, 2012

Follow-up is a term used to describe an episode of care for routine investigations following treatment for a disease, condition or injury. In these circumstances, the patient is exhibiting no signs or symptoms related to the previous disease, condition, or injury; the episode of care is strictly for an examination to assess post-treatment status. Periodic examinations to determine if there is recurrence of a previously treated condition are examples of follow-up.

Documentation of “follow-up” is classified in ICD-10-CA according to the purpose and outcome of the examination.



When the purpose of the examination is to assess the status of a previously treated condition or injury (i.e. a personal history classifiable to categories Z85–Z88) and the outcome indicates no need for further treatment, select the appropriate code from one of the following as the MRDx/main problem:

- Z08 *Follow-up examination after treatment for malignant neoplasm; or*
- Z09 *Follow-up examination after treatment for conditions other than malignant neoplasms.*
 - Assign an additional code indicating a personal history of the condition, optional, as a diagnosis type (3)/other problem.



When the examination reveals that the original condition has recurred or another related condition has been identified assign:

- a code for the condition as the MRDx/main problem; and
- an additional code from Z08 or Z09, mandatory, as a diagnosis type (3)/other problem.

Example: A male patient was admitted for a cystoscopy for follow-up of bladder cancer previously treated by radiation therapy. There was no recurrence of the malignancy. Trabeculation of bladder was noted.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z08.1	(M)	MP	Follow-up examination after radiotherapy for malignant neoplasm
Z85.5	(3)	OP	Personal history of malignant neoplasm of urinary tract (optional)
N32.8	(3)	OP	Other specified disorders of bladder (optional)
2.PM.70.BA			Inspection, bladder, using endoscopic per orifice approach

Rationale: Trabeculation of the bladder is neither recurrence nor a related condition. It is optional to code, and if coded, is a diagnosis type (3)/other problem.

Example: Patient admitted for cystoscopy for follow-up of bladder cancer previously treated by radiation therapy. Carcinoma of the bladder was detected.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C67.9	(M)	MP	Malignant neoplasm of bladder, unspecified
Z08.1	(3)	OP	Follow-up examination after radiotherapy for malignant neoplasm
Z85.5	(3)	OP	Personal history of malignant neoplasm of urinary tract
2.PM.70.BA			Inspection, bladder, using endoscopic per orifice approach

Rationale: The examination revealed a recurrence of bladder carcinoma; therefore, it is **mandatory** to assign additional codes for the follow-up examination and the personal history of neoplasm.

Example: A 45-year-old patient with a history of kidney stones presents to hospital. Four years ago, she underwent extracorporeal shock wave lithotripsy (ESWL) and has been stone free since. A stone analysis done at that time showed them to be calcium oxalate. She is on magnesium supplement prophylaxis, to avoid forming any more stones. At this visit to the stone clinic, she had no complaints. Her 24-hour urine tests and abdominal ultrasound are negative.



The patient will continue to be under surveillance in the stone clinic and has been asked to continue her magnesium supplement. She will be seen again in 12 months.

<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z09.8	(M)	MP	Follow-up examination after other treatment for other conditions
Z87.4	(3)	OP	Personal history of diseases of the genitourinary system (optional)

Example: A construction worker presents to the emergency department with a foreign body in his right eye. A small metallic piece is removed from his right cornea using an external approach. The client is instructed to return for follow-up in a week.

FIRST VISIT



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
T15.0	MP	Foreign body in cornea
W44	OP	Foreign body entering into or through eye or natural orifice
U98.6	OP	Place of occurrence, industrial and construction area

SECOND VISIT

The construction worker returns to the emergency department. During this visit, his right cornea has completely healed and the client is discharged home with no further instructions.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z09.8	MP	Follow-up examination after other treatment for other conditions
Z87.8	OP	Personal history of other specified conditions

Example: A 72-year-old gentleman presents with increasing anemia following a right hemicolectomy for colon cancer performed one year previously. He undergoes colonoscopy which does not reveal any recurrence of disease.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
D64.9	(M)	MP	Anaemia, unspecified
Z85.0	(3)	OP	Personal history of malignant neoplasm of digestive organs (optional)

Rationale: This is not a routine investigation for follow-up. This patient has a sign which is being investigated for possible recurrence of the previous malignancy.



When the sole purpose of the encounter is to receive a **specific intervention or service**, select the appropriate code from one of the following as the MRDx/main problem:

- Z39.2** *Routine postpartum follow-up*
- Z42** *Follow-up care involving plastic surgery*
- Z47** *Other orthopedic follow-up care*
- Z48** *Other surgical follow-up care*

- Assign an additional code, optional, as a diagnosis type (3)/other problem to describe the underlying disease or injury for which specific follow-up care is required.

Note: Categories **Z40–Z54** *Persons encountering health services for specific procedures and health care* are intended for use to indicate a reason for care. They may be used for patients who have already been treated for a disease or injury, but who are receiving follow-up or prophylactic care, convalescent care, or care to consolidate the treatment, to deal with residual states, to ensure that the condition has not recurred, or to prevent recurrence.ⁱ

Category **Z48** *Other surgical follow-up care* is used to describe encounters solely for the purpose of receiving a specific intervention related to previous treatment. This includes dressing changes and wound checks which may include reassurance that healing is progressing as expected.

i. World Health Organization, *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Volume 1, Second Edition* (Geneva, Switzerland: World Health Organization), p. 1102.

Example: A woman presents to the emergency department for a dressing change (medicated) on the weekend. She had a mastectomy (for breast cancer) the week before.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z48.0	MP	Attention to surgical dressings and sutures
C50.99	OP	Malignant neoplasm breast part unspecified, unspecified site (optional)
1.YS.14.JA-H1		Dressing, skin of abdomen and trunk, using medicated dressing (optional)

Example: A young man presents to the fracture clinic for removal of a cast that was put on six weeks ago after a non-displaced fracture of the ankle due to a fall on ice.

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z47.8	MP	Other specified orthopaedic follow-up care
1.WA.38.JA-FQ		Management of external appliance, ankle joint, of cast

Example: A patient presents to the emergency department after recent surgery due to the wound appearing red and draining. The doctor assesses the wound and tells the patient to continue with her antibiotics as prescribed by the surgeon. Final diagnosis is recorded as "postoperative concern."

N

<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z48.8	MP	Other specified surgical follow-up care

Rationale: The patient underwent surgery and required reassessment to ensure the wound was healing as expected and no condition or complication was found.

Admission for Convalescence

In effect 2008, 2009

Convalescence is the stage of recovery following an attack of disease, a surgical operation or an injury. For classification purposes it describes the intermediate recovery phase after treatment until a patient is ready to be discharged home/place of residence. It includes maintenance of homeostasis, wound management, routine postoperative monitoring, physiotherapy and prevention and early detection of complications. Often patients are transferred from one hospital to another to complete this phase of care to allow the patient to be closer to home or to manage beds within a health region. These patients are given the routine daily care they would normally receive if all of their care occurred in the original facility. In some circumstances, an admission from day surgery to inpatient may constitute an admission for convalescence.

Z54 *Convalescence* does not include care provided to:

- Manage the original condition;
- Treat a complication;
- Patients who are admitted solely for rehabilitation; and
- Patients who have been discharged and return for specific care (e.g. attention to drainage devices, dressing changes or examination for reassurance).

See also the coding standards entitled *Admission for Follow-up Examination* and *Acute Coronary Syndrome (ACS)*.

D When a patient is transferred from one hospital to another or admitted from day surgery to inpatient solely for the purposes of receiving care in the recovery phase following treatment of an illness or injury or following a surgical intervention, assign a code from category Z54 *Convalescence* as the MRDx.

- Assign an additional code, mandatory, as a diagnosis type (3) to indicate the condition for which convalescence is required.

Exception: The above directive statement does not apply to jurisdictions (i.e. BC, NT, NU and YT) that submit one acute inpatient abstract to the Discharge Abstract Database (DAD) for a patient who is admitted to an inpatient bed directly from the day surgery unit of the reporting facility. Refer to the province/territory section in the Discharge Abstract Database (DAD) Abstracting Manual, for further instruction regarding “Inpatient Admissions Directly From the Day Surgery Unit (of Reporting Facility).”

Example: The physician documents the patient is being admitted for convalescence following surgery for treatment of fracture of the femur after falling out of bed at home. The patient was transferred from Hospital A to Hospital B to be closer to family. The patient is discharged home on day three.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z54.0	(M)	Convalescence following surgery
S72.900	(3)	Fracture of femur, part unspecified, closed
W06	(9)	Fall involving bed
U98.0	(9)	Place of occurrence, home

Example: Patient is admitted to Hospital A with ST elevation myocardial infarction. The patient is immediately transferred to day surgery of Hospital B for primary PCI after which he is admitted as an inpatient to Hospital B with a diagnosis of STEMI.



	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Inpatient Admission to Hospital B	I21.3	(M)	Acute transmural myocardial infarction of unspecified site
	R94.30	(3)	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]

Rationale: This case is not classified to convalescence (or to follow-up surgical care) as the care the patient is receiving is still being directed towards the acute condition.

Example: The same patient is transferred back to Hospital A for continued treatment following the myocardial infarction and PCI intervention.



	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Return Admission to Hospital A	I21.3	(M)	Acute transmural myocardial infarction of unspecified site
	R94.30	(3)	Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]

Rationale: The purpose of the transfer is to receive continuing care directed toward the condition itself. The patient is not being transferred solely for the purpose of convalescence; therefore, Z54 is not assigned.

Example: Patient is admitted to day surgery for elective coronary angiography. Over the last several months, he has noted that his angina has been increasing in frequency and duration. The patient is known to have coronary artery disease. During the intervention it is noted that the patient has a 90% stenosis of the LAD (native artery) that is amenable to coronary angioplasty. A PCI with stent insertion is performed. The patient is then admitted overnight as an inpatient for observation. Diagnosis: Unstable angina, coronary artery disease



Admission
following
Day
Surgery

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z54.0	(M)	Convalescence following surgery
I25.10	(3)	Atherosclerotic heart disease of native coronary artery
I20.0	(3)	Unstable angina

Rationale: The reason for admission is to monitor the patient for any complications following the surgical intervention rather than to receive continuing care for CAD. When the sole purpose of the admission is for postoperative monitoring this is included at category Z54.

Note: This example does not apply to BC, NT, NU, YT.



When a patient presents solely for the purposes of receiving routine care following delivery outside the hospital, assign Z39.0 *Postpartum care and examination immediately after delivery* as the MRDx.

Example: A patient is transferred from another facility for postpartum care following a Cesarean section. She receives routine obstetrical care and is discharged home two days later.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z39.0	(M)	Care and examination immediately after delivery

Rationale: Z39.0 includes routine postpartum care in uncomplicated cases.

Screening for Specific Diseases

In effect 2003, amended 2006, 2008

Screening is the early detection/diagnosis of a disease such as cancer through testing a person who does not yet have recognized symptoms or obvious signs of the condition. Screening does not include examination of individuals who have previously been treated for a condition. Ideally, screening detects a condition before it becomes serious, and when it is usually easily treatable or preventable.

Some examples of screening programs include:

- Mammography to detect breast cancer for all women of a certain age (e.g. 50–74 in ON; 40–79 in BC) or who have risk factors.
- Pap test for all women who are, or ever have been, sexually active.
- Fecal occult blood testing, colonoscopy or sigmoidoscopy, or double contrast barium enema to detect colon cancer for all persons over 50 years and persons under 50 who have risk factors (e.g. family history).
- Tuberculin skin test to detect tuberculosis for certain populations such as health care workers, correctional institution workers and immigrants.

- DN** When a patient undergoes a screening examination and no sign of disease is found, assign a code from category Z11, Z12 or Z13 as the MRDx/main problem.
- DN** When the condition, or a sign of the condition for which the patient is screened is found assign a code:
- for the condition or sign as the MRDx/main problem; and
 - from Z11, Z12 or Z13, mandatory, as a diagnosis type (3)/other problem.
- DN** Assign an additional code, optional, as a diagnosis type (3)/other problem to identify any circumstances indicating the reason for the screening test (e.g. family history).
- DN** Assign an additional code, optional, as a diagnosis type (3)/other problem, to identify any incidental findings noted at the time of the exam.

Example: A 52-year-old female patient with no evidence of signs or symptoms of breast disease comes to the breast clinic for mammogram. No abnormalities were found.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z12.3	MP	Special screening examination for neoplasm of breast

Example: A 60-year-old female patient with no signs or symptoms of breast disease comes to the breast clinic for mammogram. A suspicious area is found in the upper outer quadrant and the patient will be booked for a breast biopsy.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
R92	MP	Abnormal findings on diagnostic imaging of breast
Z12.3	OP	Special screening examination for neoplasm of breast

Rationale: The screening revealed a sign of the condition; therefore R92 is the main problem. Z12.3 is **mandatory** to show the condition was discovered on screening.

Example: A 60-year-old female patient has detected a lump in her right breast on self-examination. She is referred for mammography by her family physician. The mammogram confirmed a lesion in her breast.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
N63	MP	Unspecified lump in breast

Rationale: As the patient presented with a sign of breast cancer, the mammogram in this case does not qualify as a screening test.

Example: Patient with no known complaint is admitted as a day surgery patient for a screening colonoscopy due to a family history of colon cancer. No abnormalities were detected.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z12.1	(M)	MP	Special screening examination for neoplasm of intestinal tract
Z80.0	(3)	OP	Family history of malignant neoplasm of digestive organs (optional)

Example: Patient with no known complaint is admitted as a day surgery patient for a screening colonoscopy due to a family history of colon cancer. Internal hemorrhoids were noted.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z12.1	(M)	MP	Special screening examination for neoplasm of intestinal tract
Z80.0	(3)	OP	Family history of malignant neoplasm of digestive organs (optional)
K64.9	(3)	OP	Haemorrhoids, unspecified (optional)

Example: Patient with no known complaint, but with a family history of colon cancer, presents for a screening colonoscopy. Upon examination, a lesion is noted and biopsied, which is shown to be adenocarcinoma of the sigmoid colon.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C18.7	(M)	MP	Malignant neoplasm of sigmoid colon
Z12.1	(3)	OP	Special screening examination for neoplasm of intestinal tract
Z80.0	(3)	OP	Family history of malignant neoplasm of digestive organs (optional)

Rationale: The screening revealed malignancy; therefore, C18.7 is the MRDx/main problem and Z12.1 is **mandatory** to show the condition was discovered on screening.

Example: Patient with a positive family history for colon cancer undergoes a screening colonoscopy. An adenomatous polyp is found in the sigmoid colon. Polypectomy is performed.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
D12.5	(M)	MP	Benign neoplasm of sigmoid colon
Z12.1	(3)	OP	Special screening examination for neoplasm of intestinal tract
Z80.0	(3)	OP	Family history of malignant neoplasm of digestive organs (optional)

Rationale: The screening revealed neoplastic disease; therefore, D12.5 is the MRDx/main problem and Z12.1 is **mandatory** to show the condition was discovered on screening.

Note: The patient is being screened for neoplastic disease (malignant or benign), which is found. Adenomatous polyps in the colon have a malignant potential; therefore, this is not an incidental finding.

Prophylactic Organ Removal

In effect 2001, amended 2006



Select a code from the category **Z40 Prophylactic surgery** when a patient is admitted for surgical removal of non-diseased organs or tissue related to risk of, or treatment for, malignancy.

Example: A patient is admitted for prophylactic bilateral orchidectomy due to advanced cancer of the prostate.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z40.08	(M)	Prophylactic removal of other organ
C61	(3)	Malignant neoplasm of prostate
1.QM.89.^		
Excision total, testis (approach coded with qualifiers)		
Location: B		

Example: A patient with a personal history of breast cancer, left breast (no residual disease) elects to have a right total simple mastectomy to remove the non-diseased breast.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z40.00	(M)	Prophylactic removal of breast
Z85.3	(3)	Personal history of malignant neoplasm of breast
1.YM.89.^		
Excision total, breast (approach coded with qualifiers)		
Location: R		

See also the coding standard entitled [Personal and Family History of Malignant Neoplasms](#).

Coding of NACRS Visits for Rehabilitative Services

[Click here for description of change.](#)

In effect 2002, amended 2006, 2008, 2012



Assign a code from the category **Z50 Care involving use of rehabilitation procedures**, as the main problem when it is a reason for the NACRS visit.



When a person is referred solely for physical therapy (care involving use of rehabilitation procedures), assign **Z50.1 Other physical therapy** as the main problem.



Assign an additional code, optional, as an other problem to identify the underlying disorder.

These codes apply to patients who have already been treated for a disease or injury, but who are receiving care involving rehabilitation procedures.

See also the coding standard entitled [Selection of Interventions to Code for Ambulatory Care](#).

Example: A woman with multiple sclerosis visits the rehabilitation clinic for physiotherapy.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z50.1	MP	Other physical therapy
G35	OP	Multiple sclerosis (optional)

1.ZX.12.JA Therapy, multiple body sites, using other technique NEC

Example: A patient with a history of recent stroke with ongoing aphasia, attends the rehabilitation clinic for a scheduled speech therapy session.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z50.5	MP	Speech therapy
R47.0	OP	Dysphasia and aphasia
I69.4	OP	Sequelae of stroke, not specified as haemorrhage or infarction (optional)

6.RA.30.BR Therapy, voice, for breath control

Admission for Administration of Chemotherapy, Pharmacotherapy and Radiation Therapy

Click here for description of change.

In effect 2001, amended 2006, 2007, 2008, 2009



When a patient previously diagnosed with a malignancy has an encounter for care solely for the administration of radiation therapy, assign Z51.0 *Radiotherapy session* as the MRDx/main problem.



When a patient previously diagnosed with a malignancy has an encounter solely for the administration of chemotherapy to treat the malignancy, assign Z51.1 *Chemotherapy session for neoplasm* as the MRDx/main problem.



Assign an additional code to identify the malignant condition, mandatory, as a diagnosis type (3)/other problem for radiation therapy visits and chemotherapy visits.



Assign a CCI code, mandatory, for any radiation therapy or chemotherapy interventions.

Note: Admission for brachytherapy should not be confused with admissions for radiation therapy. See also the coding standard entitled [Brachytherapy](#).

When a patient presents for radiation therapy or chemotherapy intervention and it is cancelled due to contraindication, see also the coding standard entitled [Cancelled Interventions](#).



When the patient has an encounter solely for administration of chemotherapy (pharmacotherapy) to treat conditions other than malignant neoplasms, assign Z51.2 *Other chemotherapy* as the MRDx/main problem.

- Assign an additional code to identify the disease/condition, mandatory, as a diagnosis type (3)/other problem.

CCI codes for systemic chemotherapy for neoplastic disease (drugs where the agent component of the qualifier begins with “M”) are classified within rubric 1.ZZ.35^^ *Pharmacotherapy, total body*. For example, the antineoplastic drug Vincristine administered by injection is classified to 1.ZZ.35.HA-M3. These procedures need only be assigned once.

Example: Encounter for radiation therapy session for carcinoma of the left lower lobe of lung.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z51.0	(M)	MP	Radiotherapy session
C34.31	(3)	OP	Malignant neoplasm of lower lobe, left bronchus or lung
1.GT.27.JA			Radiation, lung NEC, using external beam

Example: Encounter for IV Vincristine chemotherapy session for active left main bronchus malignancy.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z51.1	(M)	MP	Chemotherapy session for neoplasm
C34.01	(3)	OP	Malignant neoplasm of left main bronchus
1.ZZ.35.HA-M3			Pharmacotherapy, total body, percutaneous approach, using plant alkaloid and other natural product

Example: Patient with malignant neoplasm of the breast and is now presenting for a session of administration of the drug pamidronate alone for the treatment of her generalized bone loss due to malignancy.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z51.2	(M)	MP	Other chemotherapy
M85.80	(3)	OP	Other specified disorders of bone density and structure, multiple sites
C50.99	(3)	OP	Malignant neoplasm of breast, part unspecified, unspecified side
1.ZZ.35.HA-N5			Pharmacotherapy, total body percutaneous approach [intramuscular, intravenous, subcutaneous, intradermal] using drug for treatment of bone disease

Rationale: As the pharmacotherapy is directed at the bone loss, not the malignancy, Z51.2 is assigned

Example: Patient with bursitis of the elbow is seen in the emergency department for administration of IV therapy to treat that condition.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z51.2	MP	Other chemotherapy
M70.3	OP	Other bursitis of elbow

Example: Patient with AIDS is seen in ambulatory care solely for administration of antiretroviral pharmacotherapy.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z51.2	MP	Other chemotherapy
B24	OP	Human immunodeficiency virus [HIV] disease



When chemotherapy or radiation therapy is given during the admission in which the definitive surgical treatment occurs, code the malignancy as the MRDx.

Assignment of a code from category Z51 *Other medical care* in these circumstances is redundant as the chemotherapy is captured by the CCI code.

Example: Patient with cancer of the right lower lobe of the lung was admitted for lobectomy. He was started on intravenous chemotherapy before discharge.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C34.30	(M)	Malignant neoplasm of lower lobe, right bronchus or lung
1.GR.89.QB		Excision total, lobe of lung, using open thoracic approach
1.ZZ.35.HA-M0		Pharmacotherapy, total body, percutaneous approach, using antineoplastic agent NOS,

Admission for Insertion of a Vascular Access Device (VAD)

In effect 2001, amended 2006, 2007, 2009



When a patient is admitted solely for insertion of a vascular access device (VAD) for treatment of an existing condition, assign Z51.4 *Preparatory care for subsequent treatment, not elsewhere classified* as the MRDx/main problem.



Classify any encounter solely for adjustment or removal (without replacement) of an implanted vascular access device to Z45.2 *Adjustment and management of vascular access device* as the MRDx/main problem.



Assign an additional code to identify the disease/condition, mandatory, as a diagnosis type (3)/other problem.

Exception: Insertion of a VAD for the purpose of hemodialysis is classified to Z49.0 *Preparatory care for dialysis*.

Note: When there is a change or removal of a VAD due to a complication, do not assign Z51.4 *Preparatory care for subsequent treatment, not elsewhere classified*. Select an appropriate code from Chapter XIX—*Injury, Poisoning and Certain Other Consequences of External Causes*. See also coding standard entitled [Post-Intervention Conditions](#).

Example: Patient presents for insertion of a PICC line for future administration of antineoplastic agents for treatment of leukemia.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z51.4	(M)	MP	Preparatory care for subsequent treatment, not elsewhere classified
C95.9	(3)	OP	Leukaemia, unspecified
1.IS.53.GR-LF			Implantation of internal device, vena cava (superior and inferior), non-tunnelled vascular access device using percutaneous transluminal venous approach (e.g. peripherally inserted central catheter [PICC])

Example: Patient presents for removal of Broviac catheter after completion of chemotherapy for carcinoma of the lung. No further treatment is planned.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z45.2	(M)	MP	Adjustment and management of vascular access device
Z85.1	(3)	OP	Personal history of malignant neoplasm of trachea, bronchus and lung
1.IS.55.GR-LF			Removal of device, vena cava (superior and inferior), of venous access device using percutaneous transluminal approach

Admission for Blood Transfusion

[Click here for description of change.](#)

In effect 2001, amended 2007, 2012



When a patient is admitted solely for the purpose of a blood transfusion session, assign:

- **Z51.3 Blood transfusion (without reported diagnosis)** as the MRDx/main problem; and
- an additional code to identify the disease/condition, optional, as a diagnosis type (3)/other problem.

Example: Patient with thalassemia major admitted every six weeks for a blood transfusion.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z51.3	(M)	MP	Blood transfusion (without reported diagnosis)
D56.9	(3)	OP	Thalassaemia, unspecified
1.LZ.19.HH-U9-J			Transfusion, circulatory system NEC of whole blood using homologous transfusion

Rationale: These patients are generally seen on a regular or recurrent basis for continued therapy. A code for the blood transfusion is mandatory to assign because the patient is admitted solely for the purpose of a transfusion (see the table *Additional Mandatory CCI Codes for Ambulatory Care* in the coding standard entitled [Selection of Interventions to Code for Ambulatory Care](#)).

Example: Patient with leukemia is admitted for further assessment of the disease. During hospitalization the patient receives a blood transfusion as part of the treatment.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
C95.9	(M)	Leukaemia, unspecified

Rationale: As the patient was not admitted solely to receive a blood transfusion, Z51.3 is not assigned.

Palliative Care

[Click here for description of change.](#)

In effect 2008, amended 2009, 2012

Palliative care is part of the continuum of patient care, not necessarily a formal organizational designation.

Documentation to support coding palliative care may include:

- Palliative care consultation with initiation of a palliative care treatment plan; or
- Physician documentation such as “palliative patient, palliative situation, end of life care, comfort care, supportive care, or compassionate care.”

Palliative patients typically fall into one of the following three categories:

Known palliative patient admitted for the sole purpose of palliative care

- No life sustaining/curative treatment for reversible or irreversible (palliative) conditions.

Known palliative patient admitted for treatment of a reversible condition(s)

- Life sustaining/curative treatment for reversible (e.g. pneumonia, blood clot, sepsis, electrolyte imbalance, dehydration) but not irreversible conditions.
- It is assumed that palliative care is part of the treatment plan and qualifies as a significant diagnosis type.
- These patients are often expected to go home, however, they may deteriorate and the focus of care may change to that described in the first category above.

Patient not known to be palliative on admission

- These patients initially receive investigation and/or treatment but are subsequently changed to a palliative care plan.

Notes:

- Palliative care does not have to be provided in a designated palliative care bed, palliative care unit, or managed by a palliative care team.
- DNR orders alone do not constitute palliative care; there must be documentation of palliative care. While DNR orders are part of a palliative care plan, they may also be present in non-palliative care cases.
- “Pain control” alone does not constitute palliative care. While pain control is part of a palliative care plan, it may also be provided to patients who are not receiving palliative care.
- Acute conditions (e.g. pneumonia or dehydration) may be treated as part of the palliative care treatment plan.

- D** Assign **Z51.5 *Palliative care*** as a significant diagnosis type whenever there is physician documentation of palliative care.
- D** When palliative care is documented as a known component of the patient's care plan prior to arrival at the facility, assign prefix 8, **mandatory**.
- D** When a known palliative patient is admitted to the hospital for the **sole purpose** of receiving palliative care, assign:
 - **Z51.5 *Palliative care*** as the MRDx; and
 - an additional code(s), **mandatory**, to describe the palliative condition(s).
- D** When a known palliative care patient is admitted for treatment of reversible condition(s) assign:
 - **Z51.5** as a diagnosis type (1), (W), (X), or (Y); and
 - the reversible condition as the MRDx unless palliative care subsequently consumes the majority of the length of stay; and
 - an additional code, **mandatory**, to describe the palliative condition(s).
- D** When a patient who is **not** known to be palliative at the time of admission and subsequently changes to a palliative care plan assign:
 - the condition that is investigated or treated as the MRDx, unless palliative care subsequently consumes the majority of the length of stay (i.e. at least 24 hours in short stay admission).

Note: **Z51.5 *Palliative care*** must not be assigned a diagnosis type (2) or diagnosis type (3).

Note: Prefix 8 is restricted for use with **Z51.5 *Palliative care***.

Note: Do not assign palliative care as the MRDx on an obstetrical or newborn abstract. When palliative care is documented in these cases, assign **Z51.5 *Palliative care*** as a diagnosis type (1).

Example: A patient was admitted to hospital for end of life care because of amyotrophic lateral sclerosis. On admission an IV was started to maintain hydration. Pain control was monitored and medication adjusted as necessary. The patient died three days after admission.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
8	Z51.5	(M)	Palliative care
	G12.20	(3)	Amyotrophic lateral sclerosis

Rationale: The documentation indicates the patient is admitted for the sole purpose of receiving palliative care. The palliative condition is mandatory to assign and in this case, G12.20 meets the definition of diagnosis type (3). Prefix "8" is assigned with Z51.5 in this case because palliative care is documented as a known component of the patient's care plan prior to arrival at the facility.

Example: A 68-year-old patient, who is on the Palliative Care Registry due to end-stage COPD, is admitted with pneumonia. The patient is admitted to a palliative care bed and all documentation describes treatment for the pneumonia. The patient's condition improves during the admission and he is discharged home in a satisfactory condition.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
	J44.0	(M)	Chronic obstructive pulmonary disease with acute lower respiratory infection
	J18.9	(1)	Pneumonia, unspecified
8	Z51.5	(1)	Palliative care

Rationale: The documentation indicates the patient is admitted for treatment of pneumonia in COPD, which is classified in the usual manner. Z51.5 is assigned diagnosis type (1) because it is assumed that in the case of a known palliative care patient, palliative care is part of the treatment plan and assigned a significant diagnosis type. Prefix "8" is assigned with Z51.5 in this case because palliative care is documented as a known component of the patient's care plan prior to arrival at the facility.

Example: A patient, who is a known palliative care patient presents for treatment of dehydration. The patient has cancer of the lung with advanced secondary malignancy of the brain. She was admitted to the medical ward to receive hydration therapy and discharged home the following day.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
	E86.0	(M)	Dehydration
8	Z51.5	(1)	Palliative care
	C34.99	(3)	Malignant neoplasm bronchus or lung, unspecified, unspecified side
	C79.3	(3)	Secondary malignant neoplasm of brain and cerebral meninges

Rationale: The documentation indicates this palliative care patient is admitted for the purpose of receiving treatment for dehydration. It is assumed that in the case of a known palliative care patient, palliative care is part of the treatment plan and assigned a significant diagnosis type. Prefix "8" is assigned with Z51.5 in this case because palliative care is documented as a known component of the patient's care plan prior to arrival at the facility. C34.99 and C79.3 are mandatory to assign to identify the palliative condition and in this example, they meet the definition of diagnosis type (3).

Example: A patient with ovarian cancer was receiving palliative care through a community program. She was admitted to hospital on January 4 for IV antibiotics to treat pneumonia. She deteriorated on January 6 and the family was consulted. A decision was made for comfort measures only. She died peacefully on January 10.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
8	Z51.5	(M)	Palliative care
	J18.9	(1)	Pneumonia, unspecified
	C56.9	(3)	Malignant neoplasm of ovary, not specified whether unilateral or bilateral

Rationale: The documentation indicates the patient is admitted for management of an acute reversible condition, however, her condition deteriorated and palliative care is responsible for the greatest length of stay. C56.9 is mandatory to assign to identify the palliative condition and in this example, it meets the definition of diagnosis type (3). Prefix “8” is assigned with Z51.5 in this case because palliative care is documented as a known component of the patient’s care plan prior to arrival at the facility.

Example: A patient is admitted for investigation of gastric symptoms. The following day, gastroscopy and biopsy revealed linitis plastica. The physician discussed the prognosis (incurable cancer) with the patient. A DNR order is written and a palliative care consultation is initiated and the treatment plan is changed to palliative care. The patient dies in hospital 20 days following orders of palliative care.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
	Z51.5	(M)	Palliative care
	C16.9	(1) or (W)	Malignant neoplasm stomach unspecified

Rationale: This patient is diagnosed during the admission with an irreversible condition and palliative care became the treatment plan consuming the greatest length of stay and resources. Prefix “8” is not assigned in this case because palliative care is not documented as a known component of the patient’s care plan prior to arrival at the facility.

Example: A patient is admitted on January 1 for treatment of congestive heart failure (CHF). The patient is given medication for the CHF. By January 8, the CHF is worsening and the physician discusses the poor prognosis with the patient and family. The patient agrees to comfort care and all aggressive treatment measures are stopped. The patient wishes to die at home and is therefore discharged home on January 10 with palliative care measures in place.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
	I50.0	(M)	Congestive heart failure
	Z51.5	(1) or (W)	Palliative care

Rationale: Z51.5 *Palliative care* did not meet the definition of MRDx as it did not consume the greatest length of stay and resources. Diagnosis type (1) or (W) is assigned because there was a change in the treatment plan. Prefix “8” is not assigned in this case because palliative care is not documented as a known component of the patient’s care plan prior to arrival at the facility.

Example: An 84-year-old gentleman was found unresponsive at home on June 8 at 1645. The ambulance was called and the patient was intubated and ventilated. Upon admission to hospital, further examination and investigation revealed the patient suffered a hemorrhagic cerebrovascular accident. The physician discussed the diagnosis and poor prognosis with the family. The physician recommended the treatment plan be changed to palliative care because nothing further could be done for the patient. The family agreed to the palliative care treatment plan. The patient was extubated at 1900 and transferred to a palliative care room where he was kept comfortable with administration of IV Morphine and Scopolamine. He died on June 9 at 0845.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
	I61.9	(M)	Intracerebral haemorrhage, unspecified
	Z51.5	(1) or (W)	Palliative care

Rationale: Palliative care is documented following admission and it constitutes a treatment change; therefore, Z51.5 qualifies as a diagnosis type (1) or (W). When palliative care is initiated after admission, it must account for the majority of the stay and for at least 24 hours to qualify as the MRDx. It would not be the MRDx in this case, because the patient was in hospital for less than 24 hours. Prefix “8” is not assigned in this case because palliative care is not documented as a known component of the patient’s care plan prior to arrival at the facility.

Example: A 50-year-old woman with known non-small cell cancer of the right lung was admitted on June 17 with a diagnosis of pneumonia. The physician writes that her prognosis is poor. The patient died on June 19.



<u>Prefix</u>	<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
	J18.9	(M)	Pneumonia, unspecified
	C34.90	(3)	Malignant neoplasm of right bronchus or lung unspecified

Rationale: Palliative care cannot be assumed based on the diagnosis of cancer alone. Z51.5 is assigned only when there is documentation of palliative care.

Boarder Babies and Boarder Mothers

In effect 2001, amended 2006, 2008

- D** When a mother is admitted for early postpartum care and her healthy newborn is also admitted as a “boarder baby,” assign one of the following codes as the MRDx on the infant’s abstract:
- **Z76.2** *Health supervision and care of other healthy infant and child*, when supervision and care of the healthy infant is carried out by the nursing staff.
 - **Z76.3** *Healthy person accompanying sick person*, when the mother is providing all care for the infant herself.

Example: Infant’s Abstract

D A healthy male infant is admitted with his mother who requires early postpartum care. The infant receives care and supervision by nursing staff.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z76.2	(M)	Health supervision and care of other healthy infant and child

Example: Infant’s Abstract

D A healthy male infant is admitted with his mother who requires early postpartum care. The infant rooms in with his mother who provides all care for the infant.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z76.3	(M)	Healthy person accompanying sick person

- D** When a baby is ill and a mother is admitted in order to provide care and supervision of her sick infant, assign **Z76.3** *Healthy person accompanying sick person* as the MRDx on the mother’s abstract.

Example: Mother’s Abstract

D Due to distance and family circumstances, the healthy mother of a sick infant is admitted to care for her breastfeeding infant.

<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z76.3	(M)	Healthy person accompanying sick person
Z39.1	(3)	Care and examination of lactating mother (optional)

Rationale: This code is applicable to any healthy person whose only reason in hospital, is to accompany a sick person. In this case, it applies to a healthy mother. In this case scenario, Z39.1 may be added as an optional, diagnosis type (3) code in order to describe the breastfeeding component.

Personal and Family History of Malignant Neoplasms

In effect 2001, amended 2002, 2006, 2007, 2008



Use the following criteria to determine when to assign a code from Z85 *Personal history of malignant neoplasm*.

- The malignancy has been completely eradicated or excised AND there is no further treatment (including adjuvant therapy) being directed to the primary site.

Note: Codes from the category Z80 *Family history of malignant neoplasm* and Z85 *Personal history of malignant neoplasm* are never recorded as the MRDx/main problem.

See also the coding standards entitled [Recurrent Malignancies](#) and [Neoplasms Arising in Lymphoid, Hematopoietic and Related Tissue](#).

Example: A woman presents to the emergency department for a dressing change (medicated) on the weekend. She had a mastectomy (for breast cancer) the week before and is scheduled for chemotherapy.



<u>Code</u>	<u>NACRS</u>	<u>Code Title</u>
Z48.0	MP	Attention to surgical dressings and sutures
C50.99	OP	Malignant neoplasm breast, part unspecified, unspecified site (optional)
1.YS.14.JA-H1		Dressing, skin of abdomen and trunk, using medicated dressing (optional)

Rationale: Z85.— is not assigned because the patient is still undergoing treatment. See also the coding standard entitled [Admission for Follow-up Examination](#).

Example: A patient who had a previous radical prostatectomy five years previously presents for management of bone metastases.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
C79.5	(M)	MP	Secondary malignant neoplasm of bone and bone marrow
Z85.4	(3)	OP	Personal history of malignant neoplasm of genital organs (mandatory)

Rationale: When a secondary malignancy qualifies as the MRDx/main problem, it is mandatory to assign an additional code to identify the primary site. Z85.4 is selected because the patient has completed treatment directed towards the primary site. See also the coding standard entitled [Primary and Secondary Neoplasms](#).



Assign a code from Z80 *Family history of malignant neoplasm*, optional, as diagnosis type (3)/other problem, to denote a reason for an examination or prophylactic surgery.

Example: Patient has an extremely strong maternal family history for breast malignancy. She is admitted for prophylactic bilateral simple total mastectomies.



<u>Code</u>	<u>DAD</u>	<u>Code Title</u>
Z40.00	(M)	Prophylactic removal of breast
Z80.3	(3)	Family history of malignant neoplasm of breast

1.YM.89.^ ^ Excision total, breast (approach coded with qualifiers)

Location: B

Example: Patient has a strong family history of colon cancer. She is admitted for an elective colonoscopy to screen for the disease. No disease is found at this time.



<u>Code</u>	<u>DAD</u>	<u>NACRS</u>	<u>Code Title</u>
Z12.1	(M)	MP	Special screening examination for neoplasm of intestinal tract
Z80.0	(3)	OP	Family history of malignant neoplasm of digestive organs

2.NM.70.BA-BJ Inspection, large intestine, using endoscopic per orifice approach (or via stoma) and colonoscope

See also the coding standards entitled [Prophylactic Organ Removal](#) and [Screening for Specific Disease](#).

Appendix A—Resources

General Coding Standards for CCI

Definitions of Flaps and Grafts

When direct closure of a wound is not possible, there are several options available to the surgeon to repair a defect, whether surgically or traumatically created. The following definitions have been prepared for the purposes of this classification to obtain national coding consistency.

Autograft

Tissue taken from the patient's own body and having no vascular supply (e.g. full thickness skin, fat, fascia, cartilage, bone, nerve) is described as an autograft. May also be called autologous tissue in the source documentation.

Homograft

A homograft is an organ or tissue procured from another human being and may be used promptly after procurement or after preservation in a tissue bank. May also be referred to as allograft, allogeneic organ, or homologous tissue.

Xenograft

A xenograft is an organ or tissue procured from an animal source (e.g. porcine valves, bovine bone tissue). May also be referred to as heterograft, heterologous graft or heteroplastic graft.

Local Flap

When direct closure of a wound is impossible due to its size or shape a local flap may be used. The tissue is cut on three sides leaving the fourth side attached to its blood and nerve supply, in the immediate vicinity where the "repair" is needed. Examples of local flaps include: V-Y advancement flaps, transposition flaps, Z-plasties and rotation flaps. The most frequent types of tissue involved in local flaps are skin, mucosa and omentum.

Pedicled (distant or regional) Flap

The pedicled flap is prepared like a local flap, but it is not procured in the immediate vicinity where the repair is needed. It often needs to be split in order to reach the distant site and source documentation may refer to "tunneling" of the pedicled flap. The pedicled flap remains attached at its base (pedicle) carrying its own blood supply. When the flap has been set into the recipient defect site and a new blood supply has been established, the pedicle may be divided. This usually takes about three weeks. May also be referred to as composite flap, myocutaneous flap, muscle rotation flap, muscle transposition flap, latissimus dorsi myocutaneous flap (LDM), trans rectus abdominis muscle flap (TRAM).

Free Flap

A free flap is tissue that is raised on its vascular pedicle, removed from its originating site and transferred to a new location on the body. These flaps contain vessels to maintain a blood supply and must be joined at the recipient site by microvascular anastomoses to allow revascularization. May also be referred to as composite free flap, fasciocutaneous flap, fibular flap, interpositional intestinal flap, random flap.

Synthetic Tissue Grafts

Synthetic tissue grafts are man-made materials that are used to replace tissue and often also encourage tissue regeneration of healing. They include materials such as bone paste and marlex mesh. Synthetic tissue may be used to reinforce repairs such as that of a hernia.

Chapter I—Certain Infectious and Parasitic Diseases

Drug-Resistant Microorganisms

What Is Methicillin Resistant *Staphylococcus Aureus* (MRSA)?

Staphylococcus aureus, often referred to simply as “staph,” is a bacterium commonly found on the skin of healthy people. Occasionally, staph can get into the body and cause an infection. This infection can be minor (such as pimples, boils, and other skin conditions) or serious (such as blood infections or pneumonia). Methicillin is an antibiotic commonly used to treat staph infections. Although methicillin is very effective in treating most staph infections, some staph bacteria have developed resistance to methicillin and can no longer be killed by this antibiotic. These resistant bacteria are called methicillin-resistant *Staphylococcus aureus*, or MRSA. They can be found on the skin, in the nose, and in blood and urine.

Methicillin Resistant *Staphylococcus Aureus* (MRSA) infection usually develops in hospital patients who are elderly or very sick, or who have an open wound (such as a bedsore) or a tube (such as a urinary catheter) going into their body. Although MRSA is resistant to many antibiotics and often difficult to treat, a few antibiotics can still successfully cure Methicillin Resistant *Staphylococcus Aureus* (MRSA) infections.

What Is Vancomycin Resistant *Enterococcus* (VRE)?

Enterococcus is a common, gram-positive bacterium. The most common infections caused by enterococci are urinary tract infections, wound infections, bacteremia, endocarditis and meningitis. Enterococci also frequently colonize open wounds and skin ulcers.

Vancomycin is the antibiotic used for the treatment of serious infections caused by enterococci. Like with Methicillin Resistant *Staphylococcus Aureus* (MRSA), patients can be either “colonized” or “infected” with Vancomycin Resistant Enterococci (VRE) and both are sources for nosocomial infection. The most frequent sites for colonization are in the stool, perineum, anus, axilla, umbilicus, wounds, Foley catheters, and colostomy sites.

Vancomycin Resistant Enterococci (VRE) can be spread directly by patient-to-patient contact or indirectly via hands of personnel, contaminated environmental surfaces or patient care equipment. Treatment of Vancomycin Resistant Enterococci (VRE) infection is difficult due to a very limited range of antibiotics available. Those people found to be harmlessly colonized by Vancomycin Resistant Enterococci (VRE) need no special treatment and over a period of time these people become spontaneously clear of VRE.

What Is the Difference Between Colonization and Infection?

Colonization means that MRSA or VRE is present on or in the body without causing illness. Patients will have no signs or symptoms of infection caused by the organism. A microbiology report may indicate the presence of MRSA or VRE, but the patient will not have an actual infection, however, they are carriers. Treatment of carriers without symptoms of infection is not usually necessary, but they may sometimes be treated with special antibiotic ointments to the nose and/or washing with special antibacterial preparations.

On the other hand, if a patient has a MRSA or VRE infection it means that MRSA or VRE is making the person sick.

What Is Decolonization?

Decolonization is the elimination of MRSA carrier state through use of infection control measures and/or antibiotics. This decreases the risk of transmission to high-risk individuals (immunocompromised or otherwise highly susceptible persons) or to others in an outbreak situation.

Viral Hepatitis

Viral hepatitis is an inflammatory and necrotic disease of liver cells. Viruses A, B, C, D and E may result in acute viral hepatitis. Acute viral hepatitis infections with viruses B, C and D may progress to chronic viral hepatitis.

Viral hepatitis that lasts for more than 6 months is generally defined as “chronic”, however, this definition is arbitrary. Chronic viral hepatitis is a variable progressive disease that ultimately results in cirrhosis and hepatic failure. The diagnosis of chronic viral hepatitis can only be determined following a liver biopsy.

Patients with chronic viral hepatitis often have abnormal liver function tests. An indication of chronic viral hepatitis is a raised level of alanine transaminase, although this may also be due to other causes such as alcohol. Generally, patients with chronic viral hepatitis are followed biannually with blood tests and ultrasounds. Neonates of mothers who have chronic hepatitis B or are hepatitis B carriers are at risk of transmission and should be immunized soon after birth (within 24 hours), whereas there is no equivalent vaccination available for neonates of mothers who have chronic hepatitis C or are hepatitis C carriers. These neonates have approximately 5% risk of infection.

Generally, after recovery from an infection with an organism, a person will develop antibodies to the pathogenic organism. Antibodies to certain infectious diseases can also be produced by vaccination. In these vaccinated people, future blood tests demonstrating the antibodies will indicate past infection or immunization. Such people are not regarded as “carriers”. A carrier is a person who has hepatitis B, C or D virus and/or antibodies in his or her blood, does not manifest symptoms, but may infect others. Because the virus is present in the blood, it can be transmitted to others. It is important to understand the distinction between a person who is a carrier of an infectious disease (an infection risk) and a person whose antibody results indicate past infection or immunization to an infectious disease (not an infection risk). The role of antibody tests in distinguishing between carrier status and past infection varies depending on the infection.

Hepatitis A

Hepatitis A is a disease which is quite contagious and is transmitted enterically (fecal-oral route). Transmission within families is common. In developing countries, the usual source of infection is faecal contamination of drinking water.

The hepatitis A virus (HAV) is detected by two antibody tests:

1. IgM antibody: positive result indicates recent infection.
2. IgG antibody (anti-HA): positive result indicates past infection (previous exposure to HAV) or immunity through vaccination.

HAV is **never** a chronic infection. There is no known carrier state and HAV plays no role in chronic active hepatitis or cirrhosis.

The ICD-10-CA category for classifying Hepatitis A is:

B15 Acute hepatitis A

Hepatitis B

Hepatitis B may manifest as an acute illness and may progress to a chronic infection. The hepatitis B virus (HBV) is transmitted by infected body secretions such as blood and blood products, transplanted tissue, saliva, urine, semen and cervical secretions. Most adults make a full recovery and are left with immunity for life. However, in up to 10% of cases, following an acute infection, patients will become asymptomatic carriers of HBV or develop chronic active viral hepatitis (5%). There are estimated to be about 300 million HBV carriers worldwide.

ICD-10-CA categories for classifying Hepatitis B are:

B16 Acute hepatitis B
 B18.0 Chronic viral hepatitis B with delta-agent
 B18.1 Chronic viral hepatitis B without delta-agent
 Z22.50 Carrier of viral hepatitis B

Hepatitis C

Hepatitis C may manifest as an acute illness and may progress to a chronic infection. The hepatitis C virus (HCV) is transmitted parenterally (e.g. transfusions, injection drug abuse, occupational exposure to blood or blood products). Recovery rates from hepatitis C virus (HCV) infection is much lower than in hepatitis B virus infection. Generally it is known that up to 90% will progress to a chronic infection.

Hepatitis C differs from hepatitis B in that a patient with hepatitis C will have the virus for the rest of their lives as either an acute or chronic infection or as an asymptomatic carrier. A positive hepatitis C antibody test indicates hepatitis C infection. A polymerase chain reaction (PCR) assay can also be conducted; a positive result supports the diagnosis of chronic hepatitis C infection. However, a negative PCR result does not necessarily mean that there is no chronic infection as the virus may still be present in small amounts and not detected in the blood sample.

ICD-10-CA categories for classifying Hepatitis C are:

- B17.1 Acute hepatitis C
- B18.2 Chronic viral hepatitis C
- Z22.51 Carrier of viral hepatitis C

Hepatitis D

The hepatitis D virus (HDV) can only occur in the presence of HBV, never alone. It occurs as either a co-infection with acute hepatitis B or a super infection in established chronic hepatitis B. The HDV is spread mainly parenterally (e.g. by needles and blood). It is also referred to as the delta agent.

ICD-10-CA codes for classifying Hepatitis D are:

- B17.0 Acute delta-(super) infection of hepatitis B carrier
- Z22.58 Carrier of other viral hepatitis is to be assigned only when there is no sign of active hepatitis D disease (hepatitis D carrier state).

Hepatitis E

The hepatitis E virus (HEV) is transmitted enterically (fecal-oral route). It is endemic in South-East Asia, countries of the Soviet region, India, mid-east Africa and Central America. Large epidemics with person-to-person spread have been known to occur. The normal course of infection seems to be acute and a relatively benign illness, except in pregnancy.

HEV is **never** a chronic infection. There is no known carrier state and HEV plays no role in chronic active hepatitis or cirrhosis.

The ICD-10-CA code for classifying Hepatitis E is:

- B17.2 Acute hepatitis E

Hepatitis Complicating Pregnancy, Childbirth or the Puerperium

O98.4— *Viral hepatitis complicating pregnancy, childbirth and the puerperium* is assigned where acute hepatitis A, acute or chronic hepatitis B, acute or chronic hepatitis C, acute or chronic hepatitis D or Hepatitis E complicates the pregnancy, childbirth or puerperium. This code is not assigned when the obstetric patient is a carrier. Assign a code from the category Z22.5— *Carrier of viral hepatitis* for an obstetric patient with carrier status.ⁱ

Chapter IV—Endocrine, Nutritional and Metabolic Diseases

Diabetes Mellitus

Diabetes mellitus is a chronic disease in which the body does not make, or does not properly use, insulin. Insulin is the hormone that helps the body use the energy from sugar, starches and other foods. Glucose is a form of sugar produced when the body digests carbohydrates (sugars and starches). Glucose is the body's major fuel for the energy it needs. When insulin is absent or ineffective, the blood glucose (blood sugar) level increases and the patient is hyperglycemic.

Type 1 Diabetes Mellitus (E10.–)

The cause of type 1 diabetes is unknown. It is the result of an autoimmune process in which the body's immune system attacks and destroys the insulin producing cells of the pancreas. The failure of the beta cells to produce insulin prevents glucose from entering the cells of the body to provide fuel. When glucose cannot enter the cells, it builds up in the blood and the body's cells literally starve to death. People with type 1 diabetes must take daily insulin injections and regularly monitor their blood sugar levels.

Type 1 diabetes can cause different problems, but there are three key complications:

1. **Hypoglycemia** (low blood sugar; sometimes called an insulin reaction) occurs when blood sugar drops too low.
2. **Hyperglycemia** (high blood sugar) occurs when blood sugar is too high, and can be a sign that diabetes is not well controlled.
3. **Ketoacidosis** (diabetic coma) is loss of consciousness due to untreated or under-treated diabetes.

Type 2 Diabetes Mellitus (E11.–)

Type 2 diabetes mellitus, which is related to insulin resistance (lack of the ability of the body to respond to insulin appropriately), is the most common form of diabetes. In type 2 diabetes, either the body does not produce enough insulin or the cells ignore the insulin. When glucose builds up in the blood instead of going into cells, it can cause the cells to be starved for energy. Over time, high blood glucose levels may result in hyperglycemia and other complications such as accelerated atherosclerosis, neuropathy, nephropathy, and retinopathy.

i. Extracted from NCCH ICD-10-AM, July 2000, Specialty Standards.

“Although most type 2 diabetics are treated with diet, exercise and oral drugs, some patients intermittently or persistently require insulin to control hyperglycemia and prevent non-ketotic hyperglycemic-hyperosmolar coma (NKHHC).”ⁱⁱ Treatment by insulin is not an indicator of the type of diabetes. Type 2 diabetes is considered as insulin *requiring* diabetes if the patient needs insulin therapy, while type 1 diabetes mellitus is considered as insulin *dependent* diabetes.

Other Specified Diabetes Mellitus (E13.–)

Other specified types, previously called secondary diabetes, are caused by other illness or medications that result in destruction of pancreatic beta cells or development of peripheral insulin resistance. The most common are diseases of the pancreas that destroy the pancreatic beta cells (e.g. hemochromatosis, pancreatitis, cystic fibrosis, pancreatic cancer), hormonal syndromes that interfere with insulin secretion (e.g. pheochromocytoma) or cause peripheral insulin resistance (e.g. acromegaly, Cushing syndrome, pheochromocytoma), and diabetes induced by drugs (e.g. phenytoin, glucocorticosteroids, estrogens).ⁱⁱⁱ Genetic research has provided new insights into the pathogenesis of MODY (maturity-onset diabetes of young), which was formerly included as a form of type 2 diabetes. A review of the literature shows that other specified types of diabetes may account for 1% to 2% of all diagnosed cases of diabetes.

Just as patients with type 2 diabetes do not become type 1 diabetics, or vice versa, patients with a type of diabetes classifiable to E13.– do not become type 1 or type 2 diabetics.

Diabetes Mellitus in Pregnancy (O24.5–O24.8)

This pregnancy-related form of diabetes occurs when high levels of hormones cause cells to become less sensitive to insulin. Gestational diabetes occurs in about 2%–5% of all pregnancies, and disappears when pregnancy is over. Women who have had gestational diabetes are at increased risk for later developing type 2 diabetes mellitus.

Borderline Diabetes—A Misnomer

According to the Canadian Diabetic Association, “borderline” diabetes doesn’t exist, although the term seems to be used quite frequently. In general, it appears to be a common expression meaning that a person has mild diabetes, or perhaps that the treatment is only diet and exercise. Another misunderstanding about being “borderline” may be the assumption that blood glucose levels are just slightly elevated in a diabetic.^{iv}

ii. The Merck Manual, 17th edition, Mark H. Beers, Robert Berkow, ed. Merck Research Laboratories, Whitehouse Station, N.J., 2000, pg 165.

iii. Votey, Scott R. and Peters, Anne L. *Diabetes Mellitus, Type 1—A Review*. Retrieved from the world-wide web, November 2, 2005. <http://www.emedicine.com/EMERG/topic133.htm>.

iv. Canadian Diabetes Association. Retrieved from the world-wide web, <http://www.diabetes.ca>.

Impaired Glucose Tolerance (IGT) [R73.0 *Abnormal Glucose Tolerance Test*]

A diagnostic statement of IGT indicates a prediabetic state, which is associated with insulin resistance and closely related to type 2 diabetes. It occurs when the blood glucose level is higher than normal, but not high enough to be classified as diabetes. IGT is detected through the same oral glucose tolerance test that is used to detect diabetes. People with IGT have a 1 in 3 chance of developing type 2 diabetes within 10 years, but this can be minimized through healthy eating and physical activity.

Complications of Diabetes

Diabetic complications can be classified broadly as micro-vascular or macro-vascular disease. Micro-vascular complications include neuropathy, nephropathy, and vision disorders (e.g. retinopathy, glaucoma, cataract and corneal disease). Macro-vascular complications include conditions such as heart disease and stroke.

Common Microvascular Complications of Diabetes Mellitus

Diabetic Nephropathy

Diabetic nephropathy is kidney damage, usually due to changes in small blood vessels leading to the filtering system of the kidney or to the smaller blood vessels within the filtering system itself, caused by a persistently high blood sugar level from diabetes. The damaged nephrons allow proteins that normally would stay in the blood to pass into the urine.

Diabetic nephropathy is the most common cause of kidney failure. There are no symptoms in the early stages of diabetic nephropathy. A small amount of protein in the urine (microalbuminuria) is the first sign of kidney damage. As damage to the kidneys progresses, larger amounts of protein spill into the urine (macro-albuminuria) and blood pressure rises. When damage to the blood vessels continues over time, kidney failure develops.

Diabetic Retinopathy

Retinopathy is the non-inflammatory impairment of the retina. Diabetic retinopathy occurs when the small blood vessels in the retina become swollen, often leaking fluid, or when new tiny blood vessels grow that block the retina. Diabetic retinopathy is a common cause of blindness in adults.

Additionally, new tiny blood vessels may form across the retina (neo-vascularization). These blood vessels are extremely fragile and may break and bleed easily, resulting in the formation of fibrous (scar) tissue around them. This causes the vision to be obscured and may ultimately cause retinal detachment (where scar tissue pulls the retina away from where it should be). This often causes the sudden loss of sight in one eye.

Related Intervention

The treatment for retinopathy is usually a form of laser treatment called pan-retinal laser photocoagulation, which is normally done under local anesthetic. In this form of laser treatment, bursts of a laser beam directed at the retina can destroy the new, abnormal blood vessels and prevent the retina detaching. It has been shown to reduce severe visual loss significantly if treatment is undertaken early. In CCI, this is coded to 1.CN.59.LA-AG *Destruction, retina, using laser*.

Diabetic Neuropathy

Diabetic neuropathy is the loss of the function of peripheral nerves in people with diabetes. There are many theories as to why patients with diabetes develop this condition. It may be due to the nerves having increased levels of glucose (sugar), which leads to dysfunction of the normal pathways that utilize the glucose for energy. Another possibility is that the blood supply to the nerves is compromised, which causes them not to function properly.

The symptoms of diabetic neuropathy can include increased but abnormal sensations such as pain or burning, or decreased sensation like numbness. Diabetic neuropathy typically affects the longest nerves first, and so it is most common in the feet. Loss of pain and/or temperature sensation can predispose the diabetic patient to foot ulcers—they can bump their foot and not even realize there is an open wound until the wound has already become infected.

Many other nerves can be affected in patients with diabetes. The nerves that make the eyes move may be affected so a diabetic may develop double vision. The optic nerve can be affected with subsequent loss of vision.

The autonomic nervous system can over-function or under-function. This can cause patients with diabetes to have too much or too little sweating, incontinence or retention of urine, diarrhea or constipation, sexual problems (including erectile dysfunction), problems with the pupils reacting to light changes and even fainting spells.

Peripheral Circulatory Complications

Diabetic vascular disease refers to hardening of the arteries throughout the body because of diabetes. Peripheral arterial disease (PAD) is hardening and narrowing of the arteries (atherosclerosis) that supply blood to the arms, legs, and other parts of the body. It results in reduced blood flow to those parts of the body. The arteries in the legs are most often affected. As an artery is narrowed by atherosclerosis, the leg muscles do not get enough blood, especially during increased activity when more blood is required. The main symptom of peripheral arterial disease in the leg is a tight or squeezing pain in the calf, foot, thigh, or buttock that occurs during exercise (such as walking up a hill or a flight of stairs, running, or simply walking a few steps). This pain is called intermittent claudication.

Related Interventions

PAD treatment may consist of a minimally invasive procedure called **angioplasty and stenting** [1.KG.50.^[^] *Dilation, arteries of leg NEC*]. In an angioplasty, a long, thin, flexible tube called a catheter is inserted into a tiny incision above an artery in the leg and is guided through the arteries to the blocked area. Once there, a special balloon attached to the catheter is inflated and deflated several times. The balloon pushes the plaque in the artery against the artery walls, widening the vessel. A tiny mesh-metal tube called a stent may then be placed into the narrowed area of the artery to keep it open. The stent remains permanently in the artery.

Bypass surgery creates a detour around any narrowed or blocked sections of the artery [1.KG.76.^[^] *Bypass, arteries of leg NEC*]. The blood then flows, bypassing the blocked part of the artery. Sometimes the blockage itself can be removed with a procedure called an **endarterectomy** [1.KG.57.^[^] *Extraction, arteries of leg NEC*]. **Amputations** [generic intervention 93] of the lower extremity may also be performed in patients with advanced multiple diabetic complications.

Macro-Vascular Complications of Diabetes Mellitus

Chronic hyperglycemia or persistent high glucose levels allow glucose to react with certain components of the blood. When this happens, the by-products of these reactions tend to attach themselves on the wall of the major blood vessels. The lumen (space) of the blood vessel narrows down and this decreases the blood flow to the various organs. Since larger blood vessels are involved these complications are referred to as macro-vascular complications. The common macro-vascular complications are cardiac and cardiovascular complications and cerebral vascular diseases.

Diabetic Cataracts

Cataracts in a patient with diabetes are not assumed to be “diabetic” unless specified as such.

Diabetic cataracts occur at a younger age and progress more rapidly to a mature opacity. Young people with type 1 diabetes occasionally develop snowflake or metabolic cataracts. Poor control of the diabetes may be a predisposing factor. True diabetic cataracts are characterized by bilateral white punctate or snowflake anterior and posterior subcapsular opacities of the lens. This condition is usually preceded by a sudden and progressive myopia. It is due to an increased accumulation of sorbitol, fructose, and glucose in the lens. These opacities may lessen or resolve with improved glycemic control.

E10.35† *Type 1 diabetes mellitus with diabetic cataract* is only assigned when the physician documents this type of cataract. It may be recorded as “diabetic cataract” or “cataract due to diabetes”.

Diabetes Mellitus and Hyperglycemia

In simple terms, “diabetes control” means keeping blood glucose levels within—or close to—the normal range. Glucose is the major source of energy for the body’s cells. When glucose can’t be transferred into cells from the bloodstream, glucose builds up in the blood. Hyperglycemia is the medical term for having too much sugar in the blood. Patients with diabetes are hyperglycemic when their blood glucose is not well controlled. Hence, a positive glucose tolerance test (R73.0 *Abnormal glucose tolerance test*) or unspecified hyperglycemia (R73.9 *Hyperglycaemia, unspecified*) must not be coded on cases being classified to the range E10–E14. Marked hyperglycemia may lead to a coma, a critical situation requiring immediate hospitalization.

Hyperglycemia in hospitalized people with diabetes contributes to increased mortality and morbidity by increasing the susceptibility to infection and lengthening hospital stays.

Hypoglycemia in Diabetes Mellitus

Hypoglycemia, according to the Canadian Diabetic Association’s definition, is a condition in which blood glucose levels drop too low. Symptoms may include sweating, trembling, hunger, dizziness, moodiness, confusion and blurred vision. A low blood glucose level can occur when the blood glucose drops below a certain level (usually less than 4 mmol/L). Not eating enough food, missing or delaying a meal, exercising without taking the necessary precautions, taking too much insulin or drinking alcohol, causes hypoglycemia. Severe low blood glucose may cause confusion, disorientation and/or seizures.

Hypoglycemia can also be called insulin shock or insulin reaction. Severe hypoglycemia is dangerous. Very low blood sugar seriously affects the brain’s ability to reason or use good judgment. If the blood sugar levels continue to plummet to a dangerously low level, the brain is seriously impaired and consciousness is usually lost. Permanent brain changes and death can result if emergency treatment for advanced hypoglycemia is not given.

Coma in Diabetes Mellitus

Diabetic Coma—Hypoglycemia

When blood sugars become too low a loss of consciousness can result. This can advance to coma. Hypoglycemia starves the brain of glucose energy and this lack of energy can cause symptoms ranging from headache and mild confusion to loss of consciousness, seizure and coma. Severe hypoglycemia is dangerous. Very low blood sugar seriously affects the brain’s ability to reason or use good judgment.

Diabetic Coma—Hyperglycemia—Associated With Diabetic Ketoacidosis (DKA) or Diabetic Hyperosmolar Syndrome (DHS)

Diabetic coma is a life-threatening condition. Either diabetic ketoacidosis or diabetic hyperosmolar syndrome can lead to diabetic coma. If blood sugar levels become too high, this can also result in a loss of consciousness. In some cases, this can advance to coma.

Diabetic ketoacidosis (DKA) is characterized by hyperglycemia, metabolic acidosis, and increased circulating total body ketone concentration caused by the buildup of by-products of fat metabolism. DKA occurs mainly in those who have type 1 diabetes mellitus. Sometimes, it can occur in those who have type 2 diabetes mellitus.

Hyperosmolar hyperglycemic nonketotic coma (HHNC) is characterized by hyperglycemia, hyperosmolarity, and an absence of significant ketosis. HHNC most commonly develops in patients with diabetes who have some concomitant illness that leads to a reduced fluid intake for example an infection like pneumonia and urinary tract infection (UTI).

Diabetes Mellitus and Multiple Complications

Diabetic Ulcers

Neuropathy and peripheral artery disease occur very commonly in the diabetic patient and are often encountered together. These two entities are mainly responsible for ulcers in diabetic patients. A diabetic foot ulcer is an open sore that most commonly occurs on the bottom of the foot. People who use insulin are at a higher risk of developing a foot ulcer, as are patients with diabetes-related kidney, eye, and heart disease. Being overweight and using alcohol and tobacco also play a role in the development of foot ulcers.

Ulcers form due to a combination of factors, such as lack of feeling in the foot, poor circulation, foot deformities, irritation (such as friction or pressure), and trauma. Vascular disease can complicate a foot ulcer, reducing the body's ability to heal and increasing the risk for an infection. Elevations in blood glucose can reduce the body's ability to fight off a potential infection and also slow the healing process.

A venous stasis ulcer, a type of leg ulcer, usually appears below the knee on the inner part of the leg and/or just above the ankle. Such ulcers are seen in patients with a history of DVT or varicose veins. They are caused by venous insufficiency and other disorders of clotting or circulation.

Decubitus ulcers, otherwise known as pressure ulcers or bedsores, are skin ulcers that develop on areas of the body where the blood supply has been reduced because of prolonged pressure. Diabetes is not the cause of decubitus ulcers but rather a risk factor that may cause the problem to worsen and healing to become difficult.

Glycemic control in patients with diabetes has a direct impact on progression of the angiopathy and tissue perfusion. Therefore, healing of any ulcer is dependent on diabetic complications present in the patient.

Diabetes Mellitus in Pregnancy

Dr. Ian Blumer, in his book *Diabetes for Canadians for Dummies*, states: “Gestational diabetes is defined as diabetes diagnosed during pregnancy. The great majority of the time it resolves as soon as the baby is born.” Changing hormones and weight gain are part of a healthy pregnancy. But both changes make it hard for the body to keep up with its need for insulin.

Causes of Gestational Diabetes

- The body needs more energy than usual during pregnancy so more insulin is required to move glucose into the cells to provide energy.
- The placenta produces other hormones during pregnancy and some of these hormones can block the action of insulin in the body, causing “insulin resistance” to develop.
- Though insulin requirement is greater in all women during pregnancy, for some, the pancreas is not able to produce enough insulin for the body’s needs, so high levels of glucose remain in the blood stream and this is called gestational diabetes.
- It usually takes many weeks before the amount of insulin produced is not enough, so gestational diabetes does not appear until the middle of pregnancy.

Other Problems in Pregnancy Associated With Diabetes Mellitus

Most women with gestational diabetes can safely have a full term pregnancy and have a normal labor, but there may be some pregnancy-associated problems due to the diabetes.

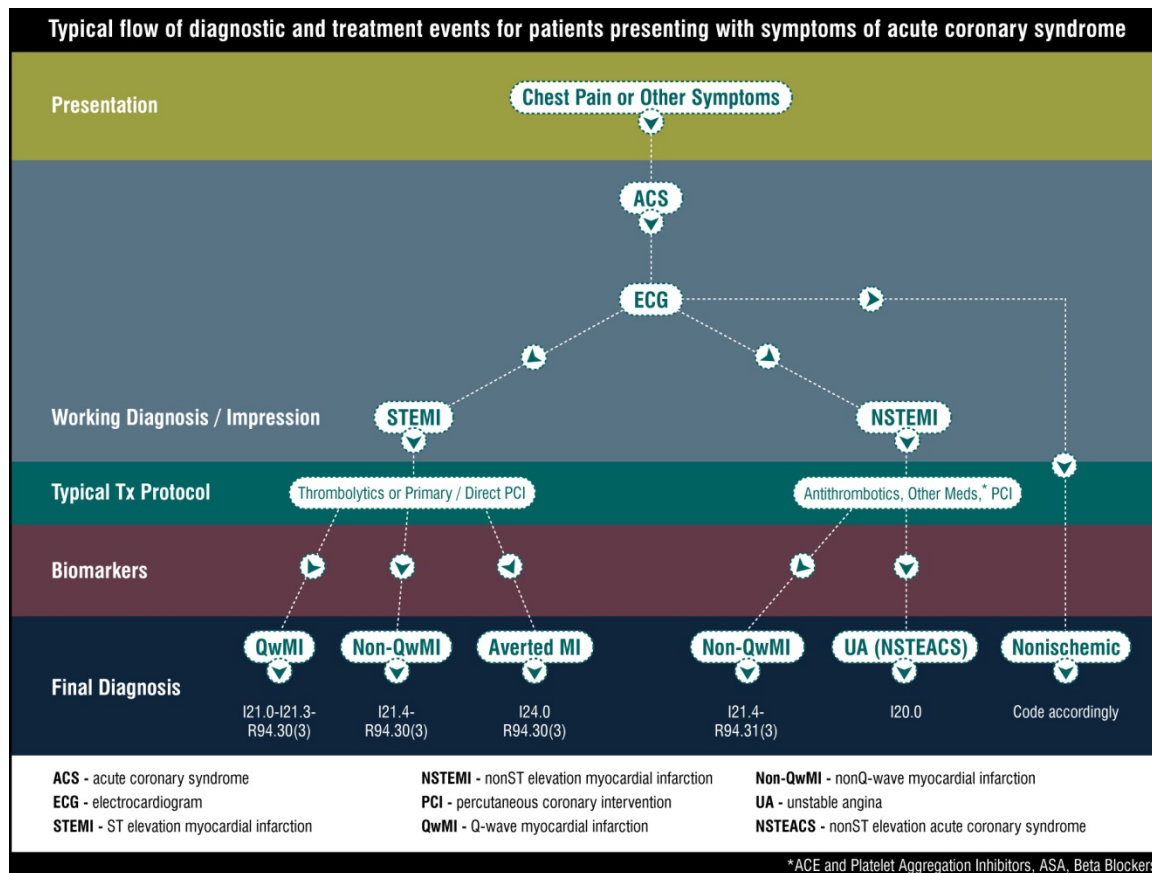
- Pregnancy induced hypertension (PIH) also known as pre-eclampsia—high blood pressure caused by pregnancy is fairly common when a mother has diabetes. It usually goes away soon after the birth of the baby.
- Infections, such as bladder infections are also fairly common during pregnancy, but are more common when the mother has diabetes.
- If the mother’s blood sugar is not well controlled during the pregnancy there is an increased risk of miscarriage or still birth.

Chapter IX—Diseases of the Circulatory System

Acute Coronary Syndrome (ACS) and Related Interventions

Acute coronary syndrome is a spectrum of conditions which includes:

- ST elevation myocardial infarction [STEMI]
- Non ST elevation myocardial infarction [NSTEMI]
- Unstable angina



This schema is **not intended to provide direction for code assignment in cases where the documentation is lacking**. When documentation is lacking, the coder must seek clarification from the physician or assign a code from the appropriate “unspecified” category. The typical flow of events are: a patient presenting with symptoms of acute coronary syndrome leads to a *working* diagnosis of one of the following:

ST Segment Elevation Myocardial Infarction [STEMI]

When the ECG shows ST elevation, a diagnosis of myocardial infarction (MI) is virtually inevitable. However, prompt treatment (e.g. percutaneous coronary intervention [PCI] or thrombolytic therapy) can alter the final outcome or type of MI. A patient presenting with an ECG with documented ST segment elevation (STEMI) can have one of the following potential outcomes:

- Evolution to Q-wave [transmural] myocardial infarction
- Evolution to non Q-wave [subendocardial] myocardial infarction
- Aborted or averted myocardial infarction

Non ST Segment Elevation Myocardial Infarction [NSTEMI]

When there is no ST elevation on the ECG, the potential outcomes are:

- Evolution to a less-damaging non Q-wave [subendocardial] myocardial infarction
- A final diagnosis of unstable angina

Sometimes the final diagnosis is referred to as non ST-elevation acute coronary syndrome (NonSTEACS or NSTEACS). When NonSTEACS or NSTEACS is the final diagnosis, the documentation must be reviewed for further confirmation to determine if the patient has had an NSTEMI or unstable angina.

In NSTEMI, myocardial infarction is confirmed by the presence of cardiac biomarkers such as troponin or CK-MB. Cardiac biomarkers are enzymes, proteins or hormones found in the blood that confirm necrosis to myocardial cells has occurred.

NSTEMI is a myocardial infarction identified by either elevated cardiac biomarkers or ECG changes *without* ST segment elevation. The ECG findings may include changes such as ST depression or T wave inversion or the ECG may be normal. The high sensitivity of the newer biomarkers enables detection of small areas of myocardial necrosis that may not show up on ECG.^v

Diagnosis is Non-Cardiac or Non-Ischemic

Conditions such as pulmonary embolism or pericarditis may initially present with symptoms similar to ACS including slightly elevated biomarkers. Investigations may include echocardiography or CT scan to confirm the diagnosis. Final diagnosis may be cardiac (e.g. pericarditis) or non-cardiac (e.g. esophagitis, pulmonary embolism).

ICD-10-CA Codes (Introduced in 2007)

The international version of the ICD does not include the terminology of STEMI and NSTEMI. In order to maintain international comparability, ICD-10-CA has retained the integrity of category **I21 Acute myocardial infarction** and category **I22 Subsequent myocardial infarction**. However, as of April 1, 2007 category R94.3 *Abnormal results of cardiovascular function studies* has been expanded to 5 characters to capture **working diagnoses** of STEMI or NSTEMI. Codes from I21 *Acute Myocardial Infarction* are used to capture **final diagnoses** recorded as STEMI or NSTEMI.

R94.30 Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]

R94.31 Abnormal cardiovascular function studies (biomarkers or ECG) suggestive of non ST segment elevation myocardial infarction [NSTEMI]
ST depression
T waves

v. *The Definitions of Acute Coronary Syndrome, Myocardial Infarction and Unstable Angina*, Thygesen & Alpert, Current Cardiology Reports 2001, 3:268-272.

R94.38 Other and unspecified abnormal results of cardiovascular function studies
Abnormal:

- electrocardiogram [ECG] [EKG] not elsewhere classified
- electrophysiological intracardiac studies
- phonocardiogram
- vectorcardiogram

Percutaneous Coronary Intervention (PCI)

A percutaneous coronary intervention (PCI) is an intervention performed on the coronary arteries via a percutaneous approach but usually refers to a coronary angioplasty, previously described as a percutaneous transluminal coronary angioplasty (PTCA). PCI is the treatment of choice in treating ST segment elevation myocardial infarctions when immediate access to cardiac catheterization laboratories is possible.^{vi} When immediate access is not possible, or PCI is not indicated, thrombolytic therapy has become the standard of care.^{vii}

At 1.IJ.50.^{^^} *Dilation, coronary arteries*, a mandatory status attribute exists to distinguish PCI that are considered primary/direct from those that are not. A primary PCI is one performed as the first intervention for STEMI within 12 hours of presentation to hospital with no thrombolytic therapy prior to PCI.

Thrombectomy devices [e.g. Pronto extraction catheter, Export aspiration catheter, Rescue catheter] may be used in cases of acute myocardial infarction where a large thrombus burden exists. The aspiration catheters are designed to reduce the thrombus before proceeding to angioplasty.

Atherectomy devices [e.g. Rotablator, rotational atherectomy catheter, laser] may be used for extraction of plaque from a coronary artery. These devices either remove plaque or pulverize it before proceeding to angioplasty.

When a thrombectomy or atherectomy is performed concomitantly with a dilation, select the appropriate code from the rubric 1.IJ.50.^{^^} *Dilation, coronary arteries*. When a thrombectomy is performed 'without' a dilation, select the appropriate code from rubric 1.IJ.57.^{^^} *Extraction, coronary arteries*.

It is expected that codes from rubric 1.IJ.57.^{^^} *Extraction, coronary arteries* will be used rarely as most times dilation is performed with atherectomy and thrombectomy.

vi. Primary Coronary Angioplasty in Patients with Acute Myocardial infarction. *Texas Heart Institute Journal* Volume 21, Number 2, 1994.

vii Letovsky, E. and Allen, T. "Initiating thrombolytic therapy for acute myocardial infarction: Whose job is it anyway?" *Canadian Medical Association Journal* 154, 4 (February 15, 1996): pp 509–511. [Online], cited July 29, 2008, from <http://epe.lac-bac.gc.ca/100/201/300/cdn_medical_association/cmaj/vol-154/0509e.htm>.

Drug-eluting stents (DES) may be used for the treatment of symptomatic ischemic disease in discrete de novo lesions. Common coatings for these stents include paclitaxel [e.g. Taxus stent], sirolimus [e.g. Cypher stent], zotarolimus [e.g. Endeavor stent], or everolimus [e.g. Xience stent]. Drug-eluting balloons (DEB) may be used for the prevention and/or treatment of in-stent restenosis. The most common DEB currently in use is the Pantera Lux which is coated with paclitaxel.

When a drug-eluting stent is employed in a PCI intervention, an additional code from rubric 1.IL.35.^*Pharmacotherapy, (local) vessels of heart* is assigned, mandatory as per direction in these standards.

When a drug-eluting balloon is employed in a PCI intervention, an additional code of 1.IL.35.HH-T9 *Pharmacotherapy, (local) vessels of heart percutaneous infusion approach using pharmacological agent NEC* is assigned, mandatory as per direction in these standards.

Strokes, Cerebrovascular Accidents (CVA) and Transient Ischemic Attacks (TIA)

A stroke is the sudden death of brain cells in a localized area due to inadequate blood flow. A stroke occurs when blood flow is interrupted to part of the brain. Without blood to supply oxygen and nutrients, and to remove waste products, brain cells quickly begin to die. Depending on the region of the brain affected, a stroke may cause paralysis, speech impairment, loss of memory and reasoning ability, coma, or death. A stroke is also sometimes called a brain infarct or a cerebrovascular accident (CVA) lasting more than 24 hours. A transient ischemic attack (TIA), by contrast, is defined arbitrarily as a similar neurological deficit lasting less than 24 hours. In the past, the defined time limit for a TIA was one hour but the time limit was expanded for practical purposes.^{viii}

A stroke involves either an ischemic or a hemorrhagic event, which causes damage to the brain. Cerebral thrombosis and cerebral embolism are caused by blood clots that block an artery supplying the brain, either in the brain itself or in the neck. Subarachnoid hemorrhage and intracerebral hemorrhage occur when a blood vessel bursts around or in the brain.

Cerebral thrombosis occurs when a blood clot, or thrombus, forms within the brain itself, blocking the flow of blood through the affected vessel. Clots most often form due to “hardening” (atherosclerosis) of brain arteries.

Cerebral embolism occurs when a blood clot from elsewhere in the circulatory system breaks free. If it becomes lodged in an artery supplying the brain, either in the brain or in the neck, it can cause a stroke.

Intracerebral hemorrhage affects vessels within the brain itself, while subarachnoid hemorrhage affects arteries at the brain’s surface, just below the protective arachnoid membrane.

viii. Cecil's Textbook of Medicine, 21st edition, edited by Lee Goldman and J. Claude Bennett, 2000 pg. 2099.

Comorbid conditions and life style choices predispose patients undergoing any kind of surgery to a stroke event. It is impossible to determine which factor caused the event. Researchers have identified five risk factors for stroke post CABG. They are age, history of the following: hypertension, diabetes previous stroke and the presence of carotid bruit.

Studies have shown that stroke complicates the postoperative course in 1% to 6% of patients undergoing coronary revascularization. This may be due to a predisposition (risk factors) or it may be due to a piece of plaque that becomes loose (before? or after? surgery), traveling to the brain and precipitating the stroke. Because these patients are almost always at risk for a stroke anyway, the most that can be said with any certainty is that the stroke is a postoperative event. Since you can never know if this is a complication of the surgical procedure or a natural progression (possibly expedited) of a disease process culminating in a sudden acute event, a postoperative stroke is not classified to I97.8 *Other postprocedural disorders of circulatory system, not elsewhere classified*.

Atrial Fibrillation

Atrial fibrillation is an abnormally fast and highly irregular heartbeat and is classified as a functional disturbance when it occurs following cardiac surgery. Atrial fibrillation and flutter are abnormal heart rhythms in which the atria, or upper chambers of the heart, are contracting out of synchronization with the ventricles, or lower chambers of the heart. In atrial fibrillation, the atria “quiver” chaotically and the ventricles beat irregularly. In atrial flutter, the atria beat regularly and faster than the ventricles.

In most cases, the cause of atrial fibrillation and flutter can be found, but sometimes the cause is not documented. Causes of these heartbeat abnormalities include:

- Many types of heart disease
- Stress and anxiety
- Caffeine
- Alcohol
- Tobacco
- Diet pills
- Some prescription and over-the-counter medications
- Open-heart surgery

Chapter X—Diseases of the Respiratory System

Lobar Pneumonia

There are two main kinds of pneumonia as determined by the method of lung involvement. When the inflammation affects an entire lobe of a lung it is called lobar pneumonia. When the inflammation is scattered here and there throughout the lungs, often with bilateral involvement, it is called bronchopneumonia, or bronchial pneumonia.

The organism in lobar pneumonia is usually a pneumococcus (*Streptococcus pneumoniae*), although other pathogens may also be the cause. Lobar pneumonia may develop suddenly in young, apparently well individuals, but the most susceptible are adults especially alcoholics and vagrants.

Bronchopneumonia may be caused by bacteria or viruses and most often is secondary to an infection or to some agent that has lowered the individual's resistance to disease. This is the more common form of pneumonia and is more common in the very young and the very old. Sometimes, the organism that is causing the pneumonia cannot be identified.

Asthma

Asthma is a disease in which inflammation of the airways causes airflow into and out of the lungs to sometimes be restricted. When an asthma attack occurs, the muscles of the bronchial tree become tight and the lining of the air passages swells, reducing airflow and producing the characteristic wheezing sound. Mucus production is increased.

Most people with asthma have periodic wheezing attacks separated by symptom-free periods. Some asthmatics have chronic shortness of breath with episodes of increased shortness of breath. Asthma attacks can last minutes to days, and can become dangerous if the airflow becomes severely restricted.

Adult Respiratory Distress Syndrome

Adult respiratory distress syndrome (ARDS), is a group of conditions or symptoms that collectively indicate or characterize a disease process.

ARDS is a life-threatening condition that occurs when there is severe fluid build-up in both lungs. The fluid build-up prevents adequate oxygen-carbon dioxide transfer within the pulmonary alveoli.

ARDS is the end result of a variety of severe injuries to the lungs, characterized by sudden onset of severe shortness of breath, tachycardia, and profound hypoxia and pulmonary edema.

Sepsis and the systemic inflammatory response are the most common predisposing factors associated with development of ARDS. A (non-inclusive) list of common causes of ARDS includes: septic shock, traumatic shock, diffuse viral pneumonia, oxygen therapy toxicity, inhaled toxins and irritants, narcotic overdose, hypersensitivity reaction, and aspiration pneumonia.

The pathogenesis of ARDS begins with mediators, for example, platelet activating factor, into the blood that result in leukocyte aggregation in the lungs. Stimulating neutrophils release oxygen-free radicals, lysosomal enzymes and products of arachidonic acid that damage the lung capillaries and alveolar epithelium. This allows fluid to leak from the blood. Further chemical damage by neutrophils destroy alveolar living cells. The result is accumulation of serum, fibrin and dead cell debris in the alveoli. Hyaline membranes form inside the alveoli. Once hyaline membranes have formed, no surfactant is present and alveoli tend to collapse. Atelectasis and edema make the lungs stiff and non-compliant.

Injured cells promote inflammation and fibrosis, and alter bronchomotor tone and vasoreactivity.

Chapter XI—Diseases of the Digestive System

Diagnostic Colonoscopic Interventions

A sigmoidoscopy is an endoscopic examination of the *lower portion of the large intestine* and its aim is to examine the rectum, sigmoid and descending colon up to the splenic flexure. Very occasionally, the transverse colon may be visualized.

A colonoscopy is an endoscopic examination of the *entire large intestine* from the distal rectum to the cecum. The goal of a complete inspection is to reach the cecum. The anatomic landmarks that help the physician to determine if this has been achieved include visualization of the appendiceal orifice and the ileocecal valve.

An ileoscopy is an endoscopic examination of the terminal ileum (anatomic site 2.NK.^) and may be accomplished using a colonoscope. This is considered a retrograde approach. The instrument tip first passes through the rectum, then through the colon and eventually reaches the area where the cecum (large intestine) and terminal ileum (small intestine) connect. The ileocecal valve separates the small from the large intestine. *In order to inspect the terminal ileum, the ileocecal valve must be intubated.* Anytime the terminal ileum is intubated during an endoscopy, it is for the purpose of inspecting the small intestine.

The ileum can also be examined by a double balloon enteroscopy. A double balloon enteroscopy, also known as push-and-pull enteroscopy is an advanced endoscopic technique to inspect the entire small bowel. The double balloon enteroscope can be inserted either orally, antegrade approach, or it can be passed in retrograde fashion, through the rectum, into the colon and finally into the ileum to inspect the end of the small bowel. To complete a double balloon enteroscopy, doctors use a scope fitted with two balloons to navigate the entire small bowel. When inflated with air, the balloons can expand sections of the small intestine to allow the camera a closer examination.

Chapter XII—Diseases of the Skin and Subcutaneous Tissue

Cellulitis

Cellulitis is a relatively deep infection, generally resulting from a break in the skin. It involves subcutaneous spaces in addition to the dermis. Some cases of cellulitis appear on areas of trauma, where the skin has broken open, such as the skin near ulcers or surgical wounds. Many times, however, cellulitis occurs where there has been no break in the skin at all. The patient presents with pain, redness, warmth and systemic symptoms such as fever. The affected area appears red and is warm to the touch. Lymphatic drainage is damaged by cellulitis, which renders the area predisposed to subsequent infections.

Cellulitis is typically treated with a course of oral or intravenous (IV) antibiotics as well as wound management involving debridement, any re-apposition and topical dressing.

Chapter XIII—Diseases of the Musculoskeletal System and Connective Tissue

Osteoarthritis

Osteoarthritis (OA) is often called “wear and tear” of the joints. OA causes certain parts of the joints to weaken and break down. Cartilage, the tough elastic material that cushions the ends of the bones, begins to crack and get holes in it. Bits of cartilage can break off into the joint space and irritate soft tissues, such as muscles, and cause problems with movement. Much of the pain of OA is a result of muscles and the other tissues that help joints move (such as tendons and ligaments) being forced to work in ways for which they were not designed, as a result of damage to the cartilage. Cartilage itself does not have nerve cells, and therefore cannot sense pain, but the muscles, tendons, ligaments and bones do. After many years of cartilage erosion, bones may actually rub together. This grinding of bone against bone adds further to the pain. Bones can also thicken and form growths, called spurs or osteophytes, which rub together. Also, when cartilage is weak or damaged, the surrounding bones place extra force on it, and this may cause excessive blood flow (hyperemia) that can cause pain, especially at night.

Damage due to OA progresses slowly over time and may result in several problems. OA commonly affects weight-bearing joints such as hips, knees, feet and spine. However, non-weight bearing joints such as finger joints and the joint at the base of the thumb may be affected as well. It usually does not affect other joints, except when they have been injured or been put under unusual stress.

No one knows for sure what causes OA, although scientists are well on their way to understanding the events that lead to the breakdown of cartilage. Researchers now think that there are several factors that may increase the risk for getting OA. Key risk factors include heredity, excess weight, injury and/or joint damage from another type of arthritis.

Osteoarthritis resulting from a known cause such as a congenital/developmental problem, metabolic disease, endocrine disease, calcium deposition disease, neuropathic condition, other bone and joint conditions, acute and chronic (repetitive) trauma is classified as secondary osteoarthritis.

Spinal Stenosis

Spinal stenosis is defined as any developmental or acquired narrowing of the spinal (neural) canal, or nerve root canals (intervertebral foramina) that results in compression of neural elements.^{ix}

Spinal or foraminal stenosis is a term used when the underlying condition has become so severe that the spinal canal's dimensions have been reduced to the point that the patient develops symptoms which range from pain to extremity dysfunction. In myelopathy, the patient will typically have organ dysfunction. Some common causes of spinal stenosis include neoplasms, intervertebral disc disorders such as displacement or disc degeneration, and spondylosis.

Chapter XIV—Diseases of the Genitourinary System

Stages of Chronic Kidney Disease (CKD)

Chronic kidney disease is defined according to the presence or absence of kidney damage and level of kidney function irrespective of the underlying disease. The stages of CKD are defined by physicians based on the level of kidney function as evidenced by the glomerular filtration rate (GFR).

In a clinical setting, patients are diagnosed with chronic kidney disease if they meet either of the following criteria:

- Kidney damage for three months or more, as defined by structural or functional abnormalities of the kidney, with or without decreased GFR, manifest by either:
 - Pathological abnormalities; or
 - Markers of kidney damage, including abnormalities in the composition of the blood or urine, or abnormalities in imaging tests.
 - GFR <60 mL/min/1.73 m² for three months or more, with or without kidney damage.

ix. Current Diagnosis & Treatment in Orthopedics.

Recent professional guidelines classify the severity of chronic kidney disease in five stages, with stage 1 being the mildest and usually causing few symptoms and stage 5 being a severe illness with poor life expectancy if untreated. Stage 5 CKD, also called end-stage chronic kidney disease or established kidney disease, is synonymous with the now-outdated terms “end-stage renal disease” (ESRD) or “end-stage renal failure” (ESRF).

Stage	Description	GFR (mL/min/1.73 m ²)
1	Kidney damage with normal or increased GFR	≥90
2	Kidney damage with mild decreased GFR	60 to 89
3	Moderate decreased GFR	30 to 59
4	Severe decreased GFR	15 to 29
5	End-stage kidney disease	<15

Adverse outcomes of kidney disease are based on the level of kidney function and risk of loss of function in the future. CKD tends to worsen over time; therefore, the risk of adverse outcomes increases over time with disease severity. Staging of chronic kidney disease will facilitate application of clinical practice guidelines, clinical performance measures and quality improvement efforts for the evaluation of CKD, as well as management of chronic kidney disease. Severity is based on the level of GFR because GFR is widely accepted as the best overall measure of kidney function.

Pelvic Relaxation

The effect of labor and delivery on the female pelvis is a common cause of a cystocele or an urethrocele. Symptoms commonly associated with a cystocele include urinary stress incontinence, frequency, or a sensation of vaginal fullness or pressure. Symptoms are aggravated by increased intra-abdominal pressure caused by activity such as prolonged standing, coughing or sneezing. It is important to note that even though stress incontinence is the most common symptom associated with a cystocele, it is not caused by the cystocele and surgical correction of the cystocele alone will not necessarily correct the incontinence. Stress incontinence is due to the relaxation of the surrounding pelvic support structures and the loss of the normal urethrovesical angle.

Cystoceles

A cystocele is a herniation of the bladder. When a cystocele exists alone, without any other form of genital prolapse, it is rarely repaired surgically unless it is so large that it is the cause of urinary retention or bladder infections. The most common method of cystocele repair is the anterior colporrhaphy which, in CCI, is classified to the rubric 1.RS.80.^{^^} *Repair, vagina NEC*.

This repair may require that sutures, grafts or synthetic materials be used to strengthen the vaginal walls and correct protrusion of the bladder. Colporrhaphy may be performed concomitantly with other interventions like vaginal hysterectomy (1.RM.89.CA) when other conditions exist.

Female Stress Incontinence

When stress incontinence is the main indication for the surgical intervention, repair is usually directed toward the urethrovesical angle where urethropexy is attained. This is classified to 1.PL.74.^^{^^} *Fixation of the bladder neck*. A variety of techniques are available to elevate the urethra and surrounding fascia and muscular support to a level that restores normal urethral function. Any concomitant repair of any co-existent cystocele is also coded.

Rectoceles

Rectocele is a rectovaginal hernia caused by damage done to the fibrous connective tissue between the rectum and vagina during childbirth. It may not become problematic until after menopause. Repair of a rectocele is classified to 1.RS.80.^^{^^} *Repair, vagina* (with location attribute “PS”).

Enteroceles

An enterocele is a small bowel herniation into the rectovaginal septum. It is commonly found in women who have had a previous hysterectomy. The peritoneum may be in direct contact with vaginal epithelium due to weakened or absent support structures. Repair of the defect involves reduction of the small bowel and suturing the apex of pubocervical and rectovaginal fascia back together. If this is the only intervention performed, then a code from the rubric 1.RS.80 will adequately capture this. However, this repair of the apical defect is sometimes followed by a vaginal vault suspension. An additional code will then be required to capture the colpexy or vaginal vault suspension (1.RS.74.^^{^^} *Fixation, vagina*) that restores the normal shape and support of the vaginal vault.

Uterine Prolapse

Uterine prolapse is a condition in which the uterus drops below its normal position as a result of damage to or weakness of the uterosacral ligaments. Childbirth, hard physical labor, aging and lack of estrogen support may cause this damage or weakness. Uterine prolapse is often described in degrees where:

- 1st degree prolapse—cervix remains within the vagina
- 2nd degree prolapse—cervix protrudes beyond introitus
- 3rd degree prolapse (complete procidentia)—prolapse with entire uterus outside vulva

The surgical treatment of choice depends on whether or not a functional uterus is still desired. In older women, a hysterectomy may be performed (1.RM.89^^{^^}). In many cases, cystocele, rectocele and enterocele are also present along with the genital prolapse and a vaginal repair (1.RS.80.^^{^^}) may then be performed concomitantly with the hysterectomy. Younger women who desire future pregnancies may have a uterine suspension performed. This is classified to 1.RM.74.^^{^^} *Fixation, uterus and surrounding structures*.

Chapter XV—Pregnancy, Childbirth and the Puerperium

Length of Gestation

The duration of gestation is measured from the first day of the last normal menstrual period. Gestational age is expressed in completed days or completed weeks (e.g. events occurring 280 to 286 completed days after the onset of the last normal menstrual period are considered to have occurred at 40 weeks of gestation).

Gestational age is frequently a source of confusion, when calculations are based on menstrual dates. For the purposes of calculation of gestational age from the date of the first day of the last normal menstrual period and the date of delivery, it should be borne in mind that the first day is day zero and not day one; days 0–6 therefore correspond to “completed week zero”; days 7–13 to “completed week one”; and the 40th week of actual gestation is synonymous with “completed week 39”. Where the date of the last normal menstrual period is not available, gestational age should be based on the best clinical estimate. In order to avoid misunderstanding, tabulations should indicate both weeks and days.

Preterm

Less than 37 completed weeks (less than 259 days) of gestation.

Term

From 37 completed weeks to less than 41 completed weeks.

Post-dates

A pregnancy is considered post-dates at 41 completed weeks. At this point in the pregnancy, induction may be offered.

Post-term/Prolonged

A pregnancy is considered post-term (prolonged) at 42 completed weeks of gestation or 294 days from the last menstrual period (LMP) (280 days from the date of conception). At this gestational age the risk of adverse fetal and neonatal outcome, and in particular the risk of perinatal death, is increased.

Trimesters

For the purposes of this classification, trimesters shall be defined as follows:

- First trimester is less than and including the 13th week of gestation (≤ 13 weeks);
- Second trimester is the fourteenth week up to and including the twenty-sixth week (14–26 weeks);
- Third trimester is more than 26 weeks gestation (> 26 weeks)

Chapter XVI—Certain Conditions Originating in the Perinatal Period

Fetal Asphyxia and Birth Asphyxia

Asphyxia is a condition of impaired gas exchange, which when persistent, leads to progressive hypoxemia. During normal labor, uterine contractions cause temporary reduction in gas exchange. After the contraction, fetal compensation occurs with self-resuscitation, followed by normal perfusion until the next contraction occurs. If these natural physiologic compensatory mechanisms are overwhelmed, hypoxic acidemia ensues. Hypoxic acidemia of a sufficient degree and duration can cause brain damage with resultant neurological sequelae in surviving children, other organ system damage, or intrapartum or neonatal death.

The diagnosis of hypoxic acidemia requires an umbilical cord blood gas analysis with evidence of metabolic acidosis (pH <7.0 and/or base deficit >12 mol/L). The presence of hypoxic acidemia confirms that an episode of fetal asphyxia has occurred. In attempting to predict the likely effect of fetal asphyxia on the newborn, both the severity and duration of the asphyxial insult must be considered. Sampling of fetal scalp blood during labor or of cord blood at birth provides a measure of the severity of metabolic acidosis but not of the duration. A certain proportion of hypoxic acidemia occurs just prior to delivery and is brief in duration. This is very unlikely to cause morbidity or mortality. However, metabolic acidosis may be accompanied by specific neonatal findings, which indicate an asphyxic episode of sufficient intensity that it is likely to cause harm. These indications include multi-organ system dysfunction, neonatal neurologic sequelae such as hypotonia, seizures and coma, and Apgar scores of 0 to 3 for 5 minutes or longer.

Clinical studies indicate that at least half of newborns suffering an asphyxial episode have no short-term or long-term morbidity or mortality. The aim of intrapartum fetal surveillance is to improve fetal outcomes by identifying fetuses with hypoxic acidemia at the point when the process is still completely reversible by intrauterine resuscitation or expedited delivery.

The Society of Obstetricians and Gynecologists of Canada (SOGC) clinical practice guidelines recommend that cord blood gases should be routinely obtained for all deliveries; doing so may help in providing appropriate care for the newborn at birth and in planning subsequent management.^x

Some of the causes of decreased oxygen **before** birth or **during** the birth process (fetal asphyxia) may include:^{xi}

- Inadequate oxygen levels in the mother's blood
- Low blood pressure in the mother
- Inadequate relaxation of the uterus during labor preventing the circulation of oxygen to the placenta
- Placental abruption
- Compression of the umbilical cord

x. SOGC Clinical Practice Guideline—Fetal Health Surveillance in Labour, No. 112, March 2002.

xi. <http://www.ucshealth.org/childrens/medical_services/critical/asphyxia/>.

- Poor placental function due to post-term pregnancy or maternal conditions such as hypertension (eclampsia or pre-eclampsia), or infection
- Premature or prolonged labor
- Malpresentation
- General anesthesia during cesarean section

Some of the causes that may lower oxygen in the baby **after** birth (birth asphyxia) include:

- Severe anemia limiting the oxygen carrying ability of the blood
- Low blood pressure or shock
- Respiratory disorders that limit oxygen intake
- Heart or lung disease
- Infection
- Prematurity

Respiratory Distress of Newborn

“Respiratory distress syndrome (RDS), also called, hyaline membrane disease is a syndrome caused by deficient surfactant manifested clinically by respiratory distress in the preterm infant. RDS almost always occurs in newborns born before 37 wk gestation; the more premature, the greater the chance of developing RDS. Pulmonary surfactant, a mixture of phospholipids and three surfactant lipoproteins, is secreted by type II pneumocytes. The air-fluid interface of the film of water lining the alveoli exerts large forces that cause the alveoli to close if surfactant is deficient. Lung compliance is decreased, and the work of inflating the stiff lungs is increased. If untreated, severe hypoxemia can result in multiple organ failure and death. However, if the newborn’s ventilation is adequately supported, surfactant production will begin and RDS will resolve by 4 or 5 days. Recovery is hastened by treatment with pulmonary surfactant.”^{xii}

“Transient tachypnea of the newborn (TTN), also called neonatal wet lung syndrome, is respiratory distress with rapid respirations and hypoxemia caused by delayed reabsorption of fetal lung fluid, requiring O₂ supplementation. Affected newborns are often born at or close to term. They are likely to have been delivered by cesarean section and may have had perinatal distress. Recovery usually occurs within 2 to 3 days.”^{xiii}

xii. The Merck Manual, 17th edition, Mark H. Beers, Robert Berkow, ed. Merck Research Laboratories, Whitehouse Station, N.J., 2000, pg 2137.

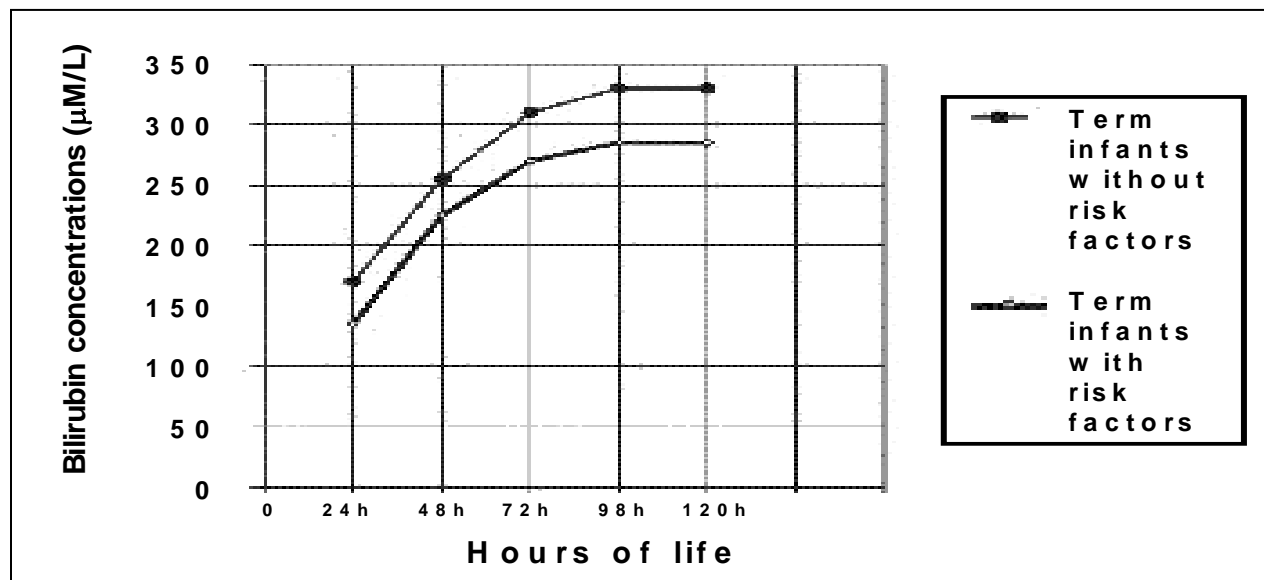
xiii. The Merck Manual, 17th edition, Mark H. Beers, Robert Berkow, ed. Merck Research Laboratories, Whitehouse Station, N.J., 2000, pg 2141.

Neonatal Jaundice

Neonatal hyperbilirubinemia, as per The Merck Manual, is diagnosed when laboratory tests show a serum bilirubin concentration >10 mg/dL (171 $\mu\text{mol/L}$) in preterm newborns or >15 mg/dL (257 $\mu\text{mol/L}$) in full-term newborns. Physiologic jaundice usually is not clinically significant and resolves within 1 week. Phototherapy has proved to be safe and effective in treating hyperbilirubinemia with the aim of preventing potentially toxic bilirubin levels and decreasing the need for exchange transfusion. A maximal effect is obtained by exposing the newborn to visible light in the blue range. However, blue lights prevent detection of cyanosis, so phototherapy using broad-spectrum white light is often preferred.

The Canadian Pediatric Society has published the following table as a guide that physicians may use for initiating phototherapy in the management of hyperbilirubinemia in term newborn infants.

Guidelines for initiation of phototherapy for hyperbilirubinemia in term infants with and without risk factors. Some risk factors include gestational age younger than 37 weeks, birth weight less than 2500 grams, hemolysis, jaundice at younger than 24 hours of age, sepsis and the need for resuscitation at birth.^{xiv}



xiv. Reprinted with permission from the Canadian Pediatric Society position statement *Approach to the Management of Hyperbilirubinemia in Term Newborn Infants* (FN 98–02), published in *Pediatrics & Child Health* 4, 2 (1999): 161–64 and on the CPS website.

Chapter XVIII—Symptoms, Signs and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified

Systemic Inflammatory Response Syndrome (SIRS)

Systemic Inflammatory Response Syndrome (SIRS) is a clinical response to an insult, infection or trauma, that includes systemic inflammation, elevated or reduced temperature, rapid heart rate and respiration and elevated white blood count. The medical community recognizes SIRS as a major complication of infection or trauma. SIRS is a condition frequently associated with stays in the Intensive Care Unit (ICU). For patients admitted to the intensive care unit with septicemia/sepsis, the symptoms of SIRS are present. The noninfectious etiologies of SIRS include trauma, burns, bleeding, adrenal insufficiency, anaphylaxis, cardiac tamponade, dissecting or ruptured aortic aneurysm, drug overdose, myocardial infarction, post cardiopulmonary bypass syndrome and pulmonary embolism.^{xv}

An insult to the body produces signs and symptoms (e.g. fever and leukocytosis) of a *systemic inflammatory response syndrome* (SIRS). When infection is the underlying cause of SIRS, the condition is called *sepsis*. When sepsis is accompanied by dysfunction in one or more vital organs, the condition is called *severe sepsis*. When severe sepsis is accompanied by hypotension that is refractory to volume infusion, the condition is called *septic shock*.^{xvi} The appearance of functional abnormalities in more than one vital organ system in patients with SIRS of an infectious origin is called multiple organ dysfunction syndrome (MODS) and is classified as *severe sepsis*. Several organ systems can be involved along with its associated clinical syndrome. The organs most involved are the lungs, kidneys, cardiovascular system and the central nervous system. Multi-organ dysfunction can progress to multi-organ failure. The most common organ failure (lungs) in this setting is the acute respiratory distress syndrome.

Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes

Crush Injuries

Crush injuries are characterized by massive swelling and skin and soft tissue ecchymosis; concomitant degloving injuries are common. Absent pulses are also common. Fractures may or may not be present. Urinalysis may demonstrate hemoglobinuria or myoglobinuria.^{xvii} Treatment usually involves soft tissue decompression, debridement and treatment for shock, as necessary, as well as any fixation of fracture or repair to other organ(s).

xv. Gorbach, Sherwood L., Falagas, Matthew, 5-Minute Infectious Diseases Consult, 1st. Edition.

xvi. Marino, Paul L., ICU Book, 2nd. Edition.

xvii. *Current Emergency Diagnosis and Treatment*, fourth edition, edited by Charles E. Saunders and Mary T. Ho, Appleton and Lange, Norwalk Connecticut, 1992: pp 77–78.

Appendix B—Y83–Y84 Inclusion List

The *Y83–Y84 Inclusion List* was produced in April 2010 to serve as a guide for the consistent assignment of interventions to subcategories in Y83 and Y84. The list below includes additions up to November 2011. It is the responsibility of each coder to keep this list up to date from responses to coding questions in the eQuery database about interventions that are not represented on the list.

Code	Use of this subcategory	Includes
Y83 Surgical operation and other surgical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure		
Y83.0 Surgical operation with transplant of whole organ or tissue	This subcategory includes any whole or partial organ or tissue transplant. “Transplant” is the keyword.	<ul style="list-style-type: none"> • Bone marrow transplant • Corneal transplant (including lamellar corneal transplant) • Heart transplant • Heart valve replacements, all natural see Y83.1 for artificial valves • Kidney transplant • Lobes of organs • Stem cell transplant
Y83.1 Surgical operation with implant of artificial internal device	This subcategory includes all interventions that employ any artificial internal device. The key words are “artificial,” “internal” and “device.” Internal means completely internal.	<ul style="list-style-type: none"> • Artificial organs • Heart valve replacements, artificial (all artificial or combination of artificial and natural [stented]) see Y83.0 for all natural valves • Infusion pumps (systems) (e.g. Baclofen, insulin) • Joint replacement prostheses (e.g. TKR, THR) • Orthopedic internal fixation devices (e.g. screws, pins, nails) and implants (to fill a bony defect [e.g. cranioplasty plate]) see Y83.8 for external orthopedic devices • Other prostheses (e.g. breast implant, ossicular prosthesis) • Pacemakers and defibrillators (includes leads) see Y84.8 for temporary pacemaker • Shunts (shunt systems) employing artificial devices (e.g. catheters, pumps) (e.g. VP shunt, Transjugular Intrahepatic Portosystemic Shunt [TIPS]) see also Y83.2 • Slings (e.g. eyelid [silastic rods], vaginal [TVT])

Code	Use of this subcategory	Includes
Y83.1 Surgical operation with implant of artificial internal device (cont'd)		<ul style="list-style-type: none"> • Stents (e.g. tear [lacrimal] duct, coronary artery [PTCA with stent], bile duct, nasal) • T-VAD (Totally implantable vascular access device) (e.g. Port-a-cath) see Y84.8 for VADs that are not totally implanted • Tubes (e.g. myringotomy/tympanostomy tubes) <p>Other</p> <ul style="list-style-type: none"> • Dental implants • Gastroplasty band(ing system) • Intraocular lens
Y83.2 Surgical operation with anastomosis, bypass or graft	This subcategory includes any intervention involving anastomosis, bypass or graft including those that employ artificial or natural tissue. The key words are “anastomosis,” “bypass” and “graft.” Excludes with stoma formation (Y83.3).	<ul style="list-style-type: none"> • Augmentation, with natural or synthetic tissue (e.g. Contigen, Macroplastique, silicone) (with device Y83.1) • Bypasses (e.g. CABG, gastric bypass, bypass for PVD [saphenous vein graft] [e.g. aortobifemoral, iliofemoral]) • Grafts (autograft, homograft, xenograft) (patch grafts, tube grafts) (flaps—local, free, pedicled) (artificial, natural) (e.g. skin, ligament [ACL], repair AAA, TRAM) • Hemodialysis access (creation AV fistula [radiocephalic—wrist; brachiocephalic or brachiobasilic—upper arm]) • Removal organ with anastomosis (e.g. hemicolectomy with colocoloanastomosis, partial gastrectomy with Billroth II, esophagectomy with cervicogastric anastomosis) • Shunts without artificial devices (e.g. Sano shunt [consists of a Gortex tube graft between the right ventricle and the pulmonary arteries]) see also Y83.1 • Surgically constructed reservoirs (e.g. neobladder, pelvic pouch) <p>Other</p> <ul style="list-style-type: none"> • Bladder neck fixation using fascia as a sling • Dacryocystorhinostomy • Mesh (e.g. hernia repair with mesh) • Trabeculectomy

Code	Use of this subcategory	Includes
Y83.3 Surgical operation with formation of external stoma	This subcategory includes all interventions that result in the formation of an external stoma. Complications of catheters used with these stomas are included here unless the catheter has a defect or has broken (Y70-Y82).	<ul style="list-style-type: none"> Anastomosis, bypass or graft with formation of external stoma (e.g. neobladder with stoma) Percutaneous ostomies (e.g. gastrostomy [PEG tube]) Reconstructive surgery with formation of external stoma Removal of organ with formation of external stoma (e.g. Hartmann's procedure) Temporary and permanent stomas
Y83.4 Other reconstructive surgery	This subcategory includes reconstructive, restorative and plastic procedures that do not involve implant of an artificial internal device (Y83.1); anastomosis, bypass or graft (Y83.2); or formation of external stoma (Y83.3).	<ul style="list-style-type: none"> A & P repair Cleft lip and palate repair Hypospadias repair Lift surgery (e.g. blepharoplasty, eyebrow lift) Nasal septum reconstruction (e.g. septoplasty, SMR) Nissen fundoplication Reduction (size reduction) (e.g. breast reduction, abdominoplasty) Repair of hernia with simple closure (with mesh Y83.2)
Y83.5 Amputation of limb(s)	This subcategory includes surgical amputations of limbs—partial and complete, and revisions of (surgical) (traumatic) amputations.	<ul style="list-style-type: none"> BKA Amputation of finger (partial) (revision) Amputation of foot
Y83.6 Removal of other organ (partial) (total)	This subcategory includes removal of organs—partial and total, that do not involve transplant (Y83.0); implant of an artificial internal device (Y83.1); anastomosis, bypass or graft (Y83.2); or formation of external stoma (Y83.3).	<ul style="list-style-type: none"> Excision of lesion (includes bunionectomy) Excisional biopsies Extractions (e.g. nail, tooth) Removal of organ (partial) (total) (e.g. appendectomy, cholecystectomy, circumcision, hysterectomy, mandibulectomy, mastoidectomy, parathyroidectomy, pneumonectomy, tonsillectomy) Resection of tissue (e.g. resection brain tumour, EMR (esophageal mucosal resection), TURB)

Code	Use of this subcategory	Includes
Y83.8 Other surgical procedures	This subcategory includes any surgical intervention that does not involve any type of intervention assigned to one of the specific subcategories.	<ul style="list-style-type: none"> • Angioplasties (dilation) see Y83.1 for with stent placement • Banding (e.g. esophageal varices) • Biopsies (all forms except excisional [Y83.6] e.g. needle lung biopsy, incisional biopsies) • Control of bleeding • Debridements • Destructions (e.g. root canal, endometrial ablation, [YAG] laser capsulotomy) • Dilation (e.g. hydrodilation of bladder) see also Angioplasties • Embolization (for control of bleeding or occlusion) • Endarterectomy (atherectomy) (no tissue or device used) (e.g. carotid endarterectomy, coronary artery atherectomy) • Endoscopies with or without biopsy (e.g. cystoscopy, colonoscopy with biopsy) Note: endoscopies with a therapeutic intervention are assigned to the appropriate surgical subcategory (e.g. endoscopic stent placement Y83.1) • Extractions (e.g. removal of ectopic pregnancy) see also Endarterectomy; see also Y83.6 • Incision and Drainage (I & D) • Lysis adhesions • Orthopedic external fixation devices (e.g. percutaneous external fixator, halo fixation device) • Release procedures (e.g. plantar fasciotomy, carpal tunnel repair, spinal decompression) • Repairs with simple closure (e.g. suture laceration, repair tendon tear) • Tubal ligation • Vasectomy • Vitrectomy

Code	Use of this subcategory	Includes
Y83.9 Surgical procedure, unspecified	This subcategory is used when there is no documentation of the type of surgical intervention performed and when multiple types of surgical interventions are performed and none are known to be directly attributed to the post-intervention condition.	N/A
Y84 Other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure		
Y84.0 Cardiac catheterization	This subcategory includes diagnostic cardiac catheterizations only. Cardiac catheterizations with therapeutic interventions are assigned to the appropriate surgical subcategory (e.g. PTCA with stent Y83.1).	<ul style="list-style-type: none"> • Cardiac catheterization, diagnostic • Coronary angiography
Y84.1 Kidney dialysis	This subcategory includes all forms of kidney dialysis as a procedure and the catheters employed unless the catheter has a defect or has broken (Y70–Y82).	<ul style="list-style-type: none"> • Hemodialysis • Peritoneal dialysis
Y84.2 Radiological procedure and radiotherapy	This subcategory includes diagnostic radiological (diagnostic imaging) procedures and radiotherapy only. Radiological procedures with a therapeutic intervention are assigned to the appropriate surgical subcategory (e.g. ERCP with bile duct stent placement Y83.1).	<ul style="list-style-type: none"> • Brachytherapy • ERCP, diagnostic • Mammogram • Radiation (irradiation) (radiotherapy) • Retrograde pyelogram (includes cystoscopy as part of this intervention)
Y84.30 Electroconvulsive therapy	This subcategory includes ECT (of brain) only.	<ul style="list-style-type: none"> • ECT for psychiatric treatment
Y84.38 Other shock therapy	This subcategory includes all forms of shock therapy other than ECT.	<ul style="list-style-type: none"> • Cardioversion • Extracorporeal shock wave therapy • Insulin shock therapy
Y84.4 Aspiration of fluid	This subcategory includes one-time aspiration of fluids for drainage or diagnostic purposes.	<ul style="list-style-type: none"> • Paracentesis • Spinal tap/lumbar puncture • Thoracentesis
Y84.5 Insertion of gastric or duodenal sound	This subcategory is specific to the use of gastric or duodenal sounds.	<ul style="list-style-type: none"> • Insertion of gastric or duodenal sound

Code	Use of this subcategory	Includes
Y84.6 Urinary catheterization	This subcategory includes urinary catheterization as a procedure and the catheter itself unless the catheter has a defect or has broken (Y70–Y82).	<ul style="list-style-type: none"> • Urinary catheterization (Foley insertion) (indwelling catheter) (suprapubic catheterization Y84.8)
Y84.7 Blood-sampling	This subcategory includes blood sampling for diagnostic purposes only.	<ul style="list-style-type: none"> • Blood sampling
Y84.8 Other medical procedures	This subcategory includes all medical interventions that do not involve any type of intervention assigned to one of the specific medical or surgical subcategories. This subcategory excludes adverse effects from drugs and other products that are introduced into the body (see Table of drugs and chemicals) and devices that have a defect or have broken (Y70–Y82).	<ul style="list-style-type: none"> • Blood donor procedure • Blood transfusion procedure • Casts • Central venous catheters that are not totally implanted (e.g. Permacath, PICC, subclavian line) see Y83.1 for totally implanted VAD • Chiropractic manipulation • CPR • Hypothermia (medically induced) • Infusion procedure • Injection procedure • Intubation (anesthetic) • IUD insertion • IVs • Nasal packing • Pacemaker, temporary see Y83.1 for permanent pacemaker • Suprapubic catheterization • TPN • Transcranial magnetic stimulation • Tubes (e.g. chest tube, tracheal [ventilator] tube, hemovac drain [collection system]) • Vaccination procedure • Ventilation therapy
Y84.9 Medical procedure, unspecified	This subcategory includes cases where there is no documentation of the type of medical intervention performed or when two or more medical interventions are performed and it is unclear which intervention is attributable to the post-intervention condition.	N/A

Appendix C—Table of Changes— 2012 Canadian Coding Standards

The purpose of the document is to:

1. Provide a summary of changes for easy reference.
2. Support understanding of changes.

Important: This table identifies changes which are reflected in the *Canadian Coding Standards for Version 2012 ICD-10-CA and CCI*. It is not an exhaustive list of v2012 changes to ICD-10-CA and CCI. For a complete list of new and disabled codes see ICD-10-CA, Appendix A and B and CCI, Appendix E and F.

Description of Change	Rationale
Diagnosis Typing Definitions for DAD—General Coding Standards for ICD-10-CA	
Revised 09/2012 , replaced i.e. (that is) with e.g. (for example) in the sentence: “When the primary responsibility for care has been designated to certain allied health care providers (e.g. midwife, nurse practitioner), the documentation of this primary care provider is used for code selection and determination of significance for diagnosis type assignment.”	Revised 09/2012 , to demonstrate that midwives and nurse practitioners are examples of allied health care providers.
Added a criterion for significance: “A diagnostic or therapeutic intervention identified as mandatory for code assignment in the coding standards entitled <i>Selection of Interventions to Code for Ambulatory Care</i> and <i>Selection of Interventions to Code for Acute Inpatient Care</i> ”.	To align with the new coding standards <i>Selection of Interventions to Code for Ambulatory Care</i> and <i>Selection of Interventions to Code for Acute Inpatient Care</i> .
Deleted the criteria for significance: <ul style="list-style-type: none"> • “Therapeutic intervention with a code assignment of 50 or greater from Section 1 of CCI; • Therapeutic intervention on the Flagged Interventions list in Appendix B; • Diagnostic intervention, inspection or biopsy, with a code assignment from Section 2 of CCI.” 	
Deleted the note and added a definition of prefix 5 and 6.	To provide direction for assignment of prefix 5 and 6 in the coding standards.
Added directive statements: <ul style="list-style-type: none"> • “Assign prefix 5, mandatory, to a diagnosis type (2) (post-admit comorbidity) that arose before the first qualifying intervention.” • “Assign prefix 6, mandatory, to a diagnosis type (2) (post-admit comorbidity) that arose during or after the first qualifying intervention.” 	

Description of Change	Rationale
<p>Added an exception to the directive statements: “Prefix 5 and 6 do not apply to obstetrical conditions classified to Chapter XV— <i>Pregnancy, childbirth and the puerperium</i> (O00–O99).”</p> <p>Added a note: “Prefix 5 and 6 apply to acute care inpatients only. Prefix 5 and 6 take precedence over diagnosis prefixes Q, C or facility defined diagnosis prefixes.”</p> <p>Added two examples:</p> <ul style="list-style-type: none"> • “On the day of admission a patient had a bronchoscopy...” • “Patient delivered by Cesarean section...” 	
<p>Added two sentences to definition of service transfer type: “The use of this diagnosis type is determined at the jurisdictional or facility level. Service transfer diagnoses are optional with the exception of service transfer to alternate level of care (ALC).”</p>	<p>To clarify that service transfer diagnosis type is optional except for alternate level of care (ALC).</p>
<p>Added a note to the definition of service transfer diagnosis type: “When a diagnosis is recorded with a service transfer diagnosis type, it is equivalent to a diagnosis type (1); therefore, it is not necessary to repeat it on the abstract as a diagnosis type (1).</p> <p>When a diagnosis is recorded as a diagnosis type (2), and also qualifies as a service transfer diagnosis type (W), (X), or (Y), facilities choosing to capture service transfer diagnoses must record the condition twice. First, mandatory, as a diagnosis type (2) and second, optionally, as a service transfer diagnosis type (W), (X), or (Y).”</p>	<p>To clarify that it is not necessary to repeat a service transfer diagnosis as a diagnosis type (1) and that it is necessary to repeat a service transfer diagnosis when it is diagnosis type (2). Diagnosis type (2) is mandatory; however service transfer diagnoses are optional with the exception of alternate level of care (ALC).</p>
<p>Added two examples to definition of service transfer diagnosis type.</p>	<p>To demonstrate the note.</p>
<p>Added two bullets to the definition of diagnosis type (0):</p> <ul style="list-style-type: none"> • “Prematurity (gestational age of the newborn less than 37 completed weeks) • Low birth weight (less than 2500 grams)” <p>Deleted the first bullet:</p> <ul style="list-style-type: none"> • “Increased the length of stay (e.g. Beyond the expected length of stay for healthy newborns. Excludes extended LOS due to mother’s condition requiring treatment.)” 	<p>To clarify that a newborn who is preterm and/or has a low birth weight is classified as an unhealthy newborn.</p> <p>To clarify that length of stay is not a factor in determining whether or not a newborn is healthy.</p>

Description of Change	Rationale
Diagnosis Cluster—General Coding Standards for ICD-10-CA	
New coding standard.	To address the mandatory application of a diagnosis cluster for external causes related to complications of surgical and medical care (Y40–Y84) and resistance to antibiotics (U82 and U83) and other antimicrobial drugs (U84).
Underlying Signs and Symptoms—General Coding Standards for ICD-10-CA	
Added a directive statement: “When no definite diagnosis has been established by the end of the episode of health care, code the...” which was moved from the coding standard entitled <i>Query Diagnosis (Q)/Etiology</i> .	To move the directive statement to a more appropriate coding standard which reflects the direction provided.
Added one example: “Patient presents to the emergency department with right lower quadrant...”	To provide a clinically relevant example that accurately reflects the directive statement regarding the greatest degree of specificity and knowledge about the condition.
Query Diagnosis (Q)/Etiology—General Coding Standards for ICD-10-CA	
Renamed the coding standard from <i>Suspected Conditions/QueryUncertain Diagnosis (Q)</i> to <i>Query Diagnosis (Q)/Etiology</i> .	To be consistent with the terminology used and to reflect the addition of new content related to query etiology.
Moved the directive statement: “When no definite diagnosis has been established by the end of the episode of health care, code the...” to the coding standard entitled <i>Underlying Signs and Symptoms</i> .	To locate the direction related to assigning the code based on the greatest degree of specificity under the appropriate coding standard entitled <i>Underlying Signs and Symptoms</i> .
Deleted the example: “A patient is brought to day surgery for bronchoscopy...”	To remove an example that is no longer relevant to the coding standard.
Removed the wording “probable etc.” from the first directive statement.	To correspond with the definitive list of terms included in ICD-10 which are considered query diagnoses. A probable diagnosis is not considered a query diagnosis. It is coded as if confirmed without prefix “Q”.
Added two directive statements: <ul style="list-style-type: none"> • “When more than one query diagnosis is recorded as the final diagnosis, and there is no further information or clarification, assign the first listed query diagnosis as the MRDx/main problem and all other query diagnoses as diagnosis type (3)/other problem.” • “When a sign or symptom and a query diagnosis are recorded as the final diagnosis, and there is no further information or clarification, assign the sign or symptom as the MRDx/main problem and the query diagnosis as diagnosis type (3)/other problem.” 	To explain sequencing and diagnosis typing when more than one condition is recorded as a query diagnosis and when a sign or symptom is recorded as the final diagnosis with a query diagnosis.
Added a note: “The prefix “Q” is applied when the health care provider has documented uncertainty in the diagnosis; not when the coder is uncertain of the diagnosis.”	To clarify that prefix “Q” is used when the health care provider has documented uncertainty.

Description of Change	Rationale
Added a note: "Prefix 5 and 6 take precedence over prefix "Q". See also the coding standard entitled <i>Diagnosis Typing Definitions for DAD</i> ."	To clarify that when both prefix "Q" and prefix 5 or 6 apply, priority is given to prefix 5 or 6 since only one prefix can be applied to each diagnosis code.
Added two examples: one with a combination code (COPD with acute lower respiratory infection) and one with a dagger/asterisk convention (type 1 diabetes mellitus with mononeuropathy).	To provide direction on how to classify a query diagnosis and apply prefix "Q" when combination codes are assigned or the dagger/asterisk convention applies.
Clarified the rationale of one example; and added the rationale to two existing examples.	To correspond with the directive statements and to demonstrate sequencing and diagnosis typing when more than one condition is recorded as a query diagnosis and when a sign or symptom is recorded as the final diagnosis with a query diagnosis.
Added a directive statement: "When a condition is recorded with more than one possible comparative or contrasting etiology, assign the code for the condition due to an unspecified cause."	To provide direction on how to classify a condition with comparative or contrasting etiologies.
Added a note: "Do not assign the prefix "Q" to the condition. Do not assign a code for the query etiologies."	To clarify that prefix "Q" is not used to denote comparative or contrasting etiologies.
Added an example: iron deficiency anemia versus simple chronic anemia.	To demonstrate the directive statement regarding query etiologies.
Sequelae—General Coding Standards for ICD-10-CA	
Added an example: "Patient presents with pain of the knee joint due to old injury of the knee."	To demonstrate the use of assigning a code from T90-T98 <i>Sequelae of injuries, of poisoning and of other consequences of external causes</i> .
Added to the note: "Coders are reminded to read and follow all notes at block headings and chapter headings where guidance is provided regarding timeframes, i.e. I69, O97 and T90-T98."	To provide the location of the notes in the classification.
Cancelled Interventions—General Coding Standards for ICD-10-CA	
Deleted intervention code and added a rationale for the example: "Patient with breast cancer arrives for chemotherapy and her blood work identifies neutropenia. The chemotherapy is cancelled and a red blood cell blood transfusion is started to treat the neutropenia."	To align with the new coding standard <i>Selection of Interventions to Code for Ambulatory Care</i> .
Selection of Interventions to Code From Section 1, 2 and 3 for NACRS—General Coding Standards for CCI	
Deleted the coding standard.	Direction is provided in the coding standards <i>Selection of Interventions to Code for Ambulatory Care</i> and <i>Selection of Interventions to Code for Acute Inpatient Care</i> .

Description of Change	Rationale
Selection of Interventions to Code From Section 1 for DAD—General Coding Standards for CCI	
Deleted the coding standard.	Direction is provided in the coding standards <i>Selection of Interventions to Code for Ambulatory Care</i> and <i>Selection of Interventions to Code for Acute Inpatient Care</i> .
Selection of Interventions to Code From Sections 2 and 3 for DAD—General Coding Standards for CCI	
Deleted the coding standard.	Direction is provided in the coding standards <i>Selection of Interventions to Code for Ambulatory Care</i> and <i>Selection of Interventions to Code for Acute Inpatient Care</i> .
Selection of Interventions to Code for Ambulatory Care—General Coding Standards for CCI	
New coding standard.	To provide criteria-based direction for mandatory CCI code assignment in the ambulatory care setting.
Selection of Interventions to Code for Acute Inpatient Care—General Coding Standards for CCI	
New coding standard.	To provide criteria-based direction for mandatory CCI code assignment in the acute inpatient care setting.
Selection of Interventions to Code from Section 5—General Coding Standards for CCI	
Added an introduction: “This standard identifies the minimum requirements for code selection from Section 5 for both acute inpatient care and ambulatory care; however, Provincial/ Territorial and local standards may specify additional requirements.”	To clarify that this coding standard identifies the minimum requirements for code selection from Section 5.
Modified the following paragraphs and directive statement into an introduction to the coding standard: <ul style="list-style-type: none"> • “Codes from the block 5.FB.^ – 5.FT.^ <i>Diagnostic Fetal Interventions</i> are those performed on the fetus prior to delivery.” • “Classify any intervention performed on the neonate after delivery to Section 1 of CCI.” • “Exception: 5.MD.11.^ <i>Cord blood sampling</i> and 5.PB.01.AC <i>Postpartum care, follow up visit, mom and baby (first post natal visit)</i>” • “Select codes from the block 5.LB.^–5.MD.^ <i>Interventions During Labour and Delivery</i> to classify interventions that occur during the intrapartum phase (from the time labor begins until complete expulsion of the fetus).” 	To provide information on the classification of codes from Section 5 before providing direction on mandatory code assignment.
Modified the directive statement from the criteria of generic intervention number >45 to ≥40.	To include interventions with the generic intervention number ≥40.

Description of Change	Rationale
Added a table <i>Additional Mandatory CCI Codes from Section 5</i> and added this as a criterion in the directive statement.	To provide a list of mandatory codes from Section 5 <40.
Deleted the exception for 5.AC.30.^ <i>Induction of Labour</i> and added this rubric to the table <i>Additional Mandatory CCI Codes from Section 5</i> .	
Deleted from the criteria: “when the intervention affects CMG+, DPG, or CACS assignment.”	To remove grouping from the criteria of code assignment.
Composite Codes in CCI—General Coding Standards for CCI	
Deleted the example: “Patient with carcinoma of the larynx and lymph node metastases has a radical laryngectomy with a radical neck dissection”... and replaced with a new example.	To provide a relevant example that demonstrates the use of a composite code. The code used in the original example was no longer valid.
Multiple Codes in CCI—General Coding Standards for CCI	
Modified the format of the coding standard to divide it into two subheadings: “Multiple Codes From Different Rubrics” and “Multiple Codes From the Same Rubric”.	To format the coding standard in such a way that the direction is readily understood.
Added a directive statement: “When an intervention is performed using robotic assistance, assign 7.SF.14.ZX <i>Robotic assisted telemanipulation of tools, service, using system NEC</i> , mandatory, as an additional code.”	To provide direction on the use of the code 7.SF.14.ZX. This is new for v2012 ICD-10-CA. Robotics is no longer at the code level and assignment of this code is mandatory when robotic assisted interventions are performed.
Added a note that not every action carried out during an intervention needs to be coded.	To clarify that many smaller actions are carried out during an intervention episode that are an inherent part of an overall intervention and do not need to be coded separately.
Added an example: “Closed reduction of fracture of right humerus...”	To demonstrate assignment of codes from different rubrics.
Added an example: “Robotic assisted supraglottic laryngectomy...”	To demonstrate the use of 7.SF.14.ZX <i>Robotic assisted telemanipulation of tools, service, using system NEC</i> .
Added a note: “In CCI, explanatory “notes” are provided to clarify what is classified to a rubric or code. When these notes describe various components of a complex intervention that may or may not be performed in a given case, additional codes for these components are not assigned. These notes are intended to eliminate assigning multiple codes. They do not purport to describe the exact nature of all possible interventions that may be correctly classified to the rubric or code.”	To clarify the purpose of notes in CCI.
Added an example: “Patient previously had a total colectomy with rectal sparing and creation of ileostomy...”	To demonstrate the use of notes in CCI.

Description of Change	Rationale
Modified the note on “code also” notes.	To clarify that while “code also” notes have been included throughout CCI, they do not cover every possible circumstance where multiple codes are required.
Added a rationale for the example: “Patient is admitted for a lumpectomy and a sampling of the axillary lymph nodes.”	To demonstrate the use of the “code also” note.
Added an example: “A patient suffered a trauma resulting in bone loss to the anterior maxilla...”	To demonstrate why both codes are mandatory to assign.
<p>Modified the paragraph “As a general rule, multiple codes from the same rubric are not assigned for the same intervention episode, unless the codes within a rubric identify...” under the new subheading “Multiple codes from the same rubric”:</p> <ul style="list-style-type: none"> Deleted “separate distinct interventions” and added “separate operative approaches.” Deleted “techniques” from the statement “Multiple codes from the same rubric are not assigned to show different devices used at the same operative site.” Added the sentence “A hierarchy for orthopedic devices is provided below and in all other cases, select the qualifier that is most significant or important for the reporting facility.” 	<ul style="list-style-type: none"> To provide clear direction (operative approaches) and to remove confusion (distinct interventions). To allow for the exception where multiple codes from the same rubric may be assigned for different techniques. To clarify that it is a facility decision when selecting which code to assign from a rubric when different devices are used (with the exception of the hierarchies provided).
Deleted the example: “Patient presents to day surgery for an endocervical curettage, a cervical biopsy and a pap smear.”	To remove an example that was not in agreement with the direction and that was the cause of confusion.
Added an example: “Patient had both an esophagogastroduodenoscopy (EGD) and ileoscopy.”	To demonstrate an example of when codes from the same rubric are assigned.
Added a note with hierarchies of orthopedic devices used to stabilize the bone and used to repair ligament or soft tissue.	To provide a hierarchy so that the most appropriate code is assigned when multiple devices are used to stabilize the bone or repair ligament or soft tissue.
Added an example: “Patient suffered a hip fracture and is admitted for repair...”	To demonstrate the orthopedic device hierarchy.
Added a directive statement: “When the same generic intervention is performed on bilateral sites and there is no variation in any component of the CCI code...”	To provide the direction that when exactly the same intervention is performed on bilateral sites a single code is assigned from the rubric with the location attribute “bilateral”.
Added an example: “A woman had a bilateral total mastectomy using free flap for breast cancer.”	To demonstrate the directive statement when exactly the same intervention is performed bilaterally.
Added a note: “When the location attribute “bilateral” is not available a single code is still assigned.”	To clarify code assignment when the location attribute “bilateral” is not available.
Added an example: “A patient had an open reduction with internal fixation using a combination of plates and screws for bilateral maxilla fractures.”	To demonstrate code assignment when the location attribute “bilateral” is not available.

Description of Change	Rationale
Added a directive statement: “When the same generic intervention is performed on bilateral sites and there is a variation in any component of the CCI code...”	To provide the direction that when there is a variation in an intervention performed on bilateral sites a separate code for each intervention from the same rubric is assigned with the applicable attribute.
Added two examples: <ul style="list-style-type: none"> • “A patient had bilateral inguinal hernias...” • “Closed reduction fracture of the right humerus and open reduction fracture of left humerus.” 	To demonstrate code assignment when interventions are performed on bilateral sites and there is a variation in any component of the CCI code.
Combined Diagnostic and Therapeutic Interventions—General Coding Standards for CCI	
Amended the first directive statement to include “Section 2” and “Section 1”.	To clarify that this coding standard applies to diagnostic interventions classified to Section 2 and therapeutic interventions classified to Section 1.
Deleted the note: “It is mandatory to assign a code from rubric 3.IP.10.^Xray, heart with coronary arteries when any therapeutic intervention is performed using a cardiac catheterization approach.”	Direction on diagnostic imaging interventions classified to Section 3 is provided in the coding standards <i>Selection of Interventions to Code for Ambulatory Care</i> and <i>Selection of Interventions to Code for Acute Inpatient Care</i> .
Diagnostic Imaging Interventions—General Coding Standards for CCI	
Deleted the coding standard.	Direction is provided in the coding standards <i>Selection of Interventions to Code for Ambulatory Care</i> and <i>Selection of Interventions to Code for Acute Inpatient Care</i> .
Interventions to Manage Bleeding—General Coding Standards for CCI	
Renamed the coding standard from <i>Control of Bleeding</i> to <i>Interventions to Manage Bleeding</i> .	To reinforce that the coding standard applies to all interventions to manage bleeding and not only rubric 1.^13.^Control of bleeding. The wording “intervention to manage bleeding” is used throughout the coding standard.
Deleted the directive statement: “When documentation indicates an intervention is performed for “control of bleeding” or “control of hemorrhage,” assign 1.^13.^Control of bleeding for that anatomy site, unless otherwise indicated by the rubric excludes notes in CCI.”	To clarify that the purpose of the coding standard is to provide direction regarding the classification of interventions to manage bleeding and not to provide mandatory code direction. See the coding standards entitled <i>Selection of Interventions to Code for Acute Inpatient Care</i> and <i>Selection of Interventions to Code for Ambulatory Care</i> for mandatory code direction.
Modified the introduction from: “Control of bleeding can be classified to an intervention other than 1.^13.^Control of bleeding in CCI” to “Control of bleeding can be classified to 1.^13.^Control of bleeding, 1.^51.^Occlusion, 1.^59.^Destruction, or 1.^80.^Repair...”	To reinforce that the coding standard applies to all interventions to manage bleeding and not only rubric 1.^13.^Control of bleeding.

Description of Change	Rationale
<p>Added the following information to the bullet “The anatomy site”: “For example, some organs are only ever “repaired” to manage bleeding. In order not to duplicate categories in CCI, there are no Repair (80) interventions available for the tonsil/adenoid, thyroid, spleen, and liver anatomy sites. The management of bleeding of these organs is included in intervention Control of bleeding (13) ;”</p> <p>This information was previously in:</p> <ul style="list-style-type: none"> • The rationale to the example “A stabbing victim has surgery to control bleeding to an internal wound of the liver.”; and • The sentence “It is important to remember that each anatomy site is not treated in exactly the same way in regards to control of bleeding.” 	<p>To provide this information upfront in the introduction.</p>
<p>Deleted the bullet: “The invasiveness of the approach into the anatomy site;”</p>	<p>To remove a bullet that did not apply.</p>
<p>Modified the sentence: “It is essential to follow the includes/excludes notes in CCI in order to determine the correct rubric for this intervention.” and replaced it with the new note: “It is essential to follow the includes/excludes notes in CCI in order to determine the correct rubric for interventions to manage bleeding.”</p>	<p>To more clearly communicate this information.</p>
<p>Moved the example: “During his hospital admission, the patient required control of an episode of intractable epistaxis. This was accomplished with the clipping of the ethmoid artery via a transantral open approach.” to below the note.</p>	<p>To demonstrate the use of the excludes note at 1.ET.13.^.</p>
<p>Deleted the paragraph: “Medical technology has enabled new, less invasive methods to be used to control bleeding within the body. In particular, the use of percutaneous transluminal (arterial) occlusion of vessels with either coils or inert synthetic substances such as gelfoam and microspheres, has radically lessened the risk of surgery by avoiding more open, invasive approaches. These procedures are often performed by interventional radiologists in a diagnostic imaging suite.”</p>	<p>To remove information that was not providing direction or assistance in code assignment.</p>
<p>Moved the example: “During his hospital stay, the patient required control of an episode of intractable epistaxis. A transarterial embolization of the ethmoid artery was accomplished using microspheres.” to under the directive statement regarding 1.^.^13.^ <i>Control of bleeding</i>.</p>	<p>To align the example with the appropriate directive statement.</p>

Description of Change	Rationale
Revised Interventions—General Coding Standards for CCI	
Modified the note to state: “when the attribute box is yellow, it is mandatory to assign the status attribute “R” whenever the criteria stated in the directive box below are met.”	To clarify that the use of status attribute “R” is mandatory whenever it meets the criteria and that it is not dependant on whether the status attribute box is pink or yellow.
Modified the directive statement to include “any problem; whether expected (e.g. end-of-life of device) or unexpected (e.g. complication).”	To clarify that the attribute is appropriately assigned. A revision is not restricted to unexpected reasons but is also performed for expected reasons such as end-of-life of devices.
Added an example: “End-of-life of pacemaker.”	To provide an example for a common scenario.
Added ICD-10-CA diagnosis codes to examples and modified rationale.	To provide complete examples.
Drug-Resistant Microorganisms—Chapter I—Certain Infectious and Parasitic Diseases	
Modified the directive statement by changing the code range from B95-B97 to B95-B98 and deleting U85 from the directive.	To align with v2012 ICD-10-CA enhancements.
Septicemia/Sepsis—Chapter I—Certain Infectious and Parasitic Diseases	
Added an introduction paragraph from a CIHI media release: “A response to infection, sepsis can be a serious condition calling for immediate medical care. If sepsis becomes severe, it can result in extensive tissue damage, organ failure or death. Sepsis can be caused by a number of bacterial, fungal or viral infections that progress into the blood stream. While sepsis can develop from minor infections, such as the flu or a urinary tract infection, it is most likely to develop in people who have serious wounds, extremely weakened immune systems and open or exposed areas from catheters.”	To provide clinical background information on the severity of sepsis.
Added a directive statement: “When the underlying localized infection is documented, assign an additional code, mandatory, as a significant diagnosis type.”	To clarify that a code must be assigned for the underlying localized infection causing sepsis when documented.
Added an exception for the new directive statement: “When sepsis and the underlying localized infection are classified using the dagger/asterisk coding convention, the localized infection is either assigned diagnosis type (3) or (6).”	To clarify the diagnosis typing.
Deleted from the second directive box the bullet: “Assign an external cause code from categories Y60-Y84 when applicable.”	To remove the potential for confusion with regards to the external cause code assignment when septicemia/sepsis is classified to T82-T85.
Added an example.	To demonstrate the new directive statement on coding the underlying infection.
Added a rationale to the second example: “Patient was being treated in ICU for Staphylococcus aureus septicemia...”	To clarify the diagnosis type when sepsis is classified using the dagger/asterisk coding convention.

Description of Change	Rationale
Moved the note: “Sometimes physicians will use the term sepsis to describe a localized infection; therefore, care must be taken in code assignment. When the term “sepsis” is used to mean a localized infection, search the lead term “ <i>Infection</i> ” rather than “ <i>Sepsis</i> ”.”	To appropriately position the exception note.
Added an example: “Patient underwent an abdominal hysterectomy...”	To provide an example to demonstrate when the term “sepsis” is used to mean a localized infection.
Modified the example: “Patient developed postoperative E. coli septicemia following total colectomy with stoma creation.”	To add specificity and allow the selection of Y83.3 versus Y83.6.
Human Immunodeficiency Virus (HIV) Disease—Chapter I—Certain Infectious and Parasitic Diseases	
Reworded the directive statement: “When a patient presents with AIDS/manifestations of AIDS...” to “When a patient with AIDS/HIV disease presents for management of a manifestation(s) of AIDS/HIV disease.”	To clarify that the direction is applicable when the diagnosis is AIDS or HIV disease.
Added two bullets to the note: <ul style="list-style-type: none"> • “The above directive applies when AIDS or HIV disease...” • “AIDS manifestations are not limited to the code ranges above...” 	
Moved the directive statement to the first directive box: “When AIDS or HIV disease is recorded as a diagnosis, assume...”	To consolidate related information.
Moved the sentence: “Diagnosis code B24 <i>Human Immunodeficiency virus [HIV] disease</i> must not be recorded...” to include in one note.	
Moved and reworded the example: “AIDS patient for treatment of PCP pneumonia” to “A patient with AIDS is treated for PCP pneumonia.”	To follow the appropriate directive to which it applies and remove reference to an “AIDS patient”.
Moved and reworded the example: “AIDS patient encountering the health care system with wasting syndrome due to HIV...” to “A patient with AIDS encountering the health care system...”	
Reworded directive statement: “When the diagnosis is recorded as “HIV Positive”...”	To clarify the direction is applicable when there is no documentation of AIDS or HIV disease.
Added an example: “A patient is admitted for treatment of Staphylococcus pneumonia...”	To demonstrate a diagnosis of “HIV positive” is classified to Z21 when the condition is not one listed on the National Surveillance Case Definitions for AIDS.
Multiple Independent Primary Neoplasms—Chapter II—Neoplasms	
Added a note: “C97 <i>Malignant neoplasms of independent (primary) multiple sites</i> applies to...”	To clarify that C97 <i>Malignant neoplasms of independent (primary) multiple sites</i> is used for multiple primary invasive neoplasms only; not in situ.

Description of Change	Rationale
Added a rationale to the last example: "The patient was admitted for left mastectomy..."	To explain that C97 <i>Malignant neoplasms of independent (primary) multiple sites</i> is not assigned in this example because only one of the neoplasms is a primary invasive neoplasm; the other is carcinoma in situ.
Interventions Relevant to Neoplasm Coding—Chapter II—Neoplasms	
Renamed the coding standard from <i>Therapeutic and Diagnostic Interventions Relevant to Neoplasm Coding</i> to <i>Interventions Relevant to Neoplasm Coding</i> . The section Diagnostic Interventions has been removed.	Direction on diagnostic interventions is provided in the coding standards <i>Selection of Interventions to Code for Ambulatory Care</i> , <i>Selection of Interventions to Code for Acute Inpatient Care</i> and <i>Combined Diagnostic and Therapeutic Interventions</i> .
The section Brachytherapy has been removed.	Direction on brachytherapy is provided in the new coding standard Brachytherapy.
Brachytherapy—Chapter II-Neoplasms	
New coding standard. Note: the direction in this coding standard was previously in <i>Therapeutic and Diagnostic Interventions Relevant to Neoplasm Coding</i> ; no change in direction.	To clarify that this coding standard provides direction for both ICD-10-CA and CCI code assignment.
Acute Blood Loss Anemia—Chapter III—Diseases of the Blood and Blood-Forming Organs and Certain Disorders Involving the Immune Mechanism	
New coding standard.	To address the request from clients to provide direction for classifying acute blood loss anemia. Specifically, to clarify under what circumstances it is appropriate to classify anemia to D62 <i>Acute posthaemorrhagic anaemia</i> .
Anemia of Chronic Disease—Chapter III—Diseases of the Blood and Blood-Forming Organs and Certain Disorders Involving the Immune Mechanism	
New coding standard.	To address the request from clients to provide direction for classifying anemia of chronic disease. Specifically, to clarify: <ul style="list-style-type: none"> • What codes may be used as the dagger code with anemia of chronic disease; • How to find the code for the underlying chronic condition when the classification establishes a link between anemia of chronic disease and the underlying condition; • How to find the code for the underlying chronic condition when the documentation establishes a link between anemia of chronic disease and the underlying condition but the link is not established in the classification; and • How to classify anemia of chronic disease when a specific type of anemia is documented also.

Description of Change	Rationale
Diabetes Mellitus—Chapter IV—Endocrine, Nutritional and Metabolic Diseases	
Added an example: “A 68-year-old female patient is admitted with pneumonia...”	To demonstrate the dagger/asterisk convention with diabetes mellitus.
Added an example: “Patient was seen in the emergency department for “kidney failure”...”	To demonstrate coding unspecified renal failure in a patient with diabetes mellitus as per the alphabetical index.
Added/amended rationale.	To accurately demonstrate the directive statements.
Added three examples: <ul style="list-style-type: none"> • “A patient with type 2 diabetes mellitus is admitted to hospital due to acute symptoms of known Crohn’s disease....” • “A patient with type 2 diabetes mellitus is admitted for treatment of a fractured wrist...” • “A patient with type 2 diabetes mellitus is admitted due to an acute exacerbation of COPD.” 	To demonstrate the correct code assignment when there are multiple complications of diabetes mellitus.
Amended the directive statement: “When diabetes mellitus is described as poorly controlled by the physician/primary care provider at admission or at any time during the episode of care, assign E1–.64 <i>Type ~ diabetes mellitus with poor control, so described</i> as a significant diagnosis type/main problem or other problem.”	To clarify the correct diagnosis type assignment of E1–.64 <i>Type ~ diabetes mellitus with poor control, so described</i> .
Deleted the notes: <ul style="list-style-type: none"> • “Ensure that E1–.9 is never assigned with any other code from the range E10–E14 with fourth digits 1–7 excluding subcategories E1–.11, E1–.63 and E1–.64.” • “When more than one complication of diabetes code is assigned, ensure all the codes are from the same three digit category.” 	<ul style="list-style-type: none"> • To reflect v2012 ICD-10-CA enhancements: <ul style="list-style-type: none"> – “Use additional code to identify any diabetes mellitus with poor control, so described” deleted at E1–.7 and E1–.9 – “Excludes diabetes mellitus with poor control, so described” added to E1–.78 and E1–.9 • Issue addressed by a Classification edit.
Acute Coronary Syndrome (ACS)—Chapter IX—Diseases of the Circulatory System	
Added the code I22 <i>Subsequent myocardial infarction</i> to the directive statement.	To accurately reflect all the ICD-10-CA codes that require the mandatory additional code of R94.3– <i>Abnormal results of cardiovascular function studies</i> .
Modified the rationale of the example: “A 52-year-old male presented with chest pain and shortness of breath...”	To address the request from clients to clarify that Non-STEACS does not always equate to unstable angina and to clarify why I20.0 <i>Unstable angina</i> qualifies as the MRDx and I25.19 <i>Atherosclerotic heart disease of unspecified type of vessel, native or graft</i> qualifies as a diagnosis type (1).
Percutaneous Coronary Intervention [PCI]—Chapter IX—Diseases of the Circulatory System	
Deleted the coding standard.	To remove information that has been incorporated into the tabular list for v2012 CCI.

Description of Change	Rationale
Selection of Status Attribute for Percutaneous Coronary Intervention (PCI)—Chapter IX—Diseases of the Circulatory System	
New coding standard	To assist coders with selecting the correct mandatory status attribute at rubric 1.IJ.50.^ [^] <i>Dilation, coronary arteries.</i>
Cardiac Arrest—Chapter IX—Diseases of the Circulatory System	
Modified the rationale in the example: “A 55-year-old gentleman collapsed at home while shoveling snow...”	To align with the new coding standard <i>Selection of Interventions to Code for Ambulatory Care.</i>
Peripheral Vascular Disease —Chapter IX—Diseases of the Circulatory System	
Deleted a sentence under the section Related Interventions, Percutaneous transluminal angioplasty (PTA): “Coding arteriograms performed with the angioplasty is optional.”	To align with the new coding standards <i>Selection of Interventions to Code for Ambulatory Care</i> and <i>Selection of Interventions to Code for Acute Inpatient Care.</i>
Septoplasty for Deviated Nasal Septum—Chapter X—Diseases of the Respiratory System	
Renamed the coding standard from <i>Nasal Repairs</i> to <i>Septoplasty for Deviated Nasal Septum</i> . Reworded the directive: “Classify nasal repairs according to the anatomical site and the intent of the intervention” to “Classify interventions involving a septoplasty for correction of deviated nasal septum according to the anatomical site and the intent of the intervention.” Revised the flowchart.	To clarify the direction is specific to septoplasties performed for deviated nasal septum.
Added four examples.	To demonstrate the flowchart.
Invasive Ventilation—Chapter X—Diseases of the Respiratory System	
Renamed the coding standard from <i>Mechanical Ventilation</i> to <i>Invasive Ventilation</i> .	To clarify the direction is related to “invasive”: ventilation.
Replaced the word “mechanical” with “invasive” as applicable throughout the rest of the coding standard.	
Deleted the words “using positive pressure” in the first directive statement.	To clarify that there are other invasive ventilation methods mandatory to code at rubric 1.GZ.31.^ [^] .
Reworded the directive: “When one method of invasive mechanical ventilation (e.g. endotracheal intubation) is initiated ...” to “When one invasive approach (e.g. endotracheal intubation is changed to another invasive approach...” Removed the word “method”, as applicable, in the bullets for calculation of duration of continuous ventilation.	To clarify when the invasive approach changes, multiple codes are assigned.

Description of Change	Rationale
Added an exception: “When invasive ventilation is an inherent part of the administration of a general...”	To identify an exception to the directive.
Deleted “Invasive mechanical ventilation is a factor in calculating cost weights...” from the note.	To remove a statement that is not required since the directive statement provides the mandatory direction for code assignment of invasive ventilation.
Modified the example and the rationale: “A patient is ventilated via ETT mechanically...” to “A patient is ventilated via ETT using positive pressure for 10 days...”	To provide enough information in the example for correct code assignment. To clarify the example is demonstrating the same invasive ventilation was initiated more than once.
Modified the example and the rationale: “A patient is intubated and ventilated via ETT for two days...”	To clarify the example is demonstrating different invasive approaches.
Added 1.GJ.77.LA to example.	To provide the mandatory code assignment applicable to the example.
Modified the rationale of the example: “Patient sustained significant trauma....”	To clarify the example is demonstrating different invasive approaches were used for ventilation.
Added an example: “Patient developed respiratory arrest...”	To demonstrate ambu bag ventilation via endotracheal tube switched to positive pressure via ET tube only requires one code from 1.GZ.31.^ is assigned.
Selection of Attributes at Hernia Repair—Chapter XI—Diseases of the Digestive System	
Deleted the directive statement: “Assign a code for any contra-lateral exploration (2.OT.70.^) done concomitantly with a unilateral hernia repair (optional, but recommended).”	To remove direction that can be found within the classification at rubric 1.YS.80.^.
Fractures—Chapter XIII—Diseases of the Musculoskeletal System and Connective Tissue	
Added an example of an underlying disease to the first directive statement: “or genetic disorder e.g. Osteogenesis imperfecta”	To provide another example of an underlying disease of a pathological fracture.
Modified the flowchart to add a new decision step: “Is this a periprosthetic fracture?” Change in direction to flowchart for decision step. From: “Is fracture traumatically induced? While inserting orthopaedic prosthetic implant or fixative device. Assign M96.6 Fracture of bone following insertion of implant, prosthesis or plate.” To: “Is fracture traumatically induced? While inserting orthopaedic prosthetic implant or fixative device or during another intervention. Assign T81.88 + a code from Chapter XIX: fracture by site.”	To reflect the difference between classifying a periprosthetic fracture and a traumatically induced fracture.

Description of Change	Rationale
Pregnancy with Abortive Outcome—Chapter XV—Pregnancy, Childbirth and the Puerperium	
Modified the see also note: “See also the coding standard entitled <i>Continuing Pregnancy After Abortion/Selective Fetal Reduction in Multiple Gestation</i> .”	To correct the name of the coding standard.
Amended the directive statement: “Classify all medical abortions (intended terminations of pregnancy), regardless of the gestational age, fetal weight...” to include, “or outcome of the fetus (i.e. products of conception, stillborn or liveborn).”	To clarify this direction is applicable when the intent is to terminate the pregnancy regardless of gestational age, fetal weight or outcome and is classified to a code from category O04 <i>Medical abortion</i> .
Added a directive statement: “When applicable, assign an additional code, mandatory, as a significant diagnosis type (1)/other problem from: <ul style="list-style-type: none"> Chapter XV—Pregnancy, childbirth and the puerperium (O10-O99), to identify any maternal illness as the reason for the medical abortion (e.g. maternal toxoplasmosis).” 	To clarify that, when known, a code must be assigned for the underlying maternal reason for a medical abortion.
Added a note: “An encounter for extraction/expulsion where fetal demise has occurred before 20 weeks gestation is classified as a missed abortion, even when extraction/expulsion of the fetus occurs after 20 weeks.”	To clarify that if the case meets the criteria for a missed abortion, this coding standard does not apply.
Added a note: “When a multiple pregnancy continues following a medical abortion, follow the direction in the coding standard entitled <i>Continuing Pregnancy After Abortion/Selective Fetal Reduction in Multiple Gestation</i> .”	To clarify where the direction for this scenario can be found.
Added a rationale to the example: “Medical abortion for unwanted pregnancy treated with a suction curettage at 10 weeks.”	To explain why O04.9 is the only code assigned for this case.
Added a section entitled “Medical Abortion at or After 20 Weeks Resulting in a Stillborn” and an introduction: “Terminations performed later in gestation are classified as a medical abortion on the mother’s abstract as described above. A stillborn abstract is created as per provincial/territorial direction.”	To provide direction on how to classify a termination performed later in gestation; and to draw attention to the fact that creation of a stillborn abstract is not mandatory; it is based on provincial/territorial direction.
Added a directive statement: “When a medical abortion is performed at or after 20 weeks gestation resulting in a stillborn, assign P96.4 <i>Termination of pregnancy, affecting fetus and newborn</i> as the MRDx/main problem on the stillborn abstract. <ul style="list-style-type: none"> When applicable, assign an additional code(s), mandatory, as a diagnosis type (3)/other problem to describe any associated congenital anomaly.” 	To provide direction on how to classify a termination performed at or after 20 weeks gestation resulting in a stillborn.

Description of Change	Rationale
Added a note: “When a medical abortion occurs at or after 20 weeks gestation, do not assign a code from category Z37 <i>Outcome of delivery</i> on the mother’s abstract. Direction for classifying a medical abortion at or after 20 weeks gestation resulting in a livebirth is addressed in the following section “Medical Abortion Resulting in a Liveborn.”	To clarify that an outcome of delivery code is not assigned on the mother’s abstract in this circumstance; and to clarify where the direction for a medical abortion at or after 20 weeks resulting in a liveborn can be found.
Added rationale and the stillborn abstract to the example: “An expectant mother presented at 26 weeks gestation. ...The results of the amniocentesis demonstrated that the fetus had Trisomy 21. ...”	To explain why the codes were assigned for this case; and to demonstrate what codes are captured on the stillborn abstract.
Added an example: “A patient is admitted at 21 weeks for an unplanned pregnancy in which the mother was desirous for termination. Dilation & evacuation (D&E) is performed. The physician documents the diagnosis as ‘delivery of a stillborn’.”	To demonstrate that even though the physician describes this as a ‘delivery’ the intent was to terminate the pregnancy so it is classified as a medical abortion, regardless of the gestational age.
Added a section entitled “Medical Abortion Resulting in a Liveborn.”	To provide direction on how to classify a termination resulting in a liveborn.
<p>Added directive statements:</p> <p>“When a medical abortion performed at or after 20 weeks gestation results in a liveborn assign:</p> <ul style="list-style-type: none"> • on the mother’s abstract, a code from: <ul style="list-style-type: none"> – category O04 <i>Medical abortion</i>, as the MRDx/main problem; and – category Z37 <i>Outcome of delivery</i>, as a diagnosis type (3)/other problem. – category O35 <i>Maternal care for known or suspected fetal abnormality and damage</i>, to identify any fetal reason for the medical abortion (e.g. anencephalic fetus); and/or – Chapter XV—<i>Pregnancy, childbirth and the puerperium (O10-O99)</i>, to identify any maternal medical illness as the reason for the medical abortion (e.g. maternal toxoplasmosis). • on the newborn’s abstract: <ul style="list-style-type: none"> – P96.4 <i>Termination of pregnancy, affecting fetus and newborn</i> as the MRDx/main problem; and – a code from category Z38 <i>Liveborn infants according to place of birth</i>, as a diagnosis type (0); and – when applicable, a code to describe any associated congenital anomaly, mandatory, as a significant diagnosis type (1)/other problem.” 	To provide direction on how to classify a termination performed at or after 20 weeks gestation resulting in a liveborn for both the mother’s abstract and the newborn’s abstract.

Description of Change	Rationale
Added rationale and the newborn abstract to the example: "A patient presented at 20 weeks gestation, requesting a therapeutic abortion. She was started on misoprostol intravenously. The fetus was successfully expelled. A heart beat and respirations were detected at birth."	To explain why the codes were assigned for this case; and to demonstrate what codes are captured on the newborn abstract.
Added rationale and the mother's abstract to the example: "Medical abortion at 23 weeks for fetal anencephaly. Labor induced with intravenous Syntocinon. Fetus was born alive and survived for 1 hour."	To explain why the codes were assigned for this case; and to demonstrate what codes are captured on the mother's abstract.
Added a note: "A liveborn resulting from a medical abortion prior to 20 weeks is considered pre-viable for the purposes of classification; therefore, a code from category Z37 <i>Outcome of delivery</i> is not assigned on the mother's abstract and a newborn abstract is not created. <i>Vital Statistics Act</i> requirements for registration of a liveborn are not the same as those for classification of a newborn in the Discharge Abstract Database (DAD). Consequently liveborn registrations for <i>Vital Statistics</i> will not always match newborn data submitted to the DAD."	To provide direction on how to classify a termination performed prior to 20 weeks gestation resulting in a liveborn; and to explain that the requirements for <i>Vital Statistics</i> are not the same as those for classification purposes.
Added an example and rationale: "A patient presented at 19 weeks gestation for a therapeutic abortion. She was started on misoprostol intravenously. The fetus was expelled. A heart beat was detected. The fetus expired 7 minutes later."	To demonstrate how to classify a termination performed prior to 20 weeks gestation resulting in a liveborn.
Modified the "failed attempted abortion" directive statement: changed "viable" to "live' fetus" and "following the intervention" to "at the time of discharge".	To clarify that a code from category O07 <i>Failed attempted abortion</i> is assigned only when the patient is discharged still in the pregnant state following a failed attempted abortion.
Added two directive statements: <ul style="list-style-type: none"> • "Assign O07.4 Failed attempted abortion, without complication when no complication occurs within the same episode of care as the failed abortion. • Assign O07.3 Failed attempted abortion, complicated when a complication occurs within the same episode of care as the failed abortion." 	To clarify how to classify a complication that occurs during the same episode of care as a failed attempted abortion.
Added a note: "When a complication follows a failed abortion a code from category O08 <i>Complications following abortion and ectopic and molar pregnancy</i> is not assigned. The patient is pregnant at the time of discharge so the codes for complication following abortion do not apply for this episode of care or any subsequent episode of care."	To clarify how to classify a complication that occurs in a patient who has been discharged in the pregnant state following a failed attempted abortion episode of care.
Added "see also" statement and hyperlink to the coding standard <i>Complications Following Abortion and Ectopic and Molar Pregnancy</i> .	To provide direction on how to classify a complication following an abortion, ectopic or molar pregnancy.

Description of Change	Rationale
Added an example and rationale: “Patient admitted at 19 weeks for a medical abortion. ...After examination it was determined the patient was still pregnant and she was taken back to the operating room for a second dilation and curettage.”	To clarify that when a patient is discharged following a successful abortion it is classified to medical abortion; even if the intervention has to be performed more than once during the episode of care to achieve the desired outcome.
Complications Following Abortion and Ectopic and Molar Pregnancy—Chapter XV—Pregnancy, Childbirth and the Puerperium	
Modified the second directive statement “Assign a code from category O08–O07 <i>Complications following abortion and ectopic and molar pregnancy</i> , as an additional code...” to “Assign an additional code, mandatory, from category O08 <i>Complications following abortion and ectopic and molar pregnancy</i> ...”	To direct that the additional code from category O08 is mandatory.
Delivery in a Completely Normal Case—Chapter XV—Pregnancy, Childbirth and the Puerperium	
Modified the list: “The following terms, when used in the absence of any other documentation to suggest otherwise, are indicators of a spontaneous delivery without complication . . .” to include: <ul style="list-style-type: none">• Periurethral, first degree, or second degree unsutured perineal lacerations• Chorioamnionitis or funisitis as an incidental placental pathological finding only without documentation of a diagnosis or fever or other symptoms of infection• Nuchal cord (loose) or other cord entanglement without mention of compression or intervention.	To include these conditions as indicators of a spontaneous delivery without complication.
Added a note: “For the purposes of the classification, ‘slipping the cord over the head/body’ of the infant or other simple manipulation of the cord during a delivery is not classified as an intervention.”	To clarify what is and is not meant by “interventions” with regard to the statement “nuchal cord (loose) or other cord entanglement without mention of compression or intervention”.
Amendment to code and code description in the note.	To clarify that Z37.0– <i>Single live birth</i> and not Z37.– <i>Outcome of delivery</i> may be used as the MRDx when no other indications/complications are present. A single live birth only would qualify as a completely normal case. A multiple birth or a stillbirth is not classified as a completely normal case. The MRDx in these circumstances is classified to the appropriate code from Chapter XV— <i>Pregnancy, childbirth and the puerperium</i> (O00–O99).

Description of Change	Rationale
Delivery With History of Previous Cesarean Section—Chapter XV—Pregnancy, Childbirth and the Puerperium	
Added an exception: “In the circumstance of a multiple gestation, O75.701 and O66.401 may appear together on the same abstract where one baby is born vaginally and another is born via Cesarean section due to an unexpected complication.”	To clarify in the circumstance of multiple gestation more than one code indicating a previous Cesarean section may appear together on the same abstract.
Prolonged Pregnancy/Post-Dates Pregnancy—Chapter XV—Pregnancy, Childbirth and the Puerperium	
New coding standard.	To provide direction referable to assignment of a code from category O48 <i>Prolonged pregnancy</i> .
Premature Rupture of Membranes—Chapter XV—Pregnancy, Childbirth and the Puerperium	
Added “see also” statement and hyperlink to the coding standard <i>Interventions Associated With Delivery</i> .	To provide a link to the note regarding direction on classification of augmentation and induction of labor in the setting of premature rupture of membranes (PROM).
Labor and Delivery Complicated by Fetal Stress—Chapter XV—Pregnancy, Childbirth and the Puerperium	
Modified the first directive statement to include the reference to the SOGC pH value for fetal asphyxia.	To clarify the directive statement.
Modified the note: “The Society of Obstetricians and Gynecologists of Canada (SOGC) values for fetal asphyxia: <ul style="list-style-type: none"> • umbilical cord arterial pH ≤ 7.0; and/or • umbilical cord arterial base deficit ≥ 12 mmol/L.” 	To correct the base deficit value from 16 mmol/L to 12 mmol/L as per SOGC guidelines.
Postpartum Hemorrhage—Chapter XV—Pregnancy, Childbirth and the Puerperium	
Added an introduction: ““Postpartum hemorrhage describes an event rather than a diagnosis, and when encountered, its etiology must be determined.” Classification of postpartum hemorrhage (PPH) in ICD-10-CA is based on its etiology (cause). Blood loss that is the result of uterine atony or retained products during or following delivery is classified to category O72 <i>Postpartum haemorrhage</i> ...When treatment measures are performed, and there is no diagnosis of postpartum hemorrhage, the chart should be referred back to the physician for documentation.”	To clarify what is classified to category O72 <i>Postpartum haemorrhage</i> ; and to provide some indicators of preventative measures versus treatment.

Description of Change	Rationale
<p>Modified the directive statement: “Assign a code from category O72 <i>Postpartum haemorrhage</i> when at least one of the following criteria is met: ...”:</p> <ul style="list-style-type: none"> • moved the criteria to determine when blood loss is excessive; and • added “uterine atony” and “bleeding in the presence of retained products” to the list of criteria. 	To clarify what is classified to category O72 <i>Postpartum haemorrhage</i> .
Moved the information about when and under what circumstances each code from category O72 <i>Postpartum haemorrhage</i> applies, from a directive statement to a table.	This information does not qualify as a directive statement. The information clarifies that selection of the appropriate code from category O72 <i>Postpartum haemorrhage</i> is based upon the cause of the hemorrhage and the time frame in which the hemorrhage occurs. The table provides a clearer picture.
Added a note: “When the amount of blood loss recorded ... do not assign a code from category O72 <i>Postpartum haemorrhage</i> .”	To clarify that blood loss resulting from an injury is not a true postpartum hemorrhage and is not classified to category O72 <i>Postpartum haemorrhage</i> .
Added a rationale to first example: “A postpartum hemorrhage has occurred during the third stage...”	To provide rationale for the code choice; hemorrhage due to retained placenta in the third stage is classified to O72.002.
Modified the rationale in the second example: “Uterine atony is documented ...”	To provide rationale for the code choice; documentation of uterine atony is classified to O72 <i>Postpartum haemorrhage</i> as per the directive statement.
Modified the rationale in the third example: “Bleeding due to retained portions of placenta...”	To clarify that when bleeding is due to retained products not during the third stage of labor it is classified to O72.2— regardless of time frame.
Added a rationale to the fourth example: “Bleeding due to retained products of conception...”	To provide rationale for the code choice; bleeding due to retained products not during the third stage of labor is classified to O72.2— regardless of time frame.
Added an example: “Patient delivers a female infant via forceps...”	To demonstrate that blood loss secondary to an injury is not classified to category O72 <i>Postpartum haemorrhage</i> as directed in the note: “When the amount of blood loss recorded...do not assign a code from category O72 <i>Postpartum haemorrhage</i> .” To clarify when blood loss is due to an injury sustained at the time of delivery it is classified to O67.80— <i>Other intrapartum haemorrhage</i> .
Interventions Associated With Delivery—Chapter XV—Pregnancy, Childbirth and the Puerperium	
<p>Modified the directive statements:</p> <ul style="list-style-type: none"> • “When active labor does not begin spontaneously...” • “When active labor begins spontaneously...” 	Added the word “active” to clarify when reference is made to the beginning or start of labor, the labor is active labor and not latent labor.

Description of Change	Rationale
Changed “optional” to “mandatory” and added “code all methods that apply” in the following directive statement: “When active labor begins spontaneously, or has been induced, and an intervention is required to ensure that labor continues to progress, assign a code, mandatory... Code all methods that apply.”	Based on clinical feedback it is now mandatory to collect augmentation of labor; and that all methods that apply must be captured.
Revised 09/2012 , deleted the note: “To determine the onset of labor, use the time that is documented on the Delivery Record. ... When there are contractions, an intervention performed to establish satisfactory contractions/labor pattern is classified to rubric 5.LD.31.^ <i>Augmentation of labour.</i> ”	Revised 09/2012 , to remove content that caused confusion and increased coder burden. Documentation of onset of labor should be taken at face value. When the physician documents augmentation, classify the intervention to augmentation; when the physician documents induction, classify the intervention to induction.
Low Birth Weight and/or Preterm Infant—Chapter XVI—Certain Conditions Originating in the Perinatal Period	
Renamed the coding standard from <i>Low Birth Weight</i> to <i>Low Birth Weight and/or Preterm Infant</i> .	To clarify the direction includes code assignment of a preterm infant.
Deleted the introduction statement: “Recognizing that in some areas admission of a newborn is deemed to occur at the time of birth...”	To remove a statement does not add value to the direction.
Added an introduction.	To add information explaining the significance of low birth weight and prematurity in a newborn.
Modified the directive statement to add direction for assignment of P05.2.	To align with the table “Sequencing Low Birth Weight, Fetal Malnutrition, Poor Fetal Growth and/or Prematurity” that demonstrates the use of this code.
Modified the directive statement: “Assign any other code(s), additional...” to “When gestational age of the newborn is less than 37 completed weeks, assign, mandatory, as a significant diagnosis type, either P07.2 <i>Extreme immaturity</i> or P07.3 <i>Other preterm infants</i> .”	To clarify direction that either P07.2 <i>Extreme immaturity</i> or P07.3 <i>Other preterm infants</i> is mandatory.
Deleted the directive statement: “Sequence low birth weight before poor fetal growth.”	To remove an incorrect statement. The classification instructs to sequence low birth weight before prematurity.
Moved the note: “This standard does not mean to imply that low birth weight must be selected as the MRDx...”	To appropriately position the note after the directive statement to which it applies.
Added a note with information specific to gestational age and the codes P07.2 and P07.3.	To provide an explanation that further clarifies the directive statement specific to assigning a code for prematurity when the gestational age is less than 37 weeks.
Modified and renamed the table “Low Birth Weight Infants” to “Sequencing Low Birth Weight, Fetal Malnutrition, Poor Fetal Growth and/or Prematurity”.	To incorporate the code assignment and sequencing for prematurity and low birth weight.
Added a new example: “Baby born vaginally at 30 weeks gestation with birth weight 2300 grams...”	To demonstrate the first directive statement and the note.

Description of Change	Rationale
Added a rationale to the example: “Infant delivered vaginally at 38 weeks gestation with evidence of symmetrical growth restriction...”	To explain the sequencing of low birth weight and intrauterine growth restriction.
Added a rationale to the example: “Infant delivered by cesarean section at 28 weeks gestation weighing 1700 grams.”	To explain the sequencing of low birth weight and prematurity.
Added a new example: “Infant delivered by cesarean section weighing 3000 grams...”	To demonstrate the mandatory assignment of P07.3.
Added two examples. <ul style="list-style-type: none"> • Mother’s Abstract: “Obstetrical patient is admitted in active labor at 37 weeks gestation...” • Newborn’s Abstract: “Discharge summary of the newborn states the baby was delivered weighing 3110 grams to a primigravida patient at 37 weeks gestation. The gestational age recorded on the newborn physical examination is 36 weeks.” 	To demonstrate an example of a mother’s abstract coded as a term delivery and the newborn’s abstract coded as a preterm delivery.
Fetal Asphyxia and Birth Asphyxia—Chapter XVI—Certain Conditions Originating in the Perinatal Period	
Modified the first directive statement by changing P21.– <i>Birth Asphyxia</i> to the specific code P21.9 <i>Newborn asphyxia, unspecified</i> .	To clarify P21.9 is the only code in the category.
Modified the second directive statement: “When these criteria...” to “When these values are not met...”.	To align with the wording in the first directive statement and clarify that the direction is specific to SOGC values for fetal asphyxia.
Modified the note.	<p>To clarify that umbilical cord arterial pH values are specific to fetal asphyxia (P20.–) and capillary or arterial blood values are specific to newborn asphyxia (P21.9).</p> <p>To correct the base deficit value from 16 mmol/L to 12 mmol/L as per SOGC guidelines.</p>
Deleted the information about P20 <i>Fetal Asphyxia</i> and P21 <i>Birth Asphyxia</i> from the paragraph.	To remove information that is not necessary to consider for the purpose of determining code assignment.
Modified rationale in three examples: <ul style="list-style-type: none"> • “Electronic fetal monitoring during active labor shows...” • “Baby delivered by emergency cesarean section due to prolonged fetal bradycardia noted during first stage of labor.” • “Male infant delivered vaginally with an absent heart beat...” 	To add information to justify code assignment.
Added P07.3 and reworded the rationale for the example: “Baby born vaginally at 30 weeks gestation...”	To include all mandatory codes for the example and provide justification for assigning P21.9.

Description of Change	Rationale
Adverse Reactions in Therapeutic Use Versus Poisonings—Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes	
Reworded the directive statement: “Classify conditions resulting from drugs, medicaments or biological agents as an “adverse effect in therapeutic use” or as a “poisoning...” to “Classify an “adverse effect in therapeutic use” or a “poisoning” resulting from drugs, medicaments or biological agents based on the criteria in the table below.”	To clarify that in some circumstances there may not be a condition or manifestation to code; however, the documentation still supports classifying either an adverse effect in therapeutic use or poisoning. (e.g. diagnosis of “allergic reaction from Penicillin” or “drug overdose”.
Reworded the directive statement: “When a compound drug (e.g. Tylenol #3 which is acetaminophen, codeine)...” to “When a compound drug (e.g. Tylenol #3 which is acetaminophen, codeine and caffeine)...”	To clarify that Tylenol #3 is acetaminophen, codeine and caffeine.
Add a note: “It is mandatory to apply the diagnosis cluster to the set of codes that describe an adverse effect in therapeutic use (Y40-Y59). See also the coding standard entitled <i>Diagnosis Cluster</i> .”	To clarify the use of the diagnosis cluster with adverse effects in therapeutic use.
In the column heading “Adverse Effect in Therapeutic Use”: <ul style="list-style-type: none">Added sentence: “Apply the diagnosis cluster, mandatory”.Reworded sentence: “When the specific reaction/manifestation is not documented, assign T88.7...” to “When the specific reaction/manifestation is not documented, select the applicable code, either: T80.6, T80.9 or T88.7.”	To provide direction for the mandatory requirement of applying a diagnosis cluster for adverse effect in therapeutic use. To clarify that when the specific reaction/manifestation is not documented in an adverse effect in therapeutic use, the primary code may be selected from either T80.6, T80.9 or T88.7 depending on the circumstances.
In the column heading “Poisonings”: <ul style="list-style-type: none">Reworded sentence: Locate the poisoning codes in the first column of the Table of Drugs and Chemicals...” to “Locate the poisoning codes from Chapter XIX and the external cause code (Accidental, Intentional self-harm or Undetermined intent) from the Table of Drugs and Chemicals.”Reworded sentence: “Sequence the poisoning code first followed by the manifestation code, the external...” to “Sequence the poisoning code first followed by the manifestation code (when applicable), the external...”Added note: “When poisoning also meets the criteria of a misadventure...”Added note: “Do not apply the diagnosis cluster when classifying a poisoning...”	To clarify the instructions for coding and provide instruction in the circumstances related to poisonings and misadventures.
Added one sentence to the example of gastritis due to aspirin: “.... Documentation indicates that the patient takes Aspirin once daily.”	To provide a more realistic scenario of the documentation

Description of Change	Rationale
Added the diagnosis cluster to all examples demonstrating an adverse effect in therapeutic use and one example that is a misadventure and a poisoning.	To demonstrate the mandatory application of a diagnosis cluster.
Added rationale to the examples: <ul style="list-style-type: none"> • “Patient was newly diagnosed with cervical spondylosis...” • “Mother found her 8-year-old son playing at home with candy coated ibuprofen...” 	To provide rationale for all examples.
Added an example: “Following infusion of blood products...”	To demonstrate an example of an adverse effect in therapeutic use in which the specific reaction/manifestation is not documented.
Added one sentence to the example of attempted suicide by drug overdose from combination of heroin, Xanax, Valium and acetaminophen: “...Patient was admitted to ICU for close monitoring of his level of consciousness, a central venous line was inserted for dialysis.”	To provide detail in the example to justify assigning R40.29 as diagnosis type 1/other problem.
Added two examples: <ul style="list-style-type: none"> • “Patient presented in labour. An epidural was administered to the patient....” • “Patient was admitted with shingles and placed on acyclovir...” 	To demonstrate an example of a poisoning that does and does not meet the criteria for significance and to demonstrate the correct code assignment for a poisoning that is also a misadventure.
Current Versus Old Injuries—Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes	
Added an introduction.	To clarify the intent of the coding standard.
Deleted the flow chart and the directive statements: <ul style="list-style-type: none"> • “A current injury is one for which the repair has just begun, is proceeding, or has yet to be completed.” • “An old injury is one in which the repair has been completed. However, following the repair, functionality has failed to return and thus continuing treatment is required to address this unexpected and unanticipated healing complication.” Added a directive statement: “When an injury is documented as being related to a traumatic event and the classification provides a choice of a condition being classified as current or old, select a code from either the body system chapter or Chapter XIX based on the time frames indicated below: <ul style="list-style-type: none"> • A current injury is one which occurred within one year (365 days) prior to the date of the visit. Select a code from Chapter XIX. 	To remove sources of confusion and replaced it with clear direction.

Description of Change	Rationale
<ul style="list-style-type: none"> An old injury is one which occurred more than one year (365 days) from the date of the visit. Select a code from the body system chapter. When the date of injury is not specified (e.g. patient cannot remember the date, physician does not state an approximate date, or the injury is documented as “long ago”) classify as an old injury. Select a code from the body system chapter.” 	
Amended a rationale in the first two examples and amended the codes and rationale in the third example.	To align with the new direction.
Added two examples: “ <ul style="list-style-type: none"> Patient presents to hospital with right femoral nerve dysfunction.” “This patient had a twisting hyperflexion injury to her knee...” 	To demonstrate the new directive statements.
Added a note: “Careful attention must be used when injuries are not related to a traumatic event...” Added an example.	To clarify the correct application of the directive statements. To demonstrate application of the new note.
Deleted the directive statement: “Assign the current injury code as MRDx/main problem on all subsequent admissions for treatment of the original injury (possible involving multi-staged interventions).” Deleted the two examples following the directive statement.	To remove content that does not apply to this coding standard.
Deleted the directive statement and example for encounters that are strictly for follow-up care or aftercare.	To remove content that is addressed in the <i>Admission for Follow-Up Examination</i> coding standard (a hyperlink is included at the end of the coding standard).
Amended the directive statement for sequelae of injuries and replaced the example. Added a hyperlink to the <i>Sequelae</i> coding standard.	To clarify application of sequelae codes for injuries.
Intracranial Injury NOS Versus Head Injury NOS—Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes	
Deleted the statement: “A Glasgow coma scale score of 13-15 indicates no brain injury.”	To remove an incorrect statement.

Description of Change	Rationale
Burns and Corrosions from Local Applications and Irradiations—Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes	
Deleted the coding standard.	To consolidate related information into the new coding standards <i>Misadventures During Surgical and Medical Care</i> and <i>Post-Intervention Conditions</i> .
Post-Intervention Conditions—Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes	
Added a note: “It is mandatory to apply a diagnosis cluster to the set of codes that describe a post-intervention condition. See also the coding standard <i>Diagnosis Cluster</i> .”	To draw attention to the new coding standard <i>Diagnosis Cluster</i> .
Reworded the directive statement: “Classify a condition or symptom as a post-intervention condition when: the condition or symptom arises during an uninterrupted continuous...” to “Classify a condition or symptom as a post-intervention condition when: a condition or symptom that is not attributable to another cause arises during an uninterrupted continuous...”	To clarify a condition arising within 30 days following an intervention is only classified as a post-intervention condition when it is not attributable to another cause.
Reworded the note and removed the term “home” from the first sentence: “The 30 day timeline does not apply when a patient has been discharged home.” to “The 30 day timeline does not apply when a patient has been discharged. This is considered an interruption in care (no longer a continuous episode of care.) On re-admission, a condition must be clearly documented as post-procedural to be classified as a post-intervention condition.”	To clarify “uninterrupted continuous episode of care” referred to in the directive statement and clarify that a patient can be discharged to places other than home.
Added a note: “The 30 day timeline includes direct transfers between the same level of care at different facilities (e.g. acute to acute) and different levels of care at the same or different facility (e.g. ambulatory day care to acute). A direct transfer constitutes an uninterrupted continuous episode of care and the 30 day timeline rule still applies.”	To clarify “transfers” referred to in the directive statement.

Description of Change	Rationale
<p>Reworded the note: “When it is clear from the chart documentation that a condition or symptom occurring in the post-intervention period of 30 days is not related to the intervention...” to “When it is clear from the chart documentation that a condition or symptom occurring in the post-intervention period of 30 days is attributable to another cause, it is not classified as a post-intervention condition.”</p> <p>Added four new examples of “due to another cause”:</p> <ol style="list-style-type: none"> 1. Respiratory failure due to congestive heart failure. 2. Fracture hip due to fall. 3. Hemorrhage from colostomy due to fall. 4. Periprosthetic fracture due to fall. 	<p>To clarify and demonstrate the meaning of “attributable to another cause” which is referred to in the definition of a post-intervention condition.</p>
<p>Add an example of periprosthetic fracture that is a post-intervention condition.</p>	<p>To demonstrate periprosthetic fracture classified as post-intervention condition.</p>
<p>Added a note: “Complications of postoperative wounds (e.g. wound hemorrhage, wound dehiscence, wound infection) are always classified as a post-intervention condition because ...”</p>	<p>To clarify that a wound complication cannot be said to be attributable to another cause in spite of contributing external factors.</p>
<p>Added a note: “When a condition arises following an intervention to administer a substance, the condition can be related to the substance that was administered...”</p> <p>Added two examples following the note. An example of “transfusion reaction” and an example of “transfusion-related phlebitis” of the forearm.</p>	<p>To draw attention to the fact that a condition arising following an intervention to administer a substance can be related to the substance that was administered or be related to the act of administering the substance.</p> <p>To demonstrate application of the note.</p>
<p>Added a note: “When a condition can reasonably be assumed to be unrelated to a particular intervention or to an intervention at all...”</p> <p>Added an example following the note. An example of “myocardial infarction and congestive heart failure following ultrasound, magnetic resonance imaging and radiotherapy.”</p>	<p>To draw attention to the fact that not all conditions arising within 30 days are classified as a post-intervention condition.</p>
<p>Added a note: “When post-intervention conditions related to obstetrical cases are classified to Chapter XV—<i>Pregnancy, childbirth and the puerperium</i> (O00–O99), the directives pertaining to post-intervention conditions do not apply.”</p> <p>Added four examples:</p> <ul style="list-style-type: none"> • “Patient delivered by Cesarean section for obstructed labor...” • “Patient admitted with a diagnosis of complete spontaneous abortion...” • “Patient at 28 weeks gestation admitted...” • “Patient with postpartum hemorrhage...” 	<p>To provide direction for this situation and demonstrate the application of the note.</p>

Description of Change	Rationale
<p>Modified the steps for searching the alphabetical index for the primary code for a post-intervention condition.</p> <p>Added three examples:</p> <ul style="list-style-type: none"> • surgical sponge left in operative wound • deltoid bursitis following administration of vaccine • abdominopelvic abscess 	<p>To clarify the instructions and address the variables that may be encountered.</p> <p>To demonstrate application of the steps.</p>
<p>Reworded rationale for all examples as applicable throughout the coding standard.</p>	<p>To ensure consistency in the wording.</p>
<p>Added the note:</p> <ul style="list-style-type: none"> • “Do not classify a post-intervention condition arising in a neonate...” <p>Added an example: “A newborn with congenital diaphragmatic hernia...”</p>	<p>To provide direction for this situation and demonstrate the application of the note.</p>
<p>Added an example: “Two days following elective surgery for graft replacement of an abdominal aortic aneurysm (AAA), patient develops respiratory failure requiring ventilator support.”</p>	<p>To demonstrate postoperative respiratory failure is classified to J95.— for v2012 of ICD-10-CA.</p>
<p>Reworded the paragraph under the heading “Residual Codes”: “Always follow the alphabetical index to locate the appropriate code. Residual codes (.8 codes) in the body system chapters and the injury chapter are used to classify unique conditions that exist only as a result of an intervention. It is important that only those unique conditions found in the alphabetic index or tabular be classified to these residual codes.” to “Always follow the alphabetical index to locate the appropriate code. Residual codes (.8 codes) in the body system chapters and the injury chapter are used primarily to classify unique conditions that exist only as a result of an intervention, thus are not classifiable elsewhere. It is important that only conditions classified to these codes per the alphabetic index or tabular be assigned to these codes.”</p>	<p>To provide clarification that residual codes in the body system chapters and the injury chapter are primarily used to classify unique conditions. Some residual codes include conditions that are not unique. For example ventilator associated pneumonia (J95.88)</p>
<p>Added a note: “Since residual categories primarily capture conditions that are not classifiable elsewhere, typically an additional code is not assigned...”</p>	<p>To clarify that assignment of an additional code is not always mandatory.</p>
<p>Added an example: “Patient in ICU develops ventilator-associated pneumonia...”</p>	<p>To demonstrate that sometimes the classification provides an instruction to “use an additional code” even though the code is a residual (.8) code.</p>

Description of Change	Rationale
<p>Added the notes:</p> <ul style="list-style-type: none"> • “A mandatory additional code for specificity does not include...” • “An additional code is assigned when required and when available whether or not a “use additional code” instruction exists at the code.” <p>Added two examples:</p> <ul style="list-style-type: none"> • “Patient is readmitted for closed reduction of dislocated left total hip replacement...” • “Patient seen in the cardiology clinic is started on antibiotics for symptoms related to subacute infective endocarditis...” 	<p>To demonstrate the notes included in the section “Assignment of Additional Codes for Specificity”.</p>
<p>Added a note: “A post-intervention condition “of the same nature” pertains to the external cause code...”</p>	<p>To explain the meaning of “same nature” referred to in the directive statement for “Assignment of External Cause Code”.</p>
<p>Reworded the directive statement: “When different types of interventions are performed and it is unclear to which intervention the condition is related (attributable)....” to “When different types of interventions are performed during the same intervention episode and it is unclear to which intervention the post-intervention condition is related...”</p>	<p>To clarify the direction to select (.9) unspecified subcategory is specific to different types of interventions performed during the same intervention episode and it is unclear to which intervention the post-intervention condition is related.</p>
Complications of Devices, Implants or Grafts—Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes	
<p>Added an introductory paragraph.</p>	<p>To explain when complications of internal devices, implants or grafts are classified as post-intervention condition and when they are not.</p>
<p>Added the term “internal” to the directive statements and first paragraph.</p>	<p>To clarify that this coding standard pertains only to complications of “internal” devices only.</p>
<p>Modified the list of Mechanical Complications:</p> <ul style="list-style-type: none"> • Added “(mechanical)” to “Breakdown” • Changed “Fracture (broken prosthesis)” to “Broken (device) (e.g. fractured)” • Added “Retention (retained)*” 	<p>To clarify what is considered a mechanical complication of an internal device.</p>
<p>Added the statement: “Assign an additional code, mandatory, to identify the specific complication.” to the list of Other Complications.</p>	<p>To clarify that mandatory additional code requirement for “Other Complications” (of devices).</p>
<p>Revised 09/2012, modified notes.</p> <ul style="list-style-type: none"> • Changed from: “A medical device intended (expected) to be left in the body (e.g. IUD)...” to “An intact device that was intended (expected) to be left in the body (e.g. IUD) that is described as retained is classified as a mechanical complication. It is not classified as a foreign body.” • Deleted note: “A broken piece of a medical device that is <u>retained</u> is classified as a mechanical complication. It is not classified as a foreign body.” 	<p>Revised 09/2012, to clarify the notes about retained devices and remove information that does not fit within this standard. The term “medical” was removed as all devices in this standard are medical; it is not necessary to describe them as such.</p>

Description of Change	Rationale
<ul style="list-style-type: none"> Changed from: “A medical device not intended (expected) to be left in the body (e.g. guidewire) that is inadvertently left behind following a procedure is classified as a foreign body” to “An intact device that was <u>not</u> intended (expected) to be left in the body (e.g. guidewire) that is retained following a procedure is classified to T81.5— <i>Foreign body accidentally left in body cavity or operation wound following a procedure</i>. See the coding standard entitled <i>Misadventures During Surgical and Medical Care</i>.” 	
<p>Added a subheading to the first directive box: “Intrinsic Forces: Complications Excluding Malfunction and Breakage.”</p> <p>Added an introductory paragraph to explain intrinsic forces.</p> <p>Added a directive statement to the first directive box.</p>	<p>To clarify in what circumstances Y83-Y84 is assigned with a code from T82-T85.</p>
<p>Modified rationale in all the examples.</p>	<p>To align with the changes to the coding standard.</p>
<p>Added an example specific to removal of a retained IUD.</p>	<p>To demonstrate a device intended (expected) to be in the body that is described as retained is classified as a mechanical complication.</p>
<p>Added a subheading to the second directive box: “Intrinsic Forces: Malfunction or Breakage.”</p> <p>Added an introductory paragraph to explain intrinsic forces.</p> <p>Added directive statement.</p> <p>Added a note.</p> <p>Revised 09/2012, deleted two examples about broken guidewire.</p>	<p>To clarify in what circumstances Y70-Y82 is assigned with a code from T82-T85.</p> <p>Revised 09/2012, to remove examples that did not fit within the coding standard because the examples were not about internal devices.</p>
<p>Added a directive box with the subheading “Extrinsic Forces: Mechanical Complication.”</p> <p>Added an introductory sentence to explain extrinsic forces.</p> <p>Added a note.</p> <p>Added three examples.</p>	<p>To clarify in what circumstances T82-T85 is assigned with an external cause code from the range V01-X59 <i>Accidents</i> and demonstrate that this circumstance is not a post-intervention condition.</p>

Description of Change	Rationale
Hemorrhage, Perforation or Laceration During Intervention—Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes	
Deleted the coding standard.	To consolidate related information into the new coding standard <i>Misadventures During Surgical and Medical Care</i> .
Misadventures During Surgical and Medical Care—Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes	
New coding standard.	To address the classification of misadventures (Y60-Y69).
Revised 09/2012 , modified the directive statement and note box for “Foreign Body Accidentally Left Following a Procedure”.	Revised 09/2012 , reworded for clarification and to align with the changes in the coding standard <i>Complications of Devices, Implants and Grafts</i> .
Intravascular Foreign Bodies—Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Causes	
Deleted the coding standard.	To consolidate related information into the new coding standard <i>Misadventures During Surgical and Medical Care</i>
Admission for Follow-Up Examination—Chapter XXI—Factors Influencing Health Status and Contact with Health Services	
Added an introduction paragraph: “Follow-up is a term used to describe an episode of care for routine investigations following treatment for a disease, condition or injury. In these circumstances, the patient is exhibiting no signs or symptoms related to the previous disease, condition, or injury; the episode of care is strictly for an examination to assess post-treatment status. Periodic examinations to determine if there is recurrence of a previously treated condition are examples of follow-up.”	To clarify what is meant by follow-up. It is not follow-up when the patient has a sign/symptom that is being investigated.
Added an example: “A 72-year-old gentleman presents with increasing anemia...”	To demonstrate that it is not follow-up when the patient presents with a sign/symptom.
Coding of NACRS Visits for Rehabilitative Services—Chapter XXI—Factors Influencing Health Status and Contact with Health Services	
Added “see also” statement and hyperlink to the coding standard <i>Selection of Interventions to Code for Ambulatory Care</i> .	To reinforce that rehabilitation intervention codes must be assigned to identify the specific rehabilitative service provided.
Added intervention codes to the examples.	To reinforce that rehabilitation intervention codes must be assigned to identify the specific rehabilitative service provided.
Admission for Administration of Chemotherapy, Pharmacotherapy and Radiation Therapy—Chapter XXI—Factors Influencing Health Status and Contact with Health Services	
Deleted information regarding grouping methodology and the Flagged Intervention list.	To align with the new coding standards <i>Selection of Interventions to Code for Ambulatory Care</i> and <i>Selection of Interventions to Code for Acute Inpatient Care</i> .

Description of Change	Rationale
Admission for Blood Transfusion—Chapter XXI—Factors Influencing Health Status and Contact with Health Services	
Added the CCI code for blood transfusion to the first example and modified the rationale.	To clarify that it is mandatory to assign a CCI code for blood transfusion when it is the sole purpose of admission.
Palliative Care—Chapter XXI—Factors Influencing Health Status and Contact With Health Services	
Deleted the note: “Assign prefix ‘8’ (palliative care that is documented as a known component of the patient’s care plan prior to admission) with Z51.5 <i>Palliative care</i> . See Group 10, Field 1 in the Discharge Abstract Database (DAD) Abstracting Manual for specific instructions for applying the prefix.”	To remove reference to the Discharge Abstract Database (DAD) Abstracting Manual because the direction for assignment of prefix 8 is now included in the coding standards.
Added a directive statement: “When palliative care is documented as a known component of the patient’s care plan prior to arrival at the facility, assign prefix 8, mandatory.”	To provide direction that it is mandatory to assign prefix 8 to Z51.5 <i>Palliative care</i> when palliative care is a known component of the patient’s care plan prior to arrival at the facility.
Changed the wording from “prior to admission” to “prior to arrival”.	To clarify the intent of prior to arrival at the facility (any type of encounter) as opposed to prior to an admission.
Added a note: “Z51.5 <i>Palliative care</i> must not be assigned a diagnosis type (2) or diagnosis type (3).”	To clarify the direction that Z51.5 <i>Palliative care</i> must be a diagnosis type (M), (1), (W), (X), or (Y) only.
Added a note: “Prefix 8 is restricted for use with Z51.5 <i>Palliative care</i> .”	To clarify that prefix 8 must be used with Z51.5 <i>Palliative care</i> only.
Added a note: “Do not assign palliative care as the MRDx on an obstetrical or newborn abstract. When palliative care is documented in these cases, assign Z51.5 <i>Palliative care</i> as a diagnosis type (1).”	To clarify that Z51.5 <i>Palliative care</i> , in the circumstance of an obstetrical or a newborn case, is not the MRDx and must be a diagnosis type (1).
Modified the rationale in the examples to change the wording from “prior to admission” to “prior to arrival”.	To correspond with the change in wording for assignment of prefix 8.
Removed the code Z51.808 <i>Pain management therapy (for) other and unspecified pain</i> from the first example and deleted the sentence in the rationale that relates to this code.	To accurately reflect the changes for v2012 ICD-10-CA. Z51.808 is no longer a valid code and the use/definition of Z51.80 <i>Pain management planning</i> has changed.

Appendix D—Mandatory Attributes in CCI

(in effect 2012)

Attributes are designated as mandatory for one or more of the following reasons:

- they affect grouping
- they provide necessary detail not present within the generic structure of the CCI code
- they provide nationally relevant detail for CIHI data holdings and registries
- they provide data important for health system use

This list contains the CCI rubrics for which the Status, Location or Extent attribute has been activated as “mandatory” in Folio.

When an intervention meets the criteria of “abandoned”, “converted” or “revision”, as per the Coding Standards, those Status attribute values, when available, are mandatory to capture, even when the Status attribute is not activated as mandatory (i.e. in a pink box) in Folio.

See also coding standards entitled: [Abandoned Interventions](#), [Converted Interventions](#), and [Revised Interventions](#).

CCI Rubric	CCI Rubric Title	Status	Location	Extent
1.AX.13.^	Control of bleeding, spinal canal and meninges			✓
1.BF.59.^	Destruction, sympathetic nerves		✓	
1.CN.13.^	Control of bleeding, retina			✓
1.ET.13.^	Control of bleeding, nose			✓
1.FL.87.^	Excision partial, sublingual gland		✓	
1.FM.87.^	Excision partial, parotid gland		✓	
1.FN.87.^	Excision partial, submandibular gland		✓	
1.FR.13.^	Control of bleeding, tonsils and adenoids			✓
1.FU.13.^	Control of bleeding, thyroid gland			✓
1.FU.87.^	Excision partial, thyroid gland		✓	
1.FU.89.^	Excision total, thyroid gland		✓	
1.FV.87.^	Excision partial, parathyroid gland		✓	
1.GJ.77.^	Bypass with exteriorization, trachea	✓		
1.GM.13.^	Control of bleeding, bronchus NEC			✓
1.GT.13.^	Control of bleeding, lung NEC			✓
1.GT.85.^	Transplant, lung NEC		✓	
1.GZ.31.^	Ventilation, respiratory system NEC			✓
1.HD.53.^	Implantation of internal device, endocardium			✓
1.HZ.53.^	Implantation of internal device, heart NEC			✓
1.IJ.50.^	Dilation, coronary arteries	✓		✓

CCI Rubric	CCI Rubric Title	Status	Location	Extent
1.IJ.55.^	Removal of device, coronary arteries			✓
1.IJ.57.^	Extraction, coronary arteries			✓
1.IJ.76.^	Bypass, coronary arteries			✓
1.IM.51.^	Occlusion, pulmonary artery			✓
1.IN.51.^	Occlusion, pulmonary vein			✓
1.JE.51.^	Occlusion, carotid artery			✓
1.JJ.51.^	Occlusion, brachiocephalic arteries			✓
1.JK.51.^	Occlusion, subclavian artery			✓
1.JL.51.^	Occlusion, internal mammary artery			✓
1.JM.51.^	Occlusion, arteries of arm NEC			✓
1.JW.51.^	Occlusion, intracranial vessels			✓
1.JX.51.^	Occlusion, other vessels of head, neck and spine NEC			✓
1.JY.51.^	Occlusion, thoracic vessels NEC			✓
1.KE.51.^	Occlusion, abdominal arteries NEC			✓
1.KG.51.^	Occlusion, arteries of leg NEC			✓
1.KG.82.^	Reattachment, arteries of leg NEC			✓
1.KQ.51.^	Occlusion, abdominal veins NEC			✓
1.KT.51.^	Occlusion, vessels of the pelvis, perineum and gluteal region			✓
1.MC.87.^	Excision partial, lymph node(s), cervical		✓	
1.MC.89.^	Excision total, lymph node(s), cervical		✓	
1.MC.91.^	Excision radical, lymph node(s), cervical		✓	
1.NF.13.^	Control of bleeding, stomach			✓
1.NF.78.^	Repair by decreasing size, stomach	✓		
1.NK.87.^	Excision partial, small intestine		✓	
1.NM.87.^	Excision partial, large intestine		✓	
1.NP.13.^	Control of bleeding, small and large intestine			✓
1.NV.89.^	Excision total, appendix	✓		
1.OA.13.^	Control of bleeding, liver			✓
1.OA.87.^	Excision partial, liver		✓	
1.OB.13.^	Control of bleeding, spleen			✓
1.PB.87.^	Excision partial, adrenal gland		✓	
1.PB.89.^	Excision total, adrenal gland		✓	
1.PC.13.^	Control of bleeding, kidney			✓
1.PL.74.^	Fixation, bladder neck	✓		
1.PM.13.^	Control of bleeding, bladder			✓
1.QM.89.^	Excision total, testis		✓	

CCI Rubric	CCI Rubric Title	Status	Location	Extent
1.RB.89.^	Excision total, ovary		✓	
1.RD.89.^	Excision total, ovary with fallopian tube		✓	
1.RF.51.^	Occlusion, fallopian tube		✓	
1.RF.59.^	Destruction, fallopian tube		✓	
1.RF.89.^	Excision total, fallopian tube		✓	
1.RM.13.^	Control of bleeding, uterus and surrounding structures			✓
1.RM.87.^	Excision partial, uterus and surrounding structures			✓
1.RS.13.^	Control of bleeding, vagina			✓
1.RS.80.^	Repair, vagina	✓	✓	
1.SC.55.^	Removal of device or appliance, spinal vertebrae		✓	
1.SC.59.^	Destruction, spinal vertebrae		✓	
1.SC.74.^	Fixation, spinal vertebrae		✓	
1.SC.75.^	Fusion, spinal vertebrae		✓	
1.SC.80.^	Repair, spinal vertebrae		✓	
1.SC.87.^	Excision partial, spinal vertebrae		✓	
1.SC.89.^	Excision total, spinal vertebrae		✓	
1.SE.53.^	Implantation of internal device, intervertebral disc		✓	
1.SE.55.^	Removal of device, intervertebral disc		✓	
1.SE.59.^	Destruction, intervertebral disc		✓	
1.SE.87.^	Excision partial, intervertebral disc		✓	
1.SE.89.^	Excision total, intervertebral disc		✓	
1.SQ.53.^	Implantation of internal device, pelvis	✓	✓	
1.SY.80.^	Repair, muscles of the chest and abdomen	✓	✓	
1.TA.53.^	Implantation of internal device, shoulder joint	✓	✓	
1.TA.55.^	Removal of device, shoulder joint		✓	
1.VA.53.^	Implantation of internal device, hip joint	✓	✓	✓
1.VA.55.^	Removal of device, hip joint		✓	
1.VG.53.^	Implantation of internal device, knee joint	✓	✓	✓
1.VG.55.^	Removal of device, knee joint		✓	
1.VP.53.^	Implantation of internal device, patella	✓	✓	
1.VP.55.^	Removal of device, patella		✓	
1.WI.87.^	Excision partial, first metatarsal bone and first metatarsophalangeal joint		✓	
1.WJ.87.^	Excision partial, tarsometatarsal joints, other metatarsal bones and other metatarsophalangeal joints [forefoot]		✓	
1.WY.19.^	Transfusion, bone marrow	✓		

CCI Rubric	CCI Rubric Title	Status	Location	Extent
1.YM.59.^	Destruction, breast		✓	
1.YM.79.^	Repair by increasing size, breast	✓		
1.YM.87.^	Excision partial, breast		✓	
1.YM.88.^	Excision partial with reconstruction, breast		✓	
1.YM.89.^	Excision total, breast		✓	
1.YM.90.^	Excision total with reconstruction, breast		✓	
1.YM.91.^	Excision radical, breast		✓	
1.YM.92.^	Excision radical with reconstruction, breast		✓	
2.ZZ.02.^	Assessment (examination), total body	✓		
3.IP.10.^	Xray, heart with coronary arteries	✓	✓	
5.CA.90.^	Selective fetal reduction			✓
5.MD.60.^	Cesarean section delivery	✓		
6.AA.02.^	Assessment, mental health and addictions	✓		
6.AA.10.^	Counseling, mental health and addictions			✓
6.AA.30.^	Therapy, mental health and addictions			✓
6.DA.07.^	Facilitation, interpersonal relationships	✓	✓	
6.DA.08.^	Test, interpersonal relationships	✓		✓
6.DA.10.^	Counseling, interpersonal relationships	✓	✓	
6.DA.30.^	Therapy, interpersonal relationships	✓	✓	✓
6.LA.02.^	Assessment, communication	✓		✓
6.LA.50.^	Training, communication	✓	✓	✓
6.PA.50.^	Training, hearing			✓
6.RA.02.^	Assessment, voice	✓		✓
6.RA.50.^	Training, voice			✓
6.VA.02.^	Assessment, motor and living skills	✓	✓	✓
6.VA.07.^	Facilitation, motor and living skills	✓	✓	
6.VA.08.^	Test, motor and living skills	✓		✓
6.VA.50.^	Training, motor and living skills			✓
7.SP.10.^	Counseling, promoting health and preventing disease			✓
7.SP.59.^	Instruction, promoting health and preventing disease		✓	✓
7.SP.60.^	Education, promoting health and preventing disease		✓	✓

Appendix E—Classification Edits

The purpose of this document is to:

1. Provide a summary of all Discharge Abstract Database (DAD) edits related to a particular coding standard and/or containing an ICD-10-CA or CCI code. For a complete list of all DAD edits, refer to the *Discharge Abstract Database (DAD) Abstracting Manual, Appendix A-DAD Error Decoder*.
2. Identify when a DAD edit has a comparable National Ambulatory Care Supporting System (NACRS) edit. For a complete list of all NACRS edits, refer to the NACRS abstracting manual, *Appendix C-Error Decoder*.

Effective April 1, 2012, subject to change. For the most up to date listing refer to the DAD and NACRS abstracting manuals.

Weight Edit

DAD Submission Detailed Error File Message	DAD Error Number	Comparable NACRS Error Number	DAD Error Explanation
Low Birthweight Neonate, no P07 code	07 03 57	N/A	A low birth weight diagnosis code (P07.0 or P07.1) is missing. The birth weight recorded is < 2500 grams. Refer to the coding standard <i>Low Birth Weight and/or Preterm Infant</i> .

Diagnosis Edits

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
Type 9 Diagnosis missing, S or T Diagnosis coded	10 00 51	4410 4510	An external cause code (diagnosis type 9) is missing. Codes from S00–T98 require an additional code to identify the external cause of injury.
Place of Occurrence Diagnosis required	10 00 52	4509	An external cause of injury code from W00 to Y34 is assigned without a place of occurrence code. Use an additional code from category U98 to identify place of occurrence.

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
DXC00–D09 required with Cancer Staging	10 00 53	N/A	A neoplasm code from C00–D09 is missing or the diagnosis type assigned is (3). When a value is entered in any of the 7 cancer staging fields, a neoplasm code must be assigned and the diagnosis type must be M, 1, W, X or Y. Refer to the cancer staging section in the <i>DAD Core Abstracting Manual</i> .
Incorrect coding of E10/E11/E13/E14	10 00 54	45a-i20	Diabetes codes describing different types of diabetes are assigned. Diabetes codes must all be from the same 3 digit category. Refer to the coding standard <i>Diabetes Mellitus</i> .
Incorrect coding of K92.0–K92.2	10 00 60	W4403	Infectious enteritis (A09.0) is assigned with hemorrhage (K92.0, K92.1 or K92.2). The hemorrhage code is redundant. Classify a diagnosis of enteritis with hemorrhage to A09.0. OR Enteritis NOS (A09.9) is assigned with a code describing hemorrhage (K92.0, K92.1 or K92.2). Classify a diagnosis of infectious enteritis with hemorrhage to A09.0. OR A specific gastrointestinal disorder <i>with hemorrhage</i> code is assigned with an additional code describing hemorrhage (K92.0, K92.1, K92.2). The hemorrhage code is redundant. Assign only the combination code indicating gastrointestinal disorder with hemorrhage.
Incorrect Coding Pneumonia in Sepsis	10 00 61	W4402 W45a-i02	Pneumonia (J13, J14, J15 or J18) is assigned with septicemia/sepsis (A40/A41). This is potentially incorrect classification of pneumonia in (due to) sepsis. Pneumonia in (due to) sepsis is classified using the dagger/asterisk combination A40†/J17* or A41†/J17*.
Incorrect coding of E86.0 dehydration	10 00 62	W4404	Dehydration (E86.0) is assigned as the MRDx with an additional code suggesting an underlying cause. When the underlying cause is known, dehydration is not assigned as the MRDx. Refer to the coding standard <i>Dehydration</i> .

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
Invalid combination of obstetrical 6th digits	10 00 63	N/A	Multiple obstetrical codes are assigned with different 6th digits describing the episode of care (i.e. antepartum, intrapartum or postpartum). Only sixth digits 1 and 2 are allowable on the same abstract. Refer to the coding standard <i>Selection of the Sixth-Digit in Obstetrical Coding</i> .
T20–T25, or T29 Coded Diagnosis missing	10 00 64	N/A	A burn or corrosion code (T20–T25, T29) is assigned without a mandatory code for extent of body surface involved (T31 or T32). Assign T31 or T32 to identify extent of body surface involved.
Incorrect coding of R40.29	10 00 65	W4407 W45a-i07	Coma unspecified (R40.29) is assigned with a diabetes code (E10–E14). When coma is due to diabetes it is classified to E10.0, E11.0, E13.0 or E14.0. Refer to the coding standard <i>Diabetes Mellitus</i> .
Invalid combination diagnosis codes O75.701, O66.401 and O34.201	10 00 66	N/A	More than one code describing a previous cesarean section (O75.701, O66.401, O34.201) is assigned. These codes are mutually exclusive. Assign only one code. Refer to the flowchart in the coding standard <i>Delivery With History of Previous Cesarean Section</i> .
Incorrect coding of J44.0–J44.9	10 00 67	45a-i30	Different codes describing COPD (J44.0, J44.1, J44.8 or J44.9) are assigned. These codes are mutually exclusive. Assign only one code. Refer to the coding standard <i>Pneumonia in Patients with Chronic Obstructive Pulmonary Disease (COPD)</i> .
Incorrect coding of S02.6	10 00 68	45a-i32	Multiple and conflicting codes describing open and closed fracture of the mandible are assigned. Classify bilateral fractures to bones of which there is only one in the body to one code indicating multiple fractures (S02.671). Refer to the coding standard <i>Bilateral Injuries</i> .

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
Multiple T31 Diagnoses	10 00 69	45a-i37	More than one code describing burns according to the extent of body surface involved (T31) is assigned. Only one code is required from category T31. First identify the proportion of burn that is third degree and then select the percentage of total body surface involved in burn (any degree) to arrive at the correct code.
Multiple T32 Diagnoses	10 00 70	45a-i38	More than one code describing corrosions according to extent of body surface involved (T32) is assigned. Only one code is required from category T32. First identify the proportion of corrosion that is third degree and then select the percentage of total body surface involved in corrosion (any degree) to arrive at the correct code.
Incorrect coding of I50 and J81	10 00 71	4435 45a-i35	Pulmonary edema (J81) is assigned with heart failure (I50). Classify pulmonary edema with mention of heart disease or heart failure NOS to I50 per the excludes note at J81.
Incorrect coding of E15	10 00 73	4436 45a-i36	A code describing non-diabetic hypoglycemic coma (E15) is assigned with a code for diabetes mellitus. If the diagnosis is hypoglycemic coma in (due to) diabetes mellitus, classify to E10–E14 at subcategories E1-.0 and E1-.63. Refer to the instructional notes at these subcategories.
I21 I22 or I24.0 but no R94.3– coded	10 00 78	N/A	A code within the spectrum of acute coronary syndrome (I21.–, I22.– or I24.0) is assigned without a mandatory code from R94.3–, to indicate the ECG and/or biomarker findings. Refer to the coding standard <i>Acute Coronary Syndrome (ACS)</i> .
Incorrect coding of P70.0/P70.1/P70.4	10 00 79	N/A	More than one code describing neonatal hypoglycemia (P70.0, P70.1, or P70.4) is assigned. These codes are mutually exclusive. Assign only one code.
R94.30/R94.31, NO I21, I22 OR I24.0 Coded	10 00 80	N/A	R94.30 or R94.31 is assigned without a code from I21, I22 or I24.0. R94.30 and R94.31 are intended to identify STEMI and NSTEMI. Do not use these codes unless a code from I21, I22 or I24.0 is assigned.

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
Invalid Data New 2012	10 01 05	N/A	Prefix 8 is assigned to a code other than Z51.5. Use of Prefix 8 is restricted to Z51.5 <i>Palliative care</i> and is assigned only when palliative care is documented as a known component of the care plan prior to arrival at the facility.
Invalid Data New 2012	10 01 05	N/A	Prefix 5 or 6 is recorded with an obstetrical code as a diagnosis type 2. Prefix 5 or 6 are not applicable with obstetrical codes because their 6th digits sufficiently distinguish the post-admit comorbidity as having occurred before or after the delivery.
Not Valid for this Hospital New 2012	10 01 08	N/A	Prefix 5 or 6 is recorded on DAD day surgery case. Prefix 5 or 6 is valid only for acute inpatient abstracts.
DX Prefix and Type Incompat New 2012	10 01 53	N/A	Prefix 5 or 6 is assigned with diagnosis type M, 1, 3, 6, 9, 0, W, X, Y. Prefix 5 or 6 is valid only with diagnosis type (2) and when there is a qualifying intervention episode. Qualifying interventions are: Intervention Location Codes 01 (Main OR), 08 (Cardiac Cath Room) or the OOH Indicator is "Y" and the OOH intervention codes are: 3.IP.10.^, 1.IJ.50.^, or 1.IJ.57.^.
DX Prefix 5/6 Required W Inter New 2012	10 01 54	N/A	Prefix 5 or 6 is missing. Prefix 5 or 6 is mandatory to assign with diagnosis type 2 when there is a qualifying intervention episode. Qualifying intervention episodes are: Intervention Location Codes 01 (Main OR), 08 (Cardiac Cath Room) or the OOH Indicator is "Y" and the OOH intervention codes are: 3.IP.10.^, 1.IJ.50.^, or 1.IJ.57.^.
DX Prefix 5/6 Invalid, No Interv New 2012	10 01 55	N/A	Prefix 5 or 6 is assigned without a qualifying intervention episode on the abstract. Prefix 5 or 6 are not valid when there is no qualifying intervention episode recorded. Qualifying intervention episodes are: [Intervention Location Codes 01 (Main OR), 08 (Cardiac Cath Room) or the OOH Indicator is Y and the OOH intervention codes are: 3.IP.10.^, 1.IJ.50.^, or 1.IJ.57.^.
Invalid ICD-10-CA Code	10 02 07	4402	The entry recorded in the diagnosis field is not a valid ICD-10-CA code.

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
Diagnosis not valid as primary diagnosis	10 02 51	N/A	An external cause of injury code or morphology code is assigned with an incorrect diagnosis type. Only diagnosis type (9) is valid with an external cause of injury code and only diagnosis type (4) is valid with a morphology code.
Diagnosis not consistent with Gender	10 02 52	4405 4445 4446 4447 45a-i05 45a-i07 45a-i08 45a-i-09	A diagnosis code is assigned that is valid only with gender female (F). Or A diagnosis code is assigned that is valid only with gender male (M). Or A diagnosis code is assigned that is valid only with gender female (F) or other (O). Or A diagnosis code is assigned that is valid only with gender male (M) or other (O).
Diagnosis not consistent with Age (on admission)	10 02 53	4406 45a-i06	A diagnosis code is assigned that is invalid for the patient's age. Or The MRDx (Z38.1-, Z38.4-, or Z38.7-) indicates the baby was born outside the hospital. The admit category must be newborn (N) or the age must be less than or equal to 1 day.
Diagnosis for Newborn but admit category not N	10 02 54	N/A	A diagnosis code is assigned that is valid only with admit category newborn (N).
Diagnosis not valid as Type 6	10 02 55	N/A	A diagnosis code that is not an asterisk code is assigned diagnosis type (6). Only asterisk codes are valid as diagnosis type (6) or (3).
Diagnosis not valid as Type 9	10 02 56	N/A	Diagnosis type (9) is restricted to external cause of injury, place of occurrence and activity codes (U98–Y98). Refer to the coding standards <i>External Cause Codes</i> ; <i>Place of Occurrence</i> ; and <i>Type of Activity</i> .
Incorrect coding of Z37.0–Z37.91	10 02 57	N/A	The MRDx Z37.0- is assigned with another code from the Obstetrical chapter. When any other code from Chapter XV <i>Pregnancy, Childbirth and the Puerperium</i> applies to the case, Z37.0- is assigned diagnosis type (3). Refer to the coding standard <i>Delivery in a Completely Normal Case</i> .

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
Incorrect coding of Z38	10 02 59	N/A	An incorrect diagnosis type is assigned with Z38.-. When the MRDx is a code from the range P00 to P96, Z38.- must be assigned diagnosis type (0). Refer to the coding standard <i>Diagnosis Typing Definitions for DAD—Diagnosis Type (0)—Newborn</i> . Or An incorrect diagnosis type is assigned. When the MRDx is Z38.-, any additional insignificant conditions must be assigned diagnosis type (0). If the conditions meet the requirements for comorbidity, then Z38.- must be assigned diagnosis type (0). Refer to the coding standard <i>Diagnosis Typing Definitions for DAD—Diagnosis Type (0)—Newborn</i> .
Death with only Abortion/Obs Diagnosis coded	10 02 60	N/A	A therapeutic abortion or obstetrical case was recorded with a discharge disposition of died (07) and the second diagnosis code occurrence is blank. There must be more than one diagnosis code recorded.
Incorrect coding of S02	10 02 61	4429	A most responsible diagnosis of a skull fracture (S02.-) is assigned with a diagnosis for intracranial injury (S06.-). The diagnosis for intracranial injury must be the MRDx. Refer to the coding standard <i>Skull Fracture and Intracranial Injury</i> .
SB Diagnosis but entry code not SB	10 02 62	N/A	A diagnosis code indicating stillbirth (P95) is assigned without an entry code (S).
Death Diagnosis but death not coded	10 02 63	4414 45a-i14	A diagnosis code indicating death or mortality (I46.1, R95, R96.-, R98, or R99) is assigned without a discharge disposition of died (07).
Admit Diagnosis same as Most Responsible Diagnosis	10 02 64	N/A	Diagnosis type (5), admitting diagnosis, is the same as the MRDx. Use Diagnosis Type (5) only when the admitting diagnosis differs from the MRDx.
Invalid coding as Most Responsible Diagnosis	10 02 67	4412	A diagnosis code is assigned that is not valid as MRDx.

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
Entry Code N but Diagnosis Born Out of Facility	10 02 70	N/A	The entry code (N) (infant born alive within the reporting facility) is recorded with a code identifying an infant born outside the hospital (Z38.1-, Z38.4-, or Z38.7-). Entry code (N) is restricted to infants born alive within the reporting facility. Record entry code (D) or (E) when an infant is born outside a reporting facility.
Secondary Neoplasm coded, no primary	10 02 74	N/A	A code for a secondary malignant neoplasm is assigned without an additional code indicating the primary site (current or history of). A code identifying the primary site (current or history of) must be assigned with a code identifying a secondary site. Refer to the coding standard <i>Primary and Secondary Neoplasms</i> .
No manifestation for HIV disease recorded	10 02 79	4416	HIV disease (B24) is assigned as the MRDx without an additional code to identify the manifestation of HIV disease. Refer to the coding standard <i>Human Immunodeficiency Virus (HIV) Disease</i> .
Diagnosis must be Type 3	10 02 81	N/A	The code assigned is valid only as a diagnosis type (3) or (0).
Diagnosis must be Type 0 or 3 or 6	10 02 82	N/A	Asterisk codes are valid only as diagnosis type (0), (3) or (6).
Diagnosis not valid as Type 4	10 02 84	N/A	Diagnosis type (4) is restricted to morphology codes.
Diagnosis and Cadaveric Donor incompatible	10 02 85	N/A	The MRDx assigned is not consistent with the admit category (R) (cadaveric donor). Assign a code from category Z52 as the MRDx when the admit category is (R). Refer to the <i>Discharge Abstract Database Core Abstracting Manual, Group 04, Field 05</i> .
OBS Delivered— needs a Type 3, Z37 Diagnosis Code	10 02 86	4516 45a-i16	An obstetrical diagnosis code indicating a delivery (6th digit of 1 or 2) is assigned. It is mandatory to assign an 'outcome of delivery' code from category Z37 as a diagnosis type (3) in all obstetrical delivery cases. Refer to the coding standard <i>Delivery in a Completely Normal Case</i> .
Missing—Live Born Infants according to Place of Birth Code	10 02 87	N/A	The admit category is recorded as (N) without a code from category Z38. It is mandatory to assign a diagnosis code from category Z38 for all newborns.

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
B24 coded with infect. disease MRDx	10 02 88	4416	A manifestation of HIV is assigned the MRDx. HIV disease (B24) must be the MRDx. Refer to the coding standard <i>Human Immunodeficiency Virus (HIV) Disease</i> .
R75/Z21 coded with B24	10 02 89	4418 45a-i18	Lab evidence of HIV (R75) and/or HIV status (Z21) is assigned with HIV Disease (B24). These categories are mutually exclusive. Assign only one code. Refer to the coding standard <i>Human Immunodeficiency Virus (HIV) Disease</i> .
R73.0 and R73.9 coded with E10–E14	10 02 90	4419 45a-i19	An abnormal glucose tolerance test (R73.0) or hyperglycaemia unspecified (R73.9) must not appear on the same abstract with diabetes (E10–E14). Refer to the excludes note at R73.0 and/or R73.9.
Diabetes no complication with other complications	10 02 91	W4405 W45a-i05	A diabetes code indicating no complication (E10.9, E11.9, E13.9 or E14.9) is assigned with another diabetes code indicating a complication. This code combination is contradictory. Exceptions are: transfer diagnosis (W, X or Y) or hypoglycaemia (E10.63, E11.63, E13.63, E14.63), or lactic acidosis (E10.11, E11.11, E13.11, E14.11).
TIA invalid with stroke	10 02 92	W508 W45a-i08	A code indicating stroke (I60–I64) is assigned with TIA (G45.9). These codes are not expected to be assigned together except when they occur as separate events.
Both Acute and Chronic conditions	10 02 93	4417 4420 4421 4422	Acute laryngitis (J04.0) is assigned with chronic laryngitis (J37.0). The chronic condition must be assigned a diagnosis type (3). Refer to the coding standard <i>Acute and Chronic Conditions</i> . Or Acute tracheitis (J04.1) is assigned with unspecified chronic bronchitis/tracheitis (J42). The chronic condition must be assigned a diagnosis type (3). Refer to the coding standard <i>Acute and Chronic Conditions</i> .

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
			Or Acute laryngotracheitis (J04.2) is assigned with chronic laryngotracheitis (J37.1). The chronic condition must be assigned a diagnosis type (3). Refer to the coding standard <i>Acute and Chronic Conditions</i> . Or Acute cholecystitis (K81.0) is assigned with chronic cholecystitis (K81.1). The chronic condition must be assigned a diagnosis type (3). Refer to coding standard <i>Acute and Chronic Conditions</i> .
Other diseases with COPD	10 02 94	4442 45a-i42	COPD (J44.0–J44.9) is assigned with chronic bronchitis (J41 or J42), emphysema (J43), or asthma (J45). These conditions (J41, J42, J43, and J45) are included in category J44; therefore, assign only one code from category J44.
Other Respiratory Problems with Adult Respiratory Disease	10 02 95	45a-i25	Adult respiratory distress syndrome (J80) is assigned with respiratory failure (J96). J80 and J96 are mutually exclusive. Assign only one code. Refer to the excludes note at J96.
Most Responsible Diagnosis and Intervention mismatch	10 02 97	4433	Arthrosis of the <i>hip</i> (M16) is assigned with an intervention describing a <i>knee</i> replacement (1.VG.53.^). Confirm the anatomical site involved in the surgery.
Most Responsible Diagnosis and Intervention mismatch	10 02 97	4434	Arthrosis of the <i>knee</i> (M17) is assigned with an intervention describing a <i>hip</i> replacement (1.VA.53.^). Confirm the anatomical site involved in the surgery.
Most Responsible Diagnosis is O00 to O08 with 6th digit 9 missing	10 02 98	W45a-i04	A code indicating an abortive pregnancy (O00–O08) is assigned with another obstetrical condition with a 6th digit of 1, 2, 3 or 4. When the outcome of the pregnancy is abortive select the 6th digit “9”— <i>Unspecified as to episode of care, or not applicable</i> for all obstetrical codes. Refer to the coding standard <i>Selection of the Sixth-Digit in Obstetrical Coding</i> .
J44 Coded With J60–J68/J70	10 02 99	4443 45a-i43	A code indicating lung disease due to an external agent (J60–J68 or J70) is assigned with a code indicating COPD (J44). Category J44 excludes lung diseases due to external agents (J60–J68 or J70). Therefore assign only one code from J60–J68 or J70.

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
Invalid Data	10 03 05	12701 127a-i01 And 127a-i02	The diagnosis cluster recorded was not in capital letters A–Y.
Diagnosis Cluster Coded But No Diagnosis Code	10 03 53	N/A	The diagnosis cluster was recorded when there was no corresponding diagnosis code.
Diagnosis Cluster Mandatory New 2012	10 03 52	127a-i03	A code from the range U82–U84 or Y40–Y84 is assigned without a mandatory diagnosis cluster value. A valid diagnosis cluster value (uppercase alpha character A–Y) must be assigned. Refer to the coding standard <i>Diagnosis Cluster</i> .
Diagnosis Cluster With No Additional Diag New 2012	10 03 54	12704 127a-i04	A code from the range U82–U84 or Y40–Y84 with its diagnosis cluster value is assigned without one or more additional codes on the abstract with the identical value in the diagnosis cluster field. The same diagnosis cluster value as the one recorded with U82–U84 or Y40–Y84 must be assigned to one or more codes to identify the related infection or condition. Refer to the coding standard <i>Diagnosis Cluster</i> .
Invalid Use of Diagnosis Cluster New 2012	10 03 55	12707 127a-i07	A diagnosis cluster value is assigned to an ICD-10-CA code (excluding Y40–Y84 and U82–U84) and there is no code from U82–U84 or Y40–Y84 with the same diagnosis cluster value. Application of a diagnosis cluster is used only for adverse effects in therapeutic use (Y40–Y59), post-intervention conditions (Y60–Y84) and infections from drug-resistant microorganisms (U82–U84). Application of a diagnosis cluster in any other circumstance is not permitted. Refer to the coding standard <i>Diagnosis Cluster</i> .
Diagnosis invalid as a Type 2	10 04 51	N/A	A neoplasm code from C00–D09 is assigned a diagnosis type (2). Neoplasms do not meet the criteria of post-admit comorbidity. Or HIV (B24) is assigned a diagnosis type (2). HIV does not meet the criteria of a post-admit comorbidity. Or A code describing hypertension (I10–I13) is assigned a diagnosis type (2). A diagnosis or exacerbation of hypertension

DAD Submission Detailed Error File Message	Error Number	Comparable NACRS Error Number	DAD Error Explanation
			<p>following admission does not meet the criteria of post-admit comorbidity.</p> <p>Or</p> <p>Chronic bronchitis (J41 and J42), emphysema (J43), COPD (J44) or asthma (J45) is assigned a diagnosis type (2). A diagnosis or exacerbation of these conditions following admission does not meet the criteria of post-admit comorbidity.</p> <p>Or</p> <p>Diabetes code from E10, E11 or E14 at the 3 digit level is assigned a diagnosis type (2). Codes from the range E10–E11 or E14 must never be assigned a diagnosis type (2) with the exception of E10.63, E11.63, E14.63, E10.11, E11.11 and E14.11.</p> <p>Or</p> <p>A code from Z75 is assigned a diagnosis type (2). These codes are not medical conditions and do not meet the criteria of post-admit comorbidity.</p>
Diagnosis questionable as a Type 3	10 04 52	N/A	A code from T31 or T32 is assigned a diagnosis type (3). Ensure that the diagnosis type for T31 or T32 matches the diagnosis type of the code for the burn/corrosion code. Refer to coding standard <i>Extent of Body Surface Area Involved in Burn Injury</i> .
Diagnosis Type coded but no Diagnosis Code	10 04 53	N/A	A diagnosis type is recorded without a diagnosis code.
Incorrect typing of Z37.0–Z37.7 or Z37.9	10 04 61	N/A	Diagnosis type (1) or (2) is assigned with a code from category Z37. A code from this category is valid only as diagnosis type (M) or (3).

Intervention Edits

DAD Error Message	DAD Error Number	Comparable NACRS Error Number	DAD Error Explanation
OBS Delivered, missing Delivery Intervention	11 00 53	4708	A code indicating a delivery (Z37 or an O code with 6th digit of 1 or 2) is assigned without a corresponding delivery intervention in the range 5.MD.50.^ to 5.MD.60.^ . Assign the appropriate intervention code to indicate the type of delivery. Refer to the coding standard <i>Interventions Associated with Delivery</i> .
Intervention inconsistent with Gender	11 02 51	4605 4612 4613 4614 45a-i-05 45a-i07 45a-i08 45a-i09	An intervention code is assigned that is valid only with gender female (F). Or An intervention code is assigned that is valid only with gender male (M). Or An intervention code is assigned that is valid only with gender female (F) or other (O). Or An intervention code is assigned that is valid only with gender male (M) or other (O).
Intervention not consistent with Age (on admission)	11 02 52	4606 47a-i06	An intervention code is assigned that is invalid for the patient's age.
Intervention invalid for non Day Surgery	11 02 57	N/A	"CANCELLED" cannot be entered on an inpatient abstract. It is valid ONLY for day surgery abstracts. Refer to the coding standard <i>Cancelled Interventions</i> .
Incorrect coding of 1.SC.74, 1.SC.75.^ and 1.SC.80.^ Modified 2012	11 02 58	W47a-i01	More than one intervention on the spinal vertebrae is assigned. There is a hierarchy for procedures performed on the spinal vertebrae. Assign only one code from either 1.SC.74.^ (fixation), or 1.SC.75.^ (fusion), or 1.SC.80.^ (repair), or 1.SC.89.^ (vertebrectomy), or 1.SE.89.^ (disectomy) An exception; when the intervention performed is on different regions of the spine (e.g. fusion of cervical vertebrae and fixation lumbar vertebrae).
Location Attribute error for 1.SY.80.^	11 02 59	4907	A hernia diagnosis (K40–K43, K45 or K46) is assigned with 1.SY.80.^ and the mandatory location attribute is '0' (not applicable). The mandatory location attribute must identify the site of the hernia repair. Refer to the coding standard <i>Selection of Attributes at Hernia Repair</i> .

DAD Error Message	DAD Error Number	Comparable NACRS Error Number	DAD Error Explanation
Delivery Intervention with a Post Partum Diagnosis	11 02 60	4610	A diagnosis code indicating a postpartum episode of care (Z39 or an O code with a 6 th digit of 4) is assigned with an intervention code indicating a delivery (5.MD.50.^ to 5.MD.60.^). The diagnosis codes and the intervention codes must match the obstetrical experience. Refer to the coding standard <i>Selection of 6th Digit in Obstetrical Coding</i> .
Non Obstetrical Intervention with MRDx O00	11 02 64	W4602	A diagnosis for an ectopic pregnancy is assigned with a non obstetric intervention. If the encounter was for removal of ectopic pregnancy, it is classified to 5.CA.93.^ per excludes notes.
Induc. Labour with term of preg	11 02 65	4611 47a-i11	A therapeutic abortion code (5.CA.88.^) or (5.CA.89.^) is assigned with an induction of labor code (5.AC.30.^). Induction of labor excludes that performed for termination of pregnancy. If the intent is to terminate the pregnancy, classify all methods used to 5.CA.^.^ Termination of Pregnancy.
Vaginal Delivery with O34.201Dx	11 02 67	4448 4449 45a-i44 45a-i45	Uterine scar due to previous c-section (O34.201) is assigned with an intervention code indicating a vaginal delivery. Vaginal birth after cesarean section is classified to O75.701. Refer to the coding standard <i>Delivery With History of Previous Cesarean Section</i> .
Invalid CCI/Status A Attribute, Principal Intervention	11 03 51	4808	A status attribute of 'abandoned' (A) is assigned with the principal intervention. Abandoned interventions can only be recorded following a code classifying an incision, biopsy, inspection or anesthetization. Refer to the coding standard <i>Abandoned Interventions</i> .
Invalid CCI/ Location Combination	11 04 33	4902 49a-i02	The intervention location attribute is not valid with the intervention code assigned or the attribute is missing.
Invalid CCI/ Extent Combination	11 05 34	5002	The intervention extent attribute is not valid with the intervention code assigned or the attribute is missing.

Appendix F1—References to Mandatory Diagnosis Type 3/Other Problem in Directive Statements

This Appendix is intended to be a quick reference that summarizes all directive statements giving instruction to assign a code as diagnosis type (3)/other problem, mandatory.

Important: This Appendix is not a list of mandatory capture of chronic diseases. This list represents ICD-10-CA codes that are mandatory to provide additional detail that in themselves do not represent a comorbidity.

Note: Diabetes mellitus is the only chronic condition that is always mandatory to capture, when documented, regardless of whether or not it meets the criteria for significance. The “use additional code” instruction in the classification, when associated with certain conditions, requires the mandatory capture of a chronic condition even when the chronic condition does not meet the criteria for comorbidity.

Standard	Directive Statement	Rationale
General Coding Standards for ICD-10-CA		
Dagger Asterisk Convention	Assign diagnosis type (6) or diagnosis type (3) to asterisk codes in accordance with the diagnosis typing definitions.	As this is an ICD convention, both codes are required. Asterisk codes contain information about both an underlying generalized disease and a manifestation in a particular organ or site which is a clinical problem in its own right.
Cancelled Interventions	When an intervention is cancelled due to a contraindication and the patient is treated for the contraindication: <ul style="list-style-type: none"> assign the contraindication as the MRDx/main problem and Z53.0 <i>Procedure not carried out because of contradiction</i> as a diagnosis type (3)/other problem, mandatory. 	It identifies another circumstance for the patient that is important from a national planning and research perspective.

Standard	Directive Statement	Rationale
Chapter I—Certain Infectious and Parasitic Diseases		
Drug-Resistant Microorganisms	<p>When there is documentation of a current infection due to a drug-resistant organism, assign, mandatory, the appropriate code combination to identify the:</p> <ul style="list-style-type: none"> • site of the infection, as a comorbid diagnosis type/main problem or other problem • infectious organism, from categories B95–B98 <i>Bacterial, viral and other infectious agents</i>, as a diagnosis type (3)/other problem, when it is not included in a combination code • drug-resistance, as a comorbid diagnosis type (1) or type (2)/other problem, from category: <ul style="list-style-type: none"> – U82 Resistance to betalactam antibiotics; or – U83 Resistance to other antibiotics; or – U84 Resistance to other antimicrobial drugs 	The code for the infectious organism (B95–B98) is supplemental information that is required to identify the organism resistant to the drug.
Drug-Resistant Microorganisms	Assign Z22.30– <i>Carrier of drug-resistant microorganism</i> , mandatory, as a diagnosis type (3)/other problem to identify carriers of drug resistant microorganisms (i.e. patients who do not have a documented current infection).	It identifies another circumstance for the patient that is important from a national planning and research perspective.
Septicemia/Sepsis	<p>When septicemia/sepsis is classified to one of the following:</p> <p>O03–O05 <i>Pregnancy with abortive outcome (with a fifth digit .0 or .5)</i></p> <p>O07.3 <i>Failed attempted abortion, complicated</i></p> <p>O08.0– <i>Genital tract and pelvic infection following abortion and ectopic and molar pregnancy</i></p> <p>O75.3– <i>Other infection during labor</i></p> <p>O85.– <i>Puerperal sepsis</i></p> <p>O98.– <i>Maternal infectious and parasitic diseases complicating pregnancy, childbirth and the puerperium (with a fourth digit of .2, .5 or .8)</i></p>	It identifies another condition in the patient that is important from a national planning and research perspective.

Standard	Directive Statement	Rationale
	<p>T80.2 <i>Infections following infusion, transfusions and therapeutic injection</i></p> <p>T81.4 <i>Infection following a procedure, not elsewhere classified</i></p> <p>T88.0 <i>Infection following immunization</i></p> <p>T82–T85 <i>Infections and inflammatory reaction due to prosthetic devices, implants and grafts</i></p> <ul style="list-style-type: none"> • assign the appropriate code from the list above as a significant diagnosis type/main or other problem; and • assign an additional code, mandatory, to identify the type of sepsis, as a diagnosis type (3)/other problem. 	
Human Immunodeficiency Virus (HIV) Disease	When patients are admitted and discharged on the same day for primary prophylactic chemotherapy for HIV infection, select Z29.2 <i>Other prophylactic chemotherapy</i> as the MRDx/main problem with Z21 <i>Asymptomatic human immunodeficiency virus [HIV] infection status</i> as an additional diagnosis type (3)/other problem.	It identifies another condition in the patient that is important from a national planning and research perspective.
Chapter II—Neoplasms		
Primary and Secondary Neoplasms	When a patient is diagnosed with a secondary neoplasm, assign an additional code, mandatory, to identify the primary site; either a code from Chapter II— <i>Neoplasms</i> or Z85 <i>Personal history of malignant neoplasm</i> .	It identifies another condition in the patient that is important from a national planning and research perspective.
Complications of Malignant Disease	<p>When a patient is admitted for treatment of a specific complication of the malignancy, without treatment directed towards the malignancy itself, assign the code for the complication as the MRDx/main problem.</p> <ul style="list-style-type: none"> • Assign the code for the malignancy, as a diagnosis type (3)/other problem. 	It identifies another condition in the patient that is important from a national planning and research perspective.

Standard	Directive Statement	Rationale
Complications of Malignant Disease	When a patient is admitted for management of a side effect of cancer treatment, assign a code for the side effect as the MRDx/main problem. <ul style="list-style-type: none"> Assign the code for the malignancy as a diagnosis type (3)/other problem. 	It identifies another condition in the patient that is important from a national planning and research perspective.
Recurrent Malignancies	Assign a code from categories C00–C75 when a primary malignancy, eradicated from the same organ or tissue, has recurred. <ul style="list-style-type: none"> Assign an additional code, mandatory, from category Z85 <i>Personal history of malignant neoplasm</i> as a diagnosis type (3)/other problem to identify the primary site. 	It identifies another condition in the patient that is important from a national planning and research perspective.
Chapter IX—Diseases of Circulatory System		
Acute Coronary Syndrome	When any code from category I21 <i>Acute myocardial infarction</i> , I22 <i>Subsequent myocardial infarction</i> or code I24.0 <i>Coronary thrombosis not resulting in myocardial infarction</i> is assigned, assign an additional code from subcategory R94.3— <i>Abnormal results of cardiovascular function studies</i> , mandatory, as diagnosis type (3)/other problem.	This is supplemental information that is important from a national planning and research perspective.
Acute Coronary Syndrome	When a code from category I22 <i>Subsequent myocardial infarction</i> is assigned, assign an additional code from subcategory R94.3- <i>Abnormal results of cardiovascular function studies</i> , mandatory, as a diagnosis type (3)/other problem.	This is supplemental information that is important from a national planning and research perspective.
Chapter XIII—Diseases of the Musculoskeletal System and Connective Tissue		
Fractures— Pathological Fractures	When a combination category is not available or when a dagger/asterisk convention is not applicable, assign separate codes for the pathological fracture and the underlying disease that precipitated the fracture. <ul style="list-style-type: none"> Sequence the code for the pathological fracture first followed by the code for the underlying disease as a mandatory diagnosis type (3)/other problem. 	It identifies another condition in the patient that is important from a national planning and research perspective.

Standard	Directive Statement	Rationale
Chapter XIV—Diseases of the Genitourinary System		
Continuous Ambulatory Peritoneal Dialysis (CAPD) Peritonitis	Assign an additional code from category K65 <i>Peritonitis</i> , mandatory, as a diagnosis type (3)/other problem, to specify the infection.	This identifies another condition in the patient that is important from a national planning and research perspective.
Chapter XV—Pregnancy, Childbirth and the Puerperium		
Pregnancy With Abortive Outcome	When a medical abortion is performed at or after 20 weeks gestation resulting in a stillborn, assign P96.4 <i>Termination of pregnancy, affecting fetus and newborn</i> as the MRDx/main problem on the stillborn abstract. <ul style="list-style-type: none"> When applicable, assign an additional code(s), mandatory, as a diagnosis type (3)/other problem to describe any associated congenital anomaly. 	It identifies another condition in the patient that is important from a national planning and research perspective.
Pregnancy With Abortive Outcome	When a medical abortion performed at or after 20 weeks gestation results in a liveborn, assign: On the mother's abstract, a code from: <ul style="list-style-type: none"> category O04 <i>Medical abortion</i>, as the MRDx/main problem; and category Z37 <i>Outcome of delivery</i>, as a diagnosis type (3)/other problem, to indicate that the abortion resulted in a liveborn. 	This is supplemental information that is important from a national planning and research perspective.
Delivery in a Completely Normal Case	Assign a code from category Z37 <i>Outcome of delivery</i> , mandatory, for all deliveries. <ul style="list-style-type: none"> When any other code from Chapter XV <i>Pregnancy, Childbirth and the Puerperium</i> applies to the case, assign the appropriate code from category Z37, mandatory, as a diagnosis type (3). 	This is supplemental information that is important from a national planning and research perspective.
Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Cause		
Post-Intervention Conditions	When a post-intervention condition is classified to a code that does not fully describe the condition, assign an additional code (when available), mandatory, as a diagnosis type (3)/other problem, to provide more detail regarding the nature of the condition.	This is supplemental information that is important from a national planning and research perspective

Standard	Directive Statement	Rationale
Chapter XXI—Factors Influencing Health Status and Contact With Health Services		
Pre-treatment Assessment	<p>When a significant condition diagnosed during the pre-treatment assessment requires further treatment or investigation, assign a code for the significant condition as the MRDx/main problem.</p> <ul style="list-style-type: none"> Assign Z01.8 <i>Other specified special examination, mandatory</i>, as a diagnosis type (3)/other problem. 	This is supplemental information that is important from a national planning and research perspective.
Admission for Follow-Up Examination	<p>When the examination reveals that the original condition has recurred or another related condition has been identified assign:</p> <ul style="list-style-type: none"> a code for the condition as the MRDx/main problem; and an additional code from Z08 or Z09, <i>mandatory</i>, as a diagnosis type (3)/other problem 	This is supplemental information that is important from a national planning and research perspective.
Admission for Convalescence	<p>When a patient is transferred from one hospital to another or admitted from day surgery to inpatient <u>solely</u> for the purposes of receiving care in the recovery phase following treatment of an illness or injury or following a surgical intervention, assign a code from category Z54 <i>Convalescence</i> as the MRDx.</p> <ul style="list-style-type: none"> Assign an additional code, <i>mandatory</i>, as a diagnosis type (3) to indicate the condition for which convalescence is required. 	This is supplemental information that is important from a national planning and research perspective.
Screening for Specific Diseases	<p>When the condition, or a sign of the condition for which the patient is screened is found assign a code:</p> <ul style="list-style-type: none"> for the condition or sign as the MRDx/main problem; and from Z11, Z12 or Z13, <i>mandatory</i>, as a diagnosis type (3)/other problem. 	This is supplemental information that is important from a national planning and research perspective.

Standard	Directive Statement	Rationale
Admission for Administration of Chemotherapy/ Pharmacotherapy and Radiation Therapy	<p>When a patient previously diagnosed with a malignancy has an encounter for care solely for the administration of radiation therapy, assign Z51.0 <i>Radiotherapy session</i> as the MRDx/main problem.</p> <p>When a patient previously diagnosed with a malignancy has an encounter for care solely for the administration of chemotherapy to treat the malignancy, assign Z51.1 <i>Chemotherapy session for neoplasm</i> as the MRDx/main problem.</p> <p>Assign an additional code to identify the malignant condition, <u>mandatory</u>, as a diagnosis type (3)/other problem for radiation therapy visits and chemotherapy visits.</p>	It identifies another condition in the patient that is important from a national planning and research perspective.
Admission for Administration of Chemotherapy/ Pharmacotherapy and Radiation Therapy	<p>When the patient has an encounter solely for administration of chemotherapy (pharmacotherapy) to treat conditions other than malignant neoplasms, assign Z51.2 <i>Other chemotherapy</i> as the MRDx/main problem.</p> <ul style="list-style-type: none"> Assign an additional code to identify the disease/condition, <u>mandatory</u>, as a diagnosis type (3)/other problem. 	It identifies another condition in the patient that is important from a national planning and research perspective.
Admission for Insertion of a Vascular Access Device (VAD)	<p>When a patient is admitted solely for insertion of a vascular access device (VAD) for treatment of an existing condition, assign Z51.4 <i>Preparatory care for subsequent treatment, not elsewhere classified</i> as the MRDx/main problem.</p> <p>Assign an additional code to identify the disease/condition, <u>mandatory</u>, as a diagnosis type (3)/other problem.</p>	It identifies another condition in the patient that is important from a national planning and research perspective.

Appendix F2—References to Optional Diagnosis Type 3/Other Problem in Directive Statements

The purpose of this Appendix is to provide a summary of all directive statements giving instruction to assign a code as diagnosis type (3)/other problem as optional or not specified as mandatory.

Important: This Appendix is not a list of optional capture of chronic diseases. This list represents ICD-10-CA codes that are optional to provide detail that in themselves do not represent a comorbidity.

Standard	Directive Statement	Rationale
General Coding Standards for ICD-10-CA		
Acute and Chronic Conditions	When a condition is described as being both acute (or subacute) and chronic, and ICD-10-CA provides separate categories or subcategories for each, but not for the combination, assign a code for the acute condition. <ul style="list-style-type: none"> Assign a code for the chronic condition, optional, as a diagnosis type (3)/other problem. 	This is supplemental information that is useful for local data retrieval.
Underlying Symptoms or Conditions	When a patient presents with a symptom or condition, and during that episode of care the underlying disease or disorder is identified, assign the underlying disease or disorder as the MRDx/main problem. <ul style="list-style-type: none"> Assign an additional code for the symptom or condition, optional, as a diagnosis type (3)/other problem based on the facility's data needs. 	This is supplemental information that is useful for local data retrieval.
Underlying Symptoms or Conditions	When a patient presents with a manifestation of an underlying disease or disorder that is known at the time of admission, and management is directed solely to the manifestation, assign the manifestation as the MRDx/main problem. <ul style="list-style-type: none"> Assign a code for the underlying disease as a diagnosis type (3)/other problem. 	This is supplemental information that is useful for local data retrieval.

Standard	Directive Statement	Rationale
Query Diagnosis (Q)/Etiology	When more than one query diagnosis is recorded as the final diagnosis, and there is no further information or clarification, assign the first listed query diagnosis as the MRDx/main problem and all other query diagnoses as diagnosis type (3)/other problem.	This is supplemental information that is useful for local data retrieval.
Query Diagnosis (Q)/Etiology	When a sign or symptom and a query diagnosis are recorded as the final diagnosis, and there is no further information or clarification, assign the sign or symptom as the MRDx/main problem and the query diagnosis as diagnosis type (3)/other problem.	This is supplemental information that is useful for local data retrieval.
Sequelae	When a patient presents with a sequela of a previously treated condition, assign a code for the current condition under investigation or treatment as a significant diagnosis type. <ul style="list-style-type: none"> Assign codes from categories entitled "Sequelae of..." (B90–B94, E64, E68, I69, O97, T90–T98), optional, as a diagnosis type (3)/other problem to identify the current problem as a sequela. 	This is supplemental information that is useful for local data retrieval.
Chapter I—Certain Infectious and Parasitic Diseases		
Infections	When the causative organism is known, classify the case in one of the following three ways as indicated by the classification: <ul style="list-style-type: none"> use the dual classification (dagger/asterisk) with a code specifying the infectious organism followed by the manifestation. Both codes must be used together to identify the infectious disease. use a combination code. use two codes, the first identifying the locally manifesting disease and the second identifying the infectious organism. The infectious agent is classified to categories B95–B98. Assignment of codes from categories B95–B98 is optional; if coded, they must be assigned diagnosis type (3)/other problem. 	This is supplemental information that is useful for local data retrieval.

Standard	Directive Statement	Rationale
Chapter II—Neoplasms		
Multiple Independent Primary Neoplasms	<p>When a patient is diagnosed with multiple independent primaries, assign a code to identify the site of each primary neoplasm.</p> <ul style="list-style-type: none"> In addition, assign C97 <i>Malignant neoplasms of independent (primary) multiple sites</i>, optional, as a diagnosis type (3)/other problem. 	This is supplemental information that is useful or local data retrieval.
Multiple Independent Primary Neoplasms	<p>When a patient is diagnosed with documented separate primary invasive neoplasms in the same organ, but of non-contiguous sites, code each separate primary neoplasm.</p> <ul style="list-style-type: none"> In addition, assign C97 <i>Malignant neoplasms of independent (primary) multiple sites</i>, optional, as a diagnosis type (3)/other problem. 	This is supplemental information that is useful for local data retrieval.
Chapter IX—Diseases of the Circulatory System		
Acute Coronary Syndrome	<p>Assign I25.2 <i>Old myocardial infarction</i> (i.e. “history of MI”) optional, as a diagnosis type 3, only when BOTH of the following criteria apply:</p> <ul style="list-style-type: none"> The previous myocardial infarction occurred more than 4 weeks (28 days) ago; and The patient is not currently receiving observation, evaluation, or treatment for the previous myocardial infarction. 	It identifies another condition in the patient that is useful for local data retrieval.
Strokes, Cerebrovascular Accidents (CVA) and Transient Ischemic Attacks (TIA)—Sequelae of Cerebrovascular Disease	<p>Assign a code from I69 <i>Sequelae of cerebrovascular disease</i>, optional, to classify conditions in I60–I67.1 and I67.4–I67.9 as the cause of sequelae (i.e. continuing neurological deficits).</p> <p>Assign Z86.78 <i>Personal history of other diseases of the circulatory system</i>, optionally, as a diagnosis type (3)/other problem when there are no longer any neurological deficits present.</p>	This is supplemental information that is useful for local data retrieval.

Standard	Directive Statement	Rationale
Chapter XII—Diseases of the Skin and Subcutaneous Tissues		
Cellulitis	<p>Classify an open wound with associated cellulitis to a “complicated” open wound.</p> <p>When the course of treatment involves <i>intravenous antibiotics</i>, sequence cellulitis as the MRDx/main problem and record the soft tissue injury as an additional diagnosis/other problem.</p> <p>When the course of treatment involves only oral <i>antibiotics</i>, sequence the soft tissue injury as the MRDx/main problem and the cellulitis as a comorbid condition/other problem.</p> <p>Assign an additional code, optional, as a diagnosis type (3)/other problem, from range B95–B98 <i>Bacterial, viral and other infectious agents</i> when a causative agent is identified.</p>	This is supplemental information that is useful for local data retrieval.
Chapter XV—Pregnancy, Childbirth and the Puerperium		
Streptococcal Group B Infection/Carrier in Pregnancy	<p>Assign O23.90– <i>Other and unspecified genitourinary tract infection in pregnancy</i> only when there is documented evidence of an active infection.</p> <ul style="list-style-type: none"> When there is active infection, assign B95.1 <i>Streptococcus, Group B, as the cause of diseases classified to other chapters</i>, optional, as a diagnosis type (3), to identify the organism. <p>Assign Z22.38 <i>Carrier of other specified bacterial diseases</i>, optional, as a diagnosis type (3), to identify GBS carrier state.</p> <p>When antibiotics are given for prophylaxis in a GBS carrier patient, assign Z29.2 <i>Other prophylactic chemotherapy</i>, optional, as a diagnosis type (3).</p>	It identifies another circumstance in the patient that is useful for local data retrieval.

Standard	Directive Statement	Rationale
Chapter XVII—Congenital Malformations, Deformations and Chromosomal Abnormalities		
Congenital Anomaly Syndromes and Specific Manifestations	<p>When a patient is diagnosed with multiple congenital anomalies described as a syndrome that cannot be classified to a more specific code (see flow chart below), assign Q87.8 <i>Other specified congenital malformation syndromes, not elsewhere classified</i>.</p> <ul style="list-style-type: none"> Assign additional codes from Q00–Q85.9 or other appropriate chapter to provide further specificity, mandatory, when meeting the criteria for significance, optional when not meeting the criteria for significance. 	This is supplemental information that is useful for local data retrieval.
Congenital Anomaly Syndromes and Specific Manifestations	<p>When a patient presents solely for management of a specific manifestation of a congenital anomaly syndrome, assign a code for the manifestation as the MRDx/ main problem.</p> <ul style="list-style-type: none"> Assign an additional code, optional, as a diagnosis type (3)/other problem to describe the syndrome. 	This is supplemental information that is useful for local data retrieval.
Chapter XIX—Injury, Poisonings and Certain Other Consequences of External Cause		
Adverse Reactions in Therapeutic Use versus Poisonings	<p>Classify conditions resulting from noncompliance with therapy to a code describing the manifestation followed by Z91.1 <i>Personal history of noncompliance with medical treatment and regimen</i> as a diagnosis type (3)/ other problem.</p>	It identifies another circumstance in the patient that is useful for local data retrieval.
Crush Injuries	<p>Assign all significant injuries associated with a crush injury as comorbid conditions or main/ other problem.</p> <ul style="list-style-type: none"> Assign an additional code, as a diagnosis type (3)/other problem, to identify the crushing injury. When multiple body regions are involved in a crush injury, select the crushing injury code from the rubric T04 <i>Crushing injuries involving multiple body regions</i>. 	This is supplemental information that is useful for local data retrieval.

Standard	Directive Statement	Rationale
Burns and Corrosions	<p>When a patient presents for change of burn dressings, assign as the MRDx/main problem Z48.0 <i>Attention to surgical dressings and sutures</i>.</p> <ul style="list-style-type: none"> Assign an additional code, optional, as a diagnosis type (3)/other problem, to identify the burn itself. 	This is supplemental information that is useful for local data retrieval.
Burns of Multiple Body Regions	<p>When documentation of specific sites of burns is provided, assign separate codes for each burn site.</p> <p>Assign T29.— <i>Burns and corrosions of multiple body regions</i>, optional, as a diagnosis type (3)/other problem, to facilitate data retrieval.</p>	This is supplemental information that is useful for local data retrieval.
Current versus Old Injuries	<p>When a patient presents with a condition that is a sequela/late effect resulting from a previous injury, assign a code for the current condition under investigation or treatment.</p> <ul style="list-style-type: none"> Assign a code from <i>Sequelae of injuries, of poisoning and of other consequences of external causes</i> (T90-T98), optional, as a diagnosis type (3)/other problem to identify the current condition as a sequela of an injury. 	This is supplemental information that is useful for local data retrieval.
Chapter XXI—Factors Influencing Health Status and Contact With Health Services		
Pre-Treatment Assessment	<p>Assign Z01.8 <i>Other specified special examination</i> to describe an encounter for a pre-treatment assessment.</p> <p>Assign an additional code to describe the underlying reason for the assessment, optional, as a diagnosis type (3)/other problem.</p>	It identifies another condition in the patient that is useful for local data retrieval.

Standard	Directive Statement	Rationale
Admission for Follow-Up Examination	<p>When the purpose of the examination is to assess the status of a previously treated condition or injury (i.e. a personal history classifiable to categories Z85–Z88) and <u>the outcome indicates no need for further treatment</u>, select the appropriate code from one of the following as the MRDx/main problem:</p> <ul style="list-style-type: none"> • <i>Z08 Follow-up examination after treatment for malignant neoplasm; or</i> • <i>Z09 Follow-up examination after treatment for conditions other than malignant neoplasms.</i> <ul style="list-style-type: none"> - Assign an additional code indicating a personal history of the condition, optional, as a diagnosis type (3)/other problem. 	It identifies another condition in the patient that is useful for local data retrieval.
Admission for Follow-Up Examination	<p>When the sole purpose of the encounter is to receive a <u>specific intervention or service</u>, select the appropriate code from one of the following as the MRDx/main problem:</p> <p><i>Z39.2 Routine postpartum follow-up</i></p> <p><i>Z42 Follow-up care involving plastic surgery</i></p> <p><i>Z47 Other orthopedic follow-up care</i></p> <p><i>Z48 Other surgical follow-up care</i></p> <ul style="list-style-type: none"> • Assign an additional code, optional, as a diagnosis type (3)/other problem to describe the underlying disease or injury for which ongoing care or treatment is required. 	It identifies another condition in the patient that is useful for local data retrieval.

Standard	Directive Statement	Rationale
Screening for Specific Diseases	<p>When a patient undergoes a screening examination and no sign of disease is found, assign a code from category Z11, Z12 or Z13 <i>Special screening examination</i> as the MRDx/main problem.</p> <p>Assign an additional code, optional, as a diagnosis type (3)/other problem to identify any circumstances indicating the reason for the screening test (e.g. family history).</p> <p>Assign an additional code, optional, as a diagnosis type (3)/other problem, to identify any incidental findings noted at the time of the exam.</p>	It identifies another condition in the patient that is useful for local data retrieval.
Admission for Blood Transfusion	<p>When a patient is admitted solely for a blood transfusion session, assign:</p> <ul style="list-style-type: none"> • Z51.3 <i>Blood transfusion (without reported diagnosis)</i> as the MRDx/main problem; and • an additional code to identify the disease/condition, optional, as a diagnosis type (3)/other problem. 	It identifies another condition in the patient that is useful for local data retrieval.
Personal and Family History of Malignant Neoplasms	Assign a code from Z80 <i>Family history of malignant neoplasm</i> , optional, as diagnosis type (3)/other problem, to denote a reason for an examination or prophylactic surgery.	It identifies another condition in the patient that is useful for local data retrieval.

Production of this report is made possible by financial contributions from Health Canada and provincial and territorial governments. The views expressed herein do not necessarily represent the views of Health Canada or any provincial or territorial government.

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ISBN 978-1-77109-092-6 (PDF)

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How to cite this document:

Canadian Institute for Health Information, *Canadian Coding Standards for Version 2012 ICD-10-CA and CCI, Revised September 2012* (Ottawa, Ont.: CIHI, 2012).

Cette publication est aussi disponible en français sous le titre *Normes canadiennes de codification pour la version 2012 de la CIM-10-CA et de la CCI, révisé en septembre 2012*.

ISBN 978-1-77109-093-3 (PDF)

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