CHEST

Moderate Sedation Changes for Bronchoscopy in 2017

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The reimbursement for procedures using moderate (conscious) sedation has changed significantly as of January 1, 2017. Due to the increasing use of anesthesia services to provide moderate sedation during endoscopy, the Centers for Medicare & Medicaid Services made the decision to remove work relative value units from many of the services requiring moderate sedation, including the bronchoscopy codes. If a bronchoscopist provides moderate sedation to a patient without using anesthesia services or another qualified provider, that work (and revenue) can be reclaimed by using the relevant codes. An understanding of the recent changes in coding and billing is essential for appropriate reimbursement. CHEST 2017; 152(4):893-897

KEY WORDS: billing; bronchoscopy; coding; management; sedation

It has probably been a number of years since physicians have last used "50 to 75 mg of meperidine and/or 50 to 75 mg of hydroxyzine and 0.25 mg of atropine by intramuscular injection, 0.5 to 1 hour before the procedure" as advocated in early descriptions of bronchoscopic procedures.[1,2] In 1990, a report advocated performing bronchoscopies without sedation, noting that previous reports revealed that approximately 50% of the life-threatening complications were related to sedation practices.[3,4] The use of medications to relax the patient and decrease secretions prior to bronchoscopy has now morphed into the concept of moderate (conscious) sedation. Although this approach has certainly improved patient tolerance of the procedure, it has complicated the physician coding and billing practices.

A Brief History of Moderate Sedation

For purposes of coding, moderate (conscious) sedation is defined as "a drug induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain cardiovascular function or a patent airway, and spontaneous ventilation is adequate."[5] Prior to 1998, there were no specific codes for sedation services provided by bronchoscopists, and services were coded by using anesthesia codes or were left uncoded and therefore unreimbursed. Moderate sedation codes were added to the Current Procedural Terminology (CPT) code set in 1998. These codes were as follows: 99141, sedation with or without analgesia (conscious sedation), intravenous, intramuscular, or inhalation; or 99142, sedation with or without analgesia (conscious sedation), oral, rectal, and/or intranasal. One of these two CPT codes was then used to bill for moderate sedation given during a bronchoscopic procedure.

ABBREVIATIONS: CMS = Centers for Medicare & Medicaid Services; CPT = Current Procedural Terminology; CY = current year; RUC = Relative Value Scale Update Committee; wRVU = work relative value unit

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DOI: http://dx.doi.org/10.1016/j.chest.2017.06.027

The use of these conscious sedation codes required the presence of an independent trained observer to assist the physician in monitoring the patient's level of consciousness and physiological status.

In 2006, sedation services were "bundled" into the majority of the bronchoscopy codes and were not separately billable. These codes were placed into a new CPT appendix, Appendix G, which included a list of procedures in which moderate sedation is considered an inherent part of the procedure. In the CPT manual, codes that were listed in Appendix G were annotated with a bulls-eye symbol (⊙) next to the code. At the same time, additional codes were created (99143-99150), which could be used to code for moderate sedation provided to patients undergoing procedures that were not listed in Appendix G of the CPT. The use of the codes 99143 to 99145 by the operating physician also required the presence of an independent trained observer to assist the physician in monitoring the patient's level of consciousness and physiological status. A Centers for Medicare & Medicaid Services (CMS) transmittal that clarified use of these new codes did identify a potential problem in delivery of moderate sedation: "In the **unusual** [emphasis added] event when a second physician other than the health care professional performing the diagnostic or therapeutic services provides moderation sedation in the facility setting for the procedures listed in Appendix G, the second physician can bill 99148 to 99150."[6]

As one might have anticipated, the development of the newer, shorter acting anesthetic and analgesic agents resulted in improved patient tolerance of procedures as well as a shorter recovery time following the procedure. The use of these agents, therefore, became much more common in clinical practice. However, it was often challenging for the operating physician to both perform the procedure and to appropriately titrate these shorter acting agents. Practice patterns changed so that an additional clinician, often an anesthetist, would provide moderate sedation while the operating physician performed the procedure. Because the number of GI procedures performed yearly surpasses all other specialty procedures, it is not surprising that literature dating even before 2006 did suggest changes in practice patterns for GI endoscopy.[7] In 2010, it was predicted that by 2015, > 50% of GI procedures would be performed with anesthesia services providing moderate sedation rather than the operating physician.[8] A retrospective analysis of a claims list in 2012 verified that practice patterns had indeed changed significantly.[9]

This information was not lost on CMS, and in the current year (CY) 2015 Physician Fee Schedule published in November 2014, they made clear their intention to address what was perceived to be a duplication of payment for sedation services to the operating physician and the anesthetist.[10] Rather than deal with each of the > 400 codes present in Appendix G of the CPT manual, CMS elected to address the problem by "establishing a uniform approach" for the valuation of moderate sedation services. The CPT editorial panel altered and renumbered the CPT codes designed to separately report moderate sedation services. The list of new codes is presented in Table 1. At the same time, Appendix G and the bulls-eye symbol were eliminated from the CPT manual. The Relative Value Scale Update Committee (RUC) devised a method for revaluing the codes into two groups based on the complexity of the patient, although this method was eventually not accepted by CMS.

To determine the value of the new moderate sedation CPT codes (99151-99157), many of the specialty societies that perform services using moderate sedation participated in the RUC survey of these codes. Following the survey, a work relative value unit (wRVU) of 0.25 was proposed by the RUC for CPT code 99152, which was accepted by CMS and published in the CY 2017 Medicare Physician Fee Schedule Final Rule (CY 2017 Final Rule).[11] The valuation of CPT code 99152 was the most important for procedural specialists because its value would determine how much work would be subtracted from the procedure codes listed in Appendix G. Interestingly, the survey data provided by the GI societies differed from other societies in that there was a bimodal distribution in the data from the respondents performing GI endoscopy. Their survey data revealed that one group of respondents determined a wRVU of 0.10 was appropriate, while a second group determined that a wRVU of 0.25 was appropriate, for provision of moderate sedation for GI procedures. Based on this information, CMS decided that a wRVU of 0.10 was more accurate for GI procedures and made a specific Healthcare Common Procedure Coding System (G0500) for reporting GI endoscopy procedures other than biliary procedures. In the CY 2017 Final Rule, CMS chose not to elaborate extensively on the reason that

TABLE 1] Moderate Sedation Codes for 2017

CPT/HCPCS Code	Long Descriptor
99151	Moderate sedation services provided by the same physician or other qualified health-care professional performing the diagnostic or therapeutic service that the sedation supports, requiring the presence of an independent trained observer to assist in the monitoring of the patient's level of consciousness and physiological status; initial 15 min of intra-service time, patient aged < 5 y
99152	Moderate sedation services provided by the same physician or other qualified health-care professional performing the diagnostic or therapeutic service that the sedation supports, requiring the presence of an independent trained observer to assist in the monitoring of the patient's level of consciousness and physiological status; initial 15 min of intra-service time, patient aged ≥ 5 y
99153	Moderate sedation services provided by the same physician or other qualified health-care professional performing the diagnostic or therapeutic service that the sedation supports, requiring the presence of an independent trained observer to assist in the monitoring of the patient's level of consciousness and physiological status; each additional 15 min of intra-service time (list separately in addition to code for primary service).
99155	Moderate sedation services provided by a physician or other qualified health-care professional other than the physician or other qualified health care professional performing the diagnostic or therapeutic service that the sedation supports; initial 15 min of intra-service time, patient aged < 5 y
99156	Moderate sedation services provided by a physician or other qualified health-care professional other than the physician or other qualified health-care professional performing the diagnostic or therapeutic service that the sedation supports; initial 15 min of intra-service time, patient aged ≥ 5 y
99157	Moderate sedation services provided by a physician or other qualified health-care professional other than the physician or other qualified health-care professional performing the diagnostic or therapeutic service that the sedation supports; each additional 15 min intra-service time (list separately in addition to code for primary service)

CPT = Current Procedural Terminology; HCPCS = Healthcare Common Procedural Coding System.

they decided moderate sedation in GI procedures required less work than sedation for all other procedures in Appendix G.

In the CY 2017 Final Rule published in November 2016, CMS removed 0.25 wRVU from many of the bronchoscopy codes to account for the work of moderate sedation. A list of bronchoscopy codes and their wRVU values prior to and following January 1, 2017, are listed in Table 2.

What Does All This Mean?

If a physician performs a bronchoscopy and also provides moderate sedation, to be reimbursed appropriately, one needs to include a moderate sedation CPT code with all bronchoscopy procedures. One may note that all of the bronchoscopy procedures are not listed in Table 2. Those that are not listed are the therapeutic bronchoscopy codes, and these were also not listed in Appendix G of the CPT manual. They are considered to require deep sedation or monitored anesthesia care. The moderate sedation codes 99151, 99152, 99153, 99155, 99156, and 99157 are not used to report administration of medications for pain control, minimal sedation (anxiolysis), deep sedation, or monitored anesthesia care.

CPT codes 99151 and 99155 are intended for patients aged < 5 years. For a patient aged ≥ 5 years, when the bronchoscopist provides moderate sedation services, CPT code 99152 should be used for the initial 15 minutes and 99153 for subsequent time in 15-minute increments. For a patient aged ≥ 5 years, when a physician (or other qualified health-care professional) other than the bronchoscopist provides moderate sedation, CPT code 99156 should be used for the initial 15 minutes and 99157 for subsequent time in 15-minute increments. CPT codes 99155, 99156, and 99157 can be used only when the second provider (other than the bronchoscopist or a member of his or her group) performs moderate sedation in the facility setting (eg, hospital, outpatient hospital/ambulatory surgery center, skilled nursing facility); when the second provider performs these services in the nonfacility setting (eg, physician office, freestanding imaging center), codes 99155, 99156, or 99157 should not be reported.

An initial moderate sedation code (99151-99152 or 99155-99156) should not be used if providing < 10 minutes of moderate sedation. As with other time-based codes, the subsequent codes 99153 and 99157 are used when moderate sedation lasts 8 minutes longer

TABLE 2] Changes to Bronchoscopy CPT Codes

CPT Code	CY 2016 Work RVU	CY 2017 Work RVU
31622	2.78	2.53
31623	2.88	2.63
31624	2.88	2.63
31625	3.36	3.11
31626	4.16	3.91
+31627	2.00	2.00
31628	3.80	3.55
31629	4.00	3.75
+31632	1.03	1.03
+31633	1.32	1.32
31634	4.00	3.75
31635	3.67	3.42
31645	3.16	2.91
31646	2.72	2.47
31647	4.40	4.15
31648	4.20	3.95
31649	1.44	1.44
31651	1.58	1.58
31652	4.71	4.46
31653	5.21	4.96
31654	1.40	1.40
31660	4.25	4.00
31661	4.50	4.25

CY 2016-7 Work RVU = current year work relative value units. See Table 1 legend for expansion of other abbreviation.

than the initial 15 minutes. The time for moderate sedation begins with the administration of the sedating agent, and it concludes when the continuous face-to-face presence of the bronchoscopist ends, following completion of the procedure. Preservice work time (eg, reviewing the record and speaking with the patient) and postservice work time (eg, re-evaluation of the patient following the procedure) are not included in the time for moderate sedation. For example, if the bronchoscopist spends 10 minutes reviewing the patient record, provides moderate sedation for 39 minutes during the procedure, and 20 minutes reviewing the findings with the patient after the procedure, in a 65-year-old man, 99152 (for the initial 15 minutes) and two units of 99153 (for the subsequent 24 minutes) should be reported. It should be noted that although total physician time calculates to 69 minutes, only the 39 minutes of moderate sedation are used to determine the appropriate codes. The remainder of the work time is captured in the bronchoscopy code. If an individual other than the bronchoscopist provides moderate sedation for 41 minutes in a 57-year-old woman, 99156 (for the initial 15 minutes) and two units of 99157 (for the subsequent 26 minutes) should be reported (Table 3). The codes for moderate sedation are modifier 51 exempt.

If a bronchoscopist provides moderate sedation and reports the appropriate CPT codes after January 1, 2017, the 0.25 wRVU change will have no financial impact compared with 2016. However, if a second provider performs the moderate sedation, expect approximately an $8.72 drop (national average) in reimbursement per procedure. One may also notice that when using 99153 in the facility setting that there is no physician reimbursement. This code contains practice expense only and no physician work. Payment, therefore, goes to the facility and not the physician independent of the number of times that it is used. Finally, recognize that these codes and rules have been adopted by CMS, and private payers may not have adopted these changes. It is imperative, therefore, that one is familiar with the regulation of all of one's payers

TABLE 3] Correct Coding Combinations for Time of Moderate Sedation

Total intra-service Time	Patient Age	Moderate Sedation Performed By	
		Bronchoscopist Codes	Second Provider Codes
< 10 min	Any age	Not reported separately	
15-22 min	< 5 y	99151	99155
	≥ 5 y	99152	99156
23-37 min	< 5 y	99151 + 99153	99155 + 99157
	≥ 5 y	99152 + 99153	99156 + 99157
38-52 min	< 5 y	99151 + 99153 ×2	99155 + 99157 ×2
	≥ 5 y	99152 + 99153 ×2	99156 + 99157 ×2

so that optimal reimbursement for procedure can be achieved.

Acknowledgments

Financial/nonfinancial disclosures: None declared.

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