Best Practices

A guide for improving the efficiency and quality of your practice



Building a Defensible Fee Schedule: An Analytical Approach to Establishing and Maintaining Charges



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Important Note: The fees and other amounts referred to in this chapter are shown as examples only. The publisher makes no suggestions or recommendations as to fees charged by individual practitioners.

The fee schedule, sometimes referred to as the charge master, is the single most important financial tool within the medical practice. As with any other business, the fees charged reflect the value of the products and services delivered. When you strip away the clinical component of a medical practice it is, in reality, just another business. And like any other business, a medical practice must deal with expenses, employees, insurance, taxes, and just about every other business-related issue.

If we accept the importance of the fee schedule, it is surprising that so many practices create and maintain their fee schedules without a solid understanding of the basic methodology involved. Practices use a broad array of methods—some that follow logical paths and others that are tied to models that favor the payors rather than the physicians. We believe physicians should subscribe to a philosophy of independence; that their decisions should be based on sound economic and market-driven principles; and that they should not be held hostage to payors.

The methods for establishing a defensible fee schedule outlined in this chapter are complex. You may find you need the assistance of a bookkeeper, accountant, or practice consultant to complete the steps it outlines. But because a defensible fee schedule is so vital to a practices success, the process of establishing such a schedule is well worth it.

In this chapter, we will look at fee scheduling from six basic perspectives:

- 1. Benchmarking using RBRVS
- 2. Econometric models, such as cost plus markup
- 3. Volumetric methods, such as time and RVU (relative value unit)-based methods
- 4. Comparative analyses using national and local average fees
- 5. Global analytical modeling using categorical conversion factors
- 6. Acuity factors, which measure the level of complexity of the services and procedures provided to a patient population

Absent some logical method, a practice is left with two alternatives: guessing and asking other physicians. The former makes so little sense it does not bear discussion; the latter, in the broadest stroke of interpretation, could expose you to antitrust charges if it looks like you had an agreement with those other physicians on rates. Besides, basing fees on those of another practice (whose methodology may itself be in question) significantly lowers your chances for having a reasonable fee schedule.

Fee schedules need constant review and evaluation. If the practice is losing money on a particular procedure, you won't fix that by doing more of this procedure or betting

This toolkit provides information about the law designed to help users deal with their own legal needs. The information in the toolkit, however, is not intended to provide users with specific legal advice (the application of law to an individual's specific circumstances). For a legal opinion concerning a specific situation, consult your personal attorney.

on the "make it up in volume" principle. If the fee for a particular procedure seems higher than reasonable, it is just as important to consider reducing that fee as it is to consider increasing a procedure fee that is below a reasonable threshold.

A proper and thorough fee schedule analysis involves much more than raising fees and may actually have nothing to do with fee adjustments at all. Raising fees is easy; anyone can do it with the stroke of a pen or tap on the keyboard. But it won't steer your practice toward an accepted and viable business model.

Establishing and maintaining a fee schedule for a medical practice can be as easy as calculating a ratio of Medicare reimbursement or as complex as incorporating real-time market econometric dynamics, such as the Consumer Price Index (CPI), the Medical Economics Index (MEI), labor rate fluctuations, and other related financial indicators. For most practices, reality falls somewhere in the middle.

The primary purpose of the information in this chapter is to help your practice reach a level of profitability that allows it to thrive within a market and deliver a consistently high quality of patient care.

WHAT IS A FEE SCHEDULE?

It is important to define what constitutes a practice's fee schedule.

It may actually be easier to define what a fee schedule is not. A fee schedule is not simply a database that assigns a charge to each procedure or service delivered by a physician. Also, a fee schedule is not a knee-jerk reactionary instrument that is used to validate an amount a payor claims to be reasonable. A fee schedule is a concise tool that gives patients, payors, regulators, and reviewers a clear picture of how every practice defines the value of its services. A well-developed and -maintained fee schedule sends a signal that the practice is market sensitive, fiscally responsible, and organizationally sound.

Fee Schedule Philosophy

It is not easy to conclusively say what drives the decisions health care professionals make when developing their fee schedules. Historically, fee schedules were constructed based on an idea of cost and profitability. A physician provided a service for a patient, billed the insurance company, and got paid—a model that seems nonexistent nowadays. Within the past decade, fee schedule methodologies have been reduced to a race to control write-offs and disallowances, a measure of the unreasonableness of payors. In essence, most practices have settled on a fee schedule that is based on what payors are willing to reimburse. The fee schedule philosophy advanced in this chapter is that practices should adopt a methodology that takes advantage of accurate internal and external data. Future contract reimbursement levels are based largely on charge levels of today. Establishing practice fees according to what another entity/ payor views as fair may very well limit your practice's ability to negotiate accurate fees that cover costs in the future.

METHODOLOGICAL CONSIDERATIONS

Within the fee scheduling methodology, several variables must be considered. Some are directly related to and within the practice's control, including expenses, conversion factors, total compensation, and to some degree, payor mix. Some variables, however, may be outside of the practice's control, such as market dynamics, malpractice costs, population fluctuations, and supply costs. Your fee schedule development should not be driven by specific charges used by other practices within the same market area. It is crucial that your methodology depend on practice-specific variables, to minimize any antitrust concerns and to make sure your fee schedule is based on your practice's own internal dynamics—not on those of another practice that may not have a similar business model.

Additionally, by using large aggregate data sets for benchmarking, a practice can compare its charge structure with that of its peer group. While comparative data should not be the sole determinant for the fee schedule, it is helpful for understanding the value other physicians within the same specialty place on services provided to patients.

WHAT IS A CONVERSION FACTOR?

In its simplest form, a conversion factor (CF) is a value used to convert some unit of measurement into a charge. For example, if you take a car to the shop for repair, you will normally get an estimate of the repair cost. That's done by taking the average number of hours it would take a certified mechanic to fix the problem (from a flat-rate book or a Chilton's manual) and multiplying it by the hourly rate. For our purposes here, the conversion factor is a per-unit value that is multiplied by the relative value units (RVU) to convert it into a fee (or charge) for a particular medical service or procedure.

For calendar year 2008, the Medicare CF is 38.0870, meaning that for every RVU assigned to a procedure, the dollar value is approximately \$38.09. This CF is assigned for reimbursement under the Physician Fee Schedule Data Base (PFSDB) as designated by CMS. Other payors may use different CF values, and each practice will have its own CF values for procedures based on the fees that it charges.

WHAT IS THE CF USED FOR?

The CF has several different uses. It can ensure that a practice's fee schedule is not below the Medicare Fee Schedule (MFS) allowable amount. The practice can do a rapid cursory check by simply calculating the conversion factor for each procedure code and ascertaining that the value is not below the current year Medicare CF amount. If it is below, that may mean the fee is too low.

The CF is also used to establish fees for new procedures or to re-price aberrant fees for existing procedures. This aspect is particularly important when you are looking for benchmarks to use in the fee analysis process.

CALCULATING CONVERSION FACTORS

In calculating CF, there are two basic models that we will use. The first calculates a CF for each procedure code and uses that to profile the fee schedule one procedure code at a time. The second model uses these individual CF values to calculate certain CF statistics, such as central measurements (mean, median, mode, etc.) and variability (variance, standard deviation, etc.).

The basic calculation given by CMS to determine the Medicare allowable multiplies the CF by the RVUs given in the PFSDB. The formula, simply stated:

$Fee = CF \times RVU$

For example, let's say we have a procedure with 3.22 geographically adjusted RVUs. Following our formula, we would have the CF (38.0870) x RVU (3.22) = Fee (\$122.64). Using some basic algebra, then, we could rearrange the formula to calculate the CF, as follows:

CF = Fee / RVU

In another example, let's say the practice charges \$190 for this same procedure. Applying the above formula, we calculate its CF as the Fee (\$190) / RVU (3.22) = CF (59.01).

It is important to note here that while the methodology used to create each RVU is the same for all procedure codes, market forces normally affect how the CF is applied. For example, many practices have received calls from prospective patients wondering what it will cost for an office visit. Very few, however, receive the same calls inquiring about the cost of, say, an appendectomy. Even though the methodology to develop RVUs for surgical procedures and Evaluation and Management (E/M) services are exactly the same, E/M procedures are more visible and more competitive in nature. Therefore it is important, in conducting statistical measurements of CF values, that each major coding category be treated individually.

CALCULATING MEASUREMENTS OF CENTRAL TENDENCY

There are three primary methods used to calculate the central CF measurement for any group of procedure codes: the average, the median, and the weighted average.

Average (Least Accurate)

Adding a series of values together and then dividing by the total number of entries or records will result in an average. To determine the average conversion factor, we first calculate the conversion factor for each code, obtain the number of procedure codes in the sample, and then divide the total of the CF values by the number of records.

The table contains a sample of values for seven procedure codes.

Code	Fee	RVU	Frequency	CF
Code 1	\$1,087	10.215	1	106.42
Code 2	\$365	5.343	7	68.31
Code 3	\$1,114	13.713	12	81.24
Code 4	\$2,487	14.051	1	177.65
Code 5	\$529	6.185	12	85.53
Code 6	\$887	14.222	60	63.37
Code 7	\$996	14.173	108	70.27
Totals				652.79

If we add up the CF values, we get a total of 652.79. Divide this by the number of records used to get that total (7) and we get an average of 93.26 (652 / 7 = 93.26).

The problem with an average is that it does not consider (or give weight to) the value of one procedure over another. In essence, the CF for each procedure within the sample is given equal value, which may significantly skew the results since some low-frequency procedures may have individual CF values that are outliers, or outside a reasonable range. That's because practices commonly spend more time analyzing and pricing procedures they perform quite often than they do for procedures they perform infrequently.

The Median (More Accurate)

Another option is to calculate the median instead of the average. Even though a large number of outliers may still skew the final result, the median is designed to measure the middle of the sample; half the values are below and half the values are above the median value.

Code	Fee	RVU	Frequency	CF
Code 6	\$887	14.222	60	63.37
Code 2	\$365	5.343	7	68.31
Code 7	\$996	14.173	108	70.27
Code 3	\$1,114	13.713	12	81.24
Code 5	\$529	6.185	12	85.53
Code 1	\$1087	10.215	1	106.42
Code 4	\$2,487	14.051	1	177.65

Using the same set of seven codes as above, we first calculate the individual CF using the same method as before. Then, we sort the CF values in ascending order (lowest to highest). The median, rather than taking the average measurement of the values, looks at the position of the values within the database. In essence, the median is a much better measurement of central tendency when there is a great deal of variability of the CF values or the frequencies being reported.

To get the median, take the middle measurement; in this case, it is the fourth entry, or Code 3 (\$81.24). This method works well when there is an odd number of records. If there is an even number of records, take the average of the middle two.

The Weighted Average (Most Accurate)

A more accurate method is to factor in the frequencies for the codes and therefore give more weight to those procedures that are used (or reported) more often. This method more accurately represents the activity of the practice. By factoring the frequency, we can calculate the weighted average, which more accurately measures the conversion factor based on the number of times each code is reported. Again, we will use the same data set as the prior two examples.

1	2	3	4	5	6	7
Code	Fee	RVU	Frequency	Total Fees	Total RVU	CF
Code 1	\$1,087	10.215	1	\$1087	10.215	106.42
Code 2	\$365	5.343	7	\$2,555	37.401	68.31
Code 3	\$1,114	13.713	12	\$13,368	164.556	81.24
Code 4	\$2,487	14.051	1	\$2,487	14.051	177.65
Code 5	\$529	6.185	12	\$6,348	74.22	85.53
Code 6	\$887	14.222	60	\$53,220	853.32	63.37
Code 7	\$996	14.173	108	\$107,568	1530.684	70.27
Totals				\$186,633	2,684.45	

The first step is to multiply the fee for each procedure (column 2) by the frequency for that procedure (column 4) to get the total charges for that record (column 5). The next step is to multiply the total adjusted RVU (column 3) by the frequency (column 4) for each procedure to get the total RVU for that record (column 6). Next, we get the sum of the products of the total fees and total RVUs for all entries in our data set (or table). Finally, we divide the grand total fees by the grand total RVU. The result will be the frequency distributed average, or mean, for the group of codes represented.

Using the above table, we calculated the sum of the fees to be \$186,633 and the sum of the RVUs to be 2,684.45. Dividing the RVUs into the fees, we get a distributed mean of 69.52. While this is less than the other calculations, it more accurately represents the activity within the practice.

BENCHMARKING FEES

A benchmark is a standard against which something can be measured or judged. Since it is nearly impossible for a practice to calculate market value for any single procedure code or group of procedure codes, it is acceptable for a practice to benchmark its fees against an external set of standards.

In this first step, we begin to establish benchmarks against external metrics. This may, to some, feel like the old way of doing business, but in fact it represents a model for setting reasonable and logical limits. Using benchmark methods may prove to be the most complex of what we will discuss here, however, they also tend to be the easiest to defend, so they can be a powerful tool for negotiating profitable contracts.

While not considered even a reasonable fee schedule by many, the Medicare Fee Schedule (MFS) is used to ensure that charges are not below the MFS's allowable amount or, for many practices, below a ratio of the MFS allowable.

The Resource-Based Relative Value Scale (RBRVS), a component of the MFS, establishes and compares the conversion factor (CF) levels for each code and, more important, each coding category. Global CF values help us see the bigger picture as it relates to overall charge levels within homogenous groups. For example, comparing the mean (average) conversion factor for all surgical procedures for general surgeons against the same metric for a general surgery practice would give the practice a high-level view of the overall charge structure for its surgical procedures.

The Physician/Supplier Procedure Summary Master File (PSPSMF) contains 100 percent of all claims submitted to Medicare during a calendar year. This database contains 5 billion claims representing every billable procedure code performed by nearly every physician in the United States. And because the majority of practices submit their "reasonable" charges to Medicare, the PSPSMF is an excellent data source to determine average charge levels by national and state aggregates for each procedure code by specialty.

COMPETITIVE FACTOR

After financial aspects are considered, competition drives fees in nearly every industry. Practices that choose to be competitive, either by specialty or location, may want to be more sensitive to the fees they charge. This is particularly true for E/M codes, as they are often "shopped" by patients in highly competitive areas. For the purpose of the fee analysis, competitiveness is broken down into five levels, from most competitive (Level 1) to least competitive (Level 5). In the most competitive practices, fewer procedures will be recommended for fee increase and for those procedures that do meet the criteria, the increase amount will be less.

Level 1 -Very competitive

Practices that choose to be very competitive in their pricing. These practices are usually located in a highly populated urban area or city, competing with many other physicians for basic primary care business.

Level 2 -Somewhat competitive

Practices that choose to be conservatively competitive. While they recognize the need to adjust their fees reasonably, they may be in a competitive market or may offer only general primary care services, such as a walk-in center or urgent care center.

Level 3 -Average competitive

Practices that choose to maintain an average competitive presence. They want their fees to fall in the central range for similar types of physicians in their area.

Level 4 -Not very competitive

Practices that choose to be somewhat less competitive than those in Level 3. This will result in more procedures being flagged for increase and a slightly higher increase for those flagged.

Level 5 -Not competitive at all

Practices that choose to be noncompetitive in their pricing structure. At this level, the increases will be much more significant than in lower levels, as will be the amount of the increases.

COST-BASED METHODS

In many businesses, fees are established based on a standard cost-plus-markup methodology, as is used in retailing. For example, a hardware store may want a 70 percent markup on certain building products, so the pricing for such products is easy: Add 70 percent to the cost of the product. Many small businesses, especially sole proprietorships, fail because the owner doesn't understand the concept of the method. When a lawyer charges \$500 per hour, that isn't what the lawyer makes; that's the gross revenue before expenses, taxes, etc. If a consultant wants to earn \$50 per hour, he or she can't charge \$50 per hour; one needs to charge \$50 per hour above and beyond the cost of delivering the services.

Note here that the critical component is knowing the cost of delivering services, and that knowledge has been a holy grail among health care providers for a very long time. Think about the basic concept here: Do you know what your hard cost is to perform an office visit? Or to perform a minor surgical procedure? Or to see a patient as a follow-up to a major surgical procedure? The overwhelming majority of practices don't. The full implications of knowing (or not knowing) the costs of delivering services to a patient population is beyond the scope of this chapter. Yet how can we intelligently sign a managed care contract that promises a certain fee for a certain procedure when we don't know if that fee is above or below our cost? The answer, of course, is we can't.

From the perspective of a fee analysis, we can use costs either on an individual basis for determining contract profitability or globally to create a fee schedule based on this cost-plus-markup method. The first step is to determine our costs. That is a lot easier than most people think.

The first step involves building a basic RBRVS table like the one in Figure 3 below. Only include procedures that have an RVU. Items that don't are usually supplies, such as drugs, casting material, etc., and developing a fee for those is relatively simple; you know what you paid for them, so adding a markup is as simple as adding your markup ratio to the cost.

For RVU-based procedures, we multiply the RVU by the frequency and then divide this into the total expenses for the data period. For example, if a practice were to report a total of 18,000 RVUs during the data period and its expenses (minus the cost of non-RVU supplies) were \$615,600, we could calculate \$34.20 as the cost per RVU (\$615,600 divided by 18,000 RVUs). This allows us to do two things: calculate the average cost per procedure and create a cost-plus-markup fee schedule.

The former is a relatively simple procedure: Multiply the cost per RVU times the RVU value for that procedure, which is readily found in the public domain. So, for example, a mid-level outpatient consult (99243) has an associated non-facility unadjusted total RVU of 3.43. Multiply this by the cost per RVU (\$34.20) and you get a hard cost of \$117.30. Remember, this is the cost based on what you included in your total expenses. If you included physician compensation, this represents total costs, including what the physician earns.

Using this model to create or maintain a fee schedule is quite a bit simpler than approaching it from a line-item perspective. Take the cost per RVU, add a markup, and multiply this number by the RVU for the individual code. For example, let's say we want to have a 100 percent markup over our expenses. Multiply the cost per RVU in this example of \$34.20 by 2 and you have a charge-per-RVU value of \$68.40. Multiply this by the RVU for the individual procedure and you have the new fee. If we extend this to the above example, the new fee for the 99243 procedure is \$234.60 (total RVU of 3.43 multiplied by the charge-per-RVU of \$68.40).

It is important to remember that just because you bill using a particular fee doesn't mean you will be paid the amount you charge. That rarely if ever happens. When you're considering using a charge-based methodology, it's vital to have a handle on your average collection ratios by payor type to ensure that, in any case, your costs do not exceed collection.

BENCHMARKING USING RBRVS

RBRVS has, since 1992, undergone quite a bit of review and revision and as a result has become a universally accepted method for financial benchmarking within medical practices. Some misconceptions do still prevail, such as the notion that every payor uses RBRVS to develop its fee schedule. That simply isn't true and it can be easily disproven just by calculating the conversion factor for each fee.

What is true is that RBRVS, as a relational model, works very well within a closed system, such as a medical practice. Since it is relational, it is quite effective in balancing a fee profile between categories of codes and between codes within a given category. RBRVS helps to assign a real part to a fee—that of resource consumption. Contrary to popular opinion, RVUs do not measure productivity, but rather consumption—in other words, the value of the resources that are consumed when a service is delivered or a procedure is performed. Later, when we look at using a cost-plus-markup method, you will see how well RBRVS works at first establishing line-item cost values for each procedure.

Establishing Charge Thresholds

The Minimum Charge Threshold (MinCT) is measured as a ratio of the Medicare Fee Schedule (MFS) and enables a practice to determine the point at which the fee for a procedure may be considered below the minimum amount. However, while a drop below this threshold may trigger a review, when you're considering competitiveness, it does not always mean the fee should be adjusted.

The CF amount is calculated by multiplying the MinCT ratio (below) for each competitive category by the current Medicare CF. The following table illustrates how that would work using the current year's Medicare conversion factor and multiplying it by the MinCT factor. In this case, we used the 2008 CF of 38.0870.

Figure 1

Very Competitive	1.1250	42.84788
Somewhat Competitive	1.3125	49.98919
Average Competitive	1.5000	57.1305
Not Very Competitive	1.6875	64.27181
Not Competitive at All	1.8750	71.41313

The Maximum Charge Threshold (MaxCT) is also measured as a ratio of the MFS and enables the practice to determine the point at which the fee for a procedure may be considered above the maximum amount. In essence, the MaxCT is the ceiling for the fee schedule model. However, while the fee for a procedure above this threshold may trigger a review, in considering competitiveness it does not always indicate the fee should be adjusted.

The CF amount is calculated by multiplying the MaxCT ratio for each competitive category (below) by the current Medicare CF. The following table illustrates how this would work using the 2008 Medicare conversion factor of 38.0870.

Figure 2

Competitive Factor	Min. Charge Threshold	CFAmount	
Very Competitive	3.0000	114.261	
Somewhat Competitive	3.5000	133.3045	
Average Competitive	4.0000	152.348	
Not Very Competitive	4.5000	171.3915	
Not Competitive at All	5.0000	190.435	

It is important to remember that the charge thresholds are established to trigger an event only—reviewing the fee for a procedure in depth and against other benchmarks. Also, just because the fee for a procedure meets one of the above criteria does not necessarily mean the fee should be automatically adjusted.

Data Elements

In order to perform a fee schedule analysis, you will need access to the following information:

- Fee Schedule
 - o Procedure code w/ modifier, if any
 - o Usual, customary, and reasonable (UCR) amount or your billed charge
 - o Annual (or other periodized) frequency
 - o Medicare Physician Fee Schedule Database (www.cms.hhs. gov), which contains all RVU, GPCI, and critical usage info
- Physician/Supplier Procedure Summary Master File (PSPSMF) (located on the CMS website at www.cms.hhs. gov). This file is produced by CMS and represents 100 percent of all Medicare claim submissions.
- Local econometric data (inflationary rates)
- Consumer Price Index, Medical Economic Index, and local, regional and national information

With this data in hand, we can move on to talk about the tools necessary for a physician practice to conduct a proper fee analysis.

Building the Spreadsheet

To begin, we build a worksheet to serve as the basis for many of the different fee analysis models we will discuss.

- 1. Start by listing the procedure code in column 1 and the modifier (if any) in the next column.
- 2. List the fee charged to commercial or private payors (your UCR) in column 3.
- 3. Then, in column 4, enter the frequency (total per year or TPY below) at which you billed this code during the analysis period.
- 4. Next determine the gross charges for each procedure code. To do this, multiply the frequency for each code (column 4) by the fee (column 3) and place this number in column 5 (TotFee).
- 5. In order to develop both MFS and CF comparisons, the total geographically adjusted RVU for each code (column 6) and the total RVUs based upon frequency calculations (column 7) must be included. To obtain the MFS (non-facility) amount (column 8), multiply the geographically adjusted RVU by the current Medicare CF (38.0870 for 2008). You can locate the geographically adjusted RVU data online at www.cms.hhs.gov/PFSlookup. Click on "Physician Fee Schedule Search."
- 6. Next, calculate the practice conversion factor (column 9) for each procedure code by dividing the fee (column 3) by the adjusted RVU (column 6).
- 7. Once you have performed this exercise for each CPT code that you bill, you will want to calculate the distributed CF (bottom of column 9) by major code category. A major code category is defined by CPT as the following:
 - a. Surgery (10000 -69999)
 - b. Radiology (70000 -79999
 - c. Pathology (80000 89999)
 - d. Medicine (90000 -99199 and 99500 -99999)
 - e. E/M services (99201 -99499) Medicine -90000 through 99999 (excluding E/M codes)
 - f. HCPCS II -prefix A through prefix V

For more information on CPT codes and where to obtain them, see Chapter II.

8. To calculate the distributed CF, divide the grand total fee (bottom of column 5) amount by the grand total RVU (bottom of column 7) amount for each major code category. Figure 3 provides a sample of what a completed table would look like:

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1	1a	3	4	5	6	7	8	9
Code	Modifier (if applicable)	Fee	ТРҮ	TotFee	RVU	TotRVU	MFS-NF	CF
10060		\$70	59	\$4,130	2.07	122.13	\$78.45	33.82
10140		\$55	33	\$1,815	2.51	82.83	\$95.12	21.91
11040		\$95	919	\$87,305	1.01	928.19	\$38.28	94.06
11050		\$35	40	\$1,400	0.81	32.40	\$30.70	43.21
11422		\$300	12	\$3,600	3.53	42.36	\$133.78	84.99
11720		\$35	61	\$2,135	0.74	45.14	\$28.04	47.30
11730		\$115	358	\$41,170	1.77	633.66	\$67.08	64.97
11750		\$379	208	\$78,832	3.76	782.08	\$142.49	100.80
20550		\$37	42	\$1,554	1.93	81.06	\$73.14	19.17
28090		\$250	10	\$2,500	9.16	91.60	\$347.14	27.29
28126		\$510	103	\$5,2530	8.67	893.01	\$328.57	58.82
28286		\$775	313	\$24,2575	9.76	3,054.88	\$369.88	79.41
28296		\$1450	409	\$59,3050	18.45	7,546.05	\$699.21	78.59
28298		\$1410	403	\$56,8230	16.70	6,730.10	\$632.89	84.43
29540		\$29	116	\$3,364	0.94	109.04	\$35.62	30.85
29580		\$375	9	\$3,375	2.47	22.23	\$93.61	151.82
Total				\$1,687,565		21,196.76		79.61

Adjusting the Fees

The first step in determining which procedures may need a fee adjustment is to identify fees that are under the MFS allowable amount, by comparing the CF for each procedure code to the current year's Medicare CF (38.0870 for 2008). If the CF for the code falls below the Medicare CF for the current year, it is identified as being below the MFS allowable amount, or the amount published by CMS for a practice in a given geographic location.

The next step is to identify codes where the cost of providing the service exceeds the collection amount. That is accomplished by reviewing results of the cost accounting analysis. (This is only valid if the cost per RVU is less than 120 percent of the Medicare CF.) If the cost per RVU for the practice, as calculated in the cost accounting analysis, is greater than 120 percent of the Medicare CF, then it normally indicates that the practice has expense problems, not fee problems, and simply raising the fee for a procedure in this case will not result in an associated increase in reimbursement.

Next, identify codes below the minimum charge threshold (MinCT). This is based on a CF calculated as a ratio of the Medicare CF (38.0870 for 2008). Procedure codes in the table that have a CF (column 8) less than this value are identified with a "Y" in column 10 and included in the analysis for possible fee adjustments later. Finally, identify groups that have fees in excess of the MaxCT, where the CF (column 8) is in excess of the MaxCT ratio (see figure 2). Figure 4 demonstrates what a completed table may look like.

Figure 4

1	2	3	4	5	6	7	8	9	10	11
Code	Fee	TPY	TotFee	RVU	TotRVU	MFS-NF	CF	MFS	MinCt	MaxCT
10060	\$70	59	\$4,130	2.07	122.13	\$78.45	33.74	Y	Y	
10140	\$55	33	\$1,815	2.51	82.83	\$95.12	21.87	Y	Y	
11040	\$95	919	\$87,305	1.01	928.19	\$38.28	94.06			
11050	\$35	40	\$1,400	0.81	32.40	\$30.70	43.16		Y	
11422	\$300	12	\$3,600	3.53	42.36	\$133.78	84.99			
11720	\$35	61	\$2,135	0.74	45.14	\$28.04	47.30		Y	
11730	\$115	358	\$41,170	1.77	633.66	\$67.08	64.97			
11750	\$379	208	\$78,832	3.76	782.08	\$142.49	100.80			
20550	\$37	42	\$1,554	1.93	81.06	\$73.14	19.13	Y	Y	
28090	\$250	10	\$2,500	9.16	91.60	\$347.14	27.29	Y	Y	
28126	\$510	103	\$5,2530	8.67	893.01	\$328.57	58.82			
28286	\$775	313	\$24,575	9.76	3,054.88	\$369.88	79.41			
28296	\$1450	409	\$59,3050	18.45	7,546.05	\$699.21	78.59			
28298	\$1410	403	\$56,8230	16.70	6,730.10	\$632.89	84.43			
29540	\$29	116	\$3,364	0.94	109.04	\$35.62	30.98	Y	Y	
29580	\$375	9	\$3,375	2.47	22.23	\$93.61	151.82			Y

Note that the letter 'Y' has been placed in the MinCT/MaxCT fields for codes that met one or more of the criteria outlined above. The practice, of course, may use any method to identify codes that meet or fall within the criteria. In this table, for example, procedure code 10060 has been identified as having a fee below both Medicare and the MinCT. Code 29580 is identified as having a fee that is greater than the designated MaxCT. This does not mean the fee will automatically be reduced; however, reducing the fee may be an option based on reimbursement from all payors. Δ

Determine the Fee Adjustment Amount

Now that you have determined which codes should be reviewed, you need to determine whether an adjustment is warranted. While the determination of how much to adjust a fee can get quite complex, for most people it is based on an understanding of and experience with the economy, both nationally and in a specific locale. Listed below are several sources that may be consulted in the percent adjustment.

- Categorical conversion factors.
- Medicare Economic Index (MEI).
- Medical component of the Consumer Price Index (CPI).
- · Local and national inflationary indices.
- Other relevant data (i.e., Department of Housing and Urban Development info, to determine increase in lease amounts, or the Department of Wage and Labor, to determine the average salary by specific SIC code).

If the information or indicators are unknown, look online. For example, typing "consumer price index" into any Internet search engine will yield considerable material on these financial metrics.



Negotiating the RVU/CF model can be tricky. For calendar years 2007 and 2008, CMS has included what is known as the Budget Neutrality Act reduction factor. This policy requires that the work RVU is first reduced by about 12 percent before being used to calculate the MFS. The reason we mention this is to avoid confusion with regard to backing out the conversion factor. For example, if you were to take the published MFS allowable amount and divide it by the calculated geographically adjusted total RVU, you would not get the current year conversion factor. Unfortunately, there is not sufficient space to discuss this in detail; however, you can find adequate resources on the CMS website (www.cms.hhs.gov) or through an Internet search.

Establish RBRVS-Based Adjustment Amount

For procedures that are below MFS, under the MinCT, or over the MaxCT, the goal is to utilize either the mean or the median conversion factor for that code category—whichever most effectively measures the central tendency of the category conversion factor.

If this central measurement of the CF for the code category is below the minimum charge amount established earlier, the minimum charge amount could be used. Similarly, if the central measurement of the CF for the code category is above the maximum charge amount that was previously established, the maximum charge amount could be used.

The modifier, total fee, and total RVU columns calculated in previous tables have been hidden, as they are not required to perform this exercise. Based on the work completed so far, a fee analysis table may look something like the following:

Figure 5	5
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1	2	3	5	7	8	9	10	11	12
Code	Fee	ТРҮ	RVU	MFS-NF	CF	MFS	MinCt	MaxCT	New Fee
10060	\$70	59	2.07	\$78.45	33.82	Y	Y		\$165.19
10140	\$55	33	2.51	\$95.12	21.91	Y	Y		\$200.20
11040	\$95	919	1.01	\$38.28	94.06				
11050	\$35	40	0.81	\$30.70	43.16		Y		\$64.56
11422	\$300	12	3.53	\$133.78	84.99				
11720	\$35	61	0.74	\$28.04	47.30		Y		\$58.92
11730	\$115	358	1.77	\$67.08	64.97				\$125.32
11750	\$379	208	3.76	\$142.49	100.80				\$413.00
20550	\$37	42	1.93	\$73.14	19.13	Y	Y		\$153.98
28090	\$250	10	9.16	\$347.14	27.29	Y	Y		\$729.40
28126	\$510	103	8.67	\$328.57	58.82				\$638.17
28286	\$775	313	9.76	\$369.88	79.41				
28296	\$1450	409	18.45	\$699.21	78.59				
28298	\$1410	403	16.70	\$632.89	84.43				\$1,536.48
29540	\$29	116	0.94	\$35.62	30.98	Y	Y		

Calculating the Net Financial Impact

The final impact to the practice of a fee schedule adjustment is normally less than the difference between the new fee and the current fee. This is due to collection based on payor mix. Unless the billed charge for the procedure is below the Medicare rate, an increase in a fee will not result in an increase in Medicare reimbursement. The same holds true for most managed care plans and insurers.

One simple way to calculate the net financial impact is to multiply the gross impact by the average collection percent for the practice. To do this:

- 1. In Figure 6, below, subtract column 2 from column 12 to determine the variance and enter that number into column 13.
- 2. Next, multiply the frequency (column 3) by the variance (column 13) to get the gross impact and enter that value into column 14.

A more detailed calculation will take into account the payor mix that would be affected (primarily true indemnity or commercial fee-for-service payors). 3. To calculate the net impact, multiply the percent collection expected (47.58 percent for this example) by the expected frequency (column 3) and enter this value into column 15.

The modifier, total fee, RVU, total RVU, and MaxCT columns calculated in Figures 3 and 4 have been hidden, as they are not required to perform this exercise.

1	2	3	9	10	12	13	14	15
Code	Fee	TPY	MFS	MinCt	New Fee	Variance	Gross	Net
10060	\$70	59	Y	Y	\$165	\$95	\$5,605	\$2,667
10140	\$55	33	Y	Y	\$200	\$145	\$4,785	\$2,277
11040	\$95	919						
11050	\$35	40		Y	\$65	\$30	\$1,200	\$571
11422	\$300	12						
11720	\$35	61		Y	\$59	\$24	\$1,459	\$694
11730	\$115	358						
11750	\$379	208						
20550	\$37	42	Y	Y	\$154	\$117	\$4,914	\$2,338
28090	\$250	10	Y	Y	\$729	\$479	\$4,790	\$2,279
28126	\$510	103			\$638	\$128	\$13,184	\$6,273
28286	\$775	313			\$775	\$0	\$0	\$0
28296	\$1450	409						
28298	\$1410	403		Y	\$1,536	\$126	\$50,778	\$24,160
29540	\$29	116	Y	Y	\$75	\$46	\$5,336	\$2,539
29580	\$375	9						

Figure 6

TIME-BASED CALCULATIONS

Lawyers do it. Accountants do it. And many consultants do it. What do these professionals have in common? They charge by time. This is an age-old institution of fee scheduling; charging by a unit of time. Notice that we didn't say "charging by the hour." Those of you who have dealt with attorneys of late may have noticed that they charge by smaller increments, such as 15-minute or even six-minute periods. So, here's the \$64,000 question: If other professionals can do it, why can't physicians? And the answer is that they can!

There are basically two ways to go about constructing a time-based fee schedule. The first is simply to pick an hourly amount out of the air—say \$450. The second is to incorporate existing data—such as cost, charge, or revenue per hour—to create a benchmark for these types of calculations.

New Time-to-Charge Ratios

This is where we pick a rate out of the air. This doesn't mean that there isn't some link to reality. It just means that we aren't considering existing internal data to do so. For example, let's say the local attorneys are getting \$400 an hour for services rendered. Most physicians have spent more time in school and training that the typical attorney, so a unit charge of \$450 per hour would certainly pass muster as a reasonable amount.

Converting this hourly rate to a charge for a procedure, however, is a little trickier than it would be for an attorney. The physician's services are more redundant—they

do the same things over and over, and while the variety of diagnoses and treatment issues is huge, the charge is based on the procedure, not the final outcome. And physicians want to maintain the same charge for the same procedure for all payor models. In effect, this requires figuring out the average time spent for each procedure. This means we need some kind of standard reference to define the amount of time spent on each procedure. This reference can be arrived at in one of two ways: The practice can either create it or use an established standard. Creating it from scratch would entail an experimental process of recording the amount of time spent on each procedure, with a sample size large enough to create a mean or median time that is statistically significant. The other option would be to use the Relative Value Scale Update Committee (RUC) time study. A link to the time study can be found at www.cmanet.org/bestpractices.

Regardless of the standard used, the model will be the same. For the following example we are going to use the RUC study. The methodology is actually very simple: Multiply the average number of minutes for the procedure by the charge per hour (in this case, reduced to charge per minute). Following from above, let's look at an example for this.

Let's assume the practice has decided on a hypothetical rate of \$450 per hour. Dividing by 60 minutes, this comes out to \$7.50 per minute. The RUC study reports the average number of minutes for E/M visit 99213 as 23. Multiply the \$7.50 per minute by the reported 23 minutes and it equals a charge of \$172.50. Because this is a common procedure and we understand patients' sensitivity to office visit charges, it probably isn't a surprise that this seems excessive. Some practices, seeking to be sensitive to the needs of their community, reduce the value for E/M codes in accordance with internal standards. This step always warrants consideration. For example, within the same practice you may find that the physicians work at different paces.

If we run the same analysis for a surgical code, say 49000 (exploration of abdomen), the charge would be the charge per minute (\$7.50) multiplied by the average RUC minutes (304) to end up with a charge of \$2,280.

Existing Charge-to-Time Ratio

The data source references are the same here as in the above example. The difference is that the practice has existing data supporting a charge-to-time ratio. For example, suppose the practice reported (for a particular physician) 2,080 work hours with total charges of \$500,000. Dividing out, we get approximately \$240 per hour (or \$4 per minute). Going back to the 99213 used in the example above, we see that the fee would be \$92 (\$4 per minute times 23 minutes). For the surgical procedure example, the fee would be \$1,216 (\$4 per minute multiplied by 304 minutes).

Work RVUs

Using work RVUs does a bit of an end run around the time-tocharge ratio, but it is just as effective a methodology. The work RVU is calculated primarily based on the number of minutes reported in the RUC study, which gives us a powerful relationship between charge per work RVU and charge per RUC minute. The difference is that the work RVU includes both RUC time and effort, so some consider it a more accurate metric.

Back to our above example, let's take the physician who reported the \$500,000 in gross charges for a given year. In that same data period, that physician reported 5,656 work RVUs. Divide out and you get an average charge-to-work RVU ratio of \$88.40.

Moving into the analysis, we take the work RVUs reported for 99213 (0.92) times the ratio of \$88.4 and we get a fee of \$81.38. For the surgical code 49000, the fee would be \$1,100 (\$88.4 times 12.44 work RVUs).

The only caveat: In establishing the fee using work RVUs only, the practice is discounting the relative cost associated with these procedures. In some cases that can be significant. The practice may want to consider using the total RVU rather than just the work RVU as, in the current RBRVS model, the practice expense RVU is also a derivative of the same RUC time.

GLOBAL CONVERSION FACTORS

Conversion factors are dollar values that are used to convert the RVU value for a procedure into a fee. For example, the Medicare conversion factor is currently 38.0870. For 2008, procedure code 99213 has a total (non-geographically adjusted) total RVU of 1.68. Multiplying the two together, we see a Medicare non-adjusted allowable amount of \$63.67 for participating physicians.

For our purposes, we want to apply a little algebra and, using the practice's current fee, divide it by the RVU to get the practice's conversion factor for a code (or group of codes) . For example, if the practice currently charges \$92 for a 99213, dividing by the total RVU of 1.68, the practice's conversion factor is then \$54.76. Accumulating this data by major code category, the practice is then able to calculate the median and/or mean conversion factor.

For our purposes here, we suggest calculating conversion factors by the major code categories as referenced earlier in this chapter:

- Surgical -10000 through 69999
- Radiology -70000 through 79999
- Laboratory and pathology -80000 through 99999

- Evaluation and management -99201 through 99499
- Medicine -90000 through 99999 (excluding E/M codes)
- HCPCS II -prefix A through prefix V

To calculate the median CF for the surgical group, the practice would list the individual CF for each surgical procedure in a spreadsheet, sort them in ascending order by CF, and then take the middle value as the median. If there is an even number of values, take the average of the middle two. For example, if the practice listed nine CF values in the spreadsheet, it would use the fifth as the median as there would be four values below and four values above the fifth. If there were 10, you would just take the average of the values in position five and six.

Let's take a practice that has gone through this scenario, calculated surgical conversion factors, and come up with a median CF of 100 for the surgical group. The median for all physicians with their specialty from the national database is 111. In this case, the practice's surgical CF is around 90 percent of the national average, indicating that its global charge model is below that of its peers.

Figure 7 gives some examples of global CF values by category for different geographic locations:

Figure 7

State	Surgical	Radiology	Pathology	Medicine	E/M	Weighted Avg
MD	86.52	98.94	80.87	76.90	56.27	73.67
ME	81.56	99.39	103.30	63.66	54.54	68.94
MI	70.34	86.10	86.51	73.54	51.72	65.12
MN	74.18	75.17	61.40	64.06	58.11	65.32

Remember, the global CF calculations don't necessarily pinpoint issues with individual codes but rather point the practice to other methods, such as average charge comparisons, to help you understand the comparative relationships by individual code.

CHARGE DATA COMPARISONS

Once a new recommended fee schedule has been established, the revised fees should be compared to national and state average charge levels (available at at www.cmanet. org/bestpractices) for those codes. This comparison can be performed using data that is specialty-specific or specialty-agnostic. The data is also compiled from the Physician/Supplier Procedure Summary Master File. Remember, the overwhelming majority of physicians and practices submit their commercial charges to Medicare, as opposed to just the Medicare allowable. Therefore, the charge database contains reasonable charges and, simply put, the database is huge. In calculating the averages, if the practice chooses to do so itself, it should use total charges submitted, and do so only for non-modified codes, since philosophies for charging for modifiers are inconsistent.

In using this data, be careful not to make adjustments to the recommended new fees based solely on average charge levels, or at least don't do so expecting to get a one-to-one ratio of reimbursement. This data may, however, be used to assess the fees within the community, defined by both specialty and geographic boundaries. It can be assumed that the charge data for all practices, all claims, and all specialties is the average charge data representing just that: the average for all practices. Therefore, if the practice does something special (cancer center, tertiary facility, etc.), it would reasonable to expect the practice's charges to be higher than average. The same holds true for the other side of the spectrum.

The only time this data should be used in considering a fee schedule adjustment is when there are major variances between the practice's fee schedule amount and the average charges. The charge database is really no more than a tool to understand the value that other providers place on the work they do.

Figure 8 provides a sample fee comparison:

Figure 8

Code	Description	Fee	National Median	National Mean	Local Mean	Below National Mean	Below State Mean
10060	Drainage of skin abscess	\$70	\$120.00	\$130.56	\$122.74	1	1
10140	Drainage of hematoma/fluid	\$55	\$150.00	\$176.24	\$109.56	1	1
11050	Trim skin lesion	\$35	\$44.74	\$50.68	\$55.81	1	1
11720	Debride nail, 1-5	\$35	\$38.45	\$49.05	\$45.66	1	1
11730	Removal of nail plate	\$115	\$103.63	\$112.49	\$116.64	-	
11750	Removal of nail bed	\$379	\$250.00	\$265.28	\$204.33	-	
20550	Inj tendon sheath/ligament	\$37	\$100.00	\$109.99	\$91.05	1	1
28090	Removal of foot lesion	\$250	\$610.00	\$659.33	\$551.09	1	1
28126	Partial removal of toe	\$510	\$567.30	\$604.78	\$505.55	1	
29540	Strapping of ankle and/or ft	\$29	\$48.63	\$51.99	\$53.87	1	1

THE COHEN ACUITY FACTOR (CAF)

The final step in establishing a fee schedule is consideration of special services, procedures, or work the practice does that exceeds that of its peer group. Remember, as in any other business, experience, time in specialty, special services, uniqueness, and other such factors all play a part in determining the value of the practitioner. A CPA who specializes in forensics, for example, may command a higher fee than other CPAs. A health care consultant who specializes in compliance litigation support may command a higher fee than other consultants. And similarly, a physician who specializes in a more arcane area or simply does something better than other physicians may also command a higher fee.

Since this is a chapter on the importance and power of analytics, we propose a method to measure the level of acuity or overall complexity of the services and procedures provided by a physician to a given patient population. The theory is this: If what you do is more complex than your peer group, then it is easy to defend a higher fee schedule.

The Cohen Acuity Factor (CAF) is a value that measures the relative complexity of the services and procedures provided to a specific patient population by a medical practice and/or medical provider. It is named after its developer, Frank Cohen, and is reported as a ratio of work RVUs to procedure. Developing the CAF is accomplished using the national Medicare database through factoring of RVU values in connection with the procedures and services delivered to that patient population.

While the data can be calculated by physician, specialty, and/or practice, comparisons to the national averages are always specialty-specific.

How It Works

RVUs measure consumption of a resource, whether time, effort, fixed or variable expenses, risk, etc. The higher the RVU value, the greater the consumption of those resources. Therefore, in most circumstances the higher the consumption of resources, the greater the complexity of the service or procedure being measured. This is particularly true with the work RVU and is most apparent in E/M codes, although certainly not restricted to that category. For example, CPT code 99204 has a higher RVU value than CPT code 99202 and therefore consumes more resources and is generally more complex in its approach.

Using the work RVU, we can isolate the consumption of resources to physician time and effort. This is important, as it intentionally obscures what is sometimes a potentially inflated assessment of the cost of the technology associated with some procedures. As noted above, the higher the RVU value, the greater the resources, and hence the greater the overall complexity of that procedure or service.

Using this assumption, if we were to average the ratio of work RVUs per procedure for a given patient population by physician or specialty, we could measure the average level of complexity of the services and procedures delivered to that population by that provider entity.

Calculating the CAF is a relatively simple affair and can be completed using the initial RBRVS table we created at the beginning of this chapter. The key is to only list procedures that have work RVU (or total RVU) values. Then, total the specific RVU values and divide by the total frequency in the table.

- 1. The first step is to multiply the RVUs for each code (column 5) by the total frequency (column 4) for that code and calculate the sum of the products to get a grand total for this column (column 6).
- 2. Next, we total the frequency of use (column 4) codes to get the total frequency for all codes in the table (448 in this example).
- 3. Add the total RVUs (column 6).
- 4. Divide the grand total RVUs by the total frequency for the RVU-based procedures performed during the study period.

In the below table, you can see if we divide the total RVUs by the total frequency, we would get the following acuity factor for this sample:

934.63 Total RVUs / 448 total frequency = 2.09 Acuity Factor

That means that for the patient population measured, the average number of RVUs per procedure (or Acuity Factor) is 2.09. Figure 9 provides an example of a CAF calculation:

Figure 9

1	2	3	4	5	6
Procedure Code	Modifier	Description	Annualized Frequency	Factored adjusted Non-Facility RVU	Total RVUs
19240	58	Removal of breast	1	30.59	30.59
19240	78	Removal of breast	4	30.59	122.38
20200	51	Muscle biopsy	4	2.68	10.70
20200		Muscle biopsy	8	5.35	42.80
20520		Removal of foreign body	1	4.83	4.83

1	2	3	4	5	6
Procedure Code	Modifier	Description	Annualized Frequency	Factored adjusted Non-Facility RVU	Total RVUs
20550	51	Inj tendon sheath/ligament	1	0.86	0.86
20550	59	Inj tendon sheath/ligament	7	1.72	12.05
20550	LT	Inj tendon sheath/ligament	15	1.72	25.82
20550	RT	Inj tendon sheath/ligament	11	1.72	18.93
20550		Inj tendon sheath/ligament	218	1.72	375.24
20551	59	Inj tendon origin/insertion	1	1.69	1.69
20551		Inj tendon origin/insertion	23	1.69	38.87
20552	RT	Inj trigger point, 1/2 muscle	1	1.65	1.65
20552		Inj trigger point, 1/2 muscle	106	1.65	174.71
20553		Inj trigger points, =/> 3	2	1.86	3.71
20600	LT	Drain/inject, joint/bursa	7	1.55	10.88
20600		Drain/inject, joint/bursa	38	1.55	58.90
		Totals	448		934.63

The key is to compare the CAF for the practice to that of a peer group. Comparisons can be made between physicians within the group can be compared to national and/or local data calculated using an appropriate database. If the practice's CAF is greater than the comparison group's, that would provide greater defensibility for a higher fee.

The following graphs illustrate a comparison to other physicians within the group and the national average for this specialty.



Figure 10 - Work Acuity as a Percent of Practice by Physician

Figure 11 - Work Acuity as a Percent of National Ave by Physician



If the CAF for the practice is lower than the CAF for the national average, as demonstrated in this example, it would indicate that what the practice does is less complex, and sometimes lower-than-average fees would be reasonable.

SUMMARY

A primary goal of the physician practice is to be profitable. Developing and maintaining a fee schedule for the physician practice is a simple task, but developing and maintaining a fee schedule correctly is not. Failure to follow standard business principles is what frequently keeps a physician practice from achieving financial success.

When a proper fee schedule has been developed, practices should remember to routinely measure the fee schedule's performance by measuring it against EOB and other validation data. It is recommended that practices establish a regular schedule for review. This review may be done every quarter, every six months, or once a year. The frequency of review isn't important; the action is. Practices that allow too much time to pass between reviews may find themselves starting the entire process over—an unnecessary and burdensome chore.