BUSINESS VALUATION

Using an income approach to value health care practices gets the best results.

Medical Practices: A BV Rx

BY MARK O. DIETRICH

EXECUTIVE SUMMARY

- CPA/ABVs NEED TO BE AWARE that a market-data approach to valuing medical entities is easy to follow but may yield less meaningful data than an income approach.

- INCOME-APPROACH METHODS include capitalization of cash flows (CCF) and discounted cash flow (DCF). CPA/ABVs must identify a normalized net cash flow from operations and apply a discount or capitalization rate that reflects associated risk. The purpose is to determine whether future revenue will mirror the past.

- A CPA/ABV USING THE INCOME APPROACH must identify what portion of a practice’s revenues depend on Medicare, HMOs and other insurers and understand their respective fee restrictions; determine reasonable physician compensation (vis à vis goodwill); determine the correct discount rate based on the relative risk of various physician specialties; and quantify a realistic growth rate.

- THE ACCEPTED INTERPRETATION of reasonable compensation under the fair
market value standard is the salary necessary to hire a nonowner replacement physician of equal experience. In other words, the CPA/ABV must distinguish between the return on labor and the return on capital or equity.


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Valuing medical practices is full of traps. Byzantine regulations, draconian fines, piecework economics, unit fees that grow at less than the rate of inflation and a heavy reliance on personal goodwill as a key intangible asset are only some of the possible pitfalls for the CPA/ABV or other valuation analyst asked to “prescribe” a price.

Physician clients need business valuations (BV) for diverse reasons: a purchase or sale or to allocate purchase price components for tax or financial reporting purposes or for divorce or other types of litigation. CPA/ABVs considering using the market approach to value health care entities should be aware it yields less meaningful data than the income approach. This article details market-data pitfalls in medical practice valuations and offers guidance on four key aspects of using an income approach to get the best results.

**FUELED BY FICTION**

The physician practice management (PPM) industry boom began in the early 1990s. PPM was a new business model based on consolidating health care systems and physician practices under entrepreneurial management. A great many “roll-up” transactions replaced traditional physician-to-physician transfers of small practice units, and PPM became a large public market segment, with $13 billion in capitalization and more than 30 public companies created and grown by acquisitions. However, by the end of the decade the sector’s health had declined dramatically—starved by insufficient postacquisition cash flow to support transaction prices. Most valuation analysts who used these transactions as the basis of appraisals derived multiples based on numbers of physicians “acquired” to determine price. CPA/ABVs in the current environment will want to follow a more sustainable valuation model.

One important aspect of medical-practice cash flow is that buyers of medical practices can’t
simply pass the acquisition price on to patients as, for instance, a restaurant does when a new owner charges customers higher prices or reduces portions. Indeed, most owner-physicians realize the bulk of the net present value of their investment through annual earnings, not from a business sale. CPA/ABVs will find that future cash flow on a stand-alone basis is the appropriate indicator of value for small, privately held medical practices.

**Growth Rate of Service Fees**

Over a 10-year period doctors’ unit fees for service have gone up at much less than the economy’s rate of inflation, with a compound growth rate of only 1.84%.

### Percentage of Increase

![Growth Rate of Service Fees Graph]


**WHY MARKET DATA ARE SUSPECT**

It’s easy to understand why some valuation analysts found a market approach for medical-practice BVs plausible and attractive. Market data draw on actual transactions used in a seemingly meaningful way. Such BVs are easy for clients, taxing authorities, courts and financially unsophisticated jurors to follow. However, the problems outweigh the benefits.
Market data, even from well-respected sources, can be skewed and thus have limited relevance.

In some cases, market data from transactions that fail remain in databases long after the fact.

The IRS and other government authorities are aware that market data in this area are weak, creating risk.

CPA/ABVs should be aware that medical business models complicate the picture, too. Managed care is an important factor, for example (see “Med BV Glossary”). It is prevalent in urban areas, where population density and an abundance of employers make attractive insurance markets. Rural areas have less managed care and fewer patients per square mile, but they may have more unprofitable Medicaid patients. The profitability of a practice per unit of service likely will be better in areas with less managed care and where higher fees and lower operating costs are the norm. This fact greatly limits the usefulness of a “goodwill percentage,” since valuation is a function of cash flow from profit, not revenue.

The databases CPA/ABVs can draw on for market information have shortcomings: Regionalization influences market data, for instance. In November 2004 nearly 90% of 96 items identified as general dentistry in the highly detailed, well-respected Pratt’s Stats BV database were from only three states. One broker submitted 50 of the entries and another submitted 20, which suggests how the views of a few individuals can distort a market. The well-known Goodwill Registry cites a range of financial data, “goodwill” value (often not cash equivalent, thus not fair market value), control and noncontrol transactions, valuations not resulting in a transaction and final divorce settlements—which are court decisions. However, some of its data go back to 1988. Even broadly held views of market value, such as the tech-sector consensus preceding the 2000 collapse, may overlook relevant facts.

Government regulations, including the Stark laws and the Anti-Kickback Statute, dictate how some market data can be used. Most of the medical consolidation purchases of the 1990s were in the South and Southwest; yet those market data were used as the basis of calculations throughout the country. In recognition of possible abuses, a second set of Stark II laws, released in 2004, specifically defines “fair market value” as “the price at which bona fide sales have been consummated for assets of like type, quality, and quantity in a particular market at the time of acquisition.” Stark II limits data transferability when the valuation is for regulatory purposes unless the CPA/ABV can demonstrate that data from one region or state relate to another.

**INCOME-APPROACH METHODS**

So what’s a CPA/ABV to do if he or she does not rely on market data multiples as a primary valuation method? The answer is a disciplined application of income-approach methods, including capitalization of cash flows (CCF), discounted cash flow (DCF) and capitalization of
excess earnings (CEE), technically a combination of cost and income approaches. When weighted capitalization rates for tangible- and intangible-asset cash flows are used to derive a single capitalization rate for all cash flows, CEE will generate the same result as CCF.

Valuing a medical practice on the basis of income is like valuing any other business: CPA/ABVs must identify a normalized net cash flow from operations and apply a discount or capitalization rate that reflects associated risk. The purpose is to determine whether future revenues will mirror the past. To properly use the income approach, a valuator must do four things:

- Identify what portion of the practice’s revenues depends on Medicare, assess how that will affect future cash flow and analyze how the principal HMOs or other health insurers contribute to the practice’s revenues.

- Determine what reasonable physician compensation is for the valuation model.

- Understand the relative risk of various physician specialties to determine the correct discount rate.

- Quantify a realistic growth rate in future net cash flow for purposes of building a discounted cash flow (DCF) model and for computing the capitalization rate.

**Medicare.** Many practices (including cardiology, general surgery, oncology and orthopedics) get much of their revenue from the Medicare program, so understanding the impact of Medicare legislation is important to developing an accurate cash-flow forecast. For example, oncology practices, which earn significant income from chemotherapy drugs, were negatively affected when the 2003 Medicare Modernization Act changed the way those drugs are paid for. HMOs trying to reduce costs also are producing a cascading, negative cash-flow effect on future revenue streams.

Medicare’s budgeted spending on physician services, unlike any other segment of the health care industry, cannot exceed a predetermined level. On average, Medicare provided physicians with a 1.5% fee increase in 2005, after legislation overturned a scheduled 4.5% decrease based on a statutory formula that sets annual fee changes. Future cuts are estimated at between 3.5% and 5.0% per year, absent further legislation.

The Medicare conversion factor measures fees for each physician procedure or service in relative value units (RVUs). Medicare fees per RVU have increased only 3.3 percentage points in seven years. Adjustments use the Medicare Economic Index (MEI) to analyze increases in physicians’ practice costs from inflation and other factors. An annual “update adjustment factor,” designed to reflect success or failure in meeting the law’s “allowed expenditures” target, is based on a sustainable growth rate.
In physician billing, RVUs are analogous to hours in an accounting firm: the more RVUs performed, the higher the fee. Unlike hourly billing rates, which can vary, the RVU rate usually is fixed. Rather than permit a higher billing rate for more-complex procedures, Medicare assigns a higher number of RVUs, and it assigns RVUs to new procedures as they are developed and implemented. Because spending on physician services can’t exceed allowed expenditures, old procedures often are devalued to provide compensation for new ones. Interventional radiology, a relatively new specialty, is one example of such revaluation. The result is a low growth or no growth environment for per unit revenue, which the CPA/ABV needs to factor into the valuation model.

**Reasonable compensation and goodwill.**

Goodwill is a key intangible asset for the typical medical practice, but the importance of separately identifying personal goodwill depends on the reason for the valuation. Goodwill ordinarily is determined by a multiple of earnings in excess of a normal or reasonable amount. When necessary, the CPA/ABV can best address valuing personal goodwill by calculating reasonable compensation. Understating reasonable compensation will result in overstating goodwill. If the selling physician(s) still will be employed by the practice after the sale, the cash flow the buyer is purchasing—the subject of the valuation—can’t be known without including a realistic amount of postsale compensation in the valuation model.

For example, assume median Medical Group Management Association (MGMA) compensation is $200,000, and 75th percentile compensation is $250,000 (that is, 75% of the MDs make less than $250,000). A physician who earns compensation of $300,000 a year generates revenues in the 75th percentile of the MGMA database. If the CPA/ABV correctly chooses 75th percentile compensation for the valuation model, the excess earnings included in the goodwill valuation will be only $50,000. If he or she chooses, incorrectly, median compensation, the excess earnings will be $100,000, resulting in a valuation overstatement of 200%.

**Transaction valuation involving tax-exempt entities.** The IRS says physician compensation in a valuation model should agree with any posttransaction employment contract. It also expresses a preference for the discounted cash-flow method, which today is *de rigueur* in exempt entity practice valuations. A hospital or other exempt entity acquiring a practice can’t base a physician’s posttransaction compensation on median or mean compensation guidelines unless an employment contract so specifies. Under the income approach, a practice’s value is based on the future owner’s future cash flows. If that owner is a third party such as a hospital and all future cash flow is used to pay physician compensation, the value under the income approach will be...
**Physician-to-physician transaction valuation.** In these transactions the CPA/ABV needs to look closely at what the buyer is buying. Compensation (cash flow) in a physician practice typically is based on employment contracts and compensation formulas, not equity. Valuing equity based on practice-wide excess earnings, for example, when the buyer won’t receive a share of those excess earnings based on equity, leads to an irrational result. Buy-in prices for physician practices typically are based on the difference in compensation for the new owner vs. that earned as an employee. A buy-in price often comes out of pretax dollars via a compensation shift from the purchaser to the seller.

**Divorce valuation.** In determining a marital litigant’s excess earnings, analysts often make the mistake of subtracting from the actual earnings a mean or median salary cited in a source such as MGMA. If the jurisdictional standard of value is fair market, and those excess earnings are capitalized to determine the intangible value of the practice, the result is suspect. Physicians’ compensation typically is based on productivity—the more you do the more you make. The accepted interpretation of reasonable compensation under the fair market value standard is the salary necessary to hire a nonowner replacement physician of equal experience. In other words, the CPA/ABV must distinguish between the return on labor and the return on capital or equity, for example:

![Table]

The return on labor to owner physicians is $160, while the return on equity from owning a practice with profitable ancillary equipment ($40) and employed physicians ($100) is $140.

In distinguishing return on labor from return on equity, the CPA/ABV also must consider whether actual compensation includes distribution of profits from ancillary testing equipment such as labs or imaging, profits from nonowner associate physicians, or profits from physician extenders such as nurse practitioners, physician assistants or certified registered nurse anesthetists.

**The discount rate: Relative risk of physician specialties.** CPA/ABVs must evaluate risk on a case-by-case basis, but there are fundamental factors to consider, particularly in specialty practices. The exhibit below, posits a risk-premium hierarchy in medical practices.

![Discount Rate Chart]
from top to bottom is the relative degree to which the revenue of specialists and surgeons is based on the risks associated with individual skills plus referrals from other physicians. But there are no absolutes.

For example, a key cash-flow risk in a cardiac surgery practice is that a surgeon typically sees a referred patient preoperatively, in the OR and again postoperatively, and receives a single global fee for that basket of services. The patient rarely is seen again. In an internal medicine or pediatric practice, a doctor may see a patient many times during the year, lowering the risk to continued cash flow. Among factors to consider is that a bad surgical result is more likely to reduce a surgeon’s future referrals than a bad outcome from treating a sinus infection.

In another example, an orthopedic practice with a significant sports medicine component will have a customer base asset worth more than an orthopedic practice focused solely on hand or back surgery. Pure interventional or invasive cardiology practices, which rely on referrals from independent medical cardiologists, are likely more risky than a group consisting of both medical and interventional cardiologists.

**Risk-Premium Hierarchy in Medical Practices**

Relative extent to which revenue depends on individual skills and referrals:

- Neurosurgery
- Cardiac surgery
- Vascular surgery
- Gynecology
- Invasive cardiology
- General surgery
- Urology
- Orthopedic surgery
- Invasive cardio group
- Gastroenterology
- Endocrinology
- Ophthalmology
- Ob/Gyn
- Medical cardiology
- Primary care

**Cash-flow growth rate.** The growth rate in future cash flow depends on two separate components: the growth or decline in number of units of service provided (unit sales) and the
growth or decline in the price paid for each unit of service. Basic cost accounting incorporates these price and volume variances.

**Unit prices.** The CPA/ABV quantifying a realistic growth rate in future net cash flow has to consider that for doctors in a typical small medical practice increasing unit prices to enhance revenue is a less risky move than expanding services. However, Medicare and Medicaid regulatory guidelines and related penalties impose serious constraints on service unit prices, and health insurers offer little room for change. To determine a reasonable growth rate in net cash flow for purposes of a DCF model, and/or for purposes of a terminal growth rate to determine the capitalization rate, a CPA/ABV needs to assess the practice’s capacity for treating additional patients and its ability to expand services.

**Units of service.** The CPA/ABV considering growth rates must assess the demand for the services, the physical and personnel capacity to meet the growth, the capital investment necessary to handle added volume and other factors. A typical primary care physician can accommodate only 4,500 or so visits per year.

**Mix of services.** The mix of services can change for some types of medical practices, offsetting unit price restrictions and capacity issues. In radiology, for example, advanced and highly paid technologies such as magnetic resonance imaging (MRI), computed tomography (CT) and now positron emission tomography (PET) scanning have experienced double digit growth, partly at the expense of poorly paid radiography. More affordable MRI units offer cardiologists and orthopedists enhanced incomes. CPA/ABVs should be aware that as a result of spending growth, Medicare announced dramatic cutbacks in per unit revenue for both MRI and CT in August 2005, as well as the inclusion of PET scanners in the Stark laws. This will have a significant impact on future profits and value.

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**RESOURCES**

**AICPA Resources**

To request information about obtaining the AICPA’s Accredited in Business Valuation (ABV) credential, send an e-mail to [abv@aipca.org](mailto:abv@aipca.org), call the ABV Hotline at 212-596-6211 or download the ABV Handbook at [www.aicpa.org/download/abv/abv_handbook.pdf](http://www.aicpa.org/download/abv/abv_handbook.pdf).

**Conference**

AICPA/ASA National Business Valuation Conference
November 14–16, 2005
Bellagio Hotel
Las Vegas

**Publications**
REGULATORY FACTORS
Besides knowing the correct quantitative assumptions to use in a valuation model, the CPA/ABV must be familiar with the Stark laws; the Anti-Kickback statute; the Intermediate Sanctions Provision of the Internal Revenue Code; and OIG Special Advisory Bulletin, Practices of Business Consultants (June 2001; www.oig.hhs.gov/fraud/docs). The substance of the Stark laws can be found in section 1877 of the Social Security Act (42 USC 1395nn). Information on the Stark laws and the Anti-Kickback Statute also is available online through the Federal Register at http://www.gpoaccess.gov/fr/index.html. The Stark laws limit physicians’ financial relationship (defined as an ownership or investment interest) in entities to which they refer patients. Stark II regulations prohibit referring physicians from owning an interest in businesses to which they refer and also require that contractual relationships between referring physicians and other parties be consummated at fair value.

Detailed discussion of these regulations is beyond the scope of this article, but a CPA/ABV should be aware that buyer-seller factors common in valuing other types of businesses are different in the health care industry. For example, a Dunkin Donuts operation’s rent inside a supermarket likely reflects the customer traffic in the supermarket, but under Stark regulations, an MRI operation’s rent in a medical office building owned and occupied by orthopedists and neurologists is not allowed to reflect the value of traffic needing MRIs.

DO NO HARM
Medical practice valuation has entered a new era in which market data have limited relevance.
No comprehensive transaction database exists for medical practices in the current environment, and CPA/ABVs and their clients must rely on a disciplined use of income-approach methods. In valuations subject to regulatory or court review, you must be certain the assumptions you use in the valuation model conform to the jurisdictional definitions of “fair market value” and that your valuation considers the complex interrelationship of current conditions and known trends in the payment for physician services.

**Med BV Glossary**

Here are some business terms that pertain to valuing medical entities:

*501(c)(3)*—Refers to section 501(c)(3) of the United States Internal Revenue Code of 1954, which deals with nonprofit organizations that are exempt from federal income taxes.

*Balanced Budget Act of 1997*—This act changed the Medicare reimbursement system for skilled nursing services, home health services and inpatient rehabilitation.

*Capitalization of cash flows (CCF)*—A BV income approach whereby economic benefits for a representative period are converted to value by dividing by a capitalization rate.

*Capitation*—Flat, periodic compensation on a per-patient, per-month basis to a health care provider who assumes the risk that the fixed payment will cover treatment costs.

*Certificate of need (CON)*—A certificate, traditionally issued by a government agency, approving a health care facility’s request for a specific service or function.

*CHAMPUS (now TRICARE)*—The Civilian Health and Medical Program of the Uniformed Services pays for civilian-provider medical care of retired members of the U.S. uniformed services and their related dependents.

*Cost-plus reimbursement*—Reimbursement compensating a recipient for the costs of providing a service plus an additional fee.

*Discounted cash-flow method*—A BV income-approach method whereby the present value of future expected net cash flows is calculated using a discount rate.

*Fair market value*—The price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm’s length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.
Free-standing outpatient surgery center (FOSC)—An outpatient surgery facility owned by a hospital but not a physical part of it. FOSCs are not subject to the same cost structures as inpatient surgery centers in hospitals.

Managed care organizations—Organizations that provide management services to corporations and insurers for the reduction or control of health care costs. Health maintenance organizations (HMOs) are in this category.

Medicaid—This federal program founded in 1965 provides health care to indigent persons and individuals with certain diseases. States administer the Medicaid program.

Medicare program—This federal program established in 1965 and administered at the federal level provides health care to individuals 65 years and older and to others entitled to Social Security benefits. Medicare Part A refers to the hospital care portion of the program. Medicare Part B helps those who qualify for Part A with payment for physician services.

Prospective payment system—This Medicare pricing negotiates payment to health care facilities for services—for example, by diagnostic-related groups (DRG) for hospital inpatient services, among others.