

Chapter 11

Coding and Reimbursement of Evaluation and Management Services

Mark Savarise

Evaluation and Management (E/M) services make up a very large proportion of the codes used by physicians and are the most frequently used codes in the Current Procedural Terminology (CPT) lexicon. Payment for these codes represents the largest portion of reimbursement from Medicare and other payors. The most-used code, 99213, office or other outpatient visit, established patient, is the most frequently used code by physicians and other qualified health care professionals, with a frequency of just under 100 million uses in the Medicare population in 2014. Although Internal Medicine and Family Practice are the most frequent users of this code, general surgeons and subspecialists used the code nearly 2 million times in 2014 on Medicare patient visits, making it the most widely used code for surgeons, as well [1].

As reimbursement for surgical procedures is declining overall, surgeons must pay more attention to their E/M coding and reimbursement, as it makes up a larger and larger share of their revenues. However, E/M coding is significantly more complicated than CPT coding for procedures, with nested requirements for documentation of encounters for multiple levels of service, coded differently for different types of patients seen in different venues. In addition, because E/M coding takes such a large portion of the reimbursement pie and because the codes are used so frequently, there is increasing scrutiny of misuse of these codes being done by auditing and recovery agencies. This is especially true with the more widespread use of electronic medical record systems, which facilitate documentation of details in the history and physical exam.

M. Savarise, MD, FACS

Associate Professor, American College of Surgeons, Alternate Advisor
to the AMA CPT Panel, Department of Surgery,
University of Utah Health Care, Salt Lake City, UT, USA
e-mail: mark.savarise@utah.edu

History

Codification of the use of the CPT system for coding and reimbursement of physician services began in 1983 when CMS adopted the CPT coding system as part of the Healthcare Common Procedure Coding System (HCPCS) [2]. In 1989, CMS adopted a standard fee schedule for physician reimbursement based on the first of the Resource Based Relative Value scales (covered elsewhere in this book). Initially there were code sets for E/M of patients as inpatients and outpatients, as well as some specific codes for evaluation in other locations. Over time, additional E/M codes have been added to the CPT code set to describe E/M services performed in relation to preventative care, outpatient observation care, coordination of complex care, telemedicine, and other services [3].

As new CPT codes for E/M services have been developed, valuation of these codes by the Relative Value Unit Update Committee (the RUC), has been consistently based on the value of the work of similar E/M services already in existence, based on the complexity and typical time involved in a given encounter. For example, when the CPT codes for subsequent evaluation and management of patients on observation care (99224–99226) were created in 2011, they were valued at 0.54–1.44 Relative Value Units (RVU). This is in comparison to the RVU of 0.76–2.00 for subsequent evaluation and management of inpatients (99231–99234) [1].

Over time, the RVUs for E/M services have tended to increase. For established outpatient code 99213, the value was 0.58 RVU in 1992, increasing to 0.67 RVU at its first 5-year review in 1997, then taking a jump to 0.97 RVU in 2007, where it remains. For the outpatient observation codes, the value of 99224 jumped from its initial 0.54 RVU to 0.76 RVU in 2012, matching the RVU for 99234, the equivalent level subsequent inpatient code. The highest level subsequent outpatient observation code, 99226, also rose to the equivalent value of the highest level subsequent inpatient code, 99234, at 2.00 RVU.

Likewise, we see upward trends in valuation of nearly all codes for consultation and initial care, both for inpatients and outpatients. (Table 11.1) Independent of this increase has been a shift in the *use* of the codes to higher levels of complexity by physicians. There is a great deal of discussion about how much of this is due to actual increasing complexity of these patients in general and how much is due to more diligent documentation of bullet points of history and physical examination in the record. At the end of this chapter, there is further discussion of the later phenomenon.

The Structure of the E/M Code set

CPT coding of E/M services such as new patient visits, established patient visits, hospital admission, and consultations is done at various levels of service. Typically there are three (eg. For hospital admission) or five (eg. For outpatient visits)

Table 11.1 Trends in valuation of E/M codes, 1992–2015

CPT code	1992 RVU	2003 RVU	2015 RVU
99201	0.40	0.45	0.48
99203	1.14	1.34	1.42
99205	2.22	2.67	3.17
99211	0.21	0.17	0.18
99213	0.58	0.67	0.97
99215	1.46	1.77	2.11
99221	1.13	1.28	1.92
99222	1.84	2.14	2.61
99223	2.54	2.99	3.86
99238	1.14	1.28	1.28

From the RUC database, AMA/specialty society RVS update committee, Copyright, 2015, American Medical Association

levels of service based on the amount of documentation of *key* and *contributory* components.

The E/M codes are grouped by place of service and type of service, starting with 99201, new patient office and other outpatient visits, through 99498, advanced care planning.

E/M coding depends on physician documentation in three fields, which CPT calls *key* components [4]:

1. History
2. Physical Examination
3. Medical Decision Making

In most circumstances, all three elements must be included, but there are exceptions to this requirement for established patient encounters, which require only two. These exceptions are for office or other outpatient visits for established patients (99211–99215), subsequent observation care (99224–99226), subsequent hospital care (99231–99233), and subsequent care of established patients in other settings, such as nursing homes.

In addition, CPT defines three components that it considers *contributory* factors in the majority of encounters. It is not required that these services be provided at every encounter. They are:

1. Counseling
2. Coordination of Care
3. Nature of Presenting Problem

A final component, considered separately in specific circumstances, is time. Time becomes the determinant of level of service in the circumstance where greater than 50 % of the encounter is spent in counseling and coordination of care [5]. CPT has explicit definitions of the encounter for which the 50 % is considered: it is the face-to face time spent with the patient and/or family in an outpatient

encounter, or floor/unit time in a hospital setting. CPT does not consider the additional time a physician spends in his office away from the patient coordinating care to apply.

Categories of Patients and Places of Service

Attention to the correct category and subcategory of service when selecting E/M codes is critical to ensure payment for services, as most payors have software which will automatically reject claims that do not follow the rules. CPT defines two classes of patients, new and established. An established patient is one who has received professional services from the physician or another physician of the exact same specialty and subspecialty who belongs to the same group practice, within the past 3 years [6]. For example, if your general surgery partner saw the patient for appendicitis and you, a general surgeon, are seeing the patient for the first time for a hernia 3 years later, this is an established patient encounter. However, if your vascular surgery partner saw the patient for claudication and you, a general surgeon, are now seeing the patient for a hernia, this is a new patient encounter.

A third type of encounter is the consultation. For consultations, CPT and CMS have differences of opinion. In CPT parlance, a consultation must be requested verbally or in writing by another physician or qualified health care provider. Either the requesting or consulting physician can document the request. The consulting physician can initiate treatment and/or accept responsibility for the patient's care. The main prohibition here is that the patient cannot request his or her own consult—it must come from another physician. Medicare eliminated payment for consultation codes in 2010 [7]. This was a result of a 2006 Office of the Inspector General (OIG) report that showed that 75% of consultations did not meet Medicare requirements, resulting in \$1.1 billion in improper payments [8]. However, many commercial insurers continue to follow CPT convention and allow the use of consultation codes.

Place of service is generally self-explanatory, with two notable exceptions of importance to surgeons. The first is the designation of inpatient hospital versus outpatient observation. Although the services provided in terms of physician work are virtually identical and the patient is generally unaware of the difference between inpatient and outpatient observation status, the incorrect code will result in denial of payment for these E/M services. The difference in coding is due to the CMS regulations pertaining to outpatient observation status. As many physicians are aware, over the past several years there has been a great deal of confusion over which patients should be admitted to which status. Note that the relative values for inpatient admission (99222=2.6 RVU) and initial observation (99219=2.6 RVU) are generally identical [1]. Incongruity between the hospital's designation of status and the physician's E/M coding (for instance, the hospital has designated the patient to be on observation status, but the physician has coded a hospital admission) can result in denial of payment for the physician service [9].

Table 11.2 Comparison of RVUs for similar services

CPT	Total 2015 Facility RVUs			Total 2015 Non-facility RVUs	
	Initial hospital care	CPT	Emergency Dept. Visit	CPT	Outpatient consultation
99221	2.87	99281	0.59	99241	1.37
		99282	1.16	99242	2.57
99222	3.87	99283	1.75	99243	3.51
		99284	3.33	99244	5.19
99223	5.73	99285	4.93	99245	6.35

From CodeManager Online: Elite, copyright American Medical Association, 2015. <https://www.ocm.ama-assn.org>

Note: Total RVUs equal wRVU + PE + malpractice RVU

The second is tied to the CMS policy disallowing consultations. For commercial insurers, the correct coding of encounters with patients seen in the Emergency Department (ED) at the request of the ED physician would be using the outpatient consultation codes (99241–99245). However, Medicare directs differently. If the patient is seen and not admitted to the hospital, the surgeon consultant codes the encounter as an ED visit (99281–99285). If the patient is seen and admitted to the hospital, the surgeon codes for hospital admission (99221–99223). If the patient is admitted to observation status, the correct codes are 99218–99220 [10]. Note that the relative value of these codes is similar: 99285 = 3.8 RVU, 99223 = 3.9 RVU, and 99220 = 3.6 RVU. (Table 11.2)

For Medicare beneficiaries who are hospital inpatients, the codes for inpatient consultation may not be used; however most other inpatients on whom a surgeon consults in the hospital, the codes for inpatient consultation (99251–99255) are used. For non-Medicare patients on outpatient observation status, outpatient consultation codes (99241–99245) are used. Medicare inpatient visits are coded as initial (99221–99223) or subsequent (99231–99233) inpatient encounters. Again, there is relative equipoise of the valuation: 99255 = 4.0 RVU, 99223 = 3.9 RVU. (Table 11.1) Medicare sorts out the admitting physician from consults by requiring the former to add the modifier –AI to the E/M code. To confuse matters further, Medicare patients who are on outpatient observation status in a hospital are considered outpatients, and consultation on these patients follow the rules for outpatient new (99201–99205) or established (99211–99215) visits [10].

Calculating the Appropriate Levels of E/M Service

As previously discussed, the level of service for E/M is based on documentation of the three elements of history, physical exam and medical decision making (MDM) for new patient encounters, and for two of the three elements for established patients. CMS specifies that MDM must be one of the two elements in established patients. There are four levels of each component. All of the required key components must meet or exceed the stated requirements to qualify for a particular level of service [11].

Stated otherwise, the highest level of E/M code that may be used for an encounter is determined by the lowest level of documentation of the required elements. There are many excellent references that deal with specific coding examples, which are beyond the scope of this book. The three following sections describe an overview of the key components of E/M services.

History

There are four levels of history: problem focused, expanded problem focused, detailed, and comprehensive.

A *problem focused* history contains a chief complaint and only one of the elements of the history of present illness (HPI). CPT defines the elements of the HPI: duration, location, quality, severity, timing, context, modifying (alleviating and/or exacerbating) factors, and associated symptoms.

An *expanded problem focused* history contains chief complaint, one of the elements of HPI, and a pertinent review of at least one system. CPT defines the areas in the review of systems (ROS): constitutional, eyes, ENT, respiratory, cardiovascular, gastrointestinal, genitourinary, musculoskeletal, neurologic, integumentary, psychiatric, endocrine, hematologic and allergic/immune.

A *detailed* history contains chief complaint, at least 3 elements of HPI, at least 2 areas of ROS, and 2 of the three areas of past medical, family and social history (PMFSH).

A *comprehensive* history contains chief complaint, 4 elements of HPI, 10 areas of ROS and all three areas of PMFSH.

There are special rules related to the documentation of these items set forth by CMS. For instance, only the provider may document the HPI, but the ROS and PMFSH may be documented by staff if the provider notes that he/she reviewed them. Also, positive and negative items in the ROS may be documented separately, or the physician may document the pertinent positive findings and state that all other elements were negative if such is the case [12].

Physical Exam

The initial guidelines for the mutli-system physical exam were established in 1995, and a second set of guidelines was established in 1997. Known as the 95 and 97 guidelines, they differ somewhat. CMS recognizes either set of guidelines, and a physician can use the 95 guidelines in one encounter and the 97 guidelines in another. However he or she may not combine the two for a single encounter in order to determine a level of service [13]. The primary difference between the two systems is the comprehensive examination of a single system in the 97 guidelines.

Just as with history, there are four levels of physical exam. For the purpose of the exam CPT recognizes seven body areas:

- Head (including face)
- Neck,
- Chest (including breasts and axilla),
- Abdomen
- Genitalia, groin and buttocks
- Back
- Each extremity

and 12 organ systems:

- Constitutional
- Eyes
- Ears, nose, mouth and throat
- Cardiovascular
- Respiratory
- Gastrointestinal
- Genitourinary
- Musculoskeletal
- Skin
- Neurologic
- Psychiatric
- Hematologic/lymphatic

In the 1997 guidelines, CMS established single organ system exams for cardiovascular, respiratory, ENT, eye, genitourinary, hematologic/lymphatic, musculoskeletal, neurologic, skin and psychiatric exams [13]. Each of these have bullet points in each of the organ systems for use in the single organ system exam (Table 11.3). Some systems have only two bullets (eg. Constitutional: general appearance and any 3 vital signs); others have multiple bullets, such as the musculoskeletal examination, which has four bullets in each of six areas of the body and additional bullets for gait and station.

A *problem focused* physical exam is a limited exam of one body area or system.

An *expanded problem focused* exam is an examination of at least 2 body areas or organ systems (95 exam) or 6 bullets (97 exam).

A *detailed* exam is also an examination of at least 2 body areas or organ systems (95) or 12 bullets (97).

A *comprehensive* exam requires examination of 8 organ systems (not body areas) from the 95 exam or at least 18 bullet points from at least 9 systems from the 97 exam.

Most general surgeons use the 1995 guidelines, as there is no single organ system exam for the abdomen or gastrointestinal system, the breasts, or the vascular system in the 1997 guidelines.

Table 11.3 General multi-system examination

System/body area	Elements of examination
Constitutional	Measurement of 3 vital signs (blood pressure, pulse, respiration, temperature, height, weight) General appearance of patient (development, nutrition, body habitus, deformities, attention to grooming)
Eyes	Inspection of conjunctiva and lids Examination of pupils and irises (eg, reaction to light and accommodation, size and symmetry) Ophthalmoscopic examination of optic discs (eg, size, C/D ratio, appearance) and posterior segments (eg, vessel changes, exudates, hemorrhages)
Ears, Nose, Mouth & Throat	External inspection of ears and nose (eg, overall appearance, scars, lesions, masses) Otoscope 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, posterior pharynx
Neck	Examination of neck (eg, masses, overall appearance, symmetry, tracheal position, crepitus) Examination of thyroid (eg, enlargement, tenderness, mass)
Respiratory	Assessment of respiratory effort (eg, intercostal retractions, use of accessory muscles, diaphragmatic movement) Percussion of chest (eg, dullness, flatness, hyperresonance) Palpation of chest (eg, tactile fremitus) Auscultation of lungs (eg, breath sounds, adventitious sounds, rubs)
Cardiovascular	Palpation of heart (eg, location, size, thrills) Auscultation of heart with notation of abnormal sounds and murmurs Examination of: carotid arteries (eg, pulse amplitude, bruits) abdominal aorta (eg, size, bruits) femoral arteries (eg, pulse amplitude, bruits) pedal pulses (eg, pulse amplitude) extremities for edema and/or varicosities
Chest (Breasts)	Inspection of breasts (eg, symmetry, nipple discharge) Palpation of breasts and axillae (eg, masses or lumps, tenderness)
Gastrointestinal (Abdomen)	Examination of abdomen with notation of presence of masses or tenderness Examination of liver and spleen Examination for presence or absence of hernia Examination (when indicated) of anus, perineum and rectum, including sphincter tone, presence of hemorrhoids, rectal masses Obtain stool sample for occult blood test when indicated

Table 11.3 (continued)

System/body area	Elements of examination
Genitourinary	<p><i>MALE:</i></p> <ul style="list-style-type: none"> 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) <p><i>FEMALE:</i></p> <ul style="list-style-type: none"> Pelvic examination (with or without specimen collection for smears and cultures), including <ul style="list-style-type: none"> 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)
Lymphatic	<p>Palpation of lymph nodes in <i>two or more</i> areas:</p> <ul style="list-style-type: none"> Neck Axillae Groin Other
Musculoskeletal	<ul style="list-style-type: none"> Examination of gait and station Inspection and/or palpation of digits and nails (eg, clubbing, cyanosis, inflammatory conditions, petechiae, ischemia, infections, nodes) Examination of joints, bones and muscles of <i>one or more of the following six</i> areas: (1) head and neck; (2) spine, ribs and pelvis; (3) right upper extremity; (4) left upper extremity; (5) right lower extremity; and (6) left lower extremity. The examination of a given area includes: <ul style="list-style-type: none"> Inspection and/or palpation with notation of presence of any misalignment, asymmetry, crepitation, defects, tenderness, masses, effusions Assessment of range of motion with notation of any pain, crepitation or contracture Assessment of stability with notation of any dislocation (luxation), subluxation or laxity Assessment of muscle strength and tone (eg, flaccid, cog wheel, spastic) with notation of any atrophy or abnormal movements
Skin	<ul style="list-style-type: none"> Inspection of skin and subcutaneous tissue (eg, rashes, lesions, ulcers) Palpation of skin and subcutaneous tissue (eg, induration, subcutaneous nodules, tightening)
Neurologic	<ul style="list-style-type: none"> Test cranial nerves with notation of any deficits Examination of deep tendon reflexes with notation of pathological reflexes (eg, Babinski) Examination of sensation (eg, by touch, pin, vibration, proprioception)
Psychiatric	<ul style="list-style-type: none"> Description of patient’s judgment and insight Brief assessment of mental status including: <ul style="list-style-type: none"> orientation to time, place and person recent and remote memory mood and affect (eg, depression, anxiety, agitation)

From CMS 1997 documentation guidelines for evaluation and management services. <http://www.cms.gov/MLNProducts/downloads/MASTER1.pdf>

Medical Decision Making

Medical decision making (MDM) is the most important of the key elements, and also the most complicated. There are three components to MDM:

- The complexity of diagnoses or management options
- The amount and/or complexity of data to be reviewed
- The risk of complications and/or morbidity/mortality

For each of these, there are four levels of complexity: straightforward (minimal), low (limited), moderate (multiple), and high (extensive). The level of MDM is then determined by the two highest of these three elements. Table 11.4 gives examples from CMS of each of these levels in the three components of MDM.

Table 11.4 Levels of risk in medical decision making

Level of risk	Presenting problem(s)	Diagnostic procedure(s) ordered	Management options selected
Minimal	One self – limited or minor problem e.g., cold, insect bite, tinea	Laboratory tests requiring venipuncture Chest x-rays EKG/EEG Urinalysis Ultrasound, e.g., echocardiography	Rest Gargles Elastic bandages Superficial dressings
Low	Two or more self-limited or minor problems One stable chronic illness, e.g., well controlled hypertension or non-insulin dependent diabetes, cataracts, BPH Acute uncomplicated illness or injury, e.g., cystitis, allergic rhinitis, simple sprain	Physiologic tests not under stress, e.g., pulmonary function tests Non-cardiovascular imaging studies with contrast, e.g., barium enema Superficial needle biopsy Clinical laboratory tests requiring arterial puncture Skin biopsy	Over-the-counter drugs Minor surgery with no identified risks Occupational therapy IV fluids without additives
Moderate	One or more chronic illnesses with mild exacerbation progression or side effects Two or more stable chronic illnesses Undiagnosed new problem with uncertain, e.g., lump in breast Acute illness with systemic symptoms, e.g., pyelonephritis, pneumonitis, colitis Acute complicated injuries, e.g., head injury with loss of consciousness	Physiologic tests under stress, e.g., cardiac stress tests, fetal contraction stress test Diagnostic endoscopies with no identified risks Deep needle or incisional biopsy Cardiovascular imaging studies with contrast and no identified risks, e.g., arteriogram, cardiac catheter Obtain fluid from body cavity, e.g., lumbar puncture, thoracentesis, culdocentesis	Elective major surgery (open percutaneous or endoscopic) with no identified risks Prescription drugs Therapeutic nuclear medicine IV fluids with additives_ Closed treatment of fracture or dislocation

Table 11.4 (continued)

Level of risk	Presenting problem(s)	Diagnostic procedure(s) ordered	Management options selected
High	<p>One or more chronic illness with severe exacerbation, progressions, or side effects</p> <p>Acute or chronic illness or injuries that may pose threat to life or bodily function, e.g., multiple trauma, acute MI, pulmonary embolus, severe respiratory distress, progressive severe rheumatoid arthritis, psychiatric illness with potential threat to self or others, peritonitis, acute renal failure</p> <p>An abrupt change in neurologic status, e.g., seizure TIA, weakness, or sensory loss</p>	<p>Cardiovascular imaging studies with contrast</p> <p>Cardiac electrophysiological tests</p> <p>Diagnostic endoscopies with identified risks</p> <p>Discography</p>	<p>Elective major surgery (open or endoscopic) with identified risks</p> <p>Emergency major surgery (open percutaneous or endoscopic)</p> <p>Parenteral controlled substance</p> <p>Drug therapy requiring intensive monitoring for toxicity</p> <p>Decision not to resuscitate or to de-escalate care because of poor prognosis</p>

From Department of Health and Human Services, Centers for Medicare & Medicaid Services, Evaluation and Management Services Guide, November 2014/ICN 006764

Important for surgeons are some key points about MDM:

- Complexity of management options of the presenting problems for surgeons are often moderate (undiagnosed problem such as abdominal pain or breast lump, or acute illness or injury) or severe (illness or injury that poses a threat to bodily function).
- Diagnostic tests ordered or reviewed count equally. Documentation of review of the actual images is considered an additional level of complexity. This applies to radiographic images, photo documentation from endoscopy, pathology slides, tracings from noninvasive vascular studies, and others.
- Any operation done in the OR or endoscopy suite is considered major surgery for coding purposes, and is at least a moderate level of MDM; major surgery with identified risk factors is considered high level MDM.

Because of the definitions of the levels of complexity, it is frequently the case that patient encounters with surgeons qualify for moderate or high levels of MDM.

Valuation of E/M Services

Like all CPT codes, E/M services are valued by the RUC and resurveyed periodically (see also Chapter 4). The total relative value is a sum of the work, practice expense and malpractice expense. The work RVU is a sum of the pre-service,

intra-service and post-service times. E/M codes do contain pre- and post-service time valuations.

For example, the initial hospital care codes 99222 and 99223 both have 15 min of pre-evaluation time and 20 min of post-evaluation time in their wRVU calculations. The vignettes for these codes describe the pre-service, “Review data (eg, diagnostic and imaging studies) not available at the unit. Communicate with other health care professionals and with patient and/or family. Obtain and review past results or records not available at the unit. Perform evaluation and management related to ‘observation status’ in other sites of service (eg, office or ED) earlier the same day.” and the post-service, “Address interval data obtained and reported changes in condition. Communicate results and additional care plans to other health care professionals and to the patient and/or family.” The codes differ on their intra-service. Both services require a comprehensive history and a comprehensive physical exam, and these additional services: “Discuss diagnosis and treatment options with patient and/or family. Consider discharge needs of patient. Communicate with other health care professionals as necessary. Write and/or review admission orders, including arranging for necessary diagnostic testing, consultation(s), and therapeutic intervention(s). Complete medical record documentation.” Where the codes differ is that 99223 requires MDM of high complexity and 99222 involves MDM of moderate complexity. The median intra-time for 99222 is 40 min, and its value is 2.61 RVU; median intra-time for 99223 is 55 min, and its value is 3.86 RVU [1].

Table 11.2 illustrates the relative values of some E/M codes at various levels. Note that codes for outpatient evaluation have more granularity than codes for hospital admission and visits, but that the relative values of the lower and higher codes in the sets are consistent. When the RUC data for pre-, intra-, and post-service are analyzed, there is consistency of the relative values of E/M codes.

Economics of E/M Coding

As stated in the introduction to this chapter, E/M services are the most frequently used of the CPT codes, and represent a large share of physician expenditures from the Medicare budget. In 2010, 442,000 physicians provided 370 million E/M services to 30 million Medicare beneficiaries. Medicare payments for E/M services totaled \$33.5 billion in 2010, 30 % of all physician expenditures by Medicare, and a 48 % increase since 2000 [14].

There are two concurrent trends, which are resulting in significant overall increases in the amount of money spent on E/M services:

1. There is a trend of increasing reimbursement for E/M codes over time.
2. There is a trend toward the use of higher level of E/M services over time.

We can consider these separately.

First, consider the gradual increase in valuation of E/M services over the past 20 years, and especially over the past 10 years. For example, initial outpatient evaluation,

moderate complexity (99203) was valued at 1.14 RVU in 1995, 1.34 RVU in 2005, and 1.42 RVU in 2015, an increase of 25%. More impressive, initial hospital care, high level (99223) was valued at 2.57 RVU in 1995, 2.99 RVU in 2005, and 3.86 RVU in 2015, an increase of 50%.

In comparison, laparoscopic cholecystectomy (47562) was valued at 10.68 RVU in 1995, increased to 11.07 RVU in 2005, but decreased to 10.47 RVU in 2015.

There are several purported reasons for this increase. The RUC points to survey data that show increased times spent during these services. There has also been political pressure to improve relative reimbursement to primary care, the most frequent users of the E/M codes. CMS has supported the RUC recommendations for increasing RVUs of these codes, but in recent years has rejected RUC recommendations for increasing RVUs for some surgical codes, such as open cholecystectomy (47600). In 2011, CMS directed the RUC to review the code for mis-valuation. The RUC re-surveyed surgeons, recognizing that the typical patient undergoing open cholecystectomy had become more complicated over time, and made a recommendation of 20.00 RVU. CMS rejected the value, assigning 17.48 RVU instead.

The second consideration is the trend toward higher E/M coding levels. Mis-coding is not a new problem. Some blame can be attributed to the complexity of the process of calculating the correct E/M code using the complicated set of rules that have been set forth. It is also widespread among all specialties. A 2000 study of family physicians in Ohio showed that 43% of visits were mis-coded, with equal numbers overcoded and undercoded [15]. This study preceded the widespread use of EMR, and this type of data led some proponents of EMR to argue that more accurate coding would be a benefit of the technology.

More recent studies show that inaccurate coding continues to be widespread. In 2006, the OIG reported that 75% of consultations did not meet Medicare coverage requirements, and consultations billed at the highest level were miscoded 95% of the time [8].

An OIG study in 2010 analyzed the trends in coding from 2001–2010, and noted marked trends toward increasing use of the highest levels of codes in any given code family [16]. For established patient office visits, the OIG found a shift in billing from the three lowest level E/M codes to the two highest levels (99214–99215) by 17% over 8 years. Subsequent inpatient hospital care billing of the lowest level (99231) decreased 16%, while higher levels (99232–99233) increased 6% and 9%, respectively. For emergency department visits, physicians' billing of the highest-level code (99285) rose 21%, comprising by 2010 48% of all ER visits.

CMS guidelines state that “medical record documentation supports the level of service reported to a payer [but] the volume of documentation should not be used to determine which specific level of service is billed.” [17] Some studies suggest that, in fact, the opposite is done in many cases. Medicare auditing agencies are not unaware of these trends. Combined with the afore mentioned findings of the OIG and other recovery agencies, the OIG is engaged at the time of publication of this chapter in a study of the (mis)use of EMR in incorrect coding of evaluation and management services [18]. CMS has already been able to use analysis of claims data to identify physicians who are outliers in E/M coding, identifying in its 2010 analysis 1669

physicians who billed the two highest level E/M codes 95% of the time, and who were in the top 1% in their specialties. Medicare paid \$108 million to these physicians, which the OIG estimated to be a \$54 million overpayment [16]. Although the report did not specify the means of recovery of these payments, CMS has at its disposal Recovery Audit Contractors and Zone Program Integrity Contractors with the authority to recover these funds from physicians. It is unknown at this time what actions CMS will be taking toward repayment of funds or punishment.

References

1. AMA/Specialty society RVS update committee database; copyright American Medical Association. 2015
2. Omnibus Budget Reconciliation Act of 1989, P. L. No. 101-239 ss. 6102. Social Security Act ss. 42 U.S.C. 1395w-4. 1848.
3. Ahlman, J, et. al. Current procedural terminology, 2016 professional edition. Chicago: copyright American Medical Association. p. 1-3.
4. Ahlman, J, et. al. Current procedural terminology, 2016 professional edition. Chicago: copyright American Medical Association. p. 9-10.
5. Ahlman, J, et. al. Current procedural terminology, 2016 professional edition. Chicago: copyright American Medical Association. p. 7-8, 10.
6. Ahlman, J, et. al. Current procedural terminology, 2016 professional edition. Chicago: copyright American Medical Association. p. 4.
7. CY 2010 Physician fee schedule final rule. 74 Fed. Reg. 61738, 61767-78 (2009); CMS, Change Request 6740, Transmittal 1875, Revisions to consultation services payment policy. 2009.
8. Office of the Inspector General, consultations in medicare: coding and reimbursement, OEI-09-02-00030. 2006.
9. KZA. Coding and reimbursement workshops: office and hospital coding: how to document, what to bill for and appeal (Instructor Guide). 2015. p. 17-19.
10. Savarise, M. Coding for hospital admission, consultations, and emergency department visits. ACS Bulletin. 2013;98(2):54-56.
11. CMS. Documentation guidelines for evaluation and management services. 1995.<http://www.cms.gov/MLNProducts/downloads/1995dg.pdf>.
12. KZA. Coding and reimbursement workshops: office and hospital coding: how to document, what to bill for and appeal (Instructor Guide). 2015: 30.
13. CMS. Documentation guidelines for evaluation and management services. 1997.<http://www.cms.gov/MLNProducts/downloads/MASTER1.pdf>.
14. Office of Inspector General (OIG) analysis of 2010 National Claims History (NCH) File and 2010 Part B Analytic Reports (PBAR) National Procedure Summary File.
15. Kikano GE, Goodwin MA, Stange KC. Evaluation and management services. A comparison of medical record documentation with actual billing in community family practice. Arch Fam Med. 2000;9(1):68-71.
16. OIG, Coding trends of medicare evaluation and management services. OEI-04-10-00180.pdf. 2012.
17. CMS Medicare Learning Network: evaluation and management services guide, -ICN006764.pdf. 2014.
18. OIG, Use of electronic health record systems among physicians providing evaluation and management services, OEI-04-10-00182, in progress.