Chapter Outline

- Digestive System Procedure Basics
- Coding Overview of Digestive System Procedures
- Abstracting Digestive System Procedures
- Assigning Codes for Digestive System Procedures
- Arranging Codes for Digestive System Procedures
- E/M Coding for Gastroenterology

Learning Objectives

After completing this chapter, you should have the skills to:

35.1 Spell and define the key words, medical terms, and abbreviations related to digestive system procedures.
35.2 Discuss the types of digestive system procedures.
35.3 Identify the main characteristics of coding for the Digestive System.
35.4 Abstract procedural information from the medical record for coding digestive system procedures.
35.5 Assign codes for Digestive System procedures.
35.6 Arrange codes for Digestive System procedures.
35.7 Code evaluation and management services for gastroenterology.
35.8 Discuss the CPT coding guidelines related to Digestive System.

Key Terms and Abbreviations

- allotransplantation
- anastomosis
- capsule endoscopy
- incidental appendectomy
- proximal
- pull-through
- transnasal
- transoral
- multiple endoscopy rule
- reducible
- by report

In addition to the key terms listed here, students should know the terms defined within tables in this chapter.
INTRODUCTION

It is exciting when a favorite store offers a BOGO sale—buy one, get one at half-price. Insurance companies require a similar discount when physicians bill for multiple procedures done at the same time. Coders indicate this circumstance with a modifier. Modifiers and multiple endoscopy payment rules are among the skills to be mastered when coding for the Digestive System.

DIGESTIVE SYSTEM PROCEDURE BASICS

Gastroenterology is a subspecialty of internal medicine that specializes in the digestive system. Gastroenterologists perform medical procedures such as endoscopies and gastric function studies, but they do not perform surgery. General surgeons perform surgery on digestive system organs and structures. Plastic surgeons perform reconstructive repairs involving the lips and mouth, such as cleft palate repair. Oral and maxillofacial surgeons (OMSs) also perform surgery on the face, mouth, and jaws.

For procedural purposes, the digestive system is divided into four parts:

- Upper gastrointestinal (GI) tract—lips through ileum
- Lower gastrointestinal (GI) tract—cecum through anus
- Accessory organs—salivary glands, liver, gallbladder, and pancreas
- Surrounding structures—abdomen, peritoneum, and omentum

Physicians use a variety of dividing points between the upper and lower GI tract, depending on the context:

- Diagnosis of bleeding—Bleeding above the duodenal junction is classified as upper GI bleeding, and bleeding below the duodenal junction is classified as lower GI bleeding.
- Endoscopic access—An upper GI endoscopy includes the mouth through the duodenum, and a lower GI endoscopy includes the cecum through the anus. The jejunum and ileum are not accessible to endoscopy procedures.
- Embryonic development—Developmentally, the GI tract is divided into three parts—the upper, from the mouth to the major duodenal papilla (opening of the pancreatic duct into the duodenum); middle, from the duodenal papilla to the mid-transverse colon; and lower, from the mid-transverse colon to the anus—based on the derivation from the foregut, midgut, and hindgut, respectively.

Because the digestive, or alimentary, tract consists of and connects several anatomic sites, medical terms frequently contain word roots of multiple sites, which are combined with a procedural suffix. To understand terminology, identify the suffix, then break down each word into the combining forms for each site. Refer to Table 35-1 for a refresher on how to build medical terms related to digestive system procedures.

CODING CAUTION

Be alert for medical terms that are spelled similarly and have different meanings.

- cholecystectomy (excision of the gall bladder) and choledochectomy (excision of the common bile duct)
- laparotomy (cutting into the abdomen) and laparoscopy (visual examination of the abdomen)
- an/o (combining form for anus) and an- (prefix meaning none)

Procedures commonly performed on each section of the digestive system are discussed next. Refer to detailed anatomic diagrams of specific parts of the digestive system when you need to refresh your memory of the relationship of organs and sites to each other.

Procedures of the Upper GI Tract

Procedures commonly performed on the upper GI tract are summarized in Table 35-2 (pages 640–641). In particular, coders need to understand upper GI endoscopy, anastomosis, and foreign body removal.

Upper GI Endoscopy

Endoscopy is a procedure that is performed for screening, diagnostic, and therapeutic purposes. In the upper GI tract, the endoscope access can be transoral (through the oral cavity) or transnasal (through the nose) and can access the esophagus, stomach, and duodenum. Transnasal procedures are performed

<table>
<thead>
<tr>
<th>Table 35-1</th>
<th>EXAMPLE OF CONSTRUCTING MEDICAL TERMS FOR DIGESTIVE SYSTEM PROCEDURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root/Combining Form</td>
<td>Suffix</td>
</tr>
<tr>
<td>esophag/o (esophagus)</td>
<td>-scopy (visual examination)</td>
</tr>
<tr>
<td>gastr/o (stomach)</td>
<td>-ectomy (excision)</td>
</tr>
<tr>
<td>duoden/o (duodenum)</td>
<td></td>
</tr>
</tbody>
</table>

Source: © PB Resources, Inc. Used with permission.
### Table 35-2  COMMON PROCEDURES OF THE UPPER GASTROINTESTINAL TRACT

<table>
<thead>
<tr>
<th>Procedure Name</th>
<th>Definition</th>
<th>Reason Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antrectomy</td>
<td>The distal (lowest) portion of the stomach is excised. (Open)</td>
<td>Gastric ulcers, neoplasms</td>
</tr>
<tr>
<td>• Distal gastrectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billroth I</td>
<td>The pylorus is removed and the proximal (toward the center of the body) stomach is anastomosed (connected) directly to the duodenum in an end-to-end manner. (Open)</td>
<td>Reestablish gastrointestinal continuity after excision of portions of one or more organs</td>
</tr>
<tr>
<td>• Gastroduodenostomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billroth II</td>
<td>The greater curvature of the stomach is connected to the first part of the jejunum in a side-to-side manner. (Open)</td>
<td>Reestablish gastrointestinal continuity after excision of portions of one or more organs</td>
</tr>
<tr>
<td>• Gastrojejunostomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleft lip/cleft palate repair</td>
<td>Abnormally oriented and attached muscles are repositioned to repair the functionality of soft palate musculature. (Open)</td>
<td>Cleft lip or cleft palate (incomplete formation of the lip or roof of the mouth)</td>
</tr>
<tr>
<td>Endoscopic balloon dilation (EBD)</td>
<td>Through-the-scope (TTS) balloon dilators or plastic dilators are moved over a guide wire to stretch the esophagus, pyloric valve, or duodenum. (Endoscopic)</td>
<td>Stricture (narrowing) of the esophagus, pylorus, or duodenum due to a variety of conditions (e.g., gastric outlet obstruction [GOO], peptic ulcers, Crohn's disease)</td>
</tr>
<tr>
<td>Endoscopic sclerotherapy</td>
<td>A solution that causes inflammation and scarring is injected into a vein to close it off. (Endoscopic)</td>
<td>Esophageal varices</td>
</tr>
<tr>
<td>Esophagectomy</td>
<td>All or part of the esophagus is surgically removed. (Open)</td>
<td>Barrett esophagus, localized esophageal cancer</td>
</tr>
<tr>
<td>• Transhiatal esophagectomy (THE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Transthoracic esophagectomy (TTE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Esophagogastroduodenoscopy (EGD)</td>
<td>The endoscope is inserted through the mouth and moved down the throat into the esophagus, stomach, and duodenum. (Endoscopic)</td>
<td>Esophagitis, gastritis, gastroesophageal reflux disease (GERD), esophageal stricture (narrowing), varices, Barrett esophagus, hiatal hernia, ulcers, cancer</td>
</tr>
<tr>
<td>• Upper gastrointestinal endoscopy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign body removal (FBR)</td>
<td>An object is retrieved from within the body. (Endoscopic or open)</td>
<td>Removal of an object from outside the body that has made its way into the body, usually into a hollow organ, such as the nose, ear, or throat</td>
</tr>
<tr>
<td>Gastric bypass</td>
<td>The stomach is divided to create a small pouch and causes food to bypass part of the small intestine. (Laparoscopic or open)</td>
<td>Reduce calorie absorption</td>
</tr>
<tr>
<td>Heller myotomy</td>
<td>The esophageal sphincter muscle is cut. (Laparoscopic)</td>
<td>Achalasia (a disorder of the esophagus that makes it difficult for foods and liquids to pass into the stomach)</td>
</tr>
<tr>
<td>• Esophagomyotomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laparoscopically adjustable gastric banding (LABG)</td>
<td>An inflatable silicone device is placed around the top portion of the stomach to divide it into a smaller pouch and a larger pouch. (Laparoscopic or open)</td>
<td>Slow and reduce food consumption</td>
</tr>
<tr>
<td>• Lap-band</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• A-band</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Gastric restriction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nissen fundoplication</td>
<td>The upper part of the stomach is wrapped around the lower esophageal sphincter (LES). (Laparoscopic or open)</td>
<td>Strengthen the sphincter, prevent acid reflux, repair a hiatal hernia</td>
</tr>
<tr>
<td>Paraesophageal hernia repair</td>
<td>The diaphragm is repaired using sutures or mesh; part of the stomach may be wrapped around the esophagus (fundoplication). (Laparoscopic or open)</td>
<td>Paraesophageal hernia (part of the stomach bulges through the hiatus [opening in the diaphragm])</td>
</tr>
<tr>
<td>• Hiatal hernia repair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Hiatus hernia repair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percutaneous endoscopic gastrostomy (PEG)</td>
<td>A tube is passed into a patient’s stomach through the abdominal wall. (Percutaneous)</td>
<td>Feed patients who cannot swallow due to conditions such as stroke and neurological diseases</td>
</tr>
<tr>
<td>• Fundoplication</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
with a rigid endoscope. Transoral procedures can be performed with either a rigid or flexible endoscope. Rigid endoscopes provide excellent lighting and visualization and have tips of varying angles and sizes. They enable tissue collection, surgery, and procedures such as cauterization. Flexible endoscopes are smaller in diameter and can be manipulated in tight areas but require two hands to operate. Historically, flexible endoscopes have provided inferior lighting and images, but these have improved with the development of digital endoscopes. Among procedures most commonly performed with an endoscope are:

- collection of specimens by brushing or washing
- injections
- biopsies
- removal of foreign bodies
- dilation of strictures
- removal of tumors or polyps
- electrocauterization
- hemostasis
- ultrasound examination
- cyst drainage
- resection

Endoscopes cannot access the jejunum or ileum, so physicians may opt to use capsule endoscopy to examine the small intestine. Capsule endoscopy is a technology in which patients swallow a video capsule the size of a large pill that contains a video microchip, light bulb, battery, and radio transmitter. As the capsule moves through the alimentary tract, it takes about 14 photographs per second and transmits them to a receiver worn by the patient. When the capsule passes through the anus, it is flushed down the toilet. The physician downloads thousands of photographs from the receiver and analyzes them to formulate a diagnosis or plan for further testing.

**Anastomosis**

Sometimes all or part of a digestive organ must be removed because of disease. The excision interrupts the continuous flow of GI tract, so continuity is reestablished through anastomosis. **Anastomosis** is a surgical connection between two, usually tubular, structures such as the organs in the digestive tract or blood vessels. Several techniques can be used to join the structures:

- **End-to-end**—the ends of both tubes are connected
- **End-to-side**—the end of one tube is connected to an opening in the side of another
- **Side-to-side**—the sides of two tubes are connected with an opening between them

The choice of technique depends on the condition, the exact sites removed, and the surgeon’s preference (Figure 35-1).

In an operative note, anastomosis can be described as a pull-through, which means that the surgeon removes the diseased portion of organ and connects the healthy segment to the adjacent organ. The pull-through procedure was originally developed to treat Hirschsprung disease (nerve cells normally present in the wall of the intestine do not form properly during fetal development). Part of the colon is excised, then joined to the anus in a posterior sagittal anorectoplasty (PSARP) procedure. The pull-through became preferred over a colostomy, and the technique was eventually adapted for use in other portions of the digestive tract.

**SUCCESS STEP**

An anastomosis is described with the suffix -stomy for the creation of a new opening and word roots that identify the two body parts joined. For example, gastro/duodeno/stomy describes the joining of the stomach and the duodenum.

**Foreign Body Removal**

Foreign bodies can enter the digestive tract through the mouth. They can pass through the system without incident or become lodged. Some objects, such as a coin, normally pass through without a problem and are excreted. An object that becomes lodged can create an obstruction or perforation and poses a medical risk.
SECTION FOUR  
CPT/HCPCS Procedure Coding

Table 35-3

<table>
<thead>
<tr>
<th>Procedure Name</th>
<th>Definition</th>
<th>Reason Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendectomy</td>
<td>Surgical removal of the appendix (Laparoscopic or open)</td>
<td>Appendicitis</td>
</tr>
<tr>
<td>Colectomy</td>
<td>Surgical removal of all or part of the large intestine (Laparoscopic or open)</td>
<td>Bleeding, bowel obstruction, Crohn’s disease, colon cancer, ulcerative colitis, diverticulitis</td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>Use of an endoscope to view the colon (a thin, flexible tube with small video camera attached to take pictures or video)</td>
<td>Ulcers, colon polyps, tumors, and areas of inflammation or bleeding; biopsy, screening for malignant neoplasm</td>
</tr>
<tr>
<td>Colostomy</td>
<td>Division (cutting) of the colon (large intestine), bringing the proximal end out through a stoma (opening) in the abdominal wall, bypassing the rectum and anus (Laparoscopic or open)</td>
<td>Bowel blockage (obstruction), bowel resection, injuries</td>
</tr>
<tr>
<td>Ileostomy</td>
<td>Division of the ileum (small intestine) bringing the proximal end out to a stoma in the abdominal wall, bypassing the colon, rectum, and anus (Laparoscopic or open)</td>
<td>Inflammatory bowel disease, colon or rectal cancer, familial polyposis, birth defects involving the intestines, injuries</td>
</tr>
<tr>
<td>Polypectomy</td>
<td>Surgical removal of a polyp(s) (abnormal growth from the mucous membrane) (Laparoscopic or open)</td>
<td>Polyps</td>
</tr>
<tr>
<td>Small bowel transplant</td>
<td>Surgical removal of a diseased small intestine and replacement with some or all of a small intestine from a healthy person (Open)</td>
<td>Intestinal failure and complications related to parenteral nutrition (PN)</td>
</tr>
</tbody>
</table>

Lower GI Endoscopy

Endoscopy of the lower GI tract is named after the sites examined: anoscopy (endoscopy of the anus), proctosigmoidoscopy (endoscopy of the anus, rectum, and part of the descending colon), sigmoidoscopy (endoscopy of the anus, rectum, and part of the sigmoid colon), and colonoscopy (endoscopy of the entire colon from the rectum to the cecum and possibly the terminal ileum). A colonoscopy is the preferred method of screening for colorectal cancer, which is recommended by the American Cancer Society and the Centers for Disease Control and Prevention (CDC).

Objects that are potentially poisonous must be removed immediately. For example, ingested batteries have potential for corrosive injury. X-rays are used to identify the type and location of foreign objects. Many can be retrieved endoscopically, but others require an open procedure to access the site.

Procedures of the Lower GI Tract

Procedures commonly performed on the lower GI tract are summarized in Table 35-3. Endoscopy and ostomy procedures of the lower GI tract require special attention from coders.

Figure 35-1  ■  Anastomoses. (A) End-to-End Gastroduodenostomy. (B) End-to-Side Gastrojejunostomy.
every 10 years from ages 50 to 75. When abnormalities are found by a screening colonoscopy, such as polyps that are removed, it becomes a therapeutic, or surgical, procedure.

**Ostomy**

An ostomy is a temporary or permanent surgically created opening that connects an internal organ to the surface of the body. In the lower GI tract, ostomies are performed most commonly to reroute the contents of the ileum or colon because of rectal cancer or inflammatory bowel disease. A temporary ostomy may be performed when the intestinal tract cannot be properly prepared for surgery, as occurs when it is blocked by disease (e.g., tumors) or scar tissue, or when inflammation or an operative wound needs to heal without contamination by stool. Temporary ostomies can usually be reversed with minimal or no loss of intestinal function. A permanent ostomy may be required when disease, or its treatment, impairs normal intestinal function or when the pelvic and anal sphincter muscles that control elimination do not work properly. After the procedure, an ostomy appliance (a bag or pouch that is adhered to the body with an adhesive) collects bowel contents. The appliance is quite secure and is emptied or changed as needed. Whenever a portion of the small or large intestines is removed, the excision procedure must be followed by an anastomosis or ostomy.

**SUCCESS STEP**

An ostomy is described with the word root of the organ involved and the suffix -stomy for the creation of a new opening. For example, ileo/stomy describes connecting the ileum to the abdominal wall, and colo/stomy describes connecting the colon to the abdominal wall.

**Procedures of the Accessory Digestive Organs**

Commonly performed procedures on the accessory digestive organs are summarized in Table 35-4. In particular, coders need to be familiar with procedures on the biliary tract and transplant procedures.

**Biliary Tract**

The biliary tract, or biliary tree, consists of the gall bladder, cystic duct, common bile duct, extrahepatic ducts, and pancreatic duct (Figure 35-2, page 644). The sphincter of Oddi is a muscular valve that joins the biliary tree to the duodenum. Any of these structures can become inflamed or obstructed, requiring surgery that may involve multiple components. A cholecystectomy can be either a laparoscopic or open procedure. It can be

<table>
<thead>
<tr>
<th>Procedure Name</th>
<th>Definition</th>
<th>Reason performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autologous islet cell transplantation</td>
<td>The pancreas is surgically removed and the islet cells are isolated then injected into the portal vein. (Open)</td>
<td>Prevent or minimize the risk of diabetes after a pancreatectomy</td>
</tr>
<tr>
<td>Cholecystectomy</td>
<td>Surgical removal of the gall bladder (Laparoscopic or open)</td>
<td>Gallstones, infected or inflamed gallbladder</td>
</tr>
<tr>
<td>Common bile duct (CBD) exploration</td>
<td>Injection of a dye into the duct, visualization on an X-ray, removal of calculi, and introduction of a drainage bag when necessary (Laparoscopic)</td>
<td>Obstructive jaundice, stones in bile ducts</td>
</tr>
<tr>
<td>Endoscopic retrograde cholangiopancreatography (ERCP)</td>
<td>Injection of contrast medium into the bile ducts via a tube through the ampulla of Vater to visualize the entire biliary tree (pancreatic, common bile, cystic, and hepatic ducts)</td>
<td>Obstructive jaundice, stones in bile ducts, pancreatitis, biliary strictures due to cancer</td>
</tr>
<tr>
<td>Hepatocystography</td>
<td>Use of high-frequency sound waves to break up gallstones (External)</td>
<td>Cholelithiasis, choledocholithiasis</td>
</tr>
<tr>
<td>Liver biopsy</td>
<td>Surgical removal of a small piece of the liver (Percutaneous, transvenous, or laparoscopic)</td>
<td>Determine the presence of liver disease</td>
</tr>
<tr>
<td>Liver transplant</td>
<td>Surgical removal of a diseased liver and replacement with one or all of a healthy liver from another person (Open)</td>
<td>Acute and end-stage liver failure, usually due to neoplasms of the liver or cirrhosis</td>
</tr>
<tr>
<td>Pancreatectomy</td>
<td>Surgical removal of all or part of the pancreas (Open)</td>
<td>Chronic pancreatitis, malignant neoplasm</td>
</tr>
<tr>
<td>Pancreaticoduodenectomy</td>
<td>Surgical removal of parts of the pancreas, duodenum, common bile duct, and, if required, portions of the stomach (Open)</td>
<td>Pancreatic cancer, neuroendocrine (islet cell) tumors, chronic pancreatitis, cancer of the ampulla of Vater (ampullary cancer), duodenal cancer, cancer of the distal bile duct</td>
</tr>
</tbody>
</table>

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Scarring of the liver islet cells that produce insulin. Islet cell transplantation is an option. Pancreas transplant requires about 6 hours. Transplant surgery takes about 3 hours; a combination kidney/pancreas transplant requires about 12 hours and three surgeons, two anesthesiologists, and up to 12 nurses. Liver transplantation typically requires 4 to 12 hours and three surgeons. Donors and recipients are matched using blood typing and tissue typing. The donor liver is removed. The liver begins to regenerate almost immediately and continues to do so for about a year. Although all transplants are complicated procedures, liver transplants are even more intricate because of the number of disconnections and reconnections of abdominal and hepatic tissue and blood vessels. A liver transplant typically requires 4 to 12 hours and three surgeons, two anesthesiologists, and up to four nurses.

Pancreatic islets, also called islets of Langerhans, are tiny clusters of cells scattered throughout the pancreas. Autologous (from the same person) islet cell transplantation is an option for patients who require a pancreatectomy because of chronic pancreatitis that cannot be managed by other treatments. The surgeon removes the pancreas from the patient, extracts and purifies islets, and infuses them into the patient’s liver using a catheter. The goal is to give the body enough healthy islets to make insulin. Type 1 diabetics cannot receive autologous islet cell transplants because their beta cells (islet cells that produce insulin) do not function. Allotransplantation from a cadaver is an experimental procedure approved for limited use by the Food and Drug Administration (FDA) and is being tested as an option for type 1 diabetics.

**SUCCESS STEP**

The six organs that can be transplanted are, in descending order of frequency, kidney, liver, heart, lung, pancreas, and intestine.

**Procedures of the Abdominal Structures**

Procedures commonly performed on the abdominal structures that surround the digestive organs are summarized in Table 35-5. When extensive adhesions impede access to an intended operative site, surgeons must perform adhesiolysis as part of the procedure.

Hernias can occur in several locations and are named by site. Some hernias are reducible, which means they can be corrected by the physician pushing the tissue back into place, whereas others require surgical repair, suturing, or insertion of a mesh prosthesis to reinforce the abdominal wall. This section provides a general reference to help understand the most common digestive system procedures. Remember to keep standard reference books handy in case you get stuck.
Table 35-5  ■ COMMON PROCEDURES WITHIN THE ABDOMINAL CAVITY

<table>
<thead>
<tr>
<th>Procedure Name</th>
<th>Definition</th>
<th>Reason Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesiolysis</td>
<td>Use of scalpel or electric current to destroy or cut free adhesions (scar tissue between organs or structures) (Laparoscopic or open)</td>
<td>Abdominal adhesions</td>
</tr>
<tr>
<td>Hernia repair</td>
<td>Surgical correction of a hernia through the use of manual manipulation, sutures, or mesh (External, laparoscopic, or open)</td>
<td>Bulging of internal organs or tissues through a defect in the wall of a body cavity</td>
</tr>
<tr>
<td>• Hernioplasty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Herniorrhaphy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Herniotomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Omental flap</td>
<td>Removal of part of the omentum with blood vessel supply intact (Open)</td>
<td>Reconstruction of other anatomic sites, such as the chest wall or abdomen</td>
</tr>
<tr>
<td>Paracentesis</td>
<td>A surgical puncture of a body cavity to remove ascites (excess fluid) (Percutaneous)</td>
<td>Remove excess fluid caused by conditions such as infection, inflammation, cirrhosis, cancer, or injuries.</td>
</tr>
</tbody>
</table>

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ABSTRACTING DIGESTIVE SYSTEM PROCEDURES

Abstracting digestive system procedures requires paying special attention to the detailed anatomy of the digestive system and the order of the digestive organ within the GI tract, starting from either end. Knowledge of the order of the alimentary tract is necessary to determine the path of an endoscope and the farther site reached. Refer to Chapter 9 in this text for a refresher on digestive system anatomy.

In addition to familiarity with each structure, coders must be able to locate specific anatomic landmarks within the mouth, salivary glands, stomach (Figure 35-4), or colon. Coders need to read operative or procedure reports and determine the exact organ(s) and site(s) accessed, treated, excised, and/or reconnected to another site.

Refer to Table 35-7 for guidance on how to abstract procedures on the Digestive System, then work through the detailed example that follows. Remember that the abstracting questions are a guide and that not every question applies to, or can be answered for, every case. For example, anastomosis is not performed in every procedure. Age is a factor for tonsillectomies and some hernia repairs.

Guided Example of Abstraction Digestive System Procedures

Refer to the following example throughout this chapter to practice skills for abstracting, assigning, and arranging Digestive System procedure codes.

Table 35-7 KEY CRITERIA FOR ABSTRACTING DIGESTIVE SYSTEM PROCEDURES

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is what the patient’s age?</td>
</tr>
<tr>
<td>What site(s) is treated?</td>
</tr>
<tr>
<td>What primary procedure is performed?</td>
</tr>
<tr>
<td>What other procedure(s), if any, are performed?</td>
</tr>
<tr>
<td>Is the treatment screening, diagnostic, or therapeutic?</td>
</tr>
<tr>
<td>What is the approach?</td>
</tr>
<tr>
<td>What exact sites within an organ are excised or treated?</td>
</tr>
<tr>
<td>What type of anastomosis, if any, is performed?</td>
</tr>
<tr>
<td>What sites are joined in the anastomosis?</td>
</tr>
<tr>
<td>What is the approach (access) is used?</td>
</tr>
<tr>
<td>What is the farthest site reached?</td>
</tr>
<tr>
<td>Is the purpose of the service preventive care?</td>
</tr>
<tr>
<td>Does a screening or diagnostic endoscopy convert to a therapeutic procedure?</td>
</tr>
<tr>
<td>Is the endoscopy a separate procedure?</td>
</tr>
<tr>
<td>Was more than one treatment performed during the endoscopy?</td>
</tr>
<tr>
<td>Is the patient covered by Medicare?</td>
</tr>
</tbody>
</table>

Source: © PB Resources, Inc. Used with permission.
OUTPATIENT HOSPITAL  Gender: M  Age: 57
Preoperative diagnosis: hematochezia
Procedure: Colonoscopy, polypectomy, hemorrhoidectomy. Inspection of anus immediately revealed internal hemorrhoids. Colonoscopic examination identified 2 polyps in the sigmoid colon at 20 cm that were removed with hot forceps and one polyp in the transverse colon at 100 cm that was removed with a snare. Remainder of colon to cecum was unremarkable. Hemorrhoids were ligated with rubber bands. Patient tolerated procedure well and was transferred to the recovery area. Polyps were submitted to pathology.
Postoperative diagnosis: internal first-degree hemorrhoids, colonic polyps
Pathology report: benign adenomatous polyps

Follow along as fictitious coder Jill Hynes, CPC, abstracts the procedure. Check off each step after you complete it.

- Jill reads through the entire record, paying special attention to the reason for the encounter, the procedure performed, and the postoperative diagnosis. She refers to the Key Criteria for Abstracting Digestive System Procedures (Table 35-7).

- She notes the preoperative diagnosis, hematochezia (bloody stool).
- What is the patient’s age? 57
- What site is treated? colon
- What primary procedure is performed? colonoscopy
- What other procedure(s), if any, are performed? polypectomy, hemorrhoidectomy
- Is the treatment screening, diagnostic, or therapeutic? diagnostic because of hematochezia
What is the approach? through the anal opening

What exact sites within an organ are excised or treated? anus, sigmoid colon, transverse colon

What is the farthest site reached? cecum

Is the purpose of the service preventive care? No

Does a screening or diagnostic endoscopy convert to a therapeutic procedure? Yes, polyps were removed.

Is the endoscopy a separate procedure? Yes, because no other procedures were performed.

Was more than one treatment performed during the endoscopy? Yes, two methods of polyp removal: hot forceps and snare

At this time, Jill does not know which of these procedures may need to be coded, nor how many codes she will end up with. She will learn about this when she moves on to assigning codes.

CODING PRACTICE

Exercise 35.2 Abstracting Digestive System Procedures

Instructions: Read the mini-medical-record of each patient’s encounter and answer the abstracting questions. Write the answer on the line provided. Do not assign any codes.

1. OUTPATIENT HOSPITAL  Gender: M  Age: 57
Preprocedure diagnosis: screening colonoscopy
Procedure: flexible colonoscopy, two polyps in descending segment, one polyp in transverse segment, remainder of colon to cecum was clear. Polyps were removed with bipolar cautery and submitted to pathology
Postprocedure diagnosis: adenomatous polyps per pathology report
a. What site(s) is treated? 

b. What primary procedure is performed? 

c. What approach (access) is used? 

d. What is the farthest site reached? 

e. Is the purpose of the service preventive care? 

f. Does a screening or diagnostic endoscopy convert to a therapeutic procedure? 

g. Is the endoscopy a separate procedure? 

h. Was more than one treatment performed during the endoscopy? 

2. INPATIENT HOSPITAL  Gender: F  Age: 33
Diagnosis: morbid obesity, BMI = 43 kg/m²
Procedure: laparoscopic gastric bypass and Roux-en-Y gastroenterostomy (100 cm)
a. What site(s) is treated? 

b. What primary procedure is performed? 

c. What other procedure(s), if any, are performed? 

(continued)

2. (continued)
d. Is the treatment screening, diagnostic, or therapeutic? 

e. What is the approach? 

f. What exact sites within an organ are excised or treated? 

g. What type of anastomosis, if any, is performed? 

h. What sites are joined in the anastomosis? 

3. INPATIENT HOSPITAL  Gender: F  Age: 48
Diagnosis: squamous cell carcinoma of the esophagus
Procedure: near-total esophagectomy, thoracotomy, end-to-side pharyngogastrostomy (restructuring of the pathway from the throat to the stomach after esophagectomy)
a. What site(s) is treated? 

b. What primary procedure is performed? 

c. What other procedure(s), if any, are performed? 

(continued)
d. Is the treatment screening, diagnostic, or therapeutic? 

e. What is the approach? 

f. What exact sites within an organ are excised or treated? 

(continued)
ASSIGNING CODES FOR DIGESTIVE SYSTEM PROCEDURES

This section reviews coding rules for several commonly performed Digestive System procedures: tonsillectomy, appendectomy, anastomosis, endoscopy, transplants, and repairs. Learning about these procedures will reinforce basic coding skills that you can use throughout the CPT manual.

**Tonsillectomy**

Tonsillectomy and adenoidectomy (42820-42870) provide several coding options based on patient age and the combination of procedures performed. Codes do not distinguish among the surgical method used: tonsillotome (scalpel), cryosurgery, laser, or electrocautery.

To assign codes, search the Index for the Main Term **Tonsillectomy; Tonsils** with the first-level modifying term **Excision**; or **Adenoids** with the first-level modifying term **Excision**. Review and verify the codes in the Tabular List based on the following criteria.

When a tonsillectomy and adenoidectomy are performed together, select the code based on patient age: 42820 for **younger than 12** and 42821 for **age 12 or over**.

**SUCCESS STEP**

When you see the term **tonsil**, be sure to identify the anatomic site of the tissue. **Tonsil** refers to a small rounded mass of lymphoid tissue. The palatine (pertaining to the palate) tonsils are located at the back of the throat and are commonly referred to simply as tonsils. There are several other sites of tonsil tissue throughout the mouth and throat, and there is even tonsil tissue in the cerebellum.

4. (continued)
   c. What other procedure(s), if any, are performed?
   d. Is the treatment screening, diagnostic, or therapeutic?
   e. What is the approach?

5. OUTPATIENT HOSPITAL  Gender: M  Age: 61
   Preoperative diagnosis: melena, hematemesis
   Procedure: EGD was initiated with flexible scope through the mouth. Identified bleeding ulcers in esophagus and duodenum, which were successfully cauterized. Features of chronic gastritis were noted. No masses or hiatal hernia. Obtained biopsy from the antrum. Biopsies submitted to pathology for H&E (hematoxylin and eosin stain test to detect cancer) and CLO (Campylobacter-like organism test for H. pylori).
   Postoperative diagnosis: bleeding esophageal ulcer and bleeding peptic ulcer
   Pathology report: biopsies negative for H. pylori and carcinoma
   a. What site(s) is treated? 
   b. What primary procedure is performed?
   c. What other procedure(s), if any, are performed?
   d. Is the treatment screening, diagnostic, or therapeutic?
   e. What is the approach?
   f. What is the farthest site reached?

6. INPATIENT HOSPITAL  Gender: M  Age: 3 months
   Diagnosis: bilateral cleft lip and nasal deformity
   Procedure: primary repair of a bilateral cleft lip and nasal deformity, repair of soft tissue of cleft palate and closure of alveolar ridge
   a. What site(s) is treated?
   b. What primary procedure is performed?
   c. What other procedure(s), if any, are performed?
   d. Is the treatment screening, diagnostic, or therapeutic?
   e. What is the approach?
   f. What exact sites within an organ are excised or treated?

When only a tonsillectomy is performed, select the code based on patient age: 42825 for **younger than 12** and 42826 for **age 12 or over**.

When only an adenoidectomy is performed, determine whether the procedure is primary (the patient’s first adenoidectomy) or secondary (the patient’s second adenoidectomy performed to remove regrowth after a previous surgery). Then select the code based on the patient’s age. Codes 42830 and 42831 identify a primary adenoidectomy; codes 42835 and 42836 identify a secondary adenoidectomy.

Codes for other tonsil procedures, such as radical resection, excision of tonsil tags, and excision of the lingual tonsil, also are provided.
Appendectomy
Although there are only six codes in the Appendix subheading, they are used frequently, and coders must understand the differences. To locate codes in the Index, search for the Main Term "Appendectomy." In the Tabular List, CPT provides one code for Incision and drainage of appendiceal abscess, open (44900), three codes for open appendectomies, and one code for a laparoscopic appendectomy (plus a code for an unlisted laparoscopic procedure).

An incidental appendectomy is the removal of the appendix as a preventive measure during another procedure, such as a cholecystectomy. Incidental appendectomies are usually not coded.

When an appendectomy is performed for an indicated (specific) reason, assign the code as follows. Refer to the CPT manual to observe the formatting of codes and read the full code descriptions.

• When an open appendectomy is performed and the appendix has not ruptured, assign 44950.
• When an open appendectomy is performed for a ruptured appendix with abscess or generalized peritonitis, assign 44960.
• When an open appendectomy is done for an indicated reason at the same time as another procedure, assign the add-on code 44955.
• For a laparoscopic appendectomy, assign 44970.

Anastomosis
Anastomosis is not a standalone procedure; it is performed in conjunction with a total or partial excision of an organ. When an excision is performed on the alimentary tube or a duct, either an anastomosis or an ostomy is almost always necessary.

To locate codes in the Index, search for the Main Term "Anastomosis," a first-level modifying term for the site treated, and a second-level modifying term for the site connected to.

Refer to the Tabular List to select the correct code based on the details of the procedure. Read the code options to determine how anastomosis is to be coded:

• bundled into the code for the main procedure
• an indented code under the main code
• an add-on code
• a separate standalone code

Identify the two sites that are connected and the type of connection created, such as Roux-en-Y, end to end, end to side, and side to end. The specific type of connection is sometimes, but not always, coded.

Endoscopy
CPT differentiates between endoscopy and laparoscopy in the Digestive System subsection. Endoscopy codes describe access through the mouth, nose, or rectum. Laparoscopy codes describe percutaneous access through the abdomen. The subheadings Esophagus and Intestines provide codes for both endoscopy and laparoscopy. The subheading Anus provides endoscopy codes only. The subheadings Stomach; Appendix; Liver; and Abdomen, Peritoneum, and Ommentum provide laparoscopy codes only because these sites, except for the stomach, cannot be reached endoscopically. Endoscopy of the stomach and duodenum is classified with the esophagus because the stomach and duodenum are examined in conjunction with the esophagus.

Each category for endoscopy or laparoscopy presents special instructions that define the extent of the examinations for the respective anatomic sites. The special instructions also direct that a surgical scope procedure always includes a diagnostic scope procedure. This instruction means that when an endoscopic or laparoscopic procedure begins as a screening or diagnostic procedure and is converted to a surgical procedure, only the surgical procedure should be coded.

For example, during a screening colonoscopy, the physician may remove a polyp. The polypectomy covers the procedure from screening to surgical, but only one code—the one for the polypectomy—should be reported.

Assign endoscopy codes based on the farthest site accessed. In the upper GI system, when the esophagus, stomach, and duodenum are examined, assign a code for esophagogastroduodenoscopy only; do not also assign a code for esophagoscopy. In the lower GI system, when the entire colon is examined, assign a code for colonoscopy only; do not also assign codes for anoscopy, proctosigmoidoscopy, and sigmoidoscopy, even if procedures were done in those areas (Figure 35-5).

Multiple Endoscopy Rule
The multiple endoscopy rule explains how to assign endoscopy codes when more than one procedure is performed during the same session. Endoscopy codes are divided into families, each with a base code. The base code is a screening/diagnostic endoscopy for a particular region. The other codes in the family are therapeutic/surgical procedures, such as biopsy, dilation, or tumor excision. You may assign as many surgical codes from one family as necessary, but do not assign the base diagnostic endoscopy code together with a surgical endoscopy code. The Medicare Physician Fee Schedule Database (MPFSDB) identifies the codes subject to this rule and the corresponding base codes (Table 35-8). The descriptions of the base codes include the designation (separate procedure), which means that the base code should be reported only when it is done as a distinct procedure and not as part of a more extensive surgical procedure. Each code in the family includes the work RVU and price of the base code service, plus the additional work and price for the surgical procedure. Although more than one surgical endoscopy code from the same family can be billed, a special endoscopy payment formula excludes the price of the base service from all but the first code reported (Figure 35-6, page 652).

Upper GI Endoscopy
CPT provides endoscopy codes for esophagoscopy and esophagogastroduodenoscopy. Special instructions at the beginning of the Endoscopy category define an esophagoscopy as extending
from the upper esophageal sphincter to the gastroesophageal junction. When only the esophagus is examined, assign a code for esophagoscopy (43191-43232). Esophagoscopy codes are divided based on whether the endoscope is rigid (parent code 43191) or flexible. Flexible endoscopy codes are divided based on whether the access is transnasal (parent code 43197) or transoral (parent code 43200). Each of these code families is subdivided based on the additional procedures performed during the examination, such as a biopsy, foreign body removal, or polyp removal.

When the stomach and duodenum are examined, assign a code for esophagogastroduodenoscopy (43235-43259). Do not

Table 35-8  ENDOSCOPIC CODE FAMILIES FOR THE DIGESTIVE SYSTEM

<table>
<thead>
<tr>
<th>Base Code</th>
<th>Short Description</th>
<th>Code Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>43191</td>
<td>Esophagoscopy, rigid, transoral; diagnostic</td>
<td>43192-43196</td>
</tr>
<tr>
<td>43197</td>
<td>Esophagoscopy, flexible, transnasal; diagnostic</td>
<td>43198</td>
</tr>
<tr>
<td>43200</td>
<td>Esophagoscopy, flexible, transoral; diagnostic</td>
<td>43201-43232</td>
</tr>
<tr>
<td>43235</td>
<td>Esophagogastroduodenoscopy, flexible, transoral; diagnostic</td>
<td>43233-43259, 43270</td>
</tr>
<tr>
<td>43260</td>
<td>Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic</td>
<td>43261-43265, 43274-43278</td>
</tr>
<tr>
<td>44360</td>
<td>Small intestinal endoscopy, enteroscopy beyond second portion of duodenum, not including ileum; diagnostic</td>
<td>44361-44373</td>
</tr>
<tr>
<td>44376</td>
<td>Small intestinal endoscopy, enteroscopy beyond second portion of duodenum, including ileum; diagnostic</td>
<td>44377-44379</td>
</tr>
<tr>
<td>44388</td>
<td>Colonoscopy through stoma; diagnostic</td>
<td>44389-44397</td>
</tr>
<tr>
<td>45300</td>
<td>Proctosigmoidoscopy, rigid; diagnostic</td>
<td>45303-45327</td>
</tr>
<tr>
<td>45330</td>
<td>Sigmoidoscopy, flexible; diagnostic</td>
<td>45331-45345</td>
</tr>
<tr>
<td>45378</td>
<td>Colonoscopy, flexible; diagnostic</td>
<td>45379-45392</td>
</tr>
<tr>
<td>46600</td>
<td>Anoscopy; diagnostic</td>
<td>46604-46615</td>
</tr>
<tr>
<td>47552</td>
<td>Biliary endoscopy, percutaneous via T-tube or other tract; diagnostic</td>
<td>47553-47556</td>
</tr>
<tr>
<td>49320</td>
<td>Laparoscopy, abdomen, peritoneum, and omentum; diagnostic</td>
<td>49321-49325</td>
</tr>
</tbody>
</table>

Source: © PB Resources, Inc. Used with permission. CPT codes only © American Medical Association.
Patient underwent a flexible transoral esophagoscopy because of bleeding. A biopsy was taken and band ligation of esophageal varices was performed.

**CPT/HCPCS Procedure Coding**

**Patient underwent an endoscopic examination of the esophagus and stomach because of suspected reflux disease. The physician does not examine the duodenum because it is not clinically pertinent.**

**Figure 35-7** Example of Coding an EGD with Modifier -52

**Patient underwent an esophagogastroduodenoscopy for peptic ulcers. The physician cannot move the endoscope past the gastroduodenal junction because the patient did not prepare properly and there is still food in the duodenum. The patient is instructed about the necessity of proper preparation. The procedure is rescheduled for next week.**

**Figure 35-8** Example of Coding an EGD with Modifier -53

### Multiple Endoscopy Payment Calculation

<table>
<thead>
<tr>
<th>Code</th>
<th>MPFS RVU</th>
<th>MPFS facility fee</th>
<th>Payment rule</th>
<th>Medicare allowable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endoscopic base code 43200</td>
<td>2.71</td>
<td>$97.08</td>
<td>Do not bill the base code (diagnostic) when therapeutic procedures from the same endoscopy family are performed.</td>
<td></td>
</tr>
<tr>
<td>43205</td>
<td>4.34</td>
<td>$155.47</td>
<td>Pay (allow) the first endoscopy at 100%</td>
<td>$155.47</td>
</tr>
<tr>
<td>43202</td>
<td>3.19</td>
<td>$114.27</td>
<td>Subtract the price of the base code from the second and subsequent codes in the same endoscopy family.</td>
<td>$114.27 - $7.08 = $17.29</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$172.76</td>
</tr>
</tbody>
</table>

**Figure 35-6** Example of Multiple Endoscopy Payment Rule. Source: © PB Resources, Inc. Used with permission.

CPT codes only © American Medical Association.
CHAPTER 35 Digestive System Procedures (40490-49999) 653

Transplants
Each type or organ transplant has three groups of codes for the three main parts of the transplant process: donor organ harvesting, backbench work, and recipient transplantation. Special instructions at the beginning of each transplant category (liver, pancreas, and small intestine) describe the division and use of codes.

For liver transplants, different codes are used for a cadaver hepatectomy (47133) than for a living donor. Codes for a living donor hepatectomy are divided based on which segments of the liver are removed (47140-47142). Codes for backbench preparation and reconstruction are divided based on the extent of work performed (47143-47174). Recipient codes are divided based on whether the transplant is orthotopic (the transplanted organ is placed in the same position as the original organ) or heterotopic (the transplanted organ is placed in a position other than that of the original organ) (47135-47136).

The donor and recipient require different diagnosis codes. A living donor is assigned a Z code indicating the donor status. Diagnosis codes for the organ recipient identify the condition(s) that describes why the transplant is necessary, as well as any co-morbid conditions.

It is common for multiple physicians to be involved in various parts of the transplantation process, so each physician reports the appropriate code(s) for the services personally provided (Figure 35-10, page 654).

Modifier rules vary among the six types of organ transplants. Carefully review the MPFSDB to determine which transplant codes accept modifier -66 Surgical team and which codes require modifier -51 multiple procedures.

Repairs
Repair involves closing an opening—such as a laceration, fistula, or ostomy—or restructuring/reconstructing an anatomic site. This is in contrast to an incision made for drainage or to create an opening and in contrast to an excision, which removes tissue. Most Digestive System subheadings provide a category for Repair. To locate Repair codes in the Index, search for the one of the following:

- the Main Term Repair and a first-level modifying term for the anatomic site
- the name of the procedure, which usually ends with the suffix -plasty, -rraphy, or -pexy
- the name of the anatomic site and a first-level modifying term for Repair

In the Tabular List, review the details of the codes to select the one that describes the details of the procedure. Repair codes may appear as a parent code with several indented codes that describe variations of the procedure (Figure 35-11, page 654).

Adhesions
When performing procedures in the abdominal cavity, surgeons frequently encounter adhesions resulting from scarring from previous surgeries or inflammation. They must loosen, excise, or destroy the adhesions to reach the surgical site. CPT
A living donor match is found for a pediatric patient with congenital biliary atresia who has been on the liver transplant list. The transplant team consists of two surgeons. Surgeon A performs a hepatectomy of the left lateral segment on the living donor. Surgeon B performs the backbench reconstruction with two venous anastomoses and two arterial anastomoses. Both surgeons transplant the liver segment into the patient recipient. The transplant is orthotopic.

**Surgeon A**
- **Living donor:**
  - Z52.6 Liver donor
- **Donor hepatectomy (including cold preservation), from living donor; left lateral segment only (segments II and III)**

**Surgeon B**
- **Backbench reconstruction:**
  - Q44.2 Atresia of bile ducts
  - 47140 Donor hepatectomy (including cold preservation), from living donor; left lateral segment only (segments II and III)
- **X 2 Backbench reconstruction of cadaver or living donor liver graft prior to allotransplantation; arterial anastomosis, each**
  - 47146-51 X 2 Backbench reconstruction of cadaver or living donor liver graft prior to allotransplantation; venous anastomosis, each; -51 Multiple procedures

**Surgeon A and Surgeon B**
- **Transplant recipient:**
  - Q44.2 Atresia of bile ducts
  - 47135-66 Liver allotransplantation; orthotopic, partial or whole, from cadaver or living donor, any age; -66 Surgical team

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**Guided Example of Assigning Digestive System Procedure Codes**

To practice skills for assigning codes for the Digestive System, continue with the guided example from earlier in the chapter about a patient who was seen for a colonoscopy. Follow along in your CPT manual as Jill Hynes, CPC, assigns codes. Check off each step after you complete it.

- **First**, Jill confirms the procedures: **colonoscopy, polypectomy, hemorrhoidectomy**.
- **Jill searches the Index for the Main Term Colonoscopy.**
  - She locates the first-level modifying term **Flexible**.
  - She locates the second-level modifying term **Removal**, then **Polyp**.
  - She identifies the codes to verify: **45384,45385**.
- **Jill turns to the Tabular List to review and verify codes 45384-45385.**
  - She notices that **45384-45385** are indented codes, so she traces back through the Tabular List to locate the parent code, **45378**.
  - She reads the common part of code **45378** that appears before the semicolon: **Colonoscopy, flexible**. This code describes the basic colonoscopy provided, which extended from the anus to the cecum. She reads the second
Jill turns her attention to the hemorrhoidectomy. She reads the indent description for code 45384, with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps and confirms that this accurately describes the two polyps found in the sigmoid colon.

Jill returns to the codes for the polypectomies: 45385, with removal of tumor(s), polyp(s), or other lesion(s) by snare technique and confirms that this accurately describes the polypl found in the transverse colon.

Jill checks for instructional notes in the Tabular List. She looks for instructional notes after the parent code, 45378, and the indented codes she plan to use, 45384 and 45385, and finds none.

Jill refers to the beginning of the category Endoscopy, which appears before code 45300, and reviews the special instructions that include definitions of endoscopic procedures on the colon.

Jill understands that even though a polypectomy occurred in the sigmoid segment of the colon, she should not report a sigmoidoscopy; she should assign codes based on the farthest extent of the procedure, which was the entire length of the colon from the rectum to the cecum.

She also reads the statement Surgical endoscopy always includes diagnostic endoscopy. This tells her that she should not use a separate code for the diagnostic portion of the procedure in addition to the codes for the polypectomies.

She checks for special instructions at the beginning of the Digestive System subsection, before code 40490, and finds none.

She reviews the Surgery section guidelines that appear before code 10021 but does not find any information specific to endoscopies.

Jill returns to the codes for the polypectomies: 45384 and 45385.

Because these codes share the same parent code (45378), she needs to determine whether they can both be reported.

She confirms that there were no instructional notes directing her to not use the codes together.

She recalls the multiple endoscopy rule that permits multiple codes from the same code family to be reported together. Both of these codes belong to the code family with the base code 43578, so she knows that she can report both codes.

Jill searches the Index for the Main Term Hemorrhoidectomy.

- She locates the first-level modifying term Ligation.
- She identifies the code range to verify: 46221, 46945-46946.

Jill turns to the Tabular List to review and verify the codes.

- First she locates code 46221 and notices that codes 46945-46946 appear next because they are resequenced codes. She likes being able to review and compare all three codes together.
- She reads the description for code 46221, Hemorrhoidectomy, internal, by rubber band ligation(s). This sounds like the right description but she checks the other codes to be certain.
- She notices that code 46945 is a parent code for 46946, and the common descriptor is Hemorrhoidectomy, internal, by ligation other than rubber band;
- She double checks the documentation and confirms the ligation method: Hemorrhoids were ligated with rubber bands. The documentation confirms that 46221 is the correct code because the code specifies by rubber band ligation.

Jill reviews the Tabular List for instructional notes and finds two.

- The first instructional note appears after code 46221: (Do not report 46221 in conjunction with 45350, 45398). This note does not apply because she already determined that she is not reporting code 45350 or 45398.
- The second instructional note appears after code 46946: (Do not report 46221, 46945, and 46946, in conjunction with 0249T.) This note does not apply because she is not using code 0249T.

Jill also reviews the special instructions at the beginning of the subheading Anus, before code 46020. The special instructions define the codes to use for various types of hemorrhoids and confirm that she selected the correct code for ligation of internal hemorrhoids.

Jill reviews the procedure codes she has assigned for this case.

- 46221 Hemorrhoidectomy, internal, by rubber band ligation(s)
- 45384 Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps
- 45385 Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique

Next, Jill must determine what modifiers are needed and how to sequence the codes.
Exercise 35.3  Assigning Codes for Digestive System Procedures

Instructions: Read the mini-medical-record of each patient’s encounter. Review the information abstracted in Exercise 35.2 for questions 1–3. For questions 4–6, do the abstracting on your own. Assign CPT procedure codes using the Index and Tabular List. Write the code(s) on the line provided.

1. OUTPATIENT HOSPITAL  Gender: M  Age: 57
   Preprocedure diagnosis: screening colonoscopy
   Procedure: flexible colonoscopy, 2 polyps in descending segment, 1 polyp in transverse segment, remainder of colon to cecum was clear. Polyps were removed with bipolar cautery and submitted to pathology
   Postprocedure diagnosis: adenomatous polyps per pathology report
   Tip: Apply a modifier to identify this as a preventive service.
   1 CPT Code _______________________

2. INPATIENT HOSPITAL  Gender: F  Age: 33
   Diagnosis: morbid obesity, BMI = 43
   Procedure: laparoscopic gastric bypass and Roux-en-Y gastroenterostomy (100 cm)
   Tip: Identify the meaning of gastroenterostomy to determine the Roux-en-Y sites.
   1 CPT Code _______________________

3. INPATIENT HOSPITAL  Gender: F  Age: 48
   Diagnosis: squamous cell carcinoma of the esophagus
   Procedure: near-total esophagectomy, thoracotomy, end-to-side pharyngogastrostomy (restructure of the pathway from the throat to the stomach after esophagectomy)
   1 CPT Code _______________________

4. EMERGENCY DEPT  Gender: M  Age: 2
   Reason for encounter: Mother brings in her son, who swallowed a toy piece
   Procedure: rigid esophagoscopy through the mouth, retrieved plastic toy piece, no damage or laceration apparent
   Diagnosis: esophagoscopy with foreign body removal
   Tip: Abstract this procedure on your own before attempting to assign codes.
   1 CPT Code _______________________

5. EMERGENCY DEPT  Gender: F  Age: 26
   Diagnosis: abscess under the tongue
   Procedure: superficial sublingual incision and drainage
   Tip: Abstract this procedure on your own. Do not confuse the sublingual site within the mouth with the sublingual salivary gland.
   1 CPT Code _______________________

6. LOCATION  Gender: M  Age: 36
   Preprocedure diagnosis: rectal mass
   Procedure: transsacral proctotomy to excise rectal tumor
   Postprocedure diagnosis: stage I carcinoma of the rectum
   Tip: Abstract this procedure on your own before attempting to assign codes.
   1 CPT Code _______________________

ARRANGING CODES FOR DIGESTIVE SYSTEM PROCEDURES
When more than one procedure is performed during an operative session, coders must be attentive to modifiers and how to arrange (sequence) codes. The order of codes sometimes determines the modifiers needed. Some modifiers can be assigned at the same time the code is assigned, and some modifiers cannot be assigned until the codes are sequenced. Certain modifiers are required even when only one procedure is performed.

In general, multiple surgical procedures are sequenced in descending order of RVU, which corresponds to the complexity and price of the procedure. RVUs are provided in the MPFSDB and in most encoders and billing software programs.

Modifiers
Modifiers that have a special application for specific Digestive System codes have been discussed throughout this chapter and examples have been provided. This section summarizes those
Modifiers and introduces some new ones. These are not the only modifiers that can be used with Digestive System codes. Refer to Appendix A of the CPT manual and to Chapters 29 and 31 of this text for more information about modifiers.

-33 Preventive Service
Modifier -33 identifies certain procedures, such as a screening colonoscopy, as preventive care services under the Patient Protection and Affordable Care Act (PPACA). The United States Preventive Services Task Force (USPSTF) assigns one of five letter grades (A, B, C, D, or I) to recommend the likelihood of the net benefit of providing a preventive service. The PPACA requires that services rated as A or B be covered in full by private health plans. Copayments, coinsurances, and deductibles are not owed for these services under PPACA.

When a service on the approved list does not have a CPT code specifically described as preventive, assign modifier -33 to indicate that the service was provided for preventive care. For example, CPT provides codes for preventive medicine E/M visits, so those codes do not need modifier -33. However, CPT does not provide a dedicated code for screening colonoscopies, so the code for a diagnostic colonoscopy (45378) must be reported. Append modifier -33 to identify the colonoscopy as preventive in nature. The insurance company will waive the patient's copayment, coinsurance, and deductible and pay 100% of the allowed fee to the provider (Figure 35-12). A copayment may still apply if preventive care is not the primary purpose of the office visit or other services that require copayment are provided.

**SUCCESS STEP**

The USPSTF list of A and B services is updated annually and is available at [http://www.uspreventiveservicestaskforce.org/](http://www.uspreventiveservicestaskforce.org/). Other services eligible for modifier -33 include certain routine immunizations recommended by the CDC and certain preventive care and screening services for children and women supported by the Health Resources and Services Administration (HRSA).

-51 Multiple Procedures
When multiple procedures are performed at the same operative session by the same provider, modifier -51 indicates that payment should be reduced on the second and subsequent procedures because of the efficiencies gained. Procedures should be ordered in descending order by RVU, so that the most extensive procedure is paid in full and payment is reduced for the less extensive procedures. The standard Medicare rule for payment of multiple surgeries is to allow the full amount of the first procedure and allow the second through fifth procedures at 50% of the Medicare Physician Fee Schedule (MPFS) rate. Multiple procedures beyond six are priced by report (based on a report submitted by the physician). Private payers establish their own guidelines for payment of multiple procedures.

Do not append modifier -51 to add-on codes or to codes with the symbol (modifier-51 exempt). The MPFSDB and most encoders identify the codes for which this modifier is applicable.

-52 Reduced Services
The subcategory Esophagogastroduodenoscopy provides special instructions regarding modifier -52 that appear before code 43235. When the duodenum is not examined because it is not judged clinically relevant, append modifier -52. Likewise, if the duodenum cannot be examined for some other reason, such as retention of gastric contents, and a repeat examination is not planned, append modifier -52. Reduce the fee to be billed based on the extent of the service actually provided. Use of this modifier is required.

Special instructions at the beginning of the Endoscopy category for Colon and Rectum provide further direction on modifier -52. There are times when a therapeutic colonoscopy cannot proceed all the way to the cecum or small intestine, usually due to retained fecal matter. In this situation, append modifier -52 to the therapeutic colonoscopy code. Submit appropriate documentation with the claim to explain the reason the procedure was reduced.

-53 Discontinued Procedure
The special instructions for the subcategory Esophagogastroduodenoscopy also include directions about modifier -53. In...
the situation that the duodenum cannot be examined and a repeat examination is planned, append modifier -53.

CPT special instructions at the beginning of the Endoscopy category for Colon and Rectum provide additional guidance regarding this modifier. When a screening colonoscopy cannot proceed all the way to the cecum or small intestine, report the code for the full colonoscopy and append modifier -53 to indicate that the procedure could not be completed. Use of this modifier is required. Reduce the fee to be billed based on the extent of the service actually provided. Submit appropriate documentation with the claim to explain the reason the procedure was discontinued.

-59 Distinct Procedural Service
Modifier -59 is used to clarify that two procedures that might be considered to be bundled were performed on distinct sites or lesions or through distinct procedures. When the NCCI assigns the indicator 1 to a pair of surgical codes, modifier -59 identifies that two separate services were provided. A common example of this with Digestive System procedures is when multiple therapeutic procedures from the same endoscopic code family are performed, as described under the multiple endoscopy rule discussed earlier in this chapter. Both indented codes are reported and modifier -59 is appended to the second code of the pair.

In 2015, the Centers for Medicare and Medicaid (CMS) introduced four HCPCS modifiers to selectively identify subsets of procedures that would otherwise be reported with modifier -59. They are referred to as X modifiers and describe specific reasons that services should be considered as separate and distinct. When appropriate, use one of the following modifiers instead of modifier -59 for Medicare patients. Check with other payers to learn how they want these modifiers applied:

- **XE Separate Encounter**—a service that is distinct because it occurred during a separate encounter
- **XS Separate Structure**—a service that is distinct because it was performed on a separate organ/structure
- **XP Separate Practitioner**—a service that is distinct because it was performed by a different practitioner
- **XU Unusual Non-Overlapping Service**—the use of a service that is distinct because it does not overlap usual components of the main service

-66 Surgical Team
Surgical teams are used for liver and pancreas transplants. Each surgeon reports modifier -66 on the code for the recipient transplantation. Payment is prorated among the surgeons based on the role of each documented in the operative report. Surgical teams are not paid for all components of a transplant. For example, harvesting a cadaver organ or backbench preparation may not qualify for a surgical team. Intestinal transplants do not qualify for a surgical team. In some cases, a cosurgeon (modifier -62) or assistant surgeon (modifier -80) is allowed. The MPFSDB identifies the modifiers accepted for each code. Many encoders and billing software programs also provide modifier information.

**PT Colorectal Cancer Screening Test, Converted to Diagnostic Test or Other Procedure**
Assign this HCPCS Level II modifier for Medicare patients when a screening colonoscopy or other colorectal cancer screening test is converted to a diagnostic or therapeutic procedure. This includes any time that a treatment is performed during the screening, including removing a polyp, cautery, dilation, and so on.

**Guided Example of Arranging Digestive System Procedure Codes**
To practice skills for assigning modifiers and arranging codes for procedures of the Digestive System, continue with the example from earlier in the chapter about the patient who was seen for a colonoscopy. Follow along in your CPT manual as Jill Hynes, CPC, arranges the codes. Check off each step after you complete it.

- **First, Jill confirms the CPT codes.**
  - 46221 Hemorrhoidectomy, internal, by rubber band ligation(s)
  - 45384 Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps
  - 45385 Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique

- **Jill reviews the RVUs for each code.** She selects the facility RVUs because the physician is performing the procedure at an outpatient hospital facility rather than at a location he personally owns and operates. The RVU schedule defines facility RVU as a facility owned by a third party (other than the physician). Facility RVUs are used when the physician performing the service does not own the facility where the procedure is performed. Nonfacility RVUs are used when the physician performing the service owns the location where the procedure is performed. The facility RVUs and pricing do not reimburse the physician for facility-related costs, so they are lower than nonfacility RVUs and pricing, which reimburse the physician for facility-related costs, such as those for the building, equipment, and staff. (Note: Although this is not a Medicare patient, the MPFSDB is used because many private payers use Medicare RVUs and assign their own prices. In the workplace, follow the rules of each payer.)
  - Code 45385 for the polypectomy using the snare technique is the most extensive service, with a facility RVU of 8.78. She sequences this code first.
  - Code 45384 for the polypectomy using hot forceps is the second most extensive service, with a facility RVU of 7.74. She sequences this code second. Although two polyps were removed, the code description identifies the entire procedure. It does not provide direction to assign multiple occurrences of the code for each polyp removed, so she reports this code only once.
Code 46221 requires modifier -51 Multiple procedures because the hemorrhoidectomy was performed during the same session as the colonoscopy. The payment will be reduced to 50% of the usual fee.

Jill finalizes the procedure codes, modifiers, and sequencing for this case (Figure 35-13):

1. Code 45384 Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps
2. Code 45385-59 Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique; -59 Distinct procedural service
3. Code 46221-51 Hemorrhoidectomy, internal, by rubber band ligation(s); -51 Multiple procedures

Jill also assigns and sequences the ICD-10-CM diagnosis codes that support the need for the service.

1. D12.3 Benign neoplasm of transverse colon
2. D12.5 Benign neoplasm of sigmoid colon
3. K64.0 First degree hemorrhoids

Code 46221 for the hemorrhoid ligation is the least extensive service, with a facility RVU of 5.46. She sequences this code third.

Jill reviews the codes to determine the need for modifiers. (Refer to Table 30-1 Key Criteria for Abstracting CPT Modifiers or Appendix A in the CPT manual.)

Code 45385 does not require any modifiers because it is the primary procedure performed. She will link a diagnosis code for a polyp of the transverse colon to support this procedure.

Code 45384 requires modifier -59 Distinct procedural service to clearly identify that the hot forceps polypectomy was a different lesion than the snare polypectomy. This will be clarified further when she links the diagnosis code for a polyp of the sigmoid colon. This procedure will be paid under the multiple endoscopy rule, not the multiple procedures rule, so modifier -51 Multiple procedures is not needed. (Some private payers might require modifier -51 in addition to modifier -59.)

Code 46221 requires modifier -51 Multiple procedures because the hemorrhoidectomy was performed during the same session as the colonoscopy. The payment will be reduced to 50% of the usual fee.

Jill finalizes the procedure codes, modifiers, and sequencing for this case (Figure 35-13):

1. 45384 Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps
2. 45385-59 Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique; -59 Distinct procedural service
3. 46221-51 Hemorrhoidectomy, internal, by rubber band ligation(s); -51 Multiple procedures

Jill also assigns and sequences the ICD-10-CM diagnosis codes that support the need for the service.

1. D12.3 Benign neoplasm of transverse colon
2. D12.5 Benign neoplasm of sigmoid colon
3. K64.0 First degree hemorrhoids

Exercise 35.4 Arranging Codes for Digestive System Procedures

Instructions: Read the mini-medical-record of each patient’s encounter, and review the information abstracted in Exercise 35.2 for questions 1-3. For questions 4-6, do the abstracting on your own. Assign CPT codes and modifiers using the Index and Tabular List, and arrange the codes in proper sequence. Write the code(s) on the line provided.

1. OUTPATIENT HOSPITAL  Gender: M  Age: 64  
   Diagnosis: initial incarcerated incisional hernia  
   Procedure: incarcerated incisional hernia repair with mesh  
   2 CPT Codes _________________

2. OUTPATIENT HOSPITAL  Gender: M  Age: 61  
   Preoperative diagnosis: melena, hematemesis  
   Procedure: EGD was initiated with flexible scope through the mouth. Identified bleeding ulcers in esophagus and duodenum, which were successfully cauterized. Features of chronic gastritis were noted. No masses or hiatal hernia. Obtained biopsy from the antrum. Biopsies submitted to pathology for H&E  
   (continued)
E/M Coding for Gastroenterology


Gastroenterologists use the multisystem examination criteria (Figure 35-14). To determine the appropriate E/M code, coders must review the documentation in detail and identify the specific elements documented.

- To translate the documentation into the E/M requirements for the history, refer back to Chapter 31, “Evaluation and Management Services (99201-99499),” Tables 31-7 to 31-10, or the 1997 DG.
- To determine the requirements for an examination, refer to Figure 35-14 or to the general multisystem examination in the 1997 DG.

Guided Example of E/M Coding for Gastroenterology

Refer to Figure 35-15 Gastroenterology Encounter (page 663) to practice skills for abstracting and assigning E/M codes. Follow along as fictitious coder Jill Hynes, CPC, abstracts the procedure. Check off each step after you complete it.

- First, Jill needs to establish the category of service so she can determine the information needed to abstract and assign the code.
- What is the setting? Office.
### System/Body Area | Elements of Multi-System Examination
--- | ---
Constitutional | Measurement of any three of the following seven vital signs:  
- 1) sitting or standing blood pressure,  
- 2) supine blood pressure,  
- 3) pulse rate and regularity,  
- 4) respiration,  
- 5) temperature,  
- 6) height,  
- 7) weight (May be measured and recorded by ancillary staff)  
General appearance of patient (eg. development, nutrition, body habitus, deformities, attention to grooming)

Eyes | Inspection of conjunctivae and lids  
| Examination of pupils and irises (eg. reaction to light and accommodation, size and symmetry)  
| Ophthalmoscopic examination of optic discs (eg. size, C/D ratio, appearance) and posterior segments (eg. vessel changes, exudates, hemorrhages)

Ears, Nose, Mouth and Throat | External inspection of ears and nose (eg. overall appearance, scars, lesions, masses)  
| Otoscopic examination of external auditory canals and tympanic membranes  
| Assessment of hearing (eg. whispered voice, finger rub, tuning fork)  
| Inspection of nasal mucosa, septum and turbinates  
| Inspection of lips, teeth and gums  
| Examination of oropharynx: oral mucosa, salivary glands, hard and soft palates, tongue, tonsils and posterior pharynx

Neck | Examination of neck (eg. masses, overall appearance, symmetry, tracheal position, crepitus)  
| Examination of thyroid (eg. enlargement, tenderness, mass)

Respiratory | Assessment of respiratory effort (eg. intercostal retractions, use of accessory muscles, diaphragmatic movement)  
| Percussion of chest (eg. dullness, flatness, hyperresonance)  
| Palpation of chest (eg. tactile fremitus)  
| Auscultation of lungs (eg. breath sounds, adventitious sounds, rubs)

Cardiovascular | Palpation of heart (eg. location, size, thrills)  
| Auscultation of heart with notation of abnormal sounds and murmurs  
| Examination of carotid arteries (eg. pulse amplitude, bruits)  
| Abdominal aorta (eg. size, bruits)  
| Femoral arteries (eg. pulse amplitude, bruits)  
| Pedal pulses (eg. pulse amplitude)  
| Extremities for edema and/or varicosities

Chest (Breasts) | Inspection of breasts (eg. symmetry, nipple discharge)  
| Palpation of breasts and axillae (eg. masses or lumps, tenderness)

Gastrointestinal (Abdomen) | Examination of abdomen with notation of presence of masses or tenderness  
| Examination of liver and spleen  
| Examination for presence or absence of hernia  
| Examination (when indicated) of anus, perineum and rectum, including sphincter tone, presence of hemorrhoids, rectal masses  
| Obtain stool sample for occult blood test when indicated

Genitourinary | Male:  
| Examination of the scrotal contents (eg. hydrocele, spermatocele, tenderness of cord, testicular mass)  
| Examination of the penis  
| Digital rectal examination of prostate gland (eg. size, symmetry, nodularity, tenderness)  
| Female:  
| Pelvic examination (with or without specimen collection for smears and cultures), including  
| Examination of external genitalia (eg. general appearance, hair distribution, lesions) and vagina (eg. general appearance, estrogen effect, discharge, lesions, pelvic support, cystocele, rectocoele)  
| Examination of urethra (eg. masses, tenderness, scarring)  
| Examination of bladder (eg. fullness, masses, tenderness) Cervix (eg. general appearance, lesions, discharge)  
| Uterus (eg. size, contour, position, mobility, tenderness, consistency, descent or support)  
| Adnexa/parametria (eg. masses, tenderness, organomegaly, nodularity)

---

Figure 35-14 | 1997 DG for Multisystem Examination. Source: Centers for Medicare and Medicaid Services, 1997 Documentation Guidelines for Evaluation and Management Services (with formatting adjustments).
### 662 SECTION FOUR  CPT/HCPCS Procedure Coding

<table>
<thead>
<tr>
<th>Lymphatic</th>
<th>Palpation of lymph nodes in <strong>two or more</strong> areas:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neck</td>
<td></td>
</tr>
<tr>
<td>Axillae</td>
<td></td>
</tr>
<tr>
<td>Groin</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Musculoskeletal</th>
<th>Examination of <strong>gait and station</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inspection and/or palpation of <strong>digits and nails</strong> (eg, clubbing, cyanosis, inflammatory conditions, petechiae, ischemia, infections, nodes)</td>
</tr>
<tr>
<td></td>
<td>Examination of joints, bones and muscles of <strong>one or more</strong> of the following six areas:</td>
</tr>
<tr>
<td></td>
<td>1) head and neck;</td>
</tr>
<tr>
<td></td>
<td>2) spine, ribs and pelvis;</td>
</tr>
<tr>
<td></td>
<td>3) right upper extremity;</td>
</tr>
<tr>
<td></td>
<td>4) left upper extremity;</td>
</tr>
<tr>
<td></td>
<td>5) right lower extremity; and</td>
</tr>
<tr>
<td></td>
<td>6) left lower extremity.</td>
</tr>
<tr>
<td></td>
<td>The examination of a given area includes:</td>
</tr>
<tr>
<td></td>
<td>- Inspection and/or palpation with notation of presence of any <strong>misalignment</strong>, asymmetry, crepitation, defects, tenderness, masses, effusions</td>
</tr>
<tr>
<td></td>
<td>- Assessment of <strong>range of motion</strong> with notation of any pain, crepitation or contracture</td>
</tr>
<tr>
<td></td>
<td>- Assessment of <strong>stability</strong> with notation of any dislocation (luxation), subluxation or laxity</td>
</tr>
<tr>
<td></td>
<td>- Assessment of muscle <strong>strength</strong> and <strong>tone</strong> (eg, flaccid, cog wheel, spastic) with notation of any atrophy or abnormal movements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skin</th>
<th>Inspection of skin and subcutaneous tissue (eg, rashes, lesions, ulcers)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Palpation of skin and subcutaneous tissue (eg, induration, subcutaneous nodules, tightening)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Neurologic</th>
<th>Test <strong>cranial nerves</strong> with notation of any deficits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Examination of <strong>deep tendon reflexes</strong> with notation of pathological reflexes (eg, Babinski)</td>
</tr>
<tr>
<td></td>
<td>Examination of <strong>sensation</strong> (eg, by touch, pin, vibration, proprioception)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Psychiatric</th>
<th>Description of the patient’s <strong>judgment and insight</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brief assessment of mental status including:</td>
</tr>
<tr>
<td></td>
<td><strong>Orientation</strong> to time, place and person</td>
</tr>
<tr>
<td></td>
<td>Recent and remote <strong>memory</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Mood</strong> and affect (eg, depression, anxiety, agitation, hypomania, lability)</td>
</tr>
</tbody>
</table>

### Table

<table>
<thead>
<tr>
<th>Total # Bullets Performed and Documented</th>
<th># of Elements Performed and Documented</th>
<th>Level of Examination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1–6</td>
<td>Problem focused</td>
</tr>
<tr>
<td></td>
<td>6+</td>
<td>Expanded problem focused</td>
</tr>
<tr>
<td></td>
<td>6 organ systems/body areas @ 2 bullet points each OR: 12 elements in at least 2 organ systems/body areas</td>
<td>Detailed</td>
</tr>
<tr>
<td></td>
<td>ALL</td>
<td>Comprehensive (Perform all elements identified by a bullet in at least nine organ systems or body areas and document at least two elements identified by a bullet from each of nine areas/systems)</td>
</tr>
</tbody>
</table>

### Figure 35-14 (continued)

- **What is the type of service?** The encounter qualifies as a consultation because the gastroenterologist’s advice is requested by the referring physician and the gastroenterologist sends a report back to the referring physician at the conclusion of the encounter.

- **What is the code range?** Jill refers to the CPT Index and looks up the Main Term **Evaluation and Management** and the subterm **Consultation**. The code range listed is 99241-99255.

- **How many key components are required?** Jill refers to the code range in the Tabular List and notices that the Consultation subheading is divided into two categories: **Office or other outpatient** and **Inpatient**. She selects the **Office or other outpatient** category and reads the code description of the first code, which states **Office consultation for a new or established patient, which requires these 3 key components.** All codes in the category have the same requirements for key components. This tells her that all three key components must meet or exceed the levels listed in the code (3/3).

  - Next, Jill identifies the level of history.

- **What is the level of HPI?** The HPI is **extended** because seven elements are documented.
GASTROENTEROLOGY ENCOUNTER

CHIEF COMPLAINT: Nausea and abdominal pain after eating.

HPI: The patient is a 33 year old white female, came to the office. She is referred to me by her internal medicine physician for evaluation for a cholecystectomy. Patient complains of pain after eating fatty food, dark colored urine, subjective chills, subjective low-grade fever, nausea and sharp stabbing pain. Symptoms started about 2 months ago. Symptoms are relieved when lying on right side and with antacids. Prior workup by internist includes abdominal ultrasound positive for cholelithiasis without CBD obstruction. Laboratory studies include elevated total bilirubin and elevated WBC.

PAST MEDICAL HISTORY: No significant past medical problems.

PAST SURGICAL HISTORY: Diagnostic laparoscopic exam for pelvic pain/adhesions.

ALLERGIES: No known drug allergies.

CURRENT MEDICATIONS: No current medications.

FAMILY MEDICAL HISTORY: There is no significant, contributory family medical history.

OB GYN HISTORY: LMP: 4/03/YY. Gravida: 2. Para: 2. Date of last pap smear: 8/25/YY.

REVIEW OF SYSTEMS:

Cardiovascular: Denies angina, MI history, dysrhythmias, palpitations, murmur, pedal edema, orthopnea, TIs, stroke.

Pulmonary: Denies cough, hemoptysis, wheezing, dyspnea, bronchitis, emphysema, TB exposure or treatment.

Neurological: Denies seizures and ataxia.

Skin: Denies scaling, rashes, blisters, photosensitivity.

PHYSICAL EXAMINATION:

Appearance: Healthy appearing. Moderately overweight.


Lymphatic: No apparent cervical, supraclavicular, axillary or inguinal adenopathy.

Breast: Normal appearing breasts bilaterally, nipples everted. No nipple discharge, skin changes.

Chest: Normal breath sounds heard bilaterally without rales or rhonchi. No pleural rubs. No scars.

Cardiovascular: Regular heart rate and rhythm without murmur or gallop. No signs of edema.

Abdominal: Bowel sounds are high pitched.

Extremities: Lower extremities are normal in color, touch and temperature. No ischemic changes are noted. Range of motion is normal.

Skin: Normal color, temperature, turgor and elasticity; no significant skin lesions.

IMPRESSION: Abdominal pain due to acute cholecystitis.

DISCUSSION: Reviewed laparoscopic cholecystectomy procedure sheet and answered questions. The patient gave verbal and written consent for the procedure.

PLAN: We will proceed with laparoscopic cholecystectomy with intraoperative cholangiogram. Report sent to the referring physician with my assessment and recommendation.

MEDICATIONS PRESCRIBED: None.

PROCEDURES SCHEDULED: Laparoscopic cholecystectomy scheduled in 2 weeks on 5/11/YY at outpatient surgery center.

KEY: HPI History of the present illness PFSH Past, family, and social history MDM Medical decision making

Figure 35-15  Gastroenterology Encounter. Source: © PB Resources, Inc. Used with permission.

- What is the level of ROS? The ROS is extended because four systems are documented.
- What is the level of PFSH? The PFSH is complete because three elements are documented.
- Based on these factors, what is the overall level of history? The level of history is detailed because the lowest of the three factors (HPI, ROS, and PFSH) determines the history level. The HPI and PFSH qualify for a comprehensive history, but the ROS qualifies for only a detailed history.

Jill refers to the multisystem examination in the 1997 DG (Figure 35-14) to abstract information needed to determine the level of the examination.

- What is the level of examination? The level of examination is detailed. Nineteen (19) elements in 4 organ systems
are documented, which exceeds the requirement of 12 or more elements in 2 organ systems for a detailed examination. A comprehensive examination requires documentation of at least two elements identified by a bullet from each of nine systems, which they are not.

Jill determines the level of medical decision making. (Refer to Table 31-12 Medical Decision Making Levels.)

- What is the level of complexity of the number of diagnoses or management options based on the presenting problem? The level is moderate because there is a new presenting problem without a workup by this provider. The workup was done by the referring provider.

- What is the amount and/or complexity of data to be reviewed? The level is Straightforward because diagnostic data were reviewed.

- What is the level of risk of significant complications, morbidity, and/or mortality? She reviews each column in the Table of Risk in the 1997 DG and determines that the level of risk is Moderate because the patient has an acute illness with systemic symptoms and elective major surgery is agreed to. The patient has no identified risk factors. The single highest element in the Table of Risk determines the overall risk. Both of these risk elements are classified as Moderate.

- Based on these factors, what is the overall level of medical decision making? The medical decision making is Moderate complexity. At least two of the three MDM factors are required to qualify for a specific level of MDM. Two of the three MDM factors meet or exceed moderate decision making.

Now Jill is ready to assign the code for the GI encounter. The exercise that follows guides you through additional abstracting skills and allows you to assign the correct code.

**CODING CAUTION**

Verify that the physician signature is present in the medical record and is legible. If it is not, the physician must sign an attestation statement, which identifies the author. If the documentation for an encounter is not signed or attested to, Medicare considers the claim to be insufficiently documented and can deny or recoup payment.

---

**CODING PRACTICE**

**Exercise 35.5 Evaluation and Management Coding for Gastroenterology**

*Instructions: Refer to the 1997 Documentation Guidelines for Evaluation and Management Services (available at [www.cms.gov](http://www.cms.gov)) or Chapter 31, “Evaluation and Management Services (99201-99499)” (Tables 31-7 to 31-12), in this text. Answer the following questions about the Gastroenterology Encounter (Figure 35-15).

1. a. Which elements of the HPI are documented? Circle all that apply. Location, Quality, Severity, Duration, Timing, Context, Modifying factors, Associated signs and symptoms
   b. How many elements are documented? ______
   c. What is the level of HPI? ______

2. a. Which systems are reviewed in the ROS? Circle all that apply. Constitutional, Allergic/immunologic, CV, Endocrine, ENT/M, Eyes, GI, GU, Hemic/lymphatic, MS, Neurologic, Psychiatric, Respiratory, Skin/breast
   b. How many systems are documented? ______
   c. What is the level of ROS? ______

3. a. Which PFSH elements are documented? Circle all that apply. Past medical, Family, Social
   b. What is the level of PFSH? ______
   c. What is the overall level of history? (The lowest history factor—HPI, ROS, or PFSH—determines the level of history.) ______

4. a. Refer to Figure 35-14 (1997 DG for Multisystem Examination). Which bulleted items are documented for the examination? (Check off the items documented.)
   b. How many bulleted items are documented? ______
   c. What is the level of the examination? ______

5. Refer to Table 31-12 Medical Decision Making Levels or the 1997 DG.
   a. What is the MDM level for the number of diagnoses or management options? ______
   b. What is the MDM level for the amount and/or complexity of data to be reviewed? ______
   c. Refer to the Table of Risk in the 1997 DG. Which elements of risk are documented for each risk factor?
      1. Presenting problem: ______
      2. Diagnostic procedures ordered: ______
      3. Management options selected: ______
   d. What is the level of risk? ______
   e. What is the overall level of MDM? (2 of the 3 MDM factors are needed to determine the overall level.) ______
6. a. What is the setting? ________________
b. What type of service? ________________
c. What is the code range? ________________
d. How many key components are required? ________________
e. What is the level of history? ________________
f. What is the level of examination? ________________

g. What is the level of medical decision making? ________________
h. What is the correct code? ________________
i. Is modifier -57 required? ________________ Why or why not? ________________

7. Abstract, assign, and arrange (sequence) the diagnosis codes that support the E/M code.

1 ICD-10-CM ________________

CHAPTER SUMMARY

In this chapter you learned that:
- Because the digestive, or alimentary, tract consists of and connects several anatomical sites, medical terms frequently contain word roots of multiple sites, which are combined with a procedural suffix.
- The CPT Surgery subsection Digestive System (40490-49999) contains 18 subheadings divided by anatomical site. Anatomical sites are arranged by the order in which they occur in the alimentary (digestive) tract, beginning with the lips and ending with the anus.
- Abstracting digestive system procedures requires special attention to the detailed anatomy of the digestive system and the order of the digestive organs within the GI tract, starting from either end.
- Coding for tonsillectomy, appendectomy, anastomosis, endoscopy, transplants, and repairs reinforces basic coding skills that you can use throughout the CPT manual.
- The order of codes sometimes determines the modifiers needed. Some modifiers can be assigned at the same time the code is assigned, and some cannot be assigned until the codes are sequenced. Certain modifiers are required even when only one procedure is performed.
- Gastroenterologists use the multisytem examination criteria because the 1997 Documentation Guidelines for Evaluation and Management Services do not provide guidelines for a single-system gastroenterology examination.
- The Digestive System does not have any subsection guidelines or special instructions, but some subheadings and categories provide definitions and coding information. A special instruction that appears in each endoscopy or laparoscopy category directs that a surgical endoscopy or laparoscopy always includes a diagnostic one.

CONCEPT QUIZ

Take a moment to look back at the digestive system and solidify your skills. Try to answer the questions from memory first, then refer to the discussion in this chapter if you need a little extra help.

Completion

Instructions: Write the term that answers each question based on the information you learned in this chapter. Choose from the list below. Some choices may be used more than once and some choices may not be used at all.

anastomosis lap band
antrectomy lithotripsy
colostomy Nissen fundoplication
endoscopic sclerotherapy paracentesis
ERCP Roux-en-Y
gastric bypass transthoracic esophagectomy
herniorrhaphy vagotomy
ileostomy

1. During a(n) ________________, the upper part of the stomach is wrapped around the lower esophageal sphincter (LES).
2. A(n) ________________ may be created to relieve a bowel blockage or obstruction in the large intestine.
3. ________________ is a surgical puncture of a body cavity to remove excess fluid.
4. Gastrojejunostomy is another term used to describe a(n) ________________
5. A(n) ________________ may be performed to repair bulging of internal organs or tissues through a defect in the wall of a body cavity.
6. The treatment of Barrett esophagus may include a(n) ________________
7. High-frequency sound waves, or ________________, are used to break up gallstones.
8. A(n) ________________ is the removal of the distal portion of the stomach due to gastric ulcers.

(continued)
9. To reestablish gastrointestinal continuity after excision of portions of one or more organs, a(n) ____________ may be performed.

10. When treating peptic ulcer disease, an open or laparoscopic ____________ may be performed to relieve acid secretion.

**Multiple Choice**

*Instructions:* Circle the letter of the best answer to each question based on the information you learned in this chapter.

1. What HCPCS Level II code is used for a screening colonoscopy on a Medicare patient at high risk for colorectal cancer?
   - A. G0104
   - B. G0105
   - C. G0107
   - D. G0121

2. What procedure is an examination of the rectum, sigmoid colon, and part of the descending colon?
   - A. Proctosigmoidoscopy
   - B. Anoscopy
   - C. Sigmoideoscopy
   - D. Colonoscopy

3. What is the collective name for the salivary glands, liver, gall bladder, and pancreas?
   - A. Accessory organs
   - B. Omentum
   - C. Hepatic system
   - D. Digestive tract

4. What is the special instruction that appears in each endoscopy category?
   - A. Surgical endoscopy always includes diagnostic endoscopy.
   - B. Refer to CPT coding guidelines, Endoscopy.
   - C. Surgical endoscopy codes should not be used with surgical laparoscopy codes.
   - D. Surgical endoscopy includes radiologic guidance.

5. Which of the following codes is the base code for ERCP, diagnostic?
   - A. 43260
   - B. 43261
   - C. 43274
   - D. 43277

6. What abstracting question should be answered for an endoscopic procedure on the digestive system?
   - A. Does the surgeon administer general anesthesia?
   - B. How long does the procedure take?
   - C. Is the procedure open or closed?
   - D. What is the farthest site reached?

7. How are multiple surgical procedures sequenced?
   - A. In numerical order
   - B. In descending order of complexity and price
   - C. In the order listed by the surgeon in the operative report
   - D. According to the modifier(s) used

8. What modifier should be used when the duodenum is not examined during an EGD because it is not judged clinically relevant?
   - A. -51
   - B. -52
   - C. -53
   - D. -58

9. What does pull-through refer to?
   - A. A surgical approach for an open procedure
   - B. A type of laparoscopic procedure
   - C. An anastomosis technique
   - D. An ostomy technique

10. What modifier is used when a hemorrhoidectomy is performed during the same session as a colonoscopy?
    - A. -51
    - B. -52
    - C. -58
    - D. None

**CODING CHALLENGE**

*Instructions:* Read the mini-medical-record of each patient's encounter, then abstract, assign, and arrange ICD-10-CM diagnosis codes and CPT procedure codes using the appropriate Index and Tabular List. Write the code(s) on the line provided.

1. **OUTPATIENT HOSPITAL**  Gender: F  Age: 61
   
   **Diagnosis:** recurrent inguinal hernia on the right side
   
   **Procedure:** right inguinal herniorrhaphy
   
   **1 ICD-10-CM Code** __________________________
   
   **1 CPT Code** __________________________

2. **OFFICE**  Gender: M  Age: 52
   
   **Reason for encounter:** lump and tenderness in jaw
   
   **Assessment:** abscess, submandibular salivary gland; heavy current tobacco use
   
   **Procedure:** incision and drainage of abscess
   
   **Tip:** Read the instructional note under the code for the salivary gland abscess to identify the second code.
   
   **2 ICD-10-CM Codes** __________________________
   
   **1 CPT Code** __________________________
3. **INPATIENT HOSPITAL**  Gender: M  Age: 38  
**Diagnosis:** fecal incontinence due to nontraumatic anal sphincter tear, which has not improved  
**Procedure:** sphincteroplasty  
**Tip:** Read the instructional notes under the code for nontraumatic anal sphincter tear to identify the second code.

2 ICD-10-CM Codes  
1 CPT Code

4. **INPATIENT HOSPITAL**  Gender: F  Age: 52  
**Reason for encounter:** RUQ pain, T 102 degrees, vomiting  
**Diagnosis:** ultrasound revealed acute cholecystitis with CBD calculus causing obstruction  
**Procedure:** laparoscopic cholecystectomy  
1 ICD-10-CM Code  
1 CPT Code

5. **OUTPATIENT HOSPITAL**  Gender: M  Age: 47  
**Reason for encounter:** foreign body–like sensation in his proximal esophagus after a meal  
**Assessment:** evaluated with lateral C-spine films and soft-tissue films without any evidence of perforation. The patient then was taken to the endoscopy suite.  
**Procedure:** EGD with removal of a foreign body from gastroesophageal junction (piece of fish bone)  
1 ICD-10-CM Code  
1 CPT Code

6. **OUTPATIENT HOSPITAL**  Gender: F  Age: 57  
**Assessment:** multiple severe external hemorrhoids  
**Procedure:** removal of external hemorrhoids  
1 ICD-10-CM Code  
1 CPT Code

7. **OUTPATIENT HOSPITAL**  Gender: M  Age: 67  
**Reason for encounter:** screening colonoscopy  
**Procedure:** colonoscopy with snare removal of two adenomatous polyps, biopsy of suspicious lesion in transverse colon to rule out malignancy  
**Pathology report:** benign polyps, benign lesion  
**Tip:** Refer to the OGCR for sequencing guidelines for the diagnoses codes.

3 ICD-10-CM Codes  
2 CPT Codes

8. **OUTPATIENT HOSPITAL**  Gender: M  Age: 9  
**Diagnosis:** chronic hypertrophic tonsillitis and adenoiditis, chronic otitis media refractory to antibiotics, left ear  
**Procedure:** tonsillectomy and adenoidectomy, insertion of myringotomy tube under general anesthesia  
1 ICD-10-CM Code  
1 CPT Code

9. **INPATIENT HOSPITAL**  Gender: F  Age: 49  
**Diagnosis:** ulcerative colitis involving primarily the rectosigmoid, unresponsive to steroids  
**Procedure:** laparoscopic total abdominal colectomy with end ileostomy, splenorrhaphy to repair accidental puncture of spleen  
2 ICD-10-CM Codes  
2 CPT Codes

10. **INPATIENT HOSPITAL**  Gender: M  Age: 53  
**Assessment:** admitted to the intensive care unit with complaints of abdominal pain and unstable vital signs  
**Procedure:** repair of perforated duodenal ulcer, gastrojejunostomy and feeding jejunostomy placement  
**Postoperative diagnosis:** perforated duodenal ulcer  
1 ICD-10-CM Code  
3 CPT Codes
Instructions: Read the procedural statement, then use the appropriate Index and Tabular List to assign CPT procedure codes. Write the code(s) on the line provided.

1. Percutaneous endoscopic colostomy: CPT Code(s)
2. Transnasal biopsy of esophagus: CPT Code(s)
3. Esophagogastroduodenoscopy with cold forceps biopsy: CPT Code(s)
4. Hemiglossectomy: CPT Code(s)
5. Laparoscopic appendectomy converted to open due to extensive intestinal adhesions, which were lysed to provide access to the appendix. Enterolysis increased the time for the procedure by 50%: CPT Code(s)
6. Endoscopic retrograde cholangiopancreatography with stent placement: CPT Code(s)
7. Orthotopic liver transplantation by a surgical team with cholecystectomy, standard bench prep of donor organ: CPT Code(s)
8. Open drainage of subphrenic abscess: CPT Code(s)
9. Left colon resection with colorectal anastomosis; complete mobilization of the splenic flexure: CPT Code(s)
10. Laparoscopic cholecystectomy with needle biopsy of liver: CPT Code(s)
11. Repair of nasolabial fistula: CPT Code(s)
12. Small-bowel resection for congenital atresia, approximately 1.5 feet; jejunostomy; placement of an abdominal wound VAC, wound surface area 20 sq cm: CPT Code(s)
13. Parotid gland needle biopsy: CPT Code(s)
14. Incarcerated ventral hernia repair: CPT Code(s)
15. Excision of full-thickness lip lesion with local flap reconstruction: CPT Code(s)
16. Flexible sigmoidoscopy with removal of foreign body: CPT Code(s)
17. Esophagogastroduodenoscopy with esophageal variceal band ligation: CPT Code(s)
18. Pelvic exenteration for colorectal malignancy with proctectomy and colostomy: CPT Code(s)
19. Revision of ileostomy: CPT Code(s)
20. Endoscopic ultrasound of sigmoid colon: CPT Code(s)
21. Gastric lavage: CPT Code(s)
22. EGD with dilation of gastric outlet for obstruction and biopsy of esophagus: CPT Code(s)
23. Closure of gastrostomy: CPT Code(s)
24. Suture of bleeding gastric ulcer: CPT Code(s)
25. Closure of anal fistula: CPT Code(s)