

Interpretation Key for E&M Utilization Analysis Workbook

This document is designed as an aid in reading, defining and interpreting the E&M Utilization Analysis workbook.

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E&M Utilization Analysis Worksheets

The E&M utilization analysis workbook is a comprehensive analysis that calculates intra-, inter- and global utilization statistics for the medical practice. In total, there are 16 tables that contain utilization-specific data. The following is a detailed explanation of those tables.

Green cells are ready for user input. Enter your practice figures for an overall assessment or make a copy of the workbook for each provider and enter their figures separately.

Intra-Category Utilization

The first thirteen tables are Intra-Category analyses, which involves comparing the utilization distribution of codes within a category. Utilization is calculated for each code by first getting the sum of the frequencies for all codes in that category and then dividing the frequency for each code by that sum. This percent distribution can then be graphed as a distribution curve as in the graphs next to each of the tables. The graph compares the utilization distribution of the practice against the control group.

The next two tables contain the utilization of Critical Care and Prolonged Care codes. Since these categories do not contain mutually exclusive codes, redistributing the RVUS and counts is not performed. In addition, these are graphed differently, showing the practice utilization (as “observed”) with the benchmark utilization (as “expected”).

Column A – E&M Code

This contains the official CPT code associated to an E&M designated procedure.

Column B – Count

Enter the annual (or any other period you wish to review) occurrences performed by the practice or provider for this procedure code. The last row in the table is the calculated total for that code category and represents the sum of the individual frequencies.

Column C – Current Fee

Enter the fee charged by the practice for this code during the period you wish to review.

Column D – Total RVUs

This column contains the total non-geographically adjusted RVU value for each of the corresponding procedure codes. These are used to develop the average RVU by category.

Column E – Current Gross Charges

The value in this column is calculated by multiplying the fee times the frequency for each line item. This represents the gross charges for this code. The last row in the table is the calculated total for that code category and represents the sum of the individual charges.

Column F – Current Practice Dist. %

This represents the distribution of each code as a percent of all frequencies for the specific category. This is calculated by dividing the frequency for that item by the total frequency recorded in the totals row under Column B. The total for this column should add up to 100%.

Column G – State (or National) Dist. %

Depending upon the workbook, this column contains either the national or state distribution for each code for the specific medical specialty. The total for this column should add up to 100%.

Column H – Variance Practice vs. State (or National)

This is the variance of the distribution percent for the practice compared to the comparative data set (national or state). This is calculated as follows: (column F / column G) – 1.

A positive value indicates that the practice's utilization of the specific code as a percent of the total utilization is greater than the national average where a negative (or red) value indicates the opposite. The greater the value, the greater the variance. For example, a variance of 100% indicates that the practice's utilization is twice that of the national average where a variance of – 50% would indicate that the practice's utilization is half that of the national average.

Column I – Redistributed Annual Frequency

In this column, the annual frequency for the code is redistributed to indicate what the frequency would be if the practice were to code the same as the comparative distribution.

It is important to note that this should not be viewed as a guide to coding for E&M services, as that should be done solely based upon E&M coding guidelines.

The purpose of the redistribution is to provide an additional method to view the variance and for later calculations that report charge differentials. This value is obtained by multiplying the total frequency in column B times the value in column G for each line item.

Column J – Redistributed Gross Charges

This is calculated by multiplying the value in column I times the fee reported in column C.

Again, it is critical that the practice not use the results of this calculation to provide an incentive for coding changes within the practice.

The primary purpose of this calculation is to serve as an interim step to calculate charge differentials and as a tool for risk assessment.

Column K – Charge Differential

This is the charge differential calculated by subtracting the calculated gross charges in column E from the redistributed gross charges in column J. This shows the difference between where the gross charges currently are for the practice compared to where they would be if the practice were coding to the exact Medicare distribution. A positive value is the amount that is greater than what would be charged would the coding match the comparative group. Large amounts may increase the likelihood of audits, as this benchmarking is performed by the payers as well. Contact the Frank Cohen Group to assess the actual risk of the current coding patterns.

To reiterate, this value should be used solely for compliance risk analysis and should **never** be used as an incentive or tool for E&M coding. As stated above, coding for E&M services is based solely and exclusively on official coding documentation guidelines and the practice should adhere religiously to those guidelines for the determination and reporting of any and every E&M service.

Note that the tables for Critical Care and Prolonged Care services do not include redistributed figures, as these codes are billed under different rules than the preceding service categories.

Inter-Category Ratios

In addition to the linear relationships of one code to another within a given category, it is also important to understand the relationships between certain categories. The Inter-Category Ratios table contains a set of ratios that compares certain categories, one to another and then compares that ratio to the national average for that specific specialty.

- Column G contains the specialty-specific ratio based upon the national (or state) Medicare database,
- Column H contains the ratio for the practice, and
- Column I contains the variance of the practice to the comparative figure.

The following is an explanation of those relationships based upon rows 151 through 159:

Office Consult to New Office Visit:

Confusion and abuse concerning the use of office consults versus new office visits is widespread and a source of problems, particularly for specialty practices. Since most patients are referred to a specialist, i.e. neurologist or cardiologist, we would expect to see a much higher ratio of consults to office visits. In a primary care practice, where most visits are patient self-referrals, we would expect to see a much higher ratio of office visits to consults.

Discharge Days to Initial Hospital Visit:

This ratio measures the relationship of hospital discharges to hospital admissions when the admitting physician and not the consulting physician performing the admission. A ratio above 1 indicates that the practice is discharging more patients than are being admitted. A ratio below .5 may indicate that the practice is not coding properly for discharges. Some practices have

problems identifying the difference between using an established hospital visit (99231 – 99233) and a discharge day code on the final day of hospitalization.

Established Office Visit to New Office Visit:

This ratio measures the relationship of established office visits to new office visits. This ratio is often used to determine the potential of abuse in scheduling patients for follow-up visits or, if the ratio is excessively high, the possibility of billing for services not rendered.

Established Hospital Visit to Initial Hospital Visit:

This ratio measures the number of established hospital visits to hospital admissions. This ratio is often used as a benchmark for determining average length of stay (ALOS). A high ratio may indicate that there is an unusually high length of stay or that more than one established hospital visit is being billed for the same patient by the same physician (or physician within the group) on the same day.

Inpatient Consult to Initial Hospital Visit:

This ratio measures the relationship of initial consults to the number of initial hospital visits, or hospital admissions. This is another measurement that is used to identify potentially abusive visit patterns with respect to the differences between primary care and specialty practices. In the primary care area, we would expect to see a higher ratio of initial hospital visits as opposed to a greater ratio of inpatient consults amongst specialty practices.

Inpatient Consult to Subsequent Hospital Visits:

In the case of specialty practices, one would expect to see more inpatient consults than hospital admissions. In the same respect, many specialists get their hospital patients as a result of referrals from other physicians. This ratio is often used to measure average length of stay for certain diagnoses.

Initial Observation Care to Initial Hospital Visit:

Initial Observation Care codes (99218 – 99220) are to be used when the observation occurs during an outpatient visit, meaning that the patient is not admitted to the hospital or other inpatient facility. This may occur, for example, in an emergency room or a nursing home. These codes are often confused with initial hospital visit codes (99221 – 99223). This ratio can be used to determine if the practice is using the appropriate codes with respect to the visit properties.

Observation or Inpatient Care to Initial Observation Care:

Again, quite often, there is much confusion over the use of the observation codes 99218 – 99220 (which represent an outpatient encounter) and 99234 – 99236 (which represent an inpatient encounter). The national ratio, when compared with that of the practice, can be used to determine the potential for either misuse or abuse among these categories.

Observation or Inpatient Care to Initial Hospital Visit:

Observation or Inpatient Care codes are only to be used if the patient is admitted and discharged on the same day. Codes 99234 – 99236 are also referred to as '23 hour observation codes' because one criterion for use is that the patient must be admitted and discharged during the same 24-hour period. Therefore, reviewers will also look for issues that involve the use of an initial hospital visit (99221 – 99223) and a discharge day code (99238 – 99239) occurring within the same 24-hour period.

Global Category Relationships

In order to be as exhaustive as possible in identifying potential coding anomalies within the medical practice, it is necessary to study the data from all possible angles. In order to facilitate this process and to validate suspicions that may have been aroused from intra- and/or inter-category analyses, it is important to also look at the utilization of each category as a percent of total E&M utilization.

- Column G contains the specialty-specific ratio based upon the national (or state) Medicare database,
- Column H contains the ratio for the practice, and
- Column I contains the variance of the practice to the comparative figure.

Utilization Distribution Variances by Category

This table is used to represent a quantification of utilization differentials based upon the variance from the national database or other control group used. In the intra-category analysis, we are able to identify potential under and over utilization issues based upon the charge differential and by “eyeballing” both the utilization distribution and variance graphs. For the purpose of risk assessment, it is important to be able to quantify the over- and/or under-utilization potential for the practice. In doing so, the practice can set a quantified objective differential, for example, at 20% higher than the national average, in order to establish policies for chart audit and review. In order to accomplish this, it is necessary to establish a numerical value that represents the utilization characteristics for a given E&M code category, as defined in the intra-category analysis. Using the RBRVS database, we have assigned an RVU for each E&M code – it is understood that the higher the RVU value, the greater the overall complexity of the E&M procedure. Therefore, the higher the RVU value within a category, the greater the weight shifts towards the higher utilization codes.

The base value is calculated as a weighted RVU for each category by multiplying the utilization percent for each code by its respective RVU value. The sum of those products results in the average (weighted) RVU value. Comparing the practice’s average RVU by category to that of the national average for the same category and specialty gives a ratio that is used for risk analysis and resource allocation within the practice.

Column G – Comparative Average RVU

This value represents the national or state weighted average RVU for this category for this specialty.

Column H – Practice Average RVU

This value represents the weighted average RVU for this category based upon the data entered in the Intra-Category Utilization tables.

Column I – Variance

This is calculated as $(\text{Column H} / \text{Column G}) - 1$.