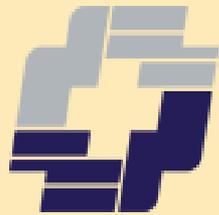


ICD-10 



Salem Health

ICD-10-CM TRAINING
March 2013

Linda Dawson, RHIT, AHIMA Approved ICD-10 Trainer

Judy Parker, RHIT, CCS, AHIMA Approved ICD-10 Trainer

ICD-10-CM Compliance Date October 1, 2014

October 2014

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|---------|-----------|----------|--------|----------|
| | | | ① | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |

HISTORY ICD-10

The 10th revision of the International Classification of diseases was written in 1990.

We are one of the last industrialized nations to adopt ICD-10 with a clinical modification known as ICD-10-CM

WHY DO WE CODE?

TO JUSTIFY:

Billing

Statistics

Continuity of Care

Severity of illness

WHAT DO WE CODE?

Outpatient → Reason for Visit

Inpatient → Reason for Admission

WHAT DO WE CODE?

Outpatient →

No probable or possible diagnoses

Symptoms of a disease or confirmed diagnosis

WHAT DO WE CODE?

Outpatient →

Patient came in with syncope, physician states possible TIA

You can only code the confirmed symptom of syncope

WHAT DO WE CODE?

Outpatient → Lab or X-ray Visit

Code the symptom that brought the patient into the physician

If symptom, code the symptom such as weakness, tiredness, pallor, cough, congestion, shortness of breath

No “probable” diagnosis

OUTPATIENT CODING

CODE COMPLICATIONS OR COMORBIDITIES

Example:

Patient seen for diabetes with neuropathy with hypertension, hypothyroidism, obesity with BMI of 44, and coronary artery disease

Code all conditions that are being treated that visit, either with medication change, counseling, lab follow-up, etc

Will affect the overall patient's care and severity of illness

Justifies the E&M level change

OUTPATIENT CODING

Definition of principal diagnosis does not apply to the outpatient setting

If the physician does not identify a definite condition or problem at the conclusion of the visit or an encounter, the coder should report the documented “chief complaint” as the reason for the visit/encounter

Remember the ruling that you cannot code, probable, possible, maybe, rule out, etc. In the case of a rule out diagnosis or probably diagnosis, a symptom or reason for the encounter may be used as a diagnosis for reason for visit

**Example: Patient complains of RUQ abdominal pain
Appendicitis ruled out, maybe irritable bowel
Code to RUQ abdominal pain**

EDUCATE THE PHYSICIANS

This will alleviate a call to the physician asking for the reason for the test

There should be a diagnosis/symptom for every test done - If more than one test – a reason for every test; includes labs where physician may be checking diabetes, anemia, hypothyroidism or electrolyte abnormalities

Remember no possible or probable diagnosis

WHAT DO WE CODE?

Inpatient →

All confirmed dx as well as all probable, possible diagnoses on the discharge summary

Symptoms if not related to a disease process

Code a reason for lab or x-ray studies if documented and no diagnosis to substantiate reason for testing

REVIEW OF MEDICAL RECORD

Patient admitted for a left herniorrhaphy, an extremely low potassium level is noted on the laboratory report.

In examining the physician's order, intravenous potassium was ordered.

The physician has not listed any indication of an abnormal potassium level or any related condition within the medical record.

Best course of action to take is:

REVIEW OF MEDICAL RECORD

ANSWER:

Confer with the physician and request the condition be listed as a final diagnosis

RATIONALE:

Abnormal findings (laboratory, x-ray, pathologic, and other diagnostic results) are not coded and reported unless the provider indicates their clinical significance

If the findings are outside the normal range and the attending provider has ordered other tests to evaluate the condition or prescribed treatment, it is appropriate to ask the provider whether the abnormal findings should be added (ICD-10-CM Coding Guidelines III.B)

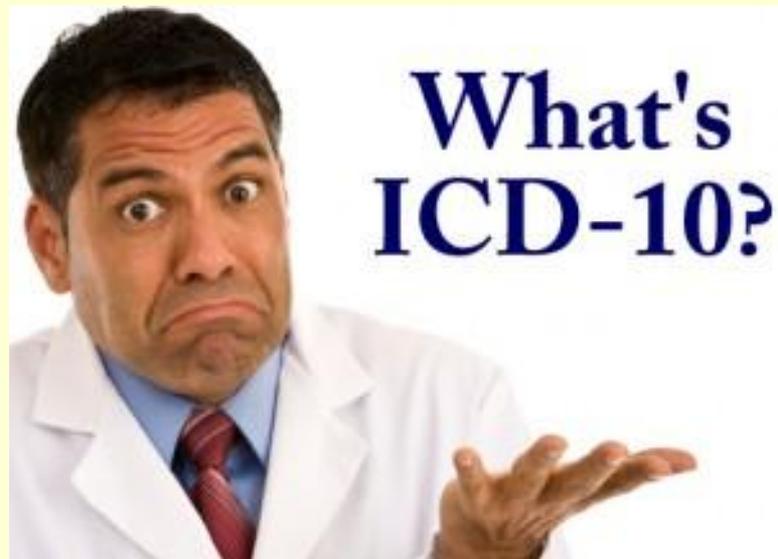
WHAT DO WE CODE?

Inpatient →

**Patient has an EKG, troponin level, or other test;
has no Hx of CAD**

**Patient is admitted with chest pain and no other
cause is found to substantiate reason for testing,
code the chest pain**

EDUCATE THE PHYSICIANS



UHDDS DEFINITION

Uniform Hospital Discharge Data Set

Principal Diagnosis: The condition established after study to be chiefly responsible for the admission of the patient to the hospital for care

The entire medical record must be reviewed to determine the condition that should be designated as the principal diagnosis

The words “after study” are important, but their meaning is sometimes confusing. It is not the admitting diagnosis but rather the diagnosis found after workup or even after surgery that proved to be the reason for admission

Consistent, complete documentation is essential to determine the principal diagnosis

ICD-10-CM
Similarities and Differences
Improvements

IMPROVEMENTS AND MODIFICATIONS

- **Improvements in coding primary encounters, external causes of injury, mental disorders, neoplasms and preventative care**
- **Expanded distinction for ambulatory and managed care encounters**
- **Expansion of diabetes and injury coding**
- **Creation of combination codes to reduce the number of codes to describe a condition**
- **Greater Specificity in code assignment**
- **Inclusion of trimester information in pregnancy**

ICD-10 AND ICD-9 SIMILARITIES

Volume I - tabular listing

Volume II - alphabetical listing

**** Main terms - flush with left margin**

**** Subterms - indented**

**** The further indented to the right, the more specific**

**** Carryover lines are two indents**

**** Strict alphabetization rules**

**** A dash at the end of the line indicates additional characters are required**

ICD-10 AND ICD-9 SIMILARITIES

Main term – diseases or injuries

Subterms – site, type or etiology

Exceptions to the rule when looking up diagnoses:

....Congenital disorders – see anomaly

**....Pregnancy/delivery conditions – see delivery,
pregnancy and puerperal**

**....Complications of procedures – see
complication**

....Late effects – See sequelae

ICD-10 AND ICD-9 SIMILARITIES

Alphabetization rules –

Single spaces between words

Single hyphens within words

The “s” in the possessive forms of the words

Numerical Entries –

Spelled out form in alphabetical order

(first)(second)

Roman numerals “II” or Arabic numerals “2”

are listed in numerical order

ICD-10 AND ICD-9 SIMILARITIES

Categories in ICD-10-CM are three characters

A three-character category that has no further subdivision is equivalent to a code

Example: 068 - Abnormality of fetal acid-base balance

Subcategories are either four or five characters

Codes may be three, four, five, six, or seven characters Example: S15.221A – Major laceration, rt external jugular vein, initial encounter

CODE STRUCTURE

The first character of an ICD-10-CM code is:

Always a Letter

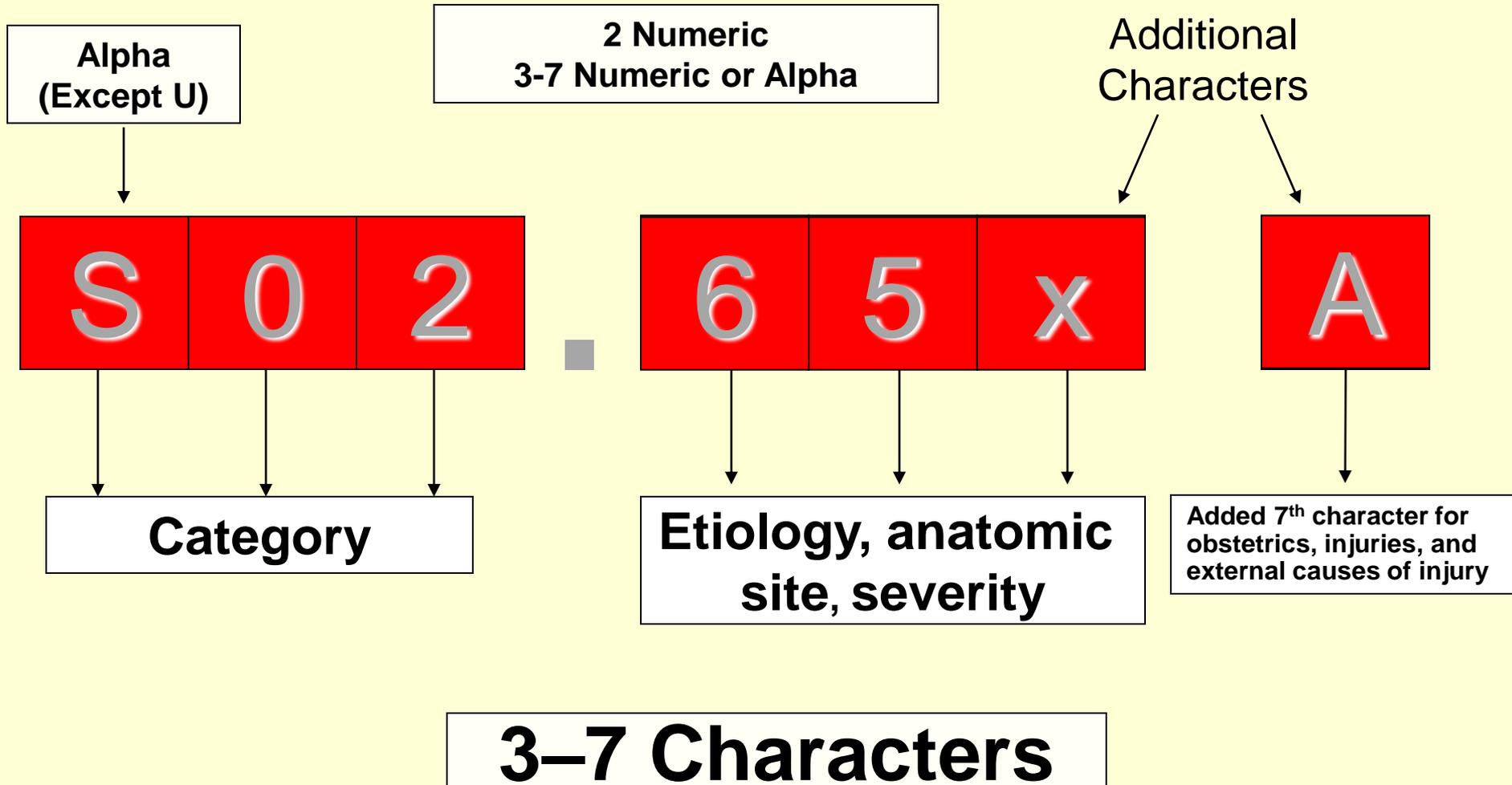
Rationale:

This is an ICD-10-CM convention with all codes beginning with a letter of the alphabet, except the letter U

CODING ICD-10-CM

| ICD-9-CM | ICD-10-CM |
|---|---|
| Three to five characters | Three to seven characters |
| First digit is numeric but can be alpha (E or V) | First character always alpha |
| 2–5 are numeric | All letters used except U |
| Always at least three digits | Character 2 always numeric: 3–7 can be alpha or numeric |
| Decimal placed after the first three characters (or with E codes, placed after the first four characters) | Always at least three digits |
| Alpha characters are not case-sensitive | Decimal placed after the first three characters |
| | Alpha characters are not case-sensitive |

Coding and 7th Characters



PLACEHOLDER CHARACTER “X”

ICD-10-CM Coding Guideline I.A.5 states that the seventh character must always be in the seventh character data field. If a code that requires a seventh character is not six characters long, a placeholder “X” must be used to fill in the empty characters.

Additionally, Guideline A.4 indicates that ICD-10-CM utilizes a placeholder character X and where a placeholder exists, the X **must be used** in order for the code to be considered a **valid code**.

All alpha characters in ICD-10-CM are *not* case sensitive, which means that if the placeholder x is entered in either the upper or lowercase format, the meaning would not change.

PLACEHOLDER CHARACTER “X”

EXAMPLE:

S09.12XA – Laceration of muscle or tendon or head, initial encounter

036.93X1 - Maternal care for fetal problem, unspecified, third trimester – fetus 1

There is no 6th character so you need to use the placeholder “X” in the 6th position for these to be valid codes

ICD-10-CM CORRECT CODING

*******Always look up in the alphabetical index**

*******Verify in the tabular listing**

*******Check for instructional notes**

Assign code, making sure you have the placeholder (“X”) when necessary and seventh character values

A. Initial encounter

D subsequent encounter

S sequela

ICD-10-CM CODING CONVENTIONS



ICD-10-CM RELATIONAL TERMS

“With”, “in”, “Due To” and “Associated With” are used to express the relationship between the main term and subterm indicating an associated condition or etiology

“With” and “Without” are not in alpha order but are immediately below the main term

ICD-10-CM CONNECTING WORDS

Bronchitis: note the word “with” immediately following the main term

To code correctly, follow the alphabetization rules

Bronchitis

with

Influenza – see Influenza with respiratory manifestation

Obstruction J44.9

acute J20.9

chemical J68.0

Due to

fumes J68.0

ICD-10-CM CROSS-REFERENCE NOTES

“See”, “See Also” - refers the coder to see another entry

“See Category” – refers the coder to see another category

“See Condition” – refers the coder to the main term of the condition.

Example:

Glaucomatous flecks – see cataract, complicated

Hypersensitivity – see also Allergy

Multiple – see

ICD-10-CM CONVENTIONS

Inclusion Notes:

Used to further define or give example of the content of the chapter, section or category; may be a synonym or condition similar

Example:

Chapter 1: Certain Infections and Parasitic Diseases -A00-B99

Inclusion note states that this chapter includes diseases generally recognized as communicable and transmissible

Code First or Use Additional Code:

Manifestations of a disease in which you must code the disease process first; shows proper sequencing

Example:

J99 – Respiratory disorders in diseases classified elsewhere

This code can never be the first listed code

Code Also:

Indicates two codes may be required to fully describe the condition

ICD-10-CM CONVENTIONS

Inclusion Notes:

Contain terms that are the condition 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 various conditions assigned to that code

The inclusion terms are not necessarily exhaustive (ICD-10-CM Coding Guideline I.A.11)

ICD-10-CM CONVENTIONS

Inclusion Notes Example:

E11.22 Type 2 Diabetes Mellitus with diabetic chronic kidney disease

Type 2 diabetes with renal tubular degeneration

Use additional code to identify stage of chronic kidney disease (N18.1 – N18.6)

Notice that N18.9 - CKD, unspecified is not included

Only add additional code for Stage I-VI

ICD-10-CM CONVENTIONS

Code Also:

In ICD-10-CM a “code also” note instructs that two codes may be required to fully describe a condition, but this note does not provide sequencing direction

In contrast, the “code first” and “use additional code” notes provide sequencing order of the codes

(ICD-10-CM coding guideline I.A.17)

ICD-10-CM CONVENTIONS

Abbreviations:

NEC: Not elsewhere classified - no separate code for the condition - other specified - NEC

4th or 6th character “8”

5th character “9”

NOS: 5th character “0”

4th or 6th character “9”

NEC and unspecified sometimes combined in one code

ICD-10-CM CONVENTIONS

Codes Titled “Other” or “Other Specified”

For use when information in medical record provides detail for which a specific code does not exist (ICD-10-CM Coding Guideline I.A.9.a)

Contrasted with “unspecified” codes when information in medical record is insufficient to assign a more specific code (ICD-10-CM Coding Guideline I.A.9.b)

ICD-10-CM CONVENTIONS

When the term “And” is used in a narrative statement, it should be interpreted to mean either “And” or “Or”

(ICD-10-CM Coding Guideline I.A.8)

ICD-10-CM CONVENTIONS

PUNCTUATION:

Square Brackets: In the Tabular List are used to enclose synonyms, alternative wordings, abbreviations, and explanatory phrases

Example: Human Immunodeficiency Virus [HIV]

Brackets : Are used in the Index to identify manifestation codes

Example: Nephropathy . . .

Sickle cell D57.- [N08]

ICD-10-CM CONVENTIONS

PUNCTUATION:

Colons: Used in Tabular List in both Includes and Excludes Notes to define when one or more modifier is needed following the colon in order for the term to apply

Example: N92.6 Irregular menstruation, unspecified
Irregular bleeding NOS
Irregular periods NOS

Excludes1: Irregular menstruation with:
lengthened intervals or scanty bleeding
shortened intervals or excessive bleeding

ICD-10-CM CONVENTIONS

PARENTHESES:

Parentheses are used in both the Alphabetic Index and Tabular to enclose supplementary words that may be present or absent in the statement of a disease without affecting the code number to which it is assigned

Terms within the parentheses are referred to as:

“Nonessential Modifiers” - the term in the parentheses does not have to be present to code it to this term

Example: Diabetes, diabetic (mellitus) sugar)

Boxes are not a defined convention of ICD-10-CM

ICD-10-CM CONVENTIONS

Excludes Notes :

There are two types of Excludes Notes:

*******Excludes1**

*******Excludes2**

ICD-10-CM CONVENTIONS

Excludes1 Note:

Indicates that the condition is “Not Coded Here” and should never be used at the same time as the code above the *Excludes1* note

(ICD-10-CM Coding Guideline I.A.12.a)

EXCLUDES1 NOTE EXAMPLE



M43.0 Spondylolysis

**Excludes1: congenital spondylolysis
(Q76.2)**

**You cannot code the congenital and
acquired disease processes together**



ICD-10-CM CONVENTIONS

Excludes2 Note:

Represents “Not Included Here” and it is acceptable to use both the code and the excluded code together when both are documented

Indicates that the condition excluded is not part of the condition represented, but a patient may have both conditions at the same time

(ICD-10-CM Coding Guideline I.A.12.b)

EXCLUDES2 NOTE EXAMPLE



026.0 Excessive weight gain in pregnancy

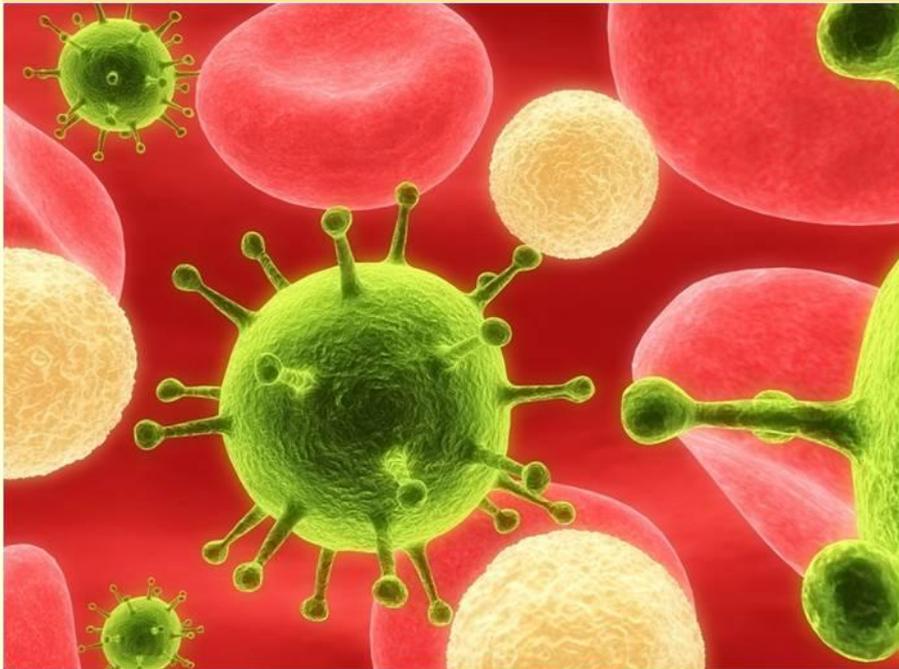
***Excludes2:* gestational edema (012.0)**

You can code both the excessive weight and edema together



ICD-10-CM

Certain Infectious and Parasitic Diseases

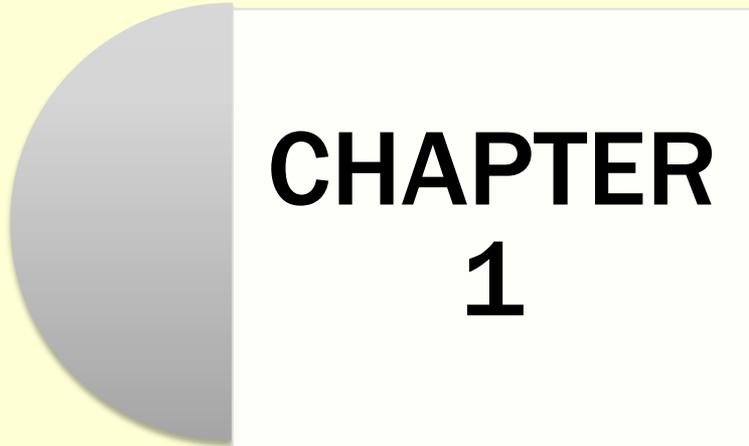


CHAPTER 1

Certain Infectious and Parasitic Diseases

Main Axis of Chapter 1

Organism responsible
for the disease

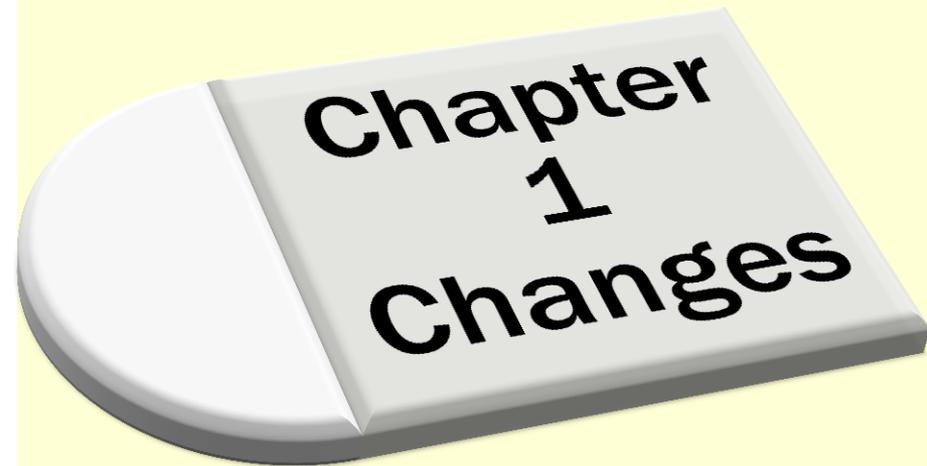


CHAPTER 1

Certain Infectious and Parasitic Diseases

Codes from Chapter one
take precedence over
codes from other
chapters for the same
condition

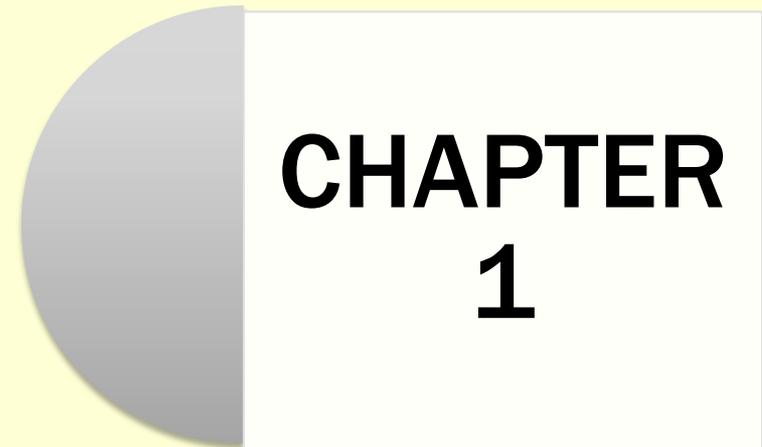
Histoplasmosis B39.9
and meningitis G02



Certain Infectious and Parasitic Diseases

Chapter 1 very similar to ICD-9-CM with some categories and subcategory titles changes

Separate subchapters for viral hepatitis and other viral diseases

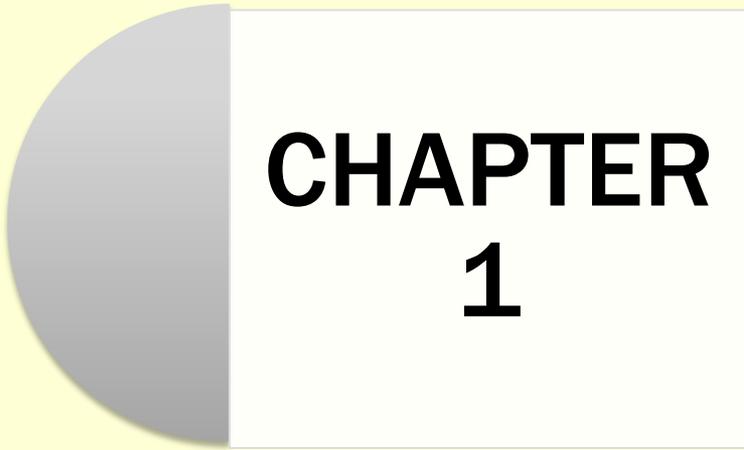


Certain Infectious and Parasitic Diseases

Includes:

**Diseases generally recognized
as communicable or
transmissible:**

**Instructional note at
beginning of Chap 1:
Use additional code to
identify resistance to
antimicrobial drugs (Z16)**

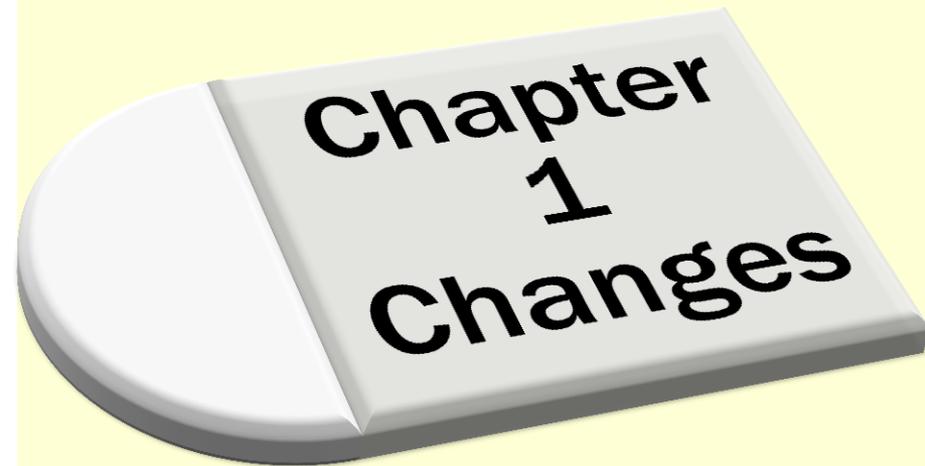


CHAPTER 1

Certain Infectious and Parasitic Diseases

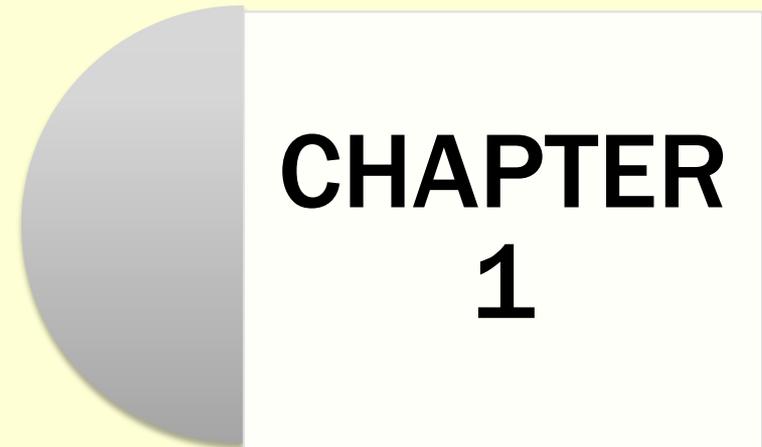
TERMINOLOGY CHANGE

- Strep sore throat moved to chapter 10
- Codes expanded to reflect manifestations – one code instead of two



Certain Infectious and Parasitic Diseases

**New section called:
Infections with a
predominantly sexual
mode of transmission
(A50-A64)**



**Codes were moved from
other sections of the
codebook to Chapter 1**

Certain Infectious and Parasitic Diseases

- Urosepsis is no longer a term in the codebook.
- Codebook says - Code to condition
- Query the physician for his meaning of this term



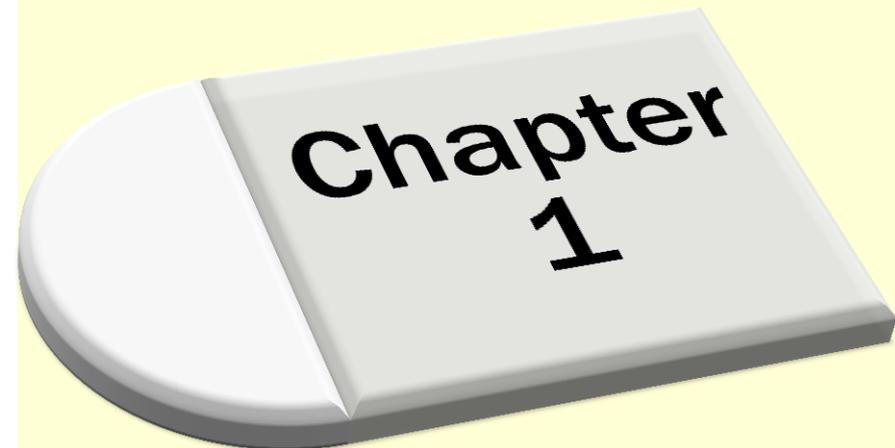
Certain Infectious and Parasitic Diseases

- Dual classifications are also used in Chapter one.

Bronchomycosis

B49

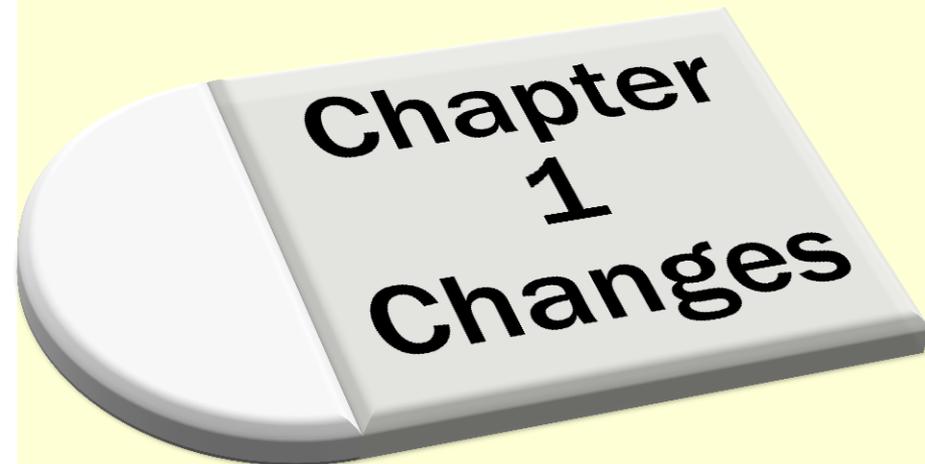
J99



Certain Infectious and Parasitic Diseases

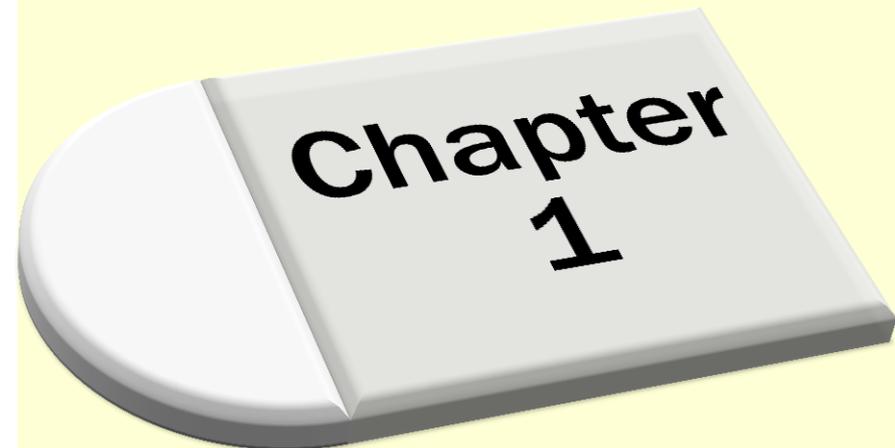
Coded in two ways:

- A single code from chapter one to indicate the organism - B37.1
Candidiasis of the lung
- A combination code to show the disease and the infection - J15.212 MRSA pneumonia



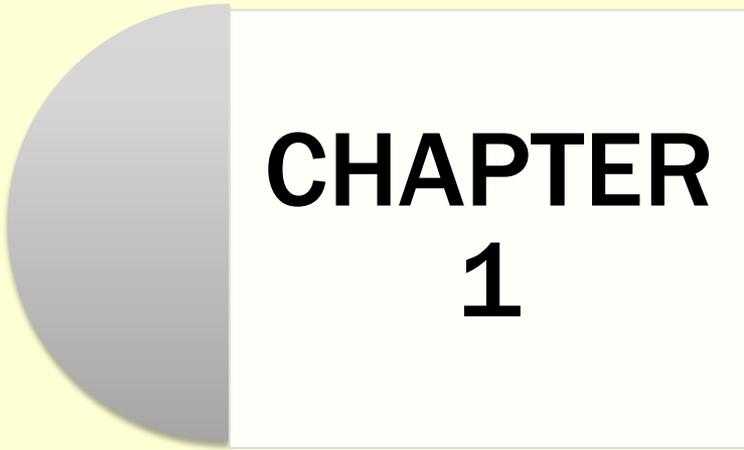
Certain Infectious and Parasitic Diseases

- Sequelae of Infections and Parasitic disease are included in B90-B94.
- Only use these codes for the residual effects of an infection which has been treated and is no longer present.
- Code first the condition that is still present as a result of the sequelae of the infection.
- **DO NOT USE FOR CHRONIC INFECTIONS**



Certain Infectious and Parasitic Diseases

- Sepsis
- Bacteria's
- AIDS
- Influenza
- TB
- Infectious gastroenteritis
- Sexually transmitted diseases



CHAPTER 1

Certain Infectious and Parasitic Diseases



SEPSIS

SEVERE SEPSIS

SEPTIC SHOCK

Certain Infectious and Parasitic Diseases

SEPSIS DEFINITION

- **Life-threatening Systemic Bloodstream Infection**
- **Originating in:**
 - **Urinary tract**
 - **Lungs**
 - **GI Tract**
 - **Surgical wound**
 - **Infected implanted device**

Certain Infectious and Parasitic Diseases

ICD-10-CM Sepsis Codes (A40.0 - A41.9)

Common Causative Organisms

- **Streptococcal (A40.0 – A40.9)**
- **Staphylococcus Aureus (A41.01 – A41.02)**
- **Gram-negative organisms (E.coli, Pseudomonas)
(A41.50 – A41.59)**
- **Other and unspecified sepsis (A41.8 - A41.9)**

Certain Infectious and Parasitic Diseases

ICD-10-CM Sepsis Codes

(Not in categories A40 - A41)

- **Disseminated herpesviral disease (sepsis) (B00.7)**
- **Candidal Sepsis (B37.7)**
- **Listerial Sepsis (A32.7)**

ICD-10-CM SPOILER ALERT



**ICD-9-CM term “Septicemia” has been replaced in
ICD-10-CM with the term “Sepsis”**

Septicemia A41.9 (Sepsis, unspecified organism)

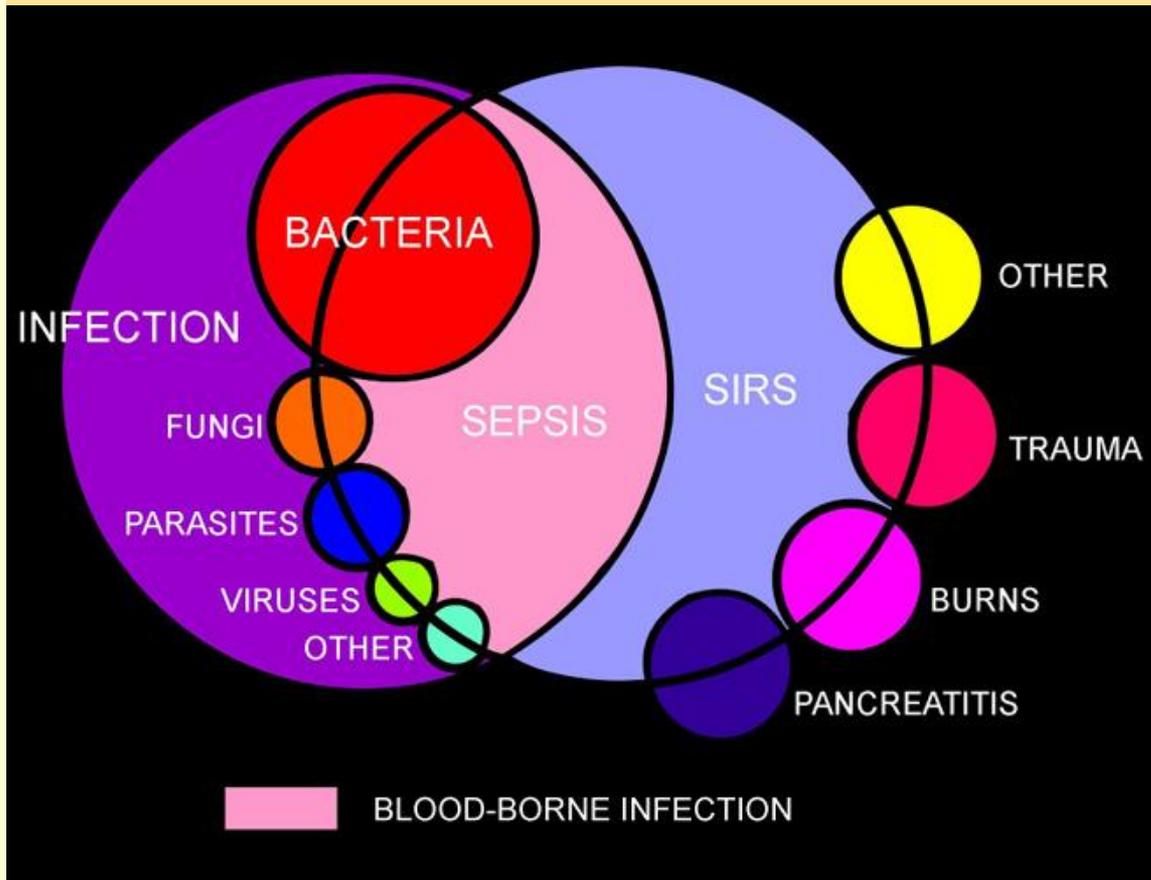
- meaning sepsis – see Sepsis

Note: All codes for bloodstream infections are classified to “Sepsis”

What about Bacteremia? (R78.81)

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

Primary Disease Pattern in Sepsis



Sepsis originates as an isolated infection

Microorganisms in circulatory system overcome the immune system

Systemic Inflammatory Response Syndrome (SIRS)

Systemic Inflammatory Response Syndrome (SIRS)

Systemic Response to Critical Illness

- SIRS due to an infection = Sepsis
- Noninfectious SIRS (R65.11 with acute organ failure) or (R65.10 without acute organ failure)
 - Severe burns/trauma
 - Cancer
 - Pancreatitis

Systemic Inflammatory Response Syndrome (SIRS)

Must Meet At Least Two SIRS Criteria:

- Temperature >100.4 or < 96.8
- Heart rate > 90 beats a minute
- Respiratory rate > 20 breaths a minute
- WBC >12 or < 4 or 10% or greater bands

Coding Clinic for ICD-9-CM, 4Q, 2007

American Hospital Association (AHA) Coding Clinic Advisor

www.codingclinicadvisor.com

Systemic Inflammatory Response Syndrome (SIRS)

Additional SIRS Criteria

- Altered mental status
- Arterial hypotension
- Hyperglycemia in the absence of diabetes
- Procalcitonin (PCT)
 - PCT 0.5-2.0 - trauma/major surgery/cardiogenic shock or could be sepsis
 - PCT 2.0-10.0 - Likely sepsis
 - PCT >10.0 - Severe sepsis/shock

Primary Disease Pattern in Sepsis

Three-stage Syndrome:

- **Sepsis - (A40.0 - A41.9)**
- **Severe Sepsis without septic shock (R65.20)**
 - associated with acute organ failure
- **Severe Sepsis with septic shock (R65.21)**
 - **Septic shock = subset of severe sepsis, is defined as a persistently low arterial blood pressure despite adequate fluid resuscitation**

Treatment Of Sepsis, Severe Sepsis and Septic Shock

- **Aggressive goal-directed therapy in the first six hours**
- **IV fluid resuscitation to prevent organ failure**
- **Stabilize respiration (intubation and mechanical ventilation may be required)**
- **IV broad-spectrum antibiotics begins immediately — even before the infectious agent is identified**
- **Severe sepsis/septic shock = ICU, Vasopressors**

Surviving Sepsis Campaign: International Guidelines for Management of Severe Sepsis and Septic Shock: 2012

<http://www.sccm.org/Documents/SSC-Guidelines.pdf>

<http://www.uptodate.com/contents/management-of-severe-sepsis-and-septic-shock-in-adults>

DOCUMENTATION TIP



- ✓ **Documentation Must Support Clinical Picture**
- ✓ **SIRS criteria must be documented and the underlying cause; Was it an infection or trauma?**
 - **Suggested documentation of Sepsis is (for example):
“patient presents with leukocytosis and fever, suspect UTI as source, meets criteria for Sepsis”**
- ✓ **We simply need to educate the physicians**

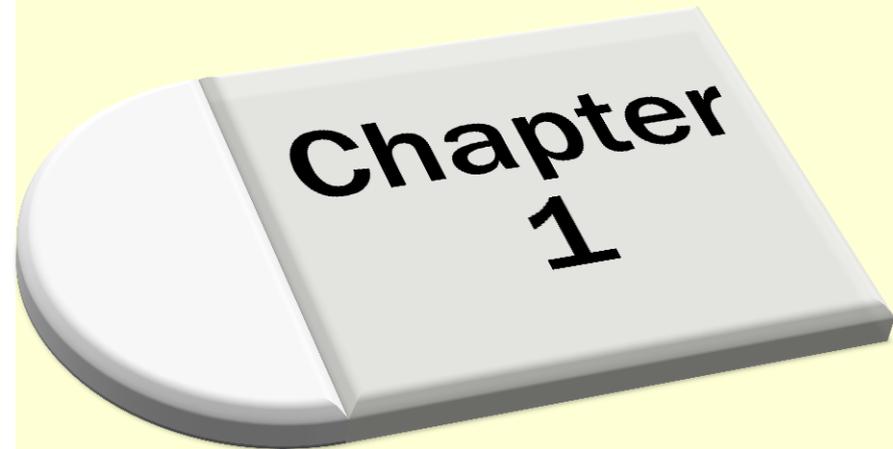
Certain Infectious and Parasitic Diseases

When Can I Code Sepsis?

- If you have a documented diagnosis of sepsis, what else do you need documented before you can code Sepsis?
- If you have clinical indication of SIRS without documented diagnosis of Sepsis, what do you do?

Certain Infectious and Parasitic Diseases

Sepsis Coding Guidelines



Sepsis

- Assign appropriate code for the underlying systemic infection
- Streptococcal sepsis:
 - Group A (A40.0)
 - Group B (A40.1)
 - Streptococcus Pneumoniae (A40.3)
- *Streptococcus group D: A41.81, Sepsis due to Enterococcus.*
- A41.9, Sepsis, unspecified organism



Sepsis

Negative or inconclusive blood cultures do not exclude a diagnosis of sepsis with clinical evidence of the condition



Certain Infectious and Parasitic Diseases

Case 1.7:

This 87-year-old nursing home patient is being treated with IV antibiotics for E. Coli sepsis

What diagnosis codes are assigned?

Certain Infectious and Parasitic Diseases

Sepsis

Case 1.7:

A41.51 Sepsis, Escherichia coli (E. coli)

- Review Tabular for complete code assignment
- One code from category A41 is necessary for correct code assignment

Sepsis and Severe Sepsis with a Localized Infection

Correct Sequencing

- Sepsis/severe sepsis present on admission (POA) with localized infection (pneumonia or cellulitis)
 1. Code first the underlying systemic infection
 2. Code secondary diagnoses for localized infection and severe sepsis, R65.2



Sepsis and Severe Sepsis with a Localized Infection

Correct Sequencing

- Patient is admitted with a localized infection
- Sepsis/severe sepsis does not develop until after admission
 1. The localized infection should be sequenced first
 2. Code secondary diagnoses for sepsis/severe sepsis codes



Sepsis due to a Postprocedural Infection

1. Code first the postprocedural infection codes:

T80.2-, Infections following infusion, transfusion, and therapeutic injection

T81.4, Infection following a procedure;

T88.0-, Infection following immunization

O86.0, Infection of obstetric surgical wound

2. Followed by the code underlying systemic infection



Sepsis due to a Postprocedural Infection

Must have provider's documentation of the relationship between the infection and the procedure



Sepsis /Severe Sepsis with Noninfectious Condition

- **Sepsis/severe sepsis due to trauma, burn, cancer, pancreatitis**
- **If documented as noninfectious, the noninfectious condition would be coded as the principal diagnosis**



Sepsis /Severe Sepsis with Noninfectious Condition

Noninfectious condition leads to an infection resulting in severe sepsis

- Only one code from R65 may be assigned:
 - R65.20 Severe Sepsis w/o septic shock
 - R65.21 Severe Sepsis w/septic shock
- Do not assign R65.1 Systemic Inflammatory Response Syndrome (SIRS) of non-infectious origin



Sepsis due to a Postpartum Infection

Postpartum Sepsis

**086.0 Infection of Obstetrical
Surgical Wound**

Code 085, Puerperal sepsis

**Secondary code to identify the
causal organism (e.g. bacterial
infection, B95-B97)**

**Codes from category A40.0 - A41.9
should not be used for
postpartum sepsis**



Newborn Sepsis

- Code to the Perinatal chapter
- Bacterial sepsis of the newborn
P36.0 – P36.9



CODING SEPSIS/SEVERE SEPSIS/SEPTIC SHOCK

True or false? When coding Severe Sepsis a minimum of three codes is required

Answer: False

Rationale:

The coding of Severe Sepsis requires a minimum of two codes:

First a code for the underlying systemic infection)

Then code Severe Sepsis without shock R65.20 or Severe Sepsis with septic shock R65.21

Additional codes for the other acute organ dysfunctions should also be assigned

(ICD-10-CM Coding Guideline I.C.1.d.1.b)

CODING SEPSIS/SEVERE SEPSIS/SEPTIC SHOCK

Sepsis

Case 1.9:

A 25-year-old woman was transferred from an outside facility for treatment of septic shock and acute meningococcal sepsis. The outside facility was unable to manage her severe illness.

What diagnoses are assigned?

CODING SEPSIS/SEVERE SEPSIS/SEPTIC SHOCK

Case 1.9:

A39.2 Sepsis, meningococcal, acute

R65.21 Shock, septic (due to severe sepsis)

Rationale: The combination code of severe sepsis with septic shock is assigned as a secondary diagnosis although severe sepsis is not documented. The underlying infection, meningococcal sepsis is sequenced first.

CODING SEPSIS/SEVERE SEPSIS/SEPTIC SHOCK

Case 1.8:

75-year-old woman was taken to the ER after being found semi-conscious with markedly abnormal vital signs, a fever of over 39 degrees Celsius, a heart rate of 100, and a respiratory rate of 22/min. On admission to the ICU, the physician documented her condition as severe sepsis with acute respiratory failure. The final diagnosis provided was gram-negative sepsis with acute respiratory failure.

What diagnosis codes are assigned?

CODING SEPSIS/SEVERE SEPSIS/SEPTIC SHOCK

Case 1.8:

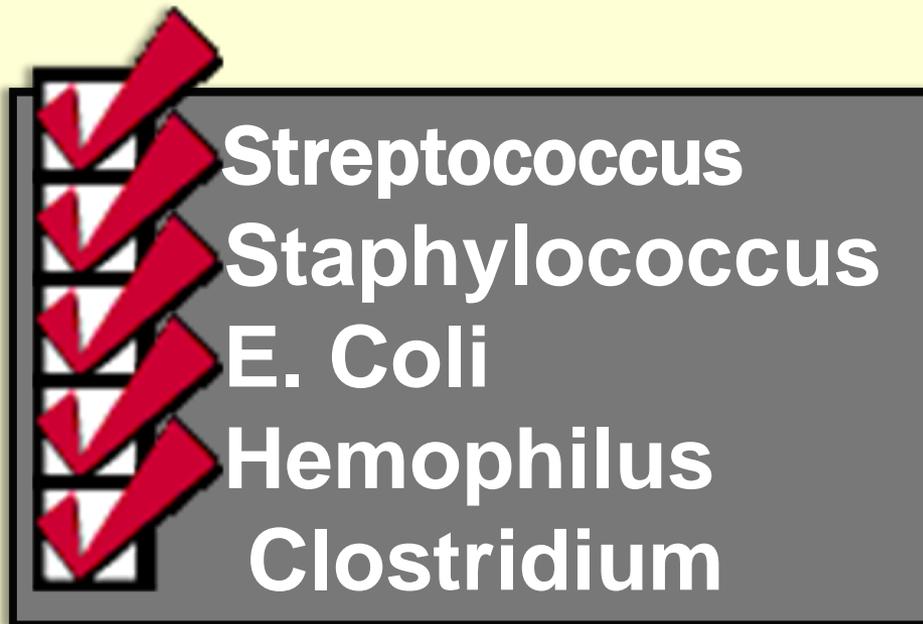
- A41.50** **Sepsis (generalized), gram-negative (organism)**
- R65.20** **Sepsis, with organ dysfunction (acute) (multiple)**
- J96.00** **Failure, respiration, respiratory, acute**

Rationale: Under the R65.2 subcategory, there is a “code first underlying infection” note; therefore, A41.50 should be listed as the principal diagnosis followed by R65.20 as a secondary diagnosis. Coding Guideline C.1.d.1.b provides sequencing guidance for 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. Code J96.00 is used to identify the acute respiratory failure.



Infections by organism

Organisms





The proteobacteria are a major group of Gram-negative bacteria, including *Escherichia coli* (*E. coli*), *Salmonella*, *Shigella*, and other Enterobacteriaceae, *Pseudomonas*, *Moraxella*, *Helicobacter*, *Stenotrophomonas*, *Bdellovibrio*, acetic acid bacteria, *Legionella* and numerous others. Other notable groups of Gram-negative bacteria include the cyanobacteria, spirochaetes, green sulfur and green non-sulfur bacteria.

- Medically relevant Gram-negative cocci include three organisms, which cause a sexually transmitted disease (*Neisseria gonorrhoea*), a meningitis (*Neisseria meningitidis*), and respiratory symptoms (*Moraxella catarrhalis*).



Medically relevant Gram-negative bacilli include a multitude of species. Some of them primarily cause respiratory problems (*Hemophilus influenzae*, *Klebsiella pneumoniae*, *Legionella pneumophila*, *Pseudomonas aeruginosa*), primarily urinary problems (*Escherichia coli*, *Proteus mirabilis*, *Enterobacter cloacae*, *Serratia marcescens*), and primarily gastrointestinal problems (*Helicobacter pylori*, *Salmonella enteritidis*, *Salmonella typhi*).

- Gram-negative bacteria associated with nosocomial infections include *Acinetobacter baumannii*, which cause bacteremia, secondary meningitis, and ventilator-associated pneumonia in intensive-care units of hospital establishments.



Gram-positives of medical interest: *Staphylococcus*, *Streptococcus*, *Enterococcus* (cocci), *Bacillus*, *Clostridium* and *Listeria* (bacilli/rods). This group been expanded to include *Mycoplasma*.

— Actinobacteria, are the Gram-positive bacteria and contains genera such as *Corynebacterium*, *Mycobacterium*, *Nocardia* and *Streptomyces*.



- **Combination code –
MRSA Sepsis A41.02**

- **MRSA Pneumonia
J15.212**

Do not code B95.62



- If no combination code –
code **B95.62** as a additional
code
- UTI with MRSA
N39.0 B95.62
- Do not assign a code for
resistance to Penicillin
Z16.11



Tips

- **Hemophilus influenza is not influenza**



- **Categories B90-B94 are to be used to indicate conditions in categories A00-B89 as the cause of sequelae, which are themselves classified elsewhere.**



- Code first condition resulting from (sequela) the infectious or parasitic disease
- Bacterial and viral infectious agents (B95-B97) are provided for use as supplementary or additional codes to identify the infectious agent(s) in diseases classified elsewhere
 - Index
 - Infection
 - Organism (Streptococcus)

Case 1.3:

This woman is seen for right lower leg muscle atrophy as a result of a previous bout of polio.

What diagnosis codes are assigned?

Case 1.3:

M62.561 Atrophy, atrophic (of), muscle, muscular (diffuse) (general) Idiopathic) (primary), lower leg

B91 Late effect(s) – see Sequelae, Sequelae (of), poliomyelitis (acute)

Rationale: In ICD-10-CM, late effect conditions are classified to “sequelae.” In Chapter 1, Sequelae of Infectious and Parasitic Diseases are classified to categories B90-B94. The condition resulting from the sequela is sequenced first.

Case 1.1:

This 80-year-old female patient was seen with fever, malaise, and left flank pain. A urinalysis was performed and showed bacteria more than 100,000/ml. This was followed by a urine culture, showing E. Coli as the cause of the UTI.

What diagnosis codes are assigned?

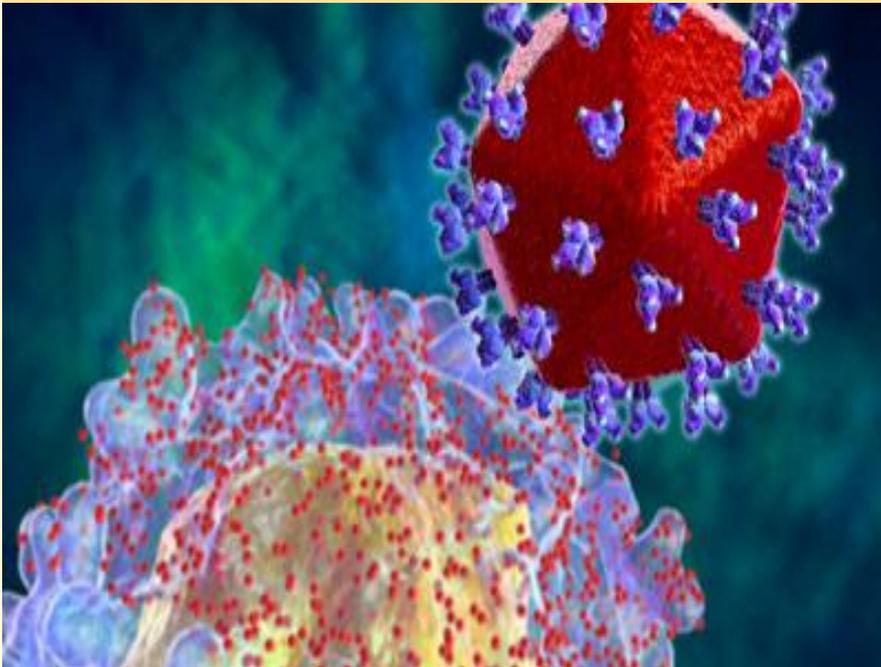
Case 1.1:

**N39.0 Infection, infected, infective
(opportunistic), urinary (tract)**

**B96.20 Infection, infected, infective (opportunistic),
bacterial NOS, as cause of disease classified
elsewhere, Escherichia coli [E. coli] (see also
Escherichia coli)**

Rationale: The symptoms associated with the UTI should not be coded. The “use additional code” note under N39.0 instructs to add an additional code (B95-B97) to identify the infectious agent.

Certain Infectious and Parasitic Diseases



Human Immunodeficiency Virus (HIV)

Certain Infectious and Parasitic Diseases

Human Immunodeficiency Virus (HIV) (B20)

- **Begins with Human Immunodeficiency Virus (HIV)**
- **HIV patients may not have any symptoms for 10 years or longer**
- **HIV slowly begins to destroy the immune system**
- **When immune system is severely damaged, patient has Acquired immune deficiency syndrome (AIDS)**
- **Major Complication/Comorbidity**

Certain Infectious and Parasitic Diseases

Human Immunodeficiency Virus (HIV) (B20)

- **AIDS patient susceptible to infections and cancers**
- **Past Definition:**
 - **AIDS was defined as having HIV infection and getting one infection and/or cancer**
- **Definition Today:**
 - **AIDS defined as HIV-positive and have a CD4 cell count below 200 cells/mm³, without an opportunistic infection**

Certain Infectious and Parasitic Diseases

Human Immunodeficiency Virus (HIV) (B20)

- **HIV infections described as the following:**
 - **Acquired immune deficiency syndrome (AIDS)**
 - **AIDS-related complex (ARC)**
 - **AIDS-related conditions**
 - **HIV infection, symptomatic**

Certain Infectious and Parasitic Diseases

Human Immunodeficiency Virus (HIV) (B20)

AIDS-related infections and cancers: code these conditions when documented

- Herpes simplex virus (B00.9) - Herpes zoster (B02.9)
- Kaposi's sarcoma (C46.-)
- Non-Hodgkin's lymphoma (C83.- C85.)
- Oral thrush (Candidal infections) (B37.-)
- Tuberculosis (A15 –A19)
- *Pneumocystosis* (B59)
- AIDS dementia (F02.80)
- Cryptococcal meningitis (B45.1)

Certain Infectious and Parasitic Diseases

Human Immunodeficiency Virus (HIV) (B20)

Excludes¹ Note:

- **Asymptomatic Human Immunodeficiency Virus [HIV] infection status (Z21A)**
- **Exposure to HIV virus (Z20.6)**
- **Inconclusive serologic evidence of HIV (R75)**

Certain Infectious and Parasitic Diseases

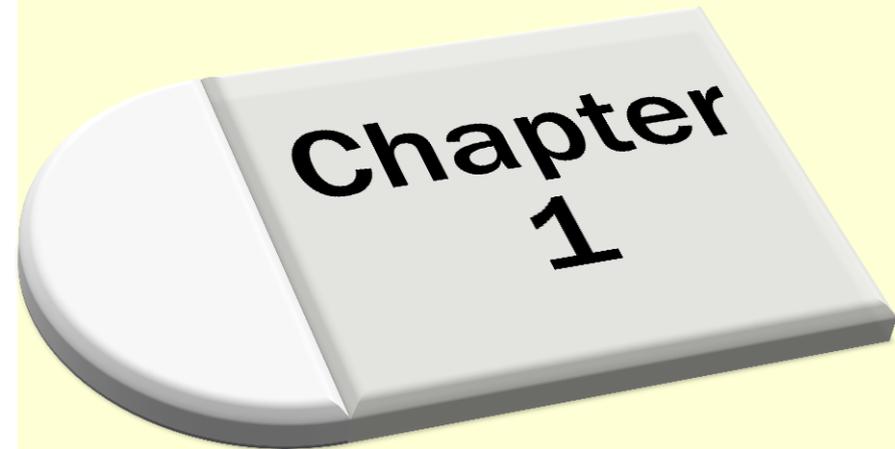
Human Immunodeficiency Virus (HIV) (B20)

TREATMENT:

**Highly Active Antiretroviral Therapy (HAART),
Antiretroviral therapy suppresses the replication of
the HIV virus in the body**

Human Immunodeficiency Virus (HIV)

HIV Coding Guidelines



HIV/AIDS (B20)



- **Code only confirmed cases**
- **Does not require documentation of positive serology or culture for HIV**
- **Physician's diagnostic statement of HIV positive or an HIV-related illness is sufficient**

Human Immunodeficiency Virus (HIV)

Sequencing of HIV-Related Diagnoses

- Patient is admitted for treatment of an HIV infection or any related complications
 - B20, Human immunodeficiency virus (HIV) is sequenced as the principal diagnosis
 - Additional codes for the HIV-related conditions
- Patient with an HIV infection is admitted for treatment of an entirely unrelated condition (e.g. injury)
 - Unrelated condition is designated as the principal diagnosis
 - Additional code B20 Human immunodeficiency virus (HIV)
 - Additional codes for the HIV-related conditions

Human Immunodeficiency Virus (HIV)

Serologic Testing for HIV Infection

When to code Z11.4 Encounter for screening for human immunodeficiency virus (HIV)

- Asymptomatic patient
- No diagnosis of HIV infection or positive-HIV status
- Requests testing to determine HIV status

Human Immunodeficiency Virus (HIV)

Serologic Testing for HIV Infection

When to code **Z71.7, Human immunodeficiency virus (HIV) counseling**

- Patient makes a return visit to learn the result of the serology test
 - assigned as the reason for the encounter when the test result is negative
- Use as an additional code when counseling is provided for patients who test HIV-positive
- R75 - Inconclusive lab evidence of HIV

Human Immunodeficiency Virus (HIV)

Serologic Testing for HIV Infection

When to code Z21, Asymptomatic HIV infection status

- **When the test result is positive**
- **Patient displays no symptoms**
- **Has no related complications**
- **No established diagnosis of HIV infection**

True or false? When assigning the principal diagnosis for a patient with AIDS, the AIDS code would always be sequenced before any other conditions.

Answer: False

Rationale: When a patient is admitted with an HIV-related condition, the principal diagnosis should be B20, Human immunodeficiency virus [HIV] disease, followed by additional diagnosis codes for all reported HIV-related conditions (ICD-10-CM Coding Guideline I.C.1.a.2.a). When a patient with HIV disease is admitted for an unrelated condition, for example, trauma, the code for the unrelated condition should be the principal diagnosis with B20 listed as an additional code (ICD-10-CM Coding Guideline I.C.1.a.2.b)

True or False? Patients with a prior diagnosis of an HIV-related illness should be assigned the code for AIDS (B20) on every subsequent admission.

Answer: A True

Rationale: 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 or encounter. Patients previously diagnosed with any HIV illness (B20) should never be assigned to R75 or Z21, Asymptomatic human immunodeficiency virus [HIV] infection status (ICD-10-CM coding guideline I.C.1.a.2.f).

When reporting an encounter for a patient who is HIV positive but has never had any symptoms, the following code is assigned:

Answer: b. Z21, Asymptomatic HIV infection status

Rationale: Z21, Asymptomatic HIV infection status is to be used 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 HIV positive status; use B20 in these cases (ICD-10-CM Coding Guideline I.C.1.a.2.d).

Case 1.6:

This 42-year-old HIV positive male has a fever and shortness of breath. The diagnostic workup, including chest x-ray and sputum culture, resulted in a diagnosis of Pneumocystis pneumonia. This was documented as Pneumocystis pneumonia due to AIDS.

What diagnoses codes are assigned?

Certain Infectious and Parasitic Diseases



INFLUENZA

INFLUENZA

Must be documented and confirmed by a physician:

- **Avian Flu**
- **2009 H1N1 flu**
- **Novel Influenza A**

In this context, confirmation does not require documentation of a positive laboratory test specific for these influenza's. However, confirmations does require provider documentation of the specific type of Influenza.

Case 1.2:

A 78-year-old gentleman is seen for continued follow-up for *c. difficile* colitis. Cultures of the organism have found this infection to be resistant to Ampicillin. A new drug regimen was started at this time.

What is the correct code assignment?

Case 1.2:

A04.7

**Colitis (acute) (catarrhal) (chronic)
(noninfective) (hemorrhagic),**

Clostridium

difficile

Z16.11

**Resistance, resistant (to), organism(s), to
drug, ampicillin**

Rationale: ICD-10-CM provides a code to identify resistance to antimicrobial drugs (Z16._). The “use additional code” note is found at the beginning of Chapter 1.

Case 1.4:

This patient is seen for an acute case of bacterial food poisoning due to Salmonella. No complications are present at the time and the patient will be treated appropriately.

What diagnosis codes are assigned?

Case 1.4:

**A02.9 Poisoning (acute), food (acute)
(diseased) (infected) (noxious),
bacterial – see Intoxication,
foodborne, by agent,
Intoxication, foodborne, due to Salmonella**

Rationale: Food poisoning is classified to Chapter 1, Certain infectious and parasitic diseases (A00-B99). If gastroenteritis was documented, the code would be A02.0.

Case 1.10:

This 28-year-old man was admitted with flank pain and renal colic. After diagnostic workup, he was found to have nephrolithiasis. He wanted to avoid surgery and was treated conservatively with fluids and straining of the urine. Two days after admission he developed a cough and fever and was diagnosed as hospital-acquired pseudomonas pneumonia and was treated with antibiotics.

What diagnoses codes are assigned?

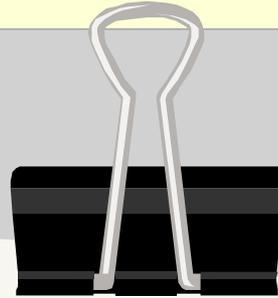
Case 1.10:

N20.0 **Nephrolithiasis (congenital) (pelvis) (recurrent) – see also Calculus, kidney, Calculus, calculi, calculous, kidney (impacted) (multiple) (pelvis) (recurrent) (staghorn)**

J15.1 **Pneumonia, Pseudomonas, NEC**

Y95 **Index to External Causes, Nosocomial condition**

Rationale: The renal colic is a symptom of the patient's nephrolithiasis and would not be coded. The nosocomial infection external cause diagnosis should be added to identify the patient's hospital-acquired pneumonia.



Coding Note: ICD-10-CM has created a range of codes to identify infections with a predominantly sexual mode of transmission (A50-A64). It is important to note that human immunodeficiency virus (HIV) disease is excluded from this range of codes.

Case 1.5:

This young woman is seen for pelvic pain due to pelvic inflammatory disease. The source of the PID is a result of a sexually transmitted disease. (Chlamydia).

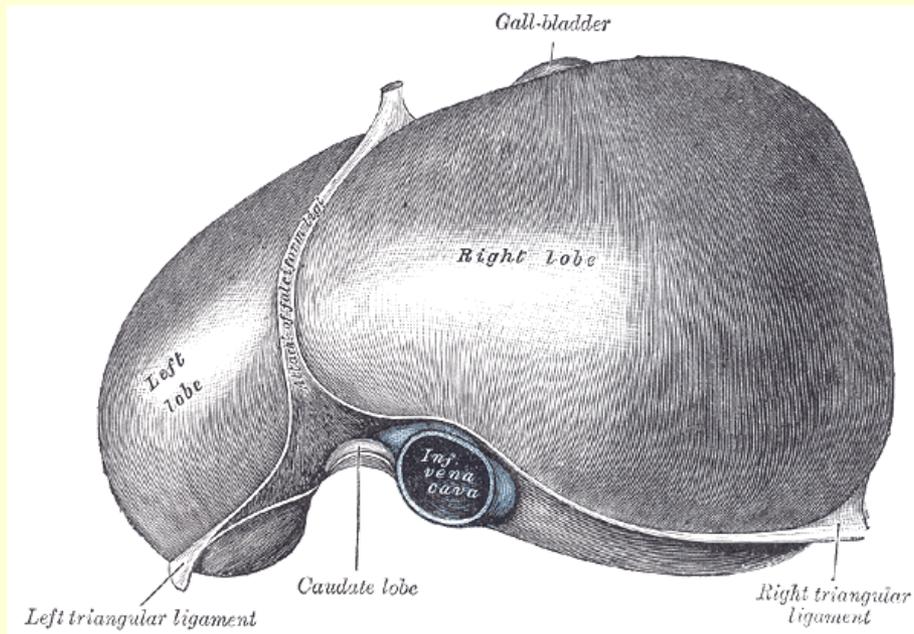
What diagnosis codes are assigned?

Case 1.5:

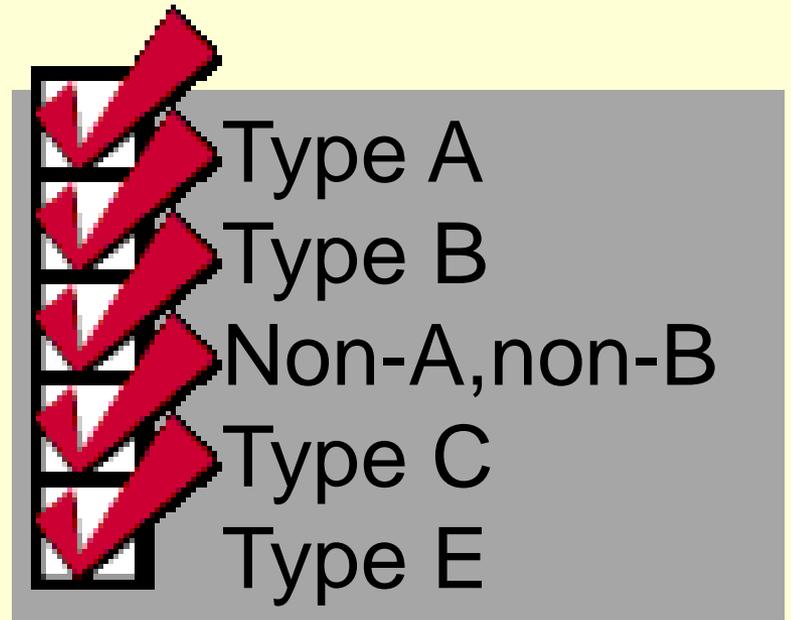
A56.11 Disease, diseased, sexually transmitted, chlamydial infection – see Chlamydia, female, pelvic inflammatory disease

Rationale: With documentation of a sexually transmitted condition, the correct diagnosis code is found beginning with disease, sexually transmitted.

Hepatitis



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HEPATITIS

**Acute – with or without hepatic coma
with or without delta –agent**

**Chronic – with or without hepatic coma
with or without delta-agent**

HEPATIC COMA IS THE SAME AS HEPATIC ENCEPHALOPATHY

DELTA AGENT, A DEFECTIVE VIRAL AGENT THAT OCCURS ONLY IN ASSOCIATION WITH HEPATITIS B INFECTION. IT CAUSES CHRONIC HEPATITIS AND PROGRESSIVE LIVER DAMAGE. THE DELTA AGENT IS ABLE TO INDUCE INFECTION ONLY WHEN IT IS A CO INFECTION PRESENT ALONG WITH HEPATITIS B. IT OCCURS IN 5% OF PEOPLE WITH HEPATITIS; IT INFECTS ABOUT 15 MILLION PEOPLE WORLDWIDE.

Case 1.11:

A 40-year old woman with known chronic viral hepatitis resulting from Hep B is seen for initiation of antiviral therapy.

What diagnosis codes are assigned?

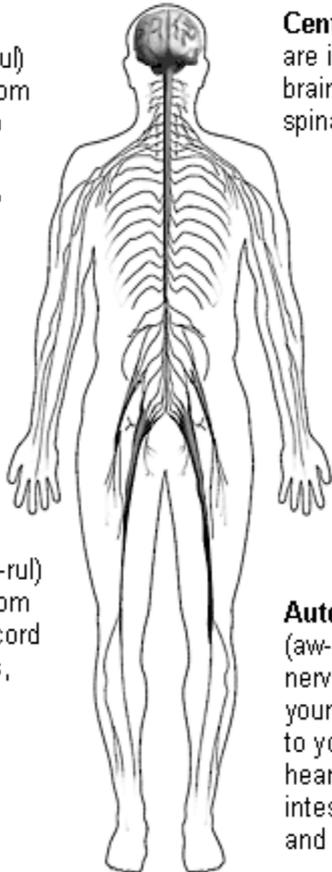
Case 1.11:

B18.1 Hepatitis, viral, virus, chronic, type B

Rationale: In ICD-10-CM chronic (viral) hepatitis B without delta-agent is coded B18.1. Delta agent is a type of virus called hepatitis D that causes symptoms only in people who have hepatitis B infection. Because of this there are no other hepatitis D codes (in the Index or Tabular List). It is a combination code available for use with hepatitis B codes. The Delta-agent can be shown with or without hepatic coma by individual codes.

Diseases of the Nervous System

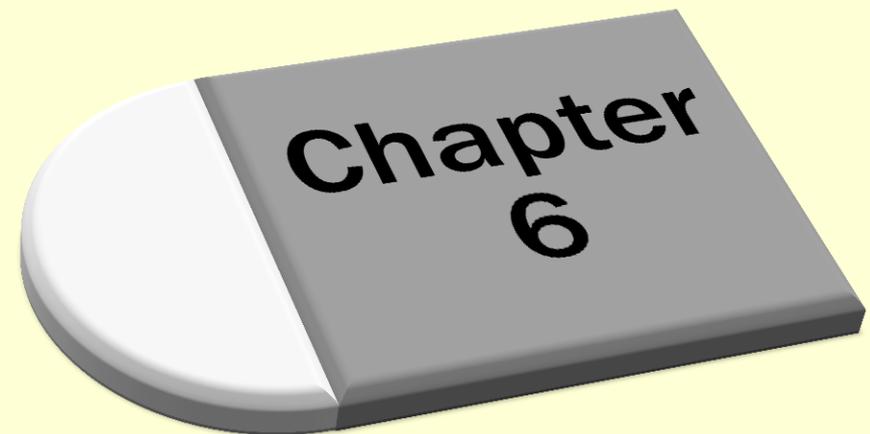
Cranial
(KRAY-nee-ul)
nerves go from
your brain to
your eyes,
mouth, ears,
and other
parts of
your head.



Central nerves
are in your
brain and
spinal cord.

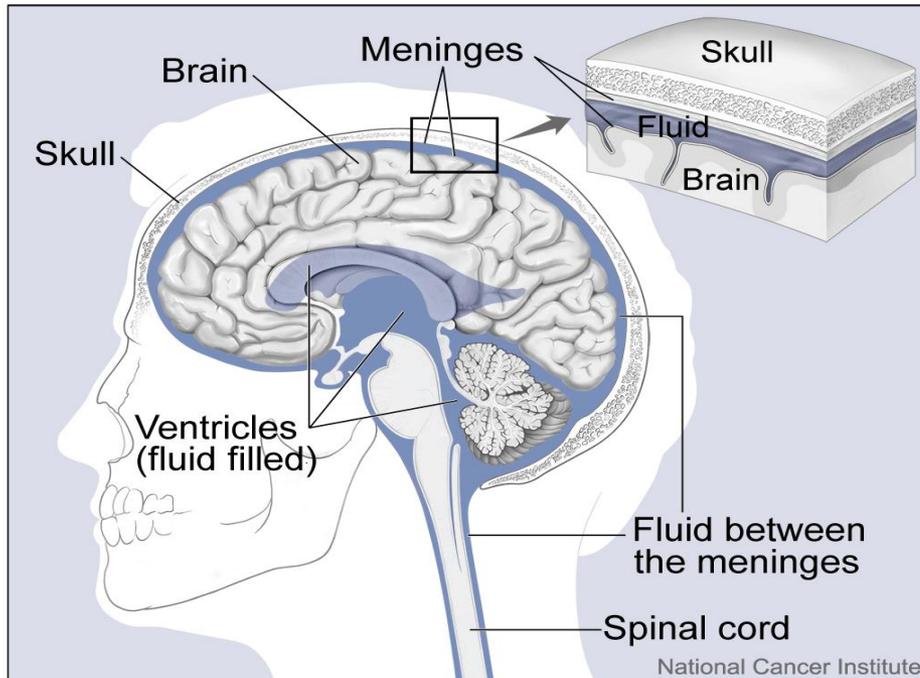
Peripheral
(puh-RIF-uh-rul)
nerves go from
your spinal cord
to your arms,
hands, legs,
and feet.

Autonomic
(aw-toh-NOM-ik)
nerves go from
your spinal cord
to your lungs,
heart, stomach,
intestines, bladder,
and sex organs.



Diseases of the Nervous System

Central nervous system (brain and spinal cord)
G00-G47; G80-G99



Conditions affecting the central nervous system:

- Cerebral Degeneration
- Alzheimer's disease
- Meningitis

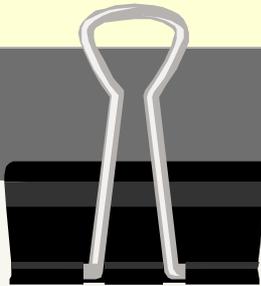
Diseases of the Nervous System

Peripheral nervous system (all other neural elements in the rest of the body) G50-G73

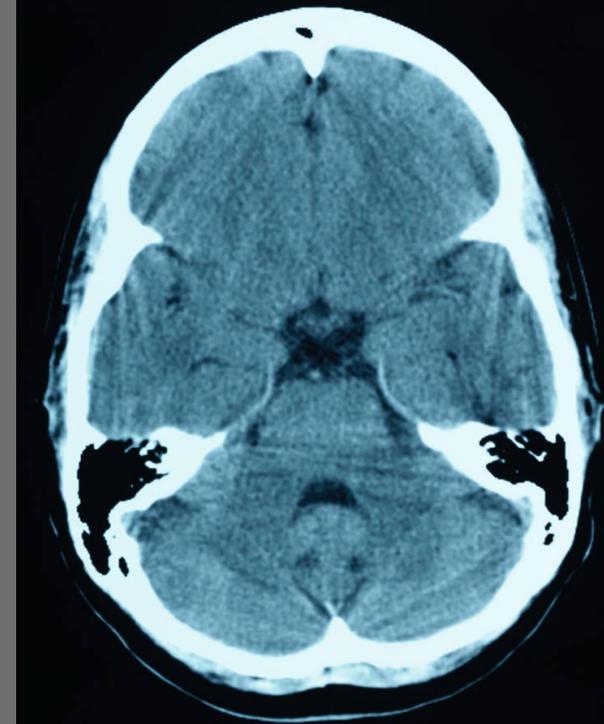
- Includes the autonomic nervous system -
cardiac muscle, smooth muscle, and glands
- Polyneuropathy
- Myasthenia gravis
- Muscular dystrophies

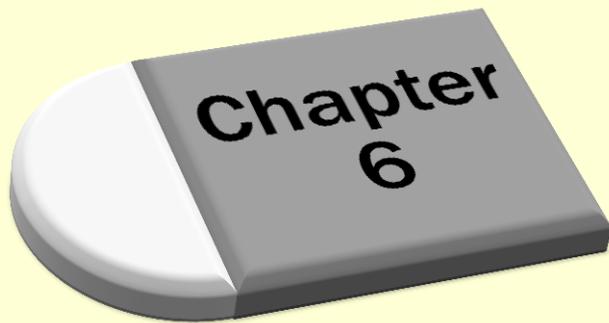
- **Epilepsy**
- **Chronic Pain**
- **Seizure**
- **Migraine**
- **Hydrocephalus**
- **TIA**
- **Hemiparesis**
- **Cerebral edema**
- **Herniation**
- **Neuropathy and Myopathy**
- **Parkinson's disease**
- **Alzheimer's disease**
- **Encephalopathy**
- **Meningitis**

Category G40 (Epilepsy and Recurrent Seizures)



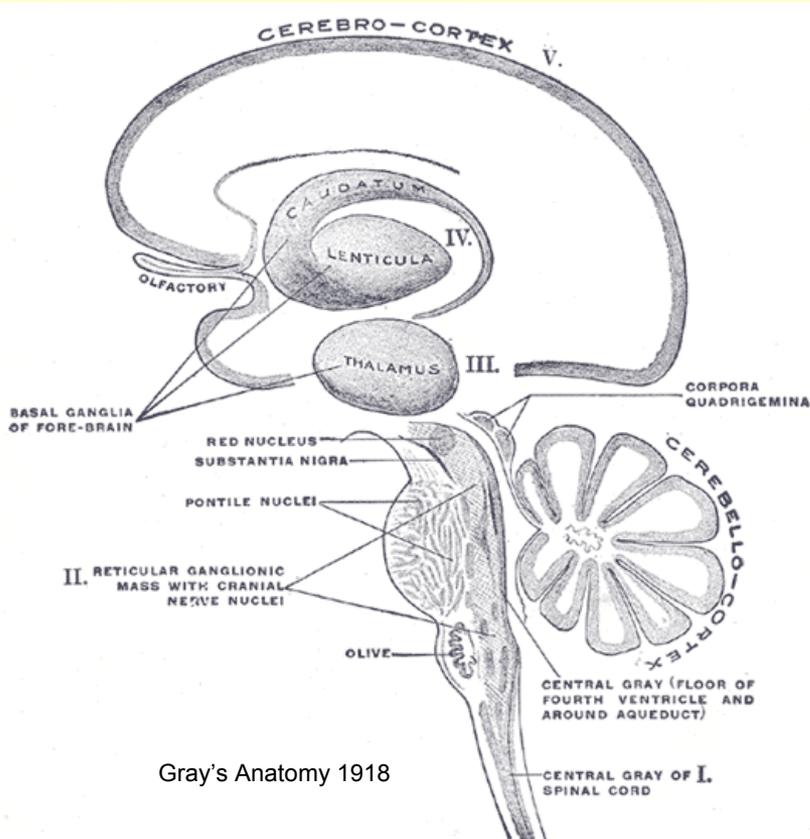
Note: the following terms are equivalent to intractable: pharmacoresistent (pharmacologically resistant), treatment resistant, refractory (medically), and poorly controlled.





- **Epilepsy terminology updated**
 - Localization-related idiopathic
 - Generalized idiopathic
 - Special epileptic syndromes
- **Provides specificity for**
 - Seizures of localized onset
 - Complex partial seizures
 - Intractable
 - Status epilepticus

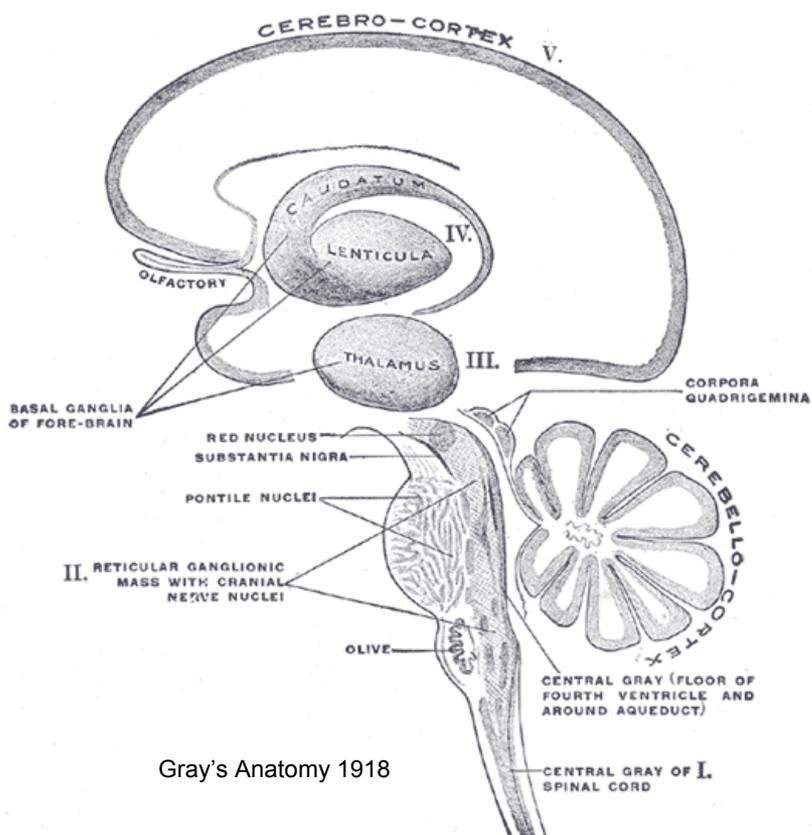
EPILEPSY



Gray's Anatomy 1918



juvenile
myoclonic,
complex partial seizures,
intractable epilepsy,
status epilepticus).



Gray's Anatomy 1918

Status Epilepticus definition:

1. A continuous series of generalized tonic-clonic seizures without return to consciousness (convulsive)
 2. Any prolonged series of similar seizures without return to full consciousness between them (convulsive)
- (Life threatening) G40.311**

Nonconvulsive – not life threatening

Case 1.42:

A 15-year-old female is being seen for management of juvenile myoclonic epilepsy. The patient did not respond to treatment and was diagnosed with an intractable seizure.

What diagnoses codes are assigned?

Case 1.42:

G40.B19 Epilepsy, epileptic, epilepsia (attack) (cerebral) (convulsion) (fit) (seizure), juvenile myoclonic, intractable

Rationale: The documentation indicates that the disorder is juvenile myoclonic epilepsy that is intractable. People with juvenile myoclonic epilepsy (JME) have myoclonic seizures which are identified as quick little jerks of the arms, shoulders, or occasionally the legs. The myoclonic jerks sometimes are followed by a tonic-clonic seizure. JME is one of the most common epilepsy syndromes, and makes up about 7% of all cases of epilepsy. JME may begin between late childhood and early adulthood, usually around the time of puberty.

Seizure – a single episode of motor activity that is not diagnosed as epilepsy

R56.9 – unspecified (symptom code)

Seizure disorder – codes to epilepsy

G40.909 Unspecified epilepsy

includes recurrent seizures and seizure disorder

Hemiplegia

Dominant/nondominant

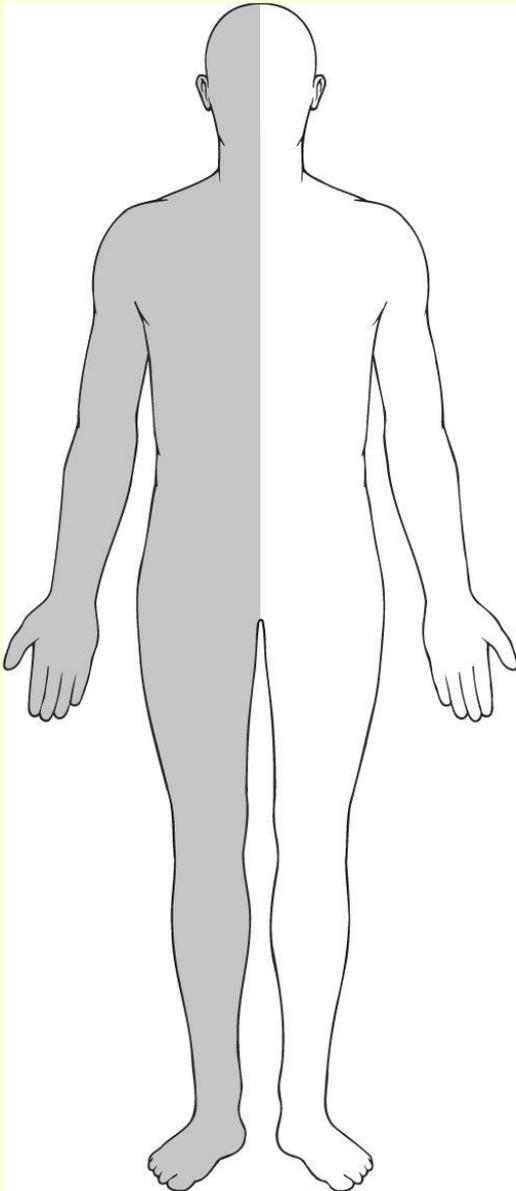
G81, G83.1, G83.2. G83.3.

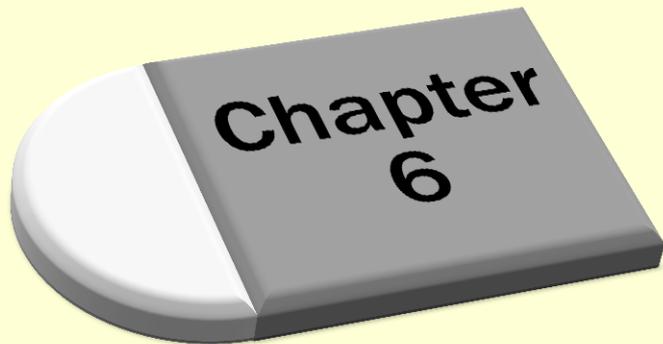
If affected side is documented
but not specified as dominant
or nondominant, and there is
no default: Code to:

Ambitextrous – dominant

Left Side – nondominant

Right side - Dominant





- **Category G81, G82, G83**
 - Used only when listed conditions are reported without further specification or are stated to be old or longstanding, with unspecified cause
- **Paralytic sequelae of infarct/stroke - Chapter 9**

Case 1.43:

**Assign the code for the following
diagnosis:**

Left sided hemiplegia

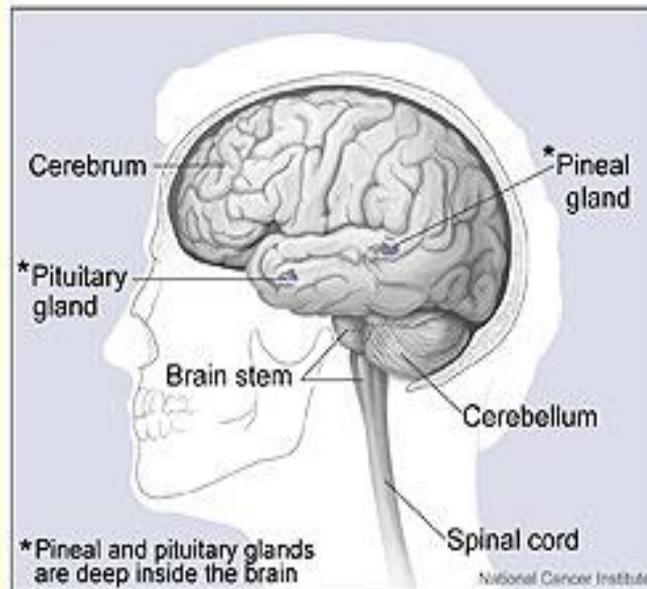
Case 1.43:

G81.94 Hemiplegia. Review Tabular for complete code assignment.

Rationale: Under the term Hemiplegia in the index, the only code option for this diagnosis is G81.9-. Review the Tabular under G81.9-, which offers five code choices. Coding Guideline I.C.6.a states “Should the affected side be documented, but not specified as dominant or nondominant and the classification system does not indicate a default, code selection is as follows: If the left side is affected the default is nondominant.”

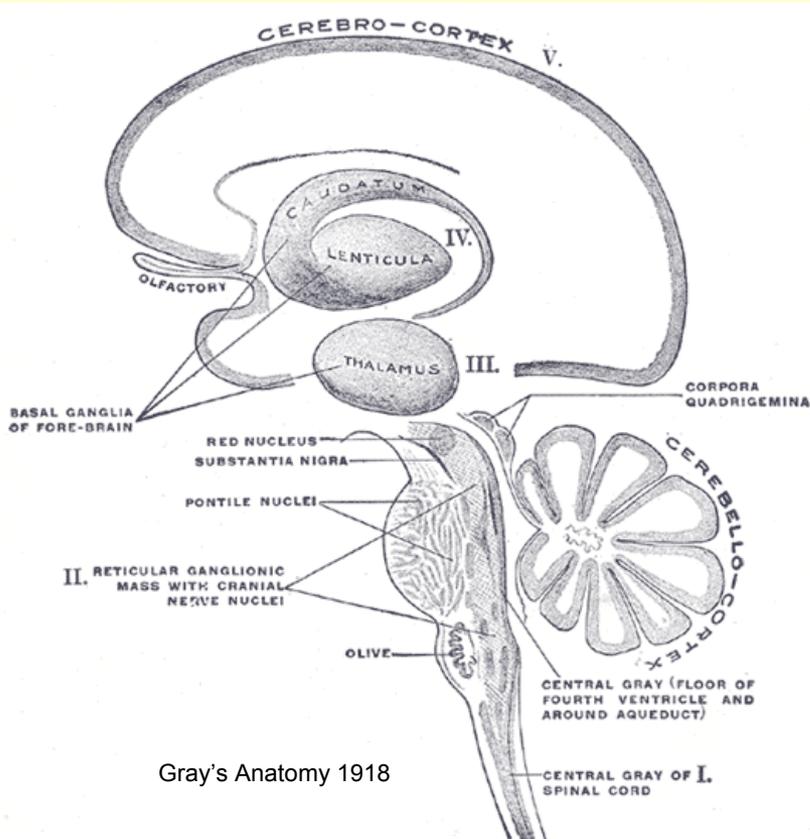


The difference between TIAs and CVAs.



Alan Hoofring

TIA



A transient ischemic attack is when blood flow to a part of the brain stops for a brief period of time. A person will have stroke-like symptoms for up to 24 hours, but in most cases for 1 - 2 hours.

A TIA is felt to be a warning sign that a true stroke may happen in the future if something is not done to prevent it.

G45.9

Case 1.47

A patient, a type 2 diabetic with neuropathy, developed weakness of the left arm and leg. The patient was brought to the ER where he could speak but was unable to use the L. arm and leg. Radiology tests scheduled. The patient completely recovered and was able to ambulate with no neurological deficits within 24 hours. Due to a complete recovery, it was determined that the patient had experienced a TIA. The patient was also treated for an intractable classical migraine. Code this case.

Case 1.47:

**G45.9 Attack, attacks, transient ischemic
(TIA)**

**E11.40 Diabetes, diabetic (mellitus) (sugar),
type 2, with, neuropathy**

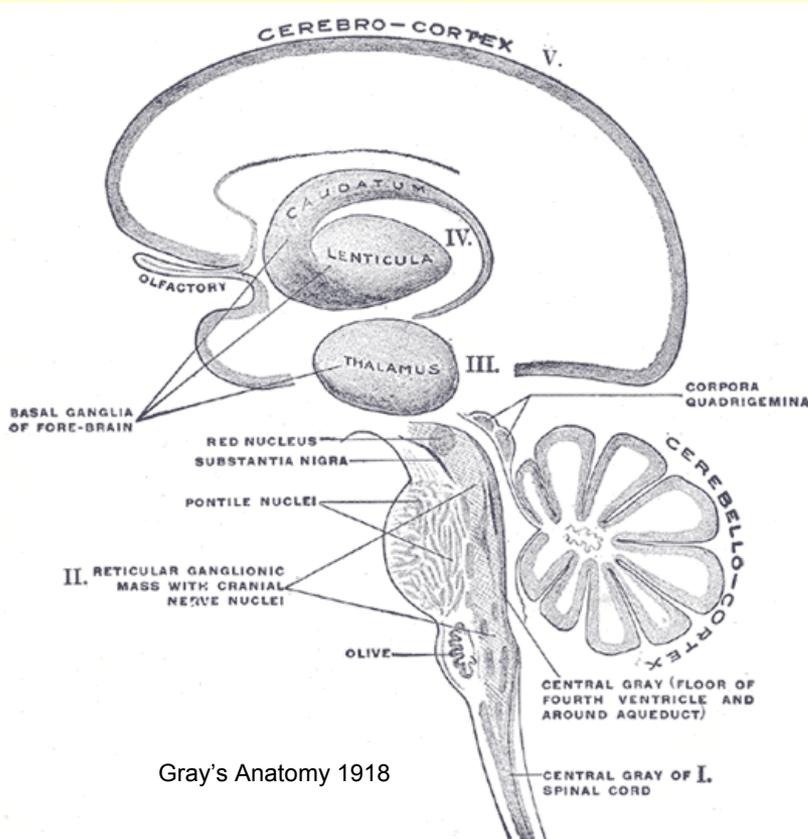
**G43.119 Migraine, classical – see Migraine,
with aura**

Migraine, with aura, intractable

Case 1.47

Rationale: The TIA is the first listed diagnoses as it was the reason for the encounter. The migraine is documented as classical. In ICD-10-CM, classical migraine is classified to with aura. And aura is a visual, motor, or cognitive phenomenon that prefaces the headache. An intractable migraine indicates that it is sustained and severe and not effectively terminated by standard outpatient interventions. ICD-10-CM also provides codes for with, without, or unspecified status migrainosus. Status migrainosus normally indicates a migraine attack lasting for more than 72 hours.

CVA



A **stroke**, or **cerebrovascular accident (CVA)**, is the rapid loss of brain function due to disturbance in the blood supply to the brain. This can be due to ischemia (lack of blood flow) caused by blockage (thrombosis, arterial embolism), or a hemorrhage. As a result, the affected area of the brain cannot function, which might result in an inability to move one or more limbs on one side of the body, inability to understand or formulate speech, or an inability to see one side of the visual field

Included in Chapter 9 – Circulatory System



PAIN

Codes from G89 may be used in conjunction with codes from other categories to provide detail as to the site of the pain. Use these codes only when specified to:

Acute or chronic pain

Post-thoracotomy, postprocedural, neoplasm related pain

G89

May not be listed as principle diagnosis under the following conditions:

- **When treatment is directed at the underlying condition**

Example: Osteoarthritis of the hip with chronic hip pain. Code to osteoarthritis

G89

May be listed as principle diagnosis under the following conditions:

- When pain control or management is the reason for the admission/encounter.**
- When the patient is admitted for a neurostimulator for pain control and treatment is not directed at the underlying condition.**

1.46

A 45 year old patient who has breast cancer of the right breast with multiple metastasis to the liver. She is seen to control the severe acute pain of the liver metastasis.

What codes are assigned?

Case 1.46:

G89.3 **Pain, acute, neoplasm related**

C50.911 **Refer to Neoplasm Table, by site, breast,
malignant, primary site**

C78.7 **Refer to Neoplasm Table, by site,
liver, malignant, secondary site**

Rationale: ICD-10-CM Coding Guideline I.C.6.b.5. states that code G89.3 is assigned to pain documented as being related, associated or due to cancer, primary or secondary malignancy or tumor. This code may be assigned as the principal or first-listed code when the stated reason for the encounter is pain control or pain management. The underlying neoplasm should be reported as an additional diagnosis.

Brain Disorders

**Cerebral Edema-Excessive accumulation of fluid within the brain due to trauma, tumor or a result of anoxia or exposure to toxic substances
G93.6**

Cerebral Herniation – Protrusion of the brain through the cranium G93.5

Hydrocephalus – Accumulation of spinal fluid within the skull due to obstruction of the CSF pathways G91.

**Anoxic brain damage – encephalopathy causes by hypoxia from either decreased rate of blood flow or decreases oxygen content of the arterial blood. Can happen with cardiac arrest or obstruction of the airways.
G93.1**

Brain Disorders

Brain death is the irreversible end of all brain activity (including involuntary activity necessary to sustain life) due to total necrosis of the cerebral neurons following loss of brain oxygenation. It should not be confused with a persistent vegetative state. Patients classified as brain dead can have their organs surgically removed for organ donation. Even after brain death, the working of the heart might continue at a slow pace, but there will be no respiratory effort.

Neuropathy

- **Alcoholic – due to alcohol toxicity G62.1**
- **Critical illness – due to Sepsis or prolonged hospitalization – G62.81**
- **Drug induced – can be caused by Chemotherapy or other drugs G62.0**
- **Inflammatory – Guillain-Barre syndrome – G61.0**
- **Radiation induced – due to the toxic affects or radiation therapy in cancer patients – G62.82**
- **Diabetic neuropathy is included in the Endocrine chapter. E11.40**

CRITICAL ILLNESS MYOPATHY

- **Associated with sepsis.**
- **It is associated with patients having a difficult time being weaned off mechanical ventilation and having a prolonged recovery from illness. It can also be associated with neuromuscular blocking agents and patients using corticosteroids in asthma or organ transplants. G72.81**

Diseases of Central Nervous System

Parkinson's disease Primary Parkinsonism (G20)

- **Chronic, progressive disorder of the central nervous system**
 - **Involuntary tremor**
 - **Postural instability**
 - **Muscle weakness and rigidity**

Diseases of Central Nervous System

Parkinson's disease

Secondary Parkinson's disease

(G21.-)

- **Postencephalitic (G21.3)**
- **Vascular (G21.4)**
- **Also caused by adverse effect of medication**
Assigned first code from G21.-
Followed by adverse effect code (T43.-)

Case 1.45

The patient has been taking Haloperidol as prescribed for paranoid schizophrenia. He is being seen for change in facial expressions and stiffness in the arms and legs. He is diagnosed with Secondary Parkinsonism due to Haloperidol.

The drug will be discontinued. What diagnoses codes are assigned?

Case 1.45:

**G21.11 Parkinsonism (idiopathic) (primary),
secondary, due to drugs, neuroleptic**

**T43.4X5A Refer to Drug and Chemical Table,
Haloperidol, adverse effect**

F20.0 Schizophrenia, paranoid (type)

Rationale: The documentation implies that this is the initial encounter, so the seventh character A is assigned. There is no evidence that the drug was taken incorrectly, so adverse effect

is selected. If there is any doubt, a query could be in order.

The note at G21.11, Neuroleptic induced Parkinsonism, states to use additional code for adverse effect, if applicable, to identify drug (T43.3X5, T43.4X5, T43.505, T43.595).

(T43.3-T43.5)

Case 1.45 (continued):

Haloperidol is an antipsychotic used in the treatment of schizophrenia and other conditions. The subcategory for T43.4 is Poisoning by, adverse effect of and underdosing of butyrophenone and thiothixene neuroleptics; neuroleptic is another word for antipsychotic.

A common cause of secondary Parkinsonism is medications such as antipsychotics, metoclopramide, and Phenothiazine.

Diseases of Central Nervous System

Alzheimer's disease (G30)

- **Progressive atrophy involving degeneration of nerve cells**
- **Mental changes that range from:**
 - **Subtle intellectual impairment**
 - **Dementia with loss of cognitive functions and failure of memory**

Diseases of Central Nervous System

Alzheimer's disease (G30)

Subdivided to:

Early onset (G30.0) under the age of 65

Late onset (G30.1) until at least 65 years of age

F02.8-, Dementia in conditions classified elsewhere, is assigned as an additional diagnosis.

For example:

G30.1 + F02.81 Dementia with behavioral disturbance due to late onset Alzheimer's disease

Case 1.41:

- **A 52-year-old man has been having increasing dementia and forgetfulness. He has been wandering off and leaving his home and forgetting where he is or where he is going. The diagnosis of dementia due to early-onset Alzheimer's was established.**
- **What diagnoses codes are assigned?**

Case 1.41:

**G30.0 Alzheimer's disease or sclerosis, see
Disease, Alzheimer's, early onset, with behavioral
disturbance**

**F02.81 Dementia, in Alzheimer's disease, see Disease,
Alzheimer's**

Z91.83 Wandering, in diseases classified elsewhere

Case 1.41

Rationale: There is mandatory sequencing for these codes. The etiology (Alzheimer's disease) is sequenced first and the manifestation (dementia) is sequenced second. The Index provides the following documentation: Alzheimer's, early onset, with behavioral disturbance G30.0 [F02.81]. The use of the brackets in the Index indicates manifestation codes. Further the note in the Tabular at the G30 category states to use an additional code to identify dementia with behavioral disturbance (F02.81). At the F02 category the note states to code first the underlying physiological condition. The dementia is coded with behavioral disturbance because of the documentation of wandering off. At code F02.81, the note states to use additional code, if applicable, to identify wandering in dementia in conditions classified elsewhere (Z91.83). This code further specifies the behavioral disturbance as wandering off. Early onset Alzheimer's usually begins in middle age, before the age of 65.

Diseases of Central Nervous System



**ENCEPHALOPATHY
(G92 and G93.4x)**

Diseases of Central Nervous System

ENCEPHALOPATHY (G92 and G93.4x)

Hallmark of encephalopathy is an altered mental state

Caused by:

- **Infectious agent**
- **Metabolic dysfunction**
- **Brain tumor or increased pressure in the skull**
- **Prolonged exposure to toxic elements**
- **Poor nutrition**
- **Lack of oxygen or blood flow to the brain**

National Institute of Neurological Disorders and Strokes, National Institutes of Health

Diseases of Central Nervous System

ENCEPHALOPATHY (G92 and G93.4x)

More than 150 different terms modify "encephalopathy"

Some common encephalopathies are:

- G93.41, Metabolic encephalopathy - also includes Septic encephalopathy
- G92 Toxic encephalopathy
- Hepatic encephalopathy is classified to K72.xx Hepatic failure
- Alcoholic encephalopathy is classified to G31.2 Degeneration of nervous system due to alcohol
- G93.40, Encephalopathy, unspecified

Diseases of Central Nervous System

ENCEPHALOPATHY

Common neurological symptoms are:

- Progressive loss of memory and cognitive ability
- Subtle personality changes
- Inability to concentrate
- Lethargy
- Progressive loss of consciousness

Diseases of Central Nervous System

ENCEPHALOPATHY

Resources consumed and diagnostic studies:

- Blood tests
- Spinal tap
- Electroencephalograms
- Head CT
- Neurological consult

Diseases of Central Nervous System

ENCEPHALOPATHY

True severity of illness may not be accurately reflected

Physician documents:

- **Altered mental status**
- **Dementia**
- **'Acute confusional state' to describe encephalopathy**



MENINGITIS

Case 1.44:

A patient was admitted with high fever, stiff neck, chest pain, and nausea. A lumbar puncture was performed and results were positive for meningitis. Sputum grew pneumococcus. The patient was treated with IV antibiotics. The diagnosis was pneumococcal meningitis and pneumococcal pneumonia.

Code this case

Case 1.44:

G00.1 Meningitis, pneumococcal

**J13 Pneumonia, pneumococcal, (broncho)
(lobar)**

Rationale: The patient had both meningitis and pneumonia so both conditions should be coded. Both conditions were present at the time of admission, therefore, either the meningitis or pneumonia could be listed as the principal diagnosis. ICD-10-CM guidelines indicate that when there are two or more diagnoses equally meeting the criteria for principal diagnosis as determined by the circumstances of admission, any one of the diagnoses may be sequenced first.



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ICD-10 

REFERENCES

•CMS:

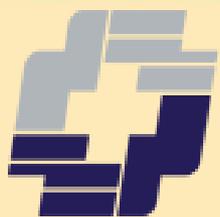
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•AHIMA: <http://www.ahima.org/>

•AAPC: <http://www.aapc.com/>

•ACDIS: <http://www.hcpro.com/acdis/index.cfm>

•HCPro Just Coding: <http://www.justcoding.com/>



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QUESTIONS?