Chapter 5

CALCULATING PRACTICE VALUE IN A REAL STRANGE MARKET

The valuation methods reviewed herein include: (a) summation of assets; (b) capitalization of earnings; (c) capitalization of excess earnings; (d) multiple or percentage of gross revenues; and (f) values of similar practices. Excess earnings and discounted future earnings are described, but examples have not been included.

The valuations herein contemplate a complete sale and purchase, although partial sale and acquisitions are usually based upon a prorata percentage of the practice acquired. For example, if the doctor acquires a 50% interest, the purchase price of 100% of the practice is multiplied by 50%.

Summation of Assets

Under the asset approach, the fair market value of the asset categories are determined. The collective sum of those values represents the fair market value of the practice. Those asset categories are as follows:

Dental Equipment and Cabinetry

Dental equipment and cabinetry may be determined by appraisal through your dental dealer. Generally, you will find that dental dealers charge a modest amount. In fact, I never did charge for this service as a dental dealer because it created goodwill with the doctor who would probably purchase dental equipment in the future. The fair market value of the dental equipment should be its value "in place" and functioning, rather than the price that the dental dealer could receive for the equipment sold as individual items; not in place although operational. For example, a ten year old "over the chair" unit is worth more in place and operational condition because a purchasing doctor can use it to treat patients. This same unit may be worthless if it were stored in a dental dealer's warehouse for resale with water lines corroding.

Another method of valuing dental equipment is to use a straight-line depreciation over a given period of years. For example, if you are using a useful life of twelve to fifteen years, then the equipment is depreciated by 1/12 or 1/15 each year. The "in place" value of dental equipment and cabinetry generally maintains a 15% to 35% salvage value, often 20%. Therefore, an equipment item should approximately maintain a value of at least 20% of its original cost, so long as it is in place, functioning and usable.

An alternative approach to valuing dental equipment, office equipment, furniture and cabinetry is through the use of the balance sheet, the "Balance Sheet Approach". The balance sheet should indicate the net book value of the equipment; the original cost, less depreciation and any amount owing for the equipment. Add back to the net book value 25% to 40% of the depreciation already taken. Provided that the equipment is in operational condition and is not
required to be replaced immediately, 25% of the original cost could be used as a base value. The Balance Sheet Approach is described in Figure 5-1 and also includes the categories of dental equipment, office equipment, furniture and technology.

Additional considerations are appropriate to consider with regard to the fair market value of dental equipment. First, technology rapidly changes and established doctors may not keep pace. As a result, it may be necessary for the incoming doctor to update the facility and pay the associated costs which impact cash flow. Where equipment must be replaced immediately, it would not have any fair market value, irrespective of salvage value. In fact, the value of the practice would be reduced by the value of the equipment to be replaced. Likewise, if certain equipment needed to operate the practice is not in place, i.e., sterilization unit or vacuum system, such equipment would be required to be purchased and its cost would negatively and directly affect the value of the practice.

The fair market value of dental equipment will be less for a potential purchaser if the selling doctor is right-handed and purchaser left-handed or vice versa. Not only will the equipment be of less value to the purchaser, but the cabinetry design, door entries, and assistant's system will also be incorrectly placed. Left hand selling doctors may need to plan for right successors.

It may be appropriate to review all repair bills for the past three to five years and year-to-date for all dental equipment. Certain manufacturers have ceased business operations in recent years and some items and lines of equipment have been discontinued. As a result, it could be very difficult, if not impossible, to obtain parts when needed. Additionally, certain equipment items have had extremely high maintenance costs and may have never performed as intended. These items would not retain the same value as equipment items that do perform as intended. Every practice has at least one equipment item which is a continuing problem. Effective dialogue with the selling doctor should serve to disclose these mechanical problems. Further, the service technician with whom you plan to work with from your dental equipment and supply company should perform a maintenance check on the equipment you plan to purchase before you acquire the practice.

Some doctors maintain equipment better than others and in accordance with manufacturer's standards. Alternatively, some doctors use equipment without regard for its maintenance. Therefore, the fair market value of such equipment should reflect the maintenance and use.

Treatment room layout can have an effect upon the fair market value of the equipment. For example, if an intraoral x-ray does not reach all positions properly, the x-ray has less value than an x-ray which is placed properly.

If all treatment rooms have identical equipment and operating systems are standardized, then any procedure can be performed in any room, including the room in which the hygienist(s) works. Additionally, the more functional the overall facility design, the more efficient you can
be. As a result, the in-place value of the equipment in a well designed facility will be greater than in one which is poorly designed.

**Office Equipment and Technology**

As to office equipment and technology, it may be easier to either: (a) add a percentage of the depreciation taken to the net book value utilizing a minimum base value; or (b) use a straight-line depreciation over a given period of years. Twelve to fifteen years for office equipment would be an appropriate depreciation period with not less than a 20% minimal salvage value. However, this generalization may be greatly impacted by changing technology. Generally, neither you nor the dental dealer valuing the dental equipment will have a working knowledge of the fair market value of the various items of office equipment which is an appropriate reason to value the office equipment from the balance sheet for the practice. Computer and other technological systems that retain less value than other office and dental equipment.

**Dental Supplies**

For dental supplies, it would be reasonable to value three or four months of supplies on hand. As the last twelve months are more reflective of current supplies than prior years, the last calendar year, depending upon the valuation date, or the most recent twelve months may be utilized to obtain the value of dental supplies. The twelve month period is then divided by four. However, be cautious of significant year end supply purchases.

As to taking an actual inventory, such a calculation is usually irrelevant to the purchaser, as the purchaser will generally not use the same impression materials, filling materials, instruments, etc. as the seller. Therefore, the actual fair market value of supplies to the seller is not the fair market value to the potential purchaser. Additionally, pricing an actual inventory is very time consuming. In the early 1970's as a dental supply salesman, I prepared and priced, without a computer, several supply inventories. As I recall, it generally took about forty hours to complete and the fair market value of the supplies was approximately the same each time. The fair market value of the inventory value would generally approximate a three or four months' supply, irrespective of the fact that the purchaser will probably not use the same supplies as the seller. Therefore, a three or four month value, in my view, may be appropriate. Remember, some practices keep more inventory on hand than others and generalities do not consider the specific practice.

**Office Supplies**

It is reasonable to obtain the value of office supplies in the identical manner as the value of dental supplies, the total of office supplies for the most recent twelve months, divided by four or six, equaling a three or two months' supply on hand. The possible rationale behind two months, as opposed to a three month or higher value, is due to the possible uniqueness of office supplies, e.g., stationery, envelopes, etc., with the name of the seller. Additionally, the purchaser probably will not utilize the same business systems as the seller, unless a partial interest in the
practice is purchased. However, where an associate buy-in is contemplated, this issue may be minimized.

**Accounts Receivable**

Generally, accounts receivable are not sold and are collected by the purchaser on behalf of the seller, less an administrative, e.g., 5%, for a period of six months from the date of closing for the sale and acquisition. Therefore, the value of the accounts receivable would not be includable in the fair market value of the practice. The rationale here is the seller would have to discount the value of the accounts receivable to the purchaser, as opposed to collecting his or her customary collection percentage.

Sometimes the purchaser will acquire the accounts receivable in an effort not to borrow the funds to maintain uninterrupted practice operations. In some cases, the purchase of the accounts receivables can resolve this cash flow problem. In the event that the purchase acquires the accounts receivable, the purchase calculation may be to determine the historical "collectible" collection percentage on a yearly basis, e.g., 95%. Collectible accounts receivable would be those receivables which are reasonably collectible, e.g., 120 days old or less. For example, if the practice collects 95% of billed and uncollected accounts receivable on the yearly basis, the 5% uncollectible accounts receivable should be periodically written off. If the 5% of uncollectible accounts receivable built up each consecutive year without being written off, the purchaser would be acquiring uncollectible accounts receivable. Another method of determining the collectible accounts receivable would be to age the monthly receivable amounts and multiply the amounts by a declining percentage for each month out to 90 or 120 days. For example, accounts receivable 30 days old or less would be multiplied by 95%; 60-30 days would be multiplied by 85%; and 90-60 days would be specifically reviewed for collectability and multiplied by 60%. The decision would then be made whether to purchase any accounts receivable 90-120 or more than 120 days old. In acquiring accounts receivable, completing the due diligence or purchase homework and in determining the overall value of the practice, the accounts receivable collection percentage, the length of time when payments are received, the collection and billing policies of the practice and the methods of payment; third party insurance or out of pocket payment by the patient or managed care contract should be considered.

Accounts receivable are not generally part of the practice sale. The collection ratios, collection policies and method of payment play a significant part in the overall determination of fair market value for the intangible assets of that practice in questions.

**Advance Payments in Orthodontic Practices**

In orthodontic practices, it is not uncommon for orthodontic cases being paid in full, in advance. Typically, the purchase price for the practice would be reduced by the advance payments and offset by the actual accounts receivable for work already completed.

Lease

Some appraisers attempt to place a value on a favorable lease or a negative value on an unfavorable lease, which would be assigned to a purchaser as part of the practice transition. While a favorable lease may be of value to a seller, the value of the practice should not be increased to the purchaser. Rather, a favorable or unfavorable lease would add or detract from the intangible asset value. Additionally, an unfavorable lease or a practice facility with too much or too little square footage can detract from the seller's ability to sell the practice. If a seller has attempted to sell his or her practice, the ability to assign the lease or obtain a new lease should be expected by the buyer. Assigning a lease to a purchaser does not usually present a problem, although there are exceptions. This matter should be considered in the drafting of the lease for the seller prior to the proposed practice sale. Most landlords require the seller to remain secondarily liable in the event of a default by the buyer for the remainder of the seller's previous lease term. This issue should be considered with the landlord for the lease term or option period prior to the practice sale.

Leasehold Improvements

Such costs are a trade-off between what an practice owner has previously spent on such costs, not the landlord, and the amount of money which a buyer would spend if he or she established a practice. Unfortunately, dental practices are required to pay for specific plumbing, electrical and carpentry costs related to dental equipment and cabinetry, which certain other professional practices often do not require. These costs can be substantial. As a result, sellers sometimes feel justified in placing a value on these costs as an asset and which a purchaser will avoid by purchasing a practice, as opposed to establishing a practice. Generally, I do not place a value on leasehold improvements because the seller does not own them.

If I were to place value on leasehold improvements, the book value provided in the seller's Federal tax returns or financial statements for the practice may be appropriate. A twenty-year straight-line depreciation, with a 20% salvage value which is premised upon the seller's original costs may be an alternative method, but that seems high. Some appraisers also use 10 to 15 years as a time period for depreciation. Twenty years may be appropriate for dental practices, as leasehold improvements should be usable for such a period of time. However, certain factors have an effect on whether the leasehold improvements will remain an asset for twenty years. For example, to the extent that it is necessary to expand, redesign or reequip the practice facility, the purchaser will incur additional leasehold improvement costs. Those costs should be considered in the value of leasehold improvements to the seller or possibly subtracted from the fair market value of the practice. Finally, if the seller owns the building, shouldn't the leasehold improvement costs be included in the value of the real estate?

Intangible Assets

The value of intangible assets can be thought of as the future cash flow attributable to a purchaser(s) operating the practice in place of the seller(s). This value is generally based upon a number of subjective factors, all of which are rated differently by various appraisers. Figure 5-2
provides thirty factors, many of which will ultimately impact the two major factors of annual gross revenues and doctor compensation in all forms. The factors are all weighted differently, depending on the characteristics of the practice being appraised or valued. Although defining intangible asset value is truly subjective, some appraisers have attempted to develop rating systems of certain criteria affecting intangible asset value and will adjust upward or downward depending upon the weight of the factor, e.g., percentage of the practice in recall. However, a particular rating system will affect each practice being valued differently. As an example, in one practice location may be more important than in another.

Where intangible value is based upon annual gross revenues, the multiplier has traditionally been between .2 and .5. The Goodwill Registry's actual data found the statistical mean goodwill at 46.35% of one year's collections. In reality, I believe that these rates are low as the market exists in 2008. Where intangible asset value is based upon annual doctor compensation in all forms, the multiplier has traditionally been between 1.0 and 1.5. Other authorities have used 50% to 80% of total earnings available to the doctor. The rating criteria used by the appraiser, like those described in Figure 5-2, will determine the multiplier used. Of all rating criteria, I believe that the most important are annual revenues of the practice and doctor compensation in all forms, e.g., compensation, bonuses, net profits, automobile expense, portion of the retirement plan contributions attributable to the doctors, statutory fringe benefits to the doctors like health insurance premiums, some continuing education costs, travel expense and entertainment expense. It is interesting to note that where intangible asset value is based upon owner compensation in all forms and assuming that average practice profitability is roughly 40% of annual gross revenues, then the 1.0 times doctor compensation in all forms formula converts to 40% of annual revenue at one times doctor compensation on the average. 1.5 times doctor compensation equates to approximately 60% of annual revenues, which, unfortunately, is what I see in the market in 2012, except for the destination locations. Further, we see rates much higher than this. Therefore, the traditional limits of intangible asset or goodwill value equate to 20% to 60% of annual gross revenues. This range is extremely broad with 1.25 times doctor compensation being very common. However, this multiple must take into consideration the practice characteristics in Figure 5-2, must notably yearly revenue and practice profitability.

Let us assume that in Figure 5-1 that the selling practice owner requests of the appraisal equates to 65% of one year's gross revenues as the purchase price and we already have determined that the fair market value of the tangible assets is $130,000. If yearly revenue is $1,000,000 and tangible assets are $130,000, the goodwill of the practice or the selling doctor, as the case may be, is $500,000 or approximately 50% of one year's revenue. In other words, the


total purchase price in this example, including any personal goodwill of the selling owner, is 65% of annual revenue of $1,000,000.

Verification Analysis

Figures 5-3 and 5-4 determine at what price a practice can afford to purchase itself. Note that a 5% interest rate was used in these Figures. Assuming that a purchaser's only source of income is the practice being purchased, the purchaser should pay no more for the practice than the cash flow for the practice can support. Additionally, the purchaser needs a yearly compensation level to live comfortably while paying for the practice, but typically not at the compensation level of prior owner(s). In determining the compensation level for a purchaser while paying for a practice purchase, the purchaser should review the compensation that he or she could earn as an associate, realizing that the practice being purchased will eventually be paid for. The question is then how long is the repayment period?

The verification analysis can be thought of as a "check" against any valuation method to determine the affordability over a predetermined payback period. As indicated in Figure 5-3, the Verification Analysis for the asset summation method of valuation considered working capital needs, renovation/equipment replacement requirements, as well as the loan for the payment of the practice. Assuming no decrease in yearly revenue, the purchaser will earn 27.11% of revenue as compensation in all forms. Not bad considering that hygiene services are included in this amount. In the example provided, the purchaser has 15 Considerations to analyze. In particular, item 9 of the Considerations questions the economic stability of the practice if revenue, patients and/or patient referral sources decrease? Note that the second column of Figure 5-3 shows the effect of a 10% decrease in annual revenue. If revenue decreases by 10%, the purchaser earns 20.78% of revenue as compensation in all forms and would likely consider another opportunity. The only operating expense decreases in this example are dental supplies and laboratory costs at 6% and 10%, respectively.

In the event that there would be no remodeling and equipment replacement costs or working capital needs, the yearly owner compensation in all forms is clearly higher and is helpful. However, if there is no operating capital is borrowed, then the accounts receivable would have to be purchased and paid for to maintain practice operations. And how often will capital expenditures in a newly purchased practice be the de minimis or non-existent? Not often because all dentists practice differently.

If no working capital is needed and no remodeling/equipment replacement costs are incurred until the incoming doctor establishes a consistent cash flow, the purchaser will earn 28.98% of revenue in line 11 of Figure 5-3, which is more favorable than 27.11%; 28.86%, assuming a 10% revenue decrease.

The summation of assets method of valuation adds all tangible asset categories of the practice being sold and acquired together, as well as the intangible assets being sold by the practice or departing practice owner to the purchaser.

After the asset values are totaled, the verification analysis should be completed by the CPA for the purchaser to determine what the likely cash flow or compensation will be while paying the operating expenses, the purchase price to the lender(s), all in a measured time period.

**Capitalization of Earnings**

The term "capitalization rate" can be thought of as the percentage by which a constant income stream is divided in order to obtain the value of the business on the basis of an assumed rate of return\(^6\). The income stream represents the annual sum available from gross revenues after the payment of operating expenses for the purchaser, the purchase price to the lender(s) and an "agreed" compensation amount to the purchaser. Provided that the stream of income being capitalized is constant, then the multiple is the reciprocal of the capitalization rate. This sum would also be exclusive of interest or the time value of money.

Capitalization rates are determined by the market and when expressed as a percentage return on an expected stream of income, the capitalization rate represents the rate of return available in the market on investments expected to produce similar streams of income.\(^7\) Capitalization rates are based upon: (a) the nature of the business; (b) the risk involved; and (c) stability or irregularity of earnings.\(^8\) As a starting point for determining an appropriate capitalization rate for dental or dental specialty practices, it is appropriate to consider determining the rate of return for U.S. Treasury bills and long-term U.S. Government bonds, a relatively safe investment, and then adding back points to compensate for the risk and illiquidity of the investment in the practice.\(^9\) The capitalization rate would be adjusted upward or downward according to various factors which impact practice value, e.g., the factors in Figure 5-2. A low capitalization rate yields a high practice value and vice versa. For example, a 20% capitalization rate would be a multiple of 5. This is represents a much lower purchase price than a 14.28% capitalization rate or a seven year repayment period. A 25% capitalization rate would be a multiple of 4 or a four year repayment period. Note that the capitalization of the earnings is typically exclusive of interest. Therefore: (a) slight increases or decreases in the capitalization rate or repayment period create substantial variations in practice value; (b) practice

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\(^8\) Revenue Ruling 59-60, Section 6.

profitability directly determines the amount available to be capitalized; and (c) new owner compensation and benefit levels also directly determine the amount available to capitalize over a measured time period.

Figure 5-4 provides for purchaser compensation of 25% of $1,000,000 in annual revenue or $250,000. Again, this includes hygiene revenue. It should be recognized that it may take two purchasers to produce at this level, which has the effect of decreasing the candidate pool. In the capitalization of earnings method of valuation, tangible assets and goodwill are included in the sum available to be capitalized. In line 8, there is $131,344 available, exclusive of interest, to pay for the practice over five or seven years. Decrease revenues by 10% in line 8 with the same 25% of purchaser compensation and the purchase price is significantly reduced.

What was not considered regarding to the determination of capitalization rates in Revenue Ruling 59-60, Section 6, was the ability of a business owner, the dentist, to successfully establish his or her own business or practice. Different doctors have varying abilities and personalities which assist or hinder them from developing a patient or referral base in the start-up mode. Therefore, the opportunity to purchase a practice may be more valuable for one doctor without the ability to develop a patient or referral base, as opposed to another, irrespective of technical and clinical skills.

For example, one general dentist has developed a practice. This doctor started on a second floor in a location without an elevator, and had to work at other practices initially. Overhead was kept at a minimum. The doctor operated out of one treatment room. The office was nicely decorated with many photographs of friends and patients, along with other personal items. This doctor has always enjoyed the profession of dentistry and radiates the enjoyment of the profession to everyone whom the doctor comes in contact with. The doctor's practice is now well established, and several years later, the doctor has moved into the doctor's own building to accommodate growth. The doctor's attitude and love for dentistry attracts patients and has created a successful practice. Because this doctor had the desire and learned the skills to establish a practice, it would not have been advisable to purchase a practice. This dentist did not need or desire to purchase a practice.

On the other hand, a dentist walked away from a very good opportunity to become a co-owner. Instead, the dentist established a practice and struggled to get a sufficient number of patients in the chairs.

**Multiple of Gross Revenues**

Although the multiple of revenues method of valuing a practice is relatively simple, this method should not be used alone, as it does not account for the particular characteristics, positive or negative, of the practice being valued. Where a multiple of gross revenues can be useful is where the appraiser is attempting to assess the current range or trend of values for dental or dental specialty practices, then adjusting the average of values as a percentage of one year's
gross revenues, e.g., 40% - 65%\textsuperscript{10}, based upon the uniqueness, profitability and revenues of the particular practice.

An example of the multiple of gross revenues approach is set forth on Figure 5-5 and the dental practices in this example averaged a multiple of gross revenues of 64%.

**Similar Practices**

The value of similar practices is a valuation approach which should be valid if there were a large enough number of comparable transactions involving practices with similar characteristics, e.g., one doctor, three treatment rooms, which were sold upon similar terms and conditions. The problem here is that no two practices are identical and the terms and conditions of each practice sale are different. For example, two practices with gross revenues of $1,000,000 will each have varying profit percentages. One practice may yield owner compensation in all forms of 40% and the other at 35%. These practices should have different selling prices even though their gross revenues are identical. In addition, one practice may have to replace equipment and relocate in the foreseeable future. This will impact the selling price. The value of similar practices can be useful if proper information is available to document the terms and conditions of other practices sold in a similar geographic area.

Figure 5-6 provides a recap of practice values. It is common to value a particular practice using more than one method, although not necessary. Often, all methods used are averaged to arrive at the determination of fair market value for the practice being appraised. However, if the verification analysis does not support the assessed fair market value, it does not matter what method is used if the economics of the sale and acquisition do not provide for a win/win transaction between the parties.

What I find interesting is Figure 5-7. This example shows that small variances in profitability have a significant impact upon the value. In Figure 5-7, the practice has $1,000,000 in yearly collections, owner compensation of 27.5% of collections and profit of 38%, 40% and 42%. If we utilize the 20% capitalization rate on the available profit to pay for the practice, the results differ significantly.

**Methods That Don't Work Well For Dentistry**

**Excess Earnings**

The excess earnings method or "formula" approach to valuing a practice is premised upon the capitalization of earnings in order to determine the value of intangible assets and is described in Revenue Ruling 68-609. The steps in this method are as follows\textsuperscript{11}:

\begin{itemize}
  \item Step 1: Determine the profits from the practice (D)
  \item Step 2: Capitalize the profits using a suitable capitalization rate (r)
  \item Step 3: Calculate the value of the practice (V)
\end{itemize}


\textsuperscript{11} Revenue Ruling, 68-609.

1. The fair market value of the "hard" or tangible assets should be determined;

2. Determine the annual practice earnings, averaged over the past five years, after deducting owner compensation;

3. An appropriate rate of return should be ascertained, 8-10% \(^{12}\), on the value of the intangible assets as a return on investment;

4. Subtract the return on tangible assets from the annual practice earnings;

5. The annual practice earnings, less the return on tangible assets should be capitalized and the resultant amount is the goodwill or intangible asset value of the practice; and

6. The tangible assets and intangible assets are added and the sum is the value of the practice.

Although the formula approach has been considered valid case law, this Ruling states that the formula approach should not be used if there is better evidence available to determine the intangible asset value. In the second edition of this work, I included an example of this method. However, I have not included such herein because I do not believe this to be one of the better methods of valuing a dental or dental specialty practice. It is worth mentioning though, because some appraisers use this method of appraisal routinely.

**Discounted Future Earnings**

Some appraisers use the discounted future earnings method to value practices. This method is based upon the future benefits, earnings, which will be produced by the practice in future years, discounted back to a present value at some discount rate. \(^{13}\) This method was not historically used in the valuation of dental and dental specialty practices but is now becoming more popular, irrespective that: (a) future profits would be based upon the purchaser's efforts as the new owner of the practice, as opposed to past efforts of the seller; and (b) it can be difficult to reliably predict future earnings in a changing market. Alternatively, capitalization rates reflect the historical profitability or earnings of the practice. \(^{14}\)

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\(^{12}\) Revenue Ruling, 68-609.


Required Information

The more complete and accurate the information for which to value the practice, the more effective the practice valuation. The items needed are as follows:

1. Federal income tax returns of the practice for the past five years;
2. Financial statements (if they are provided for the particular practice) for the past five years and year to date;
3. A copy of the current lease and any renewal amendments;
4. A floor plan of the practice facility;
5. A listing of all dental equipment by room, plus darkroom, utility room, sterilization area, x-ray area and laboratory;
6. A listing of all office equipment and technology;
7. Maintenance records for all dental and office equipment for the last five calendar years and year to date;
8. An aged trial balance of all accounts receivables;
9. An accurate description of treatment procedures performed and those referred out.
10. A current fee schedule and a summary of fee increases over the last five years, as well as the corresponding amounts;
11. The number of active patients (patients treated in the last 18 months), as well as inactive patients;
12. A summary of the number of new patients per month over the last five years and year to date; and
13. A list of all employees, hours worked, compensation levels and dates of hire, including former employees over the last five years and year to date.

Under normal circumstances, it is difficult to obtain all information requested in valuing a particular practice. If some requested information is unavailable, the appraiser must make certain assumptions based upon the information available, while noting the information on which the appraisal is based. However, certain information is crucial, such as Federal tax returns and accurate year-to-date financial information.

Note that photographs of the practice facility are helpful, as well as videos, for the reason that photographs and videos force the seller to understand that someone else will be looking at the layout and appearance of the premises. A visit to the practice is clearly the best approach, but needs to be weighed against the additional cost of the appraisal, which should be budgeted in advance.

Of all valuation methods described herein, the one common factor is that the determination of fair market value will be subjective, but market driven.

**Five Important Rulings**

1. **Revenue Ruling 59-60.**

Revenue Ruling 59-60 set forth the relevant criteria for determining fair market value of a closely held business, a business with a relatively small number of owners or practice for estate and gift tax purposes. The factors which should be considered in the determination of fair market value are as follows:

(a) The nature and history of the business from its inception;

(b) The economic outlook in general and the condition and outlook of the specific industry in general;

(c) The book value of the stock and the financial condition of the business;

(d) The earnings capacity of the business;

(e) The dividend paying capacity;

(f) Whether or not the business has goodwill or intangible asset value;

(g) Sales of the stock and the size of the block to be valued; and

(h) The market price of stocks of corporations engaged in the same or a similar businesses.

Revenue Ruling 59-60 also went on to indicate that fair market value depends upon the circumstances of each case and is not an exact science. It changes with general economic conditions, according to the degree of optimism or pessimism with which the investing public regards the future at the required date of appraisal. In many instances, the best measure of fair market value may be the price of similar practices.
Additionally, profit and loss statements should be obtained for five or more years. Earnings are one of the most important criteria of value in cases where products and services are sold to the public, whereas the value of the assets is the most important criteria in valuing closely held investment or real estate holding companies.

As to capitalization rates, there is no ready or simple solution and wide variations will be found for companies within the same industry. Additionally, the capitalization rate will fluctuate from year to year depending upon general economic conditions. The factors which should be considered in determining the capitalization rate are: (a) the nature of the business; (b) the risk involved; and (c) the stability or irregularity of the earnings.

Because valuations cannot be made on the basis of a prescribed formula, there is no means to weigh the various applicable factors of a particular case in deriving the fair market value. For this reason, no useful purpose is served by taking an average of several factors or methods of valuations, for example, book value, capitalized earnings and capitalized dividends, and basing the valuation on such a result. Such a process excludes active consideration of other pertinent factors and the end result cannot be supported by a realistic application of the significant facts, except by mere chance.

As to the fair market value of buy-sell agreements, the stated purchase price of the stock is a factor to be considered with other relevant factors, including fair market value for estate tax purposes. It is always necessary to consider the relationship between the parties, the number of shares held and other material facts to determine whether the buy-sell agreement represents a bona fide business arrangement or is a device to pass the decedent's shares to the natural objects of his or her bounty for less than adequate and full consideration for money.

2. **Revenue Ruling 65-192.**

Revenue Ruling 65-192 expanded Revenue Ruling 59-60 and stated that the methods and factors outlined in Revenue Ruling 59-60 for use in estate and gift tax purposes applied equally to valuations for income and other tax purposes, and were also useful in determining the fair market value for business interests for any type, and the intangible assets, for all tax purposes. Revenue Ruling 65-192 also discussed a capitalization rate of 20% on excess earnings.

3. **Revenue Ruling 65-193.**

Revenue Ruling 65-193 modified Revenue Ruling 59-60 by stating that the instances where it is not possible to make a separate appraisal of the tangible and intangible assets are rare. Revenue Ruling 65-193 suggested that tangible and intangible be valued separately.
4. **Revenue Ruling 68-609.**

Revenue Ruling 68-609 considered the formula or excess earnings approach the determination of fair market value. It further suggested the use of a capitalization rate of 15-20% for intangible assets and an 8-10% rate of return on tangible assets.

5. **Letter Ruling 7905013.**

Letter Ruling 7905013 stated that although the IRS may not disturb the selling price of the entire business, the values of all assets may be reallocated in proportion to their fair market values to reflect the value of goodwill. Therefore, the IRS may reallocate the purchase price of the practice or the owner(s) to reflect goodwill, irrespective of the asset purchase agreement.
SUMMATION OF PRACTICE ASSETS

I. Estimated Fair Market Value ("FMV") of Tangible Assets of the Practice

A. FMV of Dental Equipment, Office Equipment, Furniture and Technology

1. Balance Sheet Approach — Book Value, Plus 1/3 Accumulated Depreciation
2. Tangible Asset Appraisal by Dental Equipment Supply Company, but must include office equipment, technology and furniture
3. 15 years straight line depreciation
4. 12 years straight line depreciation with de minimis salvage value
5. Estimated FMV of Dental Equipment, Office Equipment, Furniture and Technology $130,000

B. Leasehold Improvements — Not Owned by Seller

C. Dental Supplies

1. Dental Supplies @ 6% of $1,000,000 $60,000
2. Divided by 12 Months $60,000 ÷ 12
3. Monthly Cost of Dental Supplies $5,000
4. Three Month Multiple $5,000 x 3
5. Estimated FMV of Dental Supplies $15,000

D. Dental Instruments @ 1/2% of $1,000,000 $5,000

E. Recap of Tangible Asset Categories

1. Dental Equipment, Office Equipment, Furniture and Technology $130,000
2. Leasehold Improvements N/A
3. Dental Supplies $15,000
4. Dental Instruments $5,000
5. Estimated FMV of Tangible Assets of the Practice $150,000

II. Agreed Intangible Asset Value of the Practice and/or Personal Goodwill of Selling Owner at 50% of Practice Revenue of $1,000,000 $500,000

III. Estimated FMV of the Practice and/or Personal Goodwill of Selling Owner $650,000
Figure 5-2

PRACTICE PROFILE FACTORS FOR
SELECTION OF CAPITALIZATION AND GOODWILL RATES

1. Annual owner compensation in all forms
2. Annual gross revenues of the practice
3. Operating expenses as a percentage of gross revenues
4. Ability of the seller(s) to transfer the patients and/or referral sources of the practice
5. Number of active patients/referral sources in the practice
6. Number of new patients per month and degree of patient turnover/The number of referral sources in the practice
7. Stability of the practice and surrounding community
8. Competition
9. Fee structure
10. Practice location
11. Demographic characteristics of patients, location, age and income
12. Likelihood that staff, including any associate doctor(s), will remain with the practice after it is sold
13. Availability of lender or seller financing
14. Facility design and square footage
15. Number of treatment rooms, age and condition of dental equipment (right or left handed)
16. Overall appearance, aesthetics and condition of practice facility — Do I need to relocate?
17. Reputation of the practice
18. The number of hours and days worked per year
19. The percentage of patients covered by insurance/managed care/medicaid/other
20. Assignability and term of lease/availability of practice facility, land and building, for purchase

Figure 5-2

21. Ability to expand the practice facility
22. Patient and/or referral source demographics
23. Percentage of collections to gross revenues and age
24. Willingness of seller to assist the purchaser in practice transition
25. Parking and of public transportation availability
26. Effectiveness of recall system
27. Quality of patient records and clinical work performed
28. Quality and experience of staff and degree of turnover
29. Effectiveness of management systems
30. Entity form/completeness of accounting and legal records, as well as any owner agreements, e.g., buy-sell agreement
## Figure 5-3

### VERIFICATION ANALYSIS

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>No Revenue Decrease</th>
<th>Revenue Decrease of 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Practice Revenue:</td>
<td>$1,000,000</td>
<td>$900,000</td>
</tr>
<tr>
<td>2.</td>
<td>Proposed Selling Price of the Practice at 65% of Revenue: (Practice Assets, $150,000; Goodwill, $500,000 or 50% of One Year's Gross Revenue):</td>
<td>$650,000</td>
<td>$650,000</td>
</tr>
<tr>
<td>3.</td>
<td>Less: Payment of Debt Service for Practice (Yearly Payment of Selling Price Over Seven Years @ 5%):</td>
<td>&lt;$110,244&gt;</td>
<td>&lt;$110,244&gt;</td>
</tr>
<tr>
<td>4.</td>
<td>Less: Working Capital — Assumes Account Receivables Not Purchased (Yearly Payment of $60,000, Payable Over Seven Years @ 5%):</td>
<td>&lt;$10,176&gt;</td>
<td>&lt;$10,176&gt;</td>
</tr>
<tr>
<td>5.</td>
<td>Less: Remodeling and Equipment Replacement Costs (Yearly Payment of $50,000, Payable Over Seven Years @ 5%):</td>
<td>&lt;$8,480&gt;</td>
<td>&lt;$8,480&gt;</td>
</tr>
<tr>
<td>6.</td>
<td>Practice Operating Expenses @ 60% of Revenue/10% Lab; 6% Supplies:</td>
<td>$600,000</td>
<td>$584,000</td>
</tr>
<tr>
<td>7.</td>
<td>Adjusted Yearly Owner Compensation @ 40% of Revenue/Reduced Revenues:</td>
<td>$400,000</td>
<td>$316,000</td>
</tr>
</tbody>
</table>

(Owner's net profit from Federal income tax return, plus: (a) automobile expense; (b) existing equipment lease paid off by the selling doctor; (c) retirement plan contribution for the doctor(s); (d) continuing education; (e) travel expense; (f) entertainment expense, less: (a) rental increase after acquisition; (b) wages, part-time employee)

| 8.   | Less: Total of Items 3, 4 & 5:                                             | <$128,900>        | <$128,900>               |
| 9.   | Yearly Available Compensation for Purchaser:                             | $271,100          | $187,100                |
| 10.  | Ratio of Compensation for Purchaser to Average Revenue where Initial Remodeling, Equipment Costs and Working Capital are Considered ($271,100/$187,100 ÷ $1,000,000/$900,000 = 27.11%/20.78%) (Includes Hygiene): | 27.11%            | 20.78%                  |

11. Ratio of Compensation for Purchaser to Average Revenue where Initial Remodeling, Equipment, and Working Capital Are Not Considered

\[ \frac{\$400,000}{\$316,000}, \text{Less: Yearly Payment of the Selling Price of } \frac{\$110,244}{\$205,756} = \frac{\$287,750}{\$205,756} \]

\[ \frac{\$289,756}{\$205,756} \div \frac{\$1,000,000}{\$900,000} = \frac{28.98\%}{22.86\%} \]

Considerations

1. Can you maintain yearly revenues of $1,000,000/$900,000?
2. To what extent will the seller work post-closing and how will this affect your cash flow?
3. Is this an associate buy-in and how is this different from a complete purchase and sale?
4. What is the effect of an increased repayment term for 5 or 7 to 10 or 15 years?
5. Is the anticipated compensation packaged fair, while paying for the practice or practice interest in light of what you can earn as an associate non-owner?
6. Should you acquire another practice in light of your available choices?
7. Should you start your own practice in light of your available choices and given area demographics?
8. Revenue increases — are you selling or acquiring potential?
9. What if revenues, patients and/or referral sources decrease — how does this analysis change?
10. What is the tax and business structure of this complete sale or associate buy-in and what are the implications to you?
11. Is this a fee for service practice? To what extent does the practice participate in reduced fee plans?
12. What procedures are performed in this practice and what procedures are referred to specialists? — What unique services does this practice provide that you do not do, e.g., orthodontics, TMJ, cosmetic services, endodontics, etc.?
13. How much of the goodwill of the practice is corporate and how much is personal to the selling owner?
14. The $500,000 question: How much of the goodwill is transferable?
15. Is the practice located in a "destination" area?
### Figure 5-4

**EARNINGS APPROACH — ANOTHER WAY OF LOOKING AT THIS!**

<table>
<thead>
<tr>
<th>Step</th>
<th>Calculation</th>
<th>No Revenue Decrease</th>
<th>Revenue Decrease of 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Revenue:</td>
<td>$1,000,000</td>
<td>$900,000</td>
</tr>
<tr>
<td>2.</td>
<td>Operating Expenses:</td>
<td>&lt;$ 600,000&gt;</td>
<td>&lt;$584,000&gt;</td>
</tr>
<tr>
<td>3.</td>
<td>Less Working Capital Needs (Yearly Payment of $60,000, Payable Over Seven Years @ 5%: ..........</td>
<td>&lt;$ 10,176&gt;</td>
<td>&lt;$10,176&gt;</td>
</tr>
<tr>
<td>4.</td>
<td>Less: Remodeling and Equipment Replacement Costs (Yearly Payment of $50,000, Payable Over Seven Years at 5%)</td>
<td>&lt;$ 8,480&gt;</td>
<td>&lt;$8,480&gt;</td>
</tr>
<tr>
<td>6.</td>
<td>Yearly Available Owner Compensation in All Forms:</td>
<td>$ 381,344</td>
<td>$ 297,344</td>
</tr>
<tr>
<td>7.</td>
<td>Less, Compensation Requirements for Purchaser @ 25% of Practice Revenue*:</td>
<td>&lt;$ 250,000&gt;</td>
<td>&lt;$ 225,000&gt;</td>
</tr>
<tr>
<td>8.</td>
<td>Yearly Available Sum to Pay Purchaser Price Exclusive of Interest:</td>
<td>$ 131,344</td>
<td>$ 72,344</td>
</tr>
<tr>
<td>9.</td>
<td>Above Sum, Multiplied by Five Years, Exclusive of Interest**:</td>
<td>$ 656,720</td>
<td>$ 361,720</td>
</tr>
<tr>
<td>10.</td>
<td>Above Sum, Multiplied by Seven Years Exclusive of Interest:</td>
<td>$ 919,408</td>
<td>$ 506,408</td>
</tr>
<tr>
<td>11.</td>
<td>Purchase Price as a Percentage of Gross Revenue — Five Years:</td>
<td>$ 656,720 =65.67%</td>
<td>$ 361,720 =40.19%</td>
</tr>
<tr>
<td>12.</td>
<td>Purchase Price as a Percentage of Gross Revenue — Seven Years:</td>
<td>$ 919,408 =91.94%</td>
<td>$ 506,408 =56.27%</td>
</tr>
</tbody>
</table>

* Should compensation be a percentage of revenues or the associate's current yearly compensation, e.g., $120,000? Answer — A percentage because it may require an additional dentist or specialist to produce at this level. Note that the 25% includes hygiene revenue.

** Should interest be included or excluded as the time value of money? If interest is excluded, to what extent will the repayment period be increased?

### Figure 5-5

**MULTIPLE OF GROSS REVENUE**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gross Revenue</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>2</td>
<td>Gross Revenue Multiplier</td>
<td>64%</td>
</tr>
<tr>
<td>3</td>
<td>Practice Value</td>
<td>$640,000</td>
</tr>
</tbody>
</table>
RECAP OF PRACTICE VALUES

1. Summation of Assets ................................................................. $ 650,000
2. Capitalization of Earnings ......................................................... $ 643,810
3. Multiple Gross Revenue ............................................................ $ 640,000
4. Subtotal ..................................................................................... $ 1,933,810
5. Averaged ................................................................................. \( \div 3 \)
6. Estimated FMV of the Practice .................................................. $ 644,603
**Figure 5-7**

**CAPITALIZATION OF EARNINGS**

<table>
<thead>
<tr>
<th>Most Recent Year Collections</th>
<th>$1,000,000</th>
<th>$1,000,000</th>
<th>$1,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Profit Percentage</td>
<td>x 38%</td>
<td>x 40%</td>
<td>x 42%</td>
</tr>
<tr>
<td>Available Profit</td>
<td>$380,000</td>
<td>$400,000</td>
<td>$420,000</td>
</tr>
<tr>
<td>New Owner Compensation at 27.5%</td>
<td>&lt;$270,500&gt;</td>
<td>&lt;$270,500&gt;</td>
<td>&lt;$270,500&gt;</td>
</tr>
<tr>
<td>Available Profit to Capitalize at 20% Rate</td>
<td>$109,500</td>
<td>$129,500</td>
<td>$149,500</td>
</tr>
<tr>
<td>20% Capitalization Rate</td>
<td>÷ .2</td>
<td>÷ .2</td>
<td>÷ .2</td>
</tr>
<tr>
<td>Estimated FMV of the Practice</td>
<td>$547,500</td>
<td>$647,500</td>
<td>$747,500</td>
</tr>
</tbody>
</table>

Small increases in profitability have significant effects upon practice value.