Coding and Reimbursement for Gastrointestinal Endoscopic Procedures in Primary Care

Walter L. Larimore, MD, and Thomas J. Zuber, MD
Kissimmee, Florida, and Midland, Michigan

Endoscopic diagnostic procedures have become part of the comprehensive care provided by many primary care physicians, and when these physicians interact with third-party payers, they must correctly report the endoscopic services they have provided. Included in this review are commonly used upper and lower gastrointestinal endoscopic procedure codes; corresponding reimbursement values from one state's Medicare and Medicaid program; lists of diagnosis codes used in reporting upper and lower endoscopy services; and instructions for reporting visits and intravenous anesthesia associated with endoscopy procedures.

Key words. Insurance, health, reimbursement; endoscopy, digestive system; endoscopy, gastrointestinal; colonoscopy; sigmoidoscopy. (*J Fam Pract 1994; 39:153-159*)

Endoscopic diagnostic procedures have become part of the comprehensive care provided by many primary care physicians,[1-6] as limited funds in our current health care system encourage the performance of cost-effective diagnostic evaluations.[1,4,5] Physicians must acquire cognitive and technical skills in order to perform endoscopic examinations, and physicians interacting with third-party payers also must learn how to accurately report these services.[7,8]

Physicians' Current Procedural Terminology (CPT), published by the American Medical Association,[7] contains the most widely accepted and current listing of medical procedures and services.[8] CPT codes for gastrointestinal (GI) endoscopic procedures and services performed by primary care physicians appear in Tables 1 and 2.

The Health Care Financing Administration (HCFA) developed a reimbursement system,[9] based on the resource-based relative value system concepts of Hsaio and his Harvard team,[10] in which relative values for the physician work, practice expenses, and professional liability insurance components of a physician's services were established for most CPT codes. The three values added together form a total relative value unit (RVU). Each component value is adjusted by a geographic practice index to reflect the cost differences among geographic areas, and the sum of the three resulting values yields an adjusted total RVU.

The total RVU for each procedure may be used as a guide for establishing fees and reimbursements. Total adjusted RVUs for selected primary care diagnostic GI endoscopy procedures are listed in Table 3.

Medicare converts total adjusted RVUs into reimbursement amounts using three conversion factors for 1994: $35.16 for surgical services, $33.72 for primary care services, and $32.91 for other nonsurgical services.[9] The appropriate conversion factor is multiplied by the total adjusted RVU to determine the Medicare reimbursement for any particular CPT code in any particular geographic locality. The conversion factors are updated annually by HCFA based on budgetary regulation.[9]

Sample reimbursements for selected endoscopic procedures from the Florida Medicare[11] and Medicaid[12] programs are listed in Table 3. These reimbursements are less than the national 50th percentile fees and average reimbursements from nonfederal insurance carriers. Since the overhead costs of most family physicians exceed 50% of their collectable charges, family physicians are discouraged from using these amounts as a guideline for setting their individual fees.

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Dr Larimore is in private practice in Kissimmee, Florida. Dr Zuber is from The National Procedures Institute, Midland, Michigan. Requests for reprints should be addressed to Thomas J. Zuber, MD, The National Procedures Institute, 4909 Hedgewood Dr, Midland, MI 48640.

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Table 1. Upper Gastrointestinal Endoscopic Procedure Codes

CPT Code*	Procedure Description
43200	Diagnostic esophagoscopy
43202	Esophagoscopy with biopsy
43215	Esophagoscopy with foreign body removal
43216	Esophagoscopy with electrocautery removal of tumor or polyp
43217	Esophagoscopy with snare removal of tumor or polyp
43220	Esophagoscopy with dilation
43227	Esophagoscopy with control of bleeding
43234	EGD—simple primary examination
43235†	EGD—diagnostic
43239†	EGD with biopsy
43241	EGD with transendoscopic catheter or tube placement
43246	EGD with PEG tube placement
43247	EGD with foreign body removal
43250	EGD with electrocautery removal of tumor or polyp
43251	EGD with snare removal of tumor or polyp
43255	EGD with control of bleeding

**From* Physicians' Current Procedural Terminology *(CPT), 1994.*[7]
†These two procedures comprise over 90% of the upper endoscopic procedures performed by family physicians.
EGD denotes esophagogastroduodenoscopy (upper gastrointestinal endoscopy); PEG, percutaneous endoscopic gastrostomy.

Table 2. Lower Gastrointestinal Endoscopic Procedure Codes

CPT Code*	Procedure Description
45330	Diagnostic sigmoidoscopy
45331	Sigmoidoscopy with biopsy
45332	Sigmoidoscopy with foreign body removal
45333	Sigmoidoscopy with electrocautery removal of tumor or polyp
45334	Sigmoidoscopy with control of bleeding
45338	Sigmoidoscopy with snare removal of tumor or polyp
45378	Diagnostic colonoscopy
45379	Colonoscopy with removal of foreign body
45380	Colonoscopy with biopsy
45382	Colonoscopy with control of bleeding
45384	Colonoscopy with electrocautery removal of tumor or polyp
45385	Colonoscopy with snare removal of tumor or polyp

**From* Physicians' Current Procedural Terminology *(CPT), 1994.*[7]

Endoscopy Reporting

Physicians performing comprehensive upper GI tract endoscopic evaluation usually report this service with the code 43235.[7] A comprehensive examination usually includes visualization into the esophagus, stomach, and duodenum, including a thorough examination of the duodenal bulb and, if possible, the second portion of the duodenum. Gastric evaluation in a comprehensive examination usually includes a retroverted view of the cardia. Esophagogastroduodenoscopy (EGD) with biopsy is reported with the code 43239.[7]

An EGD that does not include these "comprehensive" components can be reported with the code 43234 (EGD—simple primary examination).[7] Other lesser valued upper GI tract procedures include esophagoscopy (43200) or esophagoscopy with biopsy (43202).[7] It is recommended that lesser services be reported with these specific codes. Physicians should avoid adding the modifier "-52" (reduced services) to 43239, as this is not standard coding procedure and may result in unnecessary delays or denials of payment.

Gastrointestinal endoscopic biopsy is usually performed with biting "alligator-type" forceps.[13] Foreign bodies can be removed with either grasping or biopsy forceps. When a biopsy or foreign body removal is performed, the most specific code describing the service should be selected (Tables 1 and 2).

The base procedure codes for GI endoscopy include 43200 (esophagoscopy), 43235 (EGD), 45330 (sigmoidoscopy), and 45378 (colonoscopy) (Table 3). Total adjusted RVUs for endoscopic procedures that include additional services, such as tumor or foreign body removal, include the value of the base endoscopic procedure. For example, the procedure "EGD with snare removal of a polyp" (43251) includes the base procedure EGD (43235). Therefore, both 43251 and 43235 should not be reported when performed during the same session.

Consider the example of a physician who performs a colonoscopy examination during which he or she performs both a biopsy of a small lesion in one portion of the colon and a polypectomy in another area. For physicians nonparticipating in Medicare, in Medicare payment locality 2 in Florida, the reimbursement for the base code of colonoscopy (code 45378) is the Medicare "limited charge" of $306.59.[11] The limited charge represents the

Table 3. Typical Diagnostic Gastrointestinal Endoscopy Procedure Reimbursements

CPT Code*	Procedure Description	Total RVUs†	1994 Florida Medicare ($)‡	1993–1994 Florida Medicaid ($)§
43200	Esophagoscopy	4.29	222.55	175.00
43202	Esophagoscopy with biopsy	5.16	255.01	219.00
43234	EGD—simple, primary	5.14	190.36	147.50
43235	EGD—diagnostic	6.09	254.20	207.00
43239	EGD with biopsy	6.93	289.42	236.00
45330	Sigmoidoscopy	2.33	99.92	82.00
45331	Sigmoidoscopy with biopsy	3.06	138.55	115.50
45378	Colonoscopy	10.62	306.59	237.50
45380	Colonoscopy with biopsy	9.29	338.82	261.00

**From* Physicians' Current Procedural Terminology *(CPT), 1994.*[7]
†1994 total relative value units, from the Department of Health and Human Services.[9]
‡1994 Florida Medicare "limiting charge" (the upper legal limit on each Medicare charge that a nonparticipating physician can make on unassigned claims to Medicare beneficiaries) for payment locality 2.[11]
§1993–1994 Florida Medicaid allowable charges.[12]
EGD denotes esophagogastroduodenoscopy (upper gastrointestinal endoscopy).

upper legal limit that a nonparticipating physician can charge on unassigned claims to Medicare beneficiaries.[11] This base value is built into both of the two higher valued codes: ie, the base code limited charge of $306.59 is included in the limited charge for the colonoscopy with biopsy (code 45380, with a Medicare limited charge of $338.32) and in the limited charge for the colonoscopy with polypectomy (code 45385, with a Medicare limited charge of $510.17).[11]

In this scenario, 45385 (colonoscopy with polypectomy) and 45380 (colonoscopy with biopsy) should both be assigned but the total limited charge should include the base procedure (45378 for $306.59) only once. Medicare would allow a total limited charge of $510.17 for the colonoscopy with polypectomy (which includes the base procedure, 45378, and its limited charge of $306.59) but only $31.73 for the biopsy ($338.32 for colonoscopy with biopsy minus $306.59 for the base procedure):

Charge = [colonoscopy with polypectomy] + [colonoscopy with biopsy − colonoscopy]
Charge = [$510.00] + [$338.32 − $306.59]
Charge = [$510.00] + [$31.73]
Charge = $541.80

In the above example, the major procedure (the most intensive, or highest valued) would be coded as the primary code. The secondary, or lesser valued service, would be identified by adding the "-51" (multiple procedures)[7] modifier to the CPT code number of the secondary procedure: in this case, 45385 (as the primary procedure) and 45380-51 (as the secondary procedure).

The CPT book defines proctosigmoidoscopy as the examination of the rectum and sigmoid colon.[7] Sigmoidoscopy is the "examination of the entire rectum [and the] sigmoid colon, and may include examination of a portion of the descending colon."[7] Colonoscopy is the "examination of the entire colon, from the rectum to the cecum, and may include examination of the terminal ileum."[7] Colonoscopy that extends beyond the sigmoid colon but fails to visualize the cecum is called limited or incomplete colonoscopy. Colonoscopy to the splenic flexure is called left-sided colonoscopy.

The CPT description of colonoscopy codes 45378 to 45385 includes the wording "proximal to the splenic flexure."[7] Occasionally the flexible sigmoidoscope can be maneuvered proximal to the splenic flexure. If colonoscopy is incomplete and the patient received the full preparation for colonoscopy, then the colonoscopy codes may be reported, even if the cecum cannot be reached.[7] The modifier "-52" should be attached to the reported CPT code, and a documentation report should be submitted.

The procedures described in this review are within the scope of primary care physicians who are trained and experienced in GI endoscopy.[1–6] Primary care physicians may also perform endoscopic procedures not listed in Tables 1 and 2 and should check the CPT book for clarification of codes or services not included in this review.

Table 4. Frequently Used International Classification of Diseases (ICD) Diagnosis Codes for Upper Gastrointestinal Endoscopy

Code	Diagnosis	Code	Diagnosis
476.1	Chronic laryngitis	537.1	Gastric diverticulum
784.49	Hoarseness	789.0	Abdominal pain
786.09	Wheezing	536.8	Dyspepsia
786.50	Chest pain	537.81	Pylorospasm
787.0	Nausea and vomiting	537.82	Angiodysplasia, stomach
787.1	Heartburn (pyrosis)	578.0	Hematemesis
787.2	Dysphagia	553.3	Hiatal hernia
530.10	Esophagitis, unspecified	V16.0	Family history GI tract Ca
530.11	Esophagitis, reflux	150.3	Ca esophagus, upper ⅓
530.2	Esophageal ulcer	150.4	Ca esophagus, middle ⅓
530.3	Esophageal stricture	150.5	Ca esophagus, lower ⅓
530.6	Esophageal diverticulum	151.1	Ca stomach, pyloris
530.7	Mallory-Weiss syndrome	151.2	Ca stomach, antrum
530.81	Esophageal reflux	151.3	Ca stomach, fundus
530.82	Esophageal hemorrhage	151.4	Ca stomach, body
530.83	Esophageal leukoplakia	152.0	Ca duodenum
531.00	Gastric ulcer—acute with hemorrhage*	211.0	Benign neoplasm, esophagus
531.40	Gastric ulcer—chronic or unspecified with hemorrhage*	211.1	Bening neoplasm, stomach
531.70	Gastric ulcer—chronic*	211.2	Benign neoplasm, duodenum
531.71	Gastric ulcer—chronic with obstruction*	535.00	Acute gastritis
532.00	Duodenal ulcer—acute with hemorrhage*	535.01	Acute gastritis with hemorrhage
532.40	Duodenal ulcer—chronic unspecified with hemorrhage*	535.11	Atrophic gastritis with hemorrhage
532.70	Duodenal ulcer—chronic*	535.60	Duodenitis
532.71	Duodenal ulcer—chronic with obstruction*	787.3	Belching
536.2	Persisting vomiting	793.4	X-ray abnormality, GI tract

**Erosions are reported with the ulcer codes.*
From St Anthony's Color-Coded & Illustrated ICD-9-CM Code Book for Physician Payment.[14]
GI denotes gastrointestinal; Ca, carcinoma.

Reporting Additional Visits

The GI endoscopic codes describe work performed on the day of the procedure. These services usually involve variable pre- and postprocedure work that is not considered part of a global procedure package.[7] Consultations or visits performed on days before the procedure and follow-up postprocedure visits are not considered part of the endoscopy service by many third-party payers, including Medicare.

Same-day visits (evaluation and management services) generally are not billed separately if a gastroenterology endoscopic procedure is the major service provided.[9] However, primary care physicians are frequently asked, on the same day as a procedure, to provide additional services or patient care unrelated to the procedure. If a physician provides a significant, separately identifiable evaluation and management service unrelated to the endoscopy on the same day as the procedure,[7] then the visit may be reimbursed. The "-25" modifier should be attached to the visit code, and a separate, preferably non-GI diagnosis code also provided.

Diagnosis Codes

Third-party payers reimburse only services that have corresponding diagnosis codes that justify the service or procedure. Physicians should use diagnosis codes from the 1994 *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM).[14] Multiple diagnosis codes may be reported for an endoscopic procedure. Frequently used diagnosis codes appear in Tables 4 and 5. Posting these lists in the office may facilitate reporting and save time. Diagnoses not included in the tables may be obtained from the ICD-9-CM.[14]

Patient complaints and symptoms often represent the indication for performing diagnostic endoscopy procedures. Findings at the endoscopic examination often provide the foundation for diagnosis codes that will show the medical necessity for the endoscopic service. Rule-out diagnoses are unacceptable to most third-party payers.[13]

Intravenous Anesthesia

Many physicians prefer to perform diagnostic GI endoscopy following intravenous (IV) anesthesia.[6] Hospitals and surgical centers often receive hundreds of dollars reimbursement for providing IV anesthesia. Some physicians have chosen to apply for facility designation status for their offices so that they may receive reimbursement for these expenses; however, it is recommended that a physician seek financial and legal consultation before proceeding.

Table 5. Frequently Used International Classification of Diseases (ICD) Diagnosis Codes for Lower Gastrointestinal Endoscopy Procedures

Code	Diagnosis	Code	Diagnosis
555.1	Crohn's disease—colon	153.0	Ca colon—hepatic flexure
556	Ulcerative colitis	153.1	Ca colon—transverse
558.1	Radiation colitis	153.2	Ca colon—descending (left)
558.9	Colitis, nonspecific	153.3	Ca colon—sigmoid
562.10	Diverticulosis	153.4	Ca colon—cecum
562.12	Diverticulosis with hemorrhage	153.6	Ca colon—ascending (right)
562.13	Diverticulitis with hemorrhage	154.1	Ca rectum
564.0	Constipation	154.2	Ca anus
564.1	Irritable colon	211.3	Benign neoplasm, colon
564.5	Diarrhea, functional	211.4	Benign neoplasm, rectum/anus
564.6	Anal spasm	455.0	Internal hemorrhoids
565.0	Anal fissure	455.1	Internal hemorrhoids, thrombosed
566	Perirectal abscess	455.2	Internal hemorrhoids, bleeding
569.0	Anal polyp	455.3	External hemorrhoids
569.3	Anal hemorrhage	V18.5	Family history of GI disorders
569.42	Anal pain	V16.0	Family history of colon GI Ca
569.82	Ulcer, colon	V10.0	Personal history of colon Ca
569.84	Angiodysplasia, colon	787.9	Tenesmus
578.9	GI hemorrhage, unspecified	789.0	Abdominal pain
578.1	Melena	787.6	Stool incontinence
		787.7	Abnormal stools

From St Anthony's Color-Coded & Illustrated ICD-9-CM Code Book for Physician Payment.[14]
GI denotes gastrointestinal; Ca, carcinoma.

Physicians performing in-office endoscopic examinations can include anesthesia costs in their procedure charge, or bill the component costs individually. Examples are illustrated in Table 6. Individual or component billing may be cumbersome, and claim delays or denials should be anticipated; certain carriers (federal payers) will not pay the "surgeon" for any anesthesia services performed in conjunction with the performance of a procedure.

Introduction of an intracatheter (36000) may be reported for starting an IV.[7] The first hour of IV therapy is reported with code 90780.[7] If an IV is used for more than

Table 6. Reporting Monitoring and Anesthesia Services Associated with Office Gastrointestinal Endoscopy Procedures

CPT Code*	Procedure Description	1994 Florida Medicare ($)†	1993–94 Florida Medicaid ($)‡
94761	Oximetry monitoring—multiple readings	26.53	NCS
99070§	Surgical tray	34.51	NCS
36000	Introduction of intracatheter	35.65	32.00
99070	Intravenous supplies (tubing, bags)	34.51	NCS
90780	IV therapy up to 1 hour	54.26	40.50
90781	IV therapy, each additional hour (up to 8)	19.62	10.00
90782	Intramuscular therapeutic injection	3.75	NCS
90784	Intravenous therapeutic injection	16.97	NCS
99070	Medication costs (supply)	‖	‖

**From* Physicians' Current Procedural Terminology *(CPT), 1994.*[7]
†1994 Florida Medicare "limiting charge" (the limit on each Medicare charge that a nonparticipating physician can legally make on unassigned claims to Medicare beneficiaries) for payment locality 2.[11]
‡1993–1994 Florida Medicaid allowable charges.[12]
§Report to Medicare with code A4550.[9]
‖Use Health Care Financing Administration Common Procedure Coding System (HCPCS or Level II) codes for medications when reporting to federal third-party payers.[11]
NCS denotes noncovered service.

Table 7. Special Services and Reports

CPT Code*	Procedure Description	1994 Florida Medicare†	1993 Florida Medicaid‡
99000	Conveyance of specimen from office to laboratory	NCS	NCS
99050	After-hours services (in addition to basic services)	NCS	$7.00
99052	Services between 10:00 PM and 8:00 AM	NCS	NCS
99054	Sunday or holiday services (in addition to basic services)	NCS	NCS
99058	Office services provided on an emergency basis	NCS	NCS
99071	Educational materials purchased by the physician	NCS	NCS
99078	Group educational services	NCS	NCS
99080	Special insurance reports (above usual charting and communication)	NCS	NCS
99082	Unusual travel or transport of patient	$1.77	NCS

**From* Physicians' Current Procedural Terminology, *(CPT), 1994.*[7]
†1994 Florida Medicare "limiting charge" (the upper legal limit on each Medicare charge that a nonparticipating physician can make on unassigned claims to Medicare beneficiaries) for payment locality 2.[11]
‡1993–1994 Florida Medicaid allowable charges.[12]
NCS denotes non-covered service.

1 hour, generally 90781 (IV therapy, each additional hour) is not reported unless the procedure is prolonged or a complication mandates prolonged patient monitoring.

The code 90784 is used to report the administration of an IV injection.[7] Drug costs are reported separately to nonfederal third-party insurers using code 99070. The name of the drug and the dosage used should be specified. Drug costs reported to federal payers must be specifically coded according to the HCFA Common Procedure Coding System (HCPCS or Level II) codes.[15] For example, the HCPCS code for diazepam (Valium, up to 5 mg) is J3360; for meperidine (Demerol), J2175; for fentanyl citrate (up to 2 mg), J3010; and for midazolam, J3490 (J3490 is for unclassified drugs).[15] The HCPCS code should be used in conjunction with the name of the drug, the route of administration, and the dosage used.

Intravenous supplies (tubing, bags) also may be reported with code 99070 to third-party payers other than Medicare or Medicaid. Medicare allows a single payment of one RVU (roughly $32.90) for all supplies involved in upper or lower GI endoscopy.[9] This supply or surgery tray is reported to Medicare and Medicaid with the HCPCS code A4550.[9]

Physicians who use oximetry to monitor IV anesthesia can report that service with code 94761.[7] The code 94761 is reported when multiple oximetry determinations are performed. This code carries a total RVU of 0.72.[9]

Many physicians have discovered alternative anesthesia options for IV medications. Oral or inhaled medications generally are included in the procedure charge. Intramuscular injections (90782) and drug cost (99070) can be reported separately.

Pathology Specimens

Gastrointestinal biopsies are reported as Level IV surgical pathology examinations (88305),[7] which include gross and microscopic evaluation. Physicians may report these services to nonfederal insurance companies as purchased outside services. Pathologists must bill these services directly to federal third-party payers. Cytopathologic examination of washings or brushings are reported with codes 88104 to 88108. Physicians should check with the pathologist to determine which code most accurately describes the technique performed. Potassium hydroxide (KOH) smears (87220) or tuberculosis cultures (87116) occasionally may be performed as part of the EGD examination. There is no current code for reporting colorimetric urease testing for *Helicobacter pylori*. Since the test kits are relatively inexpensive, most physicians include performance of the CLO (*Campylobacter*-like organism) test (Tri-Med Specialties, Alden, Kansas) as part of the endoscopic procedure.

Special Services and Reports

Codes for special services and reports are listed in Table 7. Reimbursement for these codes by third-party payers is variable, and Medicare and Medicaid do not reimburse

for most of them. Therefore, reporting of the special services codes (990XX) may result in payment denial. Some physicians find it easier to include special services charges in their basic procedure fee.

Nevertheless, special services have legitimate CPT codes,[7] and these may be reported when they accurately describe the services provided. Physicians should document and be prepared to justify the use of the special service codes. Physicians also may be required to explain to patients why a special service is called "medically unnecessary" by the insurance company.

Summary

The reporting of procedural services is complicated because reimbursement policies vary among insurance carriers and from state to state. Physicians should contact their most commonly utilized third-party payers to obtain local rules. Manuals describing variable payment policies facilitate accurate reporting to individual carriers.

Correct physician use of GI endoscopy codes and adequate documentation should improve reimbursement for these procedures. The specific CPT codes identified in this review can be incorporated into the list of charges at a physician's office or a hospital so that each gastrointestinal endoscopic procedure code that is reported includes at least one corresponding ICD-9-CM diagnosis code.

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