Learning Outcomes

After completing this chapter, you should be able to:

- Explain why billing codes are important in an EHR system
- Show how Evaluation and Management (E&M) codes are determined
- Name and describe key components of E&M codes
- Read and understand the tables used in CMS guidelines
- Explain how the level of key components determines the level of the E&M code
- Use E&M calculator software
- Correctly use and document the time factor to change the level of an E&M code

The EHR and Reimbursement

There is no question that healthcare providers must be paid for their services and that the vast majority of those payments are from insurance plans, which require the use of standard codes. Some clinical workers ignore or resist a discussion of the relationship of the EHR to reimbursement, considering it the responsibility of the billing department. Unfortunately, that is not the case.

Whether the clinician is a doctor, nurse, or medical assistant, how and what that person documents in the patient chart has everything to do with what the medical facility is going to be paid for treating the patient.

Insurance plan audits follow this dictum: *If it isn’t documented, it wasn’t done.* This means no matter how long the medical assistant and patient discussed the patient’s history and symptoms; no matter how thoroughly the nurse assessed
the patient; no matter how brilliant the doctor’s diagnosis; if those findings are not documented with sufficient detail in the chart, the auditor will assume that those portions of the encounter were never performed.

Knowing there is a direct relationship between the completeness of your clinical documentation and the financial well-being of your medical facility can help you understand the necessity of this chapter. If your interest is primarily clinical and not administrative, have no fear of this chapter. It is not intended to train you as a medical coder or billing specialist. A complete medical coding course could not be taught in one chapter anyway. The purpose of this chapter is to help you understand the guidelines used for calculating reimbursement by analyzing a patient encounter recorded in an EHR.

**EHR Helps Meet Government Mandates**

The U.S. government, Medicare, and insurance regulations financially affect all healthcare facilities. Adoption of an EHR system can not only improve patient care, as described in earlier chapters, but can also ensure reimbursement for services provided. In this chapter we are going to discuss three factors affected by an EHR:

1. Incentives and penalties
2. Proper coding of diagnoses
3. Factors of Evaluation and Management

**Incentives and Penalties**

In Chapter 1 we discussed the Health Information Technology for Economic and Clinical Health (HITECH) Act. The government firmly believes in the benefits of using electronic health records. It is encouraging the widespread adoption of EHR by authorizing Medicare to make incentive payments to doctors and hospitals that use a certified EHR. This means that a practice adopting an EHR actually gets paid more than a practice continuing to use paper charts. Providers that implement and have a meaningful use of a certified EHR before 2015 are eligible for incentives. Here are some of the meaningful use requirements:

- Uses a certified EHR
- Submits most prescriptions electronically
- Reports clinical quality measures
- Has an EHR that interconnects electronically for healthcare delivery
- Reports billing codes indicating that patient encounters were recorded using an EHR.

After 2015, Medicare will begin to administer financial penalties for physicians and hospitals that do not use an EHR. These will involve reducing the provider’s payments by 1 percent per year for up to five years. By 2020, a provider still using paper charts will have payments reduced by 5 percent.

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HIPAA-Required Code Sets

HIPAA\(^2\) law regulates many things, including the privacy and security of health records. It also standardized healthcare transactions and required the use of the ICD-9-CM, CPT-4, and HCPCS code sets.

Diagnoses Codes Justify Billing

Chapter 7 introduced ICD-9-CM codes and discussed their use for mortality and morbidity studies. The ICD-9-CM codes are also used daily by clinicians and the billing department because they are required for insurance claims.

Reimbursement for most inpatient hospitals is based entirely on the Diagnostic Related Group (DRG) determined from the primary and secondary diagnoses assigned by the attending physician.

For both inpatient and outpatient facilities, the use of the correct ICD-9-CM code on a claim serves to explain or justify the medical reason for the services being billed. Outpatient billing requires one or more ICD-9-CM codes be assigned to every procedure. Furthermore, the diagnosis must correspond to the procedure. For example, you cannot bill for an eye exam using the diagnosis for a broken toe.

ICD-9-CM codes are from three to five digits long. The first three digits, called the “rubric,” are followed by a decimal point and up to two numerals, which serve to further specify or refine the description of the condition. Insurance billing rules require clinicians to code to the most specific level.

\(^2\)Health Insurance Portability and Accountability Act, Administrative Simplification Subsection, Title 2, subsection f.
Offices without an EHR print a list of diagnosis codes on the paper encounter form. The clinician indicates the diagnosis by checking or circling a code on the form. However, the preprinted codes on the form may not be as specific as the clinician’s assessment. The clinician must also be careful to use the same terminology in the dictation as the ICD-9-CM description, or the billing for the visit may not match the transcribed encounter note.

Most EHR systems contain a “cross-walk” or internal reference table that can produce ICD-9-CM codes at the fourth or fifth digit specificity automatically. An example of this is shown in Figure 12-1. You can see this later in any exercise that has an assessment finding. To do so, click on the tab on the right pane labeled “Outline View.” To return to the Note View, click on the tab on the right pane labeled “Note View.”

The advantage of using an EHR with a codified nomenclature is that the codes billed will always be in sync with the note that is produced. Another advantage is that the EHR allows the clinician to record nuances that are beyond the scope of ICD-9-CM such as “mild” or “improving.” The EHR software will automatically translate the assessment to the correct diagnosis code, which then may be used for billing.

**CPT-4 and HCPCS Codes**

In addition to standard codes for diagnoses, HIPAA requires the use of CPT-4 and HCPCS codes for procedures. CPT stands for Current Procedural Terminology, fourth edition. It was developed and is maintained by the American Medical Association (AMA). HCPCS stands for Healthcare Common Procedure Coding System. It was developed by the CMS to code for supplies, injectable medications, and blood products. CPT-4 is incorporated into the HCPCS standard even though it is separately maintained by the AMA.

**Evaluation and Management (E&M) Codes**

Although some CPT-4 codes represent a specific medical procedure, the most frequently used portion of the CPT-4 code set is the Evaluation and Management (E&M) codes. These CPT-4 codes are used to bill for nearly every kind of patient encounter, including medical office visits, inpatient hospital exams, nursing home visits, consults, emergency room (ER) doctors, and scores of other services. E&M codes are used by virtually all specialties.

At one time E&M billing was based on the provider’s judgment of how complex the visit was. However, Medicare has developed strict guidelines for determining how the level of exam justified the level of E&M code. The time spent with the patient is no longer the controlling factor.

The E&M guidelines were published in 1995. Specialists, however, found fault with the 1995 guidelines. For example, an ophthalmologist performs an in-depth exam of the eyes but does not typically perform a complete head-to-toe review of systems. Under the 1995 guidelines, the ophthalmologist would never meet the criteria for higher level codes. In response, the guidelines were revamped in 1997. Today physicians are allowed to use either the 1995 or 1997 guideline, whichever best suits their practice. This chapter uses the 1997 guideline, because it is the most recent.
E&M guidelines determine the CPT-4 E&M code based almost exclusively on the findings documented in the encounter note. Gone are the days when a clinician might perform a very adequate physical but scribble only a few lines in the chart.

**Four Levels of E&M Codes**

There are four levels of E&M codes for each type of visit. The levels represent the least complicated exam (level 1) to the most complex exam (level 4). The level is important because a provider’s “allowed payment” amount is proportionate to the level of the exam (with level 1 paying the least and level 4 paying the most).

Where the service is rendered is an important consideration as well. There are separate categories of E&M codes for different locations such as office visits, inpatient exams, ER exams, and so on. Each category of E&M codes has at least four codes representing the four levels of service. Some categories have more than four E&M codes because there are subcategories—for example, new patient versus established patient. The exercises in this chapter use the E&M codes for office visits.

**How the Level of an E&M Code Is Determined**

Seven components are evaluated to determine the level of E&M services:

- History
- Examination
- Medical decision making
- Counseling
- Coordination of care
- Nature of presenting problem
- Time

Three components—history, examination, and medical decision making—are the key components in determining the level of E&M services. The level of each key component is determined separately. The level of E&M code is derived from the highest level of two or three key components. There is one exception. For services such as psychiatry, which consist predominantly of counseling or coordination of care, time is the key or controlling factor determining the level of E&M service.

This chapter explains each of the components, the levels within the key components, and how they are combined to calculate the E&M code. A later exercise will also show how time can become an overriding factor, justifying a higher level code for visits that require more time for counseling the patient.

**Undercoding**

In an office using paper charts, clinicians often select the E&M code by circling a code on a paper encounter form. These clinicians are at risk. If they select a code that is at a higher level than the dictated note supports, they can be fined.
To avoid risk, many practices *undercode* (choosing a code one level below what they believe to be correct), taking the attitude “better safe than sorry.” This is bad for the practice financially; they are losing payment for their work. When clinicians undercode by one level, it is the same as seeing 80 patients and getting paid for seeing 60.

**Accurate Coding**

The clinician using an EHR does not worry about the mandate “If it isn’t documented, it wasn’t done” because it is always documented. EHR systems that use standardized nomenclatures have a codified record of the encounter. This enables the software to use data in the encounter note to calculate the correct E&M code for billing.

EHR systems analyze the amount and type of data and accurately determine the correct E&M code at the correct level. Many EHR systems can show the provider how the calculation was determined, thus giving the provider confidence that the code can be substantiated. In addition to E&M codes, the EHR can suggest CPT-4 codes for other procedures performed during the encounter.

When the EHR is an integrated component of practice management software, or when it is interfaced to a practice management system, the ICD-9-CM, CPT-4, and HCPCS codes can transfer directly to the billing or charge posting module. Most practice management systems do not post the charges automatically, but transfer them as “pending” charges. The charges are reviewed by a billing or coding specialist before being “posted” to the patient’s account or billed to insurance.

**Using EHR Software to Understand E&M Codes**

In the next few exercises, we are going to focus on understanding E&M codes. The Student Edition software contains an E&M code calculator. You are going to use that tool while learning how E&M codes are derived.

**Guided Exercise 69: Calculating the E&M Code from an Encounter**

In this exercise, you are going to learn how to use the E&M calculator by using a previously stored encounter that is already in your system. Using a previous encounter will allow you to focus on understanding the E&M codes themselves without worrying about creating the note.

**Case Study**

Mary Williams is a 26-year-old female who was seen for stuffy sinus. The healthcare provider who entered the encounter data has not yet recorded the history of present illness or vital signs.

**Step 1**

If you have not already done so, start the Student Edition software.

Click Select on the Menu bar, and then click Patient.
In the Patient Selection window, locate and click on Mary Williams (as shown in Figure 12-2).

**Step 2**

Click Select on the Menu bar, and then click **Existing Encounter**.

A small window of previous encounters will be displayed. Compare your screen to the window showing in the center of Figure 12-3.

Select **5/28/2012 10:45 AM Office Visit**.

The encounter note from that date will be displayed.

**Step 3**

Compare your screen to Figure 12-4. The exam was created using the Adult URI List and therefore should look familiar to you.

Because we are going to be using the information from the encounter note to calculate the E&M code, take a few minutes to look at the encounter note in the right pane of your screen.

Pay attention to the History section. It contains a Review of Systems, but no HPI or social history; this will be discussed later in this exercise.
Figure 12-4 Patient encounter note for May 28, 2012, displayed in right pane.

Not all of the note will fit in the pane, so you will need to use the scroll bar on the right to scroll downward to see the rest of the note, as shown in Figure 12-5.

**Step 4**

Compare the number of body systems in the Physical Findings section of the note with the number of body systems in the Review of Systems section.

Figure 12-5 Scrolled portion of patient encounter note with E&M button highlighted.
When you are sufficiently familiar with the encounter note, locate the button labeled “E&M” in the Toolbar at the top of your screen. The icon resembles a horseshoe magnet with a lightning bolt and is highlighted orange in Figure 12-5.

Click on the E&M button and the E&M calculator will be invoked. The first screen that will be displayed is the Problem Screening checklist shown in Figure 12-6.

<table>
<thead>
<tr>
<th>Problem Screening Checklist Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certain E&amp;M calculations are affected by factors of the problem assessment that may not be explicitly documented in the encounter note such as:</td>
</tr>
<tr>
<td>- Is the problem active or inactive?</td>
</tr>
<tr>
<td>- Is the problem chronic or not?</td>
</tr>
<tr>
<td>- Is the problem new to the examiner?</td>
</tr>
<tr>
<td>- Is additional workup planned for the problem?</td>
</tr>
<tr>
<td>- Is the problem stable or worsening?</td>
</tr>
</tbody>
</table>

The Problem Screening checklist (shown in Figure 12-6) displays assessments in the current encounter. Providers can add information for the E&M calculator about each problem by checking boxes for active, chronic, new, or additional workup. A drop-down list lets the provider inform the E&M calculator of the problem status, but this does not alter a problem status that has been recorded in the Entry Detail Status field.

**Step 5**

We will explore the effect of the Problem Screening checklist later as we discuss problem risk and management.

Do not check any of the boxes at this time. Locate and click on the OK button on the bottom of the Problem Screening for E/M window. The Evaluation and Management Calculator window will be displayed (as shown in Figure 12-7).
Step 6
The fields in this screen will be explained in detail in Guided Exercise 70; for the moment, just calculate the E&M code. If the field labeled “Calculated E&M Code” displays “99212 Estab Outpatient Focused H&P—Straightforward Decisions,” you are ready to proceed.

If it is blank or contains a different code, locate the area labeled “Patient Status” in the upper right corner. If the white circle next to “Existing” is empty, click it once with your mouse. It should then appear filled in the center as shown in Figure 12-7 (circled in red).

Locate the large button labeled “Calculate E&M Code” and click it.

Compare your screen to the Evaluation and Management Calculator window shown in Figure 12-7.

Step 7
You are going to use the E&M calculator window to help you understand the CMS Documentation Guidelines for Evaluation and Management Services.

Look at the bottom of the calculator window where there is a grid. The columns are labeled with terms you may recognize, such as HPI and ROS. There are four rows representing the four levels discussed earlier. Each of the columns lists the levels relevant to that particular type of finding. This will be further explained later in this chapter.

Leave your E&M calculator displayed as you read the following section. Do not click any more buttons until instructed to do so. If you cannot complete the reading in the allotted time, simply repeat steps 1, 2, and 5 to invoke the E&M calculator window again when you are ready to resume.

Levels of Key Components
You will recall from an earlier discussion that history, examination, and medical decision making are the key components that determine the level of E&M services.
The CPT-4 E&M code description lists the three key components and their levels. For example, the description for code 99212 is “Established Patient, Focused History and Physical, Straightforward Decision Making.”

The key components each have levels of their own, which are determined separately. Components have a numerical level of 1 to 4; in addition, they have a name, such as brief, extended, low, high, simple, or complex. The level of E&M code is derived from the highest level of two or three key components.

We will now discuss each of the key components, the levels within the key components, and how they are combined to calculate the E&M code.

**Key Component: History**

The History component includes the following elements:

- **CC**, which is an acronym for Chief Complaint. A Chief Complaint is required for all levels of History.
- **HPI**, which is an acronym for History of Present Illness.
- **ROS**, which is an acronym for Review of Systems.
- **PFSH**, which is an acronym for Past History, Family History, and Social History.

The extent of history of present illness, review of systems, and past, family, or social history that is obtained and documented is dependent on clinical judgment and the nature of the presenting problems.

**Step 8**

Look at the grid section of the E&M calculator window shown in Figure 12-8. The History section consists of the four columns labeled HPI, ROS, PFSH, and Overall History.

Each of the history elements (HPI, ROS, PFSH) has levels that will determine the Overall History level. If the level in a column is shown in bold type, then the number of findings is sufficient to meet the guidelines for the level at which it appears. For example, look at the column labeled “ROS.” The word “Pertinent” in the first row is bold, meaning ROS has enough findings for level 1 but not enough for level 2, “Extended.”
We will now discuss the history elements and levels.

**History of Present Illness (HPI)** The HPI is a chronological description of the development of the patient’s present illness from the first sign and/or symptom or from the previous encounter to the present. HPI includes the following characteristics:

- Location
- Quality
- Severity
- Duration
- Timing
- Context
- Modifying factors
- Associated signs and symptoms

HPI has two named levels, brief and extended. The levels are determined by the quantity of findings:

- **Brief** (consists of one to three items in the HPI)
- **Extended** (consists of at least four items in the HPI or the status of at least three chronic or inactive conditions)

In this encounter, there are no findings for HPI; therefore, none of the levels are in bold type.

**Step 9**

The E&M calculator will allow you to see which findings in the encounter note were used to determine the level. There are two ways to do this.

The first method is use the button labeled “Show Column Details” (highlighted in Figure 12-8).

Locate and click on the button labeled “Show Column Details.” A drop-down list will appear.

Position your mouse over ROS details in the drop-down list, as shown in Figure 12-9, and click the mouse. A pane will open in the upper portion of the
E&M calculator window to display the findings that were recorded in the encounter note for Review of Systems (ROS) (as shown in Figure 12-10).

The second method of displaying column details is to click your mouse directly on the column label, for example, “ROS” (circled in red in Figure 12-10).

Using either method will change the button label to “Hide Details.” Clicking the Hide Details button will close the detail pane and return to the previous view.

Step 10

Review of Systems (ROS) The ROS level is determined by the number of systems reviewed. You are familiar with ROS from previous exercises. ROS has three levels:

Problem Pertinent (ROS inquires about the system directly related to the problems identified in the HPI)

Extended (ROS inquires about the system directly related to the problems identified in the HPI and a number of additional systems. Extended level requires two to nine systems be documented)

Complete (ROS inquires about the systems directly related to the problems identified in the HPI plus all additional body systems. At least ten organ systems must be reviewed to meet the requirement for Complete.)

Compare your screen to Figure 12-10. There is one finding shown in Figure 12-10; therefore, the ROS is level 1—Pertinent.

Close the Details for ROS pane and return to the previous view, by clicking the button labeled “Hide Details” (highlighted in Figure 12-10). Be careful not to click the Cancel button by mistake, because that will close the E&M calculator instead of hiding the Details of ROS.

Step 11

Past, Family, and/or Social History (PFSH) The PFSH consists of a review of three areas:

- Past history (the patient’s past experiences with illnesses, operations, injuries, and treatments)
Family history (a review of medical events in the patient’s family, including diseases that may be hereditary or place the patient at risk)

Social history (an age-appropriate review of past and current activities)

PFOSH level is determined by the number of findings in these three history types. PFOSH has two levels:

**Pertinent** (at least one item in any of PFOSH area directly related to the problems identified in the HPI)

**Complete** (a review of two or all three of the PFOSH history areas, depending on the category of the E&M service. Complete requires all three history areas for services that include a comprehensive assessment of a new patient or reassessment of an existing patient. A review of two of the three history areas is sufficient for other services)

Look at the column under PFOSH on your screen. In this encounter, no PFOSH was recorded.

**Step 12**

The key component History has four levels:

1. Problem Focused
2. Expanded Problem Focused
3. Detailed
4. Comprehensive

Figure 12.11 shows the elements required for each level of history. The Level of History (shown in the first column of the table) is determined by the levels of the

<table>
<thead>
<tr>
<th>Level of History</th>
<th>History Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CC</td>
</tr>
<tr>
<td></td>
<td>HPI</td>
</tr>
<tr>
<td></td>
<td>ROS</td>
</tr>
<tr>
<td></td>
<td>Past, Family, and/or Social History</td>
</tr>
</tbody>
</table>

**Table of Elements Required for Each Level of History**

<table>
<thead>
<tr>
<th>Level of History</th>
<th>CC</th>
<th>History of Present Illness (HPI)</th>
<th>Review of Systems (ROS)</th>
<th>Past, Family, and/or Social History</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Problem Focused</td>
<td>*</td>
<td>Brief (1–3 elements)</td>
<td>(No elements required)</td>
<td>(No elements required)</td>
</tr>
<tr>
<td>2 Expanded Problem Focused</td>
<td>*</td>
<td>Brief (1–3 elements)</td>
<td>Problem Pertinent (related to HPI)</td>
<td>(No elements required)</td>
</tr>
<tr>
<td>3 Detailed</td>
<td>*</td>
<td>Extended (4 or more)</td>
<td>Extended (2–9 body systems)</td>
<td>Pertinent (1 or more)</td>
</tr>
<tr>
<td>4 Comprehensive</td>
<td>*</td>
<td>Extended (4 or more)</td>
<td>Complete (10 or more body systems)</td>
<td>Complete (2 areas Past, Family, or Social)</td>
</tr>
</tbody>
</table>

* Chief Complaint is expected for all Types of History.

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3Figure adapted from 1997 Documentation Guidelines for Evaluation and Management Services (Washington, DC: U.S. Department of Health and Human Services, 1997).
HPI, ROS, and PSFH elements. The first column in Figure 12-11 Level of History is comparable to the column in the E&M calculator grid labeled “Overall History.”

Compare Figure 12-11 to the HPI, ROS, and PSFH columns on your screen. Looking at the chart in Figure 12-11, do you see why the overall history is not level 1? It is because only the ROS has been recorded, and HPI is required for level 1.

**Key Component: Examination**

The second key component is the Physical Examination. Examination guidelines have been defined for a general multi-system exam and the following 10 single-organ systems:

- Cardiovascular
- Ears, Nose, and Throat
- Eyes
- Genitourinary (Female or Male)
- Hematologic/Lymphatic/Immunologic
- Musculoskeletal
- Neurological
- Psychiatric
- Respiratory
- Skin

A general multi-system examination or a single-organ system examination may be performed by any physician, regardless of specialty. The type and content of examination are selected by the examining physician and are based on clinical judgment, the patient’s history, and the nature of the presenting problems.

There are four levels of any type of examination:

**Problem Focused**—a limited examination of the affected body area or organ system.

**Expanded Problem Focused**—a limited examination of the affected body area or organ system and any other symptomatic or related body areas or organ systems.

**Detailed**—an extended examination of the affected body areas or organ systems and any other symptomatic or related body areas or organ systems.

**Comprehensive**—a general multi-system examination, or complete examination of a single-organ system and other symptomatic or related body areas or organ systems.

The required elements for different levels of single-organ system exams and the general multi-system exam vary; therefore, separate tables are published for each type of system. An abridged example of the Elements of General Multisystem Examination table⁴ has been reprinted in Figure 12-12.

Within the guideline tables, individual elements of the examination pertaining to a body area or organ system are identified by bullets. A bullet is a typographic

⁴Ibid.
### Elements of General Multisystem Examination

<table>
<thead>
<tr>
<th>System/Body Area</th>
<th>Exam Elements</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 (e.g., development, nutrition, body habitus, deformities, attention to grooming) |
| **Eyes**                         | ● Inspection of conjunctivae and lids  
   ● Examination of pupils and irises (e.g., reaction to light and accommodation, size and symmetry)  
   ● Ophthalmoscopic examination of optic discs (e.g., size, C/D ratio, appearance) and posterior segments (e.g., vessel changes, exudates, hemorrhages) |
| **Ears, Nose, Mouth, and Throat**| ● External inspection of ears and nose (e.g., overall appearance, scars, lesions, masses)  
   ● Otoscopic examination of external auditory canals and tympanic membranes  
   ● Assessment of hearing (e.g., whispered voice, finger rub, tuning fork)  
   ● Inspection of nasal mucosa, septum, and turbinates  
   ● Inspection of lips, teeth, and gums  
   ● Examination of oropharynx: oral mucosa, salivary glands, hard and soft palates, tongue, tonsils, and posterior pharynx |
| **Neck**                         | ● Examination of neck (e.g., masses, overall appearance, symmetry, tracheal position, crepitus)  
   ● Examination of thyroid (e.g., enlargement, tenderness, mass) |
| **Respiratory**                  | ● Assessment of respiratory effort (e.g., intercostal retractions, use of accessory muscles, diaphragmatic movement)  
   ● Percussion of chest (e.g., dullness, flatness, hyperresonance)  
   ● Palpation of chest (e.g., tactile fremitus)  
   ● Auscultation of lungs (e.g., breath sounds, adventitious sounds, rubs) |
| **Cardiovascular**               | ● Palpation of heart (e.g., location, size, thrills)  
   ● Auscultation of heart with notation of abnormal sounds and murmurs  
   ● Examination of:  
     - carotid arteries (e.g., pulse amplitude, bruits)  
     - abdominal aorta (e.g., size, bruits)  
     - femoral arteries (e.g., pulse amplitude, bruits)  
     - pedal pulses (e.g., pulse amplitude)  
     - extremities for edema and/or varicosities |
| **Chest (Breasts)**              | ● Inspection of breasts (e.g., symmetry, nipple discharge)  
   ● Palpation of breasts and axillae (e.g., 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 |
character that looks like this: • (a solid black circle). Locate the bullets in the second column of Figure 12-12.

If you have taken a class in medical coding or read the CPT-4 book, you may be familiar with the concept of “the number of bullets required to meet a level of E&M coding.” This simply means how many findings in the encounter note correspond to elements in the guideline table with bullet characters printed next to them.

**Step 13**

The grid in the E&M calculator window has only one column for the Exam component. Locate and click on the column labeled “Exam” (as shown in Figure 12-13). A pane displaying the exam details will open in the E&M calculator window.

Look at the “Summary details for Exam” pane. It has three columns labeled “CMS body systems,” “# of bullets,” and “Level 4 Met.”

Each row under the column labeled “# of bullets” has a pair of numbers. For example, locate the row for Ears, Nose, Mouth, and Throat; you will see the numbers 4:6. This means the clinician examined four of six elements in that system.

**Step 14**

Compare your screen with the table\(^5\) in Figure 12-14. You will see your screen has five elements with bullets documented in the exam (four bullets in Ear, Nose, Mouth and Throat and 1 bullet in Respiratory). Therefore the examination is level 1, “Problem Focused Exam,” because there are only five bullets.

The exam level is not determined by the number of findings but by the number of bullets satisfied within a system/body area.

Findings do not have to be abnormal; normal findings count as well. The guidelines state:

“A brief statement or notation indicating ‘negative’ or ‘normal’ is sufficient to document normal findings related to unaffected areas or asymptomatic organ

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\(^5\)Ibid.
systems.” Think about the Auto Negatives feature you used in previous exercises in the context of this document guideline.

**Key Component: Medical Decision Making**

The third key component is Medical Decision Making (MDM). The remaining columns in the E&M calculator window grid are all concerned with medical decision making. Medical decision making refers to the complexity of establishing a diagnosis or selecting a management option as measured by these elements:

- **Number of possible diagnoses or management options** that must be considered. This element has four levels. The level is determined by the number and types of problems addressed during the encounter, the complexity of establishing a diagnosis, and the management decisions that are made by the clinician. The levels include:
  - Level 1: Minimal
  - Level 2: Limited
  - Level 3: Multiple
  - Level 4: Extensive

In addition to the actual number of diagnoses codes selected, the number and type of diagnostic tests employed may be an indicator of the number of

---

possible diagnoses. Problems that were reviewed also are counted. Consulting
or seeking advice from others is another indicator of complexity of diagnostic
or management problems.

- **Amount or complexity of medical records, diagnostic tests, or other
  information that must be obtained, reviewed, and analyzed.** There are
  four levels for this element as well, including:

  Level 1: Minimal or None
  Level 2: Limited
  Level 3: Moderate
  Level 4: Extensive

- **Risk of significant complications, morbidity or mortality, as well as
  comorbidities,** associated with the patient’s presenting problems, the
diagnostic procedures, or the possible management options. Risk also has
four levels:

  Level 1: Minimal
  Level 2: Low
  Level 3: Moderate
  Level 4: High

As you can see, each of the elements of medical decision making has four lev-
els. The overall level of the MDM component is derived from the highest level of
two of the three elements. This is shown in the column labeled “Overall MDM”
in the E&M calculator window. Let us look at how it was determined.

**Step 15**

Locate and click on the column labeled “Dx/Mgt (as shown in Figure 12-15).
Dx/Mgt stands for Diagnosis and/or Management Options. The pane in the
E&M calculator window will display the Details for Dx/Mgt pane.

The details pane has three columns labeled “Encounter findings,” “Complexity,”
and “Prefix.” The Complexity column displays a level of complexity associated
with the finding. The Prefix column contains a code or abbreviation if the
finding has a prefix. In this example, the finding “ordered fluids” displays the
letter “O,” which stands for ordered.
**Step 16**

The remaining columns in the E&M calculator window grid are concerned with the MDM element of risk. Risk has its own table for calculating the level of risk (shown later in Figure 12-18).

Locate and click on the column labeled “Problem Risk” (as shown in Figure 12-16). The E&M calculator window will display the “Details for Problem Risk” pane. The details pane has three columns, labeled “Encounter findings,” “Risk,” and “Prefix,” which were explained in the previous step.

 ![Figure 12-16 Medical decision making—Details for Problem Risk.](image)

Note that the E&M calculator also includes a column measuring the risk of tests, but none were ordered during this exam.

**Step 17**

Locate and click on the column labeled “Mgt Risk” (as shown in Figure 12-17). Mgt is the software abbreviation for management. The E&M calculator window will display the “Details for Mgt Risk” pane. The details pane has three columns, labeled “Encounter findings,” “Risk,” and “Prefix,” which were explained in step 15.

 ![Figure 12-17 Medical decision making—Details for Mgt Risk.](image)

The risk level in this column is “minimal” because there is little risk involved when ordering fluids.

Locate and click on the button labeled “Hide Details” to return to the E&M calculator screen. (If you have difficulty locating the button, refer to Figure 12-10.)
## Table of Risk

<table>
<thead>
<tr>
<th>Level of Risk</th>
<th>Presenting Problem(s)</th>
<th>Diagnostic Procedure(s) Ordered</th>
<th>Management Options Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Minimal</td>
<td>• One self-limited or minor problem, e.g., cold, insect bite, tinea corporis</td>
<td>• Laboratory tests requiring venipuncture</td>
<td>• Rest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Chest x-rays</td>
<td>• Gargles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• EKG/EEG</td>
<td>• Elastic bandages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Urinalysis</td>
<td>• Superficial dressings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ultrasound, e.g., echocardiography</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• KOH prep</td>
<td></td>
</tr>
</tbody>
</table>
| 2 Low         | • Two or more self-limited or minor problems  
• One stable chronic illness, e.g., well-controlled hypertension, non–insulin dependent diabetes, cataract, 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 biopsies  
• Clinical laboratory tests requiring arterial puncture  
• Skin biopsies | • Over-the-counter drugs  
• Minor surgery with no identified risk factors  
• Physical therapy  
• Occupational therapy  
• IV fluids without additives |
| 3 Moderate     | • One or more chronic illnesses with mild exacerbation, progression, or side effects of treatment  
• Two or more stable chronic illnesses  
• Undiagnosed new problem with uncertain prognosis, e.g., lump in breast  
• Acute illness with systemic symptoms, e.g., pyelonephritis, pneumonitis, colitis  
• Acute complicated injury, e.g., head injury with brief loss of consciousness | • Physiologic tests under stress, e.g., cardiac stress test, fetal contraction stress test  
• Diagnostic endoscopies with no identified risk factors  
• Deep needle or incisional biopsy  
• Cardiovascular imaging studies with contrast and no identified risk factors, e.g., arteriogram, cardiac catheterization  
• Obtain fluid from body cavity, e.g., lumbar puncture, thoracentesis, culdocentesis | • Minor surgery with identified risk factors  
• Elective major surgery (open, percutaneous, or endoscopic) with no identified risk factors  
• Prescription drug management  
• Therapeutic nuclear medicine  
• IV fluids with additives  
• Closed treatment of fracture or dislocation without manipulation |
| 4 High         | • One or more chronic illnesses with severe exacerbation, progression, or side effects of treatment  
• Acute or chronic illnesses or injuries that pose a 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  
• An abrupt change in neurologic status, e.g., seizure, TIA, weakness, sensory loss  
• Cardiovascular imaging studies with contrast and identified risk factors  
• Cardiac electrophysiological tests  
• Diagnostic endoscopies with identified risk factors  
• Discography | • Elective major surgery (open, percutaneous, or endoscopic) with identified risk factors  
• Emergency major surgery (open, percutaneous, or endoscopic)  
• Parenteral controlled substances  
• Drug therapy requiring intensive monitoring for toxicity  
• Decision not to resuscitate or to deescalate care because of poor prognosis |

► Figure 12-18 Table for determining level of risk.
Step 18

The E&M guidelines use a special table for calculating the overall level of risk\(^7\) (shown in Figure 12-18). However, risk differs from the other two MDM elements in that risk level is the highest level of any one column in the table.

The table in Figure 12-18 is used to help determine whether the risk of significant complications, morbidity, or mortality is minimal, low, moderate, or high. Because the determination of risk is complex and not readily quantifiable, the table includes common clinical examples rather than absolute measures of risk.

Locate the column in the E&M calculator window labeled “Overall Risk.” Notice that the level of the overall risk column is “low,” because that was the level of the highest of the three risk elements, Problem Risk. You will see another example of this aspect of risk in Guided Exercise 70.

Determining the Level of Medical Decision Making

There are four levels of Medical Decision Making:

Level 1: **Straight forward**

Level 2: **Low Complexity**

Level 3: **Moderate Complexity**

Level 4: **High Complexity**

The individual levels from each of the elements we have discussed, number of diagnoses, amount or complexity of data, and the level of risk are used to determine the level for Medical Decision Making.

The chart in Figure 12-19 shows the level of elements required for each level of medical decision making.\(^8\) The level of MDM (shown in the first column of Figure 12-19) is determined by the highest levels of any two of the three elements.

![Figure 12-19 Table of elements required for each level of medical decision making.](image)

<table>
<thead>
<tr>
<th>Level of MDM</th>
<th>Medical Decision Making</th>
<th>Number of diagnoses or management options</th>
<th>Amount and/or complexity of data to be reviewed</th>
<th>Risk of complications and/or morbidity or mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Straightforward</td>
<td>Minimal</td>
<td>Minimal or None</td>
<td>Minimal</td>
</tr>
<tr>
<td>2</td>
<td>Low Complexity</td>
<td>Limited</td>
<td>Limited</td>
<td>Low</td>
</tr>
<tr>
<td>3</td>
<td>Moderate Complexity</td>
<td>Multiple</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>4</td>
<td>High Complexity</td>
<td>Extensive</td>
<td>Extensive</td>
<td>High</td>
</tr>
</tbody>
</table>

Step 19

Compare the chart in Figure 12-19 to the E&M calculator window.

Locate the column labeled “Overall MDM,” which is “low” or level 2.

---

\(^7\)Figure adapted from 1997 Documentation Guidelines for Evaluation and Management Services, (Washington, DC: U.S. Department of Health and Human Services, 1997).

\(^8\)Ibid.
Looking at the columns for the individual elements, note that those labeled “Dx/Mgt Options” and “Overall Risk” are also level 2. Even though there is no report for “Complexity of Data,” the MDM level is set to the highest of two out of three elements.

**Other Components: Counseling, Coordination of Care, and Time**

Time is considered the key or controlling factor to qualify for a particular level of E&M services only when counseling or coordination of care dominates more than 50% of the encounter (face-to-face time in the office or other outpatient setting, floor/unit time in the hospital or nursing facility).

**Step 20**

In the center of the E&M calculator window (beneath the exam type field) are two fields related to time. First is a check box used to indicate that counseling (or coordination of care) exceeded 50% of the face-to-face time for the visit. The second field is used to enter the total face-to-face time.

Face-to-face time incorporates the total time both before and after the visit, such as taking patient history, performing the exam, reviewing lab results, planning for follow-up care, and communicating with other providers about the patient’s case.

The E&M calculator allows you to record the amount of face-to-face time even when you are not using counseling time as a factor. It is a good practice to record the face-to-face time for each encounter.

Click on the down arrow button in the field labeled “Total face-to-face or Floor time” and select 15 minutes from the drop-down list (as shown in Figure 12-20).

This will not change the E&M code because time does not become a factor until it is more than half of the face-to-face time. In Guided Exercise 72 you will learn to use both of these time-related fields to change the E&M code and to document the results in your encounter note.

**Putting It All Together**

Momentarily leaving the element of time aside, you will see that the levels of each of the three key components combine to determine the level of the E&M code.
Step 21

The chart in Figure 12-21 shows the E&M codes used for the category of outpatient office visits. It will help you to visualize how the relationship of the key components determines the E&M code.

The first column in Figure 12-21 is the CPT-4 code. The second column indicates if the code is for a new or established patient. Note that there are two groups of codes listed. The first five codes are for new patients, and then five different codes are listed for established patients.

The third column labeled “# of Key Elements Met” indicates how many key components determine the E&M code.

The blue, green, and lavender columns list the levels of the three key components: History, Exam, and Medical Decision Making. The level numbers under each key component are derived from the individual tables in the sections you have just completed. The tables are:

- History—Figure 12-11
- Exam—Figure 12-14
- MDM—Figure 12-19

The final column lists the number of minutes per type of visit used by the E&M calculator. Time will be discussed further in Guided Exercise 72.

Evaluating Key Components

Once the level of each of the key components has been determined, calculating the level of the E&M code is fairly straightforward. The E&M code level is determined by the lowest level of the key components considered. However, different requirements apply when determining the E&M code for new versus established patients.

Scan down the third column of Figure 12-21. Note that the number of key components for a new patient is “All 3.” Notice that for established patients...
it is “2 of 3.” This does not mean that an encounter will not have findings for all three components—in most cases it will. It means that, for an established patient, the two key components with the highest levels are considered and the lowest level of the two determines the E&M code.

For example, consider an encounter that has:

History Level 1 (Problem Focused)
Exam Level 2 (Expanded Problem Focused)
MDM Level 3 (Moderate Complexity)

The E&M code for an established patient will be level 2 because the elements with the highest levels (Exam and MDM) are the relevant elements and Exam has the lower level of the two.

Now compare the E&M codes for a new patient. Locate the section of the table in Figure 12-21 for new patients. What E&M code would be used when History is level 1 (Problem Focused), Exam is level 2 (Expanded Problem Focused), and MDM is level 2 (Low Complexity)?

If you answered 99201, you are correct. The E&M code for new patients is determined by all three elements. Even though the Exam and MDM components are level 2, if the History level is not 2, then the lower code must be used.

Having tried to determine a code manually, you can appreciate the value that an E&M calculator brings to an EHR system. Remember that the level of each of the key components is a combination of elements:

◆ To qualify for a given level of history, the quantity and types of HPI, ROS, and PFSH must be met.

◆ To qualify for a given level of exam, the number of “bulleted” items in the appropriate number of body systems must be met.

◆ To qualify for a given level of medical decision making, two of the three elements (the number of diagnosis, the amount of data, and the risk assessment) must be either met or exceeded.

If you can imagine trying to count bullets from your encounter notes, calculate the amount of and types of history, and determine the level of decision making in your head, all while you are seeing the patient, you can understand why so many doctors code at the wrong level, just to be safe. You also can appreciate the skill required of medical coders who do this manually.

**Step 22**

Click the Cancel button to close the E&M calculator window. You may exit the Student Edition software **without printing** an encounter this time because you have not made any changes to the note.

**How Changes in Key Components Affect the E&M Code**

At this point, you should have a good understanding on how an E&M code is determined from the key components of the encounter. However, what raises the E&M code for an encounter to the next level is not always apparent.
The level of E&M code for an established patient is dependent on two of three of the key components. Merely adding more findings to any one component may bring that component to a higher level, but that does not necessarily mean that the visit as a whole will qualify for the higher level E&M code.

For example, in Guided Exercise 69 an established patient had:

History Level 1 (Problem Focused)
Exam Level 1 (Problem Focused)
MDM Level 2 (Low Complexity)

The E&M code was level 1 (99212) because one of the two highest key components was a level 1. Even if the level of MDM was raised to three, the E&M code would still be level 1 because the exam component was only level 1.

Work must be performed and documented in the appropriate areas to result in a higher E&M code. The next exercise demonstrates how changes to key components affect an increase to the level of an E&M code.

In the next exercise, you are going to add findings to an existing encounter to study the effects on E&M coding.

### Fraud and Abuse

The goal of these exercises is to provide an experiential understanding of concepts discussed in this chapter. They should not be construed as having any other purpose.

It is unethical and illegal to maximize payment by means that contradict regulatory guidelines. The HHS Office of Inspector General (OIG) investigates allegations of medical billing fraud and abuse. It does not matter if coding errors are made deliberately or inadvertently; OIG still treats it as fraud and abuse.

The student should not get the impression that it is okay to up-code to maximize reimbursement unless legally entitled by documentation and service provided. Similarly, a clinician cannot adjust the time factor unless it is substantiated in the documentation. Diagnoses or procedures should not be inappropriately included or excluded to affect or alter payment or insurance policy coverage requirements.

EHR systems support accurate, complete, and consistent coding practices by documenting the encounter with codified nomenclature that can be analyzed and used to determine the levels of billing justified. Medical coders must adhere to the coding conventions, official coding guidelines, and official rules, and assign codes that are clearly and consistently supported by clinical documentation in the health record.

### Guided Exercise 70: Calculating E&M for a More Complex Visit

In this exercise, you are going to add findings to an existing encounter to study the effects on E&M coding.

**Step 1**

If the patient encounter used in the previous exercise is currently displayed on your screen, proceed to step 2. If it is not, start the Student Edition software.

From the Select menu, click Patient, and from the Patient Selector window select Mary Williams. If you have difficulty, refer to Figure 12-2 at the beginning of this chapter.
From the Select menu, click Existing Encounter, and from the Encounter Selector window select **5/28/2012 10:45 AM Office Visit**. If you have difficulty, refer to Figure 12-3 at the beginning of this chapter.

**Step 2**

You will recall from Guided Exercise 69 that this patient encounter note produces a calculated E&M code of “99212 Established Outpatient Focused H&P—Straightforward Decisions.” You do not need to run the E&M calculator yet.

Because this encounter note was for an URI, and was created using the List feature, You are going to load the Adult URI list.

Locate and click on the button labeled “List” on the Toolbar at the top your screen. When the Lists Manager window shown in Figure 12-22 is displayed, select **Adult URI** and click the button labeled “Load List.”

In the following steps, you are going to use the list to add findings and study their effect on the levels of E&M codes.

**History** The History level is determined by the relationship between HPI, ROS, and PFSH. If you refer back to the table in Figure 12-11, you will see the following:

- An increase in the number of findings for HPI will only affect the level of history if ROS and PFSH contain data as well.
◆ An increase in the number of body systems in ROS will only affect the level of history if HPI contains at least four findings and PFSH contains at least one.

◆ Adding even one finding for PFSH will only affect the level of history if HPI contains at least four findings and ROS contains at least two body systems.

◆ A “Complete” level of PFSH will only affect the overall history level when HPI contains at least four findings and ROS has at least 10 systems.

**Step 3**

Scroll the encounter note, displayed in the pane on the right, upward to view the History section (circled in red in Figure 12-23). Note that there is only one type of History, Review of Systems; HPI or PFSH findings are not present in the encounter. This means that there is only one of the three History elements in the current E&M calculation.

Locate and click on the following symptom finding:

- (red button) Nasal passage blockage (stuffiness)

This symptom describes the presenting problem.

**Figure 12-24** Encounter with both History of Present Illness and Review of Systems sections.

**Step 4**

Locate and click on the button labeled “ROS” on the Toolbar at the top of the screen. Verify it is “on” (orange).

Locate and click on the following symptom findings:

- (blue button) Fever
- (blue button) Chills
Compare your screen to Figure 12-24 (scroll the right pane upward if necessary to see the full history).

These symptoms are in systems related to the presenting problem. Figure 12-24 shows, circled in red, that two types of history are now in the encounter note.

Step 5
Click on the Hx tab to add PSFH.

Locate and click on the following History finding:

- (red button) current smoker

In the Entry Details section at the bottom of your screen, type “6 years” in the field labeled “Duration” (circled in red in Figure 12-25).

Compare your screen to Figure 12-25. Note that you now have findings in all three History sections: HPI, ROS, and behavioral history (PFSH).

Examination Exams provide the most direct, but not the easiest means to reach a higher level code. The more systems examined, the more bullet points that are met, represent more work has been done and therefore a higher level of code should be justified. However, consider the following:

- In a general multi-system examination, six or more elements with a bullet are required to reach the second level.
The third level is reached when you have at least two elements in six or more systems/body areas.

The fourth level requires all of the bulleted items in at least nine systems/body areas.

**Figure 12-26 Added findings on physical exam.**

---

**Step 6**

Click on the Px tab.

Locate and click on the following Physical Exam findings:

- (blue button) Wheezing
- (blue button) Rhonchi

Compare your screen to Figure 12-26.

**Step 7**

Enter the patient’s vital signs using the Vitals form.

Ms. Williams’s vital signs are as follows:

- Temperature: 97.7
- Respiration: 25
- Pulse: 65
- BP: 128/90
- Height: 64
- Weight: 155
When you have entered all of the vital signs, compare your screen to Figure 12-27 and then click your mouse on the Encounter tab at the bottom of the screen.

**Step 8**
Click on the E&M button in the Toolbar at the top of your screen. When the Problem Screening checklist window appears, click the OK button without checking any of the boxes. The Evaluation and Management Calculator window should now display the code 99213. If it does not, locate the section labeled

![Figure 12-28 Recalculated E&M code.](image_url)
Patient Status in the upper right corner of the calculator window. Click on the circle next to the label “Existing” and then click on the button labeled “Calculate E&M Code.”

Figure 12-28 shows the E&M code generated as a result of the additional findings you have added. The new code is “99213: Estab Outpatient Expanded H&P - Low Complexity Decisions.” Refer back to Figure 12-7 which shows the previously calculated E&M code of 99212. Compare the grid at the bottom of your E&M calculator window to Figure 12-7.

Note that the History sections HPI and PFSH now have bold levels listed in them. Although only the ROS history element moved to level 2, the Overall History level changed from 1–Problem Focused to 2–Expanded Problem Focused. This is because of the presence of the HPI finding and six ROS findings related to the problem. The addition of the PFSH did not, however, affect the Overall History level. Refer to Figure 12-11, Table of Elements Required for Each Level of History.

Look again at the grid at the bottom of your E&M calculator window. Notice that the level of Exam has also increased to level 2, Expanded. This was a result of the addition of vital signs and two Physical Exam findings.

Why, if none of the key components changed to level 3, did the E&M code change from a level 2 code (99212) to a level 3 code (99213)?

Refer back to the chart in Figure 12-21; you will notice that for an established patient, the CPT-4 requirement for 99213 is that two of the three key components are at least level 2. Because Overall History and Exam are now level 2 (Expanded), the encounter justifies a higher level E&M code.

At this point, the medical decision-making components did not change levels.

**Medical Decision Making** The level of MDM is determined by two out of three elements in the table shown in Figure 12-19. However, the risk table in Figure 12-18 indicates that managing prescribed medications raises the risk to Level 3. Therefore, the MDM level for any patient on medications will usually be determined by the number of diagnosis and the amount or complexity of data reviewed during the visit.

**Step 9**

Click on the button labeled “Cancel” to close the E&M calculator window.

Click on the E&M button in the Toolbar at the top of your screen to restart the E&M calculator.

This time you are going to enter data in the Problem Screening checklist window before proceeding to the E&M calculator.

When you click your mouse on the check boxes in the Problem Screening For E/M window, a check mark appears.
Locate and click the boxes for the following:
✓ Active
✓ New Problem

Compare your screen to Figure 12-29.

Click the OK button at the bottom of the checklist window.

**Step 10**

Locate the column labeled “Dx/Mgt.” You will recall that Dx/Mgt stands for Diagnosis and/or Management. Compare Figure 12-28 and Figure 12-30.

Notice that the Dx/Mgt column has changed from level 2, Limited, to level 3, Multiple. This change in level was caused by the addition of data from the Problem Screening checklist window concerning the diagnoses.

**Time**  As you learned earlier, time can be a factor when more than 50% of the face-to-face time is spent counseling the patient. Both the face-to-face time and the counseling time must be documented. This will be covered in Guided Exercise 72.
Step 11
Because it is always a good idea to record the face-to-face time in the encounter note, the software allows you to do this when you record the E&M code even if you are not using time as a factor in E&M calculation. Remember, face-to-face time is the total time you spent on the visit before, during, and after the patient exam. It is not just the time spent counseling the patient.

Click on the button with the down arrow in the field labeled “Total Face-to-face or Floor time” and select 15 minutes (as shown in Figure 12-31).

Recalculate the E&M code by clicking on the button labeled “Calculate E&M Code” again. Note that the time did not change the calculated code, which is still 99213.
Step 12
When a clinician is satisfied with the E&M code that has been calculated, it is posted to the note.

Locate and click on the button labeled “Post To Encounter” (highlighted with orange in Figure 12-31). The E&M Calculator window will close and the E&M code will be added into your note. Compare your screen with Figure 12-32. Notice that the procedure and the face-to-face time (circled in red) have been added to the bottom of the encounter note.

Mary Williams

Student: your name or ID here

Chief complaint
The Chief Complaint is: Patient reports stuffy sinus.

History of present illness
Mary Williams is a 26 year old female.
She reported: Nasal passage blockage.

Personal history
Behavioral: Current smoker for 6 years.

Review of systems
Systemic: No fever and no chills.
Otolaryngeal: Nasal discharge. No sore throat.

Physical findings
Vital Signs:

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Value</th>
<th>Normal Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral temperature</td>
<td>97.7 F</td>
<td>97.6 - 99.6</td>
</tr>
<tr>
<td>RR</td>
<td>25 breaths/min</td>
<td>18 - 26</td>
</tr>
<tr>
<td>PR</td>
<td>65 bpm</td>
<td>50 - 100</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>128/90 mmHg</td>
<td>100-120/56-80</td>
</tr>
<tr>
<td>Weight</td>
<td>155 lbs</td>
<td>98 - 183</td>
</tr>
<tr>
<td>Height</td>
<td>64 in</td>
<td>60.24 - 68.5</td>
</tr>
</tbody>
</table>

Ears:
General/bilateral:
Tympanic Membrane: * Both tympanic membranes were normal.

Nose:
General/bilateral:
Discharge: • Purulent nasal discharge.
Cavity: • Nasal turbinate swollen.

Sinus Tenderness: • Tenderness of sinuses.

Pharynx:
Oropharynx: * Tonsils showed no abnormalities.
Mucosal: * Pharynx was not inflamed.

Lungs:
* Chest was normal to percussion. * No wheezing was heard. * No rhonchi were heard.

Assessment
* Acute sinusitis

Plan
* Fluids

Practice Management
* Estab outpatient expanded h&p - low complexity decisions 99213; Total face to face time 15 min.
Step 13
Click on the Print button on the Toolbar at the top of your screen to invoke the Print Data window.

Be certain there is a check mark in the box next to “Current Encounter” and then click on the appropriate button to either print or export a file, as directed by your instructor.

Compare your printout or file output to Figure 12-33. If it is correct, hand it in to your instructor. If there are any differences, review the previous steps in the exercise and find your error.

Do not exit. Proceed to step 14.
Do not close or exit the encounter until you have completed step 14.

Critical Thinking Exercise 71: Understanding How Procedures Are Posted to the Billing System

EHR systems that are integrated with practice management or billing software can transfer the Procedure and Diagnosis (CPT-4, HCPCS, and ICD-9-CM) codes from the EHR directly into the practice management billing system.

In most healthcare facilities the codes that are transferred from the EHR do not post automatically to the billing system. Most systems hold these as “pending” charges until they are reviewed by a billing or coding expert, who may make modifications to the codes before posting them as charges. Here are few examples of why this is necessary:

◆ Certain procedures are considered part of another procedure (bundled).
◆ Under certain conditions a coding specialist may need to add procedure modifier codes.
◆ Certain codes may represent a supply or sample for which the doctor does not wish to charge the patient.

Step 14
Locate and click on the tab on the top of the right pane labeled “Outline View.”

Locate and click the small plus signs next to the folders “Assessment” and “Practice Management.” Compare your screen with Figure 12-34. Notice that the Assessment Acute Sinusitis displays an ICD-9-CM code in this view.

Notice that the text beneath the Practice Management folder not only displays the description information of the calculated E&M code, but the CPT-4 code as well.
Your version of the Student Edition is not interfaced to a billing system and therefore does not transfer the codes automatically. However, it does post codes to the patient encounter. You can view the codes that would be transferred in Figure 12-34.

► Figure 12-34 Outline View with E&M code and description circled in red.

► Figure 12-35 Flow of procedures posted from EHR to billing.
Figure 12-35 illustrates the typical method of posting charges from an EHR to a practice management billing module. These steps include the following:

1. Clinician documents encounter at point of care.
2. EHR calculates E&M code.
3. Clinician clicks button labeled “Post To Encounter.”
4. EHR adds procedure codes to encounter note and transfers CPT-4 and ICD-9-CM codes to the practice management system.
5. A billing or coding specialist reviews the “pending” charges, adds modifiers or other information, and posts them.

Figure 12-36 shows a practice management billing screen used to post charges transferred from the EHR after being reviewed by a billing or coding specialist.

Courtesy of Medisoft

► Figure 12-36 Practice management system posting E&M code from EHR.
Philip C. Yount, M.D.
Ashe Medical Associates

Every medical doctor in America reviews the patient’s past medical problems, medication list, social history, and so on, but does each one always document that? I think it is safe to say that doctors, who dictate after the visit, actually get more information, examine more of the patient, and say things to the patient that they do not recall when they dictate later. Certainly when I was dictating or writing notes I did not always remember to document all that I did. To be safe, I tended to undercode; I am sure most everybody else does, too.

Our practice has been using an electronic medical record for almost three years. I would never go back to a paper-based system again. But back when I was dictating, the workflow with the paper system was to finish the visit, mark the charge and the E&M code on a paper encounter form, and then dictate it later. This was really hard because during dictation I was trying both to remember the visit accurately and to make sure I dictated enough to support the level of the E&M code already selected. Now that we use an EMR, both things are done simultaneously.

These days I finish the documentation before the patient leaves. I review it, verify my documentation, and then E&M code it. I am much more accurate and I think I code higher. I think the tendency on a paper system is to always downcode rather than risk getting yourself in trouble.

I practice family medicine with two other physicians and a physician assistant. One thing we do in our quarterly meetings is to review each other’s charts to see if we agree with the level of E&M coding that the other provider has charged. Our office manager randomly selects three patients’ charges for each of us and prints out the exam notes for peer review. Since we have been on the electronic system, we have had very few discrepancies. Not only is the coding very accurate with the EMR, but the quarterly review itself is facilitated by the electronic records. If you had to dig up charges and pull records from a paper file system . . . well, with electronic medical records it is a lot simpler.

Did switching to electronic records increase our level of coding? I think we are all doing a much better job of coding than we were in the past and we have definitely stopped downcoding, but it is difficult to compare the coding of visits before the EMR because you would have to analyze all those old charts. I have a sense that our documentation went up 15%–20% in terms of levels, but we actually chose to measure something else. We wanted something easy to track, so we tracked the number of patient encounters instead of the coding levels.

In the first year of using the EMR, compared to the previous year, we went up 15% in number of visits, so it really improved our efficiency to that extent. The second year we were up 17% and this year we are up 5% above that—with no additional providers, no longer hours open, or anything else. In addition, we get done on time. I am rarely at the office after 5:00 P.M. anymore. I finish the patient’s chart while the patient is still there. So there is a lot of efficiency in addition to the improved E&M coding.

The system we use does have an E&M coder that will count the points of history, review of systems, exam, and so on, and then suggest a code. Like most other EMR systems, it calculates and suggests the E&M code but the software developer does not want the responsibility for actually posting it. It is up to the doctor to decide to use the code.

Most EMR systems have templates, but there are two types. One type uses checklists of problems: “You’re here for a cold; you have an earache, a cough, and a sore throat.” The other type of template fills blanks in a narrative: “30-year-old male presents to the office with a history of cough, cold, fever.” The ability of the system to calculate the E&M code depends on whether the template uses discrete items or sentences, because it can’t count the status in those narrative sentences. However, even without using the E&M coder, the coding becomes more accurate because the electronic record is capturing the exam more accurately. A doctor can look at a finished EMR note and see the data points.

Our software uses templates and I designed the history items right into them. We don’t miss documenting them now and that lends significant points to the E&M coding. But there is something else our templates do that is perhaps more toward the issue of quality of care than just coding, and that is in the plan. By building templates for certain diagnoses we include all the things we might choose in the plan. This not only helps document simple things that might have been overlooked in the old dictation method, like telling the patient to take Tylenol, but it also gives us a complete checklist of things to consider when concluding the visit.

During the first year, we built templates and customized the software to suit our practice’s needs. We worked evenings at the office to overcome a steep learning curve and technological
Guided Exercise 72: Counseling Over 50% of Face-to-Face Time

When counseling or coordination of care represent over 50% of the face-to-face time of the visit, time becomes a key or controlling factor to the level of E&M services. The guideline states, “If the physician elects to report the level of service based on counseling and/or coordination of care, the total length of time of the encounter (face-to-face or floor time, as appropriate) should be documented and the record should describe the counseling and/or activities to coordinate care.”

In this exercise, you are going to reload the encounter, re-enter the history, and recalculate the code using time as a factor.

Case Study
You will recall from the previous exercise that the patient has been smoking since she was 20. The clinician spent about 15 minutes of time counseling the patient on the need to stop using tobacco and discussing possible strategies she might use to quit. This extra time spent counseling caused the visit to take longer.

Step 1
If the Student Edition software is not currently running on your system, start it at this time.

Perform the following tasks even if the patient encounter used in the previous exercise is still displayed on your screen. This will refresh the encounter and eliminate the changes you made in the previous exercise.

From the Select menu, click Patient, and from the Patient Selector window select Mary Williams. If you have difficulty, refer to Figure 12-2 at the beginning of this chapter.

From the Select menu, click Existing Encounter, and from the Encounter Selector window select 5/28/2012 10:45 AM Office Visit. If you have difficulty, refer to Figure 12-3 at the beginning of this chapter.

Do not run the E&M calculator yet.

Step 2
From the Toolbar at the top of your screen, click on the button labeled “List.” When the Lists Manager window shown in Figure 12-22 is displayed, select Adult URI and click the button labeled “Load List.”

Step 3
Click on the Hx tab.

Locate and click on the following History finding:

- (red button) current smoker

In the Entry Details section at the bottom of your screen, type “6 years” in the field labeled “Duration.”

If you have difficulty, refer to Figure 12-25 in the previous exercise.

In the next three steps, you are going to experiment with the factor of Time, by calculating the E&M code three times.

Step 4
Locate and click on the E&M button in the Toolbar at the top of your screen to invoke the Evaluation and Management Calculator window.

The Problem Screening checklist window is displayed.

Locate and click the boxes for the following:

✓ Active
✓ New Problem

The Evaluation and Management Calculator window is displayed.

Locate and click the Patient Status field and click on the circle labeled “Existing.”

Locate and click the button labeled “Calculate E&M Code.” Note that the Calculated E&M Code is 99212, the same as it was in the beginning of the previous exercise.

Step 5
Locate the check box used to indicate that counseling (or coordination of care) exceeded 50% of the face-to-face time for the visit. The box is circled in red in Figure 12-37. Click your mouse on the field and a check mark will appear.

Click your mouse on the down arrow button in the field labeled “Face-to-face or Floor time,” and select 10 minutes from the drop-down list.
Click the button labeled “Calculate E&M Code.” The code should still calculate as 99212. Notice that the code did not change, even though the box labeled “>50%” was checked.

**Step 6**

Click your mouse on the down arrow button in the field labeled “Face-to-face or Floor time,” and this time select **15 minutes** from the drop-down list.

Click the button labeled “Calculate E&M Code.” Compare your screen to Figure 12-37. The newly calculated code on your screen should be 99213.

In step 5, the code did not increase to a higher level because there is a minimum amount of time expected to complete each level of exam. Refer back to the table in Figure 12-21. In the right column, the standard amount of time is shown for each code. The E&M code 99212 has a minimum face-to-face time of 10 minutes, whereas the next higher level E&M code 99213 has a minimum face-to-face time of 15 minutes.

When the face-to-face time for this exam was set at less than 15 minutes, the E&M calculator did not increase the code to the next level. Once you increased the amount of time and checked the box labeled “>50% time spent counseling,” time became the controlling or key component.

Locate and click on the button labeled “Post To Encounter.”

---

**Figure 12-38** Encounter note showing counseling time >50% with Medcin button highlighted.

---

**Step 7**

The E&M description, code, time, and justification are posted to your encounter, as shown in Figure 12-38. Remember you can only use time to increase the level of E&M code when the clinician has spent more than 50% of the face-to-face
time in counseling or coordination of care. In Mary’s case, the clinician spent 10 minutes of the total 15 minutes in counseling.

Remember that the guideline also states “the record should describe the counseling and/or activities to coordinate care.” This means that whenever you use this feature in a medical office, you must add a finding or free text to describe the counseling.

Figure 12-39 Rx tab—time counseling on cessation of smoking was greater than 10 minutes.

Step 8
To clear the Adult URI list, click on the button labeled “Medcin,” which is highlighted on the toolbar in Figure 12-38.

Click on the Rx tab.

Locate “Basic Management Procedures and Services” and click on the small plus sign.

Scroll the screen to locate and expand the tree for “Education and Instructions” and then for “Instructions to the Patient.”

Scroll the screen to locate and expand the tree for “Smoking cessation” and then for “with intervention and counseling.”

Locate and click on the following finding:

- (red button) Greater than 10 minutes

Compare your screen to Figure 12-39.

10Ibid.
Step 9
Click on the Print button on the Toolbar at the top of your screen to invoke the Print Data window.

Be certain there is a check mark in the box next to “Current Encounter” and then click on the appropriate button to either print or export a file, as directed by your instructor.

Compare your printout or file output to Figure 12-40. If it is correct, hand it in to your instructor. If there are any differences, review the previous steps in the exercise and find your error.

Factors That Affect the E&M Code Set
Thus far you have seen the effects of key components and time on determining the E&M code. However, you will recall that earlier in this chapter it was mentioned that there are different sets of E&M codes used for new versus established patients as well as for location of service. It was also mentioned...
that a provider may choose to use the 1995 or 1997 E&M guidelines (or a single-organ guideline).

**Guided Exercise 73: Exploring Other Factors of E&M Codes**

In this exercise you are going to use the E&M calculator window to see examples of different sets of E&M codes, by changing the settings of several fields that you have not yet worked with. The first four steps should be familiar to you, as you performed them in the previous exercises.

**Step 1**

If the Student Edition software is not currently running on your system, start it at this time.

Perform the following tasks even if the patient encounter used in the previous exercise is still displayed on your screen. This will refresh the encounter and eliminate the changes you made in the previous exercise.

From the Select menu, click Patient, and from the Patient Selector window select *Mary Williams*. If you have difficulty, refer to Figure 12-2 at the beginning of this chapter.

From the Select menu, click Existing Encounter, and from the Encounter Selector window select *5/28/2012 10:45 AM Office Visit*. If you have difficulty, refer to Figure 12-3 at the beginning of this chapter.

Do not run the E&M calculator yet.

**Step 2**

From the Toolbar at the top of your screen, click on the button labeled “List.” When the Lists Manager window shown in Figure 12-22 is displayed, select *Adult URI* and click the button labeled “Load List.”

**Step 3**

Verify you are on the Sx tab.

Locate and click on the following symptom findings:

- (red button) Nasal passage blockage (stuffiness)

**Step 4**

Locate and click on the E&M button in the Toolbar at the top of your screen to invoke the Evaluation and Management Calculator window.

The Problem Screening checklist window is displayed.

Locate and click the boxes for the following:

- Active
- New Problem

The Evaluation and Management Calculator window is displayed. The calculated E&M code field should display “99213 Estab Outpatient Expanded H&P - Low Complexity Decisions,” as it did in Exercise 70.
Step 5

Some E&M categories, such as outpatient, provide two sets of codes, one for new patients and one for established patients. The Patient Status field allows the E&M calculator to select the appropriate code set for categories that make this distinction. You have used this field in previous exercises and should be familiar with it. In this step, you will see its effect on coding.

Locate the section labeled “Patient Status” in the upper right corner of the calculator window. Click on the circle next to the label “New” (circled in red). Then click on the button labeled “Calculate E&M code.” Compare your screen to Figure 12-41.

Notice the code and description “99201: New Outpatient Focused H&P - Straightforward Decision Making” (circled in red) are different from the code and description generated in step 4.

Step 6

Locate the field labeled “Setting” in the upper left corner of the E&M calculator window. This field allows you to set the location where the service was rendered. The field should already be set to Outpatient.
Click on the down arrow button within the field. A drop-down list of service locations is displayed (as shown in Figure 12-42).

Locate and click on the location “Hospital inpatient” in the drop-down list.

**Step 7**

You will recall from earlier in this chapter that within categories of E&M codes for different locations there were also subcategories of the types of services that might be rendered. The Detailed Service Type field is used to indicate the type of service that was performed in a given setting.

Locate the field labeled “Detailed Service Type” in the center of the E&M calculator window. Click on the down arrow button within the field. A drop-down list of service types is displayed (as shown in Figure 12-43).

Locate and click on the service type “Consult inpatient.” The “Detailed Service Type” field is related to and dependent on the “Setting” field—that is, the drop-down list contents change based on the type of facility selected in the “Setting” field.

**Figure 12-43** Drop-down list for Detailed Service Type when inpatient is set.

**Figure 12-44** Hospital inpatient uses a different E&M code set.
**Step 8**

Locate and click on the button labeled “Calculate E&M code.” Compare your screen to Figure 12-44. Notice that inpatient services generate an entirely different E&M code, even though the encounter data has not been changed.

![Figure 12-45 Drop-down list of different exam types in E&M calculator.](image)

**Step 9**

You will recall that in addition to the general multisystem exam, there are guidelines for 10 different specialty exams. Also, clinicians are permitted to use either the 1995 or 1997 guideline, whichever best suits their practice. The field labeled “Exam Type” allows the clinician to select the appropriate guideline for the E&M calculator to use.

Locate the field labeled “Exam Type” in the upper center of the E&M calculator window. Click on the down arrow button in the field. The drop-down list not only displays the various exam types, but indicates for each name if it is from the 1995 or 1997 guidelines.

Locate and click on the guideline labeled “97 ENT” as shown in Figure 12-45.

Locate and click on the button labeled “Calculate E&M code.”

Compare the grid at the bottom of your E&M calculator window to Figure 12-44. Notice that changing the guideline from “97 general multisystem” to “97 ENT” changed the Exam column from “Brief” to “Expanded.”

**Step 10**

Locate and click on the button labeled “Cancel” to close the E&M calculator window.

This completes Exercise 73. You may exit and close your program without printing.
Critical Thinking Exercise 74: Counseling an Established Patient

In this exercise you will use features of the software with which you are already familiar to document an encounter. You will then calculate the E&M code and post it to the encounter.

Case Study
Sally Sutherland is a 49-year-old established patient with Type II diabetes who complained of a lump in the right breast during her last checkup. A mammogram was ordered and performed. You will recall cataloging her mammogram and the radiologist’s report in Chapter 2. The purpose of this visit is to discuss the mammogram results. The patient is anxious and apprehensive. The clinician will spend extra face-to-face time counseling Ms. Sutherland.

Step 1
If you have not already done so, start the Student Edition software.

Click Select on the Menu bar, and then click Patient.

In the Patient Selection window, locate and click on Sally Sutherland.

Step 2
Click Select on the Menu bar, and then click New Encounter.

Select the date May 30, 2012, the time 1:00 PM, and the reason Follow-Up.

Make certain that you set the date and reason correctly. Compare your screen to the date, time, and reason printed in bold type before clicking on the OK button.

Step 3
Enter the chief complaint by locating the button in the toolbar labeled “Chief” and clicking on it.

In the dialog window that will open, type “Review mammogram results.”

When you have finished typing, click on the button labeled “Close the note form.”

Step 4
Begin the visit by taking Sally's vital signs and medical history using the “Diabetes” form. Locate and click on the button labeled “Forms” in the Toolbar at the top of your screen.
Locate and click on the form labeled “Diabetes” as you have done in previous exercises. Enter Sally’s vital signs in the corresponding fields on the form as follows:

- Temperature: 98.6
- Respiration: 28
- Pulse: 83
- BP: 150/90
- Weight: 168

**Step 5**
Locate and check the following diagnosis:

✓ Diabetes Mellitus Type II

Locate and click on the button labeled “Negs” in the Toolbar at the top of your screen.

When you have finished, check your work. If it is correct, proceed to step 6.

**Step 6**
Locate and click on the button labeled “Forms” in the Toolbar at the top of your screen to invoke the Forms Manager window again.

Locate and click on the form labeled “Hypertension.”

When the Hypertension form is displayed, locate and click on the Y box for the diagnosis:

✓ Hypertension

Locate and click on the button labeled “Negs” in the Toolbar at the top of your screen.

When you have finished, check your work. If it is correct, click on the Encounter tab at the bottom of the screen.

**Step 7**
Verify that you are on the Sx tab.

Locate and click the small plus signs next to “Psychological symptoms” and “mood.”

Locate and click on the following findings:

- (red button) nervous
- (red button) anxiety
- (red button) depression

When you have finished, check your work. If it is correct, proceed to step 8.
Step 8
Locate and click on the button labeled “Lists” in the Toolbar at the top of your screen to invoke the Lists Manager window.

Locate and click on the list labeled “M GY BREAST CA MGMT” (it is located near the bottom of the second column). Click on the button labeled “Load List.”

Step 9
Click on the Sx tab, if you are not already there.

Locate and click the small plus sign next to “Breast lump.”

Locate and click on the following symptom findings:
   • (red button) in the right breast

The description will change to “Lump in the right breast.”

Step 10
Click on the Hx tab.

Locate and click the small plus sign next to “reported mammogram.”

Locate and click on the following finding:
   • (red button) abnormal

The description will change to “A mammogram was abnormal.”

Step 11
Click on Tx tab.

Locate and click the small plus signs next to “Tests” and “Pathology.”

Locate and highlight the description, then click the Order button for the following test:
   • (order button) Fine Needle Aspiration

Verify that the test appears in the Plan section of the note before proceeding.

Step 12
Locate and click on the button labeled “Search” in the Toolbar at the top of your screen to invoke the “Search String” window. Position your mouse in the Search String field and enter the medical term “mammogram.” Verify that you have spelled this correctly, and then click the button in the Search String window labeled “Search.”

Step 13
Click on the Rx tab.
Locate and click on the small plus sign next to “Prev Medicine Results Document/Review Screening Mammography.”

Locate and click on the small plus sign next to “Assessment Category.”

Locate and click on the following findings:
- (red button) Highly Suggestive of Malignancy
- (red button) Communicated Mammogram Results to Patient Within 5 Days of Interpretation

**Step 14**
Locate and click on the button labeled “E&M” in the Toolbar at the top of your screen.

When the Problem Screening window is displayed, click the check boxes next to “chronic” for each of the diagnoses and then click on the button labeled “OK.”

The E&M calculator window should be invoked.

**Step 15**
Verify that the Patient Status section in the upper right corner of the E&M calculator is set to “Existing.” If it is not, click on the white circle next to “Existing” and then click on the button labeled “Calculate E&M Code.”

Notice that the calculated E&M code is 99213.

**Step 16**
Locate and click on the checkbox next to “>50% time spent counseling.”

Locate and click your mouse on the down arrow button in the field labeled “Face-to-face or Floor time.” Select 30 minutes from the drop-down list.

Locate and click on the button labeled “Calculate E&M Code.”

**Step 17**
The Calculated E&M Code field should display “99214: Estab Outpatient Detailed H&P - Moderate Complexity Decisions.” If this is the code displayed in your window, locate and click on the button labeled “Post To Encounter.” If this is not the code calculated, click on the Cancel button, and review the previous steps to find your error.

---

**Alert**
Do not close or exit the encounter until you have a printed copy in your hand. You will lose your work if you exit before printing.
Step 18

Click on the Print button on the Toolbar at the top of your screen to invoke the Print Data window.

Be certain there is a check mark in the box next to “Current Encounter” and then click on the appropriate button to either print or export a file, as directed by your instructor.

Compare your printout to Figure 12-46 if anything is missing, review the previous steps and correct your mistake.
Chapter Twelve Summary

CPT-4 and ICD-9-CM codes are national standards that are required on insurance claims for outpatient and other services.

ICD-9-CM codes (introduced in Chapter 7) are also used for billing. For both inpatient and outpatient facilities, the use of the correct ICD-9-CM code on a claim serves to explain or justify the medical reason for the services being billed.

Reimbursement for most inpatient hospitals is based entirely on the Diagnostic Related Group (DRG) determined from the primary and secondary diagnoses assigned by the attending physician.

Outpatient billing requires one or more ICD-9-CM codes be assigned to every procedure and the diagnosis must be appropriate to the procedure.

The use of HCPCS and CPT-4 codes for procedures is also required. CPT stands for Current Procedural Terminology. It was developed and is maintained by the AMA.

A group of the CPT-4 codes called Evaluation and Management (E&M) codes is used to bill for nearly every kind of patient encounter.

There are separate categories of E&M codes for different locations such as outpatient, inpatient hospital exams, nursing home visits, consults, emergency room doctors, and so on.

There are four levels of E&M codes within each category. The levels represent the least complicated exam (level 1) to the most complex exam (level 4), with higher levels paying the provider more.

The medical record for the encounter must support the level of E&M code billed with documented findings. An EHR can accurately calculate the correct level of E&M code from the findings that are documented.

There are seven components that are used in defining the level of E&M services. These components are:

◆ History
◆ Examination
◆ Medical Decision Making
◆ Counseling
◆ Coordination Of Care
◆ Nature Of Presenting Problem
◆ Time

The first three of these components, History, Examination, and Medical Decision Making, are called key components. Each of the key components has subcomponents called elements that determine the level of the component. Once the level of each of the key components is determined, the results are evaluated to calculate the correct level of E&M code.
Time is used to adjust the level of the E&M code only when counseling/coordination of care exceeds 50% of the face-to-face time.

Because the level of E&M code is dependent on the levels of multiple key components, merely adding more findings to only one key component may bring that component to a higher level, but that does not necessarily mean that the visit as a whole will qualify for the higher level E&M code.

**Testing Your Knowledge of Chapter 12**

1. What does the acronym E&M stand for?
2. How many levels are there for a category of E&M code?
3. Name the three key components of an E&M code.
4. How many levels are there for each key component?
5. How many key components determine the level of E&M code for an established patient?

**Write the definitions for the following History acronyms:**

6. HPI __________
7. ROS __________
8. PFSH __________

9. Explain how the level of a general multisystem exam is determined.
10. What determines the level of risk?
11. What makes up face-to-face time?
12. When does time become a factor in determining the level of E&M code?
13. What does the E&M button on the Toolbar do?
14. How do you record an E&M code in the patient encounter note?
15. You should have produced three narrative documents of patient encounters. If you have not already done so, hand these in to your instructor with this test. The printed encounter notes will count as a portion of your grade.
Comprehensive Evaluation of Chapters 7–12

This comprehensive evaluation will enable you and your instructor to determine your understanding of the material covered in the second half of this book. Complete both the written test and the hands-on exercises provided below. Depending on the time provided, it may be necessary to do this in two separate sessions. Your instructor will advise you. Do not begin Part II if there will not be enough class time to complete it. You will need access to the Internet for Part III.

Part I—Written Exam

1. Where does the data that appears in the patient management tab come from?
2. Why would clinicians use trending of lab results and what type of results can be graphed?
3. Describe the benefits of having patients entering their own symptoms and history.
4. Why are childhood immunizations important?
5. List at least three ways that codified data in the EHR can be used to manage and prevent disease.
6. Describe a problem list and provide at least two reasons why clinicians use a problem list.
7. Describe how to create a flow sheet from a form.
8. What does it mean to cite a finding and how would you do it from a flow sheet?
9. How does an E-visit differ from provider-to-patient e-mails?
10. What are “evidence-based” guidelines?
11. Name at least three external sources of data for populating the EHR?
12. What is a growth chart percentile?
13. List the four components of the HIPAA Administrative Simplification Subsection.
14. Compare the difference between HIPAA Consent and HIPAA Authorization.
15. Does a provider need the patient’s consent to share PHI with an authorized government agency?
16. Name the Covered Entities under HIPAA.
17. Name some advantages of a PHR.
18. Give an example of a specialty that might use annotated drawings in an encounter note.
19. How is the Internet changing healthcare? Give examples of changes.
20. List the three criteria of an Electronic Signature.
21. Name the key components of an E&M code.

22. Where are “bullets” used in E&M calculation?

For questions 23–30, select the acronym from the list below that best matches the description, and write it next to the number.

<table>
<thead>
<tr>
<th></th>
<th>BMI</th>
<th>HPI</th>
<th>PDA</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>EPHI</td>
<td>MMR</td>
<td>PKI</td>
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<td></td>
<td>HCPCS</td>
<td>OCR</td>
<td>VPN</td>
</tr>
</tbody>
</table>

23. ___________ Information protected by the Security Rule

24. ___________ Electronic Signature standard

25. ___________ Calculation for height/weight ratio

26. ___________ Procedure code set

27. ___________ Three vaccines

28. ___________ Enforces HIPAA Privacy Rule

29. ___________ Element of a patient exam

30. ___________ Method of Internet Security

Part II—Hands-On Exercise

The following exercise will require use of the Student Edition software and it may require a full class period to complete the exercise. Do not start the exercise unless there is sufficient time remaining to complete it.

Critical Thinking Exercise 75: Examination of a Patient with Arterial Disease

In this exercise, you will use all of the skills you have acquired to document this patient encounter. Complete each step in sequential order using the instructions and other information provided.

Case Study

Brenda Green is a 54-year-old female with a history of hypertension and possible peripheral arterial disease of the legs. During her last visit, she complained of pain in the legs and cold feet following exercise. After performing an ankle-brachial index test in the office, the clinician ordered an angiogram. Brenda is coming today for the results of her test and a follow-up exam.

Step 1

Start the Student Edition software and log in.

Click Select on the Menu bar, and then click Patient.

In the Patient Selection window, locate and click on **Brenda Green**.
Step 2
Click Select on the Menu bar, and then click New Encounter.

Select the date **May 31, 2012**, the time **10:15 AM**, and the reason **Office Visit**.

Compare your screen to the date, time, and reason printed in bold type before clicking on the OK button.

Step 3
Enter the Chief complaint: “**Patient reports leg pain after exercise.**”

When you have finished typing, click on the button labeled “Close the Note Dialog.”

Step 4
Begin the visit by recording Brenda’s vital signs and Quick Screening Exam using a form.

Locate the Forms button on the Toolbar and select the form labeled “**Hypertension.**” Enter Brenda’s vital signs in the corresponding fields on the form as follows:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature:</td>
<td>98.6</td>
</tr>
<tr>
<td>Respiration:</td>
<td>22</td>
</tr>
<tr>
<td>Pulse:</td>
<td>78</td>
</tr>
<tr>
<td>BP:</td>
<td>130/90</td>
</tr>
<tr>
<td>Weight:</td>
<td>210</td>
</tr>
</tbody>
</table>

When you have finished, check your work; if it is correct, proceed to step 5.

Step 5
Remain on the Forms tab.

Locate and click on checkbox for hypertension. The small circle will turn red.

- Hypertension ✓ Y

Enter the Quick Screening Exam portion by using the Negs button in the Toolbar at the top of your screen. The Quick Screening Exam items should be checked as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retina</td>
<td>✓ N</td>
</tr>
<tr>
<td>Optic Disc</td>
<td>✓ N</td>
</tr>
<tr>
<td>Heart Rate and Rhythm</td>
<td>✓ N</td>
</tr>
<tr>
<td>Heart Borders</td>
<td>✓ N</td>
</tr>
<tr>
<td>Murmurs</td>
<td>✓ N</td>
</tr>
<tr>
<td>Heart Sounds S1</td>
<td>✓ N</td>
</tr>
<tr>
<td>Heart Sounds S2</td>
<td>✓ N</td>
</tr>
<tr>
<td>Heart Sounds S3</td>
<td>✓ N</td>
</tr>
<tr>
<td>Heart Sounds S4</td>
<td>✓ N</td>
</tr>
</tbody>
</table>
Step 6
Locate and click on the button labeled “FS Form” in the Toolbar at the top of your screen to invoke the Flow Sheet view.

Locate and click on the button labeled “Cite” in the Toolbar at the top of your screen.

Move your mouse pointer over the column date “5/17/2012.” The pointer should change to include a large question mark. Click on the column date. A window of findings from that encounter will be displayed.

Review the findings and then click the button labeled “Post To Encounter.”

Locate and click on the button labeled “Cite” in the Toolbar at the top of your screen to turn off the Cite feature. Then locate and click on the button labeled “FS Form” in the Toolbar at the top of your screen to return to the Hypertension form.

Step 7
Locate the section of the Hypertension form labeled “Standard Orders.” Click on the checked boxes to remove the orders for the tests:

- Hematocrit
- Hemoglobin

Confirm each deletion by clicking on the OK button in the confirmation dialog box that will appear.

Step 8
Locate and click on the Manage tab at the bottom of the screen.

Review the patient’s problem list. Locate and click on the problem “Atherosclerosis of the femoral artery” to highlight it.

Locate and click on the button labeled “Flowsheet” in the Toolbar at the top of your screen. The Flowsheet view will be invoked for the specific problem.

Locate and click on the button labeled “Cite” in the Toolbar at the top of your screen.

Locate the section of the Flowsheet with the label “Tests” (in a teal divider) by scrolling the window.

Cite an individual test result by moving your mouse pointer over the column “5/18/2012.” The pointer should change to include a large question mark.

Locate the finding of Bilateral Angiography and click on the column with the abbreviation “72% blockage” (in red). The finding will be recorded in the current encounter.

Cite the findings from the previous exam by moving your mouse pointer over the date “5/17/2012” at the top of the column, and click on the date.
A window of findings from that encounter will be displayed.

Locate and click on the red button (in the Review Cite of Flowsheet window) for the finding:

- (red button) ordered bilateral angiography of the extremity

This will prevent a reorder of that test.

Locate and then click the button labeled “Post To Encounter.”

**Note**

If you have difficulty locating the test finding of Bilateral Angiography in the problem-oriented flow sheet because it does not appear on the problem flow sheet, the most likely cause is a misstep with the Flowsheet and Cite buttons earlier in the exercise. Do the following to remedy the situation:

- Before citing anything in step 8, locate and click on the button labeled “Cite” in the Toolbar at the top of the screen to turn off the Cite feature.
- Then locate and click on the button labeled “Flowsheet” in the Toolbar at the top of the screen to close the flow sheet and return to the Patient Management Problem tab.
- Locate and click on the Encounter tab to return to the Encounter note view. Start Step 8 over again from the beginning. “Bilateral Angiography” should then appear in the flow sheet as indicated in the directions.

**Step 9**

Locate and click on the button labeled “Cite” in the Toolbar at the top of your screen to turn off the Cite feature. Then locate and click on the button labeled “Flowsheet” in the Toolbar at the top of your screen to return to Patient Management.

Locate and click on the Manage tab labeled “Medications.” Review the patient’s current medications.

When you have reviewed her medications, locate and click on the tab labeled “Encounter” at the bottom of the window to return to the encounter note view.

**Step 10**

Locate and click the assessment “Atherosclerosis of the femoral artery” in the encounter note (right pane). The finding will then be displayed in the left pane on the Edit tab.

Highlight the diagnosis description, then locate and click on the button labeled “Prompt” in the Toolbar at the top of your screen.

Locate and click on the Rx tab in the left pane. Locate and highlight “Anticoagulants Warfarin sodium (Coumadin),” and then click the Rx button on the Toolbar.

This will invoke the prescription writer.
Step 11
Enter the following prescription by selecting the following options as they are presented:

Rx Dosage: 2 mg
Rx Brand: Coumadin

Enter the following data in the prescription fields:

Sig
Quantity: 1
Frequency: daily
Per Day: 1
Days: 30

Dispense
Amount: 30
Refill: 3
Generic: Y

Verify that you have entered the information correctly, and then click the button labeled “Save Rx.”

Step 12
Locate and click the button labeled “Search” in the Toolbar at the top of your screen. The Search window will be invoked. Type “Low fat diet” and click the Search button.

Locate and select the following findings from the list displayed in the Rx tab:

- (red button) Low Fat Diet
- (red button) Patient Education Dietary Low Fat Cooking
- (red button) Patient Education Dietary Changing Eating Habits

Step 13
Click on the button labeled “Search” on the Toolbar at the top of your screen. The Search String window will be invoked.

Type the search string “INR” and click on the Search button in the window.

If the left pane is not on the Rx tab, click on the Rx tab.

Locate and highlight the finding “Anticoagulants management.”

Locate and click on the down arrow in the Entry Details Prefix field. Select “Follow-up with” from the drop-down list.

In the Entry Details Duration field, type “2 weeks” and press the Enter key on your keyboard.

Step 14
Create an annotated drawing to explain the angiography results to the patient.
Scroll the encounter note in the right pane to locate the imaging study finding “Bilateral Angiography.” Click on the word “Bilateral.” The left pane should change to the Edit tab.

Locate the context button (the second button from the right in the lower right corner of your window) and click on it. From the drop-down list displayed, choose “Add Object to Finding.”

The drawing window will be invoked in the right pane.

If the cardiovascular drawing is not displayed, use the fields at the top of the drawing to select the Cardiovascular, Full Body, Front view from the drop-down lists.

**Step 15**

Once the correct illustration template is displayed, use the Toolbar in the drawing tool to set up the tool.

Locate and click on the down arrow next to the first button; then select “Circle” from the drop-down list.

Locate and click on the Lock button (with the padlock). It should have a white background.

Locate and click on the Color pallet button. When the window is displayed, select Blue. Click OK to close the Color pallet window.

**Step 16**

As closely as possible, replicate the drawing in Figure C-1.

Draw a blue circle over the femoral artery midway between the groin and the knee (as shown in Figure C-1).

Change the drawing tool.

Locate and click on the down arrow next to the first button, then select “Line” from the drop-down list.

Draw a horizontal line from the circle to the blank area of the drawing on the right.

Next, change the color to red by selecting the Color pallet button.

In the blank area of the drawing, draw two vertical, parallel lines to represent an enlarged view of the artery.

Change the drawing tool.

Locate and click on the down arrow next to the first button, then select “Brush” from the drop-down list.

Using the Brush, make a thick line on the interior of each of the parallel lines to represent the blockage in the artery (similar to Figure C-1).
Annotate the drawing.

Locate and click on the down arrow next to the first button, then select “Text” from the drop-down list.

Click your mouse in the image to the right of the knee and a text field will open. Type “72% blockage.”

Right click anywhere on the drawing except in the text box to display a list of options; click on “Complete Text” from the list displayed.

Compare your drawing to Figure C-1. If you need to correct the line or circle, change the tool button to “Select” and click on the object. Use the Delete button in the Toolbar and then redraw the correct element.

**Step 17**

Click the Print button on the drawing toolbar, not the Print button on the main Toolbar. The familiar Print Data window will be invoked.

Be certain there is a check mark in the box next to “Imager Drawing” and then click on the appropriate button to either print or export a file, as directed by your instructor.

Compare your printout or file output to Figure C-1.

When you have a printout of your annotated drawing in hand, close the Print Data window.
Step 18
Locate and click on the Exit button in the *drawing toolbar* to close the drawing tool and redisplay the encounter note.

Step 19
Locate and click on the button labeled “Search” in the Toolbar at the top of your screen. The Search String window will be invoked.

Type the search string “Total cholesterol” and click on the Search button in the window.

Click on the Tx tab.

The left pane should display several findings with the words “Total Cholesterol” in them.

Locate and highlight the finding “Total plasma cholesterol” (the finding with the red button selected).

Click Graph on the Menu bar, and then click “Current Finding” from the drop-down list. The Graph window will be invoked with a graph of Brenda’s recent cholesterol results.

Locate and click on the Print button in the upper left corner of the graph window to invoke the Print Data window.

Locate the check box for Total Cholesterol in the left column and click on it.

Locate and click on the appropriate button to either print or export a file, as directed by your instructor. When your graph has printed successfully, click on the Exit button in the window displaying the Total Cholesterol graph.

Step 20
Print a chart of Brenda’s weight.

Click Graph on the Menu bar, and then click “Weight” from the drop-down list. The Graph window will be invoked with a graph of Brenda’s weight measurements.

Locate and click on the Print button in the upper left corner of the graph window to invoke the Print Data window.

Locate the check box for Weight in the left column and click on it.

Locate and click on the appropriate button to either print or export a file, as directed by your instructor. When your graph has printed successfully, click on the Exit button in the window displaying the Total Cholesterol graph.

Step 21
Locate and click on the button labeled “E&M” in the Toolbar at the top of the screen to invoke the E&M calculator.

When the Problem Screening Checklist window is displayed, check the box next to “Chronic” for the diagnosis “Hypertension” and check the boxes next to
“Active” and “New Problem” for the diagnosis “Atherosclerosis of the femoral artery,” and then click on the OK button.

**Step 22**
The E&M calculator window will be displayed.

Click on the Check box labeled “>50% time spent counseling.”

Click the down arrow in the Face to face/Floor time field and select **50 minutes** from the drop-down list.

Click on the circle next to “Existing Patient.”

Click on the button labeled “Calculate E&M Code.”

The Code field should display “99215: Estab Outpatient Comprehensive H&P—High Complex Decisions.”

If this is the code displayed in your window, locate and click on the button labeled “Post To Encounter.”

**Step 23**
Locate and click on the finding “Counseling” in the right pane (in the Practice Management section of the encounter note). The finding should appear on the Edit tab in the left pane.

Locate and click on the Finding Note button (in the lower right corner of your screen).

Type the following text into the Finding Note window: “**30 minutes of visit spent on dietary and Coumadin counseling.**”

When you have finished, click your mouse on the button labeled “Close the note form.”

**Step 24**
Click on the Print button on the Toolbar at the top of your screen to invoke the Print Data window.

Be certain there is a check mark in the box next to “Current Encounter” and then click on the appropriate button to either print or export a file, as directed by your instructor.

**Part III—Internet Exercise**

You will need access to the Internet for this portion of your evaluation.

**Critical Thinking Exercise 76: Patient Researches Medication**

**Case Study**

Brenda Green has been prescribed a new drug. Upon returning home from the doctor’s office, she uses the Internet to look up information about it.
Step 1
Start your web browser. In the address bar type the URL: www.webmd.com.

Step 2
When the web site is displayed, locate the search field and type: warfarin. Click on the Search button.

Step 3
A list of search results will be displayed.
Locate and click on the link for “Warfarin for arterial fibrillation.”

Step 4
When the article is displayed, locate and click on the link “Print Article.”
If your instructor normally requires printouts of your work, click the Print button.
If you normally submit your work as a file, copy the URL displayed in the print window, and paste it into an e-mail or text file. Consult your instructor as to his or her preference for this step.
Give your instructor the following printouts or files along with your written exam:

1. Annotated drawing of femoral artery
2. Graph of Total Cholesterol
3. Graph of Brenda Green’s Weight
4. Encounter note for May 31, 2012, for Brenda Green
5. Printed WebMD article or file containing URL of print window.