ICD-10-CM
General Code Set Manual

2014

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Clinical Examples Used in this Book

AAPC believes it is important in training and testing to reflect as accurate a coding setting as possible to students and examinees. All examples and case studies used in our study guides and exams are *actual, redacted* office visit and procedure notes donated by AAPC members.

To preserve the *real world* quality of these notes for educational purposes, we have not re-written or edited the notes to the stringent grammatical or stylistic standards found in the text of our products. Some minor changes have been made for clarity or to correct spelling errors originally in the notes, but essentially they are as one would find them in a coding setting.

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Introduction to ICD-10-CM

Introduction

The Health Insurance Portability and Accountability Act (HIPAA) of 1996 includes provisions for the standardization of healthcare information. These administrative simplification provisions include standards for electronic transmission of claims, provider identifiers, privacy, and code sets. A national committee of the Department of Health and Human Services (HHS) has worked extensively over the past several years to develop recommendations that meet the HIPAA requirements. Committee discussion of code sets has been lengthy and controversial due to potential costs of the transition to new and revised code sets in terms of infrastructure (computer software), anticipated delays in billing at startup, and costs associated with training and education.

ICD-10-CM

The National Center for Health Statistics (NCHS) developed ICD-10-CM *(International Classification of Diseases, Tenth Revision, Clinical Modification)* in consultation with a technical advisory panel, physician groups, and clinical coders to assure clinical accuracy and utility. There are no codes for procedures in the ICD-10-CM and procedures are coded using the procedure classification appropriate for the encounter setting (eg, Physicians' Current Procedural Terminology or CPT®, and ICD-10-PCS).

The term clinical is used to emphasize the modification's intent to serve as a useful tool in the area of classification of morbidity data for indexing of medical records, medical care review, ambulatory and other medical care programs, as well as for basic health statistics. To describe the clinical picture of the patient, the codes must be more precise than those needed for statistical groupings and trend analysis.

Final Rule for the Adoption of ICD-10-CM and ICD-10-PCS

On January 15, 2009, the Department of Health and Human Services released the final regulation to move from the current ICD-9-CM coding system to the ICD-10 coding system beginning October 1, 2013. This timeline will allow for time to plan and implement this regulatory change.

On April 9th, 2012, DHHS released a proposed rule to push back the implementation of ICD-10 one year. There is a 30-day comment period, however, it is anticipated that this delay will be accepted. The new effective date of October 1, 2014 will allow those in the industry who have not yet begun to prepare the time needed to transition to ICD-10-CM.

ICD-10-CM is similar to ICD-9-CM in that some terminology, conventions, classifications, and other features are similar.

International Classification of Diseases (ICD)

ICD-10 was endorsed by the 43rd World Health Assembly in May 1990 and came into use in WHO Member States in 1994. The classification is the latest in a series, which has its origins in the 1850s. The first edition, known as the International List of Causes of Death, was adopted by the International Statistical Institute in 1893. WHO took over the responsibility for the ICD at its creation in

1948 when the Sixth Revision, which included causes of morbidity for the first time, was published. The World Health Assembly adopted in 1967 the WHO Nomenclature Regulations that stipulate use of ICD in its most current revision for mortality and morbidity statistics by all Member States.

The ICD is the international standard diagnostic classification for all general epidemiological, many health management purposes and clinical use. These include the analysis of the general health situation of population groups and monitoring of the incidence and prevalence of diseases and other health problems in relation to other variables such as the characteristics and circumstances of the individuals affected, reimbursement, resource allocation, quality, and guidelines.

It is used to classify diseases and other health problems recorded on many types of health and vital records including death certificates and health records. In addition to enabling the storage and retrieval of diagnostic information for clinical, epidemiological and quality purposes, these records also provide the basis for the compilation of national mortality and morbidity statistics by WHO Member States.

ICD-9-CM has 17 chapters, compared with 21 chapters in ICD-10-CM, which includes separate chapters for the eye and adnexa and the ear. The chapters are subdivided into blocks of three alphanumeric character categories. In addition, the classifications External Cause of Morbidity and Mortality and Factors Influencing Health Status and Contact with Health Services (V and E codes in ICD-9-CM) are not considered supplemental classifications in ICD-10-CM and have their own chapter classifications (chapters 20 and 21).

ICD-10 includes 22 chapters for use, however, in the United States, our clinical modifications (CM) does not include the letter U. The letter U is not used for international data comparison and the codes are not being used in the United States.

Characteristics of ICD-10-CM

Guidance for the use of the codes can be found in the Official Coding and Reporting guidelines section of ICD-10-CM (www.cms.hhs.gov/icd10). The ICD-10 is copyrighted by the World Health Organization (WHO) and reproduced by permission for United States Government purposes.

ICD-10-CM Format and Structure

The ICD has been revised periodically to incorporate changes in the medical field. The Tenth Revision (ICD-10) differs from the Ninth Revision (ICD-9) in a number of respects although the overall content is similar.

CODING TIP

ICD-10-CM is divided into the Alphabetic Index, which is an alphabetic list of terms and their corresponding codes, and the Tabular List, a numerical list of codes divided by chapter, according to condition or body system. Become familiar with chapter specific guidelines to know when the seventh character is needed.

The International Classification of Diseases (ICD) is designed to encourage international comparability in the collection and management of mortality statistics.

The table below illustrates the chapter comparison between ICD-9-CM and ICD-10-CM. Notice that Diseases of the Eye and Adnexa and Diseases of the Ear and Mastoid Process will have its own chapter in ICD-10-CM.

CODING TIP

Never code strictly from the alphabetical index, always confirm your code choice in the tabular list to insure the most appropriate code choice selection.

Chapter	ICD-9-CM	ICD-10-CM
1	Infectious and Parasitic Diseases	Certain Infectious and Parasitic Diseases
2	Neoplasms	Neoplasms
3	Endocrine, Nutritional and Metabolic Diseases, and Immunity Disorders	Diseases of the Blood and Blood-Forming Organs and Certain Disorders Involving the Immune Mechanism
4	Diseases of the Blood and Blood-Forming Organs	Endocrine, Nutritional and Metabolic Diseases
5	Mental Disorders	Mental, Behavioral and Neurodevelopmental Disorders
6	Diseases of the Nervous System and Sense Organs	Diseases of the Nervous System
7	Diseases of the Circulatory System	Diseases of the Eye and Adnexa
8	Diseases of the Respiratory System	Diseases of the Ear and Mastoid Process
9	Diseases of the Digestive System	Diseases of the Circulatory System
10	Diseases of the Genitourinary System	Diseases of the Respiratory System
11	Complications of Pregnancy, Childbirth, and the Puerperium	Diseases of the Digestive System
12	Diseases of the Skin and Subcutaneous Tissue	Diseases of the Skin and Subcutaneous Tissue
13	Diseases of the Musculoskeletal System and Connective Tissue	Diseases of the Musculoskeletal System and Connective Tissue
14	Congenital Anomalies	Diseases of the Genitourinary System
15	Certain Conditions Originating in the Perinatal Period	Pregnancy, Childbirth and the Puerperium
16	Symptoms, Signs, and Ill-Defined Conditions	Certain Conditions Originating in the Perinatal Period
17	Injury and Poisoning	Congenital Malformations, Deformations and Chromosomal Abnormalities

Chapter	ICD-9-CM	ICD-10-CM
18	N/A	Symptoms, Signs and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified
19	N/A	Injury, Poisoning and Certain Other Consequences of External Causes
20	N/A	External Causes of Morbidity
21	N/A	Factors Influencing Health Status and Contact with Health Services
Supplementary Classification	Classification of Factors Influencing Health Status and Contact with Health Services (V codes)	N/A
Supplementary Classification	Classification of External Cause of Injury and Poisoning (E Codes)	N/A

Alphabetic Index

The Alphabetic Index is divided into sections and is organized by main terms:

Index of Diseases and Injury

Index of External Causes of Injury

Table of Neoplasms

Table of Drugs and Chemicals

The Alphabetic Index is organized in the same manner as ICD-9-CM. Codes are listed by "Main term" which describes the disease and/or condition. As with ICD-9-CM there are exceptions to the rule. Cross-references such as "see," "see also" are also found in ICD-10-CM. Sub-terms and modifiers are located under the main terms following an indented format. Nonessential modifiers are found in parentheses after the main term. A nonessential modifier does not affect selection of the code and is used as guidance. In the section on external causes, the main term and modifiers identify the type of accident or occurrence, vehicles(s) involved, the place of occurrence, etc.

Notes appear in the Alphabetic Index to:

- Define terms
- Provide direction
- Provide coding instructions

Combination Code—The term represents a single code used to classify: two diagnoses, either a diagnosis with an associated sign or symptom or a diagnosis with an associated complication. Multiple codes should not be used when the classification provides a combination code that clearly identifies all of the elements documented in the diagnosis.

Combination codes allow fewer codes to be submitted while still explaining the patients' clinical condition.

Granularity—As applied to ICD-10-CM, the term refers to the level of hierarchy and the amount of information the increased hierarchy provides to the diagnostic description.

Laterality—ICD-10-CM code descriptions include right or left designation. The right side is usually character 1, and left side character 2. In those cases where a bilateral code is provided, the bilateral character is usually 3. An unspecified side code is provided should the side not be identified in the medical record. The unspecified side is either a character 0 or 9, depending on whether it is a fifth or sixth character.

There are certain situations in ICD-10-CM where the laterality convention is not followed. Careful considerations of the codes are necessary before routinely assigning laterality.

EXAMPLE

H02.85 Elephantiasis of eyelid

- H02.851 Elephantiasis of right upper eyelid
- H02.852 Elephantiasis of right lower eyelid
- H02.853 Elephantiasis of right eye, unspecified eyelid
- H02.854 Elephantiasis of left upper eyelid
- H02.855 Elephantiasis of left lower eyelid
- H02.856 Elephantiasis of left eye, unspecified eyelid
- H02.859 Elephantiasis of unspecified eye, unspecified eyelid

Morbidity—The term refers to the disease rate or number of cases of a particular disease in a given age range, gender, occupation, or other relevant population based grouping.

Mortality—The term refers to the death rate reflected by the population in a given region, age range, or other relevant statistical grouping.

Principal or First-listed Diagnosis—The code sequenced first on a medical record defines the primary reason for the encounter as determined at the end of the encounter. In the inpatient setting, the first code listed on a medical record is referred to as the principal diagnosis. In all other healthcare settings, it is referred to as the first-listed code. The Uniform Hospital Discharge Data Set (UHDDS) defines principal diagnosis as "that condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care." The UHDDS definition also applies in selection of the first-listed diagnosis code in other healthcare settings.

Rubric—The term refers to a group of similar conditions, which in ICD-10-CM denotes either a three-character category or a four-character subcategory.

Code Structure

The Tabular List contains categories, subcategories, and codes. Each character for all categories, subcategories, and codes may be either a letter or number. All categories are three characters. The first character of a category is a letter. The second and third characters may be either numbers or alpha characters. A three-character category that has no further subdivision is equivalent to a code. Subcategories are either four or five characters. Subcategory characters may be either letters or numbers. Codes are three, four, five, or six characters and the final character in a code may be either a letter or number. Certain categories have seventh character extensions.

Three Character Categories

Following the "excludes" and "includes" notes, each chapter begins with a list of blocks—or subchapters—of three character categories, for example:

Chapter 1	**Certain Infectious and Parasitic Diseases (A00–B99)**
A00–A09	Intestinal infectious diseases
A15–A19	Tuberculosis
A20–A28	Certain zoonotic bacterial diseases
A30–A49	Other bacterial diseases
A50–A64	Infections with a predominantly sexual mode of transmission
A65–A69	Other spirochetal diseases
A70–A74	Other diseases caused by chlamydiae
A75–A79	Rickettsioses
A80–A89	Viral infections of the central nervous system
A90–A99	Arthropod-borne viral fevers and viral hemorrhagic fevers
B00–B09	Viral infections characterized by skin and mucous membrane lesions
B15–B19	Viral hepatitis
B20	Human immunodeficiency virus [HIV] disease
B25–B34	Other viral diseases
B35–B49	Mycoses
B50–B64	Protozoal diseases
B65–B83	Helminthiases
B85–B89	Pediculosis, acariasis and other infestations
B90–B94	Sequelae of infectious and parasitic diseases
B95–B97	Bacterial, viral and other infectious agents
B99	Other infectious diseases

Chapter 2	**Neoplasms (C00–D49)**
C00–C75	Malignant neoplasms, stated or presumed to be primary, of specified sites, except of lymphoid, hematopoietic and related tissue
C00–C14	Lip, oral cavity and pharynx
C15–C26	Digestive organs
C30–C39	Respiratory and intrathoracic organs
C40–C41	Bone and articular cartilage
C43–C44	Skin
C45–C49	Mesothelial and soft tissue
C50	Breast
C51–C58	Female genital organs
C60–C63	Male genital organs
C64–C68	Urinary tract
C69–C72	Eye, brain and other parts of central nervous system
C73–C75	Thyroid and other endocrine glands
C76–C80	Malignant neoplasms of ill-defined, secondary and unspecified sites

C81–C96	Malignant neoplasms, stated or presumed to be primary, of lymphoid, hematopoietic and related tissue
D00–D09	In situ neoplasms
D10–D36	Benign neoplasms
D37–D48	Neoplasms of uncertain behavior
D49	Neoplasms of unspecified behavior

Chapter 3 Diseases of the Blood and Blood-Forming Organs and Certain Disorders Involving the Immune Mechanism (D50–D89)

D50–D53	Nutritional anemias
D55–D59	Hemolytic anemias
D60–D64	Aplastic and other anemias
D65–D69	Coagulation defects, purpura and other hemorrhagic conditions
D70–D78	Other diseases of blood and blood-forming organs
D80–D89	Certain disorders involving the immune mechanism

Chapter 4 Endocrine, Nutritional and Metabolic Diseases (E00–E90)

E00–E07	Disorders of thyroid gland
E08–E13	Diabetes mellitus
E15–E16	Other disorders of glucose regulation and pancreatic internal secretion
E20–E36	Disorders of other endocrine glands
E40–E46	Malnutrition
E50–E64	Other nutritional deficiencies
E65–E68	Obesity and other hyperalimentation
E70–E89	Metabolic disorders

Chapter 5 Mental, Behavioral and Neurodevelopmental Disorders (F01–F99)

F01–F09	Mental disorders due to known physiological conditions
F10–F19	Mental and behavioral disorders due to psychoactive substance use
F20–F29	Schizophrenia, schizotypal and delusional, and other non-mood psychotic disorders
F30–F39	Mood [affective] disorders
F40–F48	Anxiety, dissociative, stress-related, somatoform and other nonpsychotic mental disorders
F50–F59	Behavioral syndromes associated with physiological disturbances and physical factors
F60–F69	Disorders of adult personality and behavior
F70–F79	Mental retardation
F80–F89	Pervasive and specific developmental disorders
F90–F98	Behavioral and emotional disorders with onset usually occurring in childhood and adolescence
F99	Unspecified mental disorder

Chapter 6	**Diseases of the Nervous System (G00–G99)**
G00–G09	Inflammatory diseases of the central nervous system
G10–G13	Systemic atrophies primarily affecting the central nervous system
G20–G26	Extrapyramidal and movement disorders
G30–G32	Other degenerative diseases of the nervous system
G35–G37	Demyelinating diseases of the central nervous system
G40–G47	Episodic and paroxysmal disorders
G50–G59	Nerve, nerve root and plexus disorders
G60–G64	Polyneuropathies and other disorders of the peripheral nervous system
G70–G73	Diseases of myoneural junction and muscle
G80–G83	Cerebral palsy and other paralytic syndromes
G90–G99	Other disorders of the nervous system

Chapter 7	**Disorder of the Eye and Adnexa (H00–H59)**
H00–H05	Disorders of eyelid, lacrimal system and orbit
H10–H13	Disorders of the conjunctiva
H15–H21	Disorders of sclera, cornea, iris and ciliary body
H25–H28	Disorders of lens
H30–H36	Disorders of choroid and retina
H40–H42	Glaucoma
H43–H45	Disorders of vitreous body and globe
H46–H47	Disorders of optic nerve and visual pathways
H49–H52	Disorders of ocular muscles, binocular movement, accommodation and refraction
H53–H54	Visual disturbances and blindness
H55–H59	Other disorders of eye and adnexa

Chapter 8	**Diseases of the Ear and Mastoid Process (H60–H95)**
H60–H62	Diseases of external ear
H65–H75	Diseases of middle ear and mastoid
H80–H83	Diseases of inner ear
H90–H95	Other disorders of ear

Chapter 9	**Diseases of the Circulatory System (I00–I99)**
I00–I02	Acute rheumatic fever
I05–I09	Chronic rheumatic heart diseases
I10–I15	Hypertensive diseases
I20–I25	Ischemic heart diseases
I26–I28	Pulmonary heart disease and diseases of pulmonary circulation
I30–I52	Other forms of heart disease
I60–I69	Cerebrovascular diseases
I70–I79	Diseases of arteries, arterioles and capillaries
I80–I89	Diseases of veins, lymphatic vessels and lymph nodes, not elsewhere classified
I95–I99	Other and unspecified disorders of the circulatory system

Chapter 10 Diseases of the Respiratory System (J00–J99)

J00–J06	Acute upper respiratory infections
J10–J18	Influenza and pneumonia
J20–J22	Other acute lower respiratory infections
J30–J39	Other diseases of upper respiratory tract
J40–J47	Chronic lower respiratory diseases
J60–J70	Lung diseases due to external agents
J80–J84	Other respiratory diseases principally affecting the interstitium
J85–J86	Suppurative and necrotic conditions of the lower respiratory tract
J90–J94	Other diseases of the pleura
J95–J99	Other diseases of the respiratory system

Chapter 11 Diseases of the Digestive System (K00–K95)

K00–K14	Diseases of oral cavity and salivary glands
K20–K31	Diseases of esophagus, stomach and duodenum
K35–K38	Diseases of appendix
K40–K46	Hernia
K50–K52	Noninfective enteritis and colitis
K55–K63	Other diseases of intestines
K65–K68	Diseases of peritoneum and retroperitoneum
K70–K77	Diseases of liver
K80–K87	Disorders of gallbladder, biliary tract and pancreas
K90–K95	Other diseases of the digestive system

Chapter 12 Diseases of the Skin and Subcutaneous Tissue (L00–L99)

L00–L08	Infections of the skin and subcutaneous tissue
L10–L14	Bullous disorders
L20–L30	Dermatitis and eczema
L40–L45	Papulosquamous disorders
L50–L54	Urticaria and erythema
L55–L59	Radiation-related disorders of the skin and subcutaneous tissue
L60–L75	Disorders of skin appendages
L76	Intraoperative and postprocedural complications of dermatologic procedures
L80–L99	Other disorders of the skin and subcutaneous tissue

Chapter 13 Diseases of the Musculoskeletal System and Connective Tissue (M00–M99)

M00–M02	Infectious arthropathies
M05–M14	Inflammatory polyarthropathies
M15–M19	Osteoarthritis
M20–M25	Other joint disorders
M26–M27	Dentofacial anomalies [including malocclusion] and other disorders of jaw
M30–M36	Systemic connective tissue disorders
M40–M43	Deforming dorsopathies

M45–M49	Spondylopathies
M50–M54	Other dorsopathies
M60–M63	Disorders of muscles
M65–M67	Disorders of synovium and tendon
M70–M79	Other soft tissue disorders
M80–M85	Disorders of bone density and structure
M86–M90	Other osteopathies
M91–M94	Chondropathies
M95–M99	Other disorders of the musculoskeletal system and connective tissue

Chapter 14 Diseases of the Genitourinary System (N00–N99)

N00–N08	Glomerular diseases
N10–N16	Renal tubulo-interstitial diseases
N17–N19	Renal failure
N20–N23	Urolithiasis
N25–N29	Other disorders of kidney and ureter
N30–N39	Other diseases of the urinary system
N40–N51	Diseases of male genital organs
N60–N64	Disorders of breast
N70–N77	Inflammatory diseases of female pelvic organs
N80–N98	Noninflammatory disorders of female genital tract
N99	Other disorders of genitourinary system

Chapter 15 Pregnancy, Childbirth and the Puerperium (O00–O9A)

O00–O08	Pregnancy with abortive outcome
O09	Supervision of high-risk pregnancy
O10–O16	Edema, proteinuria and hypertensive disorders in pregnancy, childbirth and the puerperium
O20–O29	Other maternal disorders predominantly related to pregnancy
O30–O48	Maternal care related to the fetus and amniotic cavity and possible delivery problems
O60–O77	Complications of labor and delivery
O80, O82	Encounter for delivery
O85–O92	Complications predominantly related to the puerperium
O93	Sequelae of complication of pregnancy, childbirth, and the puerperium
O94–O9A	Other obstetric conditions, not elsewhere classified

Chapter 16 Certain Conditions Originating in the Perinatal Period (P00–P96)

P00–P04	Newborn affected by maternal factors and by complications of pregnancy, labor and delivery
P05–P08	Disorders related to length of gestation and fetal growth
P10–P15	Birth trauma
P19–P29	Respiratory and cardiovascular disorders specific to the perinatal period
P35–P39	Infections specific to the perinatal period
P50–P61	Hemorrhagic and hematological disorders of newborn

P70–P74	Transitory endocrine and metabolic disorders specific to newborn
P75–P78	Digestive system disorders of newborn
P80–P83	Conditions involving the integument and temperature regulation of newborn
P84	Other problems with newborn
P90–P96	Other disorders originating in the perinatal period

Chapter 17 Congenital Malformations, Deformations and Chromosomal Abnormalities (Q00–Q99)

Q00–Q07	Congenital malformations of the nervous system
Q10–Q18	Congenital malformations of the eye, ear, face and neck
Q20–Q28	Congenital malformations of the circulatory system
Q30–Q34	Congenital malformations of the respiratory system
Q35–Q37	Cleft lip and cleft palate
Q38–Q45	Other congenital malformations of the digestive system
Q50–Q56	Congenital malformations of genital organs
Q60–Q64	Congenital malformations of the urinary system
Q65–Q79	Congenital malformations and deformations of the musculoskeletal system
Q80–Q89	Other congenital malformations
Q90–Q99	Chromosomal abnormalities, not elsewhere classified

Chapter 18 Symptoms, Signs and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified (R00–R99)

R00–R09	Symptoms and signs involving the circulatory and respiratory systems
R10–R19	Symptoms and signs involving the digestive system and abdomen
R20–R23	Symptoms and signs involving the skin and subcutaneous tissue
R25–R29	Symptoms and signs involving the nervous and musculoskeletal systems
R30–R39	Symptoms and signs involving the urinary system
R40–R46	Symptoms and signs involving cognition, perception, emotional state and behavior
R47–R49	Symptoms and signs involving speech and voice
R50–R69	General symptoms and signs
R70–R79	Abnormal findings on examination of blood, without diagnosis
R80–R82	Abnormal findings on examination of urine, without diagnosis
R83–R89	Abnormal findings on examination of other body fluids, substance and tissues, without diagnosis
R90–R94	Abnormal findings on diagnostic imaging and in function studies, without diagnosis
R99	Ill-defined and unknown cause of mortality

Chapter 19 Injury, Poisoning and Certain Other Consequences of External Cause (S00–T88)

S00–S09	Injuries to the head
S10–S19	Injuries to the neck
S20–S29	Injuries to the thorax
S30–S39	Injuries to the abdomen, lower back, lumbar spine, pelvis and external genitals
S40–S49	Injuries to the shoulder and upper arm

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S50–S59	Injuries to the elbow and forearm
S60–S69	Injuries to the wrist and hand
S70–S79	Injuries to the hip and thigh
S80–S89	Injuries to the knee and lower leg
S90–S99	Injuries to the ankle and foot
T07	Unspecified multiple injuries
T14	Injury of unspecified body region
T15–T19	Effects of foreign body entering through natural orifice
T20–T32	Burns and corrosions
T33–T34	Frostbite
T36–T50	Poisoning by adverse effect of an underdosing of drugs, medicaments and biological substances
T51–T65	Toxic effects of substances chiefly nonmedicinal as to source
T66–T78	Other and unspecified effects of external causes
T79	Certain early complications of trauma
T80–T88	Complications of surgical and medical care, not elsewhere classified

Chapter 20 External Causes of Morbidity (V00–Y99)

V00–X58	Accidents
V00–V99	Transport accidents
V00–V09	Pedestrian injured in transport accident
V10–V19	Pedal cyclist injured in transport accident
V20–V29	Motorcycle rider injured in transport accident
V30–V39	Occupant of three-wheeled motor vehicle injured in transport accident
V40–V49	Car occupant injured in transport accident
V50–V59	Occupant of pick-up truck or van injured in transport accident
V60–V69	Occupant of heavy transport vehicle injured in transport accident
V70–V79	Bus occupant injured in transport accident
V80–V89	Other land transport accidents
V90–V94	Water transport accidents
V95–V97	Air and space transport accidents
V98–V99	Other and unspecified transport accidents
W00–X58	Other external causes of accidental injury
W00–W19	Falls
W20–W49	Exposure to inanimate mechanical forces
W50–W64	Exposure to animate mechanical forces
W65–W74	Accidental drowning and submersion
W85–W99	Exposure to electric current, radiation and extreme ambient air temperature and pressure
X00–X09	Exposure to smoke, fire and flames
X10–X19	Contact with heat and hot substances
X30–X39	Exposure to forces of nature
X52–X58	Accidental exposure to other specified factors
X71–X83	Intentional self-harm

X92–Y08	Assault
Y21–Y33	Event of undetermined intent
Y35–Y38	Legal intervention, operations of war, military operations and terrorism
Y62–Y84	Complications of medical and surgical care
Y62–Y69	Misadventures to patients during surgical and medical care
Y70–Y82	Medical devices associated with adverse incidents in diagnostic and therapeutic use
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
Y90–Y99	Supplementary factors related to causes of morbidity classified elsewhere

Chapter 21	**Factors Influencing Health Status and Contact with Health Services (Z00–Z99)**
Z00–Z13	Persons encountering health services for examination and investigation
Z14–Z15	Genetic carrier and genetic susceptibility to disease
Z16	Infection with drug-resistant microorganisms
Z20–Z28	Persons with potential health hazards related to communicable diseases
Z30–Z39	Persons encountering health services in circumstances related to reproduction
Z40–Z53	Persons encountering health services for specific procedures and healthcare
Z55–Z65	Persons with potential health hazards related to socioeconomic and psychosocial circumstances
Z66	Do not resuscitate (DNR) status
Z67	Bloodtype
Z69–Z76	Persons encountering health services in other circumstances
Z79–Z99	Persons with potential health hazards related to family and personal history and certain conditions influencing health status

Four Character Categories

The four character categories further define the site, etiology, and manifestation or state of the disease or condition. The four-character subcategory includes the three-character category plus decimal with an additional character to further identify the condition to the highest level of specificity.

The ICD-10-CM uses an indented format and each code includes the description of the code.

EXAMPLE

C15 Malignant neoplasm of the esophagus

C15.3 Malignant neoplasm of upper third of esophagus

C15.4 Malignant neoplasm of middle third of esophagus

C15.5 Malignant neoplasm of lower third of esophagus

C15.8 Malignant neoplasm of overlapping sites of esophagus

C15.9 Malignant neoplasm of esophagus, unspecified

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Five–Six Character Subclassification

In ICD-9-CM, the fifth character identifies the most precise level of specificity. In ICD-10-CM, a fifth or sixth character sub-classifications represents the most accurate level of specificity. This addition may identify more specificity regarding the patient's condition or diagnosis.

EXAMPLE

J10.8 Influenza due to other identified influenza virus with other manifestations

J10.81 Influenza due to other identified influenza virus with encephalopathy

J10.82 Influenza due to other identified influenza virus with myocarditis

J10.83 Influenza due to other identified influenza virus with otitis media

J10.89 Influenza due to other identified influenza virus with other manifestations

EXAMPLE

M88.811 Osteitis deformans of right shoulder

Seventh Character Extension

Certain ICD-10-CM categories have applicable seven characters. The applicable seventh character is required for all codes within the category, or as the notes in the Tabular List instruct. The seventh character must always be the seventh character in the data field. If a code that requires a seventh character is not six characters, a placeholder X must be used to fill in the empty characters.

EXAMPLE

T50.B96A Underdosing of other viral vaccines, initial encounter

T50.B96D Underdosing of other viral vaccines, subsequent encounter

T50.B96S Underdosing of other viral vaccines, sequela

Dummy Placeholders

The ICD-10-CM utilizes a placeholder character "X." The "X" is used as a fifth or sixth character placeholder at certain six or seven character codes to allow for future expansion. It is responsible for holding the seventh character in the seventh character position for any code that requires it that is less than six characters in length.

EXAMPLE

T15.12XS Foreign body in conjunctival sac, left eye, sequela

Locating a Code in ICD-10-CM

To select a code in the classification that corresponds to a diagnosis or reason for visit documented in a medical record, first locate the term in the index, and then verify the code in the Tabular List. Read and be guided by instructional notations that appear in both the index and the Tabular List. It is essential to use both the Index to Diseases and the Tabular List when locating and assigning a code.

The index does not always provide the full code. Selection of the full code, including laterality and any applicable extensions can only be done in the Tabular List. A dash (-) at the end of an index entry indicates that additional characters are required. Even if a dash is not included at the index entry, it is necessary to refer to the Tabular List to verify that no extension is required.

CODING TIP

NEVER code from the index or default codes!

ICD-10-CM Conventions

Code First/Use Additional Code Notes

Etiology/manifestation paired codes have a specific index entry structure. In the index both conditions are listed together with the etiology code first followed by the manifestation codes in brackets. The code in brackets is always to be sequenced second.

NEC

An alphabetic index entry that states NEC directs the coder to an "other specified" code in the Tabular List (see inclusion terms under the Tabular Format subheading).

NOS

"Not otherwise specified." This abbreviation is the equivalent of unspecified.

Punctuation

[ ] Brackets are used in the Tabular List to enclose synonyms, alternative wording, or explanatory wording. Brackets are used in the alphabetic Index to identify manifestation codes.

( ) Parentheses are used in both the Alphabetic Index and Tabular List to enclose supplemental words that do not affect the code number. The terms within the parentheses are referred to as nonessential modifiers.

: Colon is used after an incomplete term that needs one or more of the modifiers that follow to make it assignable to a given category.

} The brace encloses a series of terms each of which is modified by the statement appearing at the right of the brace.

, Words following a comma are essential modifiers. The term in the inclusion note must be present in the diagnostic statement to qualify the code.

EXAMPLE

C50.31 Malignant neoplasm of lower-inner quadrant of breast, female

Code Also

A "code also" note instructs that two codes may be required to fully describe a condition, but the sequencing of the two codes depends on the severity of the conditions and the reason for the encounter.

"See" and "See Also"

The "see" instruction following a main term in the Index indicates that another term should be referenced. It is necessary to go to the main term referenced with the "see" note to locate the correct code.

A "see also" instruction following a main term in the index instructs that there is another main term that may also be referenced that may provide additional index entries that may be useful. It is not necessary to follow the "see also" note when the original main term provides the necessary code.

EXAMPLE

Amentia—see also Disability, intellectual

—Meynert's (nonalcoholic) F04

Annular—see also condition

Default Codes

A code listed next to a main term in the ICD-10-CM Index is referred to as a default code. The default code represents that condition that is most commonly associated with the main term, or is the unspecified code for the condition. If a condition is documented in a medical record (for example, appendicitis) without any additional information, such as acute or chronic, the default code should be assigned.

EXAMPLE

A simple statement of Appendicitis without further documentation would be coded K37 for unspecified appendicitis

CODING TIP

Never code directly from the default code listed; always confirm your code choice selection in the tabular list.

Code First/Use Additional Code Notes

Codes that have both an underlying etiology and multiple body system manifestations due to the underlying etiology require sequencing the underlying condition first followed by the manifestation. Wherever such a combination exists there is a "use additional code" note at the etiology code, and a "code first" note at the manifestation code. These instructional notes indicate the proper sequencing order of the codes, etiology followed by manifestation.

In most cases, the manifestation codes will have in the code title, "in diseases classified elsewhere." Codes with this title are a component of the etiology/manifestation convention. The code title indicates that it is a manifestation code. "In diseases classified elsewhere" codes are never permitted to be used as first-listed or principal diagnosis codes. They must be used in conjunction with an underlying condition code and they must be listed following the underlying condition.

In some circumstances, more than two codes may be required to fully describe a condition. In these cases a "use additional code" note will be present at a complication or manifestation code to indicate that more codes are needed. The additional codes used are secondary codes that are to be sequenced following any underlying cause and following the main manifestation (see same listing under Index Format subheading).

EXAMPLE

H42 Glaucoma in diseases classified elsewhere

Code first underlying condition, such as:

amyloidosis (E85.-)

aniridia (Q13.1)

Lowe's syndrome (E72.03)

Reiger's anomaly (Q13.81)

specified metabolic disorder (E70–E90)

Excludes Notes

Two types of "excludes" notes are found although each indicates that codes excluded from each other are independent of each other.

- A type 1 Excludes note indicates that the code excluded should never be used at the same time as the code above the *Excludes1* note. An *Excludes1* is used when two conditions cannot occur together, such as a congenital form versus an acquired form of the same condition. Conditions listed with *Excludes1* are mutually exclusive.

CODING TIP

A type 1 Excludes note means NOT CODED HERE!

EXAMPLE

E11 Type 2 diabetes

Excludes1: gestational diabetes (O24.4-)
Type 1 diabetes (E10.-)

EXAMPLE

I10 Essential (primary) Hypertension Includes:

high blood pressure hypertension (arterial) (benign) (essential) (malignant) (primary) (systemic)

Excludes1: hypertensive disease complicating pregnancy, childbirth and the puerperium (O10-O11, O13–O16)

Note: A type 1 Excludes note instructs the user to go to another code for the excluded condition, so if the patient is pregnant code I10 is not assigned.

- A type 2 Excludes note indicates that the condition excluded is not part of the condition represented by the code, but from a patient who may have both conditions at the same time. When a type 2 Excludes note appears under a code, it is acceptable to use both the code and the excluded code together when both conditions exist.

EXAMPLE

J03 Acute tonsillitis

Excludes2: chronic tonsillitis (J35.0)

Excludes2—A Type 2 excludes note represents "Not included here." A type 2 Excludes note indicates that the condition excluded is not part of the condition represented by the code, but a patient may have both conditions at the same time. When an *Excludes2* note appears under a code, it is acceptable to use both the code and the excluded code together.

Excludes2 EXAMPLE

I10 Essential (primary) Hypertension Includes:

high blood pressure hypertension (arterial) (benign) (essential) (malignant) (primary) (systemic)

Excludes2: essential (primary) hypertension involving vessels of brain (I60–I69)
essential (primary) hypertension involving vessels of eye (H35.0)

The above type 2 Excludes note instructs that the user that hypertension involving vessels of the eye has a different code than essential hypertension without further specification. If the patient has both systemic hypertension and primary hypertension of the eye, then it would be appropriate to assign a code for both conditions.

Inclusion Terms

Lists of terms are included under some codes. These terms are some of the conditions for which that code number is to be used. The terms may be synonyms of the code title, or in the case of "other specified" codes, the terms are a list of some of the various conditions assigned to that code. The inclusion terms are not necessarily exhaustive. Additional terms found only in the index may also be assigned to a code.

ICD-10-CM expands upon both the excludes notes and inclusion terms at the beginning of each chapter.

EXAMPLE

Chapter 1 Certain Infectious and Parasitic Diseases

Use additional code to identify resistance to antimicrobial drugs (Z16-)

Excludes2: carrier or suspected carrier of infectious disease (Z22.-)

B95–B97 Bacterial and viral infectious agents

Other Specified and NEC

Codes in the Tabular List with "Other…" or "Other specified…" are for use when the information in the medical record provides detail for which a specific code does not exist. The abbreviation NEC, "Not elsewhere classifiable" represents "other specified." An index entry that states NEC directs the coder to an "other specified" code in the Tabular List.

EXAMPLE

Abruptio placentae O45.9-
-with
afibrinogenemia O45.01
coagulation defect O45.00
specified **NEC** O45.09
disseminated intravascular coagulation O45.02
hypofibrinogenemia O45.01
specified **NEC** O45.8X-

Unspecified and NOS

Codes in the Tabular List with "Unspecified…" in the title are for use when the information in the medical record is insufficient to assign a more specific code. The abbreviation NOS, "Not otherwise specified," in the Tabular List is the equivalent of unspecified.

EXAMPLE

A04.9 Bacterial intestinal infection, unspecified
Bacterial enteritis NOS

Use of "and"

When the term "and" is used in a narrative statement, it represents and/or.

With/Without

When "with" and "without" are the two options for the final character of a set of codes, the default is always "without." For five character codes, a "0" as the fifth position character represents "without," and "1" represents "with." For six character codes, the sixth position character "1" represents "with" and "9" represents "without."

EXAMPLE

G40.501 Epileptic seizures related to external causes, not intractable, with status epilepticus

G40.509 Epileptic seizures related to external causes, not intractable, without status epilepticus

General Coding Guidelines

ICD-10-CM guidelines developed to assist both the physician and the coder in identifying diagnoses are similar to those in ICD-9-CM, which should ease the transition. The guidelines are summarized in this section. Review the ICD-10-CM document for the complete general coding guidelines and guidelines specific to each chapter.

In addition to the general coding guidelines, there are guidelines for specific diagnoses and/or conditions in the ICD-10-CM by chapter that, unless otherwise indicated, apply to both inpatient and outpatient settings.

Locating a Code in the ICD-10-CM

To select a code in the classification that corresponds to a diagnosis or reason for visit documented in a medical record, first locate the term in the Index, and then verify the code in the Tabular List. Read and be guided by instructional notations that appear in both the Index and the Tabular List.

It is essential to use both the Index and Tabular List when locating and assigning a code. The Index does not always provide the full code. Selection of the full code, including laterality and any applicable seventh character can only be done in the Tabular list. A dash (-) at the end of an Index entry indicates that additional characters are required. Even if a dash is not included at the Index entry, it is necessary to refer to the Tabular list to verify that no seventh character is required.

Level of Detail in Coding

Diagnosis codes are to be used and reported at their highest number of characters available.

ICD-10-CM diagnosis codes are composed of codes with three, four, five, six, or seven characters. Codes with three characters are included in ICD-10-CM as the heading of a category of codes that may be further subdivided by the use of fourth and/or fifth characters, which provide greater detail.

A three-character code is to be used only if it is not further subdivided. A code is invalid if it has not been coded to the full number of characters required for that code, including the seventh character, if applicable.

Code or Codes From A00.0 Through T88.9, Z00–Z99.8

The appropriate code or codes from A00.0 through T88.9, Z00–Z99.8 must be used to identify diagnoses, symptoms, conditions, problems, complaints, or other reason(s) for the encounter/visit.

Signs and Symptoms

Codes that describe symptoms and signs, as opposed to diagnoses, are acceptable for reporting purposes when a related definitive diagnosis has not been established (confirmed) by the provider. Chapter 18 of ICD-10-CM, Symptoms, Signs, and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified (codes R00.0–R99) contains many, but not all codes for symptoms.

EXAMPLE

Abnormal Liver Function Test would be coded R94.5

As with ICD-9-CM coding signs and symptoms should not be reported with a confirmed diagnosis if the symptom is integral to the diagnosis. For example, if the patient is experiencing ear pain and the diagnosis is otitis media, the ear pain would be integral to the otitis media and not reported. A symptom code is used with a confirmed diagnosis only when the symptom is not associated with the confirmed diagnosis. It is up to the coder to understand pathophysiology to determine as well as to query the provider when not known.

EXAMPLE

A patient is diagnosed with epigastric pain. The physician referred the patient to a gastroenterologist to rule out ulcer.

ICD-9-CM 789.06 Abdominal pain, epigastric

ICD-10-CM R10.13 Epigastric pain

Conditions that are an Integral Part of a Disease Process

Signs and symptoms that are associated routinely with a disease process should not be assigned as additional codes, unless otherwise instructed by the classification.

Conditions that are Not an Integral Part of a Disease Process

Additional signs and symptoms that may not be associated routinely with a disease process should be coded when present.

EXAMPLE

A physician diagnosed a patient with rheumatoid arthritis of the right ankle and foot who also has rheumatoid polyneuropathy. The condition is coded in ICD-10-CM using the combination code. Currently in ICD-9-CM we do not have a combination code to fully describe the condition and must use two codes when reporting this diagnosis.

ICD-9-CM 714.0 Rheumatoid arthritis

357.1 Polyneuropathy in collagen vascular disease

With ICD-10-CM a combination code is available:

ICD-10-CM M05.571 Rheumatoid polyneuropathy with rheumatoid arthritis of right ankle and foot

Multiple Coding for a Single Condition

In addition to the etiology/manifestation convention that requires two codes to fully describe a single condition that affects multiple body systems, there are other single conditions that also require more than one code. "Use additional code" notes are found in the Tabular Index at codes that are not part of an etiology/manifestation pair where a secondary code is useful to fully describe a condition. The sequencing rule is the same as the etiology/manifestation pair, "use additional code" indicates that a secondary code should be added.

For example, bacterial infections that are not included in chapter 1 may require a secondary code from category B95 Streptococcus, Staphylococcus, and Enterococcus to identify the cause of diseases classified elsewhere, or B96 Other bacterial agents as the cause of diseases classified elsewhere may be required to identify the bacterial organism causing the infection. A "use additional code" note will normally be found at the infectious disease code, indicating a need for the organism code to be added as a secondary code.

"Code first" notes are also under certain codes that are not specifically manifestation codes but may be due to an underlying cause. When there is a "code first" note and an underlying condition is present, the underlying condition should be sequenced first.

"Code, if applicable, any causal condition first," notes indicate that this code may be assigned as a principal diagnosis when the causal condition is unknown or not applicable. If a causal condition is known, then the code for that condition should be sequenced as the principal or first-listed diagnosis.

Multiple codes may be needed for late effects, complication codes and obstetric codes to more fully describe a condition. See the specific guidelines for these conditions for further instruction.

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EXAMPLE

A patient is treated by his primary care physician for impetigo manifested by otitis externa of the right ear.

The underlying condition is the impetigo and the manifestation in this example is the otitis externa.

The Impetigo is sequenced first followed by the otitis externa.

L01.00 Impetigo, unspecified

H62.41 Otitis externa in other diseases classified elsewhere, right ear

This guideline is also based on the fact that the classification has the etiology/manifestation convention that requires that the underlying etiology take sequencing precedence over the acute manifestation.

Acute and Chronic Conditions

If the same condition is described as both acute (subacute) and chronic, and separate subentries exist in the Alphabetic Index at the same indentation level, code both and sequence the acute (subacute) code first.

EXAMPLE

A patient was diagnosed with acute maxillary sinusitis that is chronic.

In ICD-10-CM both codes for the acute and chronic condition are reported.

J01 Acute sinusitis

Includes: acute abscess of sinus acute empyema of sinus acute infection of sinus acute inflammation of sinus acute suppuration of sinus

Use additional code (B95–B97) to identify infectious agent.

Excludes1: sinusitis NOS (J32.9)

Excludes2: chronic sinusitis (J32.0–J32.8)

The correct diagnosis coding and reporting is:

J01.00 Acute maxillary sinusitis, unspecified

J32.0 Chronic maxillary sinusitis

Note: There is an *Excludes2* note, which indicates that conditions listed with *Excludes2* are not considered inclusive to a code, but may coexist, and if present, should be coded as an additional code.

Combination Code

A combination code is a single code used to classify:

- Two diagnoses, or
- A diagnosis with an associated secondary process (manifestation) or
- A diagnosis with an associated complication

Combination codes are identified by referring to subterm entries in the Alphabetic Index and by reading the inclusion and exclusion notes in the Tabular List.

Assign only the combination code when that code fully identifies the diagnostic conditions involved or when the Alphabetic Index so directs. Multiple coding should not be used when the classification provides a combination code that clearly identifies all of the elements documented in the diagnosis. When the combination code lacks necessary specificity in describing the manifestation or complication, an additional code should be used as a secondary code.

Combination codes can actually help simplify the coding process by spelling out the correct clinical condition of the patient without the use of multiple codes. Combination codes can also lead to what sometimes appears to be redundant coding when multiple clinical conditions exist. For example, a patient suffering from Type 2 diabetes with mild nonproliferative diabetic retinopathy who is also experiencing diabetic dermatitis would be coded as:

E11.321 Type 2 diabetes with mild nonproliferative diabetic retinopathy and E11.620 Type 2 diabetes mellitus with diabetic dermatitis. For each diabetic condition the type of diabetes is included in the combination code.

Late Effects (Sequela)

A sequela is the residual effect (condition produced) after the acute phase of an illness or injury has terminated. There is no time limit on when a sequela code can be used. The residual may be apparent early, such as in cerebral infarction, or it may occur months or years later, such as that due to a previous injury. Coding of sequela generally requires two codes sequenced in the following order: The condition or nature of the sequela is sequenced first. The sequela code is sequenced second.

An exception to the above guidelines are those instances where the code for sequela is followed by a manifestation code identified in the Tabular List and title, or the sequela code has been expanded (at the fourth, fifth or sixth character levels) to include the manifestation(s). The code for the acute phase of an illness or injury that led to the sequela is never used with a code for the late effect.

Impending or Threatened Condition

Code any condition described at the time of discharge as "impending" or "threatened" as follows:

- If it did occur, code as confirmed diagnosis.
- If it did not occur, reference the Alphabetic Index to determine if the condition has a subentry term for "impending" or "threatened" and also reference main term entries for "Impending" and for "Threatened."
- If the subterms are listed, assign the given code.
- If the subterms are not listed, code the existing underlying condition(s) and not the condition described as impending or threatened.

Complications of Surgery and Other Medical Care

When the admission is for treatment of a complication resulting from surgery or other medical care, the complication code is sequenced as the first-listed code.

EXAMPLE

Dr. Smith performed a spinal puncture on Mr. Cartwright. The patient was doing well following surgery, but later in the evening, the patient was experiencing weakness and a loss of consciousness. The patient was rushed to the emergency room where Dr. Smith met the patient in the ER. The physician examined the patient and determined that cerebrospinal fluid (CFS) was leaking from the puncture site. The physician took the patient into a surgery suite and stopped the leak.

G97.0 Cerebrospinal fluid leak from spinal puncture

Reporting Same Diagnosis Code More than Once

Each unique ICD-10-CM diagnosis code may be reported only once for an encounter. This applies to bilateral conditions or two different conditions classified to the same ICD-10-CM diagnosis code.

For bilateral sites, the final character of the codes in the ICD-10-CM indicates laterality. An unspecified side code is also provided should the side not be identified in the medical record. If no bilateral code is provided and the condition is bilateral, assign separate codes for both the left and right side.

CODING TIP

Looking in the medical record encounter may better enable you to choose the most appropriate code selection as ICD-10-CM includes much higher levels of specificity.

Syndromes

Follow the Alphabetic Index guidance when coding syndromes. In the absence of Alphabetic Index guidance, assign codes for the documented manifestations of the syndrome.

Documentation of Complications of Care

Code assignment is based on the provider's documentation of the relationship between the condition and the care or procedure. The guideline extends to any complications of care, regardless of the chapter the code is located in. It is important to note that not all conditions that occur during or following medical care or surgery are classified as complications. There must be a cause-and-effect relationship between the care provided and the condition, and an indication in the documentation that it is a complication. Query the provider for clarification, if the complication is not clearly documented.

Principal or First-listed Diagnosis

Selection of principal diagnosis/first-listed code is based first on the conventions in the classification that provide sequencing instructions. If no sequencing instructions apply, then sequencing is based on the condition that brought the patient into the hospital or physician office, and which condition was the primary focus of treatment. Conditions present on admission that receive treatment, but that do not meet the definition of principal diagnosis, should be coded as additional codes. Additional guidelines on the selection of the principal/first-listed code include:

1. A sign or symptom code is not to be used as a principal diagnosis when a definitive diagnosis for the sign or symptom has been established.

2. A sign or symptom code is to be used as principal/first-listed if no definitive diagnosis is established at the time of coding. If the diagnosis is confirmed (eg, an X-ray confirms a fracture, pathology, or laboratory report confirms a diagnosis), prior to coding the encounter, the confirmed diagnosis code should be used.
3. If anticipated treatment is not carried out due to unforeseen circumstances, the principal diagnosis/first-listed code remains the condition or diagnosis that the provider planned to treat.
4. When the admission is for treatment of a complication resulting from surgery or other medical care, the complication code is sequenced as the principal diagnosis/first-listed code.

Review the ICD-10-CM document for complete instructions on the selection of the principal diagnosis/first-listed code.

Selection of Secondary Diagnoses

In most cases, more than one code is necessary to fully explain a healthcare encounter. Although a patient has an encounter for a principal/first-listed diagnosis, the additional conditions or reasons for the encounter also need to be coded. These codes are referred to as secondary, additional, or "other" diagnoses.

"Other diagnoses" is an additional code that affects patient care in terms of requiring clinical evaluation or therapeutic treatment or diagnostic procedures or extended length of hospital stay or increased nursing care and/or monitoring. Diagnoses that relate to an earlier episode that have no bearing on the current hospital stay are to be excluded.

Symptom Codes with Confirmed Diagnoses

Two rules apply to use the symptom codes with confirmed diagnoses: (1) a symptom code should not be used with a confirmed diagnosis if the symptom is integral to the diagnosis; (2) a symptom code should be used with a confirmed diagnosis if the symptom is not always associated with that diagnosis, such as the use of various signs and symptoms associated with complex syndromes.

Previous Conditions

Some physicians include in the diagnostic statement resolved conditions or diagnoses and status-post procedures from previous visits that have no bearing on the current treatment. Such conditions are not to be reported and are coded only if required by the hospital or physician office policy.

For example if the patient is being treated for hypertension and diabetes during the patient encounter and the patient had pneumonia which was resolved three months ago, and has no bearing on the services rendered at the visit, the pneumonia would not be reported.

Abnormal Test Findings

Abnormal test findings (laboratory, X-ray, pathologic, and other diagnostic results) are **not** coded or reported unless the physician indicates their clinical significance. If the findings are outside the normal range and the physician has ordered other tests to evaluate the condition or prescribe treatment, it is appropriate to ask the physician whether the abnormal finding should be added.

If the abnormal test finding corresponds to a confirmed diagnosis, it should not be coded in addition to the confirmed diagnosis. A sign or symptom code is to be used as principal/first-listed if no

definitive diagnosis is established at the time of coding. If the diagnosis is confirmed (eg, an X-ray confirms a fracture, a pathology or laboratory report confirms a diagnosis) prior to coding the encounter, the confirmed diagnosis code should be used.

Test Yourself #1

Fill in the blanks

1. ICD-10-CM has how many chapters? _____
2. Combination codes are a single code used to classify two diagnoses, or a diagnosis with an associated secondary process or associated _____
3. A symptom code should not be used with a _____ diagnosis if the symptom is integral to the diagnosis.
4. A late effect is the _____ effect after the acute phase of an illness or injury has terminated.
5. In ICD-10-CM a placeholder character is used for codes requiring the seventh character extender. This placeholder is represented as _____ ?
6. A _____ code is listed next to a main term in the ICD-10 index.

Chapter-Specific Coding Guidelines

In addition to general coding guidelines, there are guidelines for specific diagnoses and/or conditions in the classification. Unless otherwise indicated, these guidelines apply to all healthcare settings.

Chapter 1: Certain Infectious and Parasitic Diseases (A00–B99)

Human Immunodeficiency Virus (HIV) Infections

In ICD-10-CM there are several categories and codes to classify HIV. These categories are:

- B20 Human immunodeficiency virus (HIV) disease
- R75 Inconclusive laboratory evidence of human immunodeficiency virus (HIV)
- Z20.6 Contact with and exposure to human immunodeficiency virus [HIV]
- Z11.4 Encounter for screening for human immunodeficiency virus [HIV]
- Z71.7 Human immunodeficiency virus [HIV] counseling
- Z21 Asymptomatic human immunodeficiency virus (HIV) infection status

Code Only Confirmed Cases

Code only confirmed cases of HIV infection/illness. This is an exception to the hospital inpatient guideline found in Section II, H of the ICD-10-CM Official Guidelines.

In this context, "confirmation" does not require documentation of positive serology or culture for HIV; the provider's diagnostic statement that the patient is HIV positive, or has an HIV-related illness is sufficient.

Code B20 is for use for symptomatic HIV patients. This denotes the patient has had any of the opportunistic infections associated with HIV virus. People with advanced HIV infection are vulnerable to infections and malignancies that are called 'opportunistic infections' (OIs) because they take advantage of the opportunity offered by a weakened immune system. The code for HIV is synonymous with the term acquired immune deficiency syndrome (AIDS), and the AIDS-related complex (ARC). Review the code example below:

EXAMPLE

B20 Human immunodeficiency virus [HIV] disease

Includes: acquired immune deficiency syndrome [AIDS] AIDS-related complex [ARC] HIV infection, symptomatic

There is an instructional note to use an additional code to report any manifestation of AIDS.

Use additional code(s) to identify all manifestations of HIV infection.

Excludes1: asymptomatic human immunodeficiency virus [HIV] infection status (Z21)
exposure to HIV virus (Z20.6)
inconclusive serologic evidence of HIV (R75)

In ICD-9-CM, the appropriate code for a symptomatic HIV patient is 042 (HIV) adding an additional diagnosis code to identify the manifestations of the disease.

Note: People with HIV can get many infections (called opportunistic infections, or OIs).

Selection and Sequencing of HIV Codes

Sequencing HIV codes in ICD-10-CM is similar to ICD-9-CM. Code B20 should be sequenced as the first-listed diagnosis when the patient is treated for an HIV related condition. Any non-related conditions may also be sequenced following the related conditions. When an HIV patient is treated for an unrelated condition, the diagnosis code for the unrelated condition is listed first, followed by the HIV related diagnosis code, which is either B20 for a symptomatic patient or Z21 for an asymptomatic patient.

If a patient with HIV disease is admitted for an unrelated condition (such as a traumatic injury), the code for the unrelated condition (eg, the nature of injury code) should be the principal diagnosis. Other diagnoses would be B20 followed by additional diagnosis codes for all reported HIV-related conditions.

Whether the patient is newly diagnosed or has had previous admissions/encounters for HIV conditions is irrelevant to the sequencing decision.

Asymptomatic Human Immunodeficiency Virus

Z21 *Asymptomatic human immunodeficiency virus [HIV] infection status*, is to be applied when the patient without any documentation of symptoms is listed as being "HIV positive," "known HIV," "HIV test positive," or similar terminology. Do not use this code if the term "AIDS" is used

or if the patient is treated for any HIV-related illness or is described as having any condition(s) resulting from his or her HIV positive status; use B20 in these cases.

Code Z21 is used for reporting a patient diagnosed with HIV positive status but has never had any opportunistic infections. Once a patient has had a first opportunistic infection that patient is assigned code B20 thereafter. The draft guidelines state, "A patient should never be assigned a Z21 code, even if at a particular encounter no infection or HIV related condition is present. Codes B20 and Z21 should never appear on the same record."

EXAMPLE

Z20.6 Contact with and exposure to human immunodeficiency virus [HIV]

Excludes1: asymptomatic human immunodeficiency virus [HIV] infection status (Z21)

The crosswalk from ICD-9-CM for HIV exposure V01.79 to ICD-10-CM is Z20.6.

Confirmation of HIV status does not require documentation of positive serology or culture for HIV. Reporting is based on the physician's documentation that the patient has an HIV-related illness or is HIV positive.

EXAMPLE

A patient tested by his internist tested positive for HIV without symptoms.

Z21 Asymptomatic human immunodeficiency virus [HIV] infection status

Includes: HIV positive NOS

Excludes1: acquired immunodeficiency syndrome (B20)
contact with or exposure to human immunodeficiency virus [HIV] (Z20.6)
human immunodeficiency virus [HIV] disease (B20)
inconclusive laboratory evidence of human immunodeficiency virus [HIV] (R75)

Code Z20.6 is reported only when a patient believes he or she has been exposed to or has come into contact with the HIV virus.

Patients with inconclusive HIV serology, but no definitive diagnosis or manifestations of the illness, may be assigned code R75 *Inconclusive laboratory evidence of human immunodeficiency virus [HIV].*

Code R75 is used when a patient has an inconclusive lab finding for HIV. This code is reported for newborns of HIV positive mothers whose HIV status has not been confirmed.

EXAMPLE

R75 Inconclusive laboratory evidence of human immunodeficiency virus [HIV]

Includes: nonconclusive HIV-test finding in infants

Excludes1: asymptomatic human immunodeficiency virus [HIV] infection status (Z21)
human immunodeficiency virus [HIV] disease (B20)

Patients with any known prior diagnosis of an HIV-related illness should be coded to B20. Once a patient has developed an HIV-related illness, the patient should always be assigned code B20 on every subsequent admission/encounter. Patients previously diagnosed with any HIV illness (B20)

should never be assigned to R75 or Z21 *Asymptomatic human immunodeficiency virus [HIV] infection status*.

During pregnancy, childbirth or the puerperium, a patient admitted (or presenting for a healthcare encounter) because of an HIV-related illness should receive a principal diagnosis code of O98.7- *O98.7- Human immunodeficiency virus [HIV] disease complicating pregnancy, childbirth and the puerperium* followed by B20 and the code(s) for the HIV-related illness(es). Codes from chapter 15 always take sequencing priority.

Patients with asymptomatic HIV infection status admitted (or presenting for a healthcare encounter) during pregnancy, childbirth, or the puerperium should receive codes of O98.7- and Z21.

The specificity of the subcategory is six characters beginning with the letter O. Subcategory O98.71- is reported based on the trimester of pregnancy, whereas O98.72 is reported for HIV disease complicating childbirth and O98.73 is reported for complications of the puerperium.

Note: When a patient has HIV and is pregnant, codes from chapter 15 of ICD-10-CM, Pregnancy, childbirth and the puerperium, are always sequenced first. Code O98.7- should be sequenced first followed by the appropriate HIV code.

EXAMPLE

O98.7 Human immunodeficiency virus [HIV] disease complicating pregnancy, childbirth and the puerperium

Use additional code to identify the type of HIV disease:

Acquired immune deficiency syndrome (AIDS) (B20)

Asymptomatic HIV status (Z21)

HIV positive NOS (Z21)

Symptomatic HIV disease (B20)

O98.71 Human immunodeficiency virus [HIV] disease complicating pregnancy

O98.711 Human immunodeficiency virus [HIV] disease complicating pregnancy, first trimester

O98.712 Human immunodeficiency virus [HIV] disease complicating pregnancy, second trimester

O98.713 Human immunodeficiency virus [HIV] disease complicating pregnancy, third trimester

O98.719 Human immunodeficiency virus [HIV] disease complicating pregnancy, unspecified trimester

O98.72 Human immunodeficiency virus [HIV] disease complicating childbirth

O98.73 Human immunodeficiency virus [HIV] disease complicating the puerperium

Encounters for Testing for HIV

If a patient is being seen to determine his or her HIV status, use code Z11.4, *Encounter for screening for human immunodeficiency virus [HIV]*. Use additional codes for any associated high-risk behavior. If a patient with signs or symptoms is being seen for HIV testing, code the signs

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and symptoms. An additional counseling code Z71.7 *Human immunodeficiency virus [HIV] counseling* may be used if counseling is provided during the encounter for the test.

When a patient returns to be informed of his or her HIV test results and the test result is negative, use code Z71.7 *Human immunodeficiency virus [HIV] counseling.*

If the results are positive, see previous guidelines and assign codes as appropriate.

Test Yourself #2

1. A patient with AIDS is seen by her physician for severe dehydration. The final diagnosis by the physician is Salmonella with dehydration.

   Code(s): _____

2. Patient presents to the doctor for HIV testing.

   Code(s): _____

3. Six months ago Mary tested positive for HIV but has been symptom free. Today she presents to the physician and is diagnosed with acute tonsillitis.

   Code(s): _____

4. James was admitted with acute hepatitis A without a coma.

   Code(s): _____

5. Nancy returns to the physician today for the results of her HIV testing and the results were negative.

   Code(s): _____

Infectious Agents as the Cause of Diseases Classified to Other Chapters

Certain infections are classified in chapters other than chapter 1 and no organism is identified as part of the infection code. In these instances, it is necessary to use an additional code from chapter 1 to identify the organism.

A code from category B95 *Streptococcus, Staphylococcus, and Enterococcus as the cause of diseases* classified to other chapters, B96 *Other bacterial agents as the cause of diseases* classified to other chapters, or B97 *Viral agents as the cause of diseases classified to other chapters* is to be used as an additional code to identify the organism. An instructional note will be found at the infection code advising that an additional organism code is required.

Infections Resistant to Antibiotics

Many bacterial infections are resistant to antimicrobial drugs. It is necessary to identify all infections documented as antibiotic resistant. Assign a code from category Z16, Resistance to antimicrobial drugs, following the infection code only if the infection code does not identify drug resistance.

EXAMPLE

Z16.11 Resistance to penicillins

Z16.21 Resistance to vancomycin

A49.02 Methicillin resistant Staphylococcus aureus infection, unspecified site

Coding of Sepsis and Severe Sepsis

Sepsis, Severe Sepsis, and Septic Shock

Sepsis refers to an infection due to any organism that triggers a systemic inflammatory response, the systemic inflammatory response syndrome (SIRS). All codes with sepsis in the title include the concept of SIRS. For cases of sepsis that do not result in any associated organ dysfunction, a single code for the type of sepsis should be used.

For a diagnosis of sepsis, assign the appropriate code for the underlying systemic infection. If the type of infection or causal organism is not further specified, assign code A41.9 *Sepsis, unspecified organism*. A code from subcategory R65.2 *Severe sepsis* should not be assigned unless severe sepsis or an associated acute organ dysfunction is documented.

Negative or inconclusive blood cultures do not preclude a diagnosis of sepsis in patients with clinical evidence of the condition, however, the provider should be queried.

If a patient has sepsis and associated acute organ dysfunction or multiple organ dysfunction (MOD), follow the instructions for coding severe sepsis.

If a patient has sepsis and an acute organ dysfunction, but the medical record documentation indicates that the acute organ dysfunction is related to a medical condition other than the sepsis, do not assign a code from subcategory R65.2 *Severe sepsis*. An acute organ dysfunction must be associated with the sepsis in order to assign the severe sepsis code. If the documentation is not clear as to whether an acute organ dysfunction is related to the sepsis or another medical condition, query the provider.

Severe Sepsis

The coding of severe sepsis requires a minimum of two codes: first a code for the underlying systemic infection followed by a code from subcategory R65.2 *Severe sepsis*.

If the causal organism is not documented, assign code A41.9 *Sepsis, unspecified organism* for the infection. Additional code(s) for the associated acute organ dysfunction are also required.

Due to the complex nature of severe sepsis, some cases may require querying the provider prior to assignment of the codes.

Septic Shock

Septic shock is circulatory failure associated with severe sepsis, and it represents a type of acute organ dysfunction. For all cases of septic shock, the code for the underlying systemic infection should be sequenced first, followed by code R65.21 *Severe sepsis with septic shock* or code T81.12 *Postprocedural septic shock*. Any additional codes for the other acute organ dysfunctions should also be assigned.

Septic shock indicates the presence of severe sepsis. Code R65.21 *Severe sepsis with septic shock* must be assigned if septic shock is documented in the medical record, even if the term severe sepsis

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is not documented. Sepsis with acute organ dysfunction (severe sepsis) is common and frequently fatal and represents a significant healthcare burden. Multiple organ dysfunction is altered organ function in an acutely ill patient requiring medical intervention to achieve homeostasis.

The terms bacteremia and septicemia NOS are coded to R78.81 and A41.9. If a patient with a serious infection is documented to have septicemia the physician should be asked if the patient has sepsis. If any organ dysfunction is documented the physician should be asked if the patient has severe sepsis. Negative or inconclusive blood cultures do not preclude a diagnosis of sepsis in patients with clinical evidence of the condition.

R78.8 *Finding of other specified substances, not normally found in blood*

EXAMPLE

R78.81 Bacteremia

Excludes1: sepsis-code to specified infection (A00–B99)

The term urosepsis is a non-specific term. If a physician uses the term in a medical record he or she should be asked for which specific condition is the term being used. It should not be considered synonymous with sepsis.

Sequencing of Severe Sepsis

If severe sepsis is present on admission, and meets the definition of principal diagnosis, the underlying systemic infection should be assigned as principal diagnosis followed by the appropriate code from subcategory R65.2 as required by the sequencing rules in the Tabular List. A code from subcategory R65.2 can never be assigned as a principal diagnosis.

When severe sepsis develops during an encounter (it was not present on admission) the underlying systemic infection and the appropriate code from subcategory R65.2 should be assigned as secondary diagnoses.

Severe sepsis may be present on admission but the diagnosis may not be confirmed until sometime after admission. If the documentation is not clear whether severe sepsis was present on admission, the provider should be queried.

Sepsis and Severe Sepsis with a Localized Infection

If the reason for admission is both sepsis or severe sepsis and a localized infection, such as pneumonia or cellulitis, a code(s) for the underlying systemic infection should be assigned first and the code for the localized infection should be assigned as a secondary diagnosis. If the patient has severe sepsis, a code from subcategory R65.2 should also be assigned as a secondary diagnosis. If the patient is admitted with a localized infection, such as pneumonia, and sepsis/severe sepsis doesn't develop until after admission, the localized infection should be assigned first, followed by the appropriate sepsis/severe sepsis codes.

Sepsis Due to a Postprocedural Infection

As with all postprocedural complications, code assignment is based on the provider's documentation of the relationship between the infection and the procedure.

For such cases, the postprocedural infection code, such as, T80.2 *Infections following infusion, transfusion, and therapeutic injection*, T81.4 *Infection following a procedure*, T88.0 *Infection following immunization*, or O86.0 *Infection of obstetric surgical wound*, should be coded first, followed by the code for the specific infection. If the patient has severe sepsis the appropriate code from subcategory R65.2 should also be assigned with the additional code(s) for any acute organ dysfunction.

Postprocedural Infection and Postprocedural Septic Shock

In cases where a postprocedural infection has occurred and has resulted in severe sepsis and postprocedural septic shock, the code for the precipitating complication such as code T81.4, Infection following a procedure, or O86.0, Infection of obstetric surgical wound should be coded first, followed by R65.21, Severe sepsis with septic shock and a code for the systemic infection.

Sepsis and Severe Sepsis Associated with a Noninfectious Process (condition)

In some cases a noninfectious process (condition), such as trauma, may lead to an infection that can result in sepsis or severe sepsis. If sepsis or severe sepsis is documented as associated with a noninfectious condition, such as a burn or serious injury, and this condition meets the definition for principal diagnosis, the code for the noninfectious condition should be sequenced first, followed by the code for the resulting infection. If severe sepsis, is present a code from subcategory R65.2 should also be assigned with any associated organ dysfunction(s) codes. It is not necessary to assign a code from subcategory R65.1 Systemic inflammatory response syndrome (SIRS) of non-infectious origin, for these cases.

If the infection meets the definition of principal diagnosis it should be sequenced before the non-infectious condition. When both the associated non-infectious condition and the infection meet the definition of principal diagnosis either may be assigned as principal diagnosis.

Only one code from category R65, Symptoms and signs specifically associated with systemic inflammation and infection should be assigned. Therefore, when a non-infectious condition leads to an infection resulting in severe sepsis, assign the appropriate code from subcategory R65.2, Severe sepsis. Do not additionally assign a code from subcategory R65.1, Systemic inflammatory response syndrome (SIRS) of non-infectious origin. See Section I.C.18. SIRS due to non-infectious process.

Sepsis and SIRS

For other infections in which SIRS is present but sepsis is not in the code title, a code from subcategory R65.1, Systemic inflammatory response syndrome (SIRS), may also be assigned. For any infection, if associated organ dysfunction is present, a code from subcategory R65.2, Severe sepsis, should be used and the guidelines for coding of severe sepsis should be followed. Codes for sepsis and septic shock associated with abortion, ectopic pregnancy, and molar pregnancy are in chapter 15. Code R65.1 and a code from R65.2 should not be used together on the same record.

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EXAMPLE

Review the ICD-10-CM example of SIRS and Sepsis

R65.1- Systemic inflammatory response syndrome (SIRS)
Excludes1: sepsis-code to infection severe sepsis (R65.2)

Code first underlying condition such as:

heatstroke (T67.0)

injury and trauma (S00–T88)

R65.2- Severe sepsis Infection with organ dysfunction Code first underlying infection

Use additional code to identify specific organ dysfunction, such as: acute renal failure

(N17.-) acute renal failure

(J96.0-) acute respiratory failure

(G72.81) critical illness myopathy

(G93.41) encephalopathy (metabolic) (septic)

(D65) disseminated intravascular coagulopathy [DIC]

(G62.81) critical illness polyneuropathy

(K72.0-) hepatic failure

Methicillin Resistant Staphylococcus aureus (MRSA) Conditions

Combination Codes for MRSA Infection

When a patient is diagnosed with an infection that is due to methicillin resistant Staphylococcus aureus (MRSA), and that infection has a combination code that includes the causal organism assign the appropriate combination code for the condition. Do not assign B95.62 *Methicillin resistant Staphylococcus aureus infection as the cause of diseases classified elsewhere*, as an additional code because the combination code includes the type of infection and the MRSA organism. Do not assign a code from subcategory Z16.11, Resistance to penicillins, as an additional diagnosis.

EXAMPLE

A41.02 Sepsis due to Methicillin resistant Staphylococcus aureus

Other Codes for MRSA Infection

When there is documentation of a current infection due to MRSA, and that infection does not have a combination code that includes the causal organism, assign the appropriate code to identify the condition along with code B95.62 *Methicillin resistant Staphylococcus aureus infection as the cause of diseases classified elsewhere* for the MRSA infection. Do not assign a code from subcategory Z16.11, Resistance to penicillins.

Methicillin Susceptible Staphylococcus Aureus (MSSA) and MRSA Colonization

The condition or state of being colonized or carrying MSSA or MRSA is called colonization or carriage, while an individual person is described as being colonized or being a carrier. Colonization means that MSSA or MSRA is present on or in the body without necessarily causing illness. A

positive MRSA colonization test might be documented by the provider as "MRSA screen positive" or "MRSA nasal swab positive".

Assign code Z22.322 *Carrier or suspected carrier of Methicillin resistant Staphylococcus aureus* for patients documented as having MRSA colonization. Assign code Z22.321 *Carrier or suspected carrier of Methicillin susceptible Staphylococcus aureus* for patient documented as having MSSA colonization. Colonization is not necessarily indicative of a disease process or as the cause of a specific condition the patient may have unless documented as such by the provider.

MRSA Colonization and Infection

If a patient is documented as having both MRSA colonization and infection during a hospital admission, code Z22.322 *Carrier or suspected carrier of Methicillin resistant Staphylococcus aureus* and a code for the MRSA infection may both be assigned.

Test Yourself #3

1. Tim is diagnosed today with viral gastroenteritis. _____
2. SIRS with acute respiratory failure due to bacterial meningitis. _____
3. Sepsis due to puncture wound of the lower back and pelvis without a foreign body, initial encounter. _____
4. Timmy presents to his pediatrician with gastrointestinal complaints. His physician diagnosed him with rotaviral enteritis. _____
5. Tina was treated at her doctor's office for warts on her hands. _____

ICD-10-CM Chapter 2: Neoplasms (C00–D49)

ICD-10-CM chapter 2 contains codes for most benign and malignant neoplasms. There is no morphology table found in ICD-10-CM, rather, morphology is built into the codes themselves. The International Classification of Diseases for Oncology (ICD-3-O) provides additional information on morphology not included in ICD-10-CM. Morphology codes are used principally in tumor or cancer registries for coding the site (topography) and the histology (morphology) of neoplasms, usually obtained from a pathology report.

ICD-3-O uses a multi-axial classification of the site, morphology, behavior, and grading of neoplasms.

The topography axis uses the ICD-10 classification of malignant neoplasms (except those categories which relate to secondary neoplasms and to specified morphological types of tumors) for all types of tumors, thereby providing greater site detail for non-malignant tumors than is provided in ICD-10. In contrast to ICD-10, the ICD-O includes topography for sites of hematopoietic and reticuloendothelial tumors.

The morphology axis provides five-digit codes ranging from M-8000/0 to M-9989/3. The first four digits indicate the specific histological term. The fifth digit after the slash (/) is the behavior code, which indicates whether a tumor is malignant, benign, in situ, or uncertain (whether benign or malignant).

A separate one-digit code is also provided for histologic grading (differentiation).

To properly code neoplasms, the documentation in the medical record must indicate if the neoplasm is benign, in situ, malignant, or of uncertain histologic behavior. If there is a malignancy, the secondary (metastatic) site should also be reported as it is currently with ICD-9-CM.

As in ICD-9-CM there is a separate Table of Neoplasms. The codes should be selected from the table. The guidelines in ICD-10-CM state; "If the histology (cell type) of the neoplasm is documented, that term should be referenced first, in the main section of the Index, rather than going immediately to the Neoplasm Table, in order to determine which column in the Neoplasm Table is appropriate."

EXAMPLE

A physician diagnosed a 54-year-old female patient with adenocarcinoma of the breast, lower outer quadrant of the left side. The physician's documentation indicated it as the primary site. The alphabetic index should be reviewed prior to referencing the Neoplasm Table.

The first step is to reference the Alphabetic Index:

Adenocarcinoma—*see also Neoplasm, malignant*

The Alphabetic Index identifies adenocarcinoma as a malignancy reported by site. The coder then will reference the Neoplasm Table for selection of the correct code. Review an example from the Neoplasm Table for ICD-10-CM.

The Neoplasm Table provides proper coding based on the histology of the neoplasm by site. The Tabular List should be referenced to verify that the correct code has been selected and a more specific code does not exist.

	Malignant Primary	Malignant Secondary	Malignant Ca in situ	Benign	Uncertain Behavior	Unspecified
Breast, central portion (unspecified side),	C50.119	C79.81	D05.90	D24.9	D48.60	D49.3
left side, female breast	C50.112	C79.81	D05.92	D24.2	D48.62	D49.3
right side, female breast	C50.111	C79.81	D05.91	D24.1	D48.61	D49.3
ectopic sites (unspecified side),	C50.819	C79.81	D05.90	D24.9	D48.60	D49.3
left side, female breast	C50.812	C79.81	D05.92	D24.2	D48.62	D49.3
right side, female breast	C50.811	C79.81	D05.91	D24.1	D48.61	D49.3
inner upper (unspecified side), female breast	C50.219	C79.81	D05.90	D24.9	D48.60	D49.3
left side, female breast	C50.212	C79.81	D05.92	D24.2	D48.62	D49.3
right side, female breast	C50.211	C79.81	D05.91	D24.1	D48.61	D49.3
lower outer (unspecified side), female breast	C50.519	C79.81	D05.90	D24.9	D48.60	D49.3
left side, female breast	C50.512	C79.81	D05.92	D24.2	D48.62	D49.3
right side, female breast	C50.511	C79.81	D05.91	D24.1	D48.61	D49.3

Comparison between ICD-9-CM and ICD-10-CM:

ICD-9-CM

174.5 Malignant neoplasm of lower-outer quadrant of female breast (Primary site)

ICD-10-CM

C50.512 Malignant neoplasm lower-outer quadrant of female breast left side (Primary site)

You will notice the correct diagnosis code for this example is C50.512 *Adenocarcinoma of the left side, lower outer quadrant of female breast, malignant, primary site*, which is found in the first column.

The Neoplasm Table provides proper coding based on the histology of the neoplasm by site. The Tabular list should be referenced to verify that the correct code has been selected and a more specific code does not exist.

Review the Tabular List Example:

C50.519 Malignant neoplasm of lower-outer quadrant of female breast, unspecified side

C50.511 Malignant neoplasm of lower-outer quadrant of right female breast

C50.512 Malignant neoplasm of lower-outer quadrant of left female breast

Chapter 2 of the ICD-10-CM contains the codes for most benign and all malignant neoplasms. Certain benign neoplasms, such as prostatic adenomas, may be found in the specific body system chapters.

Follicular lymphoma is coded by grade.

Low Grade or Indolent

These types of lymphomas are slow growing. However they are not considered curable. Treatment is often deferred in favor of a watch and wait approach if the patient is asymptomatic. This may last for many years in some patients. When treatment is required it is often recommended to use the least toxic approach possible and to save more aggressive therapies for when they are really needed. Indolent lymphomas are characterized by a pattern of watch and wait followed by relapse and treatment.

Intermediate Grade

Most intermediate lymphomas are treated as aggressive even though they are less rapidly growing. Some of these types are curable.

High Grade or Aggressive

These lymphoma's grow very rapidly and require a more aggressive therapy approach. It is this rapid growth pattern that makes these lymphoma's curable in 30-60% of patients.

Follicular lymphomas are the most common of the low-grade lymphomas and comprise about 25% of all lymphomas. Follicular lymphoma is often graded on a scale from 1 to 3, which designates how many large cells (centroblasts) are found in a high power field. Large follicular cells are generally more aggressive and therefore while a true Grade 3 follicular lymphoma is not common they do have a shorter natural history and more aggressive behavior.

A centroblast is a general term encompassing both large and small noncleaved follicular center cells.

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The grades are defined as:

- Grade 1: 0-5 centroblasts per high power field
- Grade 2: 6-15 centroblasts per high power field
- Grade 3: >15 centroblasts per high power field

In order to code follicular lymphomas we need to understand not only the grades but also what lymph nodes are affected.

EXAMPLE

C82.14 Follicular lymphoma grade II, lymph nodes of axilla and upper limb

Primary Malignant Neoplasms Overlapping Site Boundaries

A primary malignant neoplasm that overlaps two or more contiguous (next to each other) sites should be classified to the subcategory/code .8 ('overlapping lesion'), unless the combination is specifically indexed elsewhere. For multiple neoplasms of the same site that are not contiguous such as tumors in different quadrants of the same breast, codes for each site should be assigned.

Malignant Neoplasm of Ectopic Tissue

Malignant neoplasms of ectopic tissue are to be coded to the site mentioned, eg, ectopic pancreatic malignant neoplasms are coded to pancreas, unspecified (C25.9).

The neoplasm table in the Alphabetic Index should be referenced first. However, if the histological term is documented, that term should be referenced first, rather than going immediately to the Neoplasm Table to determine which column in the Neoplasm Table is appropriate. For example, if the documentation indicates "adenoma," refer to the term in the alphabetic Index to review the entries under this term and the instructional note to "see also neoplasm, by site, benign." The table provides the proper code based on the type of neoplasm and the site. It is important to select the proper column in the table that corresponds to the type of neoplasm. The Tabular should then be referenced to verify that the correct code has been selected from the table and that a more specific site code does not exist.

If the reason for the encounter is to diagnose when malignancy may be present, assign a code(s) for sign(s)/symptom(s) unless confirmation of the diagnosis is made. Confirmation of a malignancy should be assigned when there is confirmation from an outpatient visit in the medical record or pathology report.

EXAMPLE

During a routine examination, the physician found a suspicious breast mass in the left breast of a female patient who has a history of breast cancer of the right breast. The physician scheduled a biopsy in the outpatient surgery department at the hospital.

In ICD-10-CM two codes would be reported; one for the lump in the breast and the secondary diagnosis for the personal history:

N63 Unspecified lump in breast
includes: nodule(s) NOS in breast

Z85.3 Personal history of primary malignant neoplasm of breast

See Section I.C.21. Factors influencing health status and contact with health services, Status, for information regarding Z15.0 *Codes for genetic susceptibility to cancer.*

If the treatment is directed at the malignancy, designate the malignancy as the principal diagnosis. The only exception to this guideline is if a patient admission/encounter is solely for the administration of chemotherapy, immunotherapy or radiation therapy, assign the appropriate Z51.0- code as the first-listed or principal diagnosis, and the diagnosis or problem for which the service is being performed as a secondary diagnosis.

EXAMPLE

A patient underwent removal of the upper lobe of the left lung due to lung cancer after a mass was discovered during CT scan.

The category to report is C34.1 Malignant neoplasm of upper lobe, bronchus or lung. The code is further divided by laterality right or left.

C34.10 Malignant neoplasm of upper lobe, unspecified bronchus or lung

C34.11 Malignant neoplasm of upper lobe, right bronchus or lung

C34.12 Malignant neoplasm of upper lobe, left bronchus or lung

The correct code to report is C34.12 *Malignant neoplasm of upper lobe left lung.*

When a patient is admitted because of a primary neoplasm with metastasis and treatment is directed toward the secondary site only, the secondary neoplasm is designated as the principal diagnosis even though the primary malignancy is still present.

EXAMPLE

A patient was diagnosed with a malignant cancer of pancreatic duct with metastasis to liver. The patient is being treated for the liver cancer.

C78.7 Secondary malignant neoplasm of liver

C25.3 Malignant neoplasm of pancreatic duct

Coding and sequencing of complications associated with the malignancies or with the therapy thereof are subject to the following guidelines:

When admission/encounter is for management of an anemia associated with the malignancy, and the treatment is only for anemia, the appropriate code for the malignancy is sequenced as the principal or first-listed diagnosis followed by code D63.0 *Anemia in neoplastic disease*. This is a new coding concept under ICD-10-CM. There is an instructional note under D63.0 that states to code first the neoplasm (C00–D49).

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EXAMPLE

A patient was diagnosed with a malignancy of the frontal lobe. The patient was also suffering from anemia due to the tumor.

Code D63.0 Anemia in neoplastic disease

Manifestation code (secondary)

Coding conventions require neoplasm code sequenced first and anemia, D63.0 sequenced second; therefore the correct order and codes for the above example is:

C71.1 Malignant neoplasm of frontal lobe

D63.0 Anemia in neoplastic disease

When the admission/encounter is for management of an anemia associated with chemotherapy, immunotherapy or radiotherapy and the only treatment is for the anemia, the anemia is sequenced first followed by code T45.1X5A *Adverse effect of antineoplastic and immunosuppressive drugs, initial encounter.* The appropriate neoplasm code should be assigned as an additional code.

EXAMPLE

A 48-year-old female patient was treated for anemia due to chemotherapy for a malignancy of the frontal lobe.

D64.81 Anemia due to antineoplastic chemotherapy

T45.1X5A Adverse effect of antineoplastic and immunosuppressive drugs, initial encounter

C71.1 Malignant neoplasm of frontal lobe

When the admission/encounter is for the management of an anemia associated with an adverse effect of radiotherapy, the anemia code should be sequenced first, followed by the appropriate neoplasm code and code Y84.2 *Radiological procedure and radiotherapy as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure.*

When the admission/encounter is for management of dehydration due to the malignancy or the therapy, or a combination of both, and only the dehydration is being treated (intravenous rehydration), the dehydration is sequenced first, followed by the code(s) for the malignancy.

EXAMPLE

A patient was admitted to the hospital for rehydration following chemotherapy for a malignancy of the ethmoidal sinus

E86.0 Dehydration

C31.1 Malignant neoplasm of ethmoidal sinus

When the admission/encounter is for treatment of a complication resulting from a surgical procedure, designate the complication as the principal or first-listed diagnosis if treatment is directed at resolving the complication.

EXAMPLE

A patient was treated for sepsis following surgery for the removal of a malignant tumor of the lateral wall of the bladder.

T81.4XXA Infection following a procedure

Note the last character "A" is used to identify the initial encounter.

T81.4- is selected since it identifies in the code description:

Sepsis following a procedure

C67.2 Malignant neoplasm of lateral wall of bladder

When a primary malignancy has been previously excised or eradicated from its site and there is no further treatment directed to that site and there is no evidence of any existing primary malignancy, a code from category Z85, Personal history of primary and secondary malignant neoplasm, should be used to indicate the former site of the malignancy.

Any mention of extension, invasion, or metastasis to another site is coded as a secondary malignant neoplasm to that site. The secondary site may be the principal or first-listed with the Z85 code used as a secondary code.

Episode of Care Involves Surgical Removal of Neoplasm

When an episode of care involves the surgical removal of a neoplasm, primary or secondary site, followed by adjunct chemotherapy or radiation treatment during the same episode of care, the neoplasm code should be assigned as principal or first-listed diagnosis, using codes in the C00–D49 series or where appropriate in the C83–C90 series.

If a patient admission/encounter is solely for the administration of chemotherapy, immunotherapy or radiation therapy assign code Z51.0 *Encounter for antineoplastic radiation therapy,* or Z51.11 *Encounter for antineoplastic chemotherapy*, or Z51.12 *Encounter for antineoplastic immunotherapy* as the first-listed or principal diagnosis. If a patient receives more than one of these therapies during the same admission more than one of these codes may be assigned, in any sequence.

EXAMPLE

A patient returns for outpatient chemotherapy following an oophorectomy for removal of a malignant tumor of the left ovary.

Z51.11 Chemotherapy session for neoplasm

C56.2 Malignant neoplasm of left ovary

Z90.721 Acquired absence of ovaries, unilateral

The malignancy for which the therapy is being administered should be assigned as a secondary diagnosis.

When a patient is admitted for the purpose of radiotherapy, immunotherapy, or chemotherapy and develops complications such as uncontrolled nausea and vomiting or dehydration, the principal or first-listed diagnosis is Z51.0 *Encounter for antineoplastic radiation therapy*, or Z51.11 *Encounter for antineoplastic chemotherapy*, or Z51.12 *Encounter for antineoplastic immunotherapy* followed by any codes for any complications.

EXAMPLE

A patient was experiencing nausea and vomiting following radiation therapy for treatment of a malignant tumor or the parathyroid gland.

Z51.0 Encounter for antineoplastic radiation therapy

C75.0 Malignant neoplasm of parathyroid gland

R11.2 Nausea with vomiting, unspecified

When the reason for admission/encounter is to determine the extent of the malignancy, or for a procedure such as paracentesis or thoracentesis, the primary malignancy or appropriate metastatic site is designated as the principal or first-listed diagnosis, even though chemotherapy or radiotherapy is administered.

EXAMPLE

A physician removed a malignant tumor from the descending colon in the outpatient surgery center. The physician recommended, and the patient underwent, chemotherapy the same day.

C18.6 Malignant neoplasm of descending colon

Z51.11 Encounter for antineoplastic chemotherapy

Symptoms, signs, and ill-defined conditions listed in chapter 18 characteristic of, or associated with, and existing primary or secondary site malignancy cannot be used to replace the malignancy as principal or first-listed diagnosis, regardless of the number of admissions or encounters for treatment and care of the neoplasm. Reference "Factors influencing health status and contact with health services," encounter for prophylactic organ removal.

A patient may have more than one malignant tumor in the same organ. These tumors may represent different primaries or metastatic disease, depending on the site. Should the documentation be unclear, the provider should be queried as to the status of each tumor so that the correct codes can be assigned.

Code C80.0 *Disseminated malignant neoplasm, unspecified* is for use only in those cases where the patient has advanced metastatic disease and no known primary or secondary sites are specified. It should not be used in place of assigning codes for the primary site and all known secondary sites.

Code C80.1 *Malignant neoplasm, unspecified* equates to cancer, unspecified. This code should only be used when no determination can be made as to the primary site of a malignancy. This code should rarely be used in the inpatient setting.

Coding Malignant Neoplasms of the Skin

Multiple code subcategories exist for coding malignant neoplasms of the skin in ICD-10-CM. Category C43 contains codes for malignant melanoma of the skin. The subcategories break down by site and laterality, when applicable.

EXAMPLE

A patient returns to the dermatologist's office after a biopsy of a mole on her back. She is diagnosed with malignant melanoma of the back.

C43.59 Malignant melanoma of other part of trunk

Category C44 contains codes for basal cell, squamous cell, other, and unspecified malignant neoplasms of the skin. The subcategories break down by type of malignancy, site, and laterality, when applicable.

EXAMPLE

A patient returns to the dermatologist to discuss removal of his SCC on his right ear.

C44.222 Squamous cell carcinoma of right ear and external auricular canal

Sequencing of Neoplasm Codes

If the reason for the encounter is for treatment of a primary malignancy, assign the malignancy as the principal/first-listed diagnosis. The primary site is to be sequenced first, followed by any metastatic sites.

When an encounter is for a primary malignancy with metastasis and treatment is directed toward the metastatic (secondary) site(s) only, the metastatic site(s) is designated as the principal/first-listed diagnosis. The primary malignancy is coded as an additional code.

Codes from chapter 15, Pregnancy, childbirth, and the puerperium, are always sequenced first on a medical record. A code from subcategory O9A.1- Malignant neoplasm complicating pregnancy, childbirth and the puerperium should be sequenced first, followed by the appropriate code from chapter 2 to identify the neoplasm.

When an encounter is for management of a complication associated with a neoplasm, such as dehydration, and the treatment is only for the complication, the complication is coded first, followed by the appropriate code(s) for the neoplasm.

When an encounter is for treatment of a complication resulting from a surgical procedure performed for the treatment of the neoplasm, designate the complication as the principal/first-listed diagnosis. See the guideline regarding the coding of a current malignancy versus personal history to determine if the code for the neoplasm should also be assigned.

When an encounter is for a pathological fracture due to a neoplasm, if the focus of treatment is the fracture, a code from subcategory M84.5, Pathological fracture in neoplastic disease, should be sequenced first, and followed by the code for the neoplasm.

If the focus of treatment is the neoplasm with an associated pathological fracture, the neoplasm code should be sequenced first, followed by a code from subcategory M84.5 for the pathological fracture. The "code also" note at M84.5 provides this sequencing instruction.

EXAMPLE

A patient is treated for a pathologic fracture of the right tibia, due to a neoplasm of the right tibia.

M84.561A Pathological fracture in neoplastic disease, right tibia

C40.21 Malignant neoplasm of long bones of right lower limb

Note: The seventh character "A" identifies the initial patient encounter for the condition.

When a primary malignancy has been excised but further treatment, such as an additional surgery for the malignancy, radiation therapy or chemotherapy is directed to that site, the primary malignancy code should be used until treatment is completed.

When a primary malignancy has been previously excised or eradicated from its site, there is no further treatment (of the malignancy) directed to that site, and there is no evidence of any existing primary malignancy, a code from category Z85, Personal history of primary and secondary malignant neoplasm, should be used to indicate the former site of the malignancy. *See Section I.C.21. Factors influencing health status and contact with health services, History (of).*

EXAMPLE

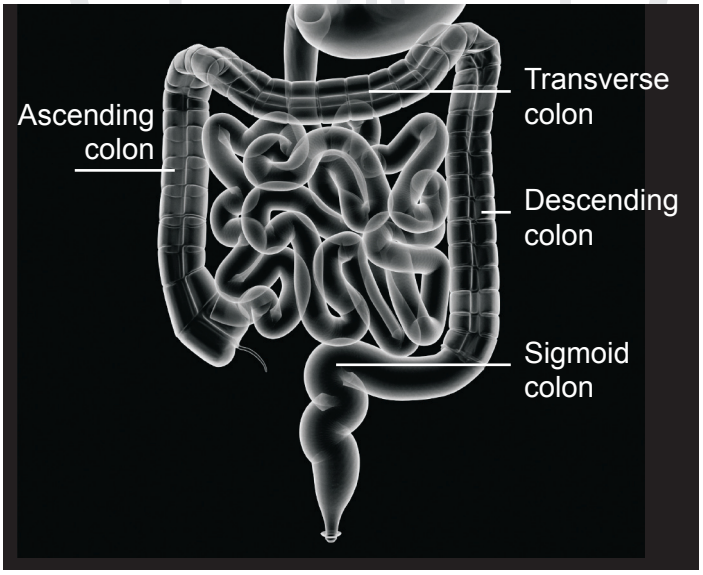
A 56-year-old male was seen in follow up following removal of the prostate three years ago for a malignancy.

Z85.46 Personal history of primary malignant neoplasm of prostate

The categories for leukemia, and category C90, Multiple myeloma and malignant plasma cell neoplasms, have codes for in remission. There are also codes Z85.6 *Personal history of leukemia and Z85.79 Personal history of other malignant neoplasms of lymphoid, hematopoietic and related tissues*. If the documentation is unclear as to whether the patient is in remission, the provider should be queried.

For coding neoplasms of the colon we need to have a good understanding of anatomy as the codes are broken down by site. Clinicians usually document in centimeters and not always by terms. Coders need to understand how the colon is broken down in order to assign the most appropriate codes.

The colon is also called the large intestine. The ileum (last part of the small intestine) connects to the cecum (first part of the colon) in the lower right abdomen.



The rest of the colon is divided into four parts:

- The ascending colon travels up the right side of the abdomen.
- The transverse colon runs across the abdomen.
- The descending colon travels down the left abdomen.
- The sigmoid colon is a short curving of the colon, just before the rectum.

There are two flexures associated with the colon:

- The hepatic or right colic flexure
- The splenic or left colic flexure

A flexure is a normal bend or curve in a body part.

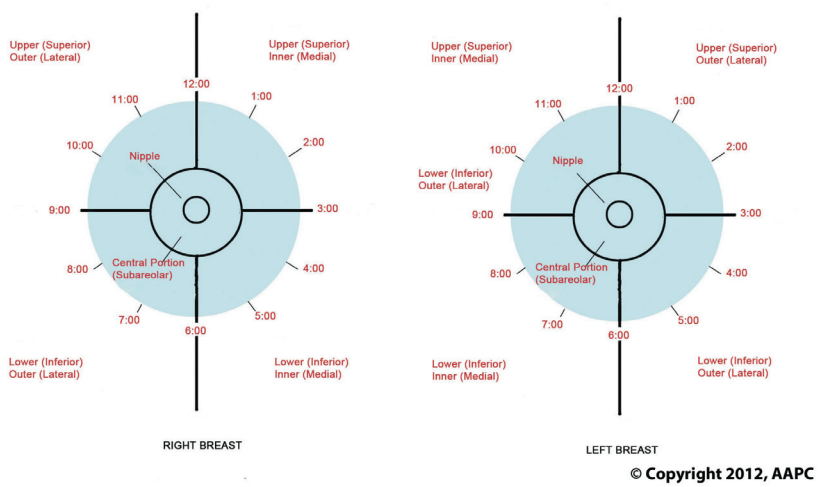
EXAMPLE

Jim is being seen for a neoplasm located at the hepatic flexure. His pathology report came back benign.

D12.3 Benign neoplasm of the transverse colon

In order to assign codes for the neoplasm of the breast it is important to understand the quadrants of the breast.

Clock and Quadrants of the Breast



Test Yourself #4

1. Personal history of liver cancer. _____
2. Malignant neoplasm of the lower segment of the uterus, primary. _____
3. Primary cancer of the vulva. _____
4. Metastatic lung cancer, right lower lobe, spread from the liver with treatment directed to the lung. _____
5. Tammy was treated at her dermatologist for basal cell carcinoma of the skin of the chin. _____

Chapter 3: Diseases of the Blood and Blood-forming Organs and Certain Disorders Involving the Immune Mechanism (D50–D89)

Reserved for future guideline expansion.

Currently there are no chapter specific coding guidelines for Diseases of the Blood and Blood-forming Organs and Certain Disorders Involving the Immune Mechanism. This chapter includes codes from D50–D89.

An Excludes2 note precludes the codes from this chapter to indicate that certain disease processes or illnesses from other chapters can be coded if both conditions do exist. This includes:

Autoimmune disease (systemic) NOS (M35.9)

Certain conditions originating in the perinatal period (P00–P96)

Complications of pregnancy, childbirth and the puerperium (O00–O9A)

Congenital malformations, deformations, ad chromosomal abnormalities (Q00–Q99)

Endocrine, nutritional and metabolic diseases (E00–E88)

Human immunodeficiency virus (HIV) disease (B20)

Injury, poisoning and certain other consequences of external causes (S00–T88)

Neoplasms (C00–D49)

Symptoms, signs and abnormal clinical laboratory findings, not elsewhere classified (R00–R94)

Nutritional anemias (D50–D53) refer to those types of anemia that can be directly attributed to nutritional disorders.

EXAMPLE

After laboratory testing Tina was determined to suffer from Biermer anemia and is scheduled to receive vitamin B12 injections.

D51.0 Vitamin B12 deficiency anemia due to intrinsic factor deficiency.

Hemolytic anemia is a condition in which there are not enough red blood cells in the blood, due to the premature destruction of red blood cells (D55–D59).

Aplastic and other anemias and other bone marrow failure syndromes (D60–D64) contain codes for conditions such as red cell aplasia, anemia in neoplastic diseases and other anemias. For anemia in chronic diseases classified elsewhere there is an instructional note that indicates to code first neoplasm (C00–D49) for subcategory D63.0 and a code first underlying chronic kidney disease (CKD) (N18-) for subcategory D63.1.

EXAMPLE

Jennifer was being treated for stage 4 chronic kidney disease when she developed erythropoietin resistant anemia.

N18.4 Chronic kidney disease, stage 4
D63.1 Anemia in chronic kidney disease

Other disorders of blood and blood-forming organs (D70–D77) includes categories for Neutropenia (D70), other disorders of white blood cells (D7-), diseases of the spleen (D73) and other conditions.

EXAMPLE

Patient presents with fatigue, weight loss, and being unable to eat large meals. He also complains of discomfort in the upper, left side of the abdomen. The provider performs an exam and orders an ultrasound. The diagnosis is enlarged spleen.

D73.1 Hypersplenism

Category D78 includes diagnostic codes for intraoperative and postprocedural complications of the spleen.

Test Yourself #5

1. Sideropenic dysphagia is included in the ICD-10-CM category of _____ anemia.
    a. Vitamin B12 deficiency
    b. Blood loss
    c. Phosphate dehydrogenase deficiency
    d. Iron deficiency anemia
2. A patient diagnosed with Beta thalassemia minor should be coded:
    a. D56.1
    b. D57.419
    c. D56.3
    d. D57.40
3. Posthemorrhagic anemia, acute
    a. D50.0
    b. P61.3
    c. D61.01
    d. D62
4. Patient with thyroid cancer has fever and found to have chemo drug induced agranulocytosis
    a. D72.0, T36.91XA, C73, R50.81
    b. D70.1, T45.1X1A, C73
    c. R50.81, J34.81, K92.81
    d. D70.1, T45.1X5A, C73, R50.81

5. Patient is diagnosed with leukocytosis
    a. D72.810
    b. D72.829
    c. D72.819
    d. D72.823

Chapter 4: Endocrine, Nutritional, and Metabolic Diseases (E00–E89)

Diabetes Mellitus

Within this category are the following blocks:

- E00–E07 Disorders of the thyroid gland
- E08–E13 Diabetes mellitus
- E15–E16 Other disorders of glucose regulation and pancreatic internal secretion

As of 2007, an estimated 23.6 million people in the United States had diabetes mellitus, of which approximately 1 million have type 1 diabetes and most of the rest have type 2 diabetes. A third group that was designated as "other specific types" by the Diabetes Association (ADA) number only in the thousands. Among these are the rare monogenic defects of either B cell function or of insulin action, primary diseases of the exocrine pancreas, endocrinopathies, and medication-induced diabetes.

Diabetes mellitus is a syndrome with disordered metabolism and inappropriate hyperglycemia due to either a deficiency of insulin secretion or to a combination of insulin resistance and inadequate insulin secretion to compensate. Type 1 diabetes is due to pancreatic islet B cell destruction predominantly by an autoimmune process, and these patients are prone to ketoacidosis. Type 2 diabetes is the more prevalent form and results from insulin resistance with a defect in compensatory insulin secretion.

Type 1 diabetes:

- Polyuria, polydipsia, and weight loss associated with random plasma glucose ≥ 200 mg/dL.
    - Polyuria is a fairly common symptom, which is often noticed when you have to get up to use the bathroom at night.
    - Polydipsia is an increased fluid intake because of pathologically excessive thirst.
- Plasma glucose of ≥ 126 mgdL after an overnight fast, on more than one occasion.
- Ketonemia, ketonuria, or both.
    - Ketonemia is the presence of detectable levels of ketone bodies in the plasma.
    - Ketonuria is a medical condition in which ketone bodies are present in the urine.
    - Islet autoantibodies are frequently present.

Type 2 diabetes:

- Most patients are over 40 years of age and obese.
- Polyuria and polydipsia.
- Ketonuria and weight loss generally are uncommon at time of diagnosis.
- Candidal vaginitis in women may be an initial manifestation.
- Many patients have few or no symptoms.
- Plasma glucose of ≥ 126 mgdL after an overnight fast on more than one occasion. After 75 g oral glucose, diagnostic values are ≥ 200 mg/dL 2 hours after the oral glucose.
- Hypertension, dyslipidemia, and atherosclerosis are often associated.

Other diabetes:

Account for very few of the diabetic cases. Contributing factors can be other diseases causing diabetes (secondary) or due to medications among others.

The creation of these expanded combination codes allow for multiple conditions to be reported with fewer codes. In order to assign the most appropriate codes the type of diabetes is referenced first.

For example in ICD-9-CM code 250.51 Diabetes with **ophthalmic manifestations, type I** [juvenile type], **not stated as uncontrolled**

In ICD-10 CM the concept of controlled and uncontrolled does not exist, the ophthalmic conditions are expanded as well.

E10.311 **Type 1 diabetes mellitus** with **unspecified diabetic retinopathy with macular edema**

E10.319 Type 1 diabetes mellitus with unspecified diabetic retinopathy **without macular edema**

E10.36 Type 1 diabetes mellitus **with diabetic cataract**

E10.39 Type 1 diabetes mellitus **with other diabetic ophthalmic complication**

E10.321 Type 1 diabetes mellitus w**ith mild nonproliferative diabetic retinopathy with macular edema**

E10.329 Type 1 diabetes mellitus **with mild nonproliferative diabetic retinopathy without macular edema**

E10.331 Type 1 diabetes mellitus **with moderate nonproliferative diabetic retinopathy with macular edema**

E10.339 Type 1 diabetes mellitus **with moderate nonproliferative diabetic retinopathy without macular edema**

E10.341 Type 1 diabetes mellitus **with severe nonproliferative diabetic retinopathy with macular edema**

E10.349 Type 1 diabetes mellitus **with severe nonproliferative diabetic retinopathy without macular edema**

E10.351 Type 1 diabetes mellitus **with proliferative diabetic retinopathy with macular edema**

E10.359 Type 1 diabetes mellitus **with proliferative diabetic retinopathy without macular edema**

092513

The biggest change in the guidelines from ICD-9-CM to ICD-10-CM is coding for Diabetes Mellitus. This is due to the creation of combination codes that are heavily used in coding for diabetes conditions.

Diabetes Mellitus codes in ICD-10-CM are combination codes that include:

- Type of diabetes mellitus
- Body system affected, and;
- The complications affecting that body system

There are five diabetes mellitus categories in the ICD-10-CM. They are:

- E08 Diabetes mellitus due to an underlying condition
- E09 Drug or chemical induced diabetes mellitus
- E10 Type 1 diabetes mellitus
- E11 Type 2 diabetes mellitus
- E13 Other specified diabetes mellitus

All the categories above with the exception of E10 include a note directing users to use an additional code to identify any insulin use, which is Z79.4. The concept of insulin and non-insulin requiring are not a component of the diabetes mellitus (DM) categories in ICD-10-CM. Code Z79.4 *Long-term current use of insulin* is added to identify the use of insulin for diabetic management even if the patient is not insulin dependent in code categories E08–E09 and E11–E13.

The fourth character under these categories refers to underlying conditions with specified complications, whereas, the fifth character defines the specific manifestation such as neuropathy, angiopathy, etc.

EXAMPLE

A 45-year-old diabetic patient returns to his physician's office for a 3-month follow-up visit. The patient has no complaints. After an expanded problem-focused history and physical examination, the physician documents in the medical record, "diabetes well controlled with Lantus, diet, and exercise. Patient will continue with same medication dosage, monitor glucose levels with home monitoring system, and return in 3 months for recheck."

E11.9 Type 2 diabetes mellitus without complications

Z79.4 Long-term (current) use of insulin

Definitions for the types of diabetes mellitus are included in the "Includes notes" under each DM category. Sequencing of diabetes codes from categories E08–E09 have a "Code first" note indicating that diabetes is to be sequenced after the underlying condition, drug or chemical that is responsible for the diabetes. Codes from categories E10–E13 (diabetes mellitus) are sequenced first, followed by codes for any additional complications outside of these categories if applicable.

The diabetes mellitus codes are combination codes that include the type of DM, the body system affected, and the complications affecting that body system. As many codes within a particular category as are necessary to describe all of the complications of the disease may be used. They should be sequenced based on the reason for a particular encounter. Assign as many codes from categories E08–E13 as needed to identify all of the associated conditions that the patient has.

EXAMPLE

A Type 1 diabetic patient with Kimmelstiel-Wilson disease visited his endocrinologist in follow-up.

E10.21 Type 1 diabetes mellitus with diabetic nephropathy

Type 1 diabetes mellitus with Kimmelstiel-Wilson disease

EXAMPLE

A patient with Type 1 diabetes has developed moderate nonproliferative diabetic retinopathy.

E10.339 Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema

Type of Diabetes

The age of a patient is not the sole determining factor, though most Type 1 diabetics develop the condition before reaching puberty. For this reason Type 1 diabetes mellitus is also referred to as juvenile diabetes.

Type of Diabetes Mellitus Not Documented

If the type of diabetes mellitus is not documented in the medical record the default is E11.- *Type 2 diabetes mellitus*.

Diabetes Mellitus and the Use of Insulin

If the documentation in a medical record does not indicate the type of diabetes but does indicate that the patient uses insulin, code E11, Type 2 diabetes mellitus and code Z79.4 *Long-term (current) use of insulin*. Code Z79.4 should not be assigned if insulin is given temporarily to bring a Type 2 patient's blood sugar under control during an encounter.

Diabetes Mellitus in Pregnant Patient

Codes for pregnancy, childbirth, and the puerperium, which are located in chapter 15 of ICD-10-CM, are always sequenced first on the medical record. A patient who has a pre-existing DM who becomes pregnant should be assigned a code from category O24 Diabetes Mellitus in Pregnancy, Childbirth, and the Puerperium followed by the diabetes code from chapter 4 of ICD-10-CM. These codes have been expanded in ICD-10-CM. The fourth character subcategory codes identify the type of diabetes as pre-existing Type 1 or Type 2, unspecified, or gestational.

The fifth character indicates whether the diabetes is treated during pregnancy, childbirth, or the puerperium. The sixth character indicates the trimester during which treatment is sought. With gestational diabetes the sixth character identifies whether the gestational diabetes is diet-controlled, insulin controlled, or unspecified control.

EXAMPLE

A 25-year-old patient with diabetes mellitus Type 1 in her second trimester at 18 weeks visited her OB/GYN for her routine follow-up visit. The patient's blood sugar was well controlled and the patient indicated she was doing well with her diet and exercise regimen. The physician scheduled the patient for follow up for one month.

O24.012 Pre-existing diabetes mellitus, Type 1, in pregnancy, second trimester

Z3A.18 18 weeks gestation of pregnancy

092513

EXAMPLE

A 27-year-old patient developed gestational diabetes in her third trimester at 32 weeks 3/7 days. The patient's condition is controlled with diet and exercise.

O24.410 Gestational diabetes mellitus in pregnancy

Z3A.32 32 weeks gestation of pregnancy

Note: See Section I.C.15. *Diabetes mellitus in pregnancy*, and section I.C.15. *Gestational (pregnancy induced) diabetes.*

Secondary Diabetes Mellitus

Codes under categories E08, Diabetes mellitus due to underlying condition and E09, Drug or chemical induced diabetes mellitus, identify complications/manifestations associated with secondary diabetes mellitus. Secondary diabetes is always caused by another condition or event (eg, cystic fibrosis, malignant neoplasm of pancreas, pancreatectomy, adverse effect of drug, or poisoning).

For patients who routinely use insulin, code Z79.4 *Long-term (current) use of insulin* should also be assigned. Code Z79.42 should not be assigned if insulin is given temporarily to bring a patient's blood sugar under control during an encounter.

For post-pancreatectomy diabetes mellitus, assign code E89.1 *Postprocedural hypoinsulinemia*. Assign a code from category E13 and a code from subcategory Z90.41-, Acquired absence of pancreas, as additional codes.

Complications Due to Insulin Pump Malfunction

An underdose of insulin due to an insulin pump failure should be assigned to a code from subcategory T85.6 *Mechanical complication of other specified internal and external prosthetic devices, implants and grafts* that specifies the type of pump malfunction, as the principal or first-listed code, followed by code T38.3x6- *Underdosing of insulin and oral hypoglycemic [antidiabetic] drugs*. Additional codes for the type of diabetes mellitus and any associated complications due to the underdosing should also be assigned.

The principal or first-listed code for an encounter due to an insulin pump malfunction resulting in an overdose of insulin, should also be T85.6- *Mechanical complication of other specified internal and external prosthetic devices, implants and grafts followed by code T38.3x1- Poisoning by insulin and oral hypoglycemic [antidiabetic] drugs, accidental (unintentional).*

Overweight, obesity and other hyperalimentation (E65-E68)

	BMI
Underweight	Below 18.5
Normal	18.5–24.9
Overweight	25.0–29.9
Obesity	30.0 and Above

Understanding BMI will help you to determine the parameters of the difference between overweight and obesity.

In ICD-10-CM overweight and obesity are separated by coding. The coding for obesity includes the cause of the obesity such as obesity due to excess calories, drug induced and with alveolar hypoventilation. Correct coding of obesity include the cause and if the obesity is considered morbid. A secondary code for the Body Mass Index (BMI) should also be used when the codes for overweight or obesity are used.

EXAMPLE

A 28 year-old patient presents for consultation for bariatric surgery. Physician has documented that the patient was counseled on controlling her calories and set up with a dietician so that she can learn to eat right to see if the patient can lose some weight. Patient states she eats in excess of 3000 calories a day and does not exercise. Her weight is 290 pounds and BMI is documented at 37.

E66.01 Morbid obesity due to excess calories

Z68.37 Body mass index (BMI) 37.0-37.9, adult

Test Yourself #6

1. A patient with Type 1 diabetes with diabetic retinopathy is seen for an eye checkup. After a thorough examination, the ophthalmologist determines the patient has retinal edema. _____
2. Type 1 diabetic patient is brought to the ER by ambulance in a coma. Patient is pale, rapid heartbeat, and their face is covered in sweat. Physician finds the insulin pump not delivering insulin and after reviewing the lab's diagnosis the patient with diabetic ketoacidosis with coma. _____
3. Ms. B has Type 1 diabetes without complications. _____
4. Emily has a deficiency of vitamin C. _____
5. 40 year-old Tim's diet has him morbidly obese with a BMI of 47.6. _____

Chapter 5: Mental, Behavioral and Neurodevelopmental Disorders (F01–F99)

Mental and Behavioral Disorders Due to Psychoactive Substance Use

Selection of codes for "In remission" for categories F10–F19 requires the provider's clinical judgment. The appropriate codes for "In remission" are assigned only on the basis of provider documentation. Working with providers will be essential to correctly assign codes in these categories.

When the provider documentation refers to use, abuse and dependence of the same substance (eg, alcohol, opioid, cannabis, etc), only one code should be assigned to identify the pattern based on hierarchy:

- If both use and abuse are documented, assign only the code for abuse
- If both abuse and dependence are documented, assign only the code for dependence
- If both use and dependence are documented, assign only the code for dependence
- If use, abuse and dependence are all documented, assign only the code for dependence

As with all other diagnoses, the codes for psychoactive substance use (F10.9-, F11.9-, F12.9-, F13.9-, F14.9-, F15.9-, F16.9-) should only be assigned based on provider documentation and when they meet the definition of a reportable diagnosis. These codes are only to be used when the psychoactive substance use is associated with a mental or behavioral disorder, and such a relationship is documented by the provider.

EXAMPLE

Patient presents to ED with obvious disinhibition and aggression after showing impaired judgment in a bar. He was brought in by some friends because he kept repeating the same questions and was diagnosed with acute alcohol intoxication with delirium.

F10.121 Alcohol abuse with intoxication delirium

The expansion of mental and behavioral disorders due to psychoactive substance use in the block F10–F19 has created more complete clinical pictures. The third character indicates the substance used, the fourth and fifth characters the psychopathological syndrome, eg, from acute intoxication and residual states; this allows the reporting of all disorders related to a substance even when only three-character categories are used.

EXAMPLE

Jim presented to his physician with complaints of hearing voices and delusions of control. He is diagnosed with delusion disorder.

F22 Delusional disorders

The subcategories that cover schizophrenia, schizotypal states and delusional disorders (F20–F29) has been expanded by the introduction of new categories such as undifferentiated schizophrenia, postschizophrenic depression, and schizotypal disorder.

EXAMPLE

F22 Delusional disorders

Delusional dysmorphophobia

Involutional paranoid state

Paranoia

Paranoia querulans

Paranoid psychosis

Paranoid state

Paraphrenia (late)

Sensitiver Beziehungswahn

Excludes1 mood (affective) disorders with psychotic symptoms (F30.2, F31.2, F31.5, F31.64, F32.3, F33.3)

Excludes2 Paranoid personality disorder (F60.0)

Paranoid psychosis, psychogenic (F23)

Paranoid reaction (F23)

Mental and behavioral disorders are frequent and can be grave in their consequences and cause suffering to hundreds of millions of people worldwide.

Schizophrenia

Schizophrenia is a complex illness. Mental health experts are not sure what causes it. However, genes may play a role. Schizophrenia affects both men and women equally. It usually begins in the teen years or young adulthood, but it may begin later in life. It tends sometimes to begin later in women, and is more mild.

Childhood-onset schizophrenia begins after age 5. Childhood schizophrenia is rare and can be hard to tell apart from other developmental problems in childhood, such as autism. Schizophrenia makes it hard to:

- Tell the difference between what is real and not real
- Think clearly
- Have normal emotional responses
- Act normally in social situations

Coding for schizophrenia in ICD-10-CM includes the type such as paranoid, disorganized, catatonic, undifferentiated or residual.

EXAMPLE

F20.2 Catatonic schizophrenia

There are schizotypal disorders as well. These include borderline, latent, prepsychotic and schizotypal personality disorders among others.

Depression

Depression alone affects over 20 million people in the United States. Depression is a disorder of the brain. There are a variety of causes, including genetic, environmental, psychological, and biochemical factors. Depression usually starts between the ages of 15 and 30, and is much more common in women.[1] Depression can also be referred to clinically as Clinical depression, Dysthymic disorder, Major depressive disorder or Unipolar depression.

Depression is a mental illness that can be costly and debilitating to sufferers. Depression can adversely affect the course and outcome of common chronic conditions, such as arthritis, asthma, cardiovascular disease, cancer, diabetes, and obesity. Depression also can result in increased work absenteeism, short-term disability, and decreased productivity.

Understanding the condition is necessary in ICD-10-CM to assign the most appropriate codes. In ICD-10-CM depression is classified by episodes in addition to types such as mild, moderate, severe, and with or without psychotic features.

The ICD-10 classification of Mental and Behavioral Disorders developed in part by the American Psychiatric Association classifies depression by code. In typical, mild, moderate, or severe depressive episodes the patient suffers from lowering of mood, reduction of energy and decrease

[1] www.nlm.nih.gov/medlineplus/depression.html

in activities. Their capacity for enjoyment, interest, and concentration is reduced and is marked by tiredness after even a minimum of effort is common. Sleep patterns are usually disturbed and appetite diminished along with reduced self-confidence and self-esteem. Depending on the number and severity of the symptoms, a depressive episode may be specified as mild, moderate, or severe.

For mild depressive episodes two or three symptoms from the data below are usually present.

A. The general criteria for depressive episode must be met.

B. At least two of the following three symptoms must be present:

   a. Depressed mood to a degree that is definitely abnormal to the individual, present for most of the day and almost every day, largely uninfluenced by circumstances, and sustained for at least two weeks

   b. Loss of interest or pleasure in activities that are normally pleasurable

   c. Decreased energy or increased fatiguability

C. An additional symptom or symptoms from the following list should be present to give a total of at least four:

   a. Loss of confidence or self-esteem

   b. Unreasonable feelings of self-reproach or excessive and inappropriate guilty

   c. Recurrent thoughts of death or any suicidal behavior

   d. Complaints or evidence of diminished ability to think or concentrate, such as indecisiveness or vacillation

   e. Change in psychomotor activity, with agitation or retardation (either subjective or objective)

   f. Sleep disturbance of any type

   g. Change in appetite (decrease or increase) with corresponding weight change

For moderate depressive episodes four or more of the symptoms noted above are usually present and the patient is likely to have great difficulty in continuing with ordinary activities.

For severe depressive episodes without psychotic symptoms, several of the above symptoms are marked and distressing—typically loss of self-esteem and ideas of worthiness or guilt. Suicidal thoughts and acts are common and a number of somatic symptoms are usually present.

Agitated Depression

Major depression } single episode without psychotic symptoms

Vital Depression

ICD-10-CM also includes codes for recurrent depressive disorders as well as those in remission or partial remission.

A recurrent depressive disorder is characterized by repeated episodes of depression without any history of independent episodes of mood elevation and increased energy or mania. There has been at least one previous episode lasting a minimum of two weeks and separated by the current episode of at least two months. At no time in the past has there been any hypomanic or manic episodes.

For a classification of in remission the patient has had two or more depressive episodes in the past but has been free from depressive symptoms for several months. This category can still be used if the patient is receiving treatment to reduce the risk of further episodes.

ICD-10-CM EXAMPLES

F33.0 Major depressive disorder, recurrent, mild

F33.41 Major depressive disorder, recurrent, in partial remission

Bipolar disorder is a serious mental illness. People who have it experience dramatic mood swings. They may go from overly energetic, "high" and/or irritable, to sad and hopeless, and then back again. They often have normal moods in between. The up feeling is called mania. The down feeling is depression.

Bipolar disorder can run in families. It usually starts in late adolescence or early adulthood.[2] Repeated episodes of hypomania or mania only are classified as bipolar. It includes manic-depressive illness, psychosis or reaction.

In ICD-10-CM bipolar is classified as to whether the patient's current episode is currently hypomanic, manic and with or without psychotic symptoms.

A hypomanic episode is characterized by a persistent mild elevation of mood, increased energy and activity, and usually marked by feelings of well being and both physical and mental efficiency. Increased sociability, talkativeness, overfamiliarity and increased sexual energy and a decreased need for sleep are often present.

A manic episode is characterized by mood that is elevated out of keeping with the patient's circumstances and may vary from carefree joviality to almost uncontrollable excitement. Elation is accompanied by increased energy, resulting in over-activity, pressure of speech, and a decreased need for sleep. Attention cannot be sustained and there is often distractibility. Loss of social inhibitions may result in behavior that is reckless, foolhardy or inappropriate to the circumstances and out of character for the patient. In some manic episodes the mood is one of irritability or suspiciousness rather than elation.

Bipolar II is similar to bipolar I disorder, with moods cycling between high and low over time.

However, in bipolar II disorder, the "up" moods never reach full-on mania. The less-intense elevated moods in bipolar II disorder are called hypomanic episodes, or hypomania.

A person affected by bipolar II disorder has had at least one hypomanic episode in life. Most people with bipolar II disorder also suffer from episodes of depression. This is where the term "manic depression" comes from. In between episodes of hypomania and depression, many people with bipolar II disorder live normal lives.

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[2] www.nlm.nih.gov/medlineplus/bipolardisorder.html

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ICD-10-CM EXAMPLES

F31.11 Bipolar disorder, current episode manic without psychotic features, mild

F31.64 Bipolar disorder, current episode mixed, severe, with psychotic features

F31.81 Bipolar II disorder

Cyclothymia is a persistent instability of mood involving numerous periods of depression and mild elation, none of which is sufficiently severe or prolonged to justify a diagnosis of bipolar or recurrent depressive disorders. This disorder is often found in the relatives of patients with bipolar disorder, some eventually develop bipolar disorders themselves.

Dysthymia is a chronic depression of mood, lasting at least several years, it is not severe and episodes are not prolonged enough to justify a diagnosis of severe, moderate or mild recurrent depressive disorders.

ICD-10-CM EXAMPLES

F34.0 Cyclothmyic disorder

F34.1 Dysthymic disorder

Behavioral Syndromes Associated with Physiological Disturbances and Physical Factors

ICD-10-CM contains coding for eating disorders, sleep disorders that are not due to a substance or known physiological conditions and sexual dysfunction that is not due to a substance or known physiological condition. They type of the disorder is needed for coding.

EXAMPLES

F50.02 Anorexia nervosa, binge eating/purging type

F51.12 Insufficient sleep syndrome

F52.0 Hypoactive sexual desire disorder

Intellectual Disabilities

An intellectual disability, also known as mental retardation, is a term that is used when there are limits to the ability to learn at an expected level and function in daily life. Levels of intellectual disability vary greatly in children. Children with intellectual disability might have a hard time letting others know their wants and needs, and taking care of themselves. An intellectual disability could cause a child to learn and develop more slowly than other children of the same age and it could take longer for a child to learn to speak, walk, dress, or eat without help, and they could have trouble learning in school.

An intellectual disability can be caused by a problem that starts any time before a child turns 18 years old or even before birth. Some of the most common known causes of an intellectual disability —like Down syndrome, fetal alcohol syndrome, fragile X syndrome, genetic conditions, birth defects, and infections—happen before birth. Others happen while a baby is being born or soon after birth. Still other causes of intellectual disability do not occur until a child is older; these might include serious head injury, stroke, or certain infections.

To code for these types of intellectual disorders you would first code any associated physical or developmental disorders and then follow with the code for the intellectual disorder. Intellectual disabilities is coded by stage, such as mild, moderate, severe, and profound. Staging is determined by IQ levels.

EXAMPLE

F72 Severe intellectual disability

IQ level 20-25 to 35-40

Severe mental subnormality

There are other pervasive developmental disorders as well that include autistic disorders, Asperger's syndrome and such.

For patients suffering from behavioral and emotional disorders with the onset usually occurring in childhood and adolescence the conditions are captured in F90-F98.

ADHD is a problem with inattentiveness, over-activity, impulsivity, or a combination. For these problems to be diagnosed as ADHD, they must be out of the normal range for a child's age and development.

ADHD is the most commonly diagnosed behavioral disorder of childhood. It affects about 3 - 5% of school-aged children. ADHD is diagnosed much more often in boys than in girls.

ADHD may run in families, but it is not clear exactly what causes it. Whatever the cause may be, it seems to be set in motion early in life as the brain is developing.

Depression, lack of sleep, learning disabilities, tic disorders, and behavior problems may be confused with, or appear with, ADHD.

Coding for ADHD is broken down as to if the condition is predominately hyperactive or inattentive or the combined type.

EXAMPLE

F90.2 Attention-deficit hyperactivity disorder, combined type

For emotional disorders with the onset specific to childhood codes include concepts for Tourette's disorder, reactive attachment disorders, and other behavioral and emotional disorders.

EXAMPLE

F98.3 Pica of infancy and childhood

Pain Disorders Related to Psychological Factors

Assign code F45.41, for pain that is exclusively related to psychological disorders. As indicated by the Excludes1 note under category G89, a code from category G89 should not be assigned with code F45.41.

Code F45.42 *Pain disorders with related psychological factors* should be used with a code from category G89, Pain, not elsewhere classified, if there is documentation of a psychological component for a patient with acute or chronic pain.

EXAMPLE

A patient is treated by her psychiatrist for chronic pain syndrome that is psychological in nature.

F45.42 Pain disorder with related psychological factors

Code also associated acute or chronic pain (G89.-)

G89.4 Chronic pain syndrome

The subcategories F60–F69 contain a number of new disorders of adult behavior such as pathological gambling, fire-setting, and stealing, as well as the more traditional disorders of personality.

EXAMPLE

F63.0 Pathological gambling

Compulsive gambling

Excludes1 gambling and betting NOS (Z72.6)

Excludes2 excessive gambling by manic patients (F30, F31)
gambling in antisocial personality disorder (F60.2)

Test Yourself #7

1. Epileptic psychosis. _____
2. Marijuana abuse with marijuana induced anxiety disorder. _____
3. Persistent somatoform pain disorder. _____
4. Sonny has been a one pack per day cigarette smoker for over 29 years. His physician prescribes him smoking cessation medication. _____

Chapter 6: Diseases of Nervous System (G00–G99)

Epilepsy

Epilepsy (also called seizure disorder) is a condition in which clusters of nerve cells in the brain signal abnormally causing seizures that affect mental and physical functions. The Center for Disease Control (CDC) estimates that about 2 million people in the United States have epilepsy and nearly 140,000 Americans develop the condition each year. Epilepsy is the fourth most common neurological disorder in the U.S. after migraine, stroke, and Alzheimer's disease.

Seizures are divided into two major categories- focal (partial) seizures and generalized seizures. Focal seizures only occur in one part of the brain, while generalized seizures occur in both sides of the brain. About 60 percent of epileptics have focal seizures. Focal seizures include:

- Simple, in which the patient remains conscious, but experiences sensations and feelings that are abnormal; and
- Complex, in which the patient has a change in or loss of consciousness.

Generalized seizures include:

- Absence seizures (petit mal), in which the patient may appear to stare into space and/or have twitching muscles
- Tonic seizures, in which the patient has stiffening of muscles of the body (usually back, legs, and arms)
- Clonic seizures, in which the patient has repeated jerking movements of muscles on both sides of the body
- Tonic-clonic seizures (grand mal), in which the patient has a mixture of symptoms
- Myoclonic seizures, in which the patient has jerks and twitches of the upper body, arms, or legs
- Atonic seizures, in which the patient has a loss of normal muscle tone

Status epilepticus is diagnosed when a seizure lasts an abnormally long time. This can be a life-threatening issue. There is no time limit definition, but is generally defined when the seizure lasts longer than 5 minutes, according to the National Institute of Neurologic Disorders and Stroke.

Category G40 contains the codes for epilepsy. The subcategories are broken down by syndrome, seizure type, intractable/not intractable, and with/without status epilepticus.

The subcategories are as follows:

G40.0- Localization-related idiopathic epilepsy and epileptic syndromes with seizures of localized onset

G40.1- Localization-related symptomatic epilepsy and epileptic syndrome with simple partial seizures

G40.2- Localization-related symptomatic epilepsy and epileptic syndromes with complex partial seizures

G40.3- Generalized idiopathic epilepsy and epileptic syndromes

G40.A- Absence epileptic syndrome

G40.B- Juvenile myoclonic epilepsy

G40.4- Other generalized epilepsy and epileptic syndromes

G50.5- Epileptic seizures related to external causes

G40.8- Other epilepsy and recurrent seizures

G40.9- Epilepsy, unspecified

Dominant/Nondominant Side

Codes from category G81, Hemiplegia and hemiparesis, and subcategories, G83.1 Monoplegia of lower limb, G83.2 Monoplegia of upper limb, and G83.3 Monoplegia, unspecified identify whether the dominant or nondominant side is affected. Should the affected side be documented, but is not specified as dominant or nondominant and the classification does not indicate a default, code selection is as follows:

- For ambidextrous patients, the default should be dominant
- If the left side is affected, the default is non-dominant
- If the right side is affected, the default is dominant

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Pain—Category G89

General Coding Information

Codes in category G89, Pain, not elsewhere classified, may be used in conjunction with codes from other categories and chapters to provide more detail about acute or chronic pain and neoplasm-related pain, unless otherwise indicated below.

If the pain is not specified as acute or chronic, post-thoracotomy, postprocedural, or neoplasm-related, do not assign codes from category G89.

A code from category G89 should not be assigned if the underlying (definitive) diagnosis is known, unless the reason for the encounter is pain control/management and not management of the underlying condition.

When an admission or encounter is for a procedure aimed at treating the underlying condition (eg, spinal fusion, kyphoplasty), a code for the underlying condition (eg, vertebral fracture, spinal stenosis) should be assigned as the principal diagnosis. No code from category G89 should be assigned.

Category G89 Codes as Principal or First-Listed Diagnosis

Category G89 codes are acceptable as principal diagnosis or the first-listed code:

- When pain control or pain management is the reason for the admission/encounter (eg, a patient with displaced intervertebral disc, nerve impingement and severe back pain presents for injection of steroid into the spinal canal). The underlying cause of the pain should be reported as an additional diagnosis, if known.
- When a patient is admitted for the insertion of a neurostimulator for pain control, assign the appropriate pain code as the principal or first-listed diagnosis. When an admission or encounter is for a procedure aimed at treating the underlying condition and a neurostimulator is inserted for pain control during the same admission/encounter, a code for the underlying condition should be assigned as the principal diagnosis and the appropriate pain code should be assigned as a secondary diagnosis.

Use of Category G89 Codes in Conjunction with Site-Specific Pain Code

Assigning Category G89 and Site-Specific Pain Codes

Codes from category G89 may be used in conjunction with codes that identify the site of pain (including codes from chapter 18) if the category G89 code provides additional information. For example, if the code describes the site of the pain, but does not fully describe whether the pain is acute or chronic, then both codes should be assigned.

Sequencing of Category G89 Codes with Site-Specific Pain Codes

The sequencing of category G89 codes with site-specific pain codes (including chapter 18 codes), is dependent on the circumstances of the encounter/admission as follows:

- If the encounter is for pain control or pain management, assign the code from category G89 followed by the code identifying the specific site of pain (eg, encounter for pain management for acute neck pain from trauma is assigned code G89.11 *Acute pain due to trauma* followed by code M54.2 *Cervicalgia* to identify the site of pain).

- If the encounter is for any other reason except pain control or pain management, and a related definitive diagnosis has not been established (confirmed) by the provider, assign the code for the specific site of pain first, followed by the appropriate code from category G89.

See Section I.C.19. Pain due to medical devices.

Postoperative Pain

The provider's documentation should be used to guide the coding of postoperative pain, as well as Section III. Reporting Additional Diagnoses and Section IV. Diagnostic Coding and Reporting in the Outpatient Setting.

The default for post-thoracotomy and other postoperative pain not specified as acute or chronic is the code for the acute form. Routine or expected postoperative pain immediately after surgery should not be coded.

Postoperative Pain Not Associated with Specific Postoperative Complication

Postoperative pain not associated with a specific postoperative complication is assigned to the appropriate postoperative pain code in category G89.

Postoperative Pain Associated with Specific Postoperative Complication

Postoperative pain associated with a specific postoperative complication (such as painful wire sutures) is assigned to the appropriate code(s) found in chapter 19, Injury, poisoning, and certain other consequences of external causes. If appropriate, use additional code(s) from category G89 to identify acute or chronic pain (G89.18 or G89.28).

Chronic Pain

Chronic pain is classified to subcategory G89.2. There is no time frame defining when pain becomes chronic pain. The provider's documentation should be used to guide use of these codes.

Neoplasm Related Pain

Code G89.3 is assigned to pain documented as being related, associated or due to cancer, primary or secondary malignancy, or tumor. This code is assigned regardless of whether the pain is acute or chronic.

This code may be assigned as the principal or first-listed code when the stated reason for the admission/encounter is documented as pain control/pain management. The underlying neoplasm should be reported as an additional diagnosis.

When the reason for the admission/encounter is management of the neoplasm and the pain associated with the neoplasm is also documented, code G89.3 may be assigned as an additional diagnosis. It is not necessary to assign an additional code for the site of the pain.

Chronic Pain Syndrome

Central pain syndrome (G89.0) and chronic pain syndrome (G89.4) are different than the term "chronic pain," and the codes should only be used when the provider has specifically documented this condition. See Section I.C.5. Pain disorders related to psychological factors.

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Chronic pain syndrome (CPS) is a common problem that presents a major challenge to healthcare providers because of its complex natural history, unclear etiology, and poor response to therapy. CPS is a poorly defined condition.

Headaches

The National Headache Foundation estimates that 28 million Americans suffer from migraines. More women than men get migraines and a quarter of all women with migraines suffer four or more attacks a month; 35% experience 1-4 severe attacks a month, and 40% experience one or less than one severe attack a month. Each migraine can last from four hours to three days. Occasionally, it will last longer.

Symptoms that signal the onset of a migraine are used to describe two types of migraine.

- Migraine with aura (known as "classic" migraine)
- Migraine without aura (known as "common" migraine)

An "aura" is a physiological warning sign that a migraine is about to begin. Migraines with auras occur in about 20%-30% of migraine sufferers. An aura can occur one hour before the attack of pain and last from 15 to 60 minutes. The symptoms always last less than one hour. Visual auras include:

- Bright flashing dots or lights
- Blind spots
- Distorted vision
- Temporary vision loss
- Wavy or jagged lines

There are also auras that can affect the other senses. These auras can be described simply as having a "funny feeling," or the person may not be able to describe the aura. Other auras may include ringing in the ears, or having changes in smell, taste or touch.

Status migrainosus refers to a rare and severe type of migraine that can last 72-hours or longer. The pain and nausea are so intense that people who have this type of headache often need to be hospitalized. Certain medications, or medication withdrawal, can cause this type migraine syndrome.

ICD-10-CM classifies migraines to the type, such as hemiplegic, chronic, persistent, ophthalmoplegic, menstrual and abdominal among others. In order to appropriately code migraines in ICD-10-CM you need to understand the type as well as complications that are inherent to migraines.

- Hemiplegic migraines are a very serious and rare type of migraine. The symptoms can range from concerning to debilitating, and the severity can vary from each episode. The patient may experience extreme pain and minor paralysis during one episode and then during the next they may experience minor pain with extreme paralysis. Symptoms usually last from 5–60 minutes.
- Chronic migraines are classified by the International Headache Society as a migraine that occurs greater than 15 days per month for at least 3 months.
- Persistent migraines are migraines that last more than three months and occur daily from within three days of onset.

- Ophthalmoplegic migraines are also referred to as ocular migraines as the patient experiences pain around the eyes. It may cause dilated pupils and an inability to move the eyes without experiencing pain. These migraines are rare, and most commonly occur in children.
- Menstrual migraines are primarily caused by estrogen. When the levels of estrogen change in female patients, they become more vulnerable to these types of headaches. The most common time for these migraines to occur is before, during or immediately after the period, or during ovulation.
- Abdominal migraines are very rare in adults and mostly affect children between the ages of 5–9. These types are very hard to diagnose because the patient may only experience pain in the abdomen without having a headache. Often, children do not know how to express themselves and it is hard for them to understand what is happening.

EXAMPLE

G43.831 Menstrual migraine, intractable, with status migrainosus

Test Yourself #8

1. Patient presents with pain associated with his primary lung cancer of the left upper lobe. _____
2. Encounter for pain management for acute neck pain from trauma. _____
3. Three-month-old Susan suffers from Leigh's disease. _____
4. Peter suffers from spastic quadriplegic cerebral palsy since birth. _____
5. Jim suffers from paralysis of his upper right arm. He is left handed. _____

Chapter 7: Diseases of Eye and Adnexa (H00–H59)

Glaucoma

Glaucoma is an eye condition that develops when too much fluid pressure builds up inside of the eye. The condition tends to be inherited and may not show up until later in life.

The increased pressure, called intraocular pressure, can damage the optic nerve, which transmits images to the brain. If damage to the optic nerve from high eye pressure continues, glaucoma will cause loss of vision. Without treatment, glaucoma can cause total permanent blindness within a few years.

Open-angle glaucoma. Also called wide-angle glaucoma, this is the most common type of glaucoma. The structures of the eye appear normal, but fluid in the eye does not flow properly through the drain of the eye, called the trabecular meshwork.

Angle-closure glaucoma. Also called acute or chronic angle-closure or narrow-angle glaucoma, this type of glaucoma is less common, but can cause a sudden buildup of pressure in the eye. Drainage may be poor because the angle between the iris and the cornea (where a drainage channel

for the eye is located) is too narrow. Or, the pupil opens too wide, narrowing the angle and blocking the flow of the fluid through that channel.

Glaucoma is covered with codes assigned from H40–H42 and includes choices for type of glaucoma and laterality.

Assigning Glaucoma Codes

Assign as many codes from category H40, Glaucoma, as needed to identify the type of glaucoma, the affected eye, and the glaucoma stage.

Bilateral Glaucoma with Same Type and Stage

When a patient has bilateral glaucoma and both eyes are documented as being the same type and stage, and there is a code for bilateral glaucoma, report only the code for the type of glaucoma, bilateral, with the seventh character for the stage.

When a patient has bilateral glaucoma and both eyes are documented as being the same type and stage, and the classification does not provide a code for bilateral glaucoma (ie, subcategories H40.10, H40.11 and H40.20) report only one code for the type of glaucoma with the appropriate seventh character for the stage.

EXAMPLE

During examination of his eyes, Tim's doctor noted that the fluid in his eyes was not properly flowing though the trabecular meshwork. He was diagnosed with bilateral primary open-angle glaucoma. The patient was unable to perform the visual field test, so the stage is unable to be determined at this visit.

H40.11X4 Primary open-angle glaucoma, indeterminate stage

Bilateral Glaucoma Stage with Different Types or Stages

When a patient has bilateral glaucoma and each eye is documented as having a different type or stage, and the classification distinguishes laterality, assign the appropriate code for each eye rather than the code for bilateral glaucoma.

EXAMPLE

Patient presents with bilateral low-tension glaucoma, mild stage in the right eye and moderate stage in the left eye.

H40.1222 Low-tension glaucoma, left eye, moderate stage

H40.1211 Low-tension glaucoma, right eye, mild stage

When a patient has bilateral glaucoma and each eye is documented as having a different type, and the classification does not distinguish laterality (ie, subcategories H40.10, H40.11 and H40.20), assign one code for each type of glaucoma with the appropriate seventh character for the stage.

When a patient has bilateral glaucoma and each eye is documented as having the same type, but different stage, and the classification does not distinguish laterality (ie, subcategories H40.10, H40.11 and H40.20), assign a code for the type of glaucoma for each eye with the seventh character for the specific glaucoma stage documented for each eye.

Patient Admitted with Glaucoma and Stage Evolves During the Admission

If a patient is admitted with glaucoma and the stage progresses during the admission, assign the code for highest stage documented.

Indeterminate Stage Glaucoma

Assignment of the seventh character "4" for "indeterminate stage" should be based on the clinical documentation. The seventh character "4" is used for glaucomas whose stage cannot be clinically determined. This seventh character should not be confused with the seventh character "0", unspecified, which should be assigned when there is no documentation regarding the stage of the glaucoma.

Seventh character extensions are required on subcategories H40.1-, H40.2-, H40.3-, H40.4-, H40.5-, and H40.6- to designate the stage of glaucoma. The stages are mild, moderate, severe, indeterminate, and unspecified.

Disorders of eyelid, lacrimal, system and orbit include codes from categories H00–H05 include hordeolum and chalazion as well as other disorders of the eyelid. Codes found in this category include laterality.

EXAMPLE

Bob was experiencing painful, erythematous, and localized pain of the right eyelid with edema of the upper lid. The physician diagnosed the patient with hordeolum externum.

H00.011 Hordeolum externum right upper eyelid

Disorders of the conjunctiva are coded based on laterality with codes from H10–H11. Disorders coded to this category include conjunctivitis, pingueculitis, pterygium, edema and cysts among others.

Disorders of the sclera, cornea, iris and ciliary body (H15–H22) include many conditions such as scleritis, corneal ulcers, keratoconjunctivitis, keratoconus, iridocyclitis, degenerations and pupillary abnormalities.

Disorders of the lens (H25–H28) include the many types of cataracts. Type of cataracts and laterality are key for proper code assignment.

Cataracts

A cataract is a clouding of the lens of the eye. The lens is a portion of the eye that is normally clear that assists in focusing rays of light entering the eye onto the retina. In an eye without a cataract, light passes through the transparent lens to the retina. If the lens is cloudy from a cataract, the image striking the retina will be blurry and the vision will be blurry. It is like looking through a fogged up window.

Cataract types include:

- Nuclear—affect the center of the lens
- Cortical—affect the edges of the lens
- Posterior/Anterior subcapsular—occurs behind the lens capsule
- Congenital—present at birth
- Morganian—hypermature cataract
- Traumatic—due to blunt trauma, penetrating trauma, or perforating eye Injury

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In ICD-10-CM, coding for cataracts is separated by laterality and type.

EXAMPLE

Patient presents with complaint of streaking in the right eye and problems with glare. She is diagnosed with senile cortical cataract.

H25.011 Cortical age-related cataract, right eye

Test Yourself #9

1. Sally presents to her physician with acute serous conjunctivitis, non-viral bilaterally. _____
2. Edema of the right orbit. _____
3. Tina presents to her doctor with complaints of her eye not closing right. He diagnoses her with keratoconjunctivitis. _____
4. Patient presents with a central corneal ulcer of the left eye. _____
5. Tim is diagnosed with a single break retinal detachment of the right eye. _____

Chapter 8: Diseases of Ear and Mastoid Process (H60–H95)

Currently there are no chapter specific coding guidelines for Diseases of the Ear and Mastoid Process (H60–H95). There is a note at the beginning of the chapter that indicates to use an external cause code following the code for the ear condition, if applicable, to identify the cause of the ear condition.

Category H60–H62 contains codes for Diseases of the external ear. The external ear consists of the auricula or pinna, and the external acoustic meatus. Conditions covered include otitis externa, disorders of the pinna and other conditions. Laterality as well as designation for both acute and chronic are components of these codes.

EXAMPLE

Mandy was seen today by her pediatrician as her mom noted that since they got back from the pool two days ago Mandy has been tugging at her left ear and her mom states the outer ear appears swollen and red. Dr. Smith diagnosed her with Swimmer's ear and prescribed an antibiotic.

H60.332 Swimmer's ear, left ear

Otitis media (OM) is any inflammation of the middle ear without reference to etiology or pathogenesis. OM can be classified into many variants on the basis of etiology, duration, symptomatology, and physical findings.

Acute OM (AOM) implies rapid onset of disease associated with one or more of the following symptoms:

- Otalgia
- Fever

- Otorrhea
- Recent onset of anorexia
- Irritability
- Vomiting
- Diarrhea

These symptoms are accompanied by abnormal otoscopic findings of the tympanic membrane (TM), which may include the following:

- Opacity
- Bulging
- Erythema
- Middle ear effusion (MEE)
- Decreased mobility with pneumatic otoscopy

AOM is a recurrent disease.

OM with effusion (OME), is MEE of any duration that lacks the associated signs and symptoms of infection (eg, fever, otalgia, irritability). OME usually follows an episode of AOM. OME is more common than AOM, and may be caused by viral upper respiratory infections, allergies, or exposure to irritants (such as cigarette smoke).

Chronic suppurative OM is a chronic inflammation of the middle ear that persists at least 6 weeks and is associated with otorrhea through a perforated TM, an indwelling tympanostomy tube, or a surgical myringotomy.

Codes from H65–H75 are codes for diseases of the middle ear and mastoid. Conditions covered in this category include various types of otitis media, perforations of the tympanic membrane, and polyps of the middle ear among others.

Category H80–H83 contains codes for diseases of the inner ear and includes such conditions as otosclerosis, labyrinthitis, and vertigo.

Test Yourself #10

1. Tim presents with a boil in the external ear of the left side. _____
2. Tina suffers from a sudden onset of eczematoid otitis externa of the right ear. _____
3. Impacted cerumen of both ears. _____
4. Linda has suffered ongoing for years with complaints of chronic allergic otitis media that affects the left ear. _____
5. Dennis has been battling bouts of dizziness and is diagnosed with benign paroxysmal vertigo. _____

Chapter 9: Diseases of Circulatory System (I00–I99)

Coronary heart disease, also called coronary artery disease, is a condition in which plaque builds up inside the coronary arteries. It is the most common type of heart disease. These arteries supply oxygen-rich blood to your heart muscle. Plaque is made up of fat, cholesterol, calcium, and other substances found in the blood. When plaque builds up in the arteries, the condition is called atherosclerosis. The buildup of plaque occurs over many years.

A common symptom of coronary heart disease (CHD) is angina. Angina is chest pain or discomfort that occurs if an area of your heart muscle doesn't get enough oxygen-rich blood.

Angina may feel like pressure or squeezing in your chest. You also may feel it in your shoulders, arms, neck, jaw, or back and it may even feel like indigestion. The pain tends to get worse with activity and goes away with rest. Emotional stress also can trigger the pain.

Another common symptom of CHD is shortness of breath. This symptom happens if CHD causes heart failure. When you have heart failure, your heart can't pump enough blood to meet your body's needs.

ICD-10-CM separates codes for ischemic heart disease by the type of vessel affected, as well as if the patient is also experiencing angina.

Heart failure is coded by the type such as systolic, diastolic or a combination of both and whether the condition is acute or chronic.

Systolic heart failure is a form of heart failure in which the heart's lower chambers (ventricles) have become too weak to contract and pump out enough blood to meet the body's needs, resulting in shortness of breath and other heart failure symptoms.

Diastolic heart failure is defined as symptoms of heart failure in a patient with preserved left ventricular function. A stiff left ventricle often characterizes it with decreased compliance and impaired relaxation, which leads to increased end diastolic pressure.

Hypertension

There is no hypertension table found within ICD-10-CM as it is no longer necessary. Codes have been simplified and many combination codes have been created in this chapter.

Hypertension with Heart Disease

Heart conditions classified to I50.- or I51.4–I51.9, are assigned to a code from category I11, Hypertensive heart disease, when a causal relationship is stated (due to hypertension) or implied (hypertensive). Use an additional code from category I50, Heart failure, to identify the type of heart failure in those patients with heart failure. The same heart conditions (I50.-, I51.4–I51.9) with hypertension, but without a stated causal relationship, are coded separately. Sequence the codes according to the circumstances of the admission/encounter.

EXAMPLE

A patient visits his cardiologist for his 3 month follow-up visit. He is being treated by the cardiologist for hypertensive heart disease with benign hypertension.

I11.9 Hypertensive heart disease without heart failure

Hypertensive Chronic Kidney Disease

Assign codes from category I12, Hypertensive chronic kidney disease, when both hypertension and a condition classifiable to category N18, Chronic kidney disease (CKD), are present. Unlike hypertension with heart disease, ICD-10-CM presumes a cause-and-effect relationship and classifies chronic kidney disease with hypertension as hypertensive chronic kidney disease.

The appropriate code from category N18 should be used as a secondary code with a code from category I12 to identify the stage of chronic kidney disease. See Section I.C.14. Chronic kidney disease. If a patient has hypertensive chronic kidney disease and acute renal failure, an additional code for the acute renal failure is required.

EXAMPLE

A patient with malignant hypertension and stage V chronic kidney disease is admitted to the critical care unit.

I12.0 Hypertensive chronic kidney disease with stage V chronic kidney disease or end stage renal disease

N18.5 Chronic kidney disease, stage V

Hypertensive Heart and Chronic Kidney Disease

Assign codes from combination category I13, Hypertensive heart and chronic kidney disease, when both hypertensive kidney disease and hypertensive heart disease are stated in the diagnosis. Assume a relationship between the hypertension and the chronic kidney disease, whether the condition is so designated. If heart failure is present, assign an additional code from category I50 to identify the type of heart failure. The appropriate code from category N18, Chronic kidney disease, should be used as a secondary code with a code from category I13 to identify the stage of chronic kidney disease. See Section I.C.14. Chronic kidney disease.

The codes in category I13, Hypertensive heart and chronic kidney disease, are combination codes that include hypertension, heart disease, and chronic kidney disease. The Includes note at I13 specifies that the conditions included at I11 and I12 are included together in I13. If a patient has hypertension, heart disease and chronic kidney disease then a code from I13 should be used, not individual codes for hypertension, heart disease and chronic kidney disease, or codes from I11 or I12. For patients with both acute renal failure and chronic kidney disease, an additional code for acute renal failure is required.

EXAMPLE

A patient is admitted to the hospital with acute diastolic heart failure due to hypertension with end stage renal disease.

Three codes are required in this example:

I13.2 Hypertensive heart and renal disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease

I50.31 Acute diastolic (congestive) heart failure

N18.6 End-stage renal disease

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Hypertensive Cerebrovascular Disease

For hypertensive cerebrovascular disease, first assign the appropriate code from categories I60–I69, followed by the appropriate hypertension code.

Hypertensive Retinopathy

Code H35.0 *Hypertensive retinopathy* should be used with code *I10 Essential (primary) hypertension,* to include the systemic hypertension. The sequencing is based on the reason for the encounter.

Hypertension, Secondary

Secondary hypertension is due to an underlying condition. Two codes are required: one to identify the underlying etiology and one from category I15 to identify the hypertension. Sequencing of codes is determined by the reason for admission/encounter.

Hypertension, Transient

Assign code R03.0 *Elevated blood pressure reading without diagnosis of hypertension* unless patient has an established diagnosis of hypertension. Assign code O13.- *Gestational [pregnancy-induced] hypertension without significant proteinuria or O14.- Gestational [pregnancy-induced] hypertension with significant proteinuria* for transient hypertension of pregnancy.

Hypertension, Controlled

This diagnostic statement usually refers to an existing state of hypertension under control by therapy. Assign code I10.

EXAMPLE

A patient visits his internist for his three-month follow-up visit. He has been treated for hypertension for more than three years. The patient's current blood pressure is 165/110 mm Hg. The patient is a current smoker, but is not dependent. The physician adjusts the patient's medication, reviews previous blood pressure readings, counsels the patient regarding smoking cessation, and asks the patient to follow up in two months. The documentation indicates benign hypertension without good control.

I10 Essential (primary) hypertension

Z72.0 Tobacco use

Hypertension, Uncontrolled

Uncontrolled hypertension may refer to untreated hypertension or hypertension not responding to current therapeutic regimen. In either case, assign code I10.

Atherosclerotic Coronary Artery Disease and Angina

ICD-10-CM has combination codes for atherosclerotic heart disease with angina pectoris. The subcategories for these codes are I25.11- A*therosclerotic heart disease of native coronary artery with angina pectoris* and I25.7- *Atherosclerosis of coronary artery bypass graft(s) and coronary artery of transplanted heart with angina pectoris.*

When using one of these combination codes it is not necessary to use an additional code for angina pectoris. A causal relationship can be assumed in a patient with both atherosclerosis and

angina pectoris, unless the documentation indicates the angina is due to something other than the atherosclerosis.

If a patient with coronary artery disease is admitted due to an acute myocardial infarction (AMI), the AMI should be sequenced before the coronary artery disease. See Section I.C.9. Acute myocardial infarction (AMI).

EXAMPLE

A patient with unstable angina with atherosclerosis of the coronary artery was admitted to the hospital for treatment.

I25.110 Atherosclerotic heart disease of native coronary artery with unstable angina pectoris

Intraoperative and Postprocedural Cerebrovascular Accident

Proper code assignment depends on whether it was an infarction or hemorrhage and whether it occurred intraoperatively or postoperatively. If it was a cerebral hemorrhage, code assignment depends on the type of procedure performed. Medical record documentation should clearly specify the cause-and-effect relationship between the medical intervention and the cerebrovascular accident in order to assign this code.

Sequelae of Cerebrovascular Disease

Category I69, Sequelae of Cerebrovascular Disease

Category I69 is used to indicate conditions classifiable to categories I60–I67 as the causes of late effects (neurologic deficits), classified elsewhere. These "late effects" include neurologic deficits that persist after initial onset of conditions classifiable to categories I60–I67. The neurologic deficits caused by cerebrovascular disease may be present from the onset or may arise at any time after the onset of the condition classifiable to categories I60–I67.

Codes from Category I69 with Codes from I60–I67

Codes from category I69 may be assigned on a healthcare record with codes from I60–I67, if the patient has a current cerebrovascular accident (CVA) and deficits from an old CVA.

Assign code Z86.73 *Personal history of transient ischemic attack (TIA), and cerebral infarction without residual deficits* (and not a code from category I69) as an additional code for history of cerebrovascular disease when no neurologic deficits are present.

Acute Myocardial Infarction (AMI)

The coronary arteries supply blood and oxygen to the heart. If the blood flow is blocked long enough, a portion of the heart muscle is damaged or dies. This condition is a myocardial infarction (MI), or heart attack. More than a million people each year in the United States suffer MIs. The site of the MI will reflect the coronary artery experiencing the ischemia. For example, an MI of the anterior wall is caused by ischemia in the left anterior descending coronary artery.

A STEMI myocardial infarction occurs when there is a transmural infarction of the myocardium—which means that the entire thickness of the myocardium has undergone necrosis. This results in ST elevation on an ECG. An NSTEMI myocardial infarction occurs when there is a partial

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dynamic block to coronary arteries. There will be no ST elevation or Q waves on ECG, as transmural infarction is not seen.

Coding of myocardial infarctions is different in ICD-10-CM than in ICD-9-CM. In ICD-9-CM, MIs are coded as acute and chronic, utilizing an 8-week rule as a guide. In ICD-10-CM, MIs are coded as initial and subsequent, utilizing a 4-week rule.

1. **ST elevation myocardial infarction (STEMI) and non ST elevation myocardial infarction (NSTEMI)**

The ICD-10-CM codes for acute myocardial infarction (AMI) identify the site, such as anterolateral wall or true posterior wall. Subcategories I21.0–I21.2 and code I21.3 are used for ST elevation myocardial infarction (STEMI). Code I21.4 *Non-ST elevation (NSTEMI) myocardial infarction* is used for non ST elevation myocardial infarction (NSTEMI) and nontransmural MIs.

If NSTEMI evolves to STEMI, assign the STEMI code. If STEMI converts to NSTEMI due to thrombolytic therapy, it is still coded as STEMI.

For encounters occurring while the myocardial infarction is equal to, or less than, four weeks old, including transfers to another acute setting or a postacute setting, and the patient requires continued care for the myocardial infarction, codes from category I21 may continue to be reported. For encounters after the 4 week time frame and the patient is still receiving care related to the myocardial infarction, the appropriate aftercare code should be assigned, rather than a code from category I21. For old or healed myocardial infarctions not requiring further care, code I25.2 *Old myocardial infarction* may be assigned.

2. **Acute myocardial infarction, unspecified**

Code I21.3 *ST elevation (STEMI) myocardial infarction of unspecified site* is the default for the unspecified term acute myocardial infarction. If only STEMI or transmural MI without the site is documented, query the provider as to the site, or assign code I21.3.

3. **AMI documented as nontransmural or subendocardial but site provided**

If an AMI is documented as nontransmural or subendocardial but the site is provided, it is still coded as a subendocardial AMI. If NSTEMI evolves to STEMI, assign the STEMI code. If STEMI converts to NSTEMI due to thrombolytic therapy, it is still coded as STEMI.

4. **Subsequent acute myocardial infarction**

A code from category I22, Subsequent ST elevation (STEMI) and non ST elevation (NSTEMI) myocardial infarction, is to be used when a patient who has suffered an AMI has a new AMI within the 4 week time frame of the initial AMI. A code from category I22 must be used in conjunction with a code from category I21. The sequencing of the I22 and I21 codes depends on the circumstances of the encounter.

The sequencing of the I22 and I21 codes depends on the circumstances of the encounter. Should a patient who is in the hospital due to an AMI have a subsequent AMI while still in the hospital code I21 would be sequenced first as the reason for admission, with code I22 sequenced as a secondary code. Should a patient have a subsequent AMI after discharge for care of an initial AMI, and the reason for admission is the subsequent AMI, the I22 code should be sequenced first, followed by the I21. An I21 code must accompany an I22 code to identify the site of the initial AMI, and to indicate

that the patient is still within the four week time frame of healing from the initial AMI. The guidelines for assigning the correct I22 code are the same as for the initial AMI.

EXAMPLE

A patient was admitted to the hospital suffering from an acute myocardial infarction of the inferior wall. The patient was recently released after suffering an acute MI of the left anterior descending coronary artery three weeks ago.

I22.1 Subsequent ST elevation (STEMI) myocardial infarction of inferior wall

I21.02 ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery

Test Yourself #11

1. A patient presents to the nephrology clinic suffering from malignant hypertensive heart and Stage V chronic kidney disease, without heart failure, due to hypertension. _____
2. Acute subendocardial myocardial infarction. _____
3. STEMI myocardial infarction involving left anterior descending coronary artery. _____
4. Tim suffers from hypertension that is uncontrolled. _____
5. Patient is diagnosed with acute infective myocarditis due to streptococcus pneumoniae. _____

Chapter 10: Diseases of Respiratory System (J00–J99)

Chapter 10 of ICD-10-CM includes the following blocks:

J00–J06 Acute upper respiratory infections

J10–J18 Influenza and pneumonia

J20–J22 Other acute lower respiratory infections

J30–J39 Other diseases of upper respiratory tract

J40–J47 Chronic lower respiratory diseases

J60–J70 Lung diseases due to external agents

J80–J84 Other respiratory diseases principally affecting the interstitium

J85–J86 Suppurative and necrotic conditions of the lower respiratory tract

J90–J94 Other diseases of the pleura

J95–J99 Other diseases of the respiratory system

Chronic Obstructive Pulmonary Disease [COPD] and Asthma

Conditions included in this category include:

- Asthma with chronic obstructive pulmonary disease
- Chronic asthmatic (obstructive) bronchitis
- Chronic bronchitis with airways obstruction
- Chronic bronchitis with emphysema
- Chronic emphysematous bronchitis
- Chronic obstructive asthma
- Chronic obstructive bronchitis
- Chronic obstructive tracheobronchitis

EXAMPLE

A patient with COPD was admitted by her internist with a diagnosis of COPD with respiratory syncytial virus pneumonia.

J44.0 Chronic obstructive pulmonary disease with acute lower respiratory infection

J12.1 Respiratory syncytial virus pneumonia

Asthma

Asthma is a chronic lung disease in which the airways narrow and swell and produce extra mucus. It affects more than 25 million Americans. Asthma symptoms include coughing, wheezing, shortness of breath, and chest tightness. Asthma cannot be cured, just controlled.

Coding for asthma has greatly expanded in ICD-10-CM to include intermittent, mild persistent, moderate persistent and severe persistent.

Below is a chart that helps identify the different types of severity of asthma. As a coder, you would need to be able to pull this type of information out of the chart to assign the appropriate code. Clinicians do not document in "code lingo."

Asthma Severity

	Intermittent	Mild Persistent	Moderate Persistent	Severe Persistent
Symptoms	2 or less days per week	More than 2 days per week	Daily	Throughout the day
Nighttime Awakenings	2 X's per month or less	3-4 X's per month	More than once per week but not nightly	Nightly
Rescue Inhaler Use	2 or less days per week	More than 2 days per week, but not daily	Daily	Several times per day
Interference With Normal Activity	None	Minor limitation	Some limitation	Extremely limited
Lung Function	FEV1 >80% predicted and normal between exacerbations	FEV1 >80% predicted	FEV1 60-80% predicted	FEV1 less than 60% predicted

Acute Exacerbation of Chronic Obstructive Bronchitis and Asthma

The codes in categories J44 and J45 distinguish between uncomplicated cases and those in acute exacerbation. An acute exacerbation is a worsening or a decompensation of a chronic condition. An acute exacerbation is not equivalent to an infection superimposed on a chronic condition, though an exacerbation may be triggered by an infection.

Acute Respiratory Failure

Acute Respiratory Failure as Principal Diagnosis

Code J96.0 *Acute respiratory failure* or code J96.2 *Acute and chronic respiratory failure* may be assigned as a principal diagnosis when it is the condition established after study to be chiefly responsible for occasioning the admission to the hospital, and the selection is supported by the Alphabetic Index and Tabular List. However, chapter-specific coding guidelines (such as obstetrics, poisoning, HIV, newborn) that provide sequencing direction take precedence.

Acute Respiratory Failure as Secondary Diagnosis

Respiratory failure may be listed as a secondary diagnosis if it occurs after admission, or if it is present on admission but does not meet the definition of principal diagnosis.

Sequencing of Acute Respiratory Failure and Another Acute Condition

When a patient is admitted with respiratory failure and another acute condition, (eg, myocardial infarction, cerebrovascular accident, aspiration pneumonia), the principal diagnosis will not be the same in every situation. This applies whether the other acute condition is a respiratory or nonrespiratory condition. Selection of the principal diagnosis will be dependent on the circumstances of admission. If both the respiratory failure and the other acute condition are equally responsible for occasioning the admission to the hospital, and there are no chapter-specific sequencing rules, the guideline regarding two or more diagnoses that equally meet the definition for principal diagnosis (Section II, C.) may be applied in these situations.

If the documentation is not clear as to whether acute respiratory failure and another condition are equally responsible for occasioning the admission, query the provider for clarification.

Influenza Due to Certain Identified Influenza Viruses

Code only confirmed cases of influenza due to certain influenza viruses (category J09). This is an exception to the hospital inpatient guideline Section II, H. (Uncertain Diagnosis).

In this context, "confirmation" does not require documentation of positive laboratory testing specific for avian or other novel influenza A. However, coding should be based on the provider's diagnostic statement that the patient has avian influenza, or other novel influenza A.

If the provider records "suspected or possible or probable avian influenza," the appropriate influenza code from category J10, Influenza due to other influenza virus, should be assigned. A code from category J09.X-, Influenza due to identified novel influenza A virus should not be assigned.

Ventilator Associated Pneumonia

As with all procedural or postprocedural complications, code assignment is based on the provider's documentation of the relationship between the condition and the procedure.

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Code J95.851 *Ventilator associated pneumonia* should be assigned only when the provider has documented ventilator associated pneumonia (VAP). An additional code to identify the organism (eg, B96.5 *Pseudomonas aeruginosa*) should also be assigned. Do not assign an additional code from categories J12–J18 to identify the type of pneumonia.

Code J95.851 should not be assigned for cases where the patient has pneumonia and is on a mechanical ventilator but the provider has not specifically stated the pneumonia is ventilator-associated pneumonia. If the documentation is unclear as to whether the patient has a pneumonia that is a complication attributable to the mechanical ventilator, query the provider.

A patient may be admitted with one type of pneumonia and subsequently develop VAP. In this instance, the principal diagnosis would be the appropriate code from categories J12–J18 for the pneumonia diagnosed at the time of admission. Code J95.851 *Ventilator associated pneumonia* would be assigned as an additional diagnosis when the provider has also documented the presence of ventilator associated pneumonia.

Test Yourself #12

1. Acute influenza upper respiratory infection due to Avian flu. _____
2. Chronic obstructive pulmonary disease, unspecified. _____
3. Emphysema in a patient with long time previous tobacco use. _____
4. Acute respiratory failure. _____

Chapter 11: Diseases of Digestive System (K00–K94)

Currently there are no chapter specific coding guidelines for Diseases of the Digestive System. The code range K00–K94 include the codes for use for these types of conditions.

Diseases of Esophagus, Stomach and Duodenum (K20–K31)

There are certain codes in this subcategory that require the use of an additional code to identify alcohol abuse and dependence (F10-) and additional documentation will be required in order to meet this level of specificity. The codes in this subcategory list hiatus hernia (K44-) as a type 2 Excludes note, which means it can be coded if both conditions exist and are documented.

EXAMPLE

Tim is being seen in treatment today due to vomiting with traces of blood. He has been a long time alcoholic and on a recent drinking binge. After endoscopy the surgeon notes he has Barrett's ulcer with hemorrhage exacerbated by his alcohol dependence.

K22.11 Ulcer of esophagus with bleeding

F10.20 Alcohol dependence without complications

Hernia (K40–K46)

This subcategory includes acquired, congenital (except diaphragmatic or hiatus), and recurrent hernias. Hernia's with both gangrene and obstruction is classified to hernia with gangrene.

EXAMPLE

Jennifer has been diagnosed with an incisional hernia without obstruction or gangrene.

K43.2 Incisional hernia without obstruction or gangrene

Noninfective Enteritis and Colitis (K50–K52)

Crohn's disease is a chronic inflammatory condition of the gastrointestinal tract. It can affect any part of the digestive tract, but is most commonly seen in the ileum and cecum (the end of the small intestine and beginning of the large intestine). Patients may experience periods of being asymptomatic between flare ups. Symptoms displayed will depend on which part of the digestive tract is affected, and include:

- Persistent diarrhea
- Rectal bleeding
- Urgent need to move bowels
- Abdominal cramps and pain
- Sensation of incomplete evacuation
- Constipation (which can lead to bowel obstruction)
- Fever
- Loss of appetite
- Weight loss
- Fatigue
- Night sweats
- Loss of normal menstrual cycle

Men and women are equally affected by the disease. It may occur at any age, but is most prevalent between the ages of 15 and 35.

One of the largest expansions in coding in the digestive system has been with codes for Crohn's disease. Code selections include the specificity of the site such as small or large intestine as well as any complications or manifestations such as bleeding, fistula, obstruction or abscess. These complications and manifestations are indicated with the use of combination codes.

EXAMPLES

K50.814 Crohn's disease of both small and large intestine with abscess

K50.112 Crohn's disease of large intestine with intestinal obstruction

K50.013 Crohn's disease of small intestine with fistula

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Test Yourself #13

1. Patient with tobacco use has acute gingivitis, non plaque induced. _____
2. A patient is diagnosed with bleeding and is found to have acute erosion of the duodenum. _____
3. Patient with alcohol abuse complains of GERD. _____
4. Patient diagnosed with cellulitis of the abdominal wall and has an enterostomy infection. _____
5. Acute duodenal ulcer with bleeding. _____
6. Patient is admitted for colostomy closure. _____

Chapter 12: Diseases of Skin and Subcutaneous Tissue (L00–L99)

Pressure Ulcers

Codes from category L89, Pressure ulcer, are combination codes that identify the site of the pressure ulcer as well as the stage of the ulcer.

The ICD-10-CM classifies pressure ulcer stages based on severity, which is designated by stages 1–4, unspecified stage and unstageable. Assign as many codes from category L89 as needed to identify all the pressure ulcers the patient has, if applicable.

Unstageable Pressure Ulcers

Assignment of the code for unstageable pressure ulcer should be based on the clinical documentation. These codes are used for pressure ulcers whose stage cannot be clinically determined (eg, the ulcer is covered by eschar or has been treated with a skin or muscle graft) and pressure ulcers that are documented as deep tissue injury but not documented as due to trauma. This code should not be confused with the codes for unspecified stage (L89.9-). When there is no documentation regarding the stage of the pressure ulcer, assign the appropriate code for unspecified stage (L89.9-).

EXAMPLE

A patient is treated for a pressure ulcer of the ankle

L89.509 Pressure ulcer of unspecified ankle, unspecified stage

EXAMPLE

A patient is treated for an unstageable pressure ulcer of the left buttock.

L89.320 Pressure ulcer of left buttock, unstageable

Documented Pressure Ulcer Stage

Assignment of the pressure ulcer stage code should be guided by clinical documentation of the stage or documentation of the terms found in the index. For clinical terms describing the stage that are not found in the index, and there is no documentation of the stage, the provider should be

queried. A code from this category is not assigned if the documentation states the pressure ulcer is completely healed.

Patients Admitted with Pressure Ulcers Documented as Healing

Pressure ulcers described, as healing should be assigned the appropriate the pressure ulcer stage code based on the documentation in the medical record. If the documentation does not provide information about the stage of the healing pressure ulcer, assign the appropriate code for unspecified stage.

If the documentation is unclear as to whether the patient has a current (new) pressure ulcer or if the patient is being treated for a healing pressure ulcer, query the provider.

Patient Admitted with Pressure Ulcer Evolving into Another Stage During the Admission

If a patient is admitted with a pressure ulcer at one stage and it progresses to a higher stage, assign the code for the highest stage reported for that site.

Documentation for BMI and Pressure Ulcer Stages

For the Body Mass Index (BMI) and pressure ulcer stage codes, code assignment may be based on medical record documentation from clinicians who are not the patient's provider (eg, physician or other qualified healthcare practitioner legally accountable for establishing the patient's diagnosis), since this information is typically documented by other clinicians involved in the care of the patient (eg, a dietitian often documents the BMI and nurses often document the pressure ulcer stages). However, the associated diagnosis (such as overweight, obesity, or pressure ulcer) must be documented by the patient's provider. If there is conflicting medical record documentation, either from the same clinician or different clinicians, the patient's attending provider should be queried for clarification.

The BMI codes should only be reported as secondary diagnoses (Z68.-). As with all other secondary diagnosis codes, the BMI codes should only be assigned when they meet the definition of a reportable additional diagnosis.

Non-pressure Chronic Ulcers of Lower Limbs

Non-pressure chronic ulcers include diabetic (neurotrophic) ulcers, venous stasis ulcers, and arterial ulcers. Venous ulcers are located below the knee and are mainly found on the inner part of the leg, just above the ankle. Arterial ulcers are usually located on the feet, often on the heels, tips of toes, between the toes where the toes rub against one another or anywhere the bones may protrude and rub against bed sheets, socks or shoes. Neurotrophic ulcers are usually located at increased pressure points on the bottom of the feet, but can occur anywhere on the foot when due to trauma. They occur mostly in people with diabetes, although they can affect anyone who has an impaired sensation of the feet.

The coding for non-pressure chronic ulcers has greatly expanded in ICD-10-CM. Codes from category L97, Non-pressure chronic ulcer of lower limb, not elsewhere classified, are combination codes that identify the site of the ulcer, laterality, as well as severity. The severity is classified into the following groupings for code assignment:

- Limited to breakdown of skin
- With fat layer exposed

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- With necrosis of muscle
- With necrosis of bone
- Unspecified severity

Providers will need to be more specific in their documentation in order to be able to assign codes at the highest level of specificity and avoid overutilization of the unspecified severity codes.

Additional codes are necessary to fully describe the patient's condition for non-pressure chronic ulcers in ICD-10-CM. There are instructional notes under category L97 that state to code first any associated underlying conditions, such as atherosclerosis of the lower extremities, chronic venous hypertension, diabetic ulcer, or varicose ulcer. There is another note that states to code first any associated gangrene. The provider's documentation will drive what codes are able to be assigned.

EXAMPLE

May is a type 2 diabetic. She presents to the office today with a diabetic ulcer on her left great toe. May does not inspect her feet on a daily basis, but does check them about once a week. The breakdown of the ulcer is limited to the skin.

E11.621 Type 2 diabetes mellitus with foot ulcer

L97.521 Non-pressure chronic ulcer of other part of left foot limited to breakdown of skin

Test Yourself #14

1. A patient is treated for three pressure ulcers: bilateral buttock ulcers, stage 3 on the right and stage 2 on the left; and a stage 4 on the sacral area. _____
2. A mother brings her 1-year-old daughter in to see the dermatologist. She has had a persistent rash on her legs, neck, and arms. Recently, the rash has progressed into painful, raised bumps. She is diagnosed with infantile atopic dermatitis and started on a corticosteroid ointment. _____
3. A patient presents for cryotherapy of his prurigo nodularis. _____
4. A 7-year-old is brought in to be seen for a red rash on his entire back, followed by diffuse epidermal exfoliation. Blood tests confirm Staphylococcal scalded skin syndrome (SSSS). _____
5. Patient presents with a boils in both axillae. _____

Chapter 13: Diseases of the Musculoskeletal System and Connective Tissue (M00–M99)

Arthritis and osteoarthritis have both site and laterality designations in ICD-10-CM. It also includes the type of arthritis such as primary, secondary or post-traumatic.

Primary osteoarthritis is considered "wear and tear" osteoarthritis, this type of osteoarthritis is more commonly diagnosed, whereas secondary osteoarthritis is usually caused by an injury, heredity, obesity or something else. The treatment for both types are usually the same.

EXAMPLE

A patient is treated by an orthopedic surgeon for primary osteoarthritis of the right knee. The patient complains of chronic knee pain that worsens at night. The physician prescribed an anti-inflammatory drug to relieve the pain.

M17.11 Unilateral primary osteoarthritis, right knee

Rheumatoid arthritis (RA) is a chronic systemic disease that affects the joints, connective tissues, muscle, tendons, and fibrous tissue. and is a chronic disabling condition often causing pain and deformity. RA is an autoimmune disorder, whereby the immune system mistakenly attacks its own body's tissues. Rheumatoid arthritis is much more common in women than in men and generally occurs between the ages of 40 and 60. Rheumatoid arthritis increases your risk of developing osteoporosis, carpal tunnel syndrome, heart problems, and lung disease.

Juvenile RA is the most common type of arthritis in children under the age of 16 and causes persistent joint pain, stiffness, and swelling. Children with juvenile RA are at a higher risk for developing eye and growth problems.

Coding for rheumatoid arthritis in ICD-10-CM is broken down by site, laterality, complication, and with or without rheumatoid factor. Rheumatoid factor is an antibody in the blood that's present in many, but not all, people with RA.

EXAMPLES

M05.141 Rheumatoid lung disease with rheumatoid arthritis of right hand

M06.022 Rheumatoid arthritis without rheumatoid factor, left elbow

M08.261 Juvenile rheumatoid arthritis with systemic onset, right knee

Site and Laterality

Most of the codes within chapter 13 have site and laterality designations. The site represents either the bone, joint or the muscle involved. For some conditions where more than one bone, joint, or muscle is usually involved, such as osteoarthritis, there is a "multiple sites" code available. For categories where no multiple site code is provided and more than one bone, joint, or muscle is involved, multiple codes should be used to indicate the different sites involved.

EXAMPLE

A patient is treated by an orthopedic surgeon for primary osteoarthritis of the right knee. The patient complains of chronic knee pain that worsens at night. The physician prescribed an anti-inflammatory drug to relieve the pain.

First-listed diagnosis: M17.11 Unilateral primary osteoarthritis, right knee

Arthritis and osteoarthritis have both site and laterality designations in ICD-10-CM. It also includes the type of arthritis such as primary, secondary or post-traumatic.

Bone Versus Joint

For certain conditions, the bone may be affected at the upper or lower end, (eg, avascular necrosis of bone, M87, Osteoporosis, M80, M81). Though the portion of the bone affected may be at the joint, the site designation will be the bone, not the joint.

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Acute Traumatic Versus Chronic or Recurrent Musculoskeletal Conditions

Many musculoskeletal conditions are a result of previous injury or trauma to a site, or are recurrent conditions. Bone, joint, or muscle conditions that are the result of a healed injury are usually found in chapter 13. Recurrent bone, joint, or muscle conditions are also usually found in chapter 13. Any current, acute injury should be coded to the appropriate injury code from chapter 19. Chronic or recurrent conditions should generally be coded with a code from chapter 13. If it is difficult to determine from the documentation in the record which code is best to describe a condition, query the provider.

Coding of Pathologic Fractures

Seventh character A is for use as long as the patient is receiving active treatment for the fracture. Examples of active treatment are: surgical treatment, emergency department encounter, evaluation and treatment by a new physician. Seventh character D is to be used for encounters after the patient has completed active treatment. The other seventh characters, listed under each subcategory in the Tabular List, are to be used for subsequent encounters for treatment of problems associated with the healing, such as malunions and nonunions, and sequelae. Care for complications of surgical treatment for fracture repairs during the healing or recovery phase should be coded with the appropriate complication codes.

See Section I.C.19. Coding of traumatic fractures.

Osteoporosis

Osteoporosis is a systemic condition, meaning that all bones of the musculoskeletal system are affected. Site is not a component of the codes under category M81, Osteoporosis without current pathological fracture. The site codes under category M80, Osteoporosis with current pathological fracture, identify the site of the fracture, not the osteoporosis.

Osteoporosis without Pathological Fracture

Category M81, Osteoporosis without current pathological fracture, is for use for patients with osteoporosis who do not currently have a pathologic fracture due to the osteoporosis, even if they have had a fracture in the past. For patients with a history of osteoporosis fractures, status code Z87.310 *Personal history of healed osteoporosis fracture* should follow the code from M81.

EXAMPLE

A patient is treated with medication for postmenopausal osteoporosis. The patient had a pathologic fracture one year ago and the physician is following her condition every three months.

M81.0 Age-related osteoporosis without current pathological fracture

Z87.310 Personal history of (healed) osteoporosis fracture

Osteoporosis with Current Pathological Fracture

Category M80, Osteoporosis with current pathological fracture, is for patients who have a current pathologic fracture at the time of an encounter. The codes under M80 identify the site of the fracture. A code from category M80, not a traumatic fracture code, should be used for any patient with known osteoporosis who suffers a fracture, even if the patient had a minor fall or trauma, if that fall or trauma would not usually break a normal, healthy bone.

Test Yourself #15

1. Polymyositis with myopathy. _____
2. A 79-year-old with osteoporosis with a new pathological fracture of the right femur. _____
3. Displaced closed fracture of the acromial process left shoulder, initial encounter. _____ .
4. Juvenile osteochondrosis, right hand. _____

Chapter 14: Diseases of Genitourinary System (N00–N99)

Chronic Kidney Disease

Stages of Chronic Kidney Disease (CKD)

The ICD-10-CM classifies CKD based on severity. The severity of CKD is designated by stages 1–5. Stage 2, code N18.2, equates to mild CKD; stage 3, code N18.3, equates to moderate CKD; and stage 4, code N18.4, equates to severe CKD. Code N18.6 *End stage renal disease (ESRD)* is assigned when the provider has documented end-stage-renal disease (ESRD). If both a stage of CKD and ESRD are documented, assign code N18.6 only.

Chronic Kidney Disease and Kidney Transplant Status

Patients who have undergone kidney transplant may still have some form of CKD, because the kidney transplant may not fully restore kidney function. The presence of CKD alone does not constitute a transplant complication. Assign the appropriate N18 code for the patient's stage of CKD and code Z94.0 *Kidney transplant status*. If a transplant complication such as failure or rejection is documented, see section I.C.19.g for information on coding complications of a kidney transplant. If the documentation is unclear as to whether the patient has a complication of the transplant, query the provider.

Chronic Kidney Disease with Other Conditions

Patients with CKD may also suffer from other serious conditions, most commonly diabetes mellitus and hypertension. The sequencing of the CKD code in relationship to codes for other contributing conditions is based on the conventions in the Tabular List.

See I.C.9. Hypertensive chronic kidney disease. See I.C.19. Chronic kidney disease and kidney transplant complications.

EXAMPLE

A patient in end stage renal disease is admitted to undergo dialysis. The patient is prepared and fitted for a peritoneal dialysis catheter and dialysis is performed in the outpatient hospital dialysis center.

Z49.02 Encounter for fitting and adjustment of peritoneal dialysis catheter

N18.6 End stage renal disease

Chronic kidney disease requiring chronic dialysis

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Also found in this chapter of ICD-10-CM are disorders of the male and female genital organs. Male disorders listed in this chapter include diseases of the prostate, male Infertility, and erectile dysfunction. Female disorder found in this chapter include pelvic inflammatory diseases, female infertility, and menopausal and perimenopausal disorders. Disorders of the breast (excluding those associated with childbirth) are also located in this chapter.

EXAMPLE

Jack presents to the office today complaining of having to get out of bed at night repeatedly to urinate. He has previously been diagnosed with BPH. After history and exam today his diagnosis is BPH with nocturia.

N40.1 Enlarged prostate with lower urinary tract symptoms

R35.1 Nocturia

EXAMPLE

Rose presents today for the results of her ultrasound. She was complaining of painful menstrual cycles that had her bedridden, along with pelvic pain at various intervals. The results of her ultrasound indicate that Rose has endometriosis of the ovaries. The decision is made to try continuous birth control pills and pain medication.

N80.1 Endometriosis of ovary

Test Yourself #16

1. Diabetic chronic kidney disease in a Type 1 diabetic patient, which is moderate. _____
2. Renal failure. _____
3. CKD stage 5 requiring chronic dialysis. _____
4. Hypertensive chronic kidney disease, which is severe. _____
5. Postprocedural renal failure. _____

Chapter 15: Pregnancy, Childbirth, and the Puerperium (O00–O9A)

General Rules for Obstetric Cases

Trimesters are defined as follows:

- 1st trimester—less than 14 weeks, 0 days
- 2nd trimester—14 weeks, 0 days to less than 28 weeks, 0 days
- 3rd trimester—28 weeks, 0 days until delivery

Codes for unspecified trimester should never be reported unless it is impossible to determine the trimester from the medical record documentation in the medical record.

Weeks of Gestation

A code from category Z3A, Weeks of gestation are for use on the maternal record to indicate the specific week of gestation of the pregnancy. They are to be appended as additional codes to the code(s) from chapter 15.

EXAMPLE

A woman at 16 weeks 2/7 days of her pregnancy presents to her OB/GYN for hemorrhoids.

O22.42 Hemorrhoids in pregnancy, second trimester

Z3A.16 16 weeks gestation of pregnancy

Codes from Chapter 15 and Sequencing Priority

Obstetric cases require codes from chapter 15, codes in the range O00–O99, Pregnancy, Childbirth, and the Puerperium. Chapter 15 codes have sequencing priority over codes from other chapters. Additional codes from other chapters may be used in conjunction with chapter 15 codes to further specify conditions. Should the provider document that the pregnancy is incidental to the encounter, then code Z33.1 *Pregnant state, incidental* should be used in place of any chapter 15 codes. It is the provider's responsibility to state that the condition being treated is not affecting the pregnancy.

Chapter 15 Codes Used Only on the Maternal Record

Chapter 15 codes are to be used only on the maternal record, never on the record of the newborn.

Final Character for Trimester

The majority of codes in chapter 15 have a final character indicating the trimester of pregnancy. The timeframes for the trimesters are indicated at the beginning of the chapter. If trimester is not a component of a code it is because the condition always occurs in a specific trimester, or the concept of trimester of pregnancy is not applicable. Certain codes have characters for only certain trimesters because the condition does not occur in all trimesters, but it may occur in more than just one. The provider's documentation of the number of weeks may be used to assign the appropriate code identifying the trimester.

Selection of Trimester for Extended Inpatient Admissions

In instances when a patient is admitted to a hospital for complications of pregnancy and remains in the hospital for an extended period of time, it is possible for complications to develop during different trimesters. The antepartum complication code should be assigned on the basis of the trimester when the complication developed.

Unspecified Trimester

Each category that includes codes for trimester has a code for "unspecified trimester." The "unspecified trimester" code should rarely be used, such as when the documentation in the record is insufficient to determine the trimester and it is not possible to obtain clarification.

Fetal Extensions

Where applicable, a seventh character is to be assigned for certain categories (O31, O32, O33.3–O33.6, O35, O36, O40, O41, O60.1, O60.2, O64 and O69) to identify the fetus for which the complication code applies.

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Assign seventh character "0":

- For single gestations
- When the documentation in the record is insufficient to determine the fetus affected and it is not possible to obtain clarification.
- When it is not possible to clinically determine which fetus is affected.

EXAMPLE

A woman with a twin pregnancy presents to the office. She is informed that her ultrasound indicated that baby 2 has hydrocephalus. The patient is counseled on the condition and how it affects the pregnancy. A referral is made to see the perinatologist for recommendations.

O33.6XX2 Maternal care for disproportion due to hydrocephalic fetus, fetus 2

Selection of OB Principal or First-listed Diagnosis

Routine Outpatient Prenatal Visits

For routine outpatient prenatal visits when no complications are present, a code from category Z34, Encounter for supervision of normal pregnancy, should be used as the first-listed diagnosis. These codes should not be used in conjunction with chapter 15 codes.

Prenatal Outpatient Visits for High-Risk Patients

For routine prenatal outpatient visits for patients with high-risk pregnancies, a code from category O09, Supervision of high-risk pregnancy, should be used as the first-listed diagnosis. Secondary chapter 15 codes may be used in conjunction with these codes if appropriate.

Episodes When No Delivery Occurs

In episodes when no delivery occurs, the principal diagnosis should correspond to the principal complication of the pregnancy, which necessitated the encounter. Should more than one complication exist, all of which are treated or monitored, any of the complication codes may be sequenced first.

When a Delivery Occurs

When a delivery occurs, the principal diagnosis should correspond to the main circumstances or complication of the delivery. In cases of cesarean delivery, the selection of the principal diagnosis should correspond to the reason the cesarean delivery was performed unless the reason for admission/encounter was unrelated to the condition resulting in the cesarean delivery.

Outcome of Delivery

A code from category Z37, Outcome of delivery, should be included on every maternal record when a delivery has occurred. These codes are not to be used on subsequent records or on the newborn record.

Pre-existing Conditions Versus Conditions Due to the Pregnancy

Certain categories in chapter 15 distinguish between conditions of the mother that existed prior to pregnancy (pre-existing) and those that are a direct result of pregnancy. When assigning codes

from chapter 15, it is important to assess if a condition was pre-existing prior to pregnancy or developed during or due to the pregnancy in order to assign the correct code.

Categories that do not distinguish between pre-existing and pregnancy-related conditions may be used for either. It is acceptable to use codes specifically for the puerperium with codes complicating pregnancy and childbirth if a condition arises postpartum during the delivery encounter.

Pre-existing Hypertension in Pregnancy

Category O10, Pre-existing hypertension complicating pregnancy, childbirth and the puerperium, includes codes for hypertensive heart and hypertensive chronic kidney disease. When assigning one of the O10 codes that include hypertensive heart disease or hypertensive chronic kidney disease, it is necessary to add a secondary code from the appropriate hypertension category to specify the type of heart failure or chronic kidney disease. See Section I.C.9. Hypertension.

EXAMPLE

Susan presents for her routine OB visit at 22 weeks 2/7 days. She has pre-existing hypertension and, on this visit, her blood pressure is 135/90. The obstetrician counsels her on watching her sodium intake and trying to decrease her stress levels. She is asked to return in two days for a blood pressure check and to keep a log of her readings at home.

O10.012 Pre-existing hypertension complicating pregnancy, second trimester

Fetal Conditions Affecting the Management of the Mother

Codes from Categories O35 and O36

Codes from categories O35, Maternal care for known or suspected fetal abnormality and damage, and O36, Maternal care for other fetal problems, are assigned only when the fetal condition is actually responsible for modifying the management of the mother, eg, by requiring diagnostic studies, additional observation, special care, or termination of pregnancy. The fact that the fetal condition exists does not justify assigning a code from this series to the mother's record.

In Utero Surgery

In cases when surgery is performed on the fetus, a diagnosis code from category O35, Maternal care for known or suspected fetal abnormality and damage, should be assigned identifying the fetal condition. Assign the appropriate procedure code for the procedure performed.

No code from chapter 16, the perinatal codes, should be used on the mother's record to identify fetal conditions. Surgery performed in utero on a fetus is still to be coded as an obstetric encounter.

HIV Infection in Pregnancy, Childbirth and the Puerperium

During pregnancy, childbirth or the puerperium, a patient admitted because of an HIV-related illness should receive a principal diagnosis from subcategory O98.7-, Human immunodeficiency [HIV] disease complicating pregnancy, childbirth and the puerperium, followed by the code(s) for the HIV-related illness(es).

Patients with asymptomatic HIV infection status admitted during pregnancy, childbirth, or the puerperium should receive codes of O98.7- and Z21 *Asymptomatic human immunodeficiency virus [HIV] infection status*.

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EXAMPLE

A patient who is HIV positive is in her second trimester of pregnancy. Her pregnancy is progressing well without complications. She is 26 weeks 0 days.

O98.712 Human immunodeficiency [HIV] disease complicating pregnancy, second trimester

Z21 HIV positive NOS

Z3A.26 26 weeks of gestation of pregnancy

Diabetes Mellitus in Pregnancy

Diabetes mellitus is a significant complicating factor in pregnancy. Pregnant women who are diabetic should be assigned code O24 *Diabetes mellitus in pregnancy, childbirth, and the puerperium* first, followed by the appropriate diabetes code(s) (E08–E13) from chapter 4.

EXAMPLE

A patient with gestational diabetes is seen by the OB/Gyn for her routine visit during her seventh month of pregnancy. The patient is doing well and her gestational diabetes is well controlled with diet. She is 28 weeks 3 days.

O24.410 Gestational diabetes mellitus in pregnancy, diet-controlled.

Z3A.28 28 weeks gestation of pregnancy

Long-Term Use of Insulin

Code Z79.4 *Long-term (current) use of insulin* should also be assigned if the diabetes mellitus is being treated with insulin.

Gestational (Pregnancy Induced) Diabetes

Gestational (pregnancy induced) diabetes can occur during the second and third trimester of pregnancy in women who were not diabetic prior to pregnancy. Gestational diabetes can cause complications in the pregnancy similar to those of pre-existing diabetes mellitus. It also puts the woman at greater risk of developing diabetes after the pregnancy. Codes for gestational diabetes are in subcategory O24.4, Gestational diabetes mellitus. No other code from category O24, Diabetes mellitus in pregnancy, childbirth, and the puerperium, should be used with a code from O24.4.

The codes under subcategory O24.4 include diet controlled and insulin controlled; therefore, it is unnecessary to also report code Z79.4 *Long-term (current) use of insulin*. If a patient with gestational diabetes is treated with both diet and insulin, only the code for insulin controlled is required. An abnormal glucose tolerance in pregnancy is assigned a code from subcategory O99.81, Abnormal glucose complicating pregnancy, childbirth, and the puerperium.

Sepsis and Septic Shock Complicating Abortion, Pregnancy, Childbirth, and the Puerperium

When assigning a chapter 15 code for sepsis complicating abortion, pregnancy, childbirth, and the puerperium, a code for the specific type of infection should be assigned as an additional diagnosis. If severe sepsis is present, a code from subcategory R65.2, Severe sepsis, and code(s) for associated organ dysfunction(s) should also be assigned as additional diagnoses.

Alcohol and Tobacco Use During Pregnancy, Childbirth, and the Puerperium

Alcohol Use During Pregnancy, Childbirth, and the Puerperium

Codes under subcategory O99.31, Alcohol use complicating pregnancy, childbirth, and the puerperium, should be assigned for any pregnancy case when a mother uses alcohol during the pregnancy or postpartum. A secondary code from category F10, Alcohol related disorders, should also be assigned.

Tobacco Use During Pregnancy, Childbirth, and the Puerperium

Codes under subcategory O99.33, Smoking (tobacco) complicating pregnancy, childbirth, and the puerperium, should be assigned for any pregnancy case when a mother uses any type of tobacco product during the pregnancy or postpartum. A secondary code from category F17, Nicotine dependence, or code Z72.0 *Tobacco use* should also be assigned to identify the type of nicotine dependence.

Poisoning, Toxic Effects, Adverse Effects, and Underdosing in a Pregnant Patient

A code from subcategory O9A.2-, Injury, poisoning and certain other consequences of external causes complicating pregnancy, childbirth, and the puerperium, should be sequenced first, followed by the appropriate poisoning, toxic effect, adverse effect or underdosing code, and then the additional code(s) that specifies the condition caused by the poisoning, toxic effect, adverse effect or underdosing.

See Section I.C.19. Adverse effects, poisoning, underdosing, and toxic effects.

Normal Delivery, Code O80

Encounter for Full Term Uncomplicated Delivery

Code O80 should be assigned when a woman is admitted for a full-term normal delivery and delivers a single, healthy infant without any complications antepartum, during the delivery, or postpartum during the delivery episode. Code O80 is always a principal diagnosis. It is not to be used if any other code from chapter 15 is needed to describe a current complication of the antenatal, delivery, or perinatal period. Additional codes from other chapters may be used with code O80 if they are not related to or are in any way complicating the pregnancy.

Uncomplicated Delivery with Resolved Antepartum Complication

Code O80 may be used if the patient had a complication at some point during the pregnancy, but the complication is not present at the time of the admission for delivery.

Outcome of Delivery for O80

Z37.0 *Single live birth* is the only outcome of delivery code appropriate for use with O80.

Peripartum and Postpartum Periods

The postpartum period begins immediately after delivery and continues for six weeks following delivery. The peripartum period is defined as the last month of pregnancy to five months postpartum. A postpartum complication is any complication occurring within the six-week period.

Pregnancy-Related Complications After 6-week Period

Chapter 15 codes may also be used to describe pregnancy-related complications after the peripartum or postpartum period if the provider documents that a condition is pregnancy related.

Admission for Routine Postpartum Care Following Delivery Outside Hospital

When the mother delivers outside the hospital prior to admission and is admitted for routine postpartum care and no complications are noted, code Z39.0 *Encounter for care and examination of mother immediately after delivery* should be assigned as the principal diagnosis.

Pregnancy Associated Cardiomyopathy

Pregnancy associated cardiomyopathy, code O90.3, is unique in that it may be diagnosed in the third trimester of pregnancy but may continue to progress months after delivery. For this reason, it is referred to as peripartum cardiomyopathy. Code O90.3 is only for use when the cardiomyopathy develops as a result of pregnancy in a woman who did not have pre-existing heart disease.

Sequelae of Complication of Pregnancy, Childbirth, and the Puerperium

Code O94 *Sequelae of complication of pregnancy, childbirth, and the puerperium* is for use in those cases when an initial complication of a pregnancy develops sequelae requiring care or treatment at a future date. This code may be used at any time after the initial postpartum period. Like all late effect codes, O94 is to be sequenced following the code describing the sequelae of the complication.

Abortions

Abortion with Liveborn Fetus

When an attempted termination of pregnancy results in a liveborn fetus, assign a code from subcategory O60.1, Preterm labor with preterm delivery, and category Z37, Outcome of delivery. The procedure code for the attempted termination of pregnancy should also be assigned.

Retained Products of Conception Following an Abortion

Subsequent encounters for retained products of conception following a spontaneous abortion or elective termination of pregnancy are assigned the appropriate code from category O03, Spontaneous abortion, or code Z33.2 *Encounter for elective termination of pregnancy*. This advice is appropriate even when the patient was discharged previously with a discharge diagnosis of complete abortion.

Abuse in a Pregnant Patient

For suspected or confirmed cases of abuse of a pregnant patient, a code(s) from subcategories O9A.3, Physical abuse complicating pregnancy, childbirth, and the puerperium, O9A.4, Sexual abuse complicating pregnancy, childbirth, and the puerperium, and O9A.5, Psychological abuse complicating pregnancy, childbirth, and the puerperium, should be sequenced first, followed by the appropriate codes (if applicable) to identify any associated current injury due to physical abuse, sexual abuse, and the perpetrator of abuse.

Test Yourself #17

1. Full term, uncomplicated delivery of a single liveborn infant. _____
2. Pregnancy associated cardiomyopathy. _____
3. Routine prenatal visit for normal first pregnancy. _____
4. Patient is diagnosed with an ectopic pregnancy that is found to be in the fallopian tubes. _____
5. Patient is seen in her first trimester at 12 weeks 3/7 days; she has a history of ectopic pregnancy. _____

Chapter 16: Newborn (Perinatal) Guidelines (P00 – P96)

For coding and reporting purposes the perinatal period is defined as before birth through the 28th day following birth. The following guidelines are provided for reporting purposes.

General Perinatal Rules

Use of Chapter 16 Code

Codes in this chapter are **never** for use on the maternal record. Codes from chapter 15, the obstetric chapter, are never permitted on the newborn record. Chapter 16 code may be used throughout the life of the patient if the condition is still present.

Principal Diagnosis for Birth Record

When coding the birth episode in a newborn record, assign a code from category Z38, Liveborn according to place of birth and type of delivery, as the principal diagnosis. A code from category Z38 is assigned only once to a newborn at the time of birth. If a newborn is transferred to another institution, a code from category Z38 should not be used at the receiving hospital. A code from category Z38 is used only on the newborn record, not on the mother's record.

Use of Codes from Other Chapters with Codes from Chapter 16

Codes from other chapters may be used with codes from chapter 16 if the codes from the other chapters provide more specific detail. Codes for signs and symptoms may be assigned when a definitive diagnosis has not been established. If the reason for the encounter is a perinatal condition, the code from chapter 16 should be sequenced first.

Use of Chapter 16 Codes after the Perinatal Period

Should a condition originate in the perinatal period, and continue throughout the life of the patient, the perinatal code should continue to be used regardless of the patient's age.

Birth Process or Community Acquired Conditions

If a newborn has a condition that may be either due to the birth process or community acquired and the documentation does not indicate which it is, the default is due to the birth process and the

code from chapter 16 should be used. If the condition is community-acquired, a code from chapter 16 should not be assigned.

Code All Clinically Significant Conditions

All clinically significant conditions noted on routine newborn examination should be coded. A condition is clinically significant if it requires:

- clinical evaluation; or
- therapeutic treatment; or
- diagnostic procedures; or
- extended length of hospital stay; or
- increased nursing care and/or monitoring; or
- has implications for future healthcare needs.

Note: The perinatal guidelines listed above are the same as the general coding guidelines for "additional diagnoses," except for the final point regarding implications for future healthcare needs. Codes should be assigned for conditions that have been specified by the provider as having implications for future healthcare needs.

Observation and Evaluation of Newborns for Suspected Conditions Not Found

Assign a code from categories P00–P04 to identify those instances when a healthy newborn is evaluated for a suspected condition that is determined after study not to be present. Do not use a code from categories P00–P04 when the patient has identified signs or symptoms of a suspected problem; in such cases, code the sign or symptom.

EXAMPLE

A two-day-old baby is suspected to be in withdrawal. The neonate's mother was an active cocaine user up until delivery.

P04.41 Newborn (suspected to be) affected by maternal use of cocaine

Coding Additional Perinatal Diagnoses

Assigning Codes for Conditions that Require Treatment

Assign codes for conditions that require treatment or further investigation, prolong the length of stay, or require resource utilization.

Codes for Conditions Specified as Having Implications for Future Healthcare Needs

Assign codes for conditions that have been specified by the provider as having implications for future healthcare needs.

Note: This guideline should not be used for adult patients.

Prematurity and Fetal Growth Retardation

Providers utilize different criteria in determining prematurity. A code for prematurity should not be assigned unless it is documented. Assignment of codes in categories P05, Disorders of newborn related to slow fetal growth and fetal malnutrition, and P07, Disorders of newborn related to short

gestation and low birth weight, not elsewhere classified, should be based on the recorded birth weight and estimated gestational age. Codes from category P05 should not be assigned with codes from category P07.

When both birth weight and gestational age are available, two codes from category P07 should be assigned, with the code for birth weight sequenced before the code for gestational age.

A code from P05 and codes from P07.2 and P07.3 may be used to specify weeks of gestation as documented by the provider in the record.

Low Birth Weight and Immaturity Status

Codes from subcategory P07, Disorders of newborn related to short gestation and low birth weight, are for use for a child or adult who was premature or had a low birth weight as a newborn and this is affecting the patient's current health status.

See Section I.C.21. Factors influencing health status and contact with health services.

Bacterial Sepsis of Newborn

Category P36, Bacterial sepsis of newborn, includes congenital sepsis. If a perinate is documented as having sepsis without documentation of congenital or community acquired, the default is congenital and a code from category P36 should be assigned. If the P36 code includes the causal organism, an additional code from category B95 Streptococcus, Staphylococcus, and Enterococcus as the cause of diseases classified elsewhere, or B96, Other bacterial agents as the cause of diseases classified elsewhere, should **not** be assigned. If the P36 code does not include the causal organism, assign an additional code from category B96. If applicable, use additional codes to identify severe sepsis (R65.2-) and any associated acute organ dysfunction.

Stillbirth

Code P95 *Stillbirth* is only for use in institutions that maintain separate records for stillbirths. No other code should be used with P95. Code P95 should not be used on the mother's record.

Test Yourself #18

1. A baby is born with melena due to swallowed maternal blood. _____
2. A newborn is suspected to be affected by his mother's malnutrition during her pregnancy. _____
3. After administration of IV chloramphenicol, a newborn becomes hypotensive and cyanotic. She is diagnosed with grey baby syndrome. _____
4. A newborn is found to have a subarachnoid hemorrhage due to birth trauma. _____
5. A baby born at 34 weeks and weighs 4.85 lbs. _____

Chapter 17: Congenital Malformations, Deformations, and Chromosomal Abnormalities (Q00–Q99)

A congenital malformation is a defect that is present at birth. It may be genetic, result from exposure of the fetus to a malforming agent, or of unknown causation. Examples include spina bifida, heart anomalies, cleft lip and/or palate, and Down Syndrome.

Cleft lip and cleft palate are common congenital malformations. A cleft lip is a physical separation of the two sides of the upper lip, which often extends beyond the base of the nose and includes the bones of the upper jaw and/or upper gum. A cleft palate is a split in the roof of the mouth. It can involve the hard palate and/or the soft palate. The condition may occur on one or both sides of the mouth. The lip and palate develop separately, so it is possible to have a cleft lip alone, a cleft palate alone, or both conditions together.

In ICD-10-CM, codes for cleft lip/cleft palate are broken down by laterality, portion of the palate, and if the conditions occur separately or together.

EXAMPLES

Q36.0 Cleft lip, bilateral

Q37.1 Cleft hard palate with unilateral cleft lip

Q37.4 Cleft hard and soft palate with bilateral cleft lip

Chromosomal Abnormalities

Chapter 17 contains codes for chromosomal abnormalities, including Down syndrome and trisomies. Down syndrome is a genetic condition in which a person has 47 chromosomes (usually chromosome 21) instead of the normal 46. It is the most common single cause of human birth defects. While the symptoms of Down syndrome vary, children with Down syndrome have a recognizable appearance, including a flattened nose, small ears and mouth, upward slanting eyes, and a small head. Other trisomies include trisomy 13, trisomy 18, whole, and partial trisomy.

ICD-10-CM is differentiated by which chromosome is affected, and whether the condition is mosaic or nonmosaic. Nonmosaic indicates that all cells in the contain the extra chromosome. Mosaic trisomy indicates that only a portion of the cells contain the extra chromosome.

EXAMPLE

A mother brings her child in for a checkup with her pediatrician. She has nonmosaic trisomy 21.

Q90.0 Trisomy 21, nonmosaicism

Assign an appropriate code(s) from categories Q00–Q99, Congenital malformations, deformations, and chromosomal abnormalities when a malformation/deformation/or chromosomal abnormality is documented. A malformation/deformation/or chromosomal abnormality may be the principal/first-listed diagnosis on a record or a secondary diagnosis.

When a malformation/deformation/or chromosomal abnormality does not have a unique code assignment, assign additional code(s) for any manifestations that may be present.

When the code assignment specifically identifies the malformation/deformation/or chromosomal abnormality, manifestations that are an inherent component of the anomaly should not be coded

separately. Additional codes should be assigned for manifestations that are not an inherent component.

Codes from chapter 17 may be used throughout the life of the patient. If a congenital malformation or deformity has been corrected, a personal history code should be used to identify the history of the malformation or deformity. Although present at birth, malformation/deformation/or chromosomal abnormality may not be identified until later in life. Whenever the condition is diagnosed by the physician, it is appropriate to assign a code from codes Q00–Q99.

For the birth admission, the appropriate code from category Z38, Liveborn infants, according to place of birth and type of delivery, should be sequenced as the principal diagnosis, followed by any congenital anomaly codes, Q00–Q89.

Test Yourself #19

1. Tongue tied. _____
2. Axenfeld's anomaly. _____
3. Loss of voice. _____
4. Newborn full term considered light for gestational age at 1000 grams. _____

Chapter 18: Symptoms, Signs, and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified (R00–R99)

Chapter 18 includes symptoms, signs, abnormal results of clinical or other investigative procedures, and ill-defined conditions regarding which no diagnosis classifiable elsewhere is recorded. Signs and symptoms that point rather definitely to a given diagnosis have been assigned to a category in other chapters of the classification.

Use of Symptom Codes

Codes that describe symptoms and signs are acceptable for reporting purposes when a related definitive diagnosis has not been established (confirmed) by the provider.

EXAMPLE

A patient visited his family physician with symptoms of nausea and vomiting. The symptoms began two days ago. The patient has no other symptoms. The physician examines the patient and prescribes medication to help with the condition.

R11.2 Nausea with vomiting, unspecified

Use of a Symptom Code with a Definitive Diagnosis Code

Codes for signs and symptoms may be reported in addition to a related definitive diagnosis when the sign or symptom is not routinely associated with that diagnosis, such as the various signs and symptoms associated with complex syndromes. The definitive diagnosis code should be sequenced before the symptom code.

Signs or symptoms that are associated routinely with a disease process should not be assigned as additional codes, unless otherwise instructed by the classification.

EXAMPLE

A patient is seen by a cardiologist with chest pain and shortness of breath on exertion. The physician documents a diagnosis of bradycardia.

R00.1 Bradycardia, unspecified

In this example the sign/symptoms are related to the condition and would not require an additional diagnosis.

Combination Codes that Include Symptoms

ICD-10-CM contains a number of combination codes that identify both the definitive diagnosis and common symptoms of that diagnosis. When using one of these combination codes, an additional code should not be assigned for the symptom.

Repeated Falls

Code R29.6 *Repeated falls* is for use for encounters when a patient has recently fallen and the reason for the fall is being investigated. Code Z91.81 *History of falling* is for use when a patient has fallen in the past and is at risk for future falls. When appropriate, both codes R29.6 and Z91.81 may be assigned together.

Coma Scale

The coma scale codes (R40.2-) can be used in conjunction with traumatic brain injury codes, acute cerebrovascular disease or sequelae of cerebrovascular disease codes. These codes are primarily for use by trauma registries, but they may be used in any setting where this information is collected. The coma scale codes should be sequenced after the diagnosis code(s).

Three codes, one from each subcategory, are needed to complete the scale. The seventh character indicates when the scale was recorded. The seventh character should match for all three codes. In the case where the individual scores are not documented, assign a code from R40.24- for the Glasgow coma scale.

EXAMPLE

GCS of 10 is documented.

R40.242 Glasgow coma scale score 9–12

Functional Quadriplegia

Functional quadriplegia (code R53.2) is the lack of ability to use one's limbs or to ambulate due to extreme debility. It is not associated with neurologic deficit or injury, and code R53.2 should not be used for cases of neurologic quadriplegia. It should only be assigned if functional quadriplegia is specifically documented in the medical record.

SIRS Due to Non-Infectious Process

The systemic inflammatory response syndrome (SIRS) can develop as a result of certain non-infectious disease processes, such as trauma, malignant neoplasm, or pancreatitis. When SIRS

is documented with a noninfectious condition, and no subsequent infection is documented, the code for the underlying condition, such as an injury, should be assigned, followed by code R65.10 *Systemic inflammatory response syndrome (SIRS) of non-infectious origin without acute organ dysfunction* or code R65.11 *Systemic inflammatory response syndrome (SIRS) of non-infectious origin with acute organ dysfunction*.

If an associated acute organ dysfunction is documented, the appropriate code(s) for the specific type of organ dysfunction(s) should be assigned in addition to code R65.11. If acute organ dysfunction is documented, but it cannot be determined if the acute organ dysfunction is associated with SIRS or due to another condition (eg, directly due to the trauma), the provider should be queried.

Death NOS

Code R99 *Ill-defined and unknown cause of mortality* is only for use in the very limited circumstance when a patient who has already died is brought into an emergency department or other healthcare facility and is pronounced dead upon arrival. It does not represent the discharge disposition of death.

Test Yourself #20

1. Patient is seen in follow-up for history of falls. _____
2. Functional Quadriplegia. _____
3. John is seen in the office for complaints of tremors. _____
4. Tina is seen in the office for the first time with complaints of hematuria. _____
5. Little Timmy was seen for a fever of 101 degrees. _____

Chapter 19: Injury, Poisoning, and Certain Other Consequences of External Causes (S00–T88)

Code Extensions

Most categories in chapter 19 have seventh character extensions that are required for each applicable code. Most categories in this chapter have three extensions (with the exception of fractures): A, initial encounter, D, subsequent encounter and S, sequela.

Extension "A," initial encounter is used while the patient is receiving active treatment for the injury. Examples of active treatment are: surgical treatment, emergency department encounter, and evaluation and treatment by a new physician.

EXAMPLE

While playing tennis in a tournament at the Clay Court Country Club, a male player sprained his right wrist and was treated in a hospital emergency department close to the courts.

S63.501A Unspecified sprain of right wrist, initial encounter

Y93.73 Activity, racquet and hand sports

Y92.312 Tennis court as the place of occurrence as the external cause

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CODING TIP

Don't latch on to the word "initial' as this could hinder your appropriate selection, instead keep in mind the words "active treatment" as identified in the guidelines.

Extension "D" subsequent encounter is used for encounters after the patient has received active treatment of the injury and is receiving routine care for the injury during the healing or recovery phase. Examples of subsequent care are: cast change or removal, removal of external of internal fixation device, medication adjustment, other aftercare and follow-up visits following injury treatment.

The aftercare Z codes should not be used for aftercare for injuries. For aftercare of an injury, assign the acute injury code with the seventh character "D" (subsequent encounter).

Extension "S," sequela, is for use for complications or conditions that arise as a direct result of an injury, such as scar formation after a burn. The scars are sequelae of the burn. When using extension "S," it is necessary to use both the injury code that precipitated the sequela and the code for the sequela itself. The "S" is added only to the injury code, not the sequela code. The "S" extension identifies the injury responsible for the sequela. The specific type of sequela (eg, scar) is sequenced first, followed by the injury code.

Coding of Injuries

When coding injuries, assign separate codes for each injury unless a combination code is provided, in which case the combination code is assigned. Code T07 *Unspecified multiple injuries* should not be assigned unless information for a more specific code is not available. Multiple injury codes are provided in ICD-10-CM, but should not be assigned unless information for a more specific code is not available. Traumatic injury codes (S00–T14.9) are not to be used for normal, healing surgical wounds or to identify complications of surgical wounds.

The code for the most serious injury, as determined by the provider and the focus of treatment, is sequenced first.

In ICD-10-CM, open wounds are more defined. There are separate subcategories for unspecified open wounds, lacerations, puncture wounds, and open bites. Depending on the site, the information necessary for proper code assignment will differ. For example, for a laceration of the abdominal wall, the code subcategories include "with penetration into the peritoneal cavity" and "without penetration into the peritoneal cavity". Some laceration and puncture wound codes are divided into "with foreign body" and "without foreign body". There are some things that are common to each type of injury, such as site and laterality.

EXAMPLE

A patient not wearing a seatbelt was involved in an automobile accident, hit the windshield, and was treated in the emergency room for a laceration to the scalp.

S01.01XA Laceration without foreign body of scalp, initial encounter

EXAMPLE

A patient presents with a puncture wound to her left foot after walking barefoot along the beach. A piece of the seashell is found to be imbedded in the wound.

S91.342A Puncture wound with foreign body, left foot, initial encounter

Superficial Injuries

Superficial injuries such as abrasions or contusions are not coded when associated with more severe injuries of the same site.

Primary Injury with Damage to Nerves/Blood Vessels

When a primary injury results in minor damage to peripheral nerves or blood vessels, the primary injury is sequenced first with additional code(s) for injuries to nerves and spinal cord (such as category S04), and/or injury to blood vessels (such as category S15). When the primary injury is to the blood vessels or nerves, that injury should be sequenced first.

Coding of Traumatic Fractures

The principles of multiple coding of injuries should be followed in coding fractures. Fractures of specified sites are coded individually by site in accordance with both the provisions within categories S02, S12, S22, S32, S42, S52, S62, S72, S82, S92 and the level of detail furnished by medical record content.

A fracture not indicated as open or closed should be coded to closed. A fracture not indicated whether displaced or not displaced should be coded to displaced.

In ICD-10-CM fractures have both site and laterality designations. Fractures are very specific to type and location for coding purposes.

Some fracture types are:

- Greenstick fracture: an incomplete fracture in which the bone is bent. This type occurs most often in children.
- Transverse fracture: a fracture at a right angle to the bone's axis.
- Oblique fracture: a fracture in which the break has a curved or sloped pattern.
- Comminuted fracture: a fracture in which the bone fragments into several pieces.
- An impacted fracture is one whose ends are driven into each other. This is commonly seen in arm fractures in children and is sometimes known as a buckle fracture. Other types of fracture are pathologic fracture, caused by a disease that weakens the bones, and stress fracture, a hairline crack.

Other types of fracture are pathologic fracture, caused by a disease that weakens the bones, and stress fracture.

Open fractures are classified with the Gustilo classifications in ICD-10-CM. Gustilo open fracture classification classifies fractures into three major categories depending on the mechanism of the injury, soft tissue damage and degree of skeletal involvement.

Type I:

- Wound less than 1 cm with minimal soft tissue injury
- Wound bed is clean
- Fracture is usually a simple transverse, short oblique fracture, with minimal comminution

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Type II:

- Wound is greater than 1 cm with moderate soft tissue injury
- Fracture is usually a simple transverse, short oblique fracture, with minimal comminution

Type III:

Fractures that involve extensive damage to the soft tissues, including muscle, skin and neurovascular structures. It is often accompanied by a high velocity injury or a severe crushing component. Special patterns classified as Type III:

- Open segmental fracture, irrespective of the size of the wound
- Gunshot wounds -high velocity and short-range shotgun injuries
- Open fracture with neurovascular injury
- Farm injuries, with soil contamination, irrespective of the size of the wound.
- Traumatic amputations
- Open fractures over 8 hours old
- Mass casualties, e.g. war and tornado victims

Subtype IIIA: Adequate soft tissue coverage despite soft tissue laceration or flaps or high energy trauma irrespective of the size of the wound. This includes segmental fractures or severely comminuted fractures.

Subtype IIIB: Extensive soft tissue lost with periosteal stripping and bony exposure. This is usually associated with massive contamination.

Subtype IIIC: Fracture in which there is a major arterial injury requiring repair for limb salvage

Coding of fractures can be complex without the proper anatomy knowledge.

Initial vs. Subsequent Encounter for Fractures

Traumatic fractures are coded using the appropriate seventh character extension for initial encounter (A, B, C) while the patient is receiving active treatment for the fracture. Examples of active treatment are: surgical treatment, emergency department encounter, and evaluation and treatment by a new physician. The appropriate seventh character for initial encounter should also be assigned for a patient who delayed seeking treatment for the fracture or nonunion.

Fractures are coded using the appropriate seventh character extension for subsequent care for encounters after the patient has completed active treatment of the fracture and is receiving routine care for the fracture during the healing or recovery phase. Examples of fracture aftercare are cast change or removal, removal of external or internal fixation device, medication adjustment, and follow-up visits following fracture treatment.

Care for complications of surgical treatment for fracture repairs during the healing or recovery phase should be coded with the appropriate complication codes. Care of complications of fractures, such as malunion and nonunion, should be reported with the appropriate seventh character extensions for subsequent care with nonunion (K, M, N,) or subsequent care with malunion (P, Q, R). A code from category M80, not a traumatic fracture code, should be used for any patient with known osteoporosis who suffers a fracture. See Section I.C.13. Osteoporosis.

The aftercare Z codes should not be used for aftercare for traumatic injuries. For aftercare of a traumatic fracture, assign the acute fracture code with the appropriate 7th character.

EXAMPLE

A patient underwent surgery for an open burst fracture of the first lumbar vertebra, which became unstable.

S32.012B Unstable burst fracture of first lumbar vertebra

Note: The seventh character "B" identifies the initial encounter for the open fracture.

Multiple Fractures Sequencing

Multiple fractures are sequenced in accordance with the severity of the fracture. The provider should be asked to list the fracture diagnoses in the order of severity.

Coding of Burns and Corrosions

The ICD-10-CM makes a distinction between burns and corrosions. The burn codes are for thermal burns, except sunburns, that come from a heat source, such as a fire or hot appliance. The burn codes are also for burns resulting from electricity and radiation. Corrosions are burns due to chemicals. The guidelines are the same for burns and corrosions.

Current burns (T20–T25) are classified by depth, extent and by agent (X code). Burns are classified by depth as first degree (erythema), second degree (blistering), and third degree (full-thickness involvement). Burns of the eye and internal organs (T26–T28) are classified by site, but not by degree.

Sequencing of Burn and Related Condition Codes

Sequence first the code that reflects the highest degree of burn when more than one burn is present.

a. When the reason for the admission or encounter is for treatment of external multiple burns, sequence first the code that reflects the burn of the highest degree.

b. When a patient has both internal and external burns, the circumstances of admission govern the selection of the principal diagnosis or first-listed diagnosis.

c. When a patient is admitted for burn injuries and other related conditions such as smoke inhalation and/or respiratory failure, the circumstances of admission govern the selection of the principal or first-listed diagnosis.

Burns of the Same Local Site

Classify burns of the same local site (three-character category level, T20–T28) but of different degrees to the subcategory identifying the highest degree recorded in the diagnosis.

Non-Healing Burns

Non-healing burns are coded as acute burns. Necrosis of burned skin should be coded as a non-healed burn.

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Infected Burn

For any documented infected burn site, use an additional code for the infection.

Assign Separate Codes for Each Burn Site

When coding burns, assign separate codes for each burn site. Category T30, Burn and corrosion, body region unspecified is extremely vague and should rarely be used.

Burns and Corrosions Classified According to Extent of Body Surface Involved

Assign codes from category T31, Burns classified according to extent of body surface involved, or T32, Corrosions classified according to extent of body surface involved, when the site of the burn is not specified or when there is a need for additional data. It is advisable to use category T31 as additional coding when needed to provide data for evaluating burn mortality, such as that needed by burn units. It is also advisable to use category T31 as an additional code for reporting purposes when there is mention of a third-degree burn involving 20 percent or more of the body surface.

Categories T31 and T32 are based on the classic "rule of nines" in estimating body surface involved: head and neck are assigned 9 percent, each arm 9 percent, each leg 18 percent, the anterior trunk 18 percent, posterior trunk 18 percent, and genitalia 1 percent. Providers may change these percentage assignments where necessary to accommodate infants and children who have proportionately larger heads than adults, and patients who have large buttocks, thighs, or abdomen that involve burns.

EXAMPLE

A fireman suffered a third degree burn of his upper back involving 8 percent total body surface area, a second degree burn of the neck involving 2 percent total body surface area, and a third degree burn of the right forearm involving 4 percent total body surface area battling a house fire. He was in the house containing the fire when the burns occurred. He was taken to the hospital emergency department for treatment.

T21.33XA Burn of third degree of upper back, initial encounter

T22.311A Burn of third degree of right forearm, initial encounter

T20.27XA Burn of second degree of neck, initial encounter

T31.11 Burns involving 10–19 percent of body surface with 10-19% third degree burns

X00.0XXA Exposure to flames in uncontrolled fire in building or structure, initial encounter

Y92.019 Unspecified place in single family (private) house as the place of occurrence as the external cause

Encounters for Treatment of Late Effects of Burns

Encounters for the treatment of the late effects of burns or corrosions (eg, scars or joint contractures) should be coded with a burn or corrosion code with the seventh character "S" or sequela.

Sequelae with a Late Effect Code and Current Burn

When appropriate, both a code for a current burn or corrosion with seventh character extension "A" or "D" and a burn or corrosion code with extension "S" may be assigned on the same record (when both a current burn and sequelae of an old burn exist). Burns and corrosions do not heal at the same rate and a current healing wound may still exist with sequela of a healed burn or corrosion.

Use of an External Cause Code with Burns and Corrosions

An external cause code should be used with burns and corrosions to identify the source and intent of the burn, as well as the place where it occurred.

Adverse Effects, Poisoning, Underdosing and Toxic Effects

Codes in categories T36–T65 are combination codes that include the substances related to adverse effects, poisonings, toxic effects and underdosing, as well as the external cause. No additional external cause code is required for poisonings, toxic effects, adverse effects and underdosing codes. A code from categories T36-T65 should be sequenced after the codes for the adverse effect, these codes should never be assigned as the principal or first-listed code.

Do Not Code Directly from the Table of Drugs

Do not code directly from the Table of Drugs and Chemicals. Always refer back to the Tabular List.

Use as Many Codes as Necessary to Describe

Use as many codes as necessary to describe completely all drugs, and medicinal or biological substances. If the same code would describe the causative agent for more than one adverse reaction, poisoning, toxic effect, or underdosing, assign the code only once.

If two or more drugs, medicinal or biological substances are reported, code each individually unless the combination code is listed in the Table of Drugs and Chemicals.

The Occurrence of Drug Toxicity is Classified in ICD-10-CM as Follows:

Adverse Effect

When coding an adverse effect of a drug that has been correctly prescribed and properly administered, assign the appropriate code for the nature of the adverse effect followed by the appropriate code for the adverse effect of the drug (T36–T50). The code for the drug should have a 5th or 6th character "5" (for example T36.0X5-) Examples of the nature of an adverse effect are tachycardia, delirium, gastrointestinal hemorrhaging, vomiting, hypokalemia, hepatitis, renal failure, or respiratory failure.

EXAMPLE

A patient took a dose of penicillin that was prescribed correctly resulting in projectile vomiting.

R11.12 Projectile vomiting

T36.0X5A Adverse effect of penicillins, initial encounter

Poisoning

When coding a poisoning or reaction to the improper use of a medication (eg, overdose, wrong substance given or taken in error, wrong route of administration), assign the appropriate code from categories T36–T50. Poisoning codes have an associated intent: accidental, intentional self-harm, assault, and undetermined. Use additional code(s) for all manifestations of poisonings.

If there is also a diagnosis of drug abuse or dependence to the substance, the abuse or dependence is coded as an additional code.

Examples of poisoning include:

1. Errors made in drug prescription or in the administration of the drug by provider, nurse, patient, or other person.
2. Overdose of a drug intentionally taken if an overdose of a drug was intentionally taken or administered and resulted in drug toxicity, it would be coded as a poisoning.
3. If a nonprescribed drug or medicinal agent was taken in combination with a correctly prescribed and properly administered drug, any drug toxicity or other reaction resulting from the interaction of the two drugs would be classified as a poisoning.
4. When a reaction results from the interaction of a drug(s) and alcohol, this would be classified as poisoning.

Note: See Section I.C.4. if poisoning is the result of insulin pump malfunctions.

EXAMPLE

A patient was prescribed penicillin by her physician for an infection. The patient decided instead of taking the drug as prescribed (500 mg twice per day) she would take 1000 mg twice per day so it would work faster and she would feel better sooner. The patient became very ill after taking 2000 mg the first day, which resulted in projectile vomiting.

T36.0X1A Poisoning by penicillins accidental (unintentional), initial encounter

R11.12 Projectile vomiting

Underdosing

Underdosing refers to taking less of a medication than is prescribed by a physician or a manufacturer's instruction. For underdosing, assign the code from categories T36–T50. Codes for underdosing should never be assigned as the principal or first-listed diagnosis. If a patient has an exacerbation of the medical condition for which the drug is prescribed because of reduction in dose, then the medical condition itself should be coded.

Noncompliance (Z91.12-, Z91.13-) or complication of care (Y63.61, Y63.8–Y63.9) codes are to be used with an underdosing code to indicate intent, if known.

Toxic Effects

When a harmful substance is ingested or comes in contact with a person, this is classified as a toxic effect. The toxic effect codes are in categories T51–T65.

Toxic effect codes have an associated intent: accidental, intentional self-harm, assault, and undetermined.

Adult and Child Abuse, Neglect and Other Maltreatment

Sequence first the appropriate code from categories T74.- or T76.- for abuse, neglect and other maltreatment, followed by any accompanying mental health or injury code(s).

If the documentation in the medical record states abuse or neglect it is coded as confirmed. It is coded as suspected if it is documented as suspected.

For cases of confirmed abuse or neglect an external cause code from the assault section (X92–Y08) should be added to identify the cause of any physical injuries. A perpetrator code (Y07) should be added when the perpetrator of the abuse is known. For suspected cases of abuse or neglect, do not report external cause or perpetrator code.

If a suspected case of abuse, neglect, or mistreatment is ruled out during an encounter code Z04.71 *Encounter for examination and observation following alleged physical adult abuse* or code Z04.72 *Encounter for examination and observation following alleged child physical abuse* should be used, not a code from T76.

If a suspected case of alleged rape or sexual abuse is ruled out during an encounter code Z04.41 *Encounter for examination and observation following alleged adult rape* or code Z04.42 *Encounter for examination and observation following alleged child rape* should be used, not a code from T76.

See Section I.C.15. Abuse in a pregnant patient.

Complications of Care

Documentation of Complications of Care

As with all procedural or postprocedural complications, code assignment is based on the provider's documentation of the relationship between the condition and the procedure.

Pain Due to Medical Devices

Pain associated with devices, implants, or grafts left in a surgical site (for example painful hip prosthesis) is assigned to the appropriate code(s) found in chapter 19, Injury, poisoning, and certain other consequences of external causes. Specific codes for pain due to medical devices are found in the T code section of the ICD-10-CM. Use additional code(s) from category G89 to identify acute or chronic pain due to presence of the device, implant or graft (G89.18 or G89.28).

Transplant Complications Other than Kidney

Codes under category T86, Complications of transplanted organs and tissues, are for use for both complications and rejection of transplanted organs. A transplant complication code is only assigned if the complication affects the function of the transplanted organ. Two codes are required to fully describe a transplant complication, the appropriate code from category T86 and a secondary code that identifies the complication.

Pre-existing conditions or conditions that develop after the transplant are not coded as complications unless they affect the function of the transplanted organs.

Chronic Kidney Disease and Kidney Transplant Complications

Kidney transplant complications

Patients who have undergone kidney transplant may still have some form of chronic kidney disease (CKD) because the kidney transplant may not fully restore kidney function. Code T86.1- should be assigned for documented complications of a kidney transplant, such as transplant failure or rejection or other transplant complication. Code T86.1- should not be assigned for post kidney transplant patients who have chronic kidney (CKD) unless a transplant complication such as transplant failure or rejection is documented. If the documentation is unclear as to whether the patient has a complication of the transplant, query the provider.

Conditions that affect the function of the transplanted kidney, other than CKD, should be assigned a code from subcategory T86.1, Complications of transplanted organ, kidney, and a secondary code that identifies the complication.

For patients with CKD following a kidney transplant, but who do not have a complication such as failure or rejection, *see section I.C.14. Chronic kidney disease and kidney transplant status.*

Complication Codes that Include the External Cause

As with certain other T codes, some of the complications of care codes have the external cause included in the code. The code includes the nature of the complication as well as the type of procedure that caused the complication. No external cause code indicating the type of procedure is necessary for these codes.

Complications of Care Codes within the Body System Chapters

Intraoperative and postprocedural complication codes are found within the body system chapters with codes specific to the organs and structures of that body system. These codes should be sequenced first, followed by a code(s) for the specific complication, if applicable.

Test Yourself #21

1. Patient is seen for the first time for an abrasion of the scalp. _____
2. Patient seen last week for laceration of the left ear presents again today for recheck. _____
3. Patient is seen initially for contusion of buttocks. _____
4. Unspecified closed fracture of the right upper end of the right ulna initial encounter. _____
5. Patient seen for multiple burns of the left shoulder and upper arm. This is his third visit for the burns. _____

Chapter 20: External Causes of Morbidity (V00–Y99)

Introduction

These guidelines are provided for the reporting of external causes of morbidity codes in order that there will be standardization in the process. These codes are secondary codes for use in any health-care setting. External cause codes are not required for reporting to some third-party payers.

External cause codes are intended to provide data for injury research and evaluation of injury prevention strategies. These codes capture how the injury or health condition happened (cause), the intent (unintentional or accidental; or intentional, such as suicide or assault), the place where the event occurred and the activity of the patient at the time of the event. The number of available codes in ICD-10-CM in comparison to ICD-9-CM is vastly increased. In ICD-9-CM external cause codes are the E-codes. In ICD-10-CM, they are the V-W-X- and Y-codes. More precise documentation will be necessary in some cases to ensure proper code selection. Coders will also have to understand the expansion to know what to code for injury cases when the additional codes are required.

General External Cause Coding Guidelines

Used with Any Code in the Range of A00.0–T88.9, Z00–Z99

An external cause code may be used with any code in the range of A00.0–T88.9, Z00–Z99, classification that is a health condition due to an external cause. Though they are most applicable to injuries, they are also valid for use with such things as infections or diseases due to an external source, and other health conditions, such as a heart attack that occurs during strenuous physical activity.

External Cause Code Used for Length of Treatment

Assign the external cause code, with the appropriate seventh character (initial encounter, subsequent encounter or sequela) for each encounter for which the injury or condition is being treated.

Use the Full Range of External Cause Codes

Use the full range of external cause codes to completely describe the cause, the intent, the place of occurrence, if applicable, and the activity of the patient at the time of the event, for all injuries, and other health conditions due to an external cause.

Assign as Many External Cause Codes as Necessary

Assign as many external cause codes as necessary to fully explain each cause. If only one external code can be recorded, assign the code most related to the principal diagnosis.

The Selection of the Appropriate External Cause Code

The selection of the appropriate external cause code is guided by the Index to External Causes, which is located after the Alphabetical Index to diseases and by Inclusion and Exclusion notes in the Tabular List.

External Cause Code Can Never Be a Principal Diagnosis

An external cause code can never be a principal (first-listed) diagnosis.

Combination External Cause Codes

Certain of the external cause codes are combination codes that identify sequential events that result in an injury, such as a fall which results in striking against an object. The injury may be due to either event or both. The combination external cause code used should correspond to the sequence of events regardless of which caused the most serious injury.

No External Cause Code Needed in Certain Circumstances

No external cause code from chapter 20 is needed if the external cause and intent are included in a code from another chapter (eg, T36.0x1- *Poisoning by penicillins, accidental (unintentional)*).

Place of Occurrence Guideline

Codes from category Y92, Place of occurrence of the external cause, are secondary codes for use after other external cause codes to identify the location of the patient at the time of injury or other condition. The available place of occurrence codes has substantially increased in ICD-10-CM. For example, mobile home, apartment, military base, hospital, and cultural building, with specific sites in those places have separate codes in ICD-10-CM.

A place of occurrence code is used only once, at the initial encounter for treatment. No seventh characters are used for Y92. Only one code from Y92 should be recorded on a medical record. A place of occurrence code should be used in conjunction with an activity code, Y93. Do not use place of occurrence code Y92.9 *Unspecified place or not applicable*, if the place is not stated or is not applicable.

EXAMPLE

While alpine skiing in Utah, the patient fell and suffered a stress fracture of the right femur.

M84.351A Stress fracture, right femur, initial encounter

V00.321A Snow-ski accident

Y92.39 Other specified sports and athletic area as the place of occurrence of the external cause

Y93.23 Other individual sport (Activity)

Activity Code

Codes from category Y93, Activity code, are secondary codes for use with other external cause codes to identify the activity of the patient at the time of the injury.

An activity code is used only once, at the initial encounter for treatment. Only one code from Y93 should be recorded on a medical record. An activity code should be used in conjunction with a place of occurrence code, Y92.

A work related activity is any activity for which payment or income is received. Use activity code Y93.9 if the activity of the patient is not stated or is not applicable. A code from category Y93 is appropriate for use with external cause and intent codes if identifying the activity provides additional information about the event.

Place of Occurrence and Activity Code Used with Other External Cause Code

When applicable, a place of occurrence and an activity code are sequenced after the main external cause code(s). Regardless of the number of external cause codes assigned there should be only one place of occurrence code and one activity code assigned to an encounter.

If the Reporting Format Limits the Number of External Cause Codes

If the reporting format limits the number of external cause codes that can be used in reporting clinical data, code the one most related to the principal diagnosis.

Multiple External Cause Coding Guidelines

If two or more events cause separate injuries, an external cause code should be assigned for each cause. The first-listed external cause code will be selected in the following order:

1. External cause codes for child and adult abuse take priority over all other external cause codes. See Section I.C.19. Child and Adult abuse guidelines.
2. External cause codes for terrorism events take priority over all other external cause codes except child and adult abuse.
3. External cause codes for cataclysmic events take priority over all other external cause codes except child and adult abuse, and terrorism.
4. External cause codes for transport accidents take priority over all other external cause codes except cataclysmic events and child and adult abuse and terrorism.

The first-listed external cause code should correspond to the cause of the most serious diagnosis due to an assault, accident, or self-harm, following the order of hierarchy listed above.

Child and Adult Abuse Guidelines

Adult and child abuse, neglect and maltreatment are classified as assault. Any of the assault codes may be used to indicate the external cause of any injury resulting from the confirmed abuse.

For confirmed cases of abuse, neglect and maltreatment, when the perpetrator is known, a code from Y07 *Perpetrator of maltreatment and neglect* should accompany any other assault codes. See Section I.C.19. Adult and child abuse, neglect and other maltreatment.

Unknown or Undetermined Intent Guideline

If the intent (accident, self-harm, assault) of the cause of an injury or other condition is unknown or unspecified, code the intent as accidental intent. All transport accident categories assume accidental intent.

Use of Undetermined Intent

External cause codes for events of undetermined intent are only for use if the documentation in the record specifies that the intent cannot be determined.

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Late Effects of External Cause Guidelines

Late effects are reported using the external cause code with the seventh character extension "S" for sequela. These codes should be used with any report of a late effect or sequela resulting from a previous injury.

Late Effect External Cause Code with a Related Current Injury

A late effect external cause code should never be used with a related current nature of injury code.

Use of Late Effect External Cause Codes for Subsequent Visits

Use a late effect external cause code for subsequent visits when a late effect of the initial injury is being treated. Do not use a late effect external cause code for subsequent visits for follow-up care (eg, to assess healing, to receive rehabilitative therapy) of the injury or poisoning when no late effect of the injury has been documented.

Terrorism Guidelines

Cause of Injury Identified by the Federal Government (FBI) as Terrorism

When the cause of an injury is identified by the federal government (FBI) as terrorism, the first-listed external cause code should be a code from category Y38, Terrorism. The definition of terrorism employed by the FBI is found at the inclusion note at the beginning of category Y38. Use additional code for place of occurrence (Y92.-). More than one Y38 code may be assigned if the injury is the result of more than one mechanism of terrorism.

Cause of an Injury is Suspected to be the Result of Terrorism

When the cause of an injury is suspected to be the result of terrorism a code from category Y38 should not be assigned. Suspected cases should be classified as assault.

Code Y38.9, Terrorism, Secondary Effects

Assign code Y38.9 *Terrorism, secondary effects* for conditions occurring subsequent to the terrorist event. This code should not be assigned for conditions that are due to the initial terrorist act. It is acceptable to assign code Y38.9 with another code from Y38 if there is an injury due to the initial terrorist event and an injury that is a subsequent result of the terrorist event.

External Cause Status

A code from category Y99 should be assigned whenever any other external cause code is assigned for an encounter including an Activity code. Assign a code from category Y99 External cause status to indicate the work status of the person at the time the event occurred.

Do not assign a code from category Y99 for:

- Poisonings
- Adverse effects
- Misadventures
- Late effects

Do not assign code Y99.9 *Unspecified external cause status* if the status is not stated in the medical record.

An external cause status code is used only once, at the initial encounter for treatment. Only one code from Y99 should be recorded on a medical record.

Test Yourself #22

1. A man presents for treatment after falling on the moving walkway at the airport. _____
2. While learning to ride a bike, Tommy hit a street pole. _____
3. A man was injured helping build walls for houses for Habitat for Humanity as a volunteer. _____
4. A little girl is bitten by a dog in the public park. _____
5. Patient treated for carpal tunnel syndrome from excessive, long-time computer keyboarding at work. _____

Chapter 21: Factors Influencing Health Status and Contact with Health Services (Z00–Z99)

Note: The chapter specific guidelines provide additional information about the use of Z codes for specified encounters.

Use of Z Codes in Any Healthcare Setting

Z codes are for use in any healthcare setting. Z codes may be used as either a first-listed (principal diagnosis code in the inpatient setting) or secondary code, depending on the circumstances of the encounter. Certain Z codes may only be used as first-listed or principal diagnosis.

Z Codes Indicate a Reason for an Encounter

Z codes are not procedure codes. A corresponding procedure code must accompany a Z code to describe the procedure performed.

Categories of Z Codes

Contact/Exposure

Category Z20 indicates contact with, or exposure to, communicable diseases. These codes are for patients who do not show any sign or symptom of a disease but have been exposed to it by close personal contact with an infected individual or are in an area where a disease is epidemic. These codes may be used as a first-listed code to explain an encounter for testing, or, more commonly, as a secondary code to identify a potential risk.

Inoculations and Vaccinations

Code Z23 is for encounters for inoculations and vaccinations. It indicates that a patient is being seen to receive a prophylactic inoculation against a disease. Procedure codes are required to iden-

tify the actual administration of the injection and the type(s) of immunizations given. Code Z23 may be used as a secondary code if the inoculation is given as a routine part of preventive healthcare, such as a well-baby visit.

EXAMPLE

A six-month-old child came for her routine check up. The patient is a very active, healthy child. During the encounter the physician determined the patient needed the suggested vaccinations.

Z00.129 Encounter for routine child health examination without abnormal findings

Z23 Encounter for immunizations

Status

Status codes indicate that a patient is either a carrier of a disease or has the sequelae or residual of a past disease or condition. This includes such things as the presence of prosthetic or mechanical devices resulting from past treatment. A status code is informative, because the status may affect the course of treatment and its outcome. A status code is distinct from a history code. The history code indicates that the patient no longer has the condition.

A status code should not be used with a diagnosis code from one of the body system chapters, if the diagnosis code includes the information provided by the status code. For example, code Z94.1 *Heart transplant status* should not be used with a code from subcategory T86.2, Complications of heart transplant. The status code does not provide additional information. The complication code indicates that the patient is a heart transplant patient.

For encounters for weaning from a mechanical ventilator, assign code J96.1 *Chronic respiratory failure* followed by code Z99.11 *Dependence on respirator [ventilator] status*.

The status Z codes/categories are:

- Z14 Genetic carrier—Genetic carrier status indicates that a person carries a gene associated with a particular disease which may be passed to offspring who may develop that disease. The person does not have the disease and is not at risk of developing the disease.
- Z15 Genetic susceptibility to disease—Genetic susceptibility indicates that a person has a gene that increases the risk of that person developing the disease.

Codes from category Z15 should not be used as principal or first-listed codes. If the patient has the condition to which he or she is susceptible, and that condition is the reason for the encounter, the code for the current condition should be sequenced first. If the patient is being seen for follow-up after completed treatment for this condition, and the condition no longer exists, a follow-up code should be sequenced first, followed by the appropriate personal history and genetic susceptibility codes.

If the purpose of the encounter is genetic counseling associated with procreative management, code Z31.5 *Encounter for genetic counseling* should be assigned as the first-listed code, followed by a code from category Z15. Additional codes should be assigned for any applicable family or personal history.

- Z16 Resistance to antimicrobial drugs—This code category indicates resistance and nonresponsiveness of a condition to antimicrobial drugs.
- Z17 Estrogen receptor status

- Z18 Retained foreign body fragments
- Z21 Asymptomatic HIV infection status—This code indicates that a patient has tested positive for HIV but has manifested no signs or symptoms of the disease.
- Z22 Carrier of infectious disease—Carrier status indicates that a person harbors the specific organisms of a disease without manifest symptoms and is capable of transmitting the infection.
- Z28.3 Underimmunization
- Z33.1 Pregnant state, incidental—This code is a secondary code only for use when the pregnancy is in no way complicating the reason for visit. Otherwise, a code from the obstetric chapter is required.
- Z66 Do not resuscitate
- Z67 Blood type
- Z68 Body mass index (BMI)
- Z74.01 Bed confinement status
- Z76.82 Awaiting organ transplant status
- Z78.- Other specified health status

Code Z78.1 *Physical restraint status* may be used when it is documented by the provider that a patient has been put in restraints during the current encounter. Please note that this code should not be reported when it is documented by the provider that a patient is temporarily restrained during a procedure.

EXAMPLE

A healthy 33-year-old male patient was examined by his family physician during a routine preventive exam. The patient has no specific problems but is HIV positive without any other symptoms.

Z00.00 Encounter for general adult medical examination without abnormal findings

Z21 Asymptomatic human immunodeficiency virus [HIV] infection status

Codes from this category indicate a patient's continuous use of a prescribed drug (including such things as aspirin therapy) for the long-term treatment of a condition or for prophylactic use. It is not for use for patients who have addictions to drugs. This subcategory is not for use of medications for detoxification or maintenance programs to prevent withdrawal symptoms in patients with drug dependence (eg, methadone maintenance for opiate dependence). Assign the appropriate code for the drug dependence instead.

- Z79.- Long-term (current) drug therapy

Assign a code from Z79 if the patient is receiving a medication for an extended period as a prophylactic measure (such as for the prevention of deep vein thrombosis) or as treatment of a chronic condition (such as arthritis) or a disease requiring a lengthy course of treatment (such as cancer).

Do not assign a code from category Z79 for medication being administered for a brief period of time to treat an acute illness or injury (such as a course of antibiotics to treat acute bronchitis).

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EXAMPLE

A patient who has Type 2 diabetes mellitus is seen by his endocrinologist in follow-up. The patient is doing well with diet and has been on insulin for five months. The physician decided to keep the patient on insulin for a couple more months to make sure his blood sugar remains stable.

E11.9 Type 2 diabetes, without complications

Z79.4 Long-term use of insulin

Categories Z89–Z90 and Z93–Z99 are for use only if there are no complications or malfunctions of the organ or tissue replaced, the amputation site or the equipment on which the patient is dependent.

- Z88 Allergy status to drugs, medicaments and biological substances
- Except: Z88.9 Allergy status to unspecified drugs, medicaments and biological substances status
- Z89 Acquired absence of limb
- Z90 Acquired absence of organs, not elsewhere classified
- Z91.0- Allergy status, other than to drugs and biological substances
- Z91.7- Low birth weight and immaturity status
- Z91.82 Status post administration of tPA (rtPA) in a different facility within the last 24 hours prior to admission to a current facility
- Z93 Artificial opening status
- Z94 Transplanted organ and tissue status
- Z95 Presence of cardiac and vascular implants and grafts
- Z96 Presence of other functional implants
- Z97 Presence of other devices
- Z98 Other postprocedural states
- Z98.85 Transplanted organ removal status
- Z99 Dependence on enabling machines and devices, not elsewhere classified

History (of)

There are two types of history Z codes, personal and family. Personal history codes explain a patient's past medical condition that no longer exists and is not receiving any treatment, but that has the potential for recurrence, and may require continued monitoring.

Family history codes are for use when a patient has a family member(s) who has had a particular disease that causes the patient to be at higher risk of also contracting the disease.

Personal history codes may be used in conjunction with follow-up codes and family history codes may be used in conjunction with screening codes to explain the need for a test or procedure. History codes are also acceptable on any medical record regardless of the reason for visit. A history of an illness, even if no longer present, is important information that may alter the type of treatment ordered.

The history Z code categories are:

- Z80 Family history of primary malignant neoplasm
- Z81 Family history of mental and behavioral disorders
- Z82 Family history of certain disabilities and chronic diseases (leading to disablement)
- Z83 Family history of other specific disorders
- Z84 Family history of other conditions
- Z85 Personal history of primary and secondary malignant neoplasm
- Z86 Personal history of certain other diseases
- Z87 Personal history of other diseases and conditions
- Z91.4- Personal history of psychological trauma, not elsewhere classified
- Z91.5 Personal history of self-harm
- Z91.6- Personal history of other physical trauma
- Z91.8- Other specified personal risk factors, not elsewhere classified
- Z92 Personal history of medical treatment

  Except: Z92.0, Personal history of contraception
- Z92.82 Status post administration of tPA (rtPA) in a different facility within the last 24 hours prior to admission to current facility

EXAMPLE

A patient with a history of breast cancer who is currently using Tamoxifen as a preventive measure visits her oncologist one year after a mastectomy of her left breast due to a malignant tumor, which was primary. She is doing well with no sign of recurrence. The physician decided to continue the Tamoxifen therapy and will see her back in follow-up in six months.

Z85.3 Personal history of primary malignant neoplasm of the breast

Note: The malignant neoplasm would not be coded since there is no active treatment currently for cancer. A history code is reported even if the patient is using medication for prevention of reoccurrence.

Screening

Screening is the testing for disease or disease precursors in seemingly well individuals so that early detection and treatment can be provided for those who test positive for the disease (eg, screening mammogram).

The testing of a person to rule out or confirm a suspected diagnosis because the patient has some sign or symptom is a diagnostic examination, not a screening. In these cases, the sign or symptom is used to explain the reason for the test.

A screening code may be a first-listed code if the reason for the visit is specifically the screening exam. It may also be used as an additional code if the screening is done during an office visit for other health problems. A screening code is not necessary if the screening is inherent to a routine examination, such as a Pap smear done during a routine pelvic examination. Should a condition be discovered during the screening then the code for the condition may be assigned as an additional diagnosis.

The Z code indicates that a screening exam is planned. A procedure code is required to confirm that the screening was performed.

The screening Z codes/categories:

- Z11 Encounter for screening for infectious and parasitic diseases
- Z12 Encounter for screening for malignant neoplasms
- Z13 Encounter for screening for other diseases and disorders
  Except: Z13.9 Encounter for screening, unspecified
- Z36 Encounter for antenatal screening for mother

EXAMPLE

A patient with a family history of ovarian cancer undergoes her annual pap and pelvic examination along with routine blood work which came back negative.

Z12.73 Screening for malignant neoplasm of ovary

Observation

There are two observation Z code categories. They are for use in very limited circumstances when a person is being observed for a suspected condition that is ruled out. The observation codes are not for use if an injury or illness or any signs or symptoms related to the suspected condition are present. In such cases the diagnosis/symptom code is used with the corresponding external cause code.

The observation codes are to be used as principal diagnosis only. Additional codes may be used in addition to the observation code but only if they are unrelated to the suspected condition being observed.

The observation Z code categories:

- Z03 Encounter for medical observation for suspected diseases and conditions ruled out
- Z04 Encounter for examination and observation for other reasons (Except: Z04.9, Encounter for examination and observation for unspecified reason)

EXAMPLE

A 10-year-old female was transported by ambulance to the emergency department following a car accident. The mother was driving on icy roads and the minivan she was driving flipped on its top. After examination, without any significant injuries identified, the physician decided to observe the child for a few hours before releasing the child from the emergency room.

Z04.1 Encounter for examination and observation following transport accident

Aftercare

Aftercare visit codes cover situations when the initial treatment of a disease has been performed and the patient requires continued care during the healing or recovery phase, or for the long-term consequences of the disease. The aftercare Z code should not be used if treatment is directed at a current, acute disease. The diagnosis code is to be used in these cases.

The aftercare Z codes should also not be used for aftercare for injuries. For aftercare of an injury, assign the acute injury code with the seventh character "D" (subsequent encounter). Exceptions to this rule are code Z51.0 *Encounter for antineoplastic radiation therapy* and codes from subcategory Z51.1 Encounter for antineoplastic chemotherapy and immunotherapy. These codes are to be first-listed, followed by the diagnosis code when a patient's encounter is solely to receive radiation therapy or chemotherapy for the treatment of a neoplasm. If the reason for the encounter is more than one type of antineoplastic therapy, code Z51.0 and a code from subcategory Z51.1 may be assigned together, in which case one of these codes would be reported as a secondary diagnosis.

The aftercare codes are generally first-listed to explain the specific reason for the encounter. An aftercare code may be used as an additional code when some type of aftercare is provided in addition to the reason for admission and no diagnosis code is applicable. An example of this would be the closure of a colostomy during an encounter for treatment of another condition.

Aftercare codes should be used in conjunction with any other aftercare codes or other diagnosis codes to provide better detail on the specifics of an aftercare encounter visit, unless otherwise directed by the classification. Should a patient receive multiple types of antineoplastic therapy during the same encounter, code Z51.0 *Encounter for antineoplastic radiation therapy* and codes from subcategory Z51.1, Encounter for antineoplastic chemotherapy and immunotherapy, may be used together on a record. The sequencing of multiple aftercare codes is discretionary.

Certain aftercare Z code categories need a secondary diagnosis code to describe the resolving condition or sequelae, for others the condition is inherent in the code title.

Additional Z code aftercare category terms include fitting and adjustment, and attention to artificial openings.

Status Z codes may be used with aftercare Z codes to indicate the nature of the aftercare. For example code Z95.1 *Presence of aortocoronary bypass graft* may be used with code Z48.812 *Encounter for surgical aftercare following surgery on the circulatory system* to indicate the surgery for which the aftercare is being performed. A status code should not be used when the aftercare code indicates the type of status, such as using Z43.0 *Encounter for attention to tracheostomy* with Z93.0 *Tracheostomy status*. A follow-up code may be used to explain multiple visits.

The aftercare Z category/codes:

- Z42 Encounter for plastic and reconstructive surgery following medical procedure or healed injury
- Z43 Encounter for attention to artificial openings
- Z44 Encounter for fitting and adjustment of external prosthetic device
- Z45 Encounter for adjustment and management of implanted device
- Z46 Encounter for fitting and adjustment of other devices
- Z47 Orthopedic aftercare
- Z48 Encounter for other postprocedural aftercare
- Z49 Encounter for care involving renal dialysis
- Z51 Encounter for other aftercare

Follow-Up

The follow-up codes are used to explain continuing surveillance following completed treatment of a disease, condition, or injury. They imply that the condition has been fully treated and no longer exists. They should not be confused with aftercare codes, or injury codes with seventh character "D," that explain ongoing care of a healing condition or its sequelae. Follow-up codes may be used in conjunction with history codes to provide the full picture of the healed condition and its treatment. The follow-up code is sequenced first, followed by the history code. A follow-up code may be used to explain repeated visits. Should a condition be found to have recurred on the follow-up visit, then the diagnosis code for the condition should be assigned in place of the follow-up code.

The follow-up Z code categories:

- Z08 Encounter for follow-up examination after completed treatment for malignant neoplasm
- Z09 Encounter for follow-up examination after completed treatment for conditions other than malignant neoplasm
- Z39 Encounter for maternal postpartum care and examination

EXAMPLE

A 25-year-old female who six weeks ago delivered a healthy seven pound baby girl is seen by her OB physician in routine follow-up. The patient is doing fine and is released from care and will begin seeing her family physician for any further treatment.

Z39.2 Encounter for routine postpartum follow-up

Donor

Codes in category Z52, Donors of organs and tissues, are used for living individuals who are donating blood or other body tissue. These codes are only for individuals donating for others, not for self donations. They are not for use to identify cadaveric donations.

Counseling

Counseling Z codes are used when a patient or family member receives assistance in the aftermath of an illness or injury, or when support is required in coping with family or social problems. They are not necessary for use in conjunction with a diagnosis code when the counseling component of care is considered integral to standard treatment.

The counseling Z codes/categories:

- Z30.0- Encounter for general counseling and advice on contraception
- Z31.5 Encounter for genetic counseling
- Z31.6- Encounter for general counseling and advice on procreation
- Z32.2 Encounter for childbirth instruction
- Z32.3 Encounter for childcare instruction
- Z69 Encounter for mental health services for victim and perpetrator of abuse
- Z70 Counseling related to sexual attitude, behavior and orientation

- Z71 Persons encountering health services for other counseling and medical advice, not elsewhere classified
- Z76.81 Expectant parent(s) prebirth pediatrician visit

EXAMPLE

A patient who is in her third trimester of pregnancy visits a pediatrician to discuss the upcoming delivery and care of her child after delivery.

Z76.81 Expectant parent(s) prebirth pediatrician visit

Encounters for Obstetrical and Reproductive Services

See Section I.C.15. Pregnancy, Childbirth, and the Puerperium, for further instruction on the use of these codes.

Z codes for pregnancy are for use in those circumstances when none of the problems or complications included in the codes from the Obstetrics chapter exist (a routine prenatal visit or postpartum care). Codes in category Z34, Encounter for supervision of normal pregnancy, are always first-listed and are not to be used with any other code from the OB chapter. Codes in category Z3A, Weeks of gestation, may be assigned to provide additional information about the pregnancy.

The outcome of delivery, category Z37, should be included on all maternal delivery records. It is always a secondary code. Codes in category Z37 should not be used on the newborn record.

Z codes for family planning (contraceptive) or procreative management and counseling should be included on an obstetric record either during the pregnancy or the postpartum stage, if applicable.

Z codes/categories for obstetrical and reproductive services:

- Z30 Encounter for contraceptive management
- Z31 Encounter for procreative management
- Z32.2 Encounter for childbirth instruction
- Z32.3 Encounter for childcare instruction
- Z33 Pregnant state
- Z34 Encounter for supervision of normal pregnancy
- Z36 Encounter for antenatal screening of mother
- Z3A Weeks of gestation
- Z37 Outcome of delivery
- Z39 Encounter for maternal postpartum care and examination
- Z76.81 Expectant parent(s) prebirth pediatrician visit

EXAMPLE

A patient delivered a set of healthy twins in the hospital via cesarean. Mother and babies are doing fine and will be released in two days.

Z37.2 Twins, both liveborn

Z38.31 Twins, liveborn infant, delivered by cesarean born in hospital

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Newborns and Infants

See Section I.C.16. Newborn (Perinatal) Guidelines, for further instruction on the use of these codes.

Newborn Z codes/categories:

- Z76.1 Encounter for health supervision and care of foundling
- Z00.1- Encounter for routine child health examination
- Z38 Liveborn infants according to place of birth and type of delivery

EXAMPLE

A three-year-old male visited his pediatrician with complaints of ear pain with a temperature during his routine annual examination. The patient otherwise has no complaints. Mom states the patient has been complaining of ear pain for two days and his temperature comes and goes. The physician completed the preventive examination, decided to defer his vaccinations until his acute otitis media externa of both ears resolves. The patient was prescribed a prescription and was asked to return in five days.

H60.93 Unspecified otitis externa, bilateral

Z00.129 Encounter for routine child health examination without abnormal findings

Routine and Administrative Examinations

The Z codes allow for the description of encounters for routine examinations, such as a general check-up or examinations for administrative purposes such as a pre-employment physical. The codes are not to be used if the examination is for diagnosis of a suspected condition or for treatment purposes. In such cases the diagnosis code is used. During a routine exam, should a diagnosis or condition be discovered, it should be coded as an additional code. Pre-existing and chronic conditions and history codes may also be included as additional codes as long as the examination is for administrative purposes and not focused on any particular condition.

Some of the codes for routine health examinations distinguish between "with" and "without" abnormal findings. Code assignment depends on the information that is known at the time the encounter is being coded. For example, if no abnormal findings were found during the examination, but the encounter is being coded before test results are back, it is acceptable to assign the code for "without abnormal findings." When assigning a code for "with abnormal findings," additional code(s) should be assigned to identify the specific abnormal finding(s).

Pre-operative examination Z codes are for use only in those situations when a patient is being cleared for surgery and no treatment is given.

The Z codes/categories for routine and administrative examinations:

- Z00 Encounter for general examination without complaint, suspected or reported diagnosis
- Z01 Encounter for other special examination without complaint, suspected or reported diagnosis
- Z02 Encounter for administrative examination (Except: Z02.9, Encounter for administrative examinations, unspecified)
- Z32.0- Encounter for pregnancy test

EXAMPLE

A 35-year-old healthy female went to her internist for an annual physical exam. The patient had no complaints. The physician counseled the patient on diet and exercise and diagnosed the patient as a healthy female with no significant findings.

Z00.00 Encounter for general adult medical examination without abnormal findings

Genetic Carrier and Genetic Susceptibility to Disease

Code range Z14–Z15 include codes for genetic carriers and genetic susceptibility to disease. Codes for genetic carriers include choices for asymptomatic or symptomatic. For susceptibility, codes are broken down to the disease process such as malignant neoplasm of the breast, ovary, prostate, endometrium or other malignant neoplasms.

EXAMPLE

Z15.01 Genetic susceptibility to malignant neoplasm of breast

Persons Encountering Health Services in Circumstances Related to Reproduction

The codes in range Z30-Z39 include encounters for contraceptive management, surveillance of contraceptives, procreative management, counseling and advice on procreation, pregnant state and antenatal screening of mother among others. Code selection is broken down as to if the encounter is for management, surveillance or counseling.

EXAMPLE

Z31.441 Encounter for testing of male partner of patient with recurrent pregnancy loss

Miscellaneous Z Codes

The miscellaneous Z codes capture a number of other healthcare encounters that do not fall into one of the other categories. Certain of these codes identify the reason for the encounter; others are for use as additional codes that provide useful information on circumstances that may affect a patient's care and treatment.

Prophylactic Organ Removal

For encounters specifically for prophylactic removal of an organ (such as prophylactic removal of breasts due to a genetic susceptibility to cancer or a family history of cancer), the principal or first-listed code should be a code from category Z40, Encounter for prophylactic surgery, followed by the appropriate codes to identify the associated risk factor (such as genetic susceptibility or family history).

If the patient has a malignancy of one site and is having prophylactic removal at another site to prevent either a new primary malignancy or metastatic disease, a code for the malignancy should also be assigned in addition to a code from subcategory Z40.0, Encounter for prophylactic surgery for risk factors related to malignant neoplasms. A Z40.0 code should not be assigned if the patient is having organ removal for treatment of a malignancy, such as the removal of the testes for the treatment of prostate cancer.

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Miscellaneous Z codes/categories:

- Z28 Immunization not carried out
- Z28.3 Underimmunization status
- Z40 Encounter for prophylactic surgery
- Z41 Encounter for procedures for purposes other than remedying health state (Except: Z41.9 Encounter for procedure for purposes other than remedying health state, unspecified)
- Z53 Persons encountering health services for specific procedures and treatment, not carried out
- Z55 Problems related to education and literacy
- Z56 Problems related to employment and unemployment
- Z57 Occupational exposure to risk factors
- Z58 Problems related to physical environment
- Z59 Problems related to housing and economic circumstances
- Z60 Problems related to social environment
- Z62 Other problems related to upbringing (Except: Z62.81-, Personal history of abuse in childhood
- Z63 Other problems related to primary support group, including family circumstances
- Z64 Problems related to certain psychosocial circumstances
- Z65 Problems related to other psychosocial circumstances
- Z72 Problems related to lifestyle
- Z73 Problems related to life management difficulty
- Z74 Problems related to care provider dependency (Except: Z74.01, Bed confinement status)
- Z75 Problems related to medical facilities and other healthcare
- Z76.0 Encounter for issue of repeat prescription
- Z76.3 Healthy person accompanying sick person
- Z76.4 Other boarder to healthcare facility
- Z76.5 Malingerer [conscious simulation]
- Z76.89 Persons encountering health services in other specified circumstances
- Z91.1- Patient's noncompliance with medical treatment and regimen
- Z91.89 Other specified personal risk factors, not elsewhere classified

EXAMPLE

A patient who has been diagnosed recently with mixed bipolar disorder, which is moderate is counseled by his psychiatrist for non compliance. He takes his medication occasionally and is not compliant with his treatment plan.

F31.62 Bipolar disorder, current episode mixed, moderate

Z91.128 Patient's intentional underdosing of medication regimen due to other reason

There is also a note under Z91.1 to report a code from T36–T50 with the final character 6 (Table of Drugs and Chemicals). Since in this example we do not know what drug the patient is taking, the physician would need to be queried.

Nonspecific Z Codes

Certain Z codes are so non-specific, or potentially redundant with other codes in the classification, that there can be little justification for their use in the inpatient setting. Their use in the outpatient setting should be limited to those instances when there is no further documentation to permit more precise coding. Otherwise, any sign or symptom or any other reason for visit that is captured in another code should be used.

Nonspecific Z codes/categories:

- Z02.9 Encounter for administrative examinations, unspecified
- Z04.9 Encounter for examination and observation for unspecified reason
- Z13.9 Encounter for screening, unspecified
- Z41.9 Encounter for procedure for purposes other than remedying health state, unspecified
- Z52.9 Donor of unspecified organ or tissue
- Z86.59 Personal history of other mental and behavioral disorders
- Z88.9 Allergy status to unspecified drugs, medicaments and biological substances status
- Z92.0 Personal history of contraception

Z Codes that May Only be Principal/First-Listed Diagnosis

The following Z codes/categories may only be reported as the principal/first-listed diagnosis, except when there are multiple encounters on the same day and the medical records for the encounters are combined:

- Z00 Encounter for general examination without complaint, suspected or reported diagnosis
- Z01 Encounter for other special examination without complaint, suspected or reported diagnosis
- Z02 Encounter for administrative examination
- Z03 Encounter for medical observation for suspected diseases and conditions ruled out
- Z04 Encounter for examination and observation for other reasons
- Z33.2 Encounter for elective termination of pregnancy
- Z31.81 Encounter for male factor infertility in female patient
- Z31.82 Encounter for Rh incompatibility status
- Z31.83 Encounter for assisted reproductive fertility procedure cycle
- Z31.84 Encounter for fertility preservation procedure
- Z34 Encounter for supervision of normal pregnancy
- Z38 Liveborn infants according to place of birth and type of delivery
- Z39 Encounter for maternal postpartum care and examination

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- Z42 Encounter for plastic and reconstructive surgery following medical procedure or healed injury
- Z51.0 Encounter for antineoplastic radiation therapy
- Z51.1- Encounter for antineoplastic chemotherapy and immunotherapy
- Z52 Donors of organs and tissues (Except: Z52.9, Donor of unspecified organ or tissue)
- Z76.1 Encounter for health supervision and care of foundling
- Z76.2 Encounter for health supervision and care of other healthy infant and child
- Z99.12 Encounter for respirator [ventilator] dependence during power failure

Test Yourself #23

1. Exposure to TB. _____
2. Patient is seen for elective termination of pregnancy. _____
3. Physician documents that patient has been non compliant with medications and has only been taking half dose to save on money. _____
4. Patient comes in for vaccinations. _____

Coding Cases

Case 1

The patient is a 26-year-old female who presents for follow up of left sided renal calculi. The patient was originally seen in the emergency room down state for left sided flank pain. She was found to have an obstructing renal calculi with CT stone protocol per the results. A culture was also done at her visit last week and grew beta hemolytic strep greater than 100,000 organisms. In the office today the patient continues to have colicky left sided flank pain, continued chills, nausea, and loss of appetite. She has no documented fevers and no vomiting. She has 8 days left of Ciprofloxacin. The patient is out of Vicodin.

Blood pressure is 140/70, weight is 101.36 kilograms. Heart regular rate and rhythm, no murmurs. Lungs are clear to auscultation bilaterally. Abdomen has positive bowel sounds times 4 quadrants. There is CVA tenderness and left lower quadrant pain on palpation. There is no guarding and no rebound tenderness. Skin is clean without rashes, erythema, or jaundice.

A/P

1. Urinary tract infection with beta hemolytic strep
2. Elevated blood pressure secondary to pain.

The patient will stop her Ciprofloxacin. A prescription for amoxicillin 850 mg p.o. b.i.d. times 7 days was given to her today. Vicodin 5/500 1 to 2 p.o. every 4 hours p.r.n. pain, #60 were given with no refills. The patient was encouraged to continue to strain her urine. She was also given encouragement to drink 2 liters of Coke.

ICD-10-CM code(s) _____

Case 2

Operative Report

Preoperative Diagnosis:
Foreign body, right external ear canal.

Anesthetic:
General. TIME BEGAN: 1015 TIME ENDED: 1035

Postoperative Diagnosis:
Same.

Pathology Specimen:
None.

Operation:
Removal of foreign body using the microscope.

Date of Procedure: 05/12/08 **TIME BEGAN:** 1021 **TIME ENDED:** 1022

Description of Operation:
Under general anesthesia with the microscope in place, a pearly white plastic ball was seen virtually obstructing the entire ear canal. Gently with a curette, this was teased out of the ear canal atraumatically. The ear canal and eardrum were perfectly intact.

The patient tolerated the procedure well and was returned to the recovery room in satisfactory condition.

ICD-10-CM code(s) _____

Case 3

Chief Complaint: Chest pain.

History of Present Illness: I was asked to see Tom in consultation by Dr. Smith for the above complaint. He was in his usual state of health until last evening. He has a sudden onset of lower subxiphoid pain radiating to the posterior back. Subxiphoid region to the infrascapular region. He had some nausea accompanying it, but no actual emesis. He has a family history of sudden cardiac death in his father at roughly the same age. This concerned him and he presented to the Emergency Department. He has been evaluated and this is not felt to be cardiogenic in nature. An ultrasound has been obtained that shows changes consistent with acute cholecystitis.

Past Medical History:

1. Positive for gastroesophageal reflux disease
2. Hypertension
3. Gout.

Past Surgical History: Collarbone surgery.

Medications: Current medications as an outpatient include:

1. Diovan
2. Hydrochlorothiazide
3. Metoprolol
4. Allopurinol

Allergies: No known drug allergies.

Social History: Negative tobacco. Positive ethanol, one drink daily.

Family History: Positive for the above coronary artery disease in his father. Positive for diabetes mellitus.

Review of Systems: Eleven point review of systems with positives noted in the History of Present Illness. Additionally, anorexia. The rest of the 11 point review of systems is negative.

Physical Examination:
HEENT: Normal

NECK: Supple

CARDIOVASCULAR: Regular

LUNGS: Clear

ABDOMEN: Soft. There is tenderness in the right upper quadrant on deep palpation, but no actual Murphy's sign is elicited.

GU: No inguinal hernia

EXTREMITIES: No edema

NECROLOGIC: No lateralizing signs

Diagnostic Study Results: Ancillary studies: Ultrasound as above is consistent with acute cholecystitis.

Assessment: Acute cholecystitis

Plan: Laparoscopic, possible open, cholecystectomy. Risks including but not limited to bleeding, infection, bile duct injury requiring further surgery. The procedures were discussed in detail with the patient and he agrees to proceed.

ICD-10-CM code(s) _____

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Case 4

History of Present Illness: I was asked by Dr. Smithers to see Mr. Jones in consultation for the above complaints. He reports that he was fine until yesterday, ate a bowl of fruit with onset suddenly afterwards of abdominal pain. It was mid-abdomen, sharp in nature. He reports he took some over-the-counter meds and hoped that this would alleviate the symptoms. He actually went golfing and after finishing 9 holes, he reports the pain was severe; he could not continue and he then subsequently presented to the emergency department. En route, he had an episode of nausea and emesis. This consisted primarily of the food substances, and he also had additional emesis in the emergency department and one this a.m. He reports no change in his bowel habits recently. He did have a formed bowel movement yesterday. He reports passing a small amount of flatus additionally. This a.m., he reports the pain is markedly improved. He also did have some nausea previously this a.m., but actually has a bit of an appetite at this point in time.

Past Medical History: Positive for hypertension, positive for coronary artery disease.

Past Surgical History: Coronary artery bypass grafting

Medications: Lopressor, Altace, Lipitor and aspirin

Allergies: No known drug allergies

Social History: Negative for ethanol abuse. He denies tobacco use

Family History: Noncontributory

Review of Systems: Pertinent positives are noted in history of present illness. Additionally noted some chest pressure. The rest of the 11-point review of systems was negative.

Physical Examination

GENERAL: Comfortable appearing, middle-aged white male
HEENT: Sclerae are anicteric
NECK: Supple
CARDIOVASCULAR: Regular
LUNGS: Clear
ABDOMEN: Soft, mildly tympanic. There is a small umbilical hernia that is readily reducible. There is also diastasis recti present. Bowel sounds are hyperactive with occasional rushes. No organomegaly is noted. No masses are palpable.
GENITOURINARY: No cough impulses
EXTREMITIES: Not edematous

Diagnostic Study Results: CT and abdominal films were reviewed. They do show evidence of a partial high-grade obstruction.

Assessment and Plan: Small bowel obstruction, this appears to be high-grade, etiology not completely defined.

Plan: Continue with NPO status for now and IV hydration. If he as any further nausea or vomiting, I think he merits a nasogastric tubs for decompression. The plan is to obtain a follow-up CT scan in the a.m. He will follow with you. Thank you for the consultation.

ICD-10-CM code(s) _____

Case 5

Postoperative Diagnoses:

1. Obstructive sleep apnea
2. Tonsillar hypertrophy
3. Pigmented lesion right temple

Procedure:

1. Uvulopalatopharyngoplasty
2. Tonsillectomy
3. Excision of pigmented lesion left temple measuring 9 mm in width and 2.4 cm in length

Anesthesia: General

Findings: No significant tonsillar hypertrophy, severe crowding of the pharyngeal airway and pigmented lesion right temple. SPECIMENS: Tonsils, uvula and pigmented lesion right temple marked at 12 o'clock. Estimated blood loss is 3.0 cc

The patient was brought to the operating room and placed supine on the operating room table. The patient was put to sleep by a general technique of anesthesia and intubated carefully. A Crowe-Davis retractor was inserted in the oral commissure to retract the tongue and mandible. The patient was placed in gentle neck extension and suspended from towels on the chest. A red rubber catheter was inserted through the nostril to retract the soft palate. The tonsils were each grasped and metalized. Each tonsil was resected from its fossa using a needle-tip Bovie. The tonsils were found to be much smaller than they appeared to be due to the amount of subcutaneous fat in the posterior tonsillar pillar in particular. Homeostasis was obtained with a suction electrocautery. Next a uvular flap was developed with a longer posterior than anterior edge. A small amount of tissue from the posterior tonsillar pillars was removed on each side and the anterior and posterior pillars were sutured together using 3-0 Vicryl sutures in horizontal mattress fashion after a superiorly based relaxing incision was made. Similar sutures were used to close the uvular flap. A nasal trumpet was placed through the right nostril. The Crowe-Davis retractor was removed. The room was then reset for the clean portion of the case. The wound was cleansed with Betadine. This was infiltrated with 1% lidocaine with 1:100,000 epinephrine. This was a pigmented lesion and approximately 3 mm margins were designed on either side of the approximately 3 mm lesion. The lesion was then sharply excised through the full thickness of the skin. This was marked at 12 o'clock. Hemostasis was obtained with a bipolar electrocautery. The wound edges were reapproximated with 4-0 Vicryl and the skin was closed with a 5-0 fast-absorbing gut. The patient was awakened from anesthesia and extubated without any difficulty. He was brought to the recovery room in stable condition. He did not have any obvious airway problems. The nasal trumpet was maintained.

ICD-10-CM code(s) _____

Case 6

Operative Report

Procedure Date: 05/12/xx

Surgeon: Dr. Smyther

Preoperative Diagnosis: Acute appendicitis

Postoperative Diagnosis: Acute appendicitis

Procedure Performed: Laparoscopic appendectomy

Anesthesia: General

Estimated Blood Loss: Minimal

Complications: None

Indications: The patient is a 50-year-old gentleman who presented to the emergency room with signs and symptoms of acute appendicitis. He has been brought to the operating room at this time for laparoscopic appendectomy. The risks and benefits were discussed and he wished to proceed.

Findings: The patient was found to have acute appendicitis without evidence of perforation.

Description of Procedure: The patient was taken to the operating room and placed supine on the operating room table. After adequate general endotracheal anesthesia was induced, the patient's abdomen was prepped and draped in the standard surgical fashion. A Veress needle was placed at the base of the umbilicus and pneumoperitoneum established. An infraumbilical incision was made. 5 mm VersaStep trocar was inserted. A 5 mm 0-degree laparoscope was introduced. The findings were as above. A second 5 mm trocar was placed suprapubically and a 12 mm trocar in the left lower quadrant. Attention was turned to the base of the appendix. A window was made in the mesoappendix using blunt dissection. The base of the appendix was then divided using endo-GIA 45 3.5 staple load. The mesoappendix was then divided using a 45 2.5 staple load. The appendix was placed into an Endo-catch bag and brought out the 12 mm defect. The pneumoperitoneum was released. The trocars were removed. The fascia was closed using 0-Polysorb.

The patient tolerated the procedure well.

ICD-10-CM code(s) _____

Case 7

Preoperative Diagnosis: Desire for sterilization.

Postoperative Diagnosis: Desire for sterilization.

Operation: Essure.

Anesthesia: IV sedation.

Gross Findings: Evaluation under anesthesia revealed normal sized and shaped uterus. No adnexal masses were palpated. Hysteroscopic visualization of the cervix revealed no lesion. Hysteroscopic visualization of the endometrial cavity revealed no lesion. The cavity was normal size, shape and contour.

Procedure: After adequate IV sedation, the patient was placed in dorsal lithotomy position. The vaginal area was prepped with Betadine and aseptically draped. Anterior cervical lip was grasped with Behr's clamp. Hysteroscope was passed using normal saline to expand the cavity. Both tubal ostia were identified. The Essure device was placed in each tubal ostia without difficulty. There were four coils noted from each ostia. The hysteroscope was removed. The instruments were removed from the vagina. Patient was taken to the recovery room in satisfactory condition. The patient was advised at 90 days, she needs a hysterosalpingogram.

ICD-10-CM code(s) _____

Case 8

Preoperative Diagnosis: Retained intrauterine device

Postoperative Diagnosis: Retained intrauterine device

Operation: 1. Evaluation under anesthesia. 2. Removal of intrauterine device

Anesthesia: Laryngeal mask airway (LMA).

Findings: Normal ParaGard intrauterine device (IUD), not sent to pathology

Indication for Procedure: The patient is a 32-year-old female with a ParaGard intrauterine device IUD placed approximately 10 years ago. She presented to the office for a removal recently. Upon attempts in the office, the IUD string detached from the IUD Multiple attempts in the office utilizing polyp forceps and ultrasound guidance were unsuccessful in removing the IUD. Decision was made to bring the patient back for evaluation under anesthesia and removal.

Description of Operation: Complications: None. Disposition. Stable. Estimated blood loss: Less than 10 mL. After informed consent was obtained, the patient was brought back to the operative suite where adequate general anesthesia was obtained. The patient was then placed in dorsal lithotomy position and prepped and draped in a sterile fashion. A weighted speculum was placed inside the vagina, and the anterior lip of the cervix was grasped with a long Allis clamp. Upon examination after relaxation, it was noted that the IUD was in the lower uterine segment Utilizing polyp forceps, the IUD was able to be grasped at its base and removed from the uterus. Minimal bleeding was occurred. No hysteroscopy was necessary. Vaginal instruments were then removed.

The patient was then awoken from the general anesthesia and transferred to the recovery room in stable condition.

ICD-10-CM code(s) _____

Case 9

Female Age: 80-year-old patient presents today for pessary cleaning and fitting (for her bladder complications). Patient offers no complaints. Wt: 118 Exam: Ext Gen +BUS.WNL. Vag spec exam reveals no lesions. Pessary removed, scrubbed, vagina swabbed with Betadine, and pessary replaced. For F/U in ~ 4 months.

ICD-10-CM code(s) _____

Case 10

Preoperative Diagnoses:

1. Uncontrolled primary severe open-angle glaucoma, left eye
2. Pseudophakia, left eye

Postoperative Diagnoses:

1. Uncontrolled primary open-angle glaucoma, left eye
2. Pseudophakia, left eye

Procedure: 1. Attempted limbal-based trabeculectomy with mitomycin C and Express shunt under the scleral flap, left eye. 2. Open globe repair, left eye.

Anesthesia: Retrobulbar with monitored anesthesia care

After informed consent was obtained, the patient was brought to the operating room, and a retrobulbar block was performed using 5 cc of a 50/50 mixture of 4% lidocaine, 0.75% Marcaine, and added Wydase to obtain anesthesia and akinesia.

The patient was prepped and draped in usual sterile fashion for intraocular surgery. A lid speculum was placed to separate the lids of the left eye.

Under the operating microscope, a 6-0 Vicryl suture was placed through the peripheral superior clear cornea and was secured to rotate the globe inferiorly.

A superonasal limbal-based conjunctival flap was fashioned with Westcott scissors with the initial incision made at approximately 9 to 10 mm posterior to the limbus. The flap was dissected to the limbus, and at this point, an old superior limbal cataract wound was noted between the 11 and 12 o'clock position of the limbus. The wound appeared to be open, and aqueous did flow through this wound. At this point, the decision to not perform a trabeculectomy secondary to an open globe was made.

The old cataract superior limbal wound was closed with three interrupted 10-0 Nylon sutures. A #51 blade was used to enter the anterior chamber and balanced salt solution was used to inflate the chamber. The superior clear corneal wound was checked for leak. There was a small trickle and this was noted to be adequate for maintenance of the anterior chamber. The Tenon's layer as well as the conjunctiva was then closed separately using a running 8-0 Vicryl suture on a BV needle. The wound was checked and found to be without leak. Furthermore, there was no apparent bleb that was formed secondary to the superior clear limbal wound. The pressure of the eye was then reassessed and noted to be low; therefore, the decision not to perform endocyclophotocoagulation was also made.

The traction suture was removed. TobraDex ophthalmic ointment was placed in the eye. A light patch and shield was placed. The patient was brought to the postanesthesia care unit in stable condition. The patient tolerated the procedure well There were no complications.

ICD-10-CM code(s) _____

Case 11

Preop Diagnosis: Ptosis

Postop Diagnosis: Ptosis

Procedure: Mullerectomy

Anesthesia: MAC

Complications: None

Indications: The patient had been complaining of a progressive drooping of the lid which was interfering with their ability to see to watch TV and read. By holding her lid up she can see better. Visual field testing was performed which demonstrated a loss of the superior visual field. By taping the lid up into its proper anatomic position there was a marked improvement m the field. Neosynephrine 10% instilled into the eye resulted in a good elevation of the lid.

Procedure Description: After informed consent was obtained, the patient was brought to the operating room. A supraorbital block of local anesthetic consisting of a 50/50 mixture of Xylocaine 1% with epinephrine mixed with Marcaine. 75% with epinephrine. The face was then prepped and draped in the usual sterile fashion. The lid was then everted over a Desmarres retractor. The superior border of the tarsus was then marked with a marking pen. Another line was then marked on the conjunctiva 8 mm superior to this. The conjunctiva and Mueller's muscle were then freed up from the underlying levator muscle by pulling on these tissues with an Arson forceps. A Mullerectomy clamp was then placed on the two previously marked lines. The clamp was shut to enclose the 8 mm of Mueller's muscle and conjunctiva. A 6-0 plain suture was then run along the underside of the clamp. The clamp and its tissues were then excised by running a #15 Barde Parker blade along the underside of the clamp. The 6-0 plain suture was then run once again along the length of the wound to close the edge of tarsus to the conjunctiva. The suture was buried temporally. The patient tolerated the procedure well and left the operating room in good condition.

ICD-10-CM code(s) _____

Case 12

Operative Report

Preoperative Diagnosis: Bladder calculus

Postoperative Diagnosis: Bladder calculus

Anesthesia: General endotracheal and caudal block

Findings: Single 1.5 cm bladder calculus removed in toto

Estimated Blood Loss: Negligible

Drains: 10 French Foley catheter per urethra

Indications: This is a 4-year-old male who recently presented with dysuria. He has undergone treatment for a presumed medial baffle. After a similar episode of dysuria yesterday he was seen at an outside facility where a CT scan was obtained that showed a bladder calculus. He presents for surgical management.

After informed consent was obtained the patient was brought to the operating suite and placed supine on the OR table. General endotracheal anesthesia was induced. The patient was administered IV Cefazolin. The lower abdomen and penoscrotal region were sterilely prepped and draped in the usual manner.

An expressed void showed no deflection of his urinary stream. A 10 French Foley catheter was inserted per urethra, and the bladder was filled with warm saline until it was palpable.

A low transverse incision was made. This was carried through the subcutaneous tissue with electrocautery. The fascia was divided transversely yielding the underlying rectus muscle. The rectus muscles were separated in the midline yielding the bladder. Retraction sutures were placed on either side of the bladder, and the bladder was opened in the midline. After the bladder was evacuated, a ringed forceps was passed into the bladder, and the calculus was removed. It was sent for chemical analysis.

The bladder was then closed in three layers using 4-0 chromic suture in a running fashion. First the mucosa was closed. This was followed by a two layer muscle closure. The rectus muscles were reapproximated with interrupted 4-0 Vicryl suture. The fascial layers were reapproximated with 4-0 Vicryl in a running fashion. The subcutaneous tissues were reapproximated with 4-0 Vicryl in interrupted fashion, and the skin was closed with 4-0 Vicryl in a subcuticular fashion. Mastisol and Steri-strips were applied to the incision. The patient's Foley catheter was connected to a drainage bag. He was then turned to the lateral position, and caudal block was performed by anesthesiology. He was returned to the supine position and awakened from general anesthesia. He was transferred to the post anesthetic care unit in stable condition.

ICD-10-CM code(s) _____

092513

Case 13

Subjective: This 17-year-old patient presents to the emergency department after racing motorcycles earlier today. He had his helmet on as well as all of his racing gear. He actively races motorcycles and has done this all summer long, winning a number of times. He came over a jump and lost control of the bike, going over the handlebars. He denies hitting his head but landed on his left elbow and his left knee and has had some discomfort in these areas since. He tells me that he was not going fast, then approximately 30 mph. He denies any loss of consciousness. The main complaints center only on the left knee and the left elbow.

Objective: The patient is in no acute distress, nontoxic appearing. During an expanded problem-focused examination, he is alert and oriented. Eyes: PERL, EOMI conjugate without nystagmus. Fundoscopic exam reveals the disks to be sharp and the TMs normal. Throat: clear with teeth intact. Neck: non tender. No palpable discomfort or adenopathy. He has intact clavicles. Lungs: clear. Heart: regular rate and rhythm. Abdomen: soft; no hepatosplenomegaly, rebound, or guarding. He has good upper- and lower-extremity strength. His right arm is non tender to palpation. The left arm has a small amount of tenderness around the elbow joint, but there is no obvious deformity and he does have good, active motion. He has no tenderness with movement of the hips and no tenderness down the long bones of the lower extremities. There is mild tenderness at the left knee. The knee is intact with negative drawer sign and minimal tenderness along the lateral collateral ligament region. There is no real tenderness along the joint line or over the mediocollateral ligament. Both of these ligaments are intact with stress. X-rays of the left knee and left elbow are negative for fracture. Assessment: Contusion, left elbow and left knee (the MDM was of low complexity).

Plan: Ice, Tylenol; recheck if not improving over the next few days, otherwise on a prn basis.

ICD-10-CM code(s) _____

Case 14

Preoperative Diagnosis: Lentigo maligna of the right neck

Postoperative Diagnosis: Same

Procedure: Excision of 8 cm lesion, right neck, layered primary closure

Anesthesia: Local with IV sedation

Estimated Blood Loss: Minimal

Complications: None

Procedure: The patient was placed in the supine position. She was prepped and draped in the usual sterile fashion. Her previous biopsy indicated positive margins anteriorly and, therefore, the anterior extent of the lesion was drawn out. Beyond this marking, a 0.5 cm margin was drawn out. This was infiltrated with 1% Lidocaine with Epinephrine. A 15 blade scalpel was used for full excision of the lesion. The specimen was sent for permanent histopathologic examination.

Light undermining of all margins was performed. Primary closure was able to be obtained with layered closure using 3-0 and 4-0 Monocryl followed by 5-0 nylon.

The patient tolerated the procedure well, no complications were encountered.

ICD-10-CM code(s) _____

Case 15

Preoperative Diagnosis: Displaced right olecranon fracture

Postoperative Diagnosis: Displaced right olecranon fracture

Procedure: Open reduction and internal fixation of right olecranon fracture

Anesthesia: General

Tourniquet Time: Approximately 1 hour, 250 mm Hg

Estimated Blood Loss: Minimal

Patient was identified, brought to the operating room, placed on the operating table in supine position where appropriate monitoring devices were attached and adequate general anesthesia was obtained. The right arm was prepped and draped in the usual fashion for right arm surgery. The right arm was elevated and exsanguinated with an Esmarch bandage. Tourniquet was inflated to 250 mm Hg and remained inflated for approximately 1 hour during this procedure. Attention was directed to the posterior aspect of the right elbow where a linear incision was made overlying the proximal ulna. Appropriate skin flaps were raised. There was noted to be a displaced fracture of the olecranon. The fracture fragments were curetted and irrigated. The fracture was then reduced with 2 parallel, 2 mm K-wires and the longitudinal axis of the ulna from proximal to distal direction, thereby reducing the fracture. The reduction was checked with intraoperative fluoroscopy. The reduction was further maintained by utilizing a standard technique cerclage wire. The wire was tightened and there was noted to be compression at the fracture site. After this was completed, the previously placed K-wires were bent and gently tapped further into the bone and cut and left subcutaneously. A cerclage wire was also cut and left subcutaneously. When this was completed, the elbow was put through a range of motion. The reduction was noted to be stable. The wound was irrigated with irrigation solution. Hemostasis was obtained utilizing electrocautery. The wound was closed utilizing a 4-0 Vicryl in a running subcuticular fashion. The wound was reinforced with skin staples. A bulky compressive dressing was applied to the arm, incorporating a long arm fiberglass splint and the patient was considered ready for discharge from the operating room.

ICD-10-CM code(s) _____

092513

Case 16

S: This normally active, healthy 57-year-old female patient presents to the office today for evaluation of hip pain after falling at private home out of her bed. She reports her R hip became immediately sore and painful with difficulty bearing weight on her R side. No other complaints or injuries reported. Patient took 3 Advil after fall this morning with limited relief.

O: Patient appears to be in mild distress. She ambulated to the exam room slowly favoring her R hip/leg. BP today is 145/82. HEENT within normal limits. Lungs clear. Abdomen soft, normal bowel sounds. Patient is not taking any medication. Musculoskeletal exam revealed R hip tender to touch with bruising. Walking is painful. Patient did drive herself to the office with some discomfort. X-rays taken in office today ruled out fracture.

A: Contusion to R hip

P: Patient to limit physical activity for 2 weeks, apply alternative heat/cold next 72 hours and continue with over the counter as directed by manufacturer. Patient instructed to call office if pain worsens. Patient declines pain medication at this time. Anticipate full recovery. No fractures noted on X-ray.

ICD-10-CM code(s) _____

Case 17

Indication: Left vocal cord paralysis

CT Neck with Contrast: Axial CT cuts were obtained from the top of the orbits down to the thoracic inlet using 100 cc of Isovue 300. 13 mm axial CT cuts were also obtained through the larynx. Sagittal and coronal computer reconstruction images were also obtained.

Indications for Nonionic Contrast: None

No mass lesion within the posterior nasopharynx or oropharynx. There are multifocal punctate calcifications in the right palatine tonsil. The submandibular and parotid glands are unremarkable. There are subcentimeter anterior cervical and left submandibular lymph nodes. There are subcentimeter left internal jugular lymph nodes. The left pyriform sinus is slightly larger than the right and there is dilatation of the left laryngeal ventricle. There is probably atrophy of the left true vocal cord best seen on the 13 mm thick images. The left arytenoid cartilage has a more medial position than the right. The thyroid glands are unremarkable. The visualized upper mediastinum is unremarkable. Please refer to the CT of the chest report.

Impression

1. Findings compatible with left vocal cord paralysis
2. No cervical mass or adenopathy

ICD-10-CM code(s) _____

Case 18

Subjective:
CC: Patient presents with diabetes

HPI: Type 2 diabetes using oral medications and diet that was diagnosed years ago. Patient feeling well and taking medication as prescribed, see flow sheet. Patient tries to follow diet and exercises sporadically, takes an ARB inhibitor. Patient uses OneTouch Ultra and keeps a log book. Glucose readings are in the range of 110-135. No hypoglycemic episodes. Patient checks feet daily and sees eye doctor regularly.

ROS:
All systems negative per review of flow sheet signed and dated today.

Current Meds: Cozaar 50 mg 1 by mouth every day, Zaroxolyn 5 mg 1 qd 1 by mouth every day, Glucophage 1000 mg take one tablet by mouth two times a day.

Objective:
BP: 140/58 Pulse: 72 T: 96.7 Ht: 5'1" Wt 279 lb BMI: 51.5

ENMT: auditory canals normal. Tympanic membranes are intact. Oral mucosa: pink, smooth and moist. Posterior pharynx shows no exudate, irritation or redness

CV: rate is regular. Rhythm is regular. No heart murmur appreciated

Extremities: no clubbing, cyanosis or edema. Digits or Nails: Toes are normal, amputation of the left great toe. No chronic paronychia of the toenails bilaterally

Skin: Skin is warm and dry

Assessment:
Diabetes mellitus without complications; will check Hg A1c in 6 month, good range of 5.7; refills on med

Hypertension benign; higher BP today, will add second 40 mg of Lasix in pm, bring BP record on next visit

Goal for blood pressure is less than 130/80. F/U in three months, after labs.

ICD-10-CM code(s) _____

Case 19

Subjective:
This is a return visit to clinic for a 50-year-old man who I have followed for a long time with class B3 HIV infection and AIDS that is multidrug resistant. He has a long history of poor adherence with medications.

Past Medical History:

AIDS

Gastroenteritis

MAC in stool

Nausea

Anemia

Renal insufficiency

Medications:

Epzicom 1 a day

Raltegravi 400 twice a day

Reyataz 400 once a day

Ambien 10 at night

His caseworker continues to see him each week and work on adherence. He continues to miss doses regularly. Currently, his most common missed dose is Raltegravir.

Social History: He remains abstinent from alcohol. He is down to five cigarettes a day. He has moved into a bigger apartment with his partner. Unfortunately, his wife has cancer and is on chemotherapy. His partner is HIV positive.

ROS:

He is doing well. His weight is stable. Nausea is manageable. He does not have any abdominal pain. His back is sore from moving.

Objective: On physical exam, he is a well-appearing man in no acute distress. He is in good spirits today. His weight is 47.4 kilos. Blood pressure 100/82, temperature 97.7. He has no teeth. Chest is clear. Skin is dry.

Impression: A 50-year-old man with AIDS and a long history of sporadic and incomplete medication adherence. His labs are relatively stable. He does have a macrocytic anemia.

Plan:
Continue Epzicom, Raltegravir, and Reyataz and continue to try to optimize adherence. Return to clinic in 3 months. Needs a follow up hepatitis A vaccine, which is given today.

ICD-10-CM code(s) _____

Case 20

Preoperative Diagnoses:

1. Right open index distal phalanx fracture
2. Bony mallet

Postoperative Diagnoses:

1. Right open index distal phalanx fracture
2. Bony mallet

Procedures Performed:

1. Irrigation and debridement of an open fracture, right index finger for bony mallets down to bone.
2. Open treatment and internal fixation, right index finger, distal phalangeal index bony mallet, open.
3. Fluoroscopy, three plus views, right hand and wrist.
4. Application of short-arm splint, right upper extremity, Gauntlet.

Disposition: Recovery at home.

Indications for Procedure:

The patient is a young lady that sustained an open fracture at the distal phalanx and developed a bony mallet finger to the right index distal phalanx. It was determined she would need irrigation and debridement of the open fracture in the distal phalanx in the right index finger. It was also determined that she would need open treatment and internal fixation of the right distal phalangeal index bony mallet finger. The patient understood this and wished to proceed with the operation. She understood the potential risks of the surgery including but not limited to DVT, PE, infection, bleeding, anesthetic complications, or possibly even death.

Description of Procedure:

The patient's appropriate extremity was identified as the right index finger. It was marked prior to the operative procedure and confirmed as permanent. The patient was taken to the operative suite and placed in the supine position with the hand table in place. At this point, an incision was made over the area of the open wound in the dorsal aspect of the distal phalanx just proximal to the distal phalangeal joint. We thoroughly irrigated and debrided the wound itself in the area of the bony mallet in the open fracture site, and we thoroughly irrigated. We used normal saline into the joint space as well. It was noted that extensor tendon was completely disrupted as well as small fleck of bone in the open fracture itself. At this point, we determined that we would perform an open treatment and internal fixation with the use of a 0.062 K-wire into the distal phalanx and into the middle phalanx itself to keep the finger of the index into a straight position but not a chronic mallet flexed distal phalanx deformity. Fluoroscopy was done on the hand and wrist on the right side throughout the procedure in addition postoperatively to confirm appropriate placement the pin and the alignment of the digit. The patient was transported to the recovery in stable condition with a splint in place as a short arm right Gauntlet splint. The block was performed on the right upper extremity for postoperative pain separate from the general anesthetic procedure itself and done by general anesthesia services for postoperative pain.

ICD-10-CM code(s) _____

Case 21

S: The patient is here because she feels like her uterine fibroids are giving her problems. She has not had periods for several years. She is due for a physical in the not too distant future. She has not had any vaginal bleeding, no trouble urinating or moving her bowels. No blood in her stool or urine. No nausea or vomiting.

0: Blood pressure is 120/70. No exam was done, discussion only.

A: Uterine fibroids

P: 1. Ultrasound of the pelvis
2. Appointment with Dr. xxxx or Dr. xxxx for consultation regarding fibroids.
3. Follow up with us for a physical at her convenience.
4. Return check otherwise p.r.n.

ICD-10-CM code(s) _____

Case 22

S: Here to follow up on her atrial fibrillation. No new problems. Feeling well. Medications are per medication sheet. These were reconstituted with the medications that she was discharged home on.

0: Blood pressure is 110/64. Pulse is regular at 72. Neck is supple. Chest is clear. Cardiac normal sinus rhythm.

A: Chronic atrial fibrillation, currently stable.

P: 1. Prothrombin time.
2. Follow up with myself in 1 month, sooner as needed if has any other problems in the meantime. Will also check a creatinine and potassium today as well.

ICD-10-CM code(s) _____

Case 23

Chief Complaint: "I got a lot of stress and I have suicidal thoughts."

History of Present Illness: Male patient had been seeing his primary care physician for anxiety and depression since 2001. This began with job related stress; he was a supervisor and was on 24-hour call. The patient became increasingly depressed and began isolating himself and staying in bed on his day off. The patient has depressive symptoms of crying, insomnia, anorexia with recent 20-pound weight loss, decreased concentration, psychomotor retardation, and suicidal ideation with plan. In addition, the patient has auditory hallucinations and hears vague voices talking to him. He will sometimes hear his wife call him when she is not present. At the present time, the patient has been taking Wellbutrin 150 milligrams daily, Lexapro 20 milligrams daily, and Xanax 1 milligram three times a day. He also uses a Combivent inhaler. He has been to the emergency room on several occasions for panic and anxiety attacks and he was treated symptomatically and released.

Past Psychiatric History: See above. There is no evidence of physical, emotional, or sexual abuse as a child and there is no evidence of substance abuse. He denies any family history of emotional illness.

Medical and Surgical History: At work, the patient was moving a chlorine tank, which ruptured, and he inhaled chlorine gas and was hospitalized for a week. He also has asthma and sinus problems.

Family History: His wife has bipolar disorder. One son has problems with anger management and is currently disabled because of this.

Social History: The patient has a high school education. He worked for 38 years before he was disabled. He feels that he gets along well with people. His marriage is solid but his wife's mental problems, which have been going on for five or seven years, cause him stress.

Review of Systems:

HEENT - Non-contributory.

Cardiorespiratory - Patient has shortness of breath.

Gastrointestinal - Non-contributory.

Genitourinary - Non-contributory.

Musculoskeletal - Non-contributory.

Mental Status Exam: Patient is a well-nourished, well-developed white man in moderate to marked distress. He is tearful during the initial interview. His mood is depressed and his affect is appropriate for the situation. Stream of mental activity is unremarkable; there is no evidence of delusions or ideas of reference. He does have auditory hallucinations. He appears to be of average intellectual functioning. His memory is good for remote and recent events. His general knowledge is good. Insight and judgment are fair.

092513

Inventory of Strengths and Weaknesses: Patient's primary strength is his recognition of illness and willingness to accept help. Weaknesses include difficulty in dealing with stressful situations and difficulty in controlling impulses at times.

Diagnosis: AXIS I

1. Major depressive illness, recurrent with suicidal ideation and plan and psychotic features.
2. Panic/Anxiety disorder without agoraphobia.

Treatment Plan: Patient will have individual and group therapy. His Wellbutrin will be increased and he will be started on low doses of Seroquel, which will be increased if psychotic symptoms are not abated.

Problem Summaries and Recommendations: This 58-year-old married white male is admitted for treatment of depression with suicidal ideation and psychotic features secondary to multiple stressors as noted in history and physical.

Prognosis: Fair to good.

Estimated Length of Stay: 7 to 10 days.

Discharge Criteria: Resolution of depression, suicidal ideation and auditory hallucinations, follow-up treatment plan in place.

ICD-10-CM code(s) _____

Case 24

The patient is a 48-year old female who presents with a partial-thickness burn of her left hand due to a motorcycle accident. She is right-handed. She can move the fingers. Complete review of systems is negative. She has had no prior history of major illness or hospitalization, except for vaginal birth of her 15-year-old daughter.

Examination: The left hand shows that the palm and extensor surface of the hand are normal. The affected areas are the fingers. The thumb is spared, but the four fingers of the hand, especially the left middle finger and the left index finger, have involvement with the burn. None of the burned fingers have a complete, circumferential burn. The patient has full range of motion of the fingers of the hand and can bend, flex and extend the fingers. Sensory is intact. Motor is intact. Pain on touch and movement. The burn area is mostly reddened and painful to the touch. There are several small blisters. The body surface area involved is less than 5 percent.

Today we debrided the partial-thickness burn with a #15 blade, normal saline cleanse and we applied Silvadene and a dry sterile dressing to the fingers of the left hand. The patient will continue applying Silvadene twice daily. We will follow-up with her in 4 days.

ICD-10-CM code(s) _____

Case 25

Preprocedure Diagnosis: Basal cell carcinoma of the right neck, left lateral brow, right chest, and skin lesion of the back

Postoperative Diagnoses: Basal cell carcinoma of the right neck, left lateral brow, right chest, and skin lesion of the back

Procedure:

1. Wide-local excision of left lateral brow lesions, approximately 3 cm in size with intermitted closure
2. Wide-local excision of the right neck lesion with intermediate closure
3. Wide-local excision of chest lesion with intermediate closure
4. Biopsy of back lesion

Anesthesia: Local

Procedure Note: The patient's sites of intended excision were marked out in an elliptical fashion with a cuff of normal tissue surrounding each lesion. The sites were then prepped with Betadine and then injected with 1% lidocaine with 1/100,000 epinephrine. Starting with the chest the site was prepped with Betadine. A 15-blade scalpel was used to make an incision at previously marked site. The incision was carried down to the subcuticular fat. The lesion was then sharply dissected off the underlying tissue using a 15-blade scalpel. The lesion was tagged for pathologic orientation and handed off the field. Hyfrecator was used for hemostasis. The wound edges were sharply underlined using an Iris scissors. The wound was then closed using 3-O Vicryl for the deep layer followed by 4-O Prolene for the skin. A similar procedure was then carried on the right neck and left lateral brow area. On the left lateral brow 5-O Prolene was used for the skin. Once all these sites were closed attention was turned to the back. It was again prepped with Betadine and then injected with 1% lidocaine with 1/100,000 epinephrine taking care to aspirate prior to injection. It was once again prepped. A 15-blade scalpel was used to obtain a shave biopsy. Hyfrecator was used for hemostasis. The patient tolerated the procedure well.

Assessment and Plan: The patient was given instructions in cleaning of the incision sites. He should follow up in three days time for suture removal of the left lateral brow and seven to 10 days time for removal of chest and back sutures.

ICD-10-CM code(s) _____

Case 26

Chief Complaint: Reaccumulation of hematoma.

History of Present Illness: The patient is a 15-year-old male who was seen by me last week for hematoma of the pinna that he suffered in wrestling practice. The patient underwent incision and drainage. He then had a bolster placed. He had his bolster removed on Friday. Some more hematoma was drained. The patient reports that he did well all weekend; however, he reinjured his ear yesterday in wrestling. The trainer put some Dermabond on the site. The patient presents today for re-drainage.

Review of Systems: The 10-system review of systems is negative.

Past Medical History: Negative.

Past Surgical History: Incision and drainage of right hematoma.

Current Medications: None.

Allergies: The patient has no known allergies.

Family History: Notable for grandfather with heart disease, grandmother with heart disease, grandmother with cancer, mother with kidney problems, uncle with diabetes, mother with headaches.

Social History: The patient lives with his mother, stepfather, and a sibling. He attends high school.

Physical Examination: Blood pressure is 122/72. Pulse is 67. Weight is 147 pounds. The patient is a well-developed, well-nourished male in no acute distress.

HEENT: Examination of the right ear demonstrated hematoma of the pinna. He has Dermabond on the previous incision and drainage site.

Assessment and Plan: The patient has recurrence of the hematoma. Unfortunately the Dermabond has sealed the hematoma in. I would recommend that we repeat the incision and drainage. With that in mind the following procedure was done.

Procedure: Incision and drainage of right pinna hematoma.

Anesthesia: Local.

Procedure Note: The patient's ear was examined. It was injected with 1% lidocaine with 1/100,000 epinephrine taking care to aspirate prior to injection. It was prepped and draped in the usual fashion, A 15-blade scalpel was used to make and incision at the previous incision and drainage site. Curved Iris scissors were used to dissect in the wound with release of fresh hematoma. A bolster was then placed using Xeroform bolster was then sewn into place with 2-0 silk sutures. I would recommend that we keep the bolster in place for three days and I would like the patient to follow-up with me in three days time for removal of the bolster.

ICD-10-CM code(s) _____

Case 27

Note #2

Nurse Note: A six-year-old female presents with grandparents with a complaint of insect bite near her right eye. She states that she had an ant on her cheek yesterday. She states that she does not know if it bit her but does not know of any other bite. She states that it is now swollen and making her eye difficult to open.

Chief Complaint: Insect Bite

HPI: While out on a trail yesterday the patient sustained a bite under the right eye. This morning it is red and swollen. There is no drainage from the eye. It is itchy more than painful.

ROS: Const: denies fever, fussiness and loss of appetite. Eyes: Denies discharge but there is a red area under the eye. ENMT: Ears: denies hearing difficulty and ear pain. Nose and Sinuses: denies congestion. Denies nasal discharge. Denies mouth breathing. Resp: Denies Asthma, acute cough and wheezing. GI: Denies abdominal pain, constipation, diarrhea, nausea and vomiting. GU: Urinary: denies change in urine color, change in urine odor, dysuria, frequency and urgency. Skin: Denies symptoms other than stated above. Allergy/Immuno: Denies environmental allergies and seasonal allergies.

Current Meds: Polyviflor 0.5 mg chew

Allergies: NKDA

Past Medical History: Shot record: Varicella 07/11/08, Poliovirus 03/08/07, MMR 03/09/07 and DTaP 03/09/07. Physical exam: 07/11/08. Dental exam: 2008. Eye exam: Screening at school. Lead level 12/03/02 Normal. Pt has had the chickenpox vaccine. There are no medical problems. Pt has had no surgeries. The pt has no advanced directive.

Family History: Alcoholism, Drug Addiction and Hepatitis. Father: Hepatitis. Mother: Unremarkable.

Social History: Exposed to second hand smoke. Always uses a booster seat. There are smoke alarms in the house and a fire plan in place. The child lives with the father and paternal grandparents. Mother and father are both very involved and father has custody and mother has visitation rights.

Objective: BP: 88/62, Pulse: 84, Resp: 24, Ht: 48.5", Ht%: 68th, Wt: 51 lbs and BMI: 15.2.

Exam: Const: Appears healthy. No signs of apparent distress present. Eyes: Conjunctivae clear, the globe does not appear involved, nor does the upper eyelid. The area under the eye is erythematous and edematous; she is able to open the eye easily. Vision intact and is 20/20 without corrective lenses. ENMT: Auditory canals are patent. Tympanic membranes have normal landmarks, no fluid or erythema bilaterally. Nasal mucosa shows congestion, moistness, normal color, discharge and clear discharge. Oral mucosa: pink, smooth and moist. Tongue appears pink and moist with no abnormalities. Posterior pharynx shows no injection, irritation or post-nasal drip. Tonsils appear normal. Neck: Symmetric and supple. Palpation reveals no swelling or tenderness. Resp: Chest expansion is adequate bilaterally. Respiration rate is normal. No wheezing. Lungs are clear bilaterally. CV: Rate is regular. No heart murmur appreciated. Lymph: No visible or palpable lymphadenopathy in the neck. Skin: Warm and dry with no rash or tenting.

Assessment and Plan: Cellulitis and Abscess of face. Ice the area when possible, questionable infection vs. reactive, but given the area involved, will cover with antibiotic. Grandmother cautioned about signs and symptoms of worsening infection and when to contact us. Rx given for Keflex 250 mg 1 po q 6 hr.

ICD-10-CM code(s) _____

Case 28

Nurse Note: The patient is a 9-year-old female who presents with her mother with a complaint of cold symptoms. States that she had a fever last week. Now she has stomach ache, sore throat and difficulty swallowing solid foods. States also has headache and stuffy nose.

Chief Complaint: As above.

HPI: Congestion, fever, nasal discharge and sore throat. Denies cough. Fever: Temperature reported to be 101.8 on Sunday, per mom. Sore throat: Described as scratchy. Exposed to cigarette smoke. Reports associated loss of appetite, diarrhea and nausea but declines associated vomiting and pain in mid abdomen.

ROS: Const: Denies chills and fever. ENMT: Ears: Reports congestion/fullness in the ears, but denies ear pain. Nose and Sinuses: Reports congestion. Reports nasal discharge. Resp: Reports cough, but denies asthma and wheezing. Skin: Denies rashes. Allergy/Immuno: Denies environmental allergies and seasonal allergies.

Current Meds: none

Allergies: NKDA

Past Medical History: Physical exam- Fall 2007, migraines.

Family History: Diabetes Mellitus II, Congestive Heart Failure, Hypercholesterolemia, Hypertension, Breast Cancer and Alzheimer's disease. Father: unremarkable- on disability due to arm injury. Mother: unremarkable.

Social History: The child lives 50/50 share with the mother and father. The patient also has a brother and sister. The mother and father are both very involved. The home is not smoke free. Smokers are at mother's home only. The family has a cat and a dog.

Objective: BP: 108/72, Pulse: 72, Temp: 98.4, Resp: 18, Ht: 55.75", Wt: 86 lbs. BMI: 19.5.

Exam: Const: Ill appearing child and mildly dehydrated. ENMT: Auditory canals are patent. Tympanic membranes have normal landmarks, no fluid or erythema bilaterally. Nasal mucosa shows congestion, moistness and normal color, but no clear discharge. Oral mucosa: pink, smooth and moist. Tongue appears pink and moist with no abnormalities. Posterior pharynx shows injection and irritation, but no exudates. Tonsils appear normal. Neck: Symmetric and supple. Palpation reveals no swelling or tenderness. Resp: Chest expansion is adequate bilaterally. Respiration rate is normal. No wheezing. Lungs are clear bilaterally. CV: Rate is regular. Rhythm is regular. No heart murmur appreciated. Lymph: No visible or palpable lymphadenopathy in the neck. Skin: Warm and dry with no rash.

Assessment and Plan: Pharyngitis, Acute. Push fluids and rest. Rx is given for Amoxicillin 400 mg 1 po tid x 10 days. Nausea. Follow up if symptoms persist.

ICD-10-CM code(s) _____

Case 29

Nurse Note: 19-month-old female presents with mom for follow up for results of recent blood work. Mom concerned about child scratching herself when scolded.

Chief Complaint: Patient is here with mom to review lab work from last visit, pica. Per mom eating whatever she got her hands on. Started to give MVI. Seems to have less pica.

HPI: From the last note she was eating non-food items. Present for 3 weeks. Has improved since last visit. Mom states that when she is corrected she hits herself or hits head on the floor. Then dad yells at her.

ROS: Const: Denies fever, fussiness and loss of appetite, picky eating. ENMT: Ears: Denies hearing difficulty and ear pain. Nose and Sinuses: Denies congestion. Denies nasal discharge. Denies mouth breathing. Resp: Denies asthma, acute cough and wheezing. GI: Denies abdominal pain, constipation, diarrhea, nausea and vomiting. GU: Urinary: denies change in urine color, change in urine odor, dysuria, frequency and urgency. Skin: She has scratch marks on her belly, done today.

Current Meds:

Allergies: NKDA

Past Medical History: Physical exam 5-5-08. The patient was born full term, SVD, no complications, no jaundice. Birth weight 6lbs, 6oz. Birth length 19". Vaccinated for chickenpox. No medical problems, surgeries or assistive devices.

Objective: Pulse: 124, Temp: 97.6, Ht: 32.25", Wt 23lb. HdCir: 17.25.

Exam: Const: Healthy appearing toddler. No signs of apparent distress. Eyes: conjunctivae clear. ENMT: Nasal mucosa shows congestion, moistness, normal color, discharge and clear discharge. Oral mucosa: pink, smooth and moist. Tongue appears pink and moist with no abnormalities. Posterior pharynx shows no injection, irritation or post-nasal drip. Tonsils appear normal. Neck: Symmetric and supple. Palpation reveals no swelling or tenderness. Resp: Chest expansion is adequate bilaterally. Respiration rate is normal. No wheezing. Lungs are clear bilaterally. CV: Rate is regular. Rhythm is regular. No heart murmur appreciated. GI: Abdomen is nondistended, nontender and soft. Bowel sounds normoactive. Palpation of the abdomen reveals no tenderness. No palpable hepatosplenomegaly. Lymph: No visible or palpable lymphadenopathy in the neck. Skin: Warm and dry, scratches on abdomen.

Assessment and Plan: Pica. Reviewed labs. Continue to give MVI. Follow up for 2 year visit and prn. Discussed discipline, use distraction and time out no more than 1 min per age.

ICD-10-CM code(s) _____

Case 30

Chief Complaint: Patient presents for a scheduled school age well child visit. The patient is an 11-year-old male. Patient is accompanied today by her father. Parents have no specific concerns.

Diet: Adequate amount of calcium intake. The child drinks 46 ounces of water per day. The source is city water. Currently eating age appropriate foods daily. Diet is appropriate for age. No eating disorders. Sleep: Sleep patterns are normal. No sleep disturbances experienced. Hearing screen: Able to hear 500 Hz, 2000 Hz and 4000 Hz at 25 dB HL in both ears. Behavior: Described as very good most of the time. Patient has no behavior problems. Has never been sexually active. Using age appropriate discipline and withdrawal of privileges as a form of discipline. Child does get along with parents and siblings and does chores. Patient is in the sixth grade. School performance is average. The patient is active. Anticipatory Guidance: No drugs or alcohol in the home. Standard anticipatory guidance and safety sheet given.

HPI: Presents for physical exam. Patient is feeling well. Immunizations will have to wait until shot record comes in.

ROS: The patient denies constitutional symptoms, respiratory symptoms, gastrointestinal symptoms, male genital problems, and skin, hair and nail symptoms.

Current Meds: none

Allergies: NKDA

Past Medical History: Physical and dental exam in 2008. Eye exam in 2007.

Family History: Unremarkable

Social History: The home is smoke free. There is no history of abuse.

Objective: BP: 98/78, Pulse: 72, Temp: 97.8, Ht: 59", Wt: 117 lbs, BMI: 23.6.

Exam: Const: Healthy appearing child, well nourished and alert. Weight within the normal range for stated age. Communicates normally. Eyes: 20/20 in both eyes without correction. No discharge from the eyes. PERRL. Normal eye movement. ENMT: Auditory canals are patent. Tympanic membranes have normal landmarks, no fluid or erythema bilaterally. Nasal mucosa shows moistness and normal color, but no discharge. Oral mucosa: pink, smooth and moist. Neck: supple, with no adenopathy. Resp: Respiration rate is normal. Lungs are clear bilaterally. CV: Rate is regular. Rhythm is regular. Pedal pulses: 2+ and equal bilaterally. GI: Abdomen is nondistended, nontender and soft. Bowel sounds normoactive. No palpable hepatosplenomegaly. GU: Normal genitalia. No hernias. Musculo: Spine: No scoliosis. Upper extremities: Strength: Normal and symmetric. ROM is physiologic. Lower extremities: normal and symmetric. ROM is physiologic. Skin: No rash or lesions. Neuro: Mood is normal. Affect is normal.

Assessment and plan: Normal physical exam. Follow up prn.

ICD-10-CM code(s) _____

Case 31

Nurse Note: 15-year-old female presents with lump on left breast. Pt states she first noticed 2 weeks ago. Not painful.

Chief Complaint: Patient present with a breast lump.

HPI: Patient feeling well. No pain with the lump. Noticed 2 weeks ago. Affects outer left quadrant of the left breast at the 3 o'clock position. Rated as mild. Has shown no change since onset. Reports associated family history of breast cancer, but denies associated nipple discharge, rash, skin changes and skin irritation. Mom had breast cancer in 2000 at age 44. She has not had a reoccurrence of breast cancer. MGM also has breast cancer.

ROS: Const: Denies chills, fatigue, fever and weight change. General health stated as good. CV: Denies chest pain and palpitations. Resp: Denies cough, dyspnea and wheezing. GI: Denies constipation, diarrhea, dyspepsia, dysphagia, hematochezia, melena, nausea and vomiting. GU: Genital: denies dysmenorrheal, irregular menstrual periods and breast tenderness. Urinary: denies dysuria, frequency, hematuria, incontinence, nocturia and urgency. Musculo: Denies arthralgias and myalgia. Skin: Denies rashes. Neuro: Denies dizziness and lightheadedness.

Current Meds: none

Allergies: NKDA

Past Medical History: Eye exam in 2006. No medical problems. Pt had eye surgery for lazy eye at 18 mos of age.

Family History: Diabetes Mellitus II, Hypertension, Breast Cancer, and Heart Disease.

Social History: The child lives with the mother and two sisters. The home is smoke free.

Objective: BP: 118/80, Pulse: 72, Temp: 97.1, Resp: 16, Ht: 68", Wt: 128 lbs, BMI: 19.5.

Exam: Const: Appears well and comfortable. No signs of apparent distress present. Resp: Respiration rate is normal. No wheezing. Ausculate good airflow. Lungs are clear bilaterally. CV: Rate is regular. Rhythm is regular. No heart murmur appreciated. Extremities: No clubbing, cyanosis or edema. Breasts: Breast exam was performed while patient was in a supine position. Exam was done with a chaperone present, mother in room. Breasts normal on inspection. There are no skin changes. Left cyst, located at 2 o'clock position and left breast is nontender. Right breast is normal. Cyst are round in the skin and not the breast tissue. Was able to pick it up and move it around. Pea size. Nipples: No discharge of the nipples bilaterally. Axillae: Axillae normal. Musculo: Walks with a normal gait. Skin: Skin in warm and dry.

Assessment and Plan: Left breast lump. I will get an ultrasound of the left breast. I instructed the patient to follow up after the test and also if the symptoms get worse or changes. I will give her Gardasil #2 shot today.

ICD-10-CM code(s) _____

092513

Case 32

Note #1
Diagnosis: Lung cancer

Operation: Flexible bronchoscopy, mediastinoscopy with biopsies, right thoracotomy with right middle and lower lobectomy.

Indication: This 57-year-old former cigarette smoker presents with a 4 cm right lower lobe mass peripherally which is biopsy proven adenocarcinoma. PET CT does not suggest any regional or distant metastatic disease.

Technique: After induction of satisfactory general anesthesia, flexible fiberoptic bronchoscopy was performed. Airways were essentially normal with minimal secretions. No endobronchial lesions. The patient was kept supine and neck was prepared with DuraPrep and draped in the sterile fashion. A transverse incision was used and deepened with cautery. The pretracheal fascial plane was entered and the mediastinoscope easily passed. Samples of nodes from 3 different stations were taken from the subcarinal area, the right tracheobronchial angle area, and the low pretracheal area. All were negative for neoplasm. The wound was irrigated, checked for hemostasis, and closed with absorbable sutures and a dry sterile dressing was placed. A double-lumen lube was placed and its proper position confirmed bronchoscopically. The patient was then placed in the left lateral decubitus position, again padded appropriately, prepared, and draped. A lateral thoracotomy approach was used, and the chest entered in the sixth intercostals space. A small portion of #6 rib was taken posteriorly to aid with exposure. A pleural space was freed with no adhesions to the chest wall. There was a mass with puckering of the visceral pleura posteriorly in the lower lobe. We began by dissecting in the fissure and found some very large abnormal-appearing nodes between the middle and lower lobes stuck to the pulmonary artery with branches of the pulmonary artery to the middle lobe direct over this in a very dangerous way. It was obvious that taking the middle lobe was the right approach. She gets more clearance from these abnormal-appearing nodes and to avoid dangerous dissection along the pulmonary artery. The fissure between the lower and upper lobes was completed posteriorly with sharp dissection and between the upper and middle lobes medially with a stapler with reinforcements. This allowed exposure of the pulmonary artery. The inferior pulmonary ligament was taken down with cautery and the inferior pulmonary vein was taken with a vascular stapler. I dissected out a branch of the upper pulmonary vein, which drained the middle lobe and divided this with a stapler as well. This opened up the fissure quite a bit more and allowed us to identify the branches of the pulmonary artery to the middle and lower lobes and these were divided with vascular stapler as well. Lymphatic tissue was dissected up along with the specimen. We found some low subcarinal nodes, which could not be reached with the mediastinoscope and these were taken and submitted separately as well. The bronchus was dissected out. The stapler was applied across the intermediate bronchus and we had good ventilation to the upper lobe. The stapler was then applied and the specimen was removed from the wound comprising the middle and lower lobes. The chest was then irrigated with warm saline. We checked carefully for hemostasis and the staple lines at the bronchus were checked to a pressure of 25 mm Hg with no air leak seen. Two chest tubes were then brought through separate stab wounds and secured. The right upper lobe was ventilated normally and then the closure was carried out with #1 PDS to the pericostals. Running absorbable sutures were used for the muscle, subcutaneous, and skin. Dry sterile dressings were placed. The blood loss was minimal and no transfusion was required. The patient was extubated and taken to recovery in stable condition.

ICD-10-CM code(s) _____

Case 33

Preoperative Diagnosis: Symptomatic, recurrent, left carotid stenosis.

Postoperative Diagnoses: Symptomatic, recurrent, left carotid stenosis, intimal hyperplasia.

Operative Procedure: Re-do left carotid endarterectomy with extensive Dacron patch angioplasty.

Indications for Procedure: The patient is a 59-year-old white male who underwent carotid endarterectomy for symptomatic left carotid stenosis on 08/15/05. He was due for his yearly carotid ultrasound, again having recurrent left eye visual changes and left facial numbness. He saw Dr. Smith, and carotid ultrasound was done that was indicative of recurrent disease on the right side. He was admitted on 08/17/06, and carotid CT angiogram was done. This demonstrated recurrent 90% left internal carotid artery stenosis extending into the common carotid artery. The patient has been neurologically stable. He is taken to the operating room for re-do left carotid endarterectomy.

Operative Findings: There was extensive layering of intimal hyperplasia with no evidence of recurrent atherosclerosis.

Procedure: After the induction of satisfactory general endotracheal anesthesia and placement of monitoring lines including a right internal jugular central line due to the patient's limited peripheral IV access, the left neck was prepped and draped in a sterile fashion. The previous incision was carefully reopened. Using sharp dissection, the common carotid artery and its branches were dissected free. The patient was systematically heparinized and after a few minutes clamps applied to the common carotid artery and its branches. A longitudinal arteriotomy was carried out with findings as above. A silastic balloon-tip shunt was inserted first proximally and then distally, with restoration of flow. Endarterectomy in the standard fashion was not possible due to layering and intimal hyperplasia. Several layers of intima were removed and the endarterectomized surfaces irrigated with heparinized saline. An oval Dacron patch was then sewn into place with running 6-0 Prolene. Prior to completion of closure of the shunt, air and debris were evacuated. After closure, there were excellent pulses throughout the carotid system.

ICD-10-CM code(s) _____

Case 34

Preoperative Diagnosis: Adenocarcinoma of the esophagus. History of Barrett's esophageal epithelium.

Postoperative Diagnosis: Adenocarcinoma of the esophagus. History of Barrett's esophageal epithelium.

Operative Procedure:

1. Ivor-Lewis esophagogastrectomy with intrathoracic reconstruction
2. Feeding jejunostomy
3. Pyloroplasty
4. Partial resection of right sixth rib

Cosurgeons: Dr. Smith

Indications for Procedure: Patient is a 64-year-old white female with a long-standing history of Barrett's esophagus. She underwent periodic endoscopy. She was recently found to have an invasive adenocarcinoma without evidence of metastatic spread on work-up. She was referred for resection.

Operative Findings: There was tumor present at approximately 30 cm in the junction of the mid to distal esophagus. The GE junction was clear. Margins proximal and distal to the resection were negative. The proximal margin also showed only squamous epithelium and no evidence of Barrett's epithelium. No evidence of intrathoracic or intraabdominal tumor spread.

Operative Procedure: After the induction of satisfactory double-lumen endotracheal anesthesia and placement of monitor lines, the patient was placed supine on the operating table and the abdomen was prepped and draped in sterile fashion. Midline abdominal incision was made and the stomach mobilized by Dr. Smith with a series of ligatures along the greater curvature and lesser curvature. After mobilization of the stomach was satisfactory and hemostasis was obtained a Heineke-Mikulicz pyloroplasty was performed with 4-0 Monocryl suture, opening the pylorus longitudinally and sewing it transversely. A 16 French red rubber catheter was then used as a feeding jejunostomy, placed in Witzel maneuver used to cover the track with 4-0 Monocryl. This was brought out through the abdominal wall and sutured into place. Wound was then irrigated with copious amounts of antibiotic saline and closed with running looped PDS suture. Vicryl and skin staples sterile dressing was applied.

ICD-10-CM code(s) _____

Case 35

Procedures Performed:

1. Left and right heart catheterization (for congenital anomaly)
2. Left ventriculography and coronary angiography
3. Intracardiac echocardiography

Indication: Secundum-type atrioseptal defect. Congestive heart failure, chronic, systolic.

Brief History of Present Illness: This is a 63-year-old patient who has chronic dyspnea on exertion consistent with CHF NYHA class III. Outpatient evaluation revealed pulmonary hypertension and a dilated pulmonary artery, following which subsequent noninvasive testing included an echocardiogram as well as coronary CT angiography. This revealed a large Secundum-type atrial septal defect. He has been managed with medical therapy and presents today for potential closure of this defect with a percutaneous septal occluder device. Risks/benefits ratio of procedure was explained, and informed consent was obtained.

Procedure: On arrival to the lab, the patient was in stable condition. Initially, a 5-French sheath was placed in the right common femoral vein, an 11-French sheath was placed in the left common femoral vein, a 5-French sheath was placed in the left common femoral artery. Hemodynamics were measured using sheath sidearms as well as using a 7-French pulmonary artery Swan-Ganz catheter (after upgrading sheaths to 11-French at a later point in time). Intracardiac echocardiography was performed using an AcuNav 10-Prench intracardiac echocardiography catheter with standard technique.

Complications: None immediate.

Hemodynamic Findings:

1. AC 120/78 (94 mm Hg mean)
2. LV 120/17 mm Hg
3. RA 16 (12 mm Hg mean)
4. RV 45/11 mm Hg mean
5. PA 45/17 (32 mm Hg mean)
6. PCWP 19 mm Hg mean.
7. _____ oximetry run- SVC 71%, RA 84%, PA 88 4%, FA 91%
8. Systemic blood flow 6.14 liters per minute. Pulmonary blood flow

47 liters per minute, with Qp/Qs ratio 7 69 (assumed hemoglobin of 15 7 gm/dL, assumed oxygen consumption of 258 mL per minute)

Angiographic Findings:

Left Main: Normal. Has a very short left main

Left Anterior Descending: Normal

Left Circumflex: Left circumflex artery terminates into 3 large CM branches without any significant disease

Right Coronary Artery: Arising from a slightly anterior position in the right coronary cusp. This vessel has a very large conus branch arising almost in an anomalous fashion right at its origin, and supplies the right ventricle. This has multiple large branches. The main RCA and posterior descending arteries are free of significant disease. A multipurpose 5-French catheter was advanced and initially this wire went to an area outside the right atrial free border. In light of the above, anomalous pulmonary venous drainage was suspected. This multipurpose catheter was advanced, and pulmonary vein angiography was performed. This was the right upper pulmonary vein, draining normally into the left atrium and was not anomalous pulmonary vein. Subsequently, an intracardiac echocardiogram catheter was advanced and was parked in the right atrium, and detailed interrogation of the interatrial septum was performed using standard technique. There was a large secundum type atrial septal defect. There was no posterior rim detected in the midsegment. The anterior rim was adequate. In light of the above, we elected to assess the accurate sizing and flow cessation with a sizing balloon. An Amplatz Super-Stiff wire and subsequently a J-wire were parked in the left atrium, over which a 30 mm NMT sizing balloon was advanced and inflated across the interatrial septal. This balloon at 30 mm still had some residual minimal shunting on the posterior rim, and there was some give with motion. After detailed discussion with Dr. Benway, a pediatric interventional cardiologist, we elected to not proceed with any attempts at percutaneous device closure because of the above findings. All the equipment was removed, and access site hemostasis was to be achieved when ACT was less than 160 seconds.

Impression:

1. A large secundum-type atrial septal defect, and not suitable for percutaneous closure.
2. Elevated right heart filling pressure with mild pulmonary hypertension and significant left to right shunt at the atrial level (Qp/Qs ratio more than 7).
3. No significant epicardial coronary artery stenosis.

Plan and Recommendations: Mr. Lee's detailed intracardiac echocardiography and the right and left heart catheterization confirm hemodynamically significant secundum-type atrial septal defect. Based on the technical factors delineated above, this will be best served with surgical closure. I will discuss the case with a cardiothoracic surgery colleague, and then proceed further as appropriate. He will require close follow up, and I have taken the liberty of adding low-dose ACE inhibitor therapy to optimize his perioperative outcomes from a remodeling standpoint.

ICD-10-CM code(s) _____