# GOODWILL - what is it worth in the market?

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## Abrégé

Ce travail discute des valeurs immatérielles que les dentistes définissent comme "practice goodwill". Comment établir la valeur marchande de ce "goodwill"? On offre une définition en termes économiques et on présente une formule pouvant servir à estimer et à négocier le prix du "goodwill". On offre des conseils sur la meilleure utilisation de la formule. Enfin on discute de quelques situations pouvant influencer le prix du "goodwill" dans certaines circonstances particulières.

John Barton graduated from dental school, completed a year's general practice residency, and decided to go into private practice in a small town in Wisconsin. The town he chose is 120 miles from his hometown and seems to fit all his needs. However, as he does not know anyone there, he is not sure that patients will want to be treated by "that new young dentist."

So, John Barton has chosen to associate with an established dentist whose name is known and whose practice is successful and growing. He figured that he could earn a percentage of his gross and pay his lab fees. For John Barton, this was a workable arrangement and the economics of the situation seemed fairly straightforward. However, the dentist was more interested in taking John in as a partner and immediately brought up the question of

"goodwill in the practice."

Arthur Ross and Don Martin are dentists who have a successful practice as associates. Ross has been in practice for 19 years, and Martin joined him two years ago immediately after dental school.

Both dentists have pretty much established their own patient loads and help each other out with emergencies. The associateship has been lucrative for both men — Martin has moved quickly into a practice that has a well-known reputation for quality dentistry; and Ross is able to enjoy a bit more free time while taking in a percentage of Martin's earnings.

Both have a full partnership in mind for the future. Martin thinks that in his two years in practice, he has been an asset to the office, and word-of-mouth has helped him to bring in some new patients. Ross agrees that his associate is an asset, and, in fact, sees him as a vehicle to make early retirement possible. But, for all his years of building the practice, Ross figures in drawing up a partnership, he is due some "goodwill" compensation.

The "fly in the ointment" in both of these situations is goodwill: a term that can be misunderstood, misused, and at best, confusing.

The market value of tangible assets such as dental equipment or real estate can be readily and accurately estimated based on the cost of replacing these assets in today's market. A catalogue that gives the price of new and used equipment provides the information needed to make an appraisal. With real estate, a public

record of recent sales is a reliable basis for appraising the market value of the property.

In contrast, goodwill is an intangible asset; its value is related to the professional reputation of the established dentist. It presents a different problem for appraisers because there is no readily available, reliable information on the cost of replacing this asset. Even if a large sample of the sale prices of dental practices was available, because these prices include the value of tangible assets, they would not provide sufficient information for appraising goodwill.

Perhaps because of these special problems, there are few references in the dental or accounting and management literature on the problem of appraising goodwill. E.H. Weinwurn, a certified public accountant writing in Management Accounting, 1 argues that goodwill reflects market recognition of future value but he does not provide a method for estimating the future value of a practice. At the other extreme, J.E. Dunlap, writing in Dental Economics, 2 suggests that dentists estimate the value of goodwill by multiplying a 20th of the past year's net incomes by the number of months they agree to stay in the practice. Dunlap warns that this formula provides only a rough estimate. However, the fact that Dunlap emphasizes past performance as a key to estimating the value of goodwill seems to conflict with the approach suggested by Weinwurn. In this paper we provide the rationale behind our own formula for appraising the value of goodwill in a dental practice.

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# Buying a reputation

Practitioners are willing to pay for goodwill because a good professional reputation and being known in the community are important factors in determining the financial success of a dentist. Moreover, to some extent these financial rewards can be transferred to another practitioner who joins the practice. Thus, it follows that a practitioner who is starting out or relocating might increase his income by becoming an employee or partner in an already established practice. Because the new practitioner expects to earn more as an associate, he is willing to pay the established dentist for the privilege of associating.

The financial benefits that are transferred to the new associate will probably last no more than four years. As the new associate establishes a professional reputation and becomes known, his income depends more on personal performance and less on the reputation and contacts of the established dentist. Thus, a dentist who purchases goodwill is buying a privilege or property right that has a limited life.

The reason why an intangible asset such as goodwill exists and has an expected life of four years is shown in the Illustration. In this graph, the vertical axis measures income in dollars and the horizontal axis measures time lapse in years. A dentist who has to choose between becoming an associate in an established practice or starting on his own faces two possible streams of net income: as an associate, he expects to capitalize on the reputation of an established dentist and start at an annual rate of return indicated by 0a; as a new practitioner, he expects to start at a lower level of net income depicted by 0b. Until the end of the fourth year, he expects his net income to be higher as an associate than it would be as a new practitioner. However, during the first four years as a new practitioner, his net income is expected to grow more rapidly than his net income as an associate until the end of the fourth

year when his net income as a new practitioner or an associate would be equal. The triangular area in the Illustration bounded by bca represents added income the dentist expects to earn as an associate over what he might earn in his own practice. It is a measure of the potential wealth that the established dentist can transfer to a new associate in the first four years of the association.

Why do we believe four years is a more appropriate time than three or five years? First, on the basis of discussions with dentists in the Philadelphia area, reports in journals on dental practice management, and in

# Goodwill negotiations Some guidelines:

#### • Performance

Agree on the associate's future performance.

#### Income

Agree on the associate's projected gross income over the first four years.

#### Expenses

Determine the associate's impact on the practice operating expenses over the first four years.

#### • Terms

Examine the associating terms of other practicing dentists in the

the literature of dental supply dealers, it was agreed that approximately four years were required to establish a private dental practice in a new location. In addition, data from The 1977 Survey of Dental Practice supported the four-year assumption. For dentists who have been out of dental school for one to four years, those in private practice for themselves reported net incomes that were lower than net incomes reported by salaried dentists practicing in a public clinic or with another practitioner. However, for reporting dentists who were out of dental school for more than four years, those in practice for themselves reported roughly the same or higher net incomes than salaried dentists. Because of the small sample of respondents and the fact that years since graduation and years in private practice for any respondent can differ, our interpretation of the data can be questioned. However, in the absence of a larger sample and a better measure of number of years in private practice, we believe the ADA survey of dentists throughout the country supports the four-year assumption.

One further comment is necessary. In areas where market competition is relatively high, establishing a new practice will probably require five years rather than four and, as a result, the limited life of goodwill offered by practitioners in these areas would be five years. However, in locations where competition for patients is relatively low, a new practice would take less than four years to establish and the limited life of goodwill offered by practitioners in the area would be less.

It follows that usually a new dentist associate will either enter a partnership with the established practitioner or leave within four years after joining the practice. If a partnership is formed after four years, there should be no payment for goodwill. After the end of the fourth year, the new dentist is established and gross revenue will no longer depend on the professional reputation of the established dentist.

The established dentist supplies the privilege of association if he expects it will increase his income or the net worth of his practice. By selling or renting access to his professional reputation, the established dentist is capitalizing on an intangible asset that he has produced over time. This is the essence of the intangible asset, goodwill. The difficult questions are "How can the new dentist estimate a fair market price for goodwill?" or from the established practitioner's perspective, "What can he hope to receive for an intangible asset that has taken years of professional service to create?" These are difficult questions. An exchange of goodwill will require much negotiation between the buyer and seller. It is often difficult to get the kind of data that provide a basis for these negotiations. Obviously an accountant is needed to collect data and advise on the procedure.

But even though there is no simple direct way to measure the price of goodwill in all situations, we believe there are guidelines that can greatly simplify the negotiations and help the two parties agree on the value of goodwill. We suggest that both parties follow the four following guidelines and then use a related formula to determine the price of goodwill.

- Focus on how the new associate is expected to perform in the practice in the future. Becoming an associate is valuable to a new dentist because it can help him increase future income. By adding a new associate, an established dentist can help to increase future income. Past performance and characteristics of the practice can help identify practices that can profitably use a new associate, but these characteristics affect the value of goodwill only insofar as they relate to future performance.
- Agree on what the new associate dentist is expected to gross in the first four years with the practice. Of course, many factors related to patient demand and the efficiency of the new dentist have to be considered before this type of projection can be made. However, agreement on a projection or at least a range of projections is a central factor in determining the value of goodwill.
- Agree on what impact the addition of a new associate will have on the operating expenses of the practice for the next four years. Given the estimate of how much production is expected to increase with a new associate, how much will this increase the operating expenses of the practice?
- Determine under what terms new dentists are associating with established practitioners in the area. What portion of their gross revenue are the new associates paying to the

established dentists? Are new associates paying a share of the operating expenses or are all these expenses covered by owners of the practice?

After the potential buyer and seller of goodwill have reached some agreements on the aforementioned issue, the following formula can be used to estimate a market value for the goodwill involved:

Goodwill = GL - g - f  $(0_s - g)$  in which: G = expected gross revenue of the new associate to the end of the fourth year; L = the portion of G paid to the dentist/owner; g = the expected increase in operating expense associated with the new dentist to the end of the fourth year;  $0_s$  = expected operating expense to the end of the fourth year without the new associate; and f = the share of operating expense that is paid by any new associate.

The logic behind this formula requires explanation.

The new dentist is encouraged to associate with an established practitioner if he believes it will increase his net income in the first four years over what it might be if he started his own practice. He has a further incentive to become a partner or stockholder in the practice so that he can obtain some proprietary rights to the pool of patients that he develops as an associate.

The formula we recommend assumes that the new dentist has sufficient financial reason for wanting to associate with the practice. The variables in the formula outline the financial options and incentives that are open to the established dentist and owner of the practice.

The additional net income the established dentist expects to receive from the new associate is represented in the formula by GL - g. These figures represent the associate's expected gross revenue multiplied by the portion of gross paid to the established dentist less the increase in operating expense expected from adding a new associate. These figures include the income and expense that accrue to the end of the fourth year after the new dentist becomes an associate. The added net

income, GL - g, provides the incentive for the established dentist to add a new associate.

However, in the case in which a new associate becomes a partner or shareholder in a practice before the fourth year of association, the established dentist foregoes the net income, GL - g, which he could expect to receive if the new dentist remained an associate for the full four years. Therefore, it follows that the established dentist would expect the new associate to pay an amount equal to GL - g for the remainder of the four-year period.

However, the loss of expected income the established dentist experiences when he takes in a new partner is not the full story because there are financial advantages to accepting a new partner. The addition of a new partner means that half of the operating expense incurred by the practice will be paid by the new partner and, in most cases, this has a positive effect on the established dentist's owner net income. When a new partner pays half the operating expenses, the established dentist gains as he now pays only half of his operating costs but loses as he has to pay half of the additional operating expenses that result from having a new partner. In the most common cases in which the gains outweigh the losses, the established dentist is willing to pay an associate to become a partner and share the operating expense of the practice during the first four years of the partnership. Specifically the established dentist can pay the associate up to an amount f (0s-g) to become a partner.

As it turns out, making an associate a new partner has a dual impact on the net income of the established dentist. Although it reduces his net revenue from the practice by GL - g, his expenses are likely to decline by an amount equal to  $f(0_s - g)$ . Thus, the impact on the established dentist's net income of adding a new partner is equal to  $GL - g - f(0_s - g)$  which is the amount he expects the new partner to pay for the goodwill in the practice. In other words, the difference between GL - g and  $f(0_s - g)$ 

g) represents the value in the practice attributable to goodwill.

By using the guidelines and the foregoing formula, it is possible for John Barton and his future associate to reach an agreement on a fair market value for goodwill. For example, assume both parties agree that John will gross \$300,000 during the next four years; operating expenses (0s) without John are projected at \$150,000; with John as an associate, operating expenses are expected to increase by \$100,000 (g) to \$250,000 for the four years; finally, new associates in this area of Wisconsin receive 55% of their gross revenue with 45% (L) going to the established dentist. Given these assumptions, the formula discloses that \$10,000 is a fair price for the goodwill John Barton purchases in the established practice:

LG - g - ½(0s - g) (.45) (\$300,000) - \$100,000 - (.5) (\$50,000) = \$10,000.

Estimating a fair price for the new dentist, Martin, to pay for goodwill in Ross's practice is different because Martin has been an associate in the practice for two years. The two can probably agree fairly easily what Martin will gross during the next two years. Deciding on the portion of Martin's gross revenue that would go to Ross is more difficult because their professional relationship is unique. Assuming the two can agree on an appropriate portion of Martin's gross revenue that will go to Ross, the formula can be used to get an estimate of the value of goodwill. To clarify, let us assume that Martin's gross for the next two years is set at \$240,000 (G); if Ross operates the practice alone, operating expenses for the next two years are expected to be \$120,000 (0s); and Martin would retain 60% of his gross if he remained an associate for the next two years. Given these assumptions, Martin would pay \$6,000 for the goodwill he purchased in Ross's practice:

GL - g - f(0s - g) = goodwill \$240,000 × .4 - \$60,000 - .5 (\$120,000 -\$60,000) = \$6,000.

# Price of goodwill varies

As indicated by our formula, the

price of goodwill changes directly with changes in projected gross revenue of the new practitioner. However, the value of goodwill varies inversely with the level of operating expenses attributable to the new associate and with the fraction of gross revenue that goes to the new associate dentist. What are the market factors that determine increases in the level of operating expenses and the portion of gross revenue going to new dentists? As these are important determinants of the value of goodwill, a discussion of the economic factors reflected in these variables is needed.

The portion of gross revenue that goes to the associate dentist is a key factor in most associate contracts. The owner of the practice is expected to offer a figure that is sufficient to induce a new associate to join the practice. Thus, it follows that in an area or at a particular point in time in which new practitioners have good alternatives to joining an established practice, owners have to offer a higher percent of gross to a prospective associate and the price of goodwill will be less. But, if new practitioners find it difficult to start on their own, established dentists can hire associates by offering a smaller portion of gross revenue, and the value of goodwill in an established practice will be greater. The portion of gross revenue that goes to a new dentist is a key variable that adjusts to clear the market for associate contracts and inversely affects the price of goodwill in a market area.

Similarly, the supply of dental equipment and auxiliary manpower available in a market area can have a direct impact on operating expenses and, in turn, on the general value of goodwill in an area. If new associates or partners can be accommodated with currently hired auxiliaries and equipment, the addition of a new dentist to the practice will have little impact on the level of operating expense incurred in the practice. With a given projection of gross revenue and a portion of gross going to the new associate, the dentist adds more to his net income by hiring an associate and the price of goodwill in the practice is higher. However, when the established dentist has to hire additional auxiliaries or buys new equipment, or both, to accommodate a new associate, the impact on operating expense will be greater, and, with a given projection of gross revenue and portion of gross going to the new associate, the value of goodwill in the practice is less.

Because the value of goodwill depends on the demand for associate contracts and the availability of dental resources, it is possible for the price of goodwill to be negative. Of course, it is unusual to hear of an established dentist paying a new associate to become a partner but this is what happens when an associate buys into practice at a price below the market value for his share of the tangible assets. For example, take the case in which the value of inventory and equipment is appraised at \$50,000 and a new partner buys an equal share in the practice for \$20,000. The new partner is in effect paying \$5,000 to become a partner. The established dentist gives up equity valued at \$5,000. In return, he gains a partner who shares the operating expenses of the practice. Thus, in dental markets in which the expected gross revenues for new associates are low or the added operating expenses of having a new associate are high, or both, the established dentist can expect to sell goodwill at a negative price.

John Barton's situation can be used to illustrate the possibility of a negative price for goodwill. For example, if associates in this area of Wisconsin are getting contracts for 60% of their gross revenue rather than 55% as previously assumed, a fair market for the goodwill John Barton purchases would be a negative \$5,000. This figure is calculated assuming that John Barton's gross of the next four years is expected to be \$300,000; that the expense of the practice without John Barton for the next four years will be \$150,000; and that John Barton's presence will add \$100,000 in operating expense during this period:

GL - g - f(0s - g) = goodwill ( $$300,000 \times .4$ ) -  $$100,000 - \frac{1}{2}($150,000 - $100,000) = - $5,000$ .

The established dentist pays John Barton \$5,000 and foregoes the \$20,000 in expected income that would come with Barton as an associate. In return John Barton agrees to pay half the operating or \$125,000 during the next four years, which saves the established dentist \$25,000 in projected expenses for that period. If Barton takes anything less than \$5,000 to become a partner, his net income would be less than what he could earn as an associate in the practice.

### Goodwill in perspective

The decision of whether to join a partnership is complex and rarely hinges on purely economic considerations. It is unwise to negotiate the price of goodwill until you have addressed the more basic questions, such as: do you like your potential partner or partners?; is your philosophy of dental care consistent

with theirs?; and does the partnership improve your opportunities for professional growth? Answers to these questions are most important and only indirectly related to economic outcomes.

After you decide to become a partner, you have to agree on a fair price for buying into the established practice. Remember, a fair market value for a practice depends on the value of its tangible and intangible assets. It is relatively easy to appraise the value of the tangible assets. Determining a fair market price for the intangible assets, goodwill, is the real problem.

To be fair to yourself, you need to spend a good deal of time gathering information, analyzing data, considering what the future holds, and projecting what your gross revenue will be as a partner in the practice. Basically, you are developing a scenario of what is most likely to occur during your first four years with the practice. A management consultant or accountant can point you in the right direction and do some of the

analysis but you need to understand and control this process. By focusing on relevant topics and making these topics the center of negotiating, you can agree on a price of goodwill that is fair to both parties and will start your new partnership on the right foot.

#### Summary

This paper discusses the intangible asset that dentists refer to as practice goodwill. How is the market value of practice goodwill estimated? After defining goodwill in economic terms, a formula is given that dentists can use to estimate and negotiate the price of goodwill. Guidelines are suggested that indicate how the formula can best be used. Some general market conditions that can affect the price of goodwill in a particular area are discussed.

#### References

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