As stated in the CPT codebook, the classification of Evaluation and Management (E/M) services are divided into broad categories of services which include office visits, hospital visits and consultations. Most of the categories are further divided into two or more subcategories. There are two subcategories of office visits; new patient and established patient. The subcategories are further classified into the levels of E/M services that are identified by specific CPT codes. Part one and part two of the “Coding Corner” reviewed the five levels of E/M services available for reporting the new patient and established patient office visit (99201 – 99205 and 99211 – 99215). When to use the codes for outpatient consultations (99241 – 99245) has also been discussed. The six components used in defining the levels of E/M services include: history, examination, medical decision making, counseling, coordination of care, and the nature of the presenting problem. The history, examination, and medical decision making are considered the key components in selecting a level of E/M services. Counseling, coordination of care and nature of the presenting problem are considered contributory factors in the majority of physician – patient encounters. Medical decision making (MDM) is the most complex of the tasks in determining correct billing and is a conceptual challenge for physicians when coding for E/M services.

While determining the level of history and the level of the physical examination do follow traditional medical record documentation elements, the concept of medical decision making presents an even greater challenge. When recording MDM, we are asked to quantify data using qualitative descriptors. In addition, the Nature of the Presenting Problem (NPP), something outside of the physician’s control, is a major element in defining the level of MDM. The lack of comprehension of Medical Decision Making has greatly contributed to physician’s failure in meeting the standards of E/M coding and appropriate reimbursement for services rendered. It is important to note that documentation is a key to defining the service provided. If a service is not documented, from the point of view of any third party reviewer, it might as well never have been performed. MDM includes the documentation of the number of possible diagnoses and/or the number of management options, the amount of data to be reviewed, as well as the risk of complications, morbidity and mortality associated with each encounter. The challenge of meeting the standards for E/M means understanding the guidelines themselves.
It is easy for physicians to misinterpret the meaning of “Medical Decision Making” as used in the CPT coding guidelines. Our traditional training in medical school would suggest that medical decision making refers to a differential diagnosis, appropriate testing if necessary and a proposed treatment plan. However, the CPT coding system terminology deals with E/M concepts and definitions than are not part of the traditional approach to diagnostic and treatment decisions many of us learned in our training. We are now asked to rate the complexity of our decision making plus rate the complexity of the diagnosis and therapeutic options. Therefore, as stated in the CPT manual, “Comorbidities/underlying diseases, in and of themselves, are not considered in selecting a level of E/M services unless their presence significantly increases the complexity of the medical decision making process”. The fundamental principles of MDM are measured by the three following elements:

1. The number of possible diagnoses and/or the number of management options that must be considered
2. The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained, reviewed, and analyzed
3. The risk of significant complications, morbidity, and/or mortality, as well as comorbidities, associated with the patient’s presenting problem(s), the diagnostic procedures(s), and/or the possible management options

The descriptors in the CPT coding system for the levels of MDM are the same for outpatient initial visits, outpatient consultations, and established patient visits.

Calculating the level of MDM, as explained in the CPT codebook, can be quite complex and time consuming. The guidelines recognize four levels of each of the three elements listed above. The level of MDM for a given visit actually depends on the highest two out of these three elements. Therefore, if a physician tries to calculate the complexity of MDM, it may actually require an intricate series of calculations. If MDM is not included as part of the initial patient encounter, a note in the chart is often less than adequate for calculating and documenting the three elements of MDM.

The three elements are further subdivided into individual subcategories:

- **There are two categories in the first element, (Diagnosis and Management Options):**
  1. The “number of diagnoses”
  2. The “number of management options”

- **There are four subcategories in the second element (Quantity /Complexity of Records):**
  1. The “amount of data to be reviewed”
2. The amount of data “ordered, planned, scheduled or performed”
3. The “complexity of data to be reviewed”
4. The complexity of data to be obtained

There are three subcategories in the third element (Risk):
1. The level of risk “associated with the presenting problem(s)”
2. The level of risk associated with “the diagnostic procedure(s)” ordered
3. The level of risk associated with the “possible management options”

To calculate the MDM and define whether the type of medical decision making is: Straightforward, Low complexity, Moderate complexity, or High complexity, it would be necessary to reference Table 2 on page 8 of the CPT manual. Table 2 defines the “Complexity of Medical Decision Making”, which indicates the proper code for each of the individual elements.

### Complexity of Medical Decision Making

<table>
<thead>
<tr>
<th>MDM</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>Straight Forward</td>
<td>Minimal</td>
<td>Minimal</td>
<td>Minimal</td>
</tr>
<tr>
<td>Low Complexity</td>
<td>Limited</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Moderate Complexity</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>High Complexity</td>
<td>Extensive</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

For many physicians, attempting to use the above grid for MDM compliance is complex enough and idiosyncratic enough to be daunting. The table lists each of the three elements of MDM plus the four corresponding levels of medical decision making. If the fact that there are three elements of MDM and each element is further subdivided into two or more parts that may be defined as categories and that each category has four levels of medical decision seems confusing, it becomes even more complex. To qualify for a given type of decision making, two of the three elements in Table 2 must be met or exceeded. The physician must also consider that the level of Medical Decision Making is always the same as the second-highest of the three
elements; or to state it another way, MDM is the lower of the two highest factors in each column of Table 2. For example, if the number of diagnosis is minimal, the data complexity is moderate, and the risk is high, MDM would be moderate.

If at this point you are a little confused about using the grid above to produce a numerical approximation of medical decision making, you are not alone. In fact, it has been said that the guidelines for MDM leave so much unstated that it is difficult to tell what documentation may support an E/M claim. The E/M level of care is also closely tied to the Nature of the Presenting Problem (NPP) which plays an important role in determining MDM. It would also not be surprising if you began to recognize that coding for new patients requires more effort with more uncertainty than coding for established patients. The only way to be more efficient and better comprehend MDM is to reduce the need for complex calculations which are often done using hand written or typed notes after the patient has left the office. Perhaps this is the time to take another look at the three elements of MDM. Let us first revisit the Amount and/or Complexity of Data to Be Reviewed (or ordered).

It is standard practice and good quality of care to record and document the data reviewed and ordered but when the guidelines describe “the amount and complexity of data to be reviewed,” it generally refers to information collected from sources other than the H&P. This may include:

- Diagnostic lab tests
- Radiology studies
- Medicine studies
- Discussion with performing physician(s)
- Review of old records, discuss with others
- Independent visualization

The question often asked is what actually constitutes minimal, limited, moderate or extensive review of data. We are instructed to quantify the “amount” of data and at the same time define the “complexity” of data which is a qualitative analysis.

The difficulty is that the CPT codebook and Documentation Guidelines do not provide any quantifiable parameters for compliance. There have been various examples offered as reasonable guidelines usually based on a point system designed to meet the E/M criteria. As a baseline, zero point’s means nothing beyond what is collected from the H&P. Therefore, even if you document a comprehensive history and physical, you still may have no “data to be reviewed” for MDM unless you document any lab, radiology, old records or additional history. The information to consider when recording data include three major issues:
1. The type of diagnostic testing ordered or reviewed
2. The decision to review old medical records and/or obtain history from a source other than the patient increases complexity
3. The discussion of contradictory or unexpected results with the physician who performed or interpreted the test increases complexity

The literature on coding which describes the Amount and/or Complexity of Data to be Reviewed is not uniform. The methodology to determine the level of MDM is developed by private organizations or other experts in the field of CPT coding. The scoring systems are not part of the CNS guidelines or recommendations. The different methods are based upon a point system that takes qualitative information collected by the provider and translates it into quantitative data. Generally, the more points the higher level of service.

The following are examples of different scoring systems that have been discussed in the literature. One type of scoring system assigns one or two points (minimal/none or limited) for the review of printed data, such as lab and radiology reports. A review of outside records that require interpretation or evaluation of radiology procedures may be given three points (moderate). The actual review and interpretation of more complex tests such as MRI’s and CT scans, (which is something done by many headache specialists), may qualify for four points (extensive)

Another scoring system for Amount and/or Complexity of Data to be Reviewed allows the physician to add up the points according to what information was examined. One point each is given for clinical lab tests ordered/reviewed, radiology services ordered/reviewed, medical services ordered/reviewed, and the discussion of test results with the performing provider. Two points are assigned for the decision to obtain old records, prior history or discussion of the case with another provider. Two more points are assigned for independent visualization of image, tracing or report. The total points are then combined. High Complexity is >=4, Moderate Complexity is 3, Low Complexity is 2 and Straightforward is <=1. Again, however, it must be emphasized that there are no specific definitions which define “amount’ or “complexity” in the CPT codebook or the Documentation Guidelines, There is also no one specific template to guarantee compliance.

The bottom line is if we use the traditional steps for calculating the amount and complexity of data to be reviewed, as indicated in the CPT codebook, it would require complex computations and still may not be accurate. On the other hand, if we carefully document the data reviewed and ordered for the purpose of quality care and efficient record keeping, it may also meet E/M
compliance. Since the coding guidelines do not define one scoring system which would guarantee that individual insurance carriers would accept any of the suggestions found in the literature, we must do our best to comply with the instructions which ask that we record the decision to seek additional information and, when the information is obtained, document the results for review.

The next element, The Documentation of the Number of Diagnoses or Treatment Options is also unique. This is not the same as the differential diagnosis and treatment plan we learned to use through years of medical training. The three major issues to consider for this element are:

1. MDM is easier for a diagnosed problem than for an identified but undiagnosed problem
2. Medical conditions which are improving are less complex than problems that are worsening or failing to change as expected
3. The need to ask for advice from an outside source is an additional indication of the complexity of the diagnosis

As stated earlier, it must be emphasized that CPT provides no provision for quantifying the uncertainty implied by the different treatment options. However, as with data to be reviewed, there are different scoring methods introduced by private organizations or experts in CPT coding which attach a numerical value to each of the above categories. One such formula for quantifying diagnoses and management options is based upon a four point system. The design of this model defines the type of MDM as related to:

- A self-limited or minor problem
- An established and previously diagnosed problem which is stable
- An established and previously diagnosed problem which is worsening
- A previously unidentified problem requiring no additional workup
- An undiagnosed problem requiring further evaluation

According to this draft of a proposed score sheet, a previously unidentified or undiagnosed problem requiring a treatment plan, tests, or additional assessment and/or consultation (which would define most headache center new patient visits) is given 4 points and usually is enough to qualify as extensive for MDM. Self-limited and established problems are assigned 1 point. An established problem which is worsening is 2 points. A new problem requiring no additional workup is 3 points. The total scores for this scoring system are: High Complexity >=4, Moderate
 Complexity 3, Low Complexity 2, and Straightforward <=1.

The physician is also expected to justify the complexity of establishing a diagnosis which may relate to the types of diagnostic tests ordered. An important issue is that physicians often do the cognitive work and necessary diagnostic reviews when considering a diagnosis but often do not record the lists of possible diagnosis nor define the different possible treatment options. We generally will define a most probable diagnosis or the most likely differential diagnosis and record what treatment we deem necessary. However, for E/M guidelines, it would be best if we document the probable diagnosis and treatment plan plus all the potential diagnosis and treatment options.

In addition, it is important to recognize that the Documentation Guidelines do state that a physician’s subjective impressions about a relative problem, or differential diagnosis, are accepted as part of MDM. The Guidelines state that, “for a presenting problem without an established diagnosis, the assessment or clinical impression may be stated in the form of a differential diagnoses or as a ‘possible,’ probable,’ or ‘rule out’ (R/O) diagnoses”. Similarly, the number of management options that could be documented for determining the level of care should include documenting the treatment for each diagnoses and documenting the multiple potential treatment options.

The third element of MDM, the Risk of Complications and/or Morbidity or Mortality, considers the level of risk to the patient in decision making. The guidelines are referring to “the risk of significant complications, morbidity and/or mortality, as well as comorbidities, associated with the patient’s presenting problem(s), the diagnostic procedure(s) and/or the possible management options”. As might be anticipated, the quantification of risk is no more precise that the quantification of the other two elements of MDM. The guidelines do, however, define the problem by specifying limited periods in which to estimate risk. “The assessment of risk of the presenting problem(s) is based on the risk related to the disease process anticipated between the present encounter and the next one. The assessment of risk of selecting diagnostic procedures and management options is based on the risk during and immediately following any procedures or treatment”. As stated, the three principle categories of care in which risk is defined are:

   1. The risk of the patient’s presenting problem(s)
   2. The risk of the diagnostic tests ordered
3. The risk of the treatment options recommended

“The highest level of risk in any one category (presenting problem(s), diagnostic procedure(s), or management options) determines the overall risk”.

As with the other elements of MDM and as defined in Table 2 of the CPT codebook, the guidelines recognize four levels of risk: minimal, low, moderate and high. The physician is expected to use his or her judgment in documenting the level of risk.

The identification and documentation of the appropriate level of risk for each of the three categories listed above is based on descriptions provided in the Table of Risk. “Because the determination of risk is complex and not readily quantifiable, the table includes common clinical examples rather than absolute measures of risk”. The Table serves as a guideline to help measure the risk inherent in medical problems and procedures. One interesting characteristic of the table is that any management of prescription drugs qualifies as moderate risk. This is on a par with elective major surgery which is also a moderate risk intervention. Indeed, in headache management, a visit that involves a prescription for abortive and/or prophylactic care can be coded as at least of moderate risk. For the complicated headache patient, there are entries in the high risk category which justifies the high risk designation. This may include: “Drug therapy requiring intensive monitoring for toxicity” and/or “One or more chronic illnesses with severe exacerbation, progression, or side effects of treatment”. While documentation of the risk for only one category is defined in the guidelines as being compliant, for the complicated headache patient, it would appear that documenting the risk of the presenting problem(s) would be appropriate in all cases since this risk correlates with the severity of the NPP. For the complex headache patient the NPP would often be a level 4 or 5 (high). High severity for NPP is defined in CPT as “A problem where the risk of morbidity without treatment is high to extreme; there is a moderate to high risk of mortality without treatment OR high probability of severe, prolonged functional impairment”. Also, it would appear obvious that while documentation of the risk for only one category meets compliance, documentation of one of the other two categories would add to the likelihood of audit protection. A copy of the Table of Risk is found at the end of this section.

It was Albert Einstein who said “Everything should be made as simple as possible, but not simpler”. Indeed, the Current Procedural Terminology CPT 2007 devotes part of page 7 and part of page 8 to explaining Medical Decision Making. The Documentation Guidelines for
Evaluation and Management Services (May, 1997) devotes only 5 pages (43 through 47) explaining MDM. Conversely, when one does research on the guidelines of MDM, there is an enormous amount of literature dedicated to explaining the documentation requirements for compliance with MDM levels. Even though the CPT guidelines indicate that the three key components of E/M services, History, Examination and Medical Decision Making, are supposed to be weighted evenly, MDM does seem to have a special role in determining the level of a patient encounter.

The confusion seems to result from the complexity of the medical decision making process. It is this author’s opinion that most clinicians are attempting to follow the rules and often do include “Medical Decision Making” at the end of a consultation, new patient examination or office visit. However, in most all instances, none of the information provided is sufficient for compliance with the CPT guidelines for MDM. “Impression”, “Discussion”, “Recommendations”, and “Treatment Plan” are not the same as the definitions of MDM described in Table 2 in the CPT and Documentation Guidelines. In this section of the Coding Corner an attempt was made to discuss the guidelines from both a compliance as well as clinical perspective – a challenging task. Unfortunately, it is just not that simple.
<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>
</table>
| **Minimal**  | • One self-limited or minor problem, eg, cold, insect bite, tinea corporis | • Laboratory tests requiring venipuncture  
|              |                        | • Chest x-rays  
|              |                        | • EKG/EEG  
|              |                        | • Urinalysis  
|              |                        | • Ultrasound, eg, echocardiography  
|              |                        | • KOH prep | • Rest  
|              |                        |              | • Gargles  
|              |                        |              | • Elastic bandages  
|              |                        |              | • Superficial dressings |
| **Low**      | • Two or more self-limited or minor problems  
|              | • One stable chronic illness, eg, well controlled hypertension, non-insulin dependent diabetes, cataract, BPH  
|              | • Acute uncomplicated illness or injury, eg, cystitis, allergic rhinitis, simple sprain | • Physiologic tests not under stress, eg, pulmonary function tests  
|              |                        | • Non-cardiovascular imaging studies with contrast, eg, 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 |
| **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, eg, lump in breast  
|              | • Acute illness with systemic symptoms, eg, pyelonephritis, pneumonitis, colitis  
|              | • Acute complicated injury, eg, head injury with brief loss of consciousness | • Physiologic tests under stress, eg, 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, eg, arteriogram, cardiac catheterization  
|              |                        | • Obtain fluid from body cavity, eg 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 |
| **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, eg, 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, eg, seizure, TIA, weakness, sensory loss | • Cardiovascular imaging studies with contrast with 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 de-escalate care because of poor prognosis |