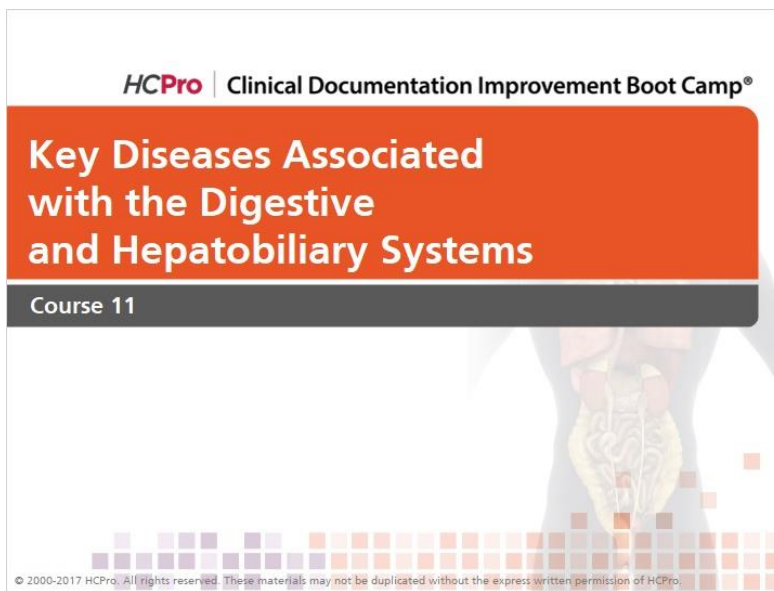


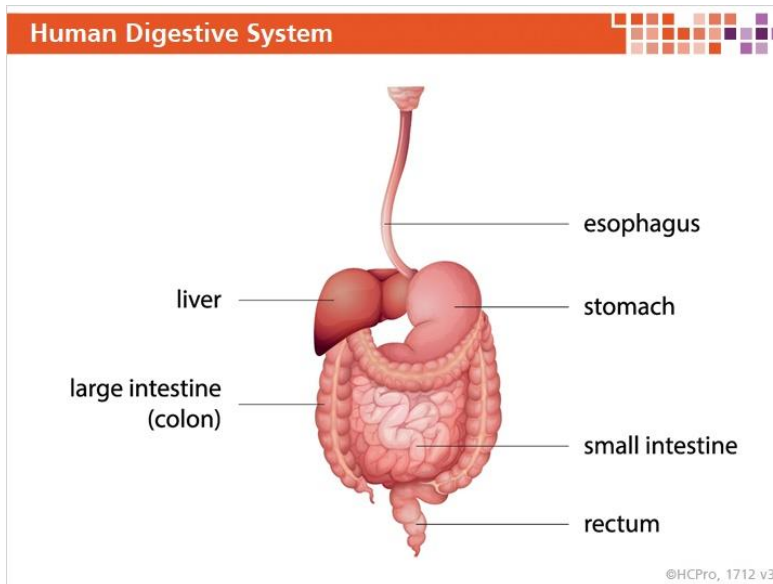
Key Diseases Associated with the Digestive and Hepatobiliary Systems

Study Guide

1.1 Key Diseases Associated with the Digestive, Hepatobiliary and Urinary Systems



1.3 Human Digestive System



1.4 Documentation for GI Conditions (cont.)

Documentation for GI Conditions (cont.)

- Many of these conditions can be attributed to **chronic alcohol or other substance consumption**
- An additional code is often necessary to capture:
 - The substance
 - Alcohol or other drugs/medication
 - The amount of consumption
 - Use, abuse, or dependence
 - Any associated complication

©HCPPro, 1712.v3

1.5 Abdominal Pain

Abdominal Pain

- The term **abdominal pain** is vague, but has many possible ICD-10-CM codes
 - R10.9 Unspecified abdominal pain**
- Documentation needs to identify the cause of the abdominal pain
 - R10.1 Pain localized to upper abdomen**
 - R10.10 Upper abdominal pain, unspecified**
 - R10.11 Right upper quadrant pain**
 - R10.12 Left upper quadrant pain**

©HCPro, 1712.v3

1.6 Conditions Associated W/Abdominal Pain

Conditions Associated W/Abdominal Pain

- Most conditions group to the following MS-DRG and aren't classified as a CC or MCC
 - DRG 391 Esophagitis, Gastroenteritis and Miscellaneous Digestive Disorders with MCC**
GMLOS 3.8 AMLOS 5.0 RW 1.2351
 - DRG 392 Esophagitis, Gastroenteritis and Miscellaneous Digestive Disorders without MCC**
GMLOS 2.7 AMLOS 3.3 RW 0.7594

Copyright 2018 Optum, LLC ©HCPro, 1712.v3

1.7 MS-DRG 391, 392

MS-DRG 391, 392

There are a large number of diagnoses that map to this MS-DRG, many of which are symptoms.

The question to ask, is what is the etiology? As this may assist in moving to a more appropriate DRG.

R10*	Abd and pelvic pain
R11.0	Nausea
R11.10	Vomiting, unsp
R11.11	Vomiting w/o nausea
R11.12	Projectile vomiting
R11.14	Bilious vomiting
R11.2	Nausea w/vomiting, unsp
R12	Heartburn
R13*	Aphagia and dysphagia
R14*	Flatulence and related conditions
R15*	Fecal incontinence
R19.0*	Intra-abd and pelvic swelling, mass and lump
R19.1*	Abnormal bowel sounds
R19.2	Visible peristalsis
R19.4	Change in bowel habit
R19.5	Oth fecal abnormalities
R19.7	Diarrhea, unsp
R19.8	Oth symptoms & signs involving the dgstv sys and abd
R93.3	Abnormal findings on dx imaging of prt digestive tract
R93.5	Abn findings on dx imaging of abd regions, inc retroperiton

2016 Copyright Optum, LLC © HCPro, 1712 v3

1.8 Abdominal Pain: Epigastric

Abdominal Pain: Epigastric

- Dyspepsia describes a pain or an uncomfortable feeling in the upper middle part of the stomach, more commonly known as epigastric pain

Dyspepsia R10.13

- atonic K30
- functional (allergic) (congenital) (gastrointestinal) (occupational) (reflex) K30
- intestinal K59.8
- nervous F45.8
- neurotic F45.8
- psychogenic F45.8

R10.13 Epigastric pain
Dyspepsia

Excludes1: functional dyspepsia (K30)

© HCPro, 1712 v3

1.9 Abdominal Pain: Epigastric (cont.)

Abdominal Pain: Epigastric (cont.)

- Heartburn and gastroesophageal reflux (GERD) are other terms similar to dyspepsia, but they all group to the same MS-DRG as abdominal pain (391/392)

R12 Heartburn
Excludes1: dyspepsia NOS (R10.13)
functional dyspepsia (K30)

K21.9 Gastro-esophageal reflux disease without esophagitis
Esophageal reflux NOS

Reflux K21.9
- acid K21.9
- esophageal K21.9
-- with esophagitis K21.0
-- newborn P78.83
- gastroesophageal K21.9
-- with esophagitis K21.0
- mitral —see Insufficiency, mitral
- ureteral —see Reflux, vesicoureteral
- vesicoureteral (with scarring) N13.70
-- with
--- nephropathy N13.729
---- with hydronephrosis N13.739
---- bilateral N13.732
---- unilateral N13.731
---- bilateral N13.722
---- unilateral N13.721
---- without hydronephrosis N13.729
---- bilateral N13.722
---- unilateral N13.721
-- pyelonephritis (chronic) N11.0
-- congenital Q62.7
-- without nephropathy N13.71

©HCPPro, 1712.v3

1.10 Abdominal Pain: Gastritis

Abdominal Pain: Gastritis

Gastritis occurs when the lining of the stomach becomes inflamed or swollen.

The code set offers specification as:

- Acute (with & without bleeding)
- Alcoholic (with & without bleeding)
- Chronic (superficial, atrophic & unspecified- with & without bleeding)
- Other (with & without bleeding)
- Unspecified (with & without bleeding)

Important
Specification of gastritis (no matter the type) with bleeding will result in a MCC as a secondary diagnosis

©HCPPro, 1712.v3

1.11 Gastritis/Duodenitis/Gastroduodenitis

Gastritis/Duodenitis/Gastroduodenitis

- The inflammation can also extend into the intestines:
 - K29.8 Duodenitis
 - K29.80 Duodenitis without bleeding
 - K29.81 Duodenitis with bleeding
 - K29.9 Gastroduodenitis, unspecified
 - K29.90 Gastroduodenitis, unspecified, without bleeding
 - K29.91 Gastroduodenitis, unspecified, with bleeding
- Gastritis, gastroduodenitis and duodenitis without bleeding all group to MS-DRG 391/392
 - Esophagitis, Gastroenteritis and Miscellaneous Digestive Disorders
- Gastritis, gastroduodenitis and duodenitis with bleeding all group to MS-DRG 377, 378, 379
 - GI Hemorrhage

Copyright 2018 Optum, LLC © HCPro, 1712 v3

1.12 Gastritis

Gastritis

- Regardless of the acuity, when gastritis results in the **complication of bleeding**, which requires the provider to link the bleeding and gastritis, it groups to the MS-DRG triplet of GI Hemorrhage (377-379)
- The following gastritis codes group to this MS-DRG family and are MCCs when a secondary diagnosis

K29.01	Acute gastritis w/ bleeding
K29.21	Alcoholic gastritis w/ bleeding
K29.31	Chr superf gastritis w/ bleeding
K29.41	Chr atrophic gastritis w/ bleeding
K29.51	Unsp chr gastritis w/ bleeding
K29.61	Oth gastritis w/ bleeding
K29.71	Gastritis, unsp, w/ bleeding
K29.81	Duodenitis w/ bleeding
K29.91	Gastroduodenitis, unsp, w/ bleeding

<http://www.nlm.nih.gov/medlineplus/ency/article/001150.htm> © HCPro, 1712 v3

1.13 Ulcerative Colitis

Ulcerative Colitis

- Chronic inflammatory bowel disease that causes inflammation, irritation or swelling, and ulcers on the inner lining of the **large** intestine

K51 Ulcerative colitis
Use additional code to identify manifestations, such as:
pyoderma gangrenosum (L88)
Excludes1: Crohn's disease [regional enteritis] (K50.-)

K51.0 Ulcerative (chronic) pancolitis
Backwash ileitis

K51.00 Ulcerative (chronic) pancolitis without complications

<http://www.niddk.nih.gov/health-information/health-topics/digestive-diseases/ulcerative-colitis/Pages/facts.aspx>

©HCPPro, 1712.v3

1.14 Ulcerative Colitis: K51

Ulcerative Colitis: K51

- Ulcerative (chronic)
 - Pancolitis
 - Proctitis
 - Rectosigmoiditis
- Inflammatory polyps of colon (K51.4-)
- Left-sided colitis (Left hemicolitis) (K51.5-)
- Other ulcerative colitis (K51.8-)
- Ulcerative colitis, unspecified (K51.9-)

TYPES OF ULCERATIVE COLITIS

The diagram shows five types of ulcerative colitis with the affected area highlighted in red or yellow:

- Proctitis:** Inflammation limited to the rectum.
- Proctosigmoiditis:** Inflammation involving the rectum and sigmoid colon.
- Distal colitis:** Inflammation involving the rectum, sigmoid colon, and descending colon.
- Extensive colitis:** Inflammation involving the rectum, sigmoid colon, and descending colon, extending further up the large intestine.
- Pancolitis:** Inflammation involving the entire large intestine.

©HCPPro, 1712.v3

1.15 Crohn's Disease

Crohn's Disease

- Crohn's disease leads to inflammation anywhere in the digestive system, but is classified as an inflammatory bowel disease because it often affects the lower part of the small intestine called the ileum
- The cause of Crohn's disease is unknown and there isn't a cure. It is thought to be related to an abnormal reaction by the body's immune system
- It appears to have a genetic component, and is usually first seen between the ages of 13 and 30
- Codes by location - large intestine, large & small intestine, & unspecified

<http://www.nlm.nih.gov/medlineplus/crohnsdisease.html>

©HCPPro, 1712.v3

1.16 Coding Clinic, 4th Quarter 2012

Coding Clinic, 4th Quarter 2012

? Question

There are a variety of codes used to identify Crohn's disease with an intestinal abscess; however, how is Crohn's disease of the small intestine with a rectal abscess coded?

Answer

©HCPPro, 1712.v3

1.17 Coding Clinic, 4th Quarter 2012 (cont.)

Coding Clinic, 4th Quarter 2012 (cont.)

? Answer

If a physician documents that a patient has Crohn's disease of the small intestine and rectal abscess, the appropriate code assignment would include the code representing Crohn's disease of the small intestine with abscess and a second code providing additional information for the rectal abscess.

©HCPPro, 1712.v3

1.18 Ulcer of the Intestine

Ulcer of the Intestine

- **Ulcerative colitis** is not the same as an ulcer of the intestine
 - These conditions map to two different codes that can't exist on the same claim (there is an Excludes1)

K63.3 Ulcer of intestine
Primary ulcer of small intestine

Excludes1: duodenal ulcer (K26.-)
gastrointestinal ulcer (K28.-)
gastrojejunal ulcer (K28.-)
jejunal ulcer (K28.-)
peptic ulcer, site unspecified (K27.-)
ulcer of intestine with perforation (K63.1)
ulcer of anus or rectum (K62.6)
ulcerative colitis (K51.-)

➔

- Groups to the MS-DRG triplet of Other Digestive System Diagnoses (393-395), but is also a CC as a secondary diagnosis

©HCPPro, 1712.v3

1.19 Bleeding in the Digestive Tract

Bleeding in the Digestive Tract

- Many GI conditions classified in ICD-10-CM include a combination code that specifies if the condition is “with bleeding” or “without bleeding” as seen with gastritis
- The complication of bleeding usually impacts MS-DRG assignment as both a Pdx or a secondary diagnosis.
- Health care providers describe two types of bleeding:
 - Acute bleeding—sudden and sometimes severe bleeding
 - Chronic bleeding—slight bleeding that lasts for a long time or may come and go

<http://www.niddk.nih.gov/health-information/health-topics/digestive-diseases/bleeding-in-the-digestive-tract/Pages/facts.aspx>

©HCPPro, 1712 v3

1.20 Terms Used to Describe Bleeding

Terms Used to Describe Bleeding

- A **hemoccult** is often used to detect the presence of occult blood (not visible to the eye)
- The source of bleeding is usually identified as from the upper or lower GI tract
 - Upper GI tract = mouth through stomach
 - Lower GI tract = colon through rectum
- The darker the blood from the rectum, the more likely the bleed is from the upper GI tract
 - Darker blood (black color) has been acted upon by stomach acid/enzymes and bacteria that normally reside in the large intestine

©HCPPro, 1712 v3

1.21 Terms Used to Describe Bleeding (cont.)

Terms Used to Describe Bleeding (cont.)

- Clinical terms used to clarify the type of blood/bleeding:
 - **Melena**: Black, tarry blood in stool
 - Melena K92.1**
- with ulcer - code by site under Ulcer, with hemorrhage K27.4
 - **Hematochezia**: Bright red blood in stool and is reported using the same code as melena, which is classified as a CC
 - K92.1 Melena**
Excludes1: occult blood in feces (R19.5)

©HCPPro, 1712 v3

1.22 Terms Used to Describe Bleeding (cont.)

Terms Used to Describe Bleeding (cont.)

- Hematemesis is the clinical term for blood in vomitus and should be linked to its cause for proper code assignment
 - Vomited blood may be bright red if bleeding is brisk and ongoing or from an upper GI source
 - Vomited blood may have the appearance of coffee grounds if bleeding has slowed or stopped or is from the lower GI due to the partial digestion of the blood by acid in the stomach

Hematemesis K92.0
- with ulcer - code by site under Ulcer, with hemorrhage K27.4

©HCPPro, 1712 v3

1.23 Coding Clinic ICD-9-CM for GI Bleed

Coding Clinic ICD-9-CM for GI Bleed

? Question

- A patient with recent history of melena underwent endoscopy to determine the cause of the GI bleeding.
- The physician noted in the endoscopy report the presence of a healing gastric ulcer, but no active bleeding was noted.
- The diagnosis at discharge was gastric ulcer with hemorrhage.
- How should this be coded?

Answer

Coding Clinic, First Quarter 1991 Page: 15 ©HCPro, 1712.v3

1.24 Coding Clinic ICD-9-CM for GI Bleed (cont.)

Coding Clinic ICD-9-CM for GI Bleed (cont.)

? Answer

- When a physician documents in the medical record the presence of a healing gastric ulcer with no active bleeding for a patient admitted for a GI bleed, the appropriate code assignment would be based on whether the physician documents it as a "bleeding ulcer"
- Most ulcers bleed intermittently so it is not uncommon for an ulcer not to be bleeding at the time of testing

Coding Clinic, First Quarter 1991 Page: 15 ©HCPro, 1712.v3

1.25 Ulcer with Hemorrhage: AHA Coding Clinic® Advice

Ulcer with Hemorrhage: AHA Coding Clinic® Advice

? Question

A patient presents due to acute gastrointestinal bleed (GI). An esophagogastroduodenoscopy (EGD) was performed, which showed gastric ulcers. The physician does not link the bleeding to the ulcer nor is it documented that these conditions are unrelated. May we assume a relationship between the gastrointestinal bleed and the ulcer. How should we report gastric ulcer in a patient with gastrointestinal bleeding?

Answer

AHA Coding Clinic, 3rd Quarter, p.27 ©HCPPro, 1712 v3

1.26 Ulcer with Hemorrhage: AHA Coding Clinic® Advice (cont.)

Ulcer with Hemorrhage: AHA Coding Clinic® Advice (cont.)

? Answer

It would be appropriate to assign code K25.4, Chronic or unspecified gastric ulcer with hemorrhage. As stated in the ICD-10-CM Official Guidelines for Coding and Reporting, (I.A.15).

The classification presumes a causal relationship between the two conditions linked by these terms in the Alphabetic Index or Tabular List. Unless the provider documents a different cause of the bleeding or states that the conditions are unrelated, it is appropriate to assign the combination code for these conditions.

AHA Coding Clinic, 3rd Quarter, p.27 ©HCPPro, 1712 v3

1.27 Gastroparesis

Gastroparesis

- Reduces the ability of the stomach to empty its contents, but does not involve a blockage (obstruction)
- Exact cause is unknown
 - May be caused by a disruption of nerve signals to the stomach
- A common complication of diabetes, and can result from some surgeries

<http://www.nlm.nih.gov/medlineplus/ency/article/000297.htm> ©HCPPro, 1712.v3

1.28 Gastroparesis (cont.)

Gastroparesis (cont.)

- Risk factors for gastroparesis include:
 - Diabetes
 - Gastrectomy, which is a surgery to remove part of the stomach
 - Systemic sclerosis
 - Use of anticholinergic medicine that blocks certain nerve signals

<http://www.nlm.nih.gov/medlineplus/ency/article/000297.htm> ©HCPPro, 1712.v3

1.29 Gastroparesis (cont.)

Gastroparesis (cont.)

- The code associated with gastroparesis groups to MS-DRGs 391/392; however, documentation of its cause will change where the MS-DRG groups

K31.84 Gastroparesis
Gastroparalysis

➔ **Code first** underlying disease, if known, such as:
anorexia nervosa (F50.0-)
diabetes mellitus (E08.43, E09.43, E10.43, E11.43, E13.43)
scleroderma (M34.-)

K31.89 Other diseases of stomach and duodenum

© HCPro, 1712 v3

1.32 Esophageal Disorders

Esophageal Disorders

- Esophageal disorders group to various MS-DRGs, depending on:
 - Type of problem
 - If diagnosis is due to or associated with certain underlying conditions
- Identify underlying etiology to assist in correct code and DRG assignment

© HCPro, 1712 v3

1.33 Esophagitis

Esophagitis

- Esophagitis is a general term for any inflammation, irritation, or swelling of the esophagus.
- It is often caused by fluid that contains acid flowing back from gastroesophageal reflux or due to an autoimmune disorder called eosinophilic esophagitis

Esophagitis (acute) (alkaline) (chemical) (chronic) (infectional) (necrotic) (peptic) (postoperative) K20.9
- candidal B37.81
- due to gastrointestinal reflux disease K21.0
- eosinophilic K20.0
- reflux K21.0
- specified NEC K20.8
- tuberculous A18.83
- ulcerative K22.10
- - with bleeding K22.11

↑
Non-essential modifiers

©HCPPro, 1712 v3

1.34 Esophagitis (cont.)

Esophagitis (cont.)

- The key documentation issue with esophagitis is determining if it is ulcerative or not, which moves the MS-DRG

Esophagitis (acute) (alkaline) (chemical) (chronic) (infectional) (necrotic) (peptic) (postoperative) K20.9
- candidal B37.81
- due to gastrointestinal reflux disease K21.0
- eosinophilic K20.0
- reflux K21.0
- specified NEC K20.8
- tuberculous A18.83
- ulcerative K22.10
- - with bleeding K22.11

- The default code for esophagitis is

K20.9 Esophagitis, unspecified
Esophagitis NOS

©HCPPro, 1712 v3

1.35 Barrett's Esophagus

Barrett's Esophagus

- Disorder in which the lining of the esophagus is damaged by stomach acid so it becomes similar to that of the stomach
 - Associated with GERD
 - Occurs more often in men than women

K22.7 Barrett's esophagus
 Barrett's disease
 Barrett's syndrome
Excludes1: Barrett's ulcer (K22.1)
 malignant neoplasm of esophagus (C15.-)

K22.70 Barrett's esophagus without dysplasia
 Barrett's esophagus NOS

K22.71 Barrett's esophagus with dysplasia
 K22.710 Barrett's esophagus with low grade dysplasia
 K22.711 Barrett's esophagus with high grade dysplasia
 K22.719 Barrett's esophagus with dysplasia, unspecified

<http://www.nlm.nih.gov/medlineplus/ency/article/001143.htm>

©HCPPro, 1712.v3

1.36 Barrett's Esophagus (cont.)

Barrett's Esophagus (cont.)

- Isn't classified as a CC or MCC; when it is the Pdx, it "moves" the MS-DRG from 391/392 to DRG 380, 381, 382

DRG 380 Complicated Peptic Ulcer with MCC		
GMLOS 5.1	AMLOS 6.7	RW 1.8969
Principal Diagnosis		
E16.4	INCREASED SECRETION OF GASTRIN	
K22.3*	ULCER OF ESOPHAGUS	
K22.7*	BARRETT'S ESOPHAGUS	
K25.1	ACUTE GASTRIC ULCER W/ PERFORATION	
K25.5	CHRONIC OR UNSP GASTRIC ULCER W/PERFORATION	
K26.1	ACUTE DUODENAL ULCER W/ PERFORATION	
K26.5	CHRONIC OR UNSP DUODENAL ULCER W/PERFORATION	
K27.1	ACUTE PEPTIC ULCER SITE UNSP W/PERFORATION	
K27.5	CHRONIC OR UNSP PEPTIC ULCER SITE UNSP W/PERF	
K28.1	ACUTE GASTROJEJUNAL ULCER W/ PERFORATION	
K28.3	ACUTE GASTROJEJUN ULCER W/O HEMORR OR PERF	
K28.5	CHRONIC OR UNSP GASTROJEJUNAL ULCER W/PERFORATION	
K28.7	CHRONIC GASTROJEJUN ULCER W/O HEMORR OR PERF	
K28.9	GASTROJEJ ULCR UNSP AS AC OR CHR N W/O HEMORR OR PERF	
K31.1	ADULT HYPERTROPHIC PYLORIC STENOSIS	
K31.5	OBSTRUCTION OF DUODENUM	
Q43.0	MECKELS DIVERTICULUM DISPLACED HYPERTROPHIC	
DRG 381 Complicated Peptic Ulcer with CC		
GMLOS 3.4	AMLOS 4.1	RW 1.0782
Select principal diagnosis listed under DRG 380		
DRG 382 Complicated Peptic Ulcer without CC/MCC		
GMLOS 2.5	AMLOS 3.0	RW 0.8033

Copyright 2018 Optum, LLC

©HCPPro, 1712.v3

1.37 Ulcerative Esophagitis

Ulcerative Esophagitis

- **Without bleeding**, adds a CC as a secondary diagnosis
- If it is a **bleeding ulcer**, adds an MCC
- If the esophagitis is clarified as an esophageal ulcer, it moves the MS-DRG from 391/392 to the triplet of Complicated Peptic Ulcer (380-382)

K22.1 Ulcer of esophagus
Barrett's ulcer
Erosion of esophagus
Fungal ulcer of esophagus
Peptic ulcer of esophagus
Ulcer of esophagus due to ingestion of chemicals
Ulcer of esophagus due to ingestion of drugs and medicaments
Ulcerative esophagitis

Code first poisoning due to drug or toxin, if applicable (T36-T65 with fifth or sixth character 1-4 or 6)
Use additional code for adverse effect, if applicable, to identify drug (T36-T50 with fifth or sixth character 5)
Excludes1: Barrett's esophagus (K22.7-)

K22.10 Ulcer of esophagus without bleeding
Ulcer of esophagus NOS

K22.11 Ulcer of esophagus with bleeding
Excludes2: bleeding esophageal varices (I85.01, I85.11)

©HCPPro, 1712.v3

1.38 Esophageal Disorders: Varices

Esophageal Disorders: Varices

- Esophageal varices describes enlarged blood vessels in the esophagus that can leak blood or even rupture, causing life-threatening bleeding
 - Usually associated with a chronic liver condition, cirrhosis

I85 Esophageal varices
Use additional code to identify:
alcohol abuse and dependence (F10.-)

I85.0 Esophageal varices
Idiopathic esophageal varices
Primary esophageal varices

I85.00 Esophageal varices without bleeding
Esophageal varices NOS

I85.01 Esophageal varices with bleeding

Copyright 2018 Optum, LLC ©HCPPro, 1712.v3

1.39 Esophageal Disorders: Varices (cont.)

Esophageal Disorders: Varices (cont.)

- Esophageal varices, either with or without bleeding, group to the same MS-DRG

DRG 368 Major Esophageal Disorders with MCC
GMLOS 4.6 AMLOS 6.1 RW 1.8374

Principal Diagnosis
B37.81 CANDIDAL ESOPHAGITIS
I85.0* ESOPHAGEAL VARICES
I85.11 SECONDARY ESOPHAGEAL VARICES W/ BLEEDING
K22.3 PERFORATION OF ESOPHAGUS
K22.6 GASTRO-ESOPHAGEAL LACERATION-HEMORRHAGE SYNDROME
Q39* CONGENITAL MALFORMATIONS OF ESOPHAGUS
S27.812A CONTUSION ESOPHAGUS THORACIC PART INITIAL ENCOUNTER
S27.813A LACERATION OF ESOPHAGUS INITIAL ENCOUNTER
S27.818A OTHER INJURY OF ESOPHAGUS INITIAL ENCOUNTER
S27.819A UNSPECIFIED INJURY OF ESOPHAGUS INITIAL ENCOUNTER
T28.1XXA BURN ESOPHAGUS INITIAL ENCOUNTER
T28.6XXA CORROSION ESOPHAGUS INITIAL ENCOUNTER

DRG 369 Major Esophageal Disorders with CC
GMLOS 3.2 AMLOS 3.9 RW 1.0879
Select principal diagnosis listed under DRG 368

DRG 370 Major Esophageal Disorders without CC/MCC
GMLOS 2.3 AMLOS 2.8 RW 0.7471

Copyright 2018 Optum, LLC ©HCPro, 1712.v3

1.40 Gastrointestinal (GI) Bleed/Hemorrhage

Gastrointestinal (GI) Bleed/Hemorrhage

- Symptom of a disease with many possible causes, including:
 - Hemorrhoids
 - Peptic ulcers
 - Tears or inflammation in the esophagus
 - Diverticulosis and diverticulitis
 - Ulcerative colitis and Crohn's disease
- Endoscopy

<http://www.nlm.nih.gov/medlineplus/gastrointestinalbleeding.html>

©HCPro, 1712.v3

1.41 Gastrointestinal (GI) Bleed/Hemorrhage (cont.)

Gastrointestinal (GI) Bleed/Hemorrhage (cont.)

- GI bleed maps to a “default” code, K92.2
 - Groups to the triple MS-DRG of GI Hemorrhage (377-379)
 - Classified as a CC when a secondary diagnosis

K92.2 Gastrointestinal hemorrhage, unspecified
Gastric hemorrhage NOS
Intestinal hemorrhage NOS

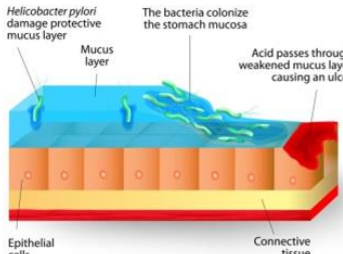
Excludes1: acute hemorrhagic gastritis (K29.01)
hemorrhage of anus and rectum (K62.5)
angiodysplasia of stomach with hemorrhage (K31.811)
diverticular disease with hemorrhage (K57.-)
gastritis and duodenitis with hemorrhage (K29.-)
peptic ulcer with hemorrhage (K25-K28)

©HCPro, 1712.v3

1.42 Peptic Ulcers

Peptic Ulcers

- Peptic ulcers are wounds in the lining of:
 - The Esophagus
 - The Stomach
 - The Duodenum
- The bacteria *Helicobacter pylori* (*H. pylori*) and use of nonsteroidal anti-inflammatory drugs (NSAIDs) can cause peptic ulcers
- Peptic ulcers can wear away the mucosa, or the stomach or duodenal lining, and cause bleeding



The diagram illustrates the process of peptic ulcer formation. It shows a cross-section of the stomach lining with a blue mucus layer on top. Green bacteria, labeled *Helicobacter pylori*, are shown colonizing the stomach mucosa and damaging the protective mucus layer. A red arrow indicates acid passing through the weakened mucus layer, causing an ulcer. The underlying layers are labeled as epithelial cells and connective tissue.

©HCPro, 1712.v3

1.43 Peptic Ulcers (cont.)

Peptic Ulcers (cont.)

- Ulcers may group to various MS-DRGs depending on the anatomic location of the ulcer and whether it is considered complicated or uncomplicated
 - Uncomplicated includes those without the following “complications,” regardless of their acuity
 - Hemorrhage
 - Perforation
 - Obstruction
 - Uncomplicated ulcers may group to the same MS-DRGs, but only an acute ulcer is classified as a CC when reported as a secondary diagnosis

©HCPPro, 1712 v3

1.44 Documentation for Ulcers

Documentation for Ulcers

- Ulcer specificity:
 - Acute, chronic, or acute on chronic
 - With or without hemorrhage
 - With or without perforation
 - Location/site
 - There are codes for site unspecified
- If the patient is admitted with a GI bleed and an ulcer is identified, does the provider clearly “link” the cause of the bleed to the ulcer?
- Many ulcer codes require an additional code to identify alcohol dependence

©HCPPro, 1712 v3

1.47 Gastric Ulcer Codes Example

Gastric Ulcer Codes Example

K25 Gastric ulcer

Includes: erosion (acute) of stomach
pylorus ulcer (peptic)
stomach ulcer (peptic)

Use additional code to identify:
alcohol abuse and dependence (F10.-)

Excludes1: acute gastritis (K29.0-)
peptic ulcer NOS (K27.-)

K25.0 Acute gastric ulcer with hemorrhage

K25.1 Acute gastric ulcer with perforation

K25.2 Acute gastric ulcer with both hemorrhage and perforation

K25.3 Acute gastric ulcer without hemorrhage or perforation

K25.4 Chronic or unspecified gastric ulcer with hemorrhage

K25.5 Chronic or unspecified gastric ulcer with perforation

K25.6 Chronic or unspecified gastric ulcer with both hemorrhage and perforation

K25.7 Chronic gastric ulcer without hemorrhage or perforation

K25.9 Gastric ulcer, unspecified as acute or chronic, without hemorrhage or perforation

! **Important**

This same pattern of specification occurs for ulcers of every location

Copyright 2018 Optum, LLC ©HCPPro, 1712.v3

1.48 Uncomplicated Ulcers MS-DRG

Uncomplicated Ulcers MS-DRG

DRG 383 Uncomplicated Peptic Ulcer with MCC
GML0S 3.9 AMLOS 5.0 RW 1.3450

Principal Diagnosis

K25.3 ACUTE GASTRIC ULCER W/O HEMORR OR PERF
K25.7 CHRONIC GASTRIC ULCER W/O HEMORR OR PERF
K25.9 GASTR ULCR UNSP AS AC OR CHRON W/O HEMORR OR PERF
K26.3 ACUTE DUODENAL ULCER W/O HEMORR OR PERF
K26.7 CHRONIC DUODENAL ULCER W/O HEMORR OR PERF
K26.9 DUOD ULCR UNSP AS AC OR CHRON W/O HEMORR OR PERF
K27.3 ACUTE PEPTIC ULCER SITE UNSP W/O HEMORR OR PERF
K27.7 CHRONIC PEPTIC ULCER SITE UNSP W/O HEMORR OR PERF
K27.9 PEPTIC ULCR SITE UNSP UNS AS AC/CHRN W/O HEM/PERF

DRG 384 Uncomplicated Peptic Ulcer without MCC
GML0S 2.7 AMLOS 3.3 RW 0.8767
Select principal diagnosis listed under DRG 383

! **Important**

Ulcers without hemorrhage or perforation

Copyright 2018 Optum, LLC ©HCPPro, 1712.v3

1.49 Bleeding Ulcers

Bleeding Ulcers

- Whenever an ulcer is “bleeding,” it groups to the MS-DRG triplet of GI Hemorrhage

DRG 377	GI Hemorrhage with MCC		
	GMLOS 4.5	AMLOS 5.7	RW 1.7142
Principal Diagnosis			
K25.0	ACUTE GASTRIC ULCER W/ HEMORRHAGE		
K25.2	ACUTE GASTRIC ULCER W/BOTH HEMORR & PERFORATION		
K25.4	CHRONIC OR UNSP GASTRIC ULCER W/HEMORRHAGE		
K25.6	CHRONIC OR UNSP GASTRIC ULCER W/BOTH HEMORR & PERF		
K26.0	ACUTE DUODENAL ULCER W/ HEMORRHAGE		
K26.2	ACUTE DUODENAL ULCER W/BOTH HEMORR & PERFORATION		
K26.4	CHRONIC OR UNSP DUODENAL ULCER W/HEMORRHAGE		
K26.6	CHRONIC OR UNSP DUOD ULCER W/BOTH HEMORR & PERF		
K27.0	ACUTE PEPTIC ULCER SITE UNSP W/HEMORRHAGE		
K27.2	ACUTE PEPTIC ULCER SITE UNSP W/BOTH HEMORR & PERF		
K27.4	CHRONIC OR UNSP PEPTIC ULCER SITE UNSP W/HEMORR		
K27.6	CHRN OR UNSP PEP ULCR SITE UNSP W/BOTH HEMORR & PERF		
K28.0	ACUTE GASTROEJUNAL ULCER W/ HEMORRHAGE		
K28.2	ACUTE GASTROEJUN ULCER W/BOTH HEMORR & PERF		
K28.4	CHRONIC OR UNSP GASTROEJUNAL ULCER W/HEMORRHAGE		
K28.6	CHRON OR UNSP GASTROEJUN ULCR W/BOTH HEMORR & PERF		
K29.01	ACUTE GASTRITIS W/ BLEEDING		
K29.21	ALCOHOLIC GASTRITIS W/ BLEEDING		
K29.31	CHRONIC SUPERFICIAL GASTRITIS W/ BLEEDING		
K29.41	CHRONIC ATROPHIC GASTRITIS W/ BLEEDING		
K29.51	UNSPECIFIED CHRONIC GASTRITIS W/ BLEEDING		
K29.61	OTHER GASTRITIS W/ BLEEDING		
K29.71	GASTRITIS UNSP W/ BLEEDING		
K29.81	DUODENITIS W/ BLEEDING		

Copyright 2018 Optum, LLC ©HCPPro, 1712.v3

1.50 Complicated Peptic Ulcer

Complicated Peptic Ulcer

- The MS-DRGs associated with a complicated ulcers are 380-382

DRG 380	Complicated Peptic Ulcer with MCC		
	GMLOS 5.1	AMLOS 6.7	RW 1.8969
DRG 381	Complicated Peptic Ulcer with CC		
	GMLOS 3.4	AMLOS 4.1	RW 1.0782
Select principal diagnosis listed under DRG 380			
DRG 382	Complicated Peptic Ulcer without CC/MCC		
	GMLOS 2.5	AMLOS 3.0	RW 0.8033
Select principal diagnosis listed under DRG 380			
Principal Diagnosis			
E16.4	Increased secretion of gastrin		
K22.1*	Ulcer of esophagus		
K22.7*	Barrett's esophagus		
K25.1	Acute gastric ulcer w/perforation		
K25.5	Chronic or unsp gastric ulcer w/perforation		
K26.1	Acute duodenal ulcer w/perforation		
K26.5	Chronic or unsp duodenal ulcer w/perforation		
K27.1	Acute peptic ulcer, site unsp, w/perforation		
K27.5	Chronic or unsp peptic ulcer, site unsp, w/perforation		
K28.1	Acute gastrojejunal ulcer w/perforation		
K28.3	Acute gastrojejunal ulcer w/o hemor or perforation		
K28.5	Chronic or unsp gastrojejunal ulcer w/perforation		
K28.7	Chronic gastrojejunal ulcer w/o hemor or perforation		
K28.9	Gastrojejunal ulcer, unsp as acute or chronic, w/o hemor		
K31.1	Adult hypertrophic pyloric stenosis		
K31.5	Obstruction of duodenum		
Q43.0	Meckel's diverticulum (displaced) (hypertrophic)		

Copyright 2018 Optum, LLC ©HCPPro, 1712.v3

1.51 Major Esophageal Disorders

Major Esophageal Disorders

- An ulcer of the esophagus groups to a complicated ulcer, but other esophageal conditions are classified as “major esophageal disorders” and group to MS-DRGs 368-370

DRG 368 Major Esophageal Disorders with MCC
GMLOS 4.6 AMLOS 6.1 RW 1.8374

Principal Diagnosis

B37.81	CANDIDAL ESOPHAGITIS
I85.0*	ESOPHAGEAL VARICES
I85.11	SECONDARY ESOPHAGEAL VARICES W/ BLEEDING
K22.3	PERFORATION OF ESOPHAGUS
K22.6	GASTRO-ESOPHAGEAL LACERATION-HEMORRHAGE SYNDROME
Q39*	CONGENITAL MALFORMATIONS OF ESOPHAGUS
S27.812A	CONTUSION ESOPHAGUS THORACIC PART INITIAL ENC NTR
S27.813A	LACERATION OF ESOPHAGUS INITIAL ENCOUNTER
S27.818A	OTHER INJURY OF ESOPHAGUS INITIAL ENCOUNTER
S27.819A	UNSPECIFIED INJURY OF ESOPHAGUS INITIAL ENCOUNTER
T28.1XXA	BURN ESOPHAGUS INITIAL ENCOUNTER
T28.6XXA	CORROSION ESOPHAGUS INITIAL ENCOUNTER

DRG 369 Major Esophageal Disorders with CC
GMLOS 3.2 AMLOS 3.9 RW 1.0879

Select principal diagnosis listed under DRG 368

DRG 370 Major Esophageal Disorders without CC/MCC
GMLOS 2.3 AMLOS 2.8 RW 0.7471

Copyright 2018 Optum, LLC © HCPro, 1712 v3

1.52 Colitis

Colitis

- The concepts associated with gastroenteritis also apply to colitis, which is an **inflammation of the colon** and groups to MS-DRGs 391-392

K52.9 Noninfective gastroenteritis and colitis, unspecified

- Colitis NOS
- Enteritis NOS
- Gastroenteritis NOS
- Ileitis NOS
- Jejunitis NOS
- Sigmoiditis NOS

Excludes1: diarrhea NOS (R19.7)
functional diarrhea (K59.1)
infectious gastroenteritis and colitis NOS (A09)
neonatal diarrhea (noninfective) (P78.3)
psychogenic diarrhea (F45.8)

<http://www.niddk.nih.gov/health-information/health-topics/digestive-diseases/bleeding-in-the-digestive-tract/Pages/facts.aspx>

© HCPro, 1712 v3

1.53 Colitis: Causative Organism

Colitis: Causative Organism

- Documentation of infectious colitis (gastroenteritis) does not change the MS-DRG
 - Designation as infectious will provide a CC as secondary diagnosis
- Identify the causative organism if possible

A09 Infectious gastroenteritis and colitis, unspecified
Infectious colitis NOS
Infectious enteritis NOS
Infectious gastroenteritis NOS

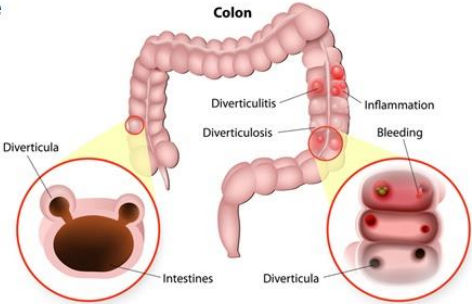
Excludes1: colitis NOS (K52.9)
diarrhea NOS (R19.7)
enteritis NOS (K52.9)
gastroenteritis NOS (K52.9)
noninfective gastroenteritis and colitis, unspecified (K52.9)

©HCPPro, 1712.v3

1.54 Diverticulitis and Diverticular Disease

Diverticulitis and Diverticular Disease

- Diverticula are small pouches that bulge outward through the colon (large intestine)
- People with these pouches have **diverticulosis**, which becomes more common as people age
- If the pouches become inflamed or infected, the condition is called **diverticulitis**
- The most common symptom is abdominal pain, usually on the left side



The diagram illustrates the human colon with several diverticula (small pouches) protruding from its surface. Labels include 'Colon' at the top, 'Intestines' at the bottom, and 'Diverticula' pointing to the pouches. Two circular insets provide magnified views: the left inset shows a healthy diverticulum, while the right inset shows a diverticulum with 'Inflammation' and 'Bleeding' occurring within it, labeled as 'Diverticulitis'. The overall condition of having diverticula is labeled as 'Diverticulosis'.

<http://www.nlm.nih.gov/medlineplus/diverticulosisanddiverticulitis.html>

©HCPPro, 1712.v3

1.55 Diverticulitis and Diverticular Disease (cont.)

Diverticulitis and Diverticular Disease (cont.)

- Combination codes that specify:
 - Diverticulitis or diverticular disease
 - The anatomical location
 - Small intestine, large intestine, or both
 - Any associated complications
 - Abscess
 - Hemorrhage (with bleeding)
 - Perforation

<http://www.nlm.nih.gov/medlineplus/diverticulosisanddiverticulitis.html>

©HCPro, 1712 v3

1.56 Diverticulitis and Diverticular Disease (cont.)

Diverticulitis and Diverticular Disease (cont.)

- Documentation of the complications affects MS-DRG grouping as well as MS-DRG assignment
 - Diverticulitis or diverticular disease with an abscess or perforation without bleeding
 - Groups to MS-DRG 391-392
 - Is a CC when a secondary diagnosis
 - Can be a Pdx with its own CC
 - Diverticulitis or diverticular disease with bleeding
 - Groups to the triple MS-DRGs of GI Hemorrhage
 - Is an MCC when a secondary diagnosis
 - Can be a Pdx with its own CC

©HCPro, 1712 v3

1.57 Intestinal Obstruction

Intestinal Obstruction

- Occurs when food or stool cannot move through the intestines
 - Also referred to as paralytic ileus or intestinal volvulus
- Obstruction of the bowel may due to:
 - A mechanical cause-blocking passage
 - **Ileus**-a condition in which the bowel does not work correctly
- Obstruction can be complete or partial

<http://www.nlm.nih.gov/medlineplus/ency/article/000260.htm>
<http://www.nlm.nih.gov/medlineplus/intestinalobstruction.html>

©HCPPro, 1712 v3

1.58 GI Obstructions - Postoperative Ileus

GI Obstructions - Postoperative Ileus

- Normal resumption of bowel activity after abdominal surgery follows a known and predictable pattern so an ileus is often considered "integral" to the surgical process
- It may be a reportable diagnosis whenever patient care deviates from routine protocol:
 - The ileus lasts longer than expected/anticipated
 - The N/G tube is removed and re-inserted
 - NPO status is resumed or continued
 - Additional tests ordered (KUB, CT, etc.)

©HCPPro, 1712 v3

1.59 Postoperative Ileus

Postoperative Ileus

- There is no specific code for post operative ileus. The code grouping K91.8- is assigned for intraoperative and post procedural complications and disorders of the digestive system

K91.8 Other intraoperative and postprocedural complications and disorders of digestive system

- K91.81 Other intraoperative complications of digestive system
- K91.82 Postprocedural hepatic failure
- K91.83 Postprocedural hepatorenal syndrome
- K91.84 Postprocedural hemorrhage and hematoma of a digestive system organ or structure following a procedure
 - K91.840 Postprocedural hemorrhage and hematoma of a digestive system organ or structure following a digestive system procedure
 - K91.841 Postprocedural hemorrhage and hematoma of a digestive system organ or structure following other procedure
- K91.85 Complications of intestinal pouch
 - K91.850 Pouchitis
 - Inflammation of internal ileoanal pouch
 - K91.858 Other complications of intestinal pouch
- K91.86 Retained cholelithiasis following cholecystectomy
- K91.89 Other postprocedural complications and disorders of digestive system
 - Use additional code, if applicable, to further specify disorder
 - Excludes2: postprocedural retroperitoneal abscess (K68.11)

©HCPro, 1712 v3

1.60 Intestinal Adhesions w/ Obstruction, Other Intestinal Obstruction, Post Procedural Obstruction

Intestinal Adhesions w/ Obstruction, Other Intestinal Obstruction, Post Procedural Obstruction

- Differentiate:
 - Partial - usually presents with diarrhea
 - Complete - inability to pass stool
 - Unspecified
- Symptoms Include:
 - Severe bloating
 - Abdominal pain
 - Decreased appetite
 - Nausea
 - Vomiting
 - Inability to pass gas or stool
 - Constipation
 - Diarrhea
 - Severe abdominal cramps
 - Abdominal swelling

©HCPro, 1712 v3

1.61 Intestinal Obstruction (cont.)

Intestinal Obstruction (cont.)

- The default code is K56.7

K56.7 Ileus, unspecified
Excludes1: obstructive ileus (K56.69)

Ileus (bowel) (colon) (inhibitory) (intestine) K56.7
- adynamic K56.0
- due to gallstone (in intestine) K56.3
- duodenal (chronic) K31.5
- gallstone K56.3
- mechanical NEC K56.69
- meconium P76.0
-- in cystic fibrosis E84.11
-- meaning meconium plug (without cystic fibrosis) P76.0
- myxedema K59.8
- neurogenic K56.0
-- Hirschsprung's disease or megacolon Q43.1
- newborn
-- due to meconium P76.0
-- in cystic fibrosis E84.11
-- meaning meconium plug (without cystic fibrosis) P76.0
- transitory P76.1
- obstructive K56.69
- paralytic K56.0

©HCPPro, 1712.v3

1.63 Malabsorption

Malabsorption

- Malabsorption is a general term that defaults to intestinal malabsorption
- It is unlikely it will be a reason for admission, but it adds a CC as a secondary diagnosis

Malabsorption K90.9
- calcium K90.89
- carbohydrate K90.4
- disaccharide E73.9
- fat K90.4
- galactose E74.20
- glucose (-galactose) E74.39
- intestinal K90.9
-- specified NEC K90.89

<http://www.nlm.nih.gov/medlineplus/ency/article/000299.htm>

©HCPPro, 1712.v3

1.64 Intestinal Malabsorption Codes

Intestinal Malabsorption Codes

K90.4 Malabsorption due to intolerance, not elsewhere classified
Malabsorption due to intolerance to carbohydrate
Malabsorption due to intolerance to fat
Malabsorption due to intolerance to protein
Malabsorption due to intolerance to starch
Excludes2: gluten-sensitive enteropathy (K90.0)
lactose intolerance (E73.-)

K90.8 Other intestinal malabsorption
K90.81 Whipple's disease
K90.89 Other intestinal malabsorption

K90.9 Intestinal malabsorption, unspecified

©HCPPro, 1712.v3

1.65 Acute Infarction/Ischemia of the Intestine

Acute Infarction/Ischemia of the Intestine

- K55.011 Focal (segmental) acute (reversible) ischemia of the small intestine
- K55.012 Diffuse acute (reversible) ischemia of the small intestine
- K55.019 Acute (reversible) ischemia of the small intestine, extent unspecified
- K55.021 Focal (segmental) acute infarction of the small intestine
- K55.022 Diffuse acute infarction of small intestine
- K55.029 Acute infarction of the small intestine, extent unspecified
- (Same pattern for large intestine and unspecified intestine)

Important

MCCs:

- Ischemia - damage to part of intestine
- Infarction - death of part of the intestine

©HCPPro, 1712.v3

1.66 Necrotizing Enterocolitis (K55.3-)

Necrotizing Enterocolitis (K55.3-)

A life threatening inflammation in the intestines which may affect the lining of the intestine or its entire thickness. This can lead to a perforation of the bowel.

NEC most commonly affects premature babies, accounting for 60 to 80 percent of cases. It is the most common gastrointestinal emergency in the Neonatal Intensive Care Unit. It usually occurs within 3-12 days after birth.



Important

MCCs:

- K55.30 Necrotizing enterocolitis, unspecified
- K55.31 Necrotizing enterocolitis, stage 1
- K55.32 Necrotizing enterocolitis, stage 2
- K55.33 Necrotizing enterocolitis, stage 3

©HCPPro, 1712 v3

1.67 Staging of NEC Bell's Criteria

Staging of NEC Bell's Criteria

Stage	Classification	Systemic Signs	Intestinal Signs	Imaging
IA	Suspected NEC	Unstable temp, lethargy, apnea, bradycardia	Increased gastric residuals, abdominal distension, guaiac positive stool	Normal intestinal dilation, mild ileus
IB	Suspected NEC	Same as above	Bright red blood per rectum	Same as IA
IIA	Proven NEC - mildly ill	Same as above	Same as IB with absent bowel sounds and +/- tenderness	Intestinal dilation, ileus, pneumatosis intestinalis
IIB	Proven NEC - moderately ill	Same as IIA w/ mild metabolic acidosis & thrombocytopenia	Same as IB with absent bowel sounds, abdominal tenderness, +/- cellulitis or mass	Same as IIA, portal venous gas +/- ascites
IIIA	Advanced NEC - severely ill, bowel intact	Same as IIB w/ hypotension, severe apnea, DIC, neutropenia & respiratory acidosis	Same as IIB with abdominal distension, tenderness and signs of peritonitis	Same as IIB plus definite ascites
IIIB	Advanced NEC - severely ill, bowel perforated	Same as IIIA	Same as IIIA	Same as IIIB plus pneumoperitoneum

http://quovadis-ass.it/resources/Altre/NEC-Staging_FINALE.pdf

©HCPPro, 1712 v3

1.68 Digestive System Complications

Digestive System Complications

- Complications related to artificial openings:
 - Colostomy
 - Enterostomy
 - Gastrostomy
 - Esophagostomy
- Be sure the documentation links the complication:
 - Unspecified
 - Hemorrhage
 - Infection
 - Malfunction
 - Other

! Important
Adds a CC as a secondary diagnosis

©HCPro, 1712.v3

1.69 Digestive System Complications (cont.)

Digestive System Complications (cont.)

K94.1 Enterostomy complications

- K94.10 Enterostomy complication, unspecified**
- K94.11 Enterostomy hemorrhage**
- K94.12 Enterostomy infection**
Use additional code to specify type of infection, such as:
 - cellulitis of abdominal wall (L03.311)
 - sepsis (A40.-, A41.-)
- K94.13 Enterostomy malfunction**
Mechanical complication of enterostomy
- K94.19 Other complications of enterostomy**

©HCPro, 1712.v3

1.70 Digestive System Complications (cont.)

Digestive System Complications (cont.)

- When a complication is the Pdx, it “drives” the MS-DRG grouping to the triplet of Other Digestive Disease System Diagnoses (393-395)

DRG 393 Other Digestive System Diagnoses with MCC
GMLOS 4.6 AMLOS 6.3 RW 1.6407


DRG 394 Other Digestive System Diagnoses with CC
GMLOS 3.2 AMLOS 4.1 RW 0.9430
Select principal diagnosis listed under DRG 393

DRG 395 Other Digestive System Diagnoses without CC/MCC
GMLOS 2.4 AMLOS 2.9 RW 0.6747

Copyright 2018 Optum, LLC © HCPro, 1712 v3

1.71 Section Break: Hepatobiliary System

Hepatobiliary System



© HCPro, 1712 v3

1.72 Liver Disease

Liver Disease

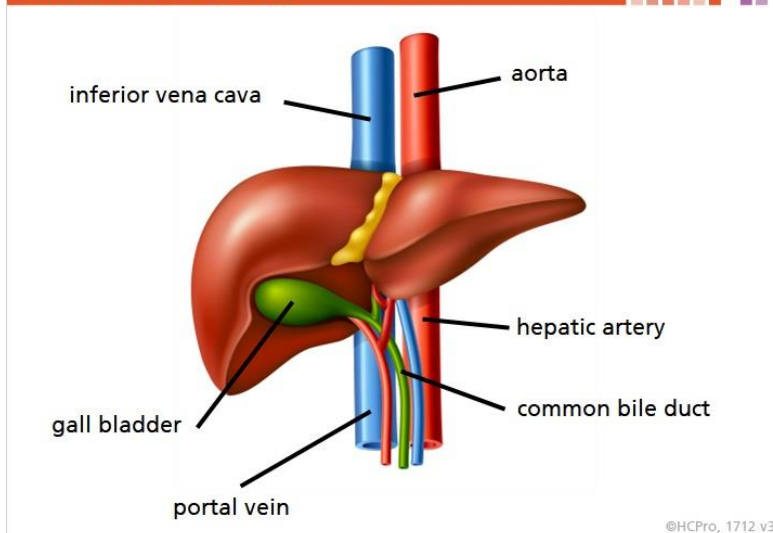
- The liver performs many critical metabolic functions, including processing and distribution of nutrients
- Liver diseases can be caused by:
 - Infection (i.e., hepatitis B and C)
 - Genetic mutations
 - Autoimmune reactions
 - Drug toxicity
- The rise in obesity in the United States has led to a rise in nonalcoholic fatty liver disease
- Treatment for end-stage liver disease is a transplant

<http://www.niddk.nih.gov/about-niddk/research-areas/liver-disease/Pages/liver-diseases.aspx>

©HCPPro, 1712.v3

1.73 Human Liver Anatomy

Human Liver Anatomy



©HCPPro, 1712.v3

1.74 Liver Disorders: CDI Focus Areas

Liver Disorders: CDI Focus Areas

- Documentation should include:
 - The specific disease process
 - The etiology
 - Is it related to substance consumption?
 - Affects MS-DRG grouping
 - The acuity
 - The presence of any associated complication
 - Coma

© HCPro, 1712 v3

1.75 Alcohol Use and Liver Disease

Alcohol Use and Liver Disease

- Many codes classify the liver condition as “alcoholic”
- When a liver condition is **linked** to alcohol use, it groups to a different MS-DRG
- Codes reflecting the level of alcohol consumption should also be reported

© HCPro, 1712 v3

1.76 Example of Alcoholic Liver Disorders

Example of Alcoholic Liver Disorders




K70 Alcoholic liver disease
 Use additional code to identify:
 alcohol abuse and dependence (F10.-)

- K70.0 Alcoholic fatty liver**
- K70.1 Alcoholic hepatitis**
 - K70.10 Alcoholic hepatitis without ascites**
 - K70.11 Alcoholic hepatitis with ascites**
- K70.2 Alcoholic fibrosis and sclerosis of liver**
- K70.3 Alcoholic cirrhosis of liver**
 - Alcoholic cirrhosis NOS
 - K70.30 Alcoholic cirrhosis of liver without ascites**
 - K70.31 Alcoholic cirrhosis of liver with ascites**
- K70.4 Alcoholic hepatic failure**
 - Acute alcoholic hepatic failure
 - Alcoholic hepatic failure NOS
 - Chronic alcoholic hepatic failure
 - Subacute alcoholic hepatic failure
 - K70.40 Alcoholic hepatic failure without coma**
 - K70.41 Alcoholic hepatic failure with coma**
- K70.9 Alcoholic liver disease, unspecified**

©HCPro, 1712.v3

1.77 Hepatitis

Cirrhosis & Alcoholic Hepatitis



DRG 432 Cirrhosis and Alcoholic Hepatitis with MCC
 GMLOS 4.8 AMLOS 6.5 RW 1.8004

Principal Diagnosis

- K70.1* ALCOHOLIC HEPATITIS
- K70.2 ALCOHOLIC FIBROSIS AND SCLEROSIS OF LIVER
- K70.3* ALCOHOLIC CIRRHOSIS OF LIVER
- K70.4* ALCOHOLIC HEPATIC FAILURE
- K70.9 ALCOHOLIC LIVER DISEASE UNSPECIFIED
- K74.0 HEPATIC FIBROSIS
- K74.3 PRIMARY BILIARY CIRRHOSIS
- K74.4 SECONDARY BILIARY CIRRHOSIS
- K74.5 BILIARY CIRRHOSIS UNSPECIFIED
- K74.6* OTHER AND UNSP CIRRHOSIS OF LIVER

DRG 433 Cirrhosis and Alcoholic Hepatitis with CC
 GMLOS 3.4 AMLOS 4.3 RW 1.0214

Select principal diagnosis listed under DRG 432

DRG 434 Cirrhosis and Alcoholic Hepatitis without CC/MCC
 GMLOS 2.3 AMLOS 2.7 RW 0.6283

Copyright 2018 Optum, LLC ©HCPro, 1712.v3

1.78 Hepatitis (cont.)

Hepatitis (cont.)

- A swelling and inflammation of the liver that can be caused by:
 - Immune cells attacking the liver
 - Infections from viruses (hepatitis A, B, or C), bacteria, or parasites
 - Liver damage from alcohol or poison
 - Medicines, such as an overdose of acetaminophen
- Code assignment will vary depending on the cause of the hepatitis, so documentation needs to reflect the etiology

K75.9 Inflammatory liver disease, unspecified
Hepatitis NOS

Excludes1: acute or subacute hepatitis (K72.0-)
chronic hepatitis NEC (K73.-)
viral hepatitis (B15-B19)

<http://www.nlm.nih.gov/medlineplus/ency/article/001154.htm>

©HCPPro, 1712.v3

1.79 Hepatitis Specificity

Hepatitis Specificity

Hepatitis K75.9

- acute B17.9
- with coma K72.01
- with hepatic failure —see Failure, hepatic
- alcoholic —see Hepatitis, alcoholic
- infectious B15.9
- with hepatic coma B15.0
- viral B17.9
- alcoholic (acute) (chronic) K70.10
- with ascites K70.11
- amebic —see Abscess, liver, amebic
- anicteric, (viral) —see Hepatitis, viral
- antigen-associated (HAA) —see Hepatitis, B
- Australia-antigen (positive) —see Hepatitis, B
- autoimmune K75.4
- B B19.10
- with hepatic coma B19.11
- acute B16.9
- with
- delta-agent (coinfection) (without hepatic coma) B16.1
- with hepatic coma B16.0
- hepatic coma (without delta-agent coinfection) B16.2
- chronic B18.1
- with delta-agent B18.0
- bacterial NEC K75.89

©HCPPro, 1712.v3

1.80 Hepatitis Specificity (cont.)

Hepatitis Specificity (cont.)

- The code set can also capture the acuity and specific type of hepatitis

K73 Chronic hepatitis, not elsewhere classified

Excludes1: alcoholic hepatitis (chronic) (K70.1-)
drug-induced hepatitis (chronic) (K71.-)
granulomatous hepatitis (chronic) NEC (K75.3)
reactive, nonspecific hepatitis (chronic) (K75.2)
viral hepatitis (chronic) (B15-B19)

K73.0 Chronic persistent hepatitis, not elsewhere classified

K73.1 Chronic lobular hepatitis, not elsewhere classified

K73.2 Chronic active hepatitis, not elsewhere classified

K73.8 Other chronic hepatitis, not elsewhere classified

K73.9 Chronic hepatitis, unspecified

©HCPro, 1712.v3

1.81 Cirrhosis

Cirrhosis

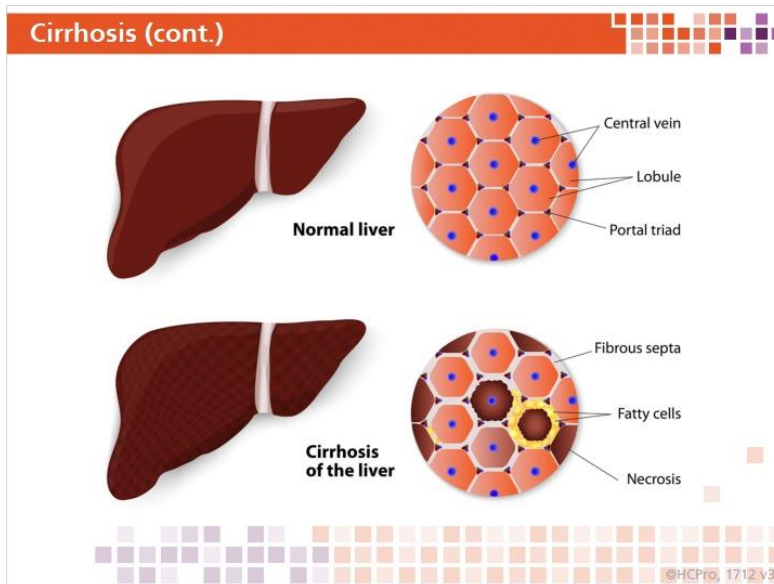
- Chronic liver disease leads to cirrhosis
 - Liver tissue is replaced by fibrosis, scar tissue, and regenerative nodules
 - Leads to loss of liver function
- Documentation should reflect the mental status of the patient as mental impairment is common
 - The codes in category K72 include hepatic encephalopathy

K72 Hepatic failure, not elsewhere classified

Includes: acute hepatitis NEC, with hepatic failure
fulminant hepatitis NEC, with hepatic failure
hepatic encephalopathy NOS
liver (cell) necrosis with hepatic failure
malignant hepatitis NEC, with hepatic failure
yellow liver atrophy or dystrophy

©HCPro, 1712.v3

1.82 Cirrhosis (cont.)



1.83 Cirrhosis (cont.)

Cirrhosis (cont.)

- Cirrhosis is most commonly caused by the following conditions
 - **Alcoholism**
 - The patient's relationship to alcohol is critical documentation for accurate code assignment as it affects MS-DRG assignment
 - **Hepatitis B and C**
 - **Fatty liver disease**
- Some cases are idiopathic where the exact etiology remains unknown
- Documentation should include end stage liver disease if applicable

©HCPPro, 1712, v3

1.84 Complications of Cirrhosis

Complications of Cirrhosis

- Portal hypertension
 - Scar tissue partially blocks the normal flow of blood, which increases the pressure in the portal vein
 - CC as a secondary diagnosis
- The portal vein carries blood from the stomach, intestines, spleen, gallbladder, and pancreas to the liver and can **lead to varices** in the stomach and/or esophagus

K76.6 Portal hypertension
Use additional code for any associated complications, such as:
portal hypertensive gastropathy (K31.89)

<http://www.niddk.nih.gov/health-information/health-topics/liver-disease/cirrhosis/Pages/facts.aspx>

©HCPPro, 1712.v3

1.85 Complications of Cirrhosis (cont.)

Complications of Cirrhosis (cont.)

- Edema and ascites
 - Ascites can lead to spontaneous bacterial peritonitis (serious infection that requires immediate medical attention)
 - ICD-10-CM has some combination codes that include the complication of ascites with:
 - Alcoholic hepatitis
 - Alcoholic cirrhosis
 - Toxic liver disease with chronic active hepatitis

<http://www.niddk.nih.gov/health-information/health-topics/liver-disease/cirrhosis/Pages/facts.aspx>

©HCPPro, 1712.v3

1.86 Complications of Cirrhosis (cont.)

Complications of Cirrhosis (cont.)

- **Splenomegaly** is a condition where the spleen enlarges and retains white blood cells and platelets, reducing the numbers of these cells and platelets in the blood
- A low platelet count may be the first evidence of cirrhosis

Important
Documentation needs to link the splenomegaly to cirrhosis

Splenomegaly, splenomegalia (Bengal) (cryptogenic) (idiopathic) (tropical) R16.1
- with hepatomegaly R16.2
- cirrhotic D73.2

D73.2 Chronic congestive splenomegaly


<http://www.niddk.nih.gov/health-information/health-topics/liver-disease/cirrhosis/Pages/facts.aspx>

©HCPPro, 1712 v3

1.87 Complications of Cirrhosis (cont.)

Complications of Cirrhosis (cont.)

- **Hepatorenal syndrome** is a condition in which there is progressive kidney failure occurring in a person with cirrhosis of the liver
- It is a serious complication that can lead to death and is classified as a MCC
- It occurs when the kidneys fail in people with serious liver problems
- The disorder occurs in up to 1 in 10 patients who are in the hospital with liver failure



<http://www.nlm.nih.gov/medlineplus/ency/article/000489.htm>

©HCPPro, 1712 v3

1.88 Shock Liver

Shock Liver

- What code would be assigned to documentation of “shock liver”?
 - K72.0-, Acute and subacute hepatic failure, for shock liver
 - The assignment of the fifth digit would be dependent on the presence or absence of coma
 - Provides a MCC as a secondary diagnosis

AHA Coding Clinic for ICD-10-CM/RCS 2nd Qtr 2014 ©HCPPro, 1712 v3

1.89 Acute Liver Failure

Acute Liver Failure

- Acute liver failure is loss of liver function that occurs rapidly (days or weeks) usually in a person who has no pre-existing liver disease causing serious complications, including excessive bleeding and increasing pressure in the brain
 - It is less common than chronic liver failure, which develops more slowly
 - It is also known as fulminant hepatic failure
- Depending on the cause, acute liver failure can sometimes be reversed with treatment, but most of the time a liver transplant may be the only cure

<http://www.mayoclinic.org/diseases-conditions/liver-failure/basics/definition/CON-200309667p=1> ©HCPPro, 1712 v3

1.90 Acute Liver Failure (cont.)

Acute Liver Failure (cont.)

- There are many codes for hepatic failure (acute liver failure)
 - hepatic K72.90
 - with coma K72.91
 - acute or subacute K72.00
 - with coma K72.01
 - due to drugs K71.10
 - with coma K71.11
- If classified as acute/subacute or with coma it is classified as a MCC
 - alcoholic (acute) (chronic) (subacute) K70.40
 - with coma K70.41
 - chronic K72.10
 - with coma K72.11
 - due to drugs (acute) (subacute) (chronic) K71.10
 - with coma K71.11
 - due to drugs (acute) (subacute) (chronic) K71.10
 - with coma K71.11
 - postprocedural K91.82

©HCPPro, 1712.v3

1.91 Hepatic Failure, Not Elsewhere Classified

Hepatic Failure, Not Elsewhere Classified

K72 Hepatic failure, not elsewhere classified

Includes: acute hepatitis NEC, with hepatic failure
fulminant hepatitis NEC, with hepatic failure
hepatic encephalopathy NOS
liver (cell) necrosis with hepatic failure
malignant hepatitis NEC, with hepatic failure
yellow liver atrophy or dystrophy

Excludes1: alcoholic hepatic failure (K70.4)
hepatic failure complicating abortion or ectopic or molar pregnancy (O00-O07, O08.8)
hepatic failure complicating pregnancy, childbirth and the puerperium (O26.6-)
hepatic failure with toxic liver disease (K71.1-)
icterus of newborn (P55-P59)
postprocedural hepatic failure (K91.82)
viral hepatitis with hepatic coma (B15-B19)

K72.0 Acute and subacute hepatic failure = MCCs

K72.00 Acute and subacute hepatic failure without coma

K72.01 Acute and subacute hepatic failure with coma

K72.1 Chronic hepatic failure

K72.10 Chronic hepatic failure without coma

©HCPPro, 1712.v3

1.92 Toxic Liver Disease

Toxic Liver Disease

- A leading cause of liver disease is medications
- Documentation needs to identify:
 - The associated medication/substance
 - How the medication/substances was consumed
 - Is it a poisoning, which also requires intent?
 - Is it an adverse effect?
 - Any associated complication:
 - Coma
 - Hepatitis
 - Necrosis

©HCPPro, 1712.v3

1.93 Toxic Liver Disease Specificity

Toxic Liver Disease Specificity

K71 Toxic liver disease
Includes: drug-induced idiosyncratic (unpredictable) liver disease
drug-induced toxic (predictable) liver disease

➡ **Code first** poisoning due to drug or toxin, if applicable (T36-T65 with fifth or sixth character 1-4 or 6)

Use additional code for adverse effect, if applicable, to identify drug (T36-T50 with fifth or sixth character 5)

Excludes2: alcoholic liver disease (K70.-)
Budd-Chiari syndrome (I82.0)

K71.0 Toxic liver disease with cholestasis
Cholestasis with hepatocyte injury
'Pure' cholestasis

K71.1 Toxic liver disease with hepatic necrosis
Hepatic failure (acute) (chronic) due to drugs

K71.10 Toxic liver disease with hepatic necrosis, without coma

➡ **K71.11 Toxic liver disease with hepatic necrosis, with coma** Pdx w/own MCC

K71.2 Toxic liver disease with acute hepatitis

K71.3 Toxic liver disease with chronic persistent hepatitis

K71.4 Toxic liver disease with chronic lobular hepatitis

©HCPPro, 1712.v3

1.94 Gallstone Diseases

Gallstone Diseases

- Gallstones are collections of cholesterol, bile pigment, or a combination of the two, which can form in the gallbladder or within the bile ducts of the liver
- Can be an obstruction leading to inflammation

<http://patients.qi.org/topics/biliary-tract-disorders-gallbladder-disorders-and-gallstone-pancreatitis/>
©HCPPro, 1712 v3

1.95 Gallstone Diseases (cont.)

Gallstone Diseases (cont.)

- The record should clearly reflect:
 - Acuity of condition
 - Associated complications
 - Inflammation
 - Cholecystitis
 - Cholangitis
 - Obstruction
- Most of these codes group to the same MS-DRGs and are CCs as secondary diagnoses

! Important

The provider needs to link the complication to the biliary disorder

©HCPPro, 1712 v3

1.96 Disorders of Biliary Tract MS-DRGs

Disorders of Biliary Tract MS-DRGs			
DRG 444	Disorders of the Biliary Tract with MCC		
GMLOS 4.4	AMLOS 5.8	RW 1.5997	
Principal Diagnosis			
K80*	CHOLELITHIASIS		
K81*	CHOLECYSTITIS		
K82*	OTHER DISEASES OF GALLBLADDER		
K83*	OTHER DISEASES OF BILIARY TRACT		
K87	DISORDER GB BILI TRACT & PANC IN DISEASES CLASS ELSW		
K91.5	POSTCHOLECYSTECTOMY SYNDROME		
Q44.2	ATRESIA OF BILE DUCTS		
Q44.3	CONGENITAL STENOSIS AND STRUCTURE OF BILE DUCTS		
R93.2	ABNORMAL FINDINGS ON DX IMAGING LIVER & BILI TRACT		
S36.122A	CONTUSION OF GALLBLADDER INITIAL ENCOUNTER		
S36.123A	LACERATION OF GALLBLADDER INITIAL ENCOUNTER		
S36.128A	OTHER INJURY OF GALLBLADDER INITIAL ENCOUNTER		
S36.129A	UNSPECIFIED INJURY GALLBLADDER INITIAL ENCOUNTER		
S36.13XA	INJURY BILE DUCT INITIAL ENCOUNTER		
DRG 445	Disorders of the Biliary Tract with CC		
GMLOS 3.2	AMLOS 3.9	RW 1.0581	
Select principal diagnosis listed under DRG 444			
DRG 446	Disorders of the Biliary Tract without CC/MCC		
GMLOS 2.3	AMLOS 2.8	RW 0.7916	

Copyright 2018 Optum, LLC ©HCPPro, 1712.v3

1.97 Calculus of Gallbladder Specificity

Calculus of Gallbladder Specificity	
• Site specificity	
• Gallbladder, bile duct, both	
• Acuity	
• Inflammation (cholangitis, cholecystitis)	
• With or without obstruction	
K80.3	Calculus of bile duct with cholangitis
Any condition listed in K80.5 with cholangitis	
K80.30	Calculus of bile duct with cholangitis, unspecified, without obstruction
K80.31	Calculus of bile duct with cholangitis, unspecified, with obstruction
K80.32	Calculus of bile duct with acute cholangitis without obstruction
K80.33	Calculus of bile duct with acute cholangitis with obstruction
K80.34	Calculus of bile duct with chronic cholangitis without obstruction
K80.35	Calculus of bile duct with chronic cholangitis with obstruction
K80.36	Calculus of bile duct with acute and chronic cholangitis without obstruction
K80.37	Calculus of bile duct with acute and chronic cholangitis with obstruction

©HCPPro, 1712.v3

1.98 Cholecystitis

Cholecystitis

- An **inflammation of the gallbladder** that occurs most commonly because of an obstruction of the cystic duct from cholelithiasis
 - Involves the presence of gallstones
 - Choledocholithiasis refers to the presence of gallstones in the common bile duct (CBD)

<http://emedicine.medscape.com/article/175667-overview>
<http://emedicine.medscape.com/article/171886-overview> ©HCPPro, 1712.v3

1.99 Cholangitis

Cholangitis

- Cholangitis is an **infection of the biliary tract**
- Treatment:
 - Antibiotic therapy
 - Biliary drainage
- Causes include:
 - Choledocholithiasis
 - Biliary tract manipulations/interventions and stents
 - Quickly becoming most common cause
 - Hepatobiliary malignancies
 - Least common cause

<http://emedicine.medscape.com/article/184043-overview#a0104> ©HCPPro, 1712.v3

1.100 Gallbladder Disorders Code Example

Gallbladder Disorders Code Example

K80 Cholelithiasis
Excludes1: retained cholelithiasis following cholecystectomy (K91.86)

K80.0 Calculus of gallbladder with acute cholecystitis
Any condition listed in K80.2 with acute cholecystitis

- K80.00 Calculus of gallbladder with acute cholecystitis without obstruction**
- K80.01 Calculus of gallbladder with acute cholecystitis with obstruction**

K80.1 Calculus of gallbladder with other cholecystitis

- K80.10 Calculus of gallbladder with chronic cholecystitis without obstruction**
Cholelithiasis with cholecystitis NOS
- K80.11 Calculus of gallbladder with chronic cholecystitis with obstruction**
- K80.12 Calculus of gallbladder with acute and chronic cholecystitis without obstruction**
- K80.13 Calculus of gallbladder with acute and chronic cholecystitis with obstruction**
- K80.18 Calculus of gallbladder with other cholecystitis without obstruction**
- K80.19 Calculus of gallbladder with other cholecystitis with obstruction**

K80.2 Calculus of gallbladder without cholecystitis
Cholecystolithiasis without cholecystitis
Cholelithiasis (without cholecystitis)
Colic (recurrent) of gallbladder (without cholecystitis)
Gallstone (impacted) of cystic duct (without cholecystitis)
Gallstone (impacted) of gallbladder (without cholecystitis)

- K80.20 Calculus of gallbladder without cholecystitis without obstruction**
- K80.21 Calculus of gallbladder without cholecystitis with obstruction**

©HCPro, 1712 v3

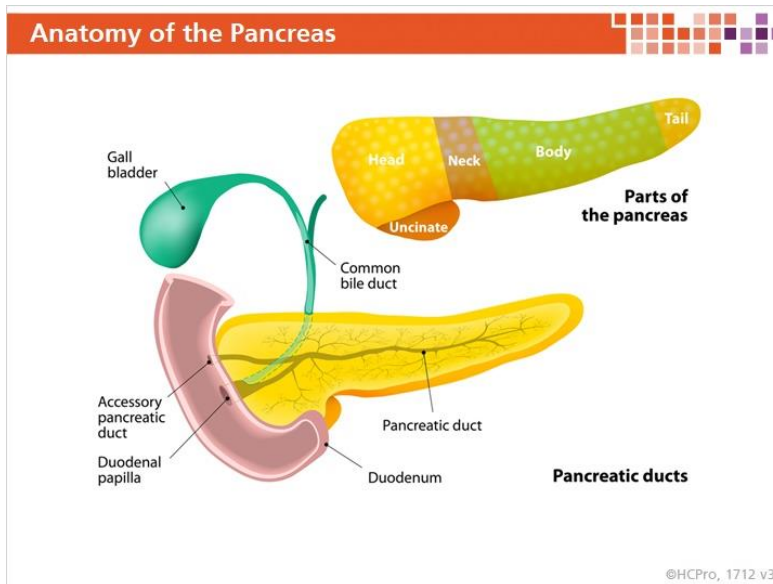
1.101 Pancreatitis

Pancreatitis

- Inflammation of the pancreas, a gland located behind the stomach
 - Pancreas releases the hormones insulin and glucagon, as well as digestive enzymes that help digest and absorb food
- Differentiated by acute and chronic:
 - Acute pancreatitis (MCC) is sudden
 - Chronic pancreatitis (CC) is characterized by recurring or persistent abdominal pain with or without steatorrhea or diabetes mellitus

©HCPro, 1712 v3

1.102 Anatomy of the Pancreas



1.103 Pancreas Disorders: CDI Focus Areas

Pancreas Disorders: CDI Focus Areas

Documentation needs to specify:

- Is it acute or chronic?
- Is it with or without infection?
- Is it with or without necrosis?
- What is the etiology of the pancreatitis?
 - Is it idiopathic?
 - Is it biliary?
 - Is it alcohol induced?
 - Is it drug induced?
 - Other?
 - Unspecified?

©HCPPro, 1712.v3

1.104 Pancreatic Pseudocysts (K86.3)

Pancreatic Pseudocysts (K86.3)

- Localized fluid collections that are rich in amylase and other pancreatic enzymes.
- Usually appear several weeks after the onset of pancreatitis.
 - Add a CC as a secondary diagnosis.
- Most resolve without interference and only require supportive care. For some, drainage is indicated.

<http://emedicine.medscape.com/article/184237-overview> ©HCPPro, 1712 v3

1.105 Pancreatitis: Diagnosis

Pancreatitis: Diagnosis

- The diagnostic criteria for pancreatitis are two of the following three features:
 - Abdominal pain characteristic of acute pancreatitis
 - Serum amylase and/or lipase ≥ 3 times the upper limit of normal
 - Characteristic findings of acute pancreatitis on CT scan

<http://emedicine.medscape.com/article/181364-overview> ©HCPPro, 1712 v3

1.106 Treatment of Pancreatitis

Treatment of Pancreatitis

- Medical management of mild acute pancreatitis includes:
 - The patient is kept NPO (nothing by mouth)
 - Intravenous (IV) fluid hydration
 - Analgesics are administered for pain relief
 - Antibiotics are generally not indicated
- Patients can be discharged when:
 - Their pain is well controlled with oral analgesia
 - They are able to tolerate an oral diet that maintains their caloric needs
 - All complications have been addressed

<http://emedicine.medscape.com/article/181364-overview> ©HCPPro, 1712.v3

1.107 Treatment of Pancreatitis (cont.)

Treatment of Pancreatitis (cont.)

- Patients with **severe acute pancreatitis** require intensive care
- The goals of medical management are:
 - Provide aggressive supportive care
 - Decrease inflammation
 - Limit infection or superinfection
 - Identify and treat complications as appropriate

<http://emedicine.medscape.com/article/181364-overview> ©HCPPro, 1712.v3

1.110 Summary

Summary

- This module covered documentation opportunities related to the genitourinary system and digestive disease system
- The digestive disease MDC can be greatly impacted by CDI efforts because most of the associated MS-DRGs are triplets and there are many diseases classified as MCCs

© HCPro, 1712 v3