Chapter 35

Digestive System Procedures (40490-49999)

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

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

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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 oral structures. Plastic surgeons perform reconstructive repairs surgically to repair these injuries and abnormalities. Gastroenterologists perform procedures involving the digestive system for 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 through the nose.

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.

-cholecytectomy (excision of the gall bladder) and
-choledochocytectomy (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 through the nose.

Table 35-1 | EXAMPLE OF CONSTRUCTING MEDICAL TERMS FOR DIGESTIVE SYSTEM PROCEDURES

<table>
<thead>
<tr>
<th>Root/Combining Form</th>
<th>Suffix</th>
<th>Complete Medical Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>esophag/o (esophagus)</td>
<td>-scop (visual examination)</td>
<td>esophago + scopy (visual examination of the esophagus)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>gastro + scopy (visual examination of the stomach)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>duodeno + scopy (visual examination of the duodenum)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>esophago + gastro + duodeno + scopy (visual examination of the esophagus, stomach, and duodenum)</td>
</tr>
<tr>
<td>gastr/o (stomach)</td>
<td>-ectom (excision)</td>
<td>esophag + ectomy (excision of the esophagus)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>gastr + ectomy (excision of the stomach)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>duoden + ectomy (excision of the duodenum)</td>
</tr>
</tbody>
</table>

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### 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>Antrectomy</td>
<td>Distal gastrectomy</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>Billroth I</td>
<td>Gastroduodenostomy</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>Billroth II</td>
<td>Gastrojejunostomy</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>Esophagectomy</td>
<td>Transhiatal esophagectomy (THE)</td>
<td></td>
</tr>
<tr>
<td>Esophagectomy</td>
<td>Transthoracic esophagectomy (TTE)</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>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>Heller myotomy</td>
<td>Esophagomyotomy</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>Laparoscopically adjustable gastric banding (LABG)</td>
<td>Lap-band</td>
<td></td>
</tr>
<tr>
<td>Laparoscopically adjustable gastric banding (LABG)</td>
<td>A-band</td>
<td></td>
</tr>
<tr>
<td>Laparoscopically adjustable gastric banding (LABG)</td>
<td>Gastric restriction</td>
<td></td>
</tr>
<tr>
<td>Laparoscopically adjustable gastric banding (LABG)</td>
<td>Nissen fundoplication</td>
<td>Strengthen the sphincter, prevent acid reflux, repair a hiatal hernia</td>
</tr>
<tr>
<td>Laparoscopically adjustable gastric banding (LABG)</td>
<td>Paraesophageal hernia repair</td>
<td>Paraesophageal hernia (part of the stomach bulges through the hiatus [opening in the diaphragm])</td>
</tr>
<tr>
<td>Laparoscopically adjustable gastric banding (LABG)</td>
<td>Hiatal hernia repair</td>
<td></td>
</tr>
<tr>
<td>Laparoscopically adjustable gastric banding (LABG)</td>
<td>Hiatus hernia repair</td>
<td></td>
</tr>
<tr>
<td>Laparoscopically adjustable gastric banding (LABG)</td>
<td>Fundoplication</td>
<td></td>
</tr>
<tr>
<td>Laparoscopically adjustable gastric banding (LABG)</td>
<td>Percutaneous endoscopic gastrostomy (PEG)</td>
<td></td>
</tr>
<tr>
<td>Laparoscopically adjustable gastric banding (LABG)</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>
</tbody>
</table>
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. Some objects, such as a coin, normally pass through without a problem and are excreted. An object that becomes lodged.

Table 35-2 (continued)

<table>
<thead>
<tr>
<th>Procedure Name</th>
<th>Definition</th>
<th>Reason Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roux-en-Y (RNY)</td>
<td>The stomach and small bowel are joined using an end-to-side anastomosis. (Laparoscopic or open)</td>
<td>Reestablish gastrointestinal continuity after excision of portions of one or more organs</td>
</tr>
<tr>
<td>Sialolithotomy</td>
<td>Calculus is removed from the salivary gland(s). (Open)</td>
<td>Sialolithiasis (calculi in the salivary gland)</td>
</tr>
<tr>
<td>Tonsillectomy/adenoidectomy (T&amp;A)</td>
<td>The tonsils and adenoids are surgically removed. (Open)</td>
<td>Acute tonsillitis, obstructive sleep apnea, nasal airway obstruction, peritonsillar abscess</td>
</tr>
<tr>
<td>Vagotomy</td>
<td>A portion of the vagus nerve in the stomach is excised. (Laparoscopic or open)</td>
<td>Peptic ulcer disease</td>
</tr>
</tbody>
</table>

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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.

The choice of technique depends on the condition, the exact sites removed, and the surgeon’s preference. The pull-through became preferred over a colostomy, and the technique was eventually adapted for use in other portions of the digestive tract.

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. An 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

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.
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.

### Table 35-3  COMMON PROCEDURES OF THE LOWER GASTROINTESTINAL TRACT

<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></td>
<td>• Bowel resection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Total colectomy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Partial (subtotal)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Hemicolectomy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Proctocolectomy</td>
<td></td>
</tr>
<tr>
<td>Coloscopy</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>Ileostomy</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></td>
<td>• Enterostomy</td>
<td></td>
</tr>
<tr>
<td>Polypectomy</td>
<td>Surgical removal of a polyp(s) (abnormal growth from the mucus 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>

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**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).
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.

Table 35-4

<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>Hepatectomy</td>
<td>Surgical removal of all or part of the liver (Open)</td>
<td>Donor for, or recipient of, liver transplantation, usually due to neoplasms of the liver or cirrhosis</td>
</tr>
<tr>
<td>• Liver resection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithotripsy of gallstones</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 some 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>Pancreatoduodenectomy</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>
<tr>
<td>• Whipple procedure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Section Four: CPT/Hcpcs Procedure Coding

Pancrætic 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. Allograft transplantation 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 decreasing 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 (Figure 35-3). 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>Hemia repair</td>
<td>Surgical correction of a hemia 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>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>• Herniorrhaphy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Herniotomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Omental flap</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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CODING OVERVIEW OF DIGESTIVE SYSTEM PROCEDURES

The CPT Surgery subsection Digestive System (40490-49999) contains 18 subheadings divided by anatomic site. Anatomic sites are arranged by the order in which they occur in the alimentary (digestive) tract, beginning with the lips and ending with the anus. The last four subheadings identify sites that aid in digestion but are not part of the alimentary tract: the liver; biliary tract; pancreas; and abdomen, peritoneum, and omentum. Each subheading contains categories divided by the type of procedure, such as incision, excision, introduction, endoscopy, destruction, repair, and other procedures. The specific category titles vary by subheading based on what is applicable to a particular anatomic site. Review the subheadings, categories, and code ranges listed at the beginning of the Digestive System subsection in

Exercise 35.1  Digestive System Procedure Basics

Instructions: Use your medical terminology skills and resources to define the following procedures, then identify the applicable code or code range. Follow these steps:

- Use slash marks “/” to break down the underlined term into its root(s) and suffix.
- Define the meaning of the underlined word based on the meaning of each word part.
- Use the entire phrase to identify the code(s) or code range shown in the CPT Index.

Example: appendectomy, laparoscopic appendectomy

<table>
<thead>
<tr>
<th>Procedure Name</th>
<th>Meaning</th>
<th>CPT Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Operculectomy</td>
<td>Meaning</td>
<td>CPT Code</td>
</tr>
<tr>
<td>2. Pancreatorrhaphy</td>
<td>Meaning</td>
<td>CPT Code</td>
</tr>
<tr>
<td>3. Sialodochoplasty</td>
<td>Meaning</td>
<td>CPT Code</td>
</tr>
<tr>
<td>4. Anus, sphincter, sphincterectomy</td>
<td>Meaning</td>
<td>CPT Code</td>
</tr>
<tr>
<td>5. Proctosigmoidoscopy, biopsy</td>
<td>Meaning</td>
<td>CPT Code</td>
</tr>
<tr>
<td>6. Cholangiopancreastography, endoscopic retrograde, with papillotomy</td>
<td>Meaning</td>
<td>CPT Code</td>
</tr>
<tr>
<td>7. Vermilenectomy</td>
<td>Meaning</td>
<td>CPT Code</td>
</tr>
<tr>
<td>8. Pyloromyotomy</td>
<td>Meaning</td>
<td>CPT Code</td>
</tr>
<tr>
<td>9. Enterolysis</td>
<td>Meaning</td>
<td>CPT Code</td>
</tr>
<tr>
<td>10. Cheiloplasty</td>
<td>Meaning</td>
<td>CPT Code</td>
</tr>
</tbody>
</table>
many CPT manuals, to become familiar with the content and organization.

This chapter includes invasive, minimally invasive, and noninvasive surgical procedures on the digestive system. Codes for diagnostic tests on the digestive system appear in the Medicine section. The medical necessity of any procedure codes always must be supported by diagnosis codes. CPT codes in the Digestive System subsection are frequently supported by diagnosis codes from ICD-10-CM Chapter 11 Diseases of the Digestive System (K00-K95), as well as neoplasms, symptoms and signs, and injuries (Table 35-6). ICD-10-CM classifies injuries of the lips, mouth, and tongue with injuries of the face. Injuries of the throat are classified with injuries of the neck. These are the most commonly used codes to support procedures on the digestive system; however, diagnosis codes from any ICD-10-CM chapter are permissible.

CPT guidelines at the beginning of the Surgery section apply to Digestive System procedures. There are no special instructions at the beginning of this subsection, but there are some for subheadings and categories that provide definitions and coding information. A special instruction that appears in each endoscopy or laparoscopy category is that a surgical endoscopy or laparoscopy always includes a diagnostic endoscopy or laparoscopy. To report a diagnostic laparoscopy as a separate procedure, use code 49320. Instructional notes appear throughout the Tabular List to alert coders to the need for modifiers, provide cross-references to codes for similar procedures on other sites, identify when additional codes might be needed for radiological services, and highlight resequenced and recently deleted codes.

### Table 35-6  LOCATING ICD-10-CM AND ADDITIONAL CPT CODES FOR THE DIGESTIVE SYSTEM

<table>
<thead>
<tr>
<th>Type of Code</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICD-10-CM Digestive System-Related Codes</td>
<td></td>
</tr>
<tr>
<td>Digestive system conditions</td>
<td>K00-K95</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>C00-C26</td>
</tr>
<tr>
<td>Symptoms and signs</td>
<td>R10-R19</td>
</tr>
<tr>
<td>Injuries</td>
<td>S09.93, S19.9, S36-, T28-.</td>
</tr>
<tr>
<td>CPT Digestive System-Related Codes</td>
<td></td>
</tr>
<tr>
<td>Medicine procedures</td>
<td>91010-91299</td>
</tr>
<tr>
<td>Radiologic procedures</td>
<td></td>
</tr>
<tr>
<td>• Diagnostic radiology</td>
<td>74210-74363</td>
</tr>
<tr>
<td>• Diagnostic ultrasound</td>
<td>76700-76766, 76975</td>
</tr>
<tr>
<td>• Radiologic guidance</td>
<td>77001-77022</td>
</tr>
<tr>
<td>• Nuclear medicine, diagnostic</td>
<td>78201-78299</td>
</tr>
<tr>
<td>Laboratory organ/disease panels</td>
<td>80074-80076</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 Abstracting 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

- What is the patient’s age?
- What site(s) is treated?
- What primary procedure is performed?
- What other procedure(s), if any, are performed?
- Is the treatment screening, diagnostic, or therapeutic?
- What is the approach?
- What exact sites within an organ are excised or treated?
- What type of anastomosis, if any, is performed?
- What sites are joined in the anastomosis?

### Endoscopy

- What approach (access) is used?
- What is the farthest site reached?
- Is the purpose of the service preventive care?
- Does a screening or diagnostic endoscopy convert to a therapeutic procedure?
- Is the endoscopy a separate procedure?
- Was more than one treatment performed during the endoscopy?
- Is the patient covered by Medicare?

Source: © PB Resources, Inc. Used with permission.
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

OUTPATIENT HOSPITAL  Gender: M  Age: 57
Preoperative diagnosis: hematochezia
Procedure: Colonoscopy, polypectomy, hemorrhoidectomy. 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
SECTION FOUR  CPT/HCPCS Procedure Coding

- 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? _________________________

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? _________________________
   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? _________________________

4. OUTPATIENT HOSPITAL  Gender: M  Age: 64
Diagnosis: initial incarcerated incisional hernia
Procedure: incarcerated incisional hernia repair with mesh
   a. What site(s) is treated? _________________________
   b. What primary procedure is performed? __________

(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.

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 **Appendix or 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 Omentum 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 converts 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 (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>
<thead>
<tr>
<th>Table 35-8</th>
<th>ENDOSCOPIC CODE FAMILIES FOR THE DIGESTIVE SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Code</td>
<td>Short Description</td>
</tr>
<tr>
<td>43191</td>
<td>Esophagoscopy, rigid, transoral; diagnostic</td>
</tr>
<tr>
<td>43197</td>
<td>Esophagoscopy, flexible, transnasal; diagnostic</td>
</tr>
<tr>
<td>43200</td>
<td>Esophagoscopy, flexible, transoral; diagnostic</td>
</tr>
<tr>
<td>43235</td>
<td>Esophagogastroduodenoscopy, flexible, transoral; diagnostic</td>
</tr>
<tr>
<td>43260</td>
<td>Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic</td>
</tr>
<tr>
<td>44360</td>
<td>Small intestinal endoscopy, enteroscopy beyond second portion of duodenum, not including ileum; diagnostic</td>
</tr>
<tr>
<td>44376</td>
<td>Small intestinal endoscopy, enteroscopy beyond second portion of duodenum, including ileum; diagnostic</td>
</tr>
<tr>
<td>44388</td>
<td>Colonoscopy through stoma; diagnostic</td>
</tr>
<tr>
<td>45300</td>
<td>Proctosigmoidoscopy, rigid; diagnostic</td>
</tr>
<tr>
<td>45330</td>
<td>Sigmoidoscopy, flexible; diagnostic</td>
</tr>
<tr>
<td>45378</td>
<td>Colonoscopy, flexible; diagnostic</td>
</tr>
<tr>
<td>46600</td>
<td>Anoscopy; diagnostic</td>
</tr>
<tr>
<td>47552</td>
<td>Biliary endoscopy, percutaneous via T-tube or other tract; diagnostic</td>
</tr>
<tr>
<td>49320</td>
<td>Laparoscopy, abdomen, peritoneum, and omentum; diagnostic</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.

43205 Esophagoscopy, flexible, transoral; with band ligation of esophageal varices

<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>The endoscopic base code is used for reference. It is not billed because therapeutic procedures from the same endoscopy family were performed.</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 - $97.08 = $17.29</td>
</tr>
</tbody>
</table>

Total $172.76

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

CPT codes only © American Medical Association.

also assign a code for esophagoscopy because the service is included in the code for the esophagogastroduodenoscopy. Code 43235 is the parent code for this code family. Codes are divided based on the additional procedures performed during the examination. CPT provides an important instructional note at the beginning of the esophagogastroduodenoscopy code family. When the examination includes the stomach but not the duodenum, assign a code for esophagogastroduodenoscopy with modifier -52 or -53. The choice of modifier depends on whether the physician intends to repeat the examination to include the duodenum.

- When the duodenum is not examined because it is not considered clinically relevant to the reason for the procedure, assign modifier -52 Reduced services (Figure 35-7).
- When the duodenum is not examined because an issue, such as retained gastric contents, prevents safe access to the duodenum, and the physician plans to repeat the procedure under better conditions, assign modifier -53 Discontinued procedure (Figure 35-8).

- When a repeat examination is not planned, assign modifier -52 Reduced services.
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, -raphy, 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
- 47140 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
  - 47147 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.

1. 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

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**Figure 35-10** Example of Coding a Liver Transplant. Source: © PB Resources, Inc. Used with permission. CPT codes only © American Medical Association.

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**Figure 35-11** Example of Coding a Repair on the Esophagus
part of the code description, **diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)**, and confirms that it does not describe this procedure because a therapeutic procedure was also performed.

- She reads the indented 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.

- She reads the indented description for code **45385, with removal of tumor(s), polyp(s), or other lesion(s) by snare technique** and confirms that this accurately describes the polyp 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 plans to use, **45384** and **45385**, and finds none.

  - She 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.

  - She 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 turns her attention to the hemorrhoidectomy.**

- **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.
CODING PRACTICE

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 colonoscopy, 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 \( \text{modifer-51 exempt} \). 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

---

**Physician performs a routine screening colonoscopy on a patient, age 50.**

<table>
<thead>
<tr>
<th>45378-33 Colonoscopy, flexible, proximal to splenic flexure; diagnostic, with or without collection of specimen(s) by brushing or washing, with or without colon decompression (separate procedure); -33 Preventive services</th>
<th>Modifier</th>
<th>Allowed fee</th>
<th>Patient co-insurance</th>
<th>Patient pays</th>
<th>Insurance pays</th>
</tr>
</thead>
<tbody>
<tr>
<td>45378</td>
<td>33</td>
<td>$400.00</td>
<td>Waived</td>
<td>$0.00</td>
<td>$400.00</td>
</tr>
<tr>
<td>45378</td>
<td>None</td>
<td>$400.00</td>
<td>20%</td>
<td>$80.00</td>
<td>$320.00</td>
</tr>
</tbody>
</table>

![Figure 35-12](http://www.uspreventiveservicestaskforce.org/)

Example of Using Modifier -33. Source: © PB Resources, Inc. Used with permission. CPT codes only © American Medical Association.
the situation that the duodenal 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.
CHAPTER 35 Digestive System Procedures (40490-49999)

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❑ 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

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) 45385-99 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

CODING PRACTICE

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

The 1997 Documentation Guidelines for Evaluation and Management Services (1997 DG), published by CMS, do not provide guidelines for a single-system gastroenterology examination. 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.

To determine the levels for medical decision making (MDM), refer to Chapter 31, Table 31-12, and to the Table of Risk 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.
<table>
<thead>
<tr>
<th>System/Body Area</th>
<th>Elements of Multi-System Examination</th>
</tr>
</thead>
</table>
| 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,   | ☑️ 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 |
| Mouth and   | ☑️ Palpation of chest (eg, tactile fremitus)  
  ☑️ Auscultation of lungs (eg, breath sounds, adventitious sounds, rales) |
| Ear            | ☑️ 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, rales) |
| Neck            | ☑️ Palpation of heart (eg, location, size, thrills)  
  ☑️ Auscultation of heart with notation of abnormal sounds and murmurs |
| Respiratory     | ☑️ Palpation of heart (eg, location, size, thrills)  
  ☑️ Auscultation of heart with notation of abnormal sounds and murmurs |
| Cardiovascular  | ☑️ Palpation of heart (eg, location, size, thrills)  
  ☑️ Auscultation of heart with notation of abnormal sounds and murmurs |
| Gastrointestinal (Abdomen) | ☑️ Palpation of abdomen (eg, masses or lumps, tenderness)  
  ☑️ Palpation of breasts and axillae (eg, masses or lumps, tenderness)  
  ☑️ Examination of abdomen with notation of presence of masses or tenderness  
  ☑️ Examination of liver and spleen  
  ☑️ Examination for presence or absence of hemia  
  ☑️ 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 |
| Chest (Breasts) | ☑️ Palpation of breasts and axillae (eg, masses or lumps, tenderness)  
  ☑️ Examination of breast (eg, symmetry, nipple discharge) |
| Genitourinary   | ☑️ 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)  
  ☑️ 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, rectocele)  
  ☑️ 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).
## 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></td>
<td>Neck</td>
</tr>
<tr>
<td></td>
<td>Axillae</td>
</tr>
<tr>
<td></td>
<td>Groin</td>
</tr>
<tr>
<td></td>
<td>Other</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 digits and nails (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;</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 any misalignment, asymmetry, crepitation, defects, tenderness, masses, effusions</td>
</tr>
<tr>
<td></td>
<td>• Assessment of range of motion with notation of any pain, crepitation or contracture</td>
</tr>
<tr>
<td></td>
<td>• Assessment of stability with notation of any dislocation (luxation), subluxation or laxity</td>
</tr>
<tr>
<td></td>
<td>• Assessment of muscle strength and tone (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 cranial nerves with notation of any deficits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Examination of deep tendon reflexes with notation of pathological reflexes (eg, Babinski)</td>
</tr>
<tr>
<td></td>
<td>Examination of sensation (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>Orientation to time, place and person</td>
</tr>
<tr>
<td></td>
<td>Recent and remote <strong>memory</strong></td>
</tr>
<tr>
<td></td>
<td>Mood and affect (eg, depression, anxiety, agitation, hypomania, liability)</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 of 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, murmurs, pedal edema, orthopnea, TIAs, 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.


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  ROS Review of systems  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
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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) 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 Code ________________

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CHAPTER SUMMARY

In this chapter you learned that:

- 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.

- The CPT Surgery subsection Digestive System (40490-49999) contains 18 subheadings divided by anatomic site. Anatomic 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 multisystem 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.

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

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, (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.

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 _______________________

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
2 ICD-10-CM Codes _______________________
2 CPT Codes ________________________

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 choledochostomy, 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) ____________________________________________