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Valuation of Healthcare Intangible Assets in the Absence of Positive Net Cash Flows

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Over the past four years, contrasting viewpoints have arisen in published articles and presentations in the valuation community surrounding the existence of value for intangible assets of a healthcare enterprise in the absence of positive net cash flow being generated by the operations of the entity in its entirety and the methodologies available to the valuation analyst. Over the recent period, trends within the broader economy, similar to the healthcare industry, have indicated that firms are employing, to ever greater extents, intangible assets. As healthcare enterprises continue to increase their utilization of intangible assets, it will become ever more important for practitioners to develop sound valuation strategies to apply to the intangible assets of an

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organization, keeping in mind that under the concept of highest and best use, the premise of value for a valuation engagement may need to change from value in use, as a going concern to value in exchange, should the enterprise in its entirety not produce positive net cash flows.

Introduction

Over the past four years, contrasting viewpoints have arisen in published articles and presentations in the valuation community surrounding two issues:

(1) the existence of value for intangible assets of a healthcare enterprise in the *absence* of positive net cash flow being generated by the operations of the entity in its entirety; and
(2) the methodologies available to the valuation analyst that simultaneously: (a) are *legally permissible*; (b) have a sound theoretical *economic* and *financial foundation*; and (c) are *feasible* to implement in practice.

Over the recent period, trends within the broader economy have indicated that firms are employing, to ever greater extents, intangible assets.[1] The healthcare industry has echoed this trend, with healthcare enterprises relying more heavily on intangible assets in the generation of their revenue stream.[2] As healthcare enterprises continue to increase their utilization of intangible assets, it will become increasingly important for practitioners to develop sound valuation strategies to apply to the intangible assets of an organization, keeping in mind that under the concept of *highest and best use*, the *premise of value* for a valuation engagement may need to change from *value in use, as a going concern* to *value in exchange,* should the enterprise in its entirety not produce positive net cash flow.

These controversies related to valuation of healthcare intangible assets are encapsulated in issues raised by some commentators regarding payments made by an acquirer for the intangible asset composed of the *trained and assembled physician workforce* (TAWF) owned and operated by healthcare enterprises. Consequently, the discussion that follows will substantially focus on the relative merits of these issues related to TAWF from a financial economic perspective. However, the same analytical approach employed in the consideration of a TAWF may also be applied to most other intangible assets.

[1]*New Sources of Growth: Intangible Assets* (Paris: Organisation for Economic Co-operation and Development [OECD], September 2011).
[2]Kevin Hassett and Robert Shapiro, *What Ideas Are Worth: The Value of Intellectual Capital and Intangible Assets in the American Economy* (Washington D.C.: Sonecon, LLC, 2011).

Positive Net Cash Flow Is *Not* Required to Support the Value of an Intangible Asset

It has been claimed by some authors that the absence of a historical positive net cash flow (above and beyond the economic operating and economic capital cost burdens associated with the generation of the projected revenue by the subject enterprise in its entirety), which absence is anticipated to remain into the indefinite future, is sufficient evidence to conclude that no economic benefit (value) may be assigned to the intangible assets of the enterprise.[3] This claim is unfounded and appears to be based upon: (a) a misunderstanding of the nature of the cash flows generated by the entirety of an enterprise; (b) an incorrect (or absent) application of the concept of *highest and best use*; and/or (c) a misunderstanding regarding the nature of *economic benefit*.

Aggregate cash flows versus incremental cash flows

In comparing the value indications arrived at by employing the *income approach* with those determined through the *cost approach*, a distinction should be made regarding the *nature* of the identified cash flows utilized. The cash flow of an enterprise in its entirety is, in fact, an *aggregation* of multiple *contributory incremental cash flows*. As an example, consider the capital budgeting decision faced by many enterprises as it relates to a single asset. To assess the viability of a prospective asset purchase, the management of the enterprise may choose to consider the expected economic benefits to be derived from the ownership of the individual subject asset offset by the corresponding economic costs associated with acquiring and operating the asset. Only in those instances that this *net* economic benefit is positive, i.e., the economic benefits exceed the economic costs, would the management of the enterprise make the decision to invest in the individual subject asset, thereby increasing the cash flows of the enterprise, which cash flows may be capitalized into an indication of economic value.

Similarly, from an economic *fair market value* (FMV) perspective, the assets currently comprising an enterprise can be analyzed as to their *incremental* cash flows resulting

[3]See Mark Dietrich, et al., "Assessing Intangible Value in a Physician Practice Acquisition." In *The BVR/AHLA Guide to Healthcare Valuation*. 3rd ed. Portland, OR: BVR, 2012, chap. 12.

from each individual asset, the aggregation of which would be the overall cash flow for the enterprise in its entirety, generated by the *portfolio of assets* owned by the enterprise in concert.[4] Each individual asset generates an incremental cash flow, which can be either positive or negative. The sum of these incremental cash flows (both positive and negative) equals the overall cash flow of the enterprise. Consider the simple example of a two-stock portfolio. The overall cash flow of the portfolio is composed of the cash flow emanating from each of the individual equities in the portfolio. Each asset in the portfolio owned by the subject enterprise, both tangible and intangible, contributes its *incremental* cash flow to the overall aggregate cash flow of the enterprise in its entirety.

Further, the existence of certain synergies among the accumulated assets may result in overall cash flows that are in excess of the incremental cash flows of the compositional assets. It is from this circumstance that much of the confusion regarding the value of intangible assets to a firm appears to arise, with some commentators *requiring* the existence of *positive* cash flow from the enterprise, in its entirety, as the foundation for their assignment of any economic value to a discrete, individual intangible asset, such as a TAWF.

The adage *"the sum of the parts does not equal the whole"*[5] can be utilized to explain the deviation in value resulting from synergies that may exist among multiple assets employed by an enterprise. *Efficiently* operating enterprises will likely be capable of generating excess returns above the economic costs associated with the ownership of the assets comprising the enterprise. This excess return can be defined as *synergy gains*. Likewise, a firm that fails to operate efficiently may realize *asynergies*; i.e., the combination of assets comprising the enterprise may fail to generate sufficient cash flows to offset the economic costs related to the invested capital, which economic costs are derived from the market consensus present value of the expected future benefits accruing to the universe of typical investors in the subject assets of the enterprise, both tangible and intangible.

Willing buyers in the market for similar assets will be disinclined to pay an amount greater than their *discounted present value* of the *future benefit* expected to be generated by the asset. Further, the *scarcity* of similar assets (i.e., the finite amount of a given asset) within the marketplace will tend to drive the price demanded by a *willing seller* for such assets toward this *upper limit*. These contending forces thereby enforce efficiency in the market, as only those enterprises capable of generating sufficient cash flows through the use of an asset will be willing to pay the market price for that asset. Less efficient users of the assets, excepting speculators and brokers, will be unwilling to convert their scarce capital into a discounted future value that is worth less than the cash value of their capital at the time of the transaction.

Therefore, when an enterprise fails to generate a positive aggregate cash flow, these circumstances may result from the realization of certain *asynergies*, i.e., the incremental cash flow generated by certain of the assets owned by the enterprise may be negative, and of a sufficient magnitude to offset the positive incremental cash flows of the aggregation of the remaining assets. For example, consider an enterprise that has a significantly disadvantageous vendor contract relative to similar market participants, so much so that the economic cost burden related to the contract offsets all the positive cash flows generated by the other assets of the business, resulting in negative net cash flows to the enterprise in its entirety. In the absence of this onerous contract, the enterprise would be capable of generating a significantly increased cash flow.

If the precept that intangible assets cannot have value in the absence of positive aggregate cash flows is to be believed, then the above example implies that the value of the other assembled intangible assets of the enterprise, such as TAWF, is diminished simply by the existence of the disadvantageous vendor contract. This seems unlikely, as the universe of typical purchasers of the specific subject intangible asset would not consider the detrimental effect of the cash flows generated by the enterprise's vendor contracts as relevant to their own consideration of the expected benefit from ownership of that asset. Under the valuation premise of *value in-use, as a going concern*, the enterprise may be deemed ***not*** to have value in that it does not produce sufficient net cash flows. However, as further described herein, under the concept of *highest and best use*, the premise of value may, in those circumstances, need to be changed to a *value-in-exchange premise*, under which distinct tangible and intangible assets of the enterprise may have economic value, even in the absence of positive net cash flow to the enterprise in its entirety.

Certainly, the value of the tangible assets would not necessarily be impaired by the existence of the disadvantageous vendor contract. The differences in the physicality of the existence of tangible assets, in contrast to intangible assets, do not confer primacy in the determination of value. The value of an asset, tangible or intangible, is not derived from the nature of its physical existence, but from the expectation of future benefit to be derived from the ownership

[4]The authors recognize that, from a fair value perspective for financial reporting purposes, this may result in a variance in the reported values.
[5]James Bonbright, *Valuation of Property,* Volume I (New York, NY: McGraw Hill Book Company, Inc., 1937), 76–82.

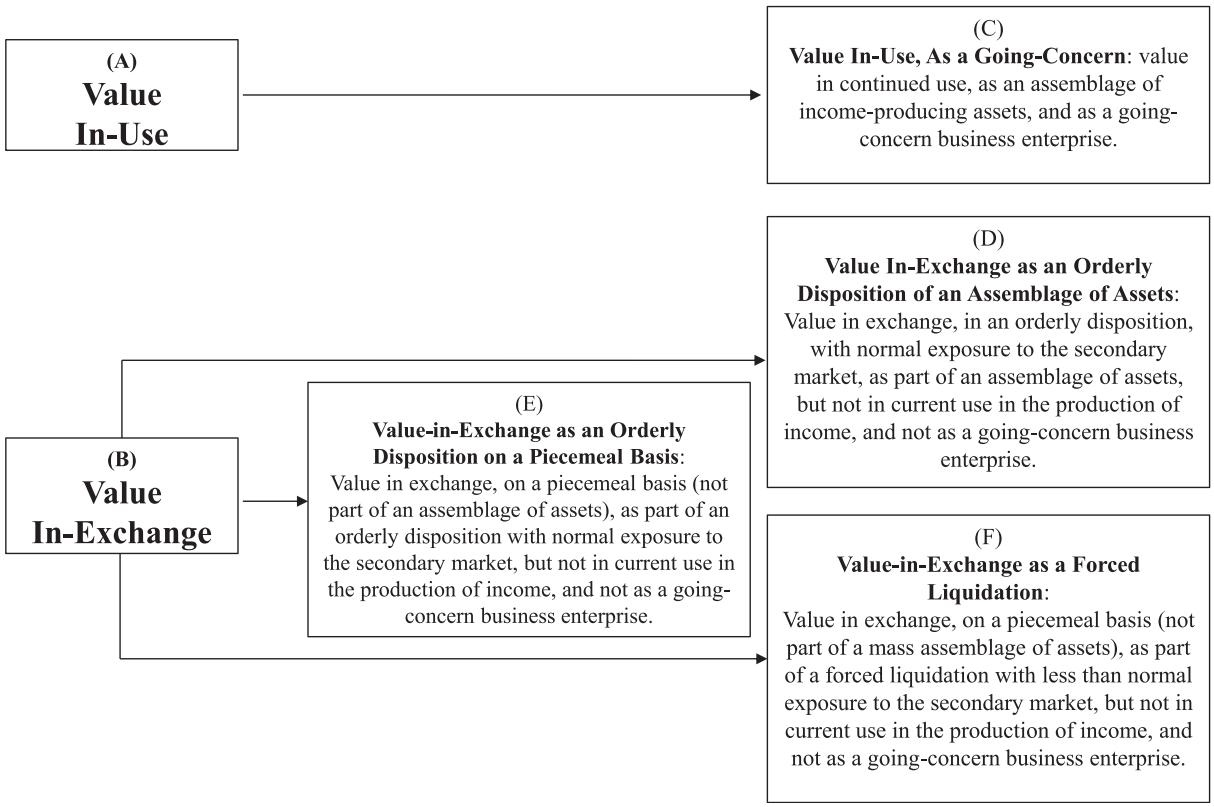

Figure 1
Premise of Value

of the asset. If it would seem an unsupportable argument to reduce the value of a tangible asset because of the existence of the disadvantageous vendor contract, then it would be similarly unsupportable to assume the reduction, or even obviation, of the value of an intangible asset simply due to the inability of the enterprise to secure appropriate vendor contacts.

This concept can be generalized to any accumulation of assets. The value of the constituent assets should not be diminished simply due to the existence of other assets. Returning to the two-stock portfolio example, the value of either of the constituent assets is independent of the value of the other equity share. An adverse price shock to one stock should not, simply by dint of their aggregation in a portfolio, imply that the unaffected stock is less valuable.

In the realm of business valuation, it may be possible to adjust the expected cash flows for an enterprise in its entirety to correct for the effects of a disadvantageous vendor contract as described above.[6] However, while in this simple example, it is theoretically possible to ascertain the genesis of the diminished cash flows, the separation and allocation of cash flows among various specific tangible and intangible assets may, in practice, prove challenging and insurmountable in the absence of sufficient data. In the absence of the ability to accurately ascertain the *expected* cash flows to be generated by a subject asset, the use of the income approach by the valuation analyst may be unreliable. In these instances, an asset/cost approach may be more efficacious.

Highest and best use of the invested capital

As mentioned already, in the event that a business enterprise fails to produce sufficient economic benefit to support the invested capital utilized to generate the revenue stream of the enterprise, the valuation premise of *value in use, as a going concern* cannot be supported, and the adoption of one of the premises under *value in exchange* is indicated (as illustrated in Fig. 1).[7]

It should be emphasized that the decision to utilize the premise of *value in exchange,* in lieu of the premise of *value in use, as a going concern,* does not preclude the

[6]There exists an entire body of knowledge related to purchase price allocations and other intangible asset valuation assignments using the multiperiod excess earnings model, among others. See the various educational offerings of the American Society of Appraisers.

[7]Robert James Cimasi, *Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services,* Volume II (Hoboken, NJ: John Wiley & Sons, 2014), 28.

existence of *economic FMV* attributable to intangible assets. Intangible assets may well exist and hold significant *economic FMV* under the *value-in-exchange* premise, based on the principle of *highest and best use*, which

> *…holds that this use is that use among possible alternatives which is legally permissible, socially acceptable, physically possible, and financially feasible, resulting in the highest economic return.*[8]

As Dr. Shannon Pratt points out, the concept of *highest and best use* drives the selection of the valuation premise that may apply under the *standard of FMV*, to wit:

> *Each of these alternative premises of value may apply under the same standard, or definition, of value. For example, the fair market value standard calls for a "willing buyer" and a "willing seller." Yet, these willing buyers and sellers have to make an informed economic decision as to how they will transact with each other with regard to the subject business.* ***In other words, is the subject business worth more to the buyer and the seller as a going concern that will continue to operate as such, or as a collection of individual assets to be put to separate uses?*** *In either case, the buyer and seller are still "willing." And, in both cases, they have concluded a set of transactional circumstances that will maximize the value of the collective assets of the subject business enterprise.*[9] [Emphasis added.]

Dr. Pratt goes on to explain that, *"…[t]ypically, in a controlling interest valuation, the selection of the appropriate premise of value is a function of the highest and best use of the collective assets of the subject business enterprise. The decision regarding the appropriate premise of value is usually made by the appraiser, based upon experience, judgment and analysis."*[10]

Robert Reilly and Robert Schweihs echo Dr. Pratt's comments in reference to intangible assets, stating that: *"…[t]he selection of the appropriate premise of value may be dictated by the* ***highest and best use of the subject intangible asset****. The highest and best use of an intangible asset is typically defined as the reasonably probable and legal use of the intangible asset that is physically possible, appropriately supported, financially feasible, and results in the* ***highest use****."*[11] [Emphasis added.] Further, as stated in a recently published paper by Robert Reilly, *"In some instances, the analyst is not able to (or is not engaged to) perform income or market approach valuations of the owner/operator entity,"*[12] which for an income approach would certainly be the case in the absence of positive net cash flow to the enterprise in its entirety.

The historical use of the assets comprising a healthcare enterprise, e.g., a physician practice, should provide no binding presupposition about the utility to be derived by a *typical purchaser* from the ownership of the subject assets. The historical inability of a *particular owner* to generate a positive net cash flow emanating from the subject asset does not require (nor even imply) that a *typical investor* in a similar asset would be likewise incapable of utilizing a subject intangible asset to produce a positive stream of economic benefit. Investors may acquire assets, such as intangible assets, under different settings and circumstances, which are not beholden to the current use of the assets by the seller of the subject intangible assets, or the current owner's difficulties in generating positive net economic benefit from the enterprise in its entirety.

The diversity in uses for assets among purchasers and sellers is an economic fact, which gives rise to the difference in anticipated benefit to be derived from the ownership of the subject asset and the opportunity of the participants in a transaction to generate *gains from trade*. In fact, it is the existence of these differences in value, i.e., the aggregate expected economic benefit accruing to the owner of a particular asset, that underpins the concept of "*willing buyer*" and "*willing seller*," as illustrated in Figure 2.[13]

As illustrated in Figure 2, the expected future economic benefit accruing to the purchaser of a subject asset will tend to put a ceiling on the price the acquirer would be *willing to pay*. Likewise, the expected future economic benefit accruing to the seller of an asset will tend to put a floor on the price the seller would be *willing to accept*. Within the gap between the expected future economic benefits of the buyer and seller lies the *gains of trade*, which may be distributed between the market participants to arrive at the agreed-upon transaction price for the subject asset.

It should be noted that in the event that the expected *future economic benefit* accruing to the potential seller in

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[8]Richard Rickert, "The Principles and Concepts of Valuation: Theory of Utility and Value, Value Influences, and Value Concepts." In *Appraisal and Valuation: An Interdisciplinary Approach,* Volume I (Washington, D.C.: American Society of Appraisers, 1987), 55.
[9]Shannon Pratt, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies,* 5th ed. (New York, NY: McGraw-Hill, 2008), 48.
[10]Shannon Pratt, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, 5th ed. (New York, NY: McGraw-Hill, 2008), 48.
[11]Robert Reilly and Robert Schweihs, *Valuing Intangible Assets* (New York, NY: McGraw Hill, 1999), 62.
[12]Robert Reilly, *Intangible Asset Valuation: Cost Approach Methods and Procedures* (Dallas: American Institute of CPAs, 2014), 54.
[13]Robert James Cimasi, *Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services,* Volume II (Hoboken, NJ: John Wiley & Sons, 2014), 884–888.

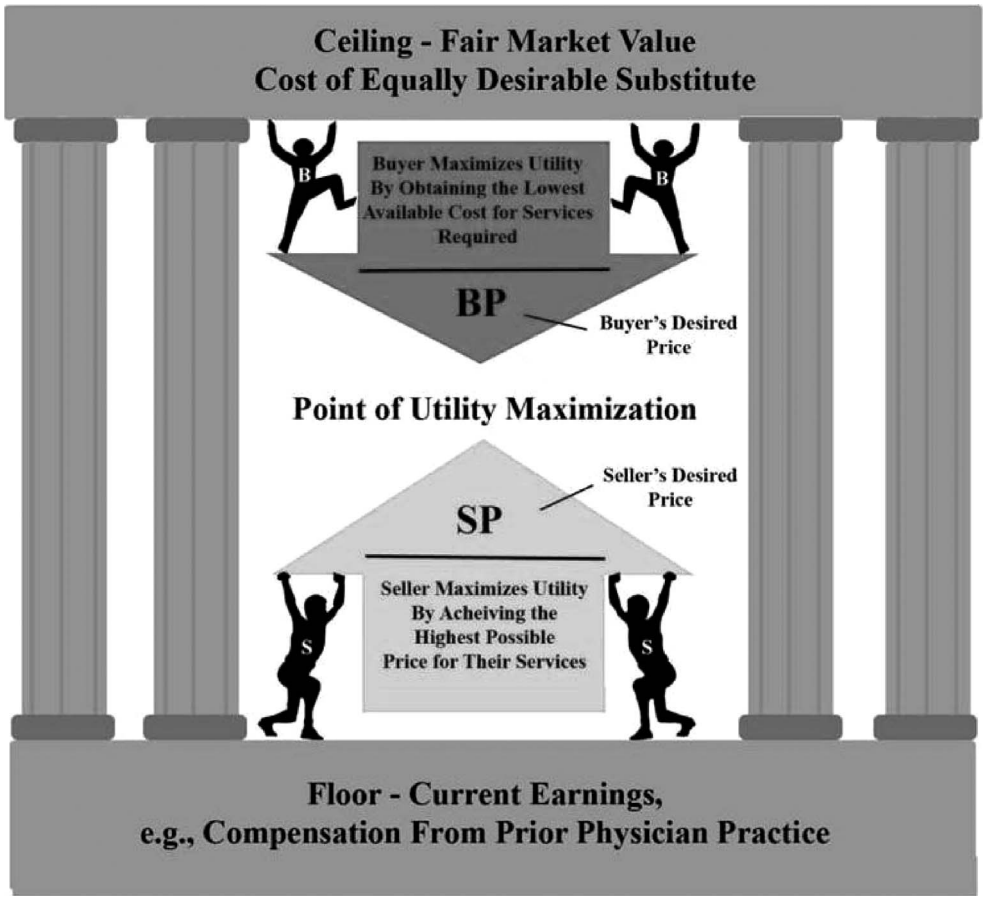

Figure 2
Point of Utility Maximization Between Buyer and Seller

a prospective transaction *exceeds* the future expected economic benefit accruing to the potential purchaser in a prospective transaction, then, assuming both parties adhere to *economic rationality*,[14] the transaction would not be concluded or even contemplated by the parties. Consequently, the very fact that a transaction is being considered increases the probability that the current use of the assets by the seller, in all likelihood, fails to produce the level of economic benefit expected by other investors in similar assets, thus providing the motivation for the seller to divest of the assets.[15] However, the seller's inability to generate a sufficient return from the assets to offset the capital investment required to acquire the assets need not be the controlling factor (or perhaps bear any relationship at all), to the potential purchaser's ability generate a return from the same assets.

Avoidance of an economic cost is equivalent to an economic benefit

In addition to the confusion arising from the misunderstanding of the economic cash flows utilized in the application of an *income-based approach* and their relationship with the value indication arrived at from the use of a *cost-based approach*, there is also a considerable lack of clarity in several of the recently published works surrounding the concept of an *economic benefit*.[16] This definitional and conceptual confusion acts to increase the misapprehension of the applicability of the *cost-based approach* to determine value.

In utilizing *cost approach*–based methods, such as the *replacement cost method*, to value a TAWF, each and every cost related to creating the asset that would provide

[14]William Jevons, *The Theory of Political Economy*. 3rd ed. (original work published by Macmillan and Co., London, 1888; electronic version from Library of Economics and Liberty utilized, http://www.econlib.org/library/YPDBooks/Jevons/jvnPE3.html#Chapter3 [Accessed 9/13/2012]), chap. 3, p. 2.

[15]It should be noted that not all transactions are strategically motivated, and there is an entire class of financial buyers who may be simply seeking to earn a risk-adjusted rate of return on an investment (absent any ability to materially alter the performance of the investment relative to its current performance).

[16]See Mark Dietrich et al., "Assessing Intangible Value in a Physician Practice Acquisition." In *The BVR/AHLA Guide to Healthcare Valuation*. 2nd ed. Portland, OR: BVR, 2012, chap. 12.

Table 1
Illustrative Example of Valuation of the Intangible Asset Composed of Trained and Assembled Physician Workforce In-Place

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
	Provider (1)	Specialty (1)	FT/PT (1)	TTM wRVU Productivity (2)	Industry Indicated Compensation per wRVU (3)	Industry Indicated Salary (4)	Total Annual Benefits (5)	Annual Employment Cost (6)	Efficiency Costs (7)	Cost to Recruit (8)	Total Cost per Employee (9)	Tenure (10)	Turnover Deficiency Cost per Employee (11)	Net Cost per Employee (12)	
1	Doctor 1	Orthopedic Surgery	1.00	9,500	$62.00	$589,000	$55,000	$644,000	$16,800	$25,000	$41,800	30.25	$2,418	$39,382	1
2	Doctor 2	Orthopedic Surgery	1.00	12,400	$62.00	$768,800	$55,000	$823,800	$21,490	$25,000	$46,490	8.75	$2,689	$43,801	2
3	Doctor 3	Orthopedic Surgery	1.00	10,300	$62.00	$638,600	$55,000	$693,600	$18,094	$25,000	$43,094	26.10	$2,493	$40,601	3
4	Doctor 4	Orthopedic Surgery	1.00	13,500	$62.00	$837,000	$55,000	$892,000	$23,270	$25,000	$48,270	21.50	$2,792	$45,477	4
5	Doctor 5	Orthopedic Surgery	1.00	16,100	$62.00	$998,200	$55,000	$1,053,200	$27,475	$25,000	$52,475	15.30	$3,036	$49,439	5
6	Doctor 6	Orthopedic Surgery	1.00	10,650	$62.00	$660,300	$55,000	$715,300	$18,660	$25,000	$43,660	12.10	$2,526	$41,134	6
7	Doctor 7	Orthopedic Surgery	1.00	9,200	$62.00	$570,400	$55,000	$625,400	$16,315	$25,000	$41,315	7.00	$2,390	$38,925	7
8	**Total Indicated Value of Trained and Assembled Physician Workforce-in-Place (Rounded)**													**$300,000**	8

N/A = Not Applicable
wRVU = work Relative Value Unit
TTM = Trailing Twelve Months

Notes:

1 Source: Physician CV's received from practice management.
Assumption: The tenure of departed physicians is reflected in the tenure of existing physician workforce in as much as the hire date of current physicians reflects the departure date of prior physicians.

2 Source: Productivity data received from practice management.

3 Survey weighted Compensation per wRVU, representing the most probable compensation rate for each physician based on their specialty.

4 Equals Column D times Column E.

5 Benefits based on benchmark industry amounts.

6 Annual employment cost equals annual salary plus total annual benefits (Column F plus Column G).

7 Estimate of the cost of lost productivity of new hires. See table below.

	A	B	C	D	E	F
		Annual Employment Cost	Efficiency Costs			
			Weeks 1-4	Weeks 5-8	Weeks 9+	Total
a	**Productivity Assumed**		**80%**	**90%**	**100%**	N/A
b	**Weeks Worked per Year Assumption**		**46**	**46**	**46**	N/A
c	**Weeks per Efficiency Period**		**4**	**4**	**4**	N/A
d	Doctor 1	$644,000	$11,200	$5,600	$0	$16,800
e	Doctor 2	$823,800	$14,327	$7,163	$0	$21,490
f	Doctor 3	$693,600	$12,063	$6,031	$0	$18,094
g	Doctor 4	$892,000	$15,513	$7,757	$0	$23,270
h	Doctor 5	$1,053,200	$18,317	$9,158	$0	$27,475
i	Doctor 6	$715,300	$12,440	$6,220	$0	$18,660
j	Doctor 7	$625,400	$10,877	$5,438	$0	$16,315

Productivity was assumed to equal 80%, 90%, and 100% in weeks 1-4, 5-8 and 9+ of employment, respectively. Assumes 46 weeks worked per year.

8 Cost to Recruit Physicians ($25,000) is based upon independent research, and includes such costs as: (1) Staff time and/or recruiter fees; (2) Interviewing candidates; (3) Relocation allowance; and, (4) Post-hire Marketing.

9 Total cost per FTE (Column I plus Column J).

10 Represents the tenure of each employee. Calculated as the difference between the VALUATION DATE, i.e., and the reported date of hire.

11 Based upon average tenure (average of reported tenures in Column L), as of the VALUATION DATE, of approximately 17.29 years, which equates to an average turnover rate of approximately 5.78% (1.0 ÷ 17.29). Accordingly, Turnover Difficiency Cost (Column M), on average, equals Total Cost per FTE (Column K) multiplied by 5.78%."

12 Equals Column K minus Column M.

equivalent utility to the subject intangible asset should be quantified. Note that, *cost approach*–based methods to value specific assets (which differ from the *asset approach*–based methods utilized to value business enterprises) are based on the economic principle of substitution, which states that the cost of an *equally desirable substitute* (or one of equivalent utility) tends to set the ceiling of value for a given asset or property.

As explained by Reilly, when performing a *cost approach*–based method to value intangible assets, the determination of "*costs*" to be included should consider the following four components of cost:

"1. ***direct costs*** *(e.g., materials and supplies);*
2. ***indirect costs*** *(e.g., engineering and design expenses, legal fees);*
3. *the intangible asset* ***developer's profit*** *(e.g., a profit margin percent applied to the direct cost and indirect cost investment); and*
4. *an* ***opportunity cost/entrepreneurial incentive*** *(e.g., a measure of lost income opportunity cost during the development period."*[17] [Emphasis added.]

In addition, as specified by Reilly, the new cost, however determined, should take into consideration any requisite adjustments based on:

(1) ***physical deterioration:*** *"reduction in value due to physical wear and tear";*[18]
(2) ***functional obsolescence:*** *"reduction in value due to the inability of the intangible asset to perform the function (or yield the periodic utility) for which it was originally designed";*[19] and,
(3) ***external obsolescence:*** *"a reduction in value due to the effects, events, or conditions that are external to—and not controlled by—the current use or condition of the intangible asset."*[20]

In general, when valuing TAWF, these costs would include those incurred to *hire* and *train* a replacement workforce, as well as the opportunity cost of having less productive staff during the replacement period. Table 1

[17]Robert F. Reilly, "Cost Approach of Health Care Entity Intangible Asset Valuation," *Journal of Health Care Finance* 39(Winter 2012):11.

[18]Robert F. Reilly, "Cost Approach of Health Care Entity Intangible Asset Valuation," *Journal of Health Care Finance* 39(Winter 2012):12.

[19]Robert F. Reilly, "Cost Approach of Health Care Entity Intangible Asset Valuation," *Journal of Health Care Finance* 39(Winter 2012):12.

[20]Robert F. Reilly, "Cost Approach of Health Care Entity Intangible Asset Valuation," *Journal of Health Care Finance* 39(Winter 2012):12.

illustrates the use of the *cost approach*–based *replacement cost method* to value TAWF.

As set forth in Table 1, the first cost to consider in valuing TAWF using the *replacement cost method* is that of *efficiency costs*, which represent the difference in value derived from variances in productivity between a *trained* staff and the equivalent *replacement* staff. The calculation of *efficiency costs* begins with an *industry indicated salary* for each physician based upon the level of productivity of each physician and the FMV compensation rate for their services, which is determined by utilizing normative industry benchmark survey data for the specialty of the physician in the market service area under consideration. Estimated FMV *total annual benefits* are then added to *industry indicated salary* to determine *annual employment cost*. *Annual employment cost* is then utilized to calculate projected *efficiency costs*, based on the estimated amount of time it would take the replacement workforce to produce output at a similar level as the subject workforce. *Efficiency costs* can be developed from applicable market evidence regarding the timing and amount of productivity for newly hired physicians, and they should reflect the projected efficiency during the specified ramp-up period, e.g., 80% of full productivity during the first four weeks of employment, 90% in weeks five to eight of employment, and full productivity (100%) thereafter.[21]

The next costs to consider when appraising TAWF using the *replacement cost method* are *recruiting costs*, which can be reflected in either: (a) the cost incurred by the subject enterprise to internally recruit and hire the workforce; or (b) the cost incurred by the subject enterprise to outsource the recruiting and hiring functions. In the event that the *recruiting costs* included in the *replacement cost method* are those that are incurred directly through the internal recruiting and hiring by the subject enterprise, the addition of an appropriate rate of return on the cost of those activities, similar to the profit margin required by a third-party staffing company, may be appropriate. However, should the *recruiting costs* be developed based on market research of the costs charged by third-party staffing companies, it may be assumed that the required profit margin of the staffing company is fully represented in the stated price for their services.

These *recruiting costs* are then added to *efficiency costs* to determine the *total cost per employee*. *Total cost per employee* should be adjusted for the anticipated level of employee turnover, similar to the *physical deterioration* of a tangible asset. The proximity to actual physician age(s) to expected work life age, as well as disability, may also be considered, depending on the facts and circumstances of the engagement. The *total cost per employee* should also be adjusted to reflect any anticipated *functional obsolescence and/or economic obsolescence* (if they exist). In the case of a TAWF, *functional obsolescence* refers to the decrease in value of the *task, duties, accountabilities, and responsibilities* (TDRAs) provided by the TAWF, e.g., requisite skill sets change over time and may require additional future training, and/or due to technological advancements in the future, less skilled staff may be able to be replaced with higher skilled staff that have a similar cost to the subject enterprise. *Economic obsolescence* related to a TAWF refers to events or circumstances not particular to the TAWF that cause a decrease in its value, e.g., an economic recession that causes the value of all assets to decrease.

The concept of *economic obsolescence* should be considered under the notion of *highest and best use* for the asset. Accordingly, even though the existing owner of the TAWF has not been able to generate sufficient net cash flows from the asset, this does not mean that other potential users of the asset would not be able to derive net economic benefit from ownership of the asset. In the example of the valuation of TAWF in this section, no additional economic obsolescence was applied to the TAWF, since the avoidance of cost serves as an economic benefit[22] that a potential purchaser would be willing to acquire, even in the case that there were insufficient financial/monetary benefits to support the value of the business under the premise of *value in use, as a going concern*, giving rise to the premise of *value in exchange* (see following for further discussion of the value of TAWF in bankruptcy court settings).

In addition, due to the impracticality of forecasting the timing and effect of *technological advancement* on the functionality of a workforce, it can be assumed that the historical workforce turnover yields some indication as to the amount of *functional obsolescence* experienced by the workforce in the past, as over a period of time the historical turnover rate reflects, in part, the filtering out of staff inefficiencies experienced through lack of functionality. Therefore, this historical turnover rate may provide an indication of the future amount of *functional obsolescence*, as well as any future physical deterioration, inherent in the existing TAWF.

[21]Note that this is an illustrative example only, and any actual analysis should be based upon industry surveys, as well as the responses to management interviews.

[22]As previously discussed, revenue increases and cost decreases both provide an economic benefit to an enterprise.

The turnover adjustment may be referred to as the *turnover deficiency cost per employee*, and it can be estimated by analyzing the historical turnover rate for the existing workforce, where the turnover rate is calculated as the reciprocal of the *average tenure* of the workforce in place. The *turnover deficiency cost per employee* is subtracted from *total cost per employee* to determine the *net cost per employee*, and the *net cost per employee* for each staff person is then summed together to determine the total expected cost to replace the TAWF.

It should be noted that valuation due diligence may reveal that the healthcare enterprise has too few or too many full-time employees (FTEs) performing a particular position. In the case that the enterprise is determined to have too many FTEs, the value of the TAWF could be adjusted to deduct FTEs that produce *duplicative* tasks, duties, responsibilities, and accountabilities deemed to be unnecessary. However, in the event that the enterprise is determined to have too few FTEs, and based on the premise that the avoidance of a cost to a potential purchaser serves as the basis of economic benefit derived from TAWF, no adjustment would be made since a potential purchaser would have to incur the costs of assemblage and training the requisite staff.

While the terminology/nomenclature discussed in the Reilly article may appear to vary from the *replacement cost methodology* described above, it is in fact parallel; e.g.,

(1) The *developer's profit*, described in the Reilly article as *"…a percentage rate of return (or profit margin) on the developer's investment in material, labor, and overhead costs,"*[23] is included in the methodology described above through inclusion in the market-derived *recruiting costs*, which are based on the fees charged by third-party recruiters, and are assumed to include the required profit margin for their services.

(2) The *entrepreneurial incentive*, described in the Reilly article as *"…[t]he lost income concept… considered in the context of a 'make versus buy' decision,"*[24] is included in the methodology described above through inclusion in the ramp-up portion of the *efficiency costs*, which reflect the lost productivity due to replacement of the workforce during the estimated ramp-up period.

(3) The *physical deterioration*, described in the Reilly article as *"…the [amount of the] intangible asset [that] can be 'used up' over time,"*[25] is accounted for in the methodology described above by only including personnel who are expected to be part of the TAWF going forward; e.g., currently employed physicians who are not becoming employees of the purchasing organization are to be excluded from the TAWF.

(4) The *functional obsolescence*, described in the Reilly article as *"…inefficiencies associated with the asset operation,"*[26] is accounted for in the methodology described above through the *turnover deficiency cost per employee*, which reflects the expected turnover in the workforce derived from the historical turnover rate that is assumed to be, in part, related to the filtering out of inefficient or nonfunctional staff.

(5) The *economic obsolescence*, described in the Reilly article as *"…the inability of the intangible asset to generate a fair rate of return on its value indication [, which] …is often analyzed with respect to the ability of the owner/operator to earn a fair rate of return on investment (ROI),"*[27] was taken into consideration for the methodology described above, but it was deemed to be nonapplicable, since the inability of the current owner of the TAWF to generate a sufficient financial return from operations is addressed in the concept that even in the absence of a financial return, the TAWF still provides an *economic benefit* in the form of *avoidance of cost* to willing purchasers.

It is commonly understood that all value arises from the expectation of future economic benefit, often referred to as *expected utility*.[28] Utility[29] may arise intrinsically from ownership or control of an asset, or it may be generated from the exchange of an *intermediary asset* for one that consequently provides the owner with a *margin of utility*. Regardless of the ultimate source of utility for a subject asset, the foundation of the value of the subject asset is the *aggregate utility*, appropriately discounted to reflect the delay in the realization of the expected utility

[23]Robert F. Reilly, "Cost Approach of Health Care Entity Intangible Asset Valuation," *Journal of Health Care Finance* 39(Winter 2012):12.
[24]Robert F. Reilly, "Cost Approach of Health Care Entity Intangible Asset Valuation," *Journal of Health Care Finance* 39(Winter 2012):12.
[25]Robert F. Reilly, "Cost Approach of Health Care Entity Intangible Asset Valuation," *Journal of Health Care Finance* 39(Winter 2012):16.
[26]Robert F. Reilly, "Cost Approach of Health Care Entity Intangible Asset Valuation," *Journal of Health Care Finance* 39(Winter 2012):17.
[27]Robert F. Reilly, "Cost Approach of Health Care Entity Intangible Asset Valuation," *Journal of Health Care Finance* 39(Winter 2012):13.
[28]Robert James Cimasi, *Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services*, Volume II (Hoboken, NJ: John Wiley & Sons, 2014), 12.
[29]"Utility" defined by Bentham in: Jeremy Bentham, *Introduction to the Principles of Morals and Legislation* (Oxford, Clarendon Press, 1907) chap. I.4.

and the risk associated with actually achieving the anticipated level of utility. It should be noted that the term *utility* is used here in a comprehensive sense, encompassing both monetary and nonmonetary gains. Further, utility should be considered as a *net* figure; i.e., utility can be measured as the difference between the economic benefit accruing to the owner of a subject asset *less* the economic cost, both up-front and ongoing, incurred by the owner of the subject asset, as set forth in Eq. (1):

$$\text{Expected Utility} = \text{Expected Economic Benefits} - \text{Expected Economic Costs} \quad (1)$$

In a similar manner, *changes in value* must also be founded upon *changes in the expectation of utility* to be derived from the ownership of the asset. All things being equal, increases in expected utility should reflect proportional increases in value, though not necessarily on a one for one basis. Likewise, all things being equal, decreases in expected utility should be reflected in a proportional decrease in value. Therefore:

$$\Delta\text{Expected Utility} = \Delta\text{Value} \quad (2)$$

and

$$\Delta\text{Expected Utility} = \Delta\text{Expected Economic Benefits} - \Delta\text{Expected Economic Costs} \quad (3)$$

From Eq. (3), it is apparent that should the *expected economic costs* be held constant while simultaneously increasing the *expected economic benefit*, then the change in *expected utility* would be positive, and, thereby, the change in value would also be positive. Likewise, if instead, the expected *economic benefits* were held constant, and the expected *economic costs* were decreased, then the change in *expected utility* would also be positive, and the resulting change in value would also be positive. The conclusion that can be drawn from this exercise is that from a value perspective, the impact of a decrement to an economic cost is equivalent to an increase in economic benefit, which is contrary to the belief espoused by some authors on the topic who question whether the mitigation of a loss is truly a benefit to a purchaser.[30]

In fact, commonly utilized valuation methodologies are premised upon this very concept. For example, patent valuators often utilize the *relief from royalty method* to determine the value of a particular patent for transactional purposes. The *relief from royalty method* is based on the premise that the owner of the subject intellectual property interest would have to pay a third party a royalty fee to license the intellectual property interest in the event that they did not own the rights to the subject intellectual property interest.[31] Therefore, by having ownership of the rights to the subject intellectual property interest, the subject enterprise may avoid a cost in that it is "*relieved*" of the royalty payments they would incur from licensing the intellectual property interest from another party. This reduction in expense serves as a decrement to the economic costs incurred by the owner of the subject intellectual property and, as discussed above, an increase in the expected utility to be derived from the ownership of the subject intellectual property, which results in an increase in value for the acquiring enterprise.

A second example would be illustrated by the value impact of the *tax shield benefits of debt*. Federal tax regulations allow for the deductibility of qualified periodic interest payments by enterprises from their tax bill. This favorable tax treatment, often referred to as the *tax shield benefit*, is commonly accepted to have value implications for an enterprise.[32] In contrast to equity capital (assuming that the level of debt employed does not cause a rise in the risk-adjusted rate of return for equity capital), the deductibility of the periodic interest payments for debt capital reduces the overall tax expense for the enterprise, thereby increasing the economic cash flow available (in comparison to an increase in equity capital) to equity holders of the subject enterprise. This increase in economic cash flow will be, in the case of a *discount net cash flow* analysis, capitalized into a marginal increase in the value of the enterprise; i.e., the *decrement in economic costs* related to the decrease in the tax expense for the enterprise will, all things being equal, lead to an increase in the value of the enterprise. (We note that agency costs, asymmetric information, and costs of financial distress may cause the required return on equity to increase beyond the benefit of the tax shield with certain amounts of leverage.[33]) Alternatively, the use of a *tax adjusted cost of debt* will similarly recognize the value implications of the *decrement to economic costs* encompassed in the *tax shield benefit*.

[30]Another author states, *"In the purchase of physician practices, what other benefit would the potential buyer receive besides cash flow?"... "Is the mitigation of a loss truly a benefit to a buyer? Only if the buyer would otherwise incur the loss for another reason that benefits the buyer."* See Curtis Bernstein, "Inclusion of Intangible Assets in the Cost Approach for Physician Practices," *The Value Examiner* (January/February 2012):10–11.

[31]Robert Reilly and Robert Schweihs, *Guide to Intangible Asset Valuation* (New York, NY: American Institute of Certified Public Accountants, 2013), 310–311.

[32]Robert James Cimasi, *Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services,* Volume II (Hoboken, NJ: John Wiley & Sons, 2014), 463–465.

[33]CFA Institute, "Chapter 5: Capital Structure Presentation." In *Corporate Finance: A Practical Approach Lecture Kit* (CFA Institute, 2013).

As can be seen from Equations (1), (2), and (3), as well as the examples discussed above, from a value perspective a reduction in economic costs is *equivalent* to an increase in economic benefit. Consequently, the value determination derived from a subject asset's ability to reduce an economic cost is, by the equivalence shown above, just as valid as a subject enterprise that produces a positive increase in net economic benefit.

Monetary and nonmonetary economic benefit

It should be noted that, *economic benefit* can be derived from both *monetary* and *non-monetary* sources. As discussed above, the ultimate source of value is the expected *utility* to be derived from the ownership of a property interest. Financial remuneration, in fact, is an intermediary economic benefit, the value of which emanates from its exchange for an asset that directly provides utility, and likely provides little monetary economic benefit. For this reason, the lack of anticipated *monetary* cash flows from an asset does not preclude the assignment of value to an asset. A rational economic actor may well be willing to convert a portion of their monetary wealth into the anticipated *nonmonetary* utility to be derived from ownership or control of an asset.

For example, consider the conversion of *monetary wealth* into anticipated *nonmonetary* utility by charitable organizations such as a not-for-profit hospital. A tax exempt 501(c)(3) organization must be *"…organized and operated exclusively for an exempt purpose…"*[34] *such as a "charitable, religious, educational, scientific,… [or] public safety…"*[35] objective. The Internal Revenue Service (IRS) further clarified section 501(c)(3) of the Internal Revenue Code (IRC)[36] in Revenue Ruling 69-545, as it relates to healthcare enterprises, stating, *"In the general law of charity, the promotion of health is considered to be a charitable purpose. […] A nonprofit organization whose purpose and activity are providing hospital care is promoting health and may, therefore, qualify as organized and operated in furtherance of a charitable purpose."*[37]

This charitable mission provides the basis for the healthcare enterprises tax-exempt status. Presumably, in lieu of a *financial return benefit*, the tax-exempt organization will, in the service of their stated charitable mission, generate a *social benefit* for the community it serves. For example, a tax-exempt hospital may, in performing its *charitable mission*, provide *indigent care* to the community in which it operates. (Note that, some for-profit healthcare organizations do provide indigent care, but their incentive to provide this care may be different from that of charitable, nonprofit organizations, which by mandate must provide the care.) This provision of *indigent care* may provide the social benefit of improved public health, a benefit which accrues to all members of the community. A further example is that, the *mission* and *objective* of tax-exempt hospitals have grown to include their role as *organizers* and *integrators of care* in a community, whereby they provide a *continuum of care* across a population, which may not necessarily be profitable, but which is nonetheless necessary for the health of the population in that community. Designating an enterprise with tax-exempt status is a method that governments may be willing to utilize in *subsidizing* and *supporting* the generation of this *social benefit*. Another method might be direct transfer payments, which may be equally effective, but which would require the tax collection and wealth distribution costs that are avoided by using the tax-exempt status method.

Additionally, *tax-exempt not-for-profit* entities may also, in the accomplishment of their charitable mission, provide *nonmonetary* benefits to the "*owners/investors*" in the charitable organization, i.e., taxpayers that act as the *charitable benefactors*, in paying higher taxes as a type of subsidy to finance the *tax-exempt* enterprise's operations. As such, it is likely that in furtherance of their *charitable mission*, *tax-exempt not-for-profit* organizations may generate ongoing *financial losses*, which losses may be offset by the *nonmonetary economic benefits* accruing to the community provided by the *tax-exempt not-for-profit* organizations.

These *financial losses* may be the result of the *tax-exempt not-for-profit* organization choosing a patient mix (e.g., providing greater levels of *indigent* and *Medicaid care*) that is less profitable than would be selected in the absence of the *charitable mission*. The *net economic benefit* accruing to those individuals and organizations who underwrite the charitable mission of the *tax-exempt not-for-profit* organization is not measured in *dollars*, but in the *utility* generated by the accomplishment of their *stated charitable mission*. Therefore, the financial reports of that *tax-exempt not-for-profit* organization, as relates to the results of the subject transaction, may fail to capture the entirety of the

[34]Exemption Requirements, Internal Revenue Code Section 501(c)(3) Organizations, accessed at http://www.irs.gov/Charities-&-Non-Profits/Charitable-Organizations/Exemption-Requirements-Section-501(c)(3)-Organizations, August 11, 2015.
[35]Exempt Purposes, Internal Revenue Code Section 501(c)(3), http://www.irs.gov/charities/charitable/article/0,,id=175418,00.html, accessed February 9, 2012.
[36]"Exemption from Tax on Corporations, Certain Trusts, etc." 26 USC, Internal Revenue Code Section 501(c)(3) (Internal Revenue Service [IRS], 1954).
[37]IRS Revenue Ruling 69-545, 1969-2 C.B. 117.

net economic benefit that is generated by the enterprise and may form the basis of value in the absence of positive *monetary* cash flows.

Bankruptcy law recognizes the value of intangible assets

In addition to the financial and economic underpinnings of the foundation of value for a healthcare intangible asset in the absence of positive net economic benefit, the existence of *FMV* attributable to the intangible assets, such as a TAWF, of a "*distressed*" company has been held in well-documented bankruptcy case law. As described by Robert Reilly, CPA, in a 2006 article published in the *American Bankruptcy Institute Journal* titled, "*A Guide to Valuation of the Assembled Workforce Intangible Asset,*" the assembled workforce intangible asset value is dependent upon the "*employer's expectation that experienced employees will report to work tomorrow morning*."[38]

"The employer also expects that these employees: (a) are trained in how to perform their duties and responsibilities; (b) know how to operate any equipment for which they are responsible; (c) are knowledgeable of the goals and protocols of the subject organization; and (d) are experienced working with and communicating with each other."[39] In determining the *FMV* of a debtor company's TAWF, the cost approach is commonly utilized, based on the cost to recruit, hire, and train new employees of comparable experience and expertise to that of the subject workforce.[40]

The bankruptcy courts have repeatedly established that a debtor company's assembled workforce is in fact an asset that is subject to transfer. In *Glosband v. Watts Detective Agency, Inc.*,[41] the court emphasized that while individuals themselves are not property, if an assembled group of employees is transferred, there is a reasonable assumption that at least some of those employees would remain with a new owner for a period, giving them property value within the meaning of the Bankruptcy Act.[42] In explaining its decision, the court reasoned that, "*Certainly the aggregate of a business' employees, even if they be individually not property, is 'property' within the meaning of the Bankruptcy Act.*"[43] The jury could reasonably have found an expectancy that at least some of the employees would stay on for some indefinite time period.

There was testimony in the *Glosband* case, for instance, that most of the Sullivan Company's (debtor company) guards had been with the company for years. Further testimony before the jury indicated that "*some effort had gone into the selection and training of those employees, and most particularly that some of the guards would have been highly sought after because of their security clearances and familiarity with the job requirements of the customers over whose premises they had watched….*"[44]

This reasoning was affirmed in *Robinson v. Watts Detective Agency, Inc.*, whereby the term "*property*" within the Bankruptcy Act was described as generous, including anything of value, not limited to tangible assets.[45] The court noted that the expansive definition has been used to ascribe value to the continuance of a contractual relationship, such as an employment contract.[46]

In contrast to a group of employees being transferred by a debtor company as part of an assembled workforce, the bankruptcy courts have held that in bankruptcy situations where employees are subsequently employed by a purchasing organization, without their *retention* having been a part of the purchasing agreement, it is solely the purchaser's good luck to have offered employment to such valuable individuals.[47] As stated in *Atchison, Topeka & Santa Fe Ry. Co. v. Brown & Bryant, Inc.*, while the employees' experience and client relationships constitute value, the purchaser is not liable to the seller for the value of the TAWF.[48] The court in *Orthotec, LLC v. REO Spineline, LLC* echoed the *Atchison* court, noting that TAWF cannot be viewed as an intangible asset if *employee retention* is not a condition of the buy-out.[49] As regards the *FMV* of TAWF, the hypothetical transaction is assumed to be closed with the typical legal

[38]Robert F. Reilly, CPA, "Value & Cents: A Guide to Valuation of the Assembled Workforce Intangible Asset," *American Bankruptcy Institute Journal* (October 2006):1.
[39]Robert F. Reilly, CPA, "Value & Cents: A Guide to Valuation of the Assembled Workforce Intangible Asset," *American Bankruptcy Institute Journal* (October 2006):40.
[40]Robert F. Reilly, CPA, "Value & Cents: A Guide to Valuation of the Assembled Workforce Intangible Asset," *American Bankruptcy Institute Journal* (October 2006):42–43.
[41]*Glosband v. Watts Detective Agency, Inc.,* 21 B.R. 936 (D.C. Mass. 1981), affirmed by *Robinson v. Watts Detective Agency, Inc.,* 685 F. 2d 728 (1st Cir. 1982).
[42]*Glosband v. Watts Detective Agency, Inc.*, 21 B.R. 963, 971-2 (D.C. Mass. 1981).
[43]*Glosband v. Watts Detective Agency, Inc.*, 21 B.R. 963, 972 (D.C. Mass. 1981).
[44]*Glosband v. Watts Detective Agency, Inc.,* 21 B.R. 963, 971-2 (D.C. Mass. 1981).
[45]*Robinson v. Watts Detective Agency, Inc.,* 685 F. 2d 728 (1st Cir. 1982).
[46]*Robinson v. Watts Detective Agency, Inc.,* 685 F. 2d 728, 734 (1st Cir. 1982).
[47]*Atchison, Topeka & Santa Fe Ry. Co. v. Brown & Bryant, Inc.,* 159 F. 3d 358, 361, 365 (9th Cir. 1997).
[48]*Atchison, Topeka & Santa Fe Ry. Co. v. Brown & Bryant, Inc.,* 159 F. 3d 358, 361, 365 (9th Cir. 1997).
[49]*Orthotec, LLC v. REO Spineline, LLC,* 438 F. Supp. 2d 1122 (C.D. Cal. 2006).

protections in place to safeguard the transfer of ownership of the legal bundle of rights that define and encompass the transacted property interest, which includes the retention aspect of the asset.

In the 2008 bankruptcy case *In Re 3DFX Interactive, Inc*. (3DFX), the court discussed several of the above principles related to the valuation of 3DFX's (the debtor company) TAWF.[50] Significantly, the 3DFX court held that although *generally accepted accounting principles* (GAAP) may be informative to the valuation professional's determination of *FMV*, GAAP "*will not determine what constitutes an asset or the FMV of an asset*" for bankruptcy purposes.[51] In explaining its decision, the 3DFX court referenced the *EBC I, Inc. v. America Online, Inc*. bankruptcy decision, in which "*both parties in a fraudulent conveyance action cited to IRS Revenue Procedure 77-12 to support their arguments about valuing the inventory of a retail business for solvency purposes*" (i.e., was it appropriate to use book value or to make an upward adjustment because the inventory was to be sold at retail?). In dismissing the arguments that Revenue Procedure 77-12 provided and answered, the court found the *"Revenue Procedure, like [GAAP,] to be unhelpful because the tax and accounting implications of how assets are listed on a company's balance sheet often have little to do with what a willing buyer and willing seller would agree is the FMV of those assets."*[52]

While the 3DFX court ultimately held that 3DFX did not transfer its TAWF, the case was fact specific.[53] As stated by the court, "*While hiring former 3DFX engineers was one of nVidia's stated goals, the hiring that took place is simply not equivalent to the security guards continuing to arrive at their assigned workplace on different nights of the week as in* Robinson. *It is, however, in line with the hiring that took place in* Atchison *and* Reo. *The Ninth Circuit authority of engineers nVidia hired was not, by definition, a workforce, and the engineers are not an intangible asset under controlling Ninth Circuit authority.*"[54]

By logical deduction, the value of a particular intangible asset using a *cost-based approach*, such as the TAWF discussed above, in a *forced liquidation* context, e.g., *bankruptcy* (which is one option under the premise of *value in exchange*), in all likelihood, would be less than: (a) the value of that asset *in use, as a going concern;* (b) the *value in exchange, as an* ***orderly disposition of an assemblage of assets in place***; or even (c) the *value in exchange, as an* ***orderly disposition of assets, with no assemblage in place.*** That is, *forced liquidation* is the bottom rung of the value ladder,[55] and as a result, under a *nonliquidation* premise (i.e., value in use), the indicated value arrived at by the valuation analyst should be bounded from below by the value of the asset under a *forced liquidation premise*. If, as we have seen in the cases discussed above, the value assigned by the courts to a subject intangible asset under a *forced liquidation premise* is greater than zero, then, *ipso facto*, the value under a *nonliquidation premise* must also be greater than zero.

Therefore, the valuation question is not *whether* an intangible asset has value in the absence of positive net cash flow to the enterprise in its entirety, but instead it is the *degree* to which value can be assigned to an intangible asset in the absence of positive net cash flows.

Professional Standards and Healthcare Regulations

A less common, but still persistent, issue in recent published works related to the valuation of healthcare intangible assets is founded upon the erroneous conclusion that the use of *cost-based approaches* in the valuation of healthcare intangible assets may run afoul of valuation professional standards as promulgated by the various professional organizations.[56] In addition, a review of healthcare regulatory edicts may also provide some insight for the valuation professional regarding the appropriateness of the use of the *cost-based approaches*

[50]In re *3DFX Interactive, Inc., Debtor, William A. Brandt, JR, Trustee, v. nVidia Corporation, et al.,* "Memorandum Decision After Trial" (Bankr. N.D. Cal. 2008).
[51]Robert F. Reilly, CPA, "Valuation Analyst Guidelines Related to Bankruptcy Expert Reports and Expert Testimony." In *Bankruptcy Valuation Insights* (Willamette Management Associates, www.willamette.com, Spring 2011), 35. In re *3DFX Interactive, Inc., Debtor, William A. Brandt, JR, Trustee, v. nVidia Corporation, et al*., "Memorandum Decision After Trial" (Bankr. N.D. Cal. 2008), 39–40, 41.
[52]In re *3DFX Interactive, Inc., Debtor, William A. Brandt, JR, Trustee, v. nVidia Corporation, et al.,* "Memorandum Decision After Trial" (Bankr. N.D. Cal. 2008), 40 (citing In Re *EBC I, Inc.,* 380 B.R. 348, 357 [Bankr. D. Del. 2008]).
[53]In re *3DFX Interactive, Inc., Debtor, William A. Brandt, JR, Trustee, v. nVidia Corporation, et al.,* "Memorandum Decision After Trial" (Bankr. N.D. Cal. 2008), 72.
[54]In re *3DFX Interactive, Inc., Debtor, William A. Brandt, JR, Trustee, v. nVidia Corporation, et al.,* "Memorandum Decision After Trial" (Bankr. N.D. Cal. 2008), 72.
[55]Robert James Cimasi, "Valuation of Intangible Assets in Exempt Hospital Acquisitions of Physician Practices." In CTI 2012 Annual Consultants Conference, June 20–3, 2012, Dallas, TX, slide 21.
[56]Another author states, *"Under the FMV standard of value, there is no basis for exclusive reliance on the Cost Approach in valuing intangible assets in general and physician workforce in particular when there is no expectation of income from the underlying assets of a going concern."* See Mark Dietrich et al., "Assessing Intangible Value in a Physician Practice Acquisition." In *The BVR/AHLA Guide to Healthcare Valuation*. 3rd ed. Portland, OR: BVR, 2012, chap. 12.

in reaching a determination of value for a specific, discrete healthcare intangible asset.

Professional standards do not preclude the use of cost-based approaches

The *Uniform Standards of Professional Appraisal Practice* (USPAP), as promulgated by *The Appraisal Standards Board* of *The Appraisal Foundation*, is a codification of the standard practices to be utilized within the practice of appraisal and it was created for the purpose of promoting and maintaining a high level of public trust in the appraisal practice by establishing *requirements* for appraisers.[57]

USPAP provides appraisers with guidance in developing and communicating appraisals. Standard nine of USPAP is dedicated to the development of appraisals of business interests and intangible assets. Of particular interest in this case is Standards Rule 9-3, which states:

> *In developing an appraisal of an equity interest in a business enterprise with the ability to cause liquidation, an appraiser* ***must*** *investigate the possibility that the business enterprise may have a* ***higher value by liquidation of all or part of the enterprise than by continued operation as is.***[58] [Emphasis added.]

This point is further elucidated in the comment to Standard 9-3:

> *This Standards Rule* ***requires*** *the appraiser to recognize that the continued operation of a business is not always the* ***best premise of value because liquidation of all or part of the enterprise may result in a higher value.*** [Emphasis added.]

Through this standards rule, USPAP echoes the discussion above regarding the economic imperative of considering the *highest and best use* of the capital invested in a subject enterprise. As was noted previously, the *highest and best use* of the invested capital in a given enterprise may not be in its continued use *as a going concern* but may, in fact, be *in exchange as an orderly disposition of the assets*. USPAP then goes further and *requires* that the valuation analyst consider the *premise of value* that results in the *highest and best use* of the assets comprising the subject enterprise. Accordingly, the use of *cost-based approaches* is not precluded by appraisal standards, and it may even be *required* in the event that the *value in exchange* premise recognizes the highest and best use of the assets comprising the subject enterprise.

Challenges in the healthcare industry regulatory environment preclude the use of income approach–based methods in valuing certain healthcare-related intangible assets

There are two important healthcare fraud and abuse regulatory edicts that constrain what payments may be made to physicians: (a) physician self-referral laws, commonly referred to as the Stark laws (Stark); and (b) the Anti-Kickback Statute (AKS). Generally, Stark prohibits a physician from making a referral of *designated health services* to an entity with which the physician, or the physician's family member, has a financial relationship, and where payment for such a service may be made under Medicare.[59] Importantly, Stark contains no intent requirement,[60] and, as such, any violation of the statute, and subsequent failure to qualify for an exception, will lead to civil liability under Stark (which is in contrast to the AKS, which includes both civil and criminal penalties). Stark incorporates a variety of exceptions for space leases, equipment leases, physician employment, and personal service arrangements, among others, which specify that the payments made under those arrangements may not be **"determined in a manner that takes into account the volume or value of any referrals or other business generated between the parties."**[61] If referrals are made in violation of Stark, each and every payment made must be refunded to Medicare, and the perpetrator(s) may be fined in an amount of up to $15,000.[62] In addition, any physician or entity that enters into a scheme in order to avoid Stark's prohibition against physician referrals may be subject to an additional $100,000 fine for each scheme.[63]

The AKS deems it a felony to solicit, offer, receive, or pay remuneration of any kind for the referral of a patient for healthcare services paid by federal healthcare programs.[64] Moreover, the *Patient Protection and Affordable Care Act* (ACA) has removed the intent requirement of the AKS, so that no actual knowledge of the AKS or specific intent to violate the AKS is necessary for conviction under the AKS.[65] However,

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[57]Preamble to the *2014–2015 Uniform Standards of Professional Appraisal Practice* (Appraisal Standards Board of the Appraisal Foundation), U-5.
[58]Standard 9 of *2014–2015 Uniform Standards of Professional Appraisal Practice* (Appraisal Standards Board of the Appraisal Foundation), U-62.
[59]"Limitation on certain physician referrals," 42 U.S.C. § 1395nn(a)(1).
[60]"Limitation on certain physician referrals," 42 U.S.C. § 1395nn(a)(1).
[61]"Limitation on certain physician referrals," 42 U.S.C. § 1395nn(e)(1)(A)(iv); "Limitation on certain physician referrals," 42 U.S.C. § 1395nn(e)(1)(B)(iv); "Limitation on certain physician referrals," 42 U.S.C. § 1395nn(e)(2)(B)(ii); "Limitation on certain physician referrals," 42 U.S.C. § 1395nn(e)(3)(A)(v); see generally "Exceptions to the referral prohibition related to compensation arrangements," 42 C.F.R. § 411.357.
[62]"Limitation on certain physician referrals," 42 U.S.C. § 1395nn(g).
[63]"Limitation on certain physician referrals," 42 U.S.C. § 1395nn(g).
[64]"Criminal penalties for acts involving federal health care programs," 42 U.S.C. § 1320a-7b.
[65]"Criminal penalties for acts involving federal health care programs," 42 U.S.C. § 1320a-7b(h).

payments by employers to employees do *not* count as remuneration.[66] Further, there are a variety of "*safe harbors*" incorporated into the AKS that prohibit AKS enforcement for a variety of arrangements, including space leases, equipment leases, and personal services contracts, among others.[67] Similar to Stark exceptions, the safe harbors specify that payments made under those certain arrangements may not be **"determined in a manner that takes into account the volume or value of any referrals or other business generated between the parties."**[68]

Finally, the OIG has stated that agreements that pose low risk of fraud and abuse will not be prosecuted under the AKS;[69] however, entities may be well-advised to structure arrangements so as to fit within safe harbors as closely as possible, as violation of the AKS may be punishable by a fine of up to $25,000, and imprisonment for up to five years.[70] Some authors have asserted, without foundation, that paying for intangible assets, specifically TAWF, in the absence of positive net cash flow being generated by the enterprise in its entirety infers payment for referrals,[71,72] which ignores: (a) the fact that individual discrete intangible assets may hold value even in the absence of positive net cash flow being generated by the enterprise in its entirety; and (b) the possibility that there may be economic benefit of avoided costs that potential purchasers obtain by purchasing an assembled, trained workforce that fits into the strategic mission of the purchasing organization.

In *US ex rel. Singh v. Bradford Regional Medical Center*, a case interpreting whether an arrangement takes into account the volume or value of referrals, a medical practice entered into an arrangement under which Bradford Regional Medical Center (BRMC) would sublease a nuclear imaging camera from the practice to perform diagnostic tests.[73] As part of this sublease, the physicians of the medical practice executed a covenant not to compete with BRMC for the provision of such diagnostic tests.[74] BRMC argued that the sublease fit within various exceptions to Stark.[75] BRMC anticipated that, due to the covenant not to compete, the physicians would likely refer diagnostic tests to BRMC.[76] The report of BRMC's accountant, Charles Day, appraised the covenant not to compete by utilizing a *with and without* analysis, whereby Mr. Day created a table to show the expected income BRMC would receive with and without the covenant not to compete in place.[77] The Court stated that this *with and without* analysis showed that determination of the aggregate remuneration paid to the physicians took into account the volume or value of referrals generated by those physicians, and as such, the arrangement would not fit into an Stark exception or AKS safe harbor.[78]

The *Bradford* case is important to valuation professionals due to its holding, which implies that *income approach–based methods* may be subject to significant regulatory vulnerability in certain instances when appraising certain medical practice–related interests, as doing so may raise an inference that the *volume or value of referrals* has been considered in determining remuneration for those interests in the same manner. *Income approach–based methods* should be avoided when appraising intangible assets where they would be interpreted by regulators to take into account the *volume or value of referrals*, e.g., covenants not to compete, patient lists, patient records, and TAWF. By employing *cost-based approaches*, the valuation analyst considers only the *avoidance of economic costs* that the acquirer would otherwise incur to re-create or replace the subject intangible asset and explicitly avoids the consideration of the *volume or value of referrals* that may be generated by the acquiree for the acquirer.

In addition to the fraud and abuse regulations governing the use of the income approach in valuing healthcare-related enterprises, assets, and services, the US Tax Court, through case law, has provided guidance regarding the

[66]"Criminal penalties for acts involving federal health care programs," 42 U.S.C. § 1320a-7b(b)(3)(B).
[67]See generally "Exceptions," 42 C.F.R. § 1001.952.
[68]"Exceptions," 42 C.F.R. § 1001.952(b)(5); "Exceptions," 42 C.F.R. § 1001.952(c)(5); "Exceptions," 42 C.F.R. § 1001.952(d)(5).
[69]"OIG Advisory Opinion No. 12-22" (Office of Inspector General, 1/7/2013), 13–14, accessed at http://oig.hhs.gov/fraud/docs/advisoryopinions/2012/AdvOpn12-22.pdf, August 12, 2014.
[70]"Criminal penalties for acts involving federal health care programs," 42 U.S.C. § 1320a-7b(b)(2).
[71]One author states, *"...the commercial reasonableness requirement under the Stark law that a transaction make sense in the absence of referrals would almost assuredly be violated by paying for physician workforce without such values being adequately supported by cash flows under the Income Approach."* See Mark Dietrich et al., "Assessing Intangible Value in a Physician Practice Acquisition." In *The BVR/AHLA Guide to Healthcare Valuation*. 3rd ed. Portland, OR: BVR, 2012, chap. 12.
[72]Another author states, *"…acquiring a practice, which currently produces no financial benefit in excess of physician compensation, only affords the hypothetical buyer the opportunity to continue to lose money or break even; when ignoring the value and volume of referrals."* See Alex Kajan, CFA, and Curtis Bernstein, CPA/ABV, ASA, CVA, MBA, "Paying for Intangible Assets: Developing a Defensible Acquisition Policy," *Compliance Today* (November 2012):63–66.
[73]*U.S. ex rel. Singh v. Bradford Regional Medical Center,* 752 F.Supp.2d 602, 609 (W.D. Penn. 2010).
[74]*U.S. ex rel. Singh v. Bradford Regional Medical Center,* 752 F.Supp.2d 602, 609 (W.D. Penn. 2010).
[75]*U.S. ex rel. Singh v. Bradford Regional Medical Center, 752* F.Supp.2d 602, 634 (W.D. Penn. 2010).
[76]*U.S. ex rel. Singh v. Bradford Regional Medical Center,* 752 F.Supp.2d 602, 623 (W.D. Penn. 2010).
[77]*U.S. ex rel. Singh v. Bradford Regional Medical Center,* 752 F.Supp.2d 602, 622 (W.D. Penn. 2010).
[78]*U.S. ex rel. Singh v. Bradford Regional Medical Center,* 752 F.Supp.2d 602, 624, 634 (W.D. Penn. 2010).

value of intangible assets. Seminal tax court cases that may provide some guidance in regards to the valuation of healthcare-related intangible assets include: (1) *Caracci v. Commissioner*, and (2) *Derby v. Commissioner*.

In the 2006 case *Caracci v. Commissioner*, the Caracci family (the petitioners) owned three home health tax-exempt entities, named "*Sta-Home*," in Mississippi.[79] In anticipation of the shift in the healthcare reimbursement environment from a periodic interim payment (PIP) system to a prospective payment system (PPS), and amid uncertainty regarding the future capital financing of the entities, the petitioners made the decision to convert the three tax-exempt *Sta-Home* entities to nonexempt S-corporations ("*chosen so that the shareholders could deduct the new entities' future losses*").[80] The Tax Commissioner revoked the tax-exempt status of the three *Sta-Home* entities and imposed income and excise taxes on the petitioners as a result of the transfer.[81] The commissioner's decision was rendered as a result of the petitioners' transfer of tangible and intangible assets "*from the Sta-Home tax-exempt entities to the Sta-Home for-profit entities in exchange for the transferees' assumption of the transferors' liabilities*."[82] The commissioner determined that the *FMV* "*of the transferred [tangible and intangible] assets exceeded the value of the consideration received*," requiring the plaintiffs to pay excise taxes.[83] The petitioners contested the deficiencies and filed suit in the tax court. The initial ruling by the tax court was that the Sta-Home enterprises had substantial intangible asset value, which they derived from the use of market multiples, in contrast to valuing specific tangible and intangible assets. Of note, is that both the petitioner's and the respondent's valuation experts placed value on intangible assets. However, the tax court did not utilize the respondent's expert value, which was derived from an adjusted balance sheet approach that valued each distinct tangible and intangible asset, due to the tax court's belief that the approach did not place enough value on intangible assets.

On appeal, the Fifth Circuit court held that the lower court's determination of value of Sta-Home was invalid since it placed significant value on intangible assets of a business that was unprofitable.[84] Specific intangible assets were determined by the Fifth Circuit ***not*** to have value, including the patient list and Certificate of Need, which were primarily related to unprofitable Medicare patients. However, the Fifth Circuit did note that Sta-Home may have other intangible assets, but that they would not have substantial value, to wit:

> *[e]ven if the Tax Court assigned a significant value to the Sta-Home exempt agencies' other intangible assets, such as its trained workforce (which would need to be paid, representing future liabilities as well as future profits), goodwill, the Tax Court would have had to find these remaining intangible assets were worth approximately $5 million to conclude that the taxpayers realized any net excess benefit from the transaction.…There is no legal or factual basis for assigning a $5 million value to these intangible assets.*[85]

The Fifth Circuit cited to Revenue Ruling 59-60 in regards to whether intangible assets of unprofitable businesses have value.[86] However, the excess earnings method described in the revenue ruling specifically attempts to determine the aggregate cash flow attributable to all intangible assets of the enterprise in its entirety, defined in the ruling as "*goodwill,*" in contrast to the cash flows derived from each distinct intangible asset that may be present in an enterprise.[87] The *Caracci* case demonstrates that while certain intangible assets of a business may be devoid of value in the absence of positive net cash flow to the enterprise in its entirety, other intangible assets may still provide economic benefit to their owner, and thereby have value, even in the absence of positive net cash flow to the enterprise in its entirety. Ultimately, in the case, the Fifth Circuit reversed the tax court's decision and rendered judgment for the petitioners, whose expert valued each distinct tangible and intangible asset, including TAWF.[88]

Some practitioners in the valuation community infer from the *Caracci* case that the value of TAWF should be adjusted for the future liabilities (financial expenses) associated with economic operating expenses that will be incurred by the purchasing organization subsequent to the transaction in relation to compensation for services to be rendered by the newly employed workforce. While this argument may be valid when using an income or market approach, it is not valid when utilizing an asset/cost approach. Also, as set forth in the *Bradford* case, discussed above, the application of an income approach to value certain healthcare intangible assets may not be risk averse from a legal and regulatory perspective.

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[79] *Caracci v. C.I.R.,* 118 T.C. 379, 379–380 (2002).
[80] *Caracci v. C.I.R.,* 118 T.C. 379, 380–381, 404 (2002).
[81] *Caracci v. C.I.R.,* 118 T.C. 379, 379–381 (2002).
[82] *Caracci v. C.I.R.,* 118 T.C. 379, 379–381 (2002).
[83] *Caracci v. C.I.R.,* 118 T.C. 379, 379 (2002).
[84] *"Caracci v. C.I.R.," Federal Reporter,* 3d Series, U.S. Court of Appeals Fifth Circuit 456 (2006), 461.
[85] *"Caracci v. C.I.R.," Federal Reporter,* 3d Series, U.S. Court of Appeals Fifth Circuit 456 (2006), 462.
[86] *"Caracci v. C.I.R.," Federal Reporter,* 3d Series, U.S. Court of Appeals Fifth Circuit 456 (2006), 461.
[87] The ruling states, *"[t]he presence of goodwill and its value, therefore, rests upon the excess of net earnings over and above a fair return on the net tangible assets."* Source: Rev. Rul. 59-60, 1959-1 CB 237, Sec.4.01(f).
[88] *"Caracci v. C.I.R.," Federal Reporter*, 3d Series, U.S. Court of Appeals Fifth Circuit 456 (2006), 462.

In the 2008 case *Derby v. Commissioner*, petitioners, who included physicians in solo and small medical practices, integrated using an *independent practice association* (IPA) model,[89] as well as some who practiced in a medical group, negotiated an affiliation with the Sutter Health organization.[90] As part of the business deal, Sutter Health refused "*to pay anything for the intangible assets, or goodwill, that might be associated with petitioners' medical practices...because Sutter Health's management believed that doing so might constitute a crime under the Medicare and Medicaid antikickback statute....*"[91] The petitioners' attorney advised the physicians to "*structure the transfers of the intangibles* [of their practices] *as donations,*" because other medical practices had successfully done this previously.[92] The commissioner ruled that the charitable deductions that each physician petitioner claimed on their 1994 income tax returns for the transfer of their medical practices' intangible assets ("*which consisted essentially of goodwill or going concern value*")[93] to Sutter Health's subsidiary, Sutter Medical Foundation,[94] were not allowable.[95] The petitioners contested the commissioner's decision and filed suit in the tax court.

The commissioner argued that the physicians could not show that the transferred assets, "*including any intangible assets of their medical practices, exceeded the values of the consideration each received in exchange*."[96] Notably, the court stated that the compensation the physicians received for their professional clinical services was above normative industry benchmark survey data.[97] Further, the court recognized that the physicians received numerous nonfinancial benefits in the transaction.[98] Ultimately, the court stated that the additional consideration the physicians received for their clinical services and the nonfinancial benefits they received from entering into the transaction were together worth more than the value of the assets they transferred to the acquirer, stating that the physician petitioners' "*charitable contributions*" were in fact not charitable because they "*received a commensurate quid pro quo*."[99]

Several recently published items have generated significant debate in the valuation community surrounding the court's holdings in the Derby case[100] related to the issue that while the medical practices may have had intangible asset value, the consideration the sellers of the medical practices received for their services, and nonfinancial benefits provided to them, were, in essence, payment received "*commensurate quid pro quo*" for the assets transferred. The *legal permissibility* of paying for assets through "*enhanced*" services compensation is certainly questionable, and *risk averse* valuation analysts are advised to separately *identify* and separately *appraise* the amounts paid for services from any amounts paid for assets, tangible or intangible, in order to determine whether the consideration paid for each property interest does not exceed the threshold of *FMV* or commercial reasonableness. This would include consideration for (as cited in Derby), "*…the various contractual rights and other intangible benefits that petitioners…sought and obtained…such as avoiding signing noncompete agreements and obtaining preferred working conditions*."[101] Also, calculating compensation for physician services should include *"…(1) contributions to retirement plans; (2) payment of automobile expenses; (3) compensation for continuing medical education, (4) reimbursement for business-related travel and entertainment; and (5) payment of malpractice insurance coverage,"* including *nose coverage*.[102] Legal counsel should also be consulted to determine if the structure of the transaction meets the numerous and complex legal and regulatory requirements in the healthcare industry.

With careful adherence to the above considerations, nothing in the Derby case precludes a valid finding of

[89]*Derby et al., v. Commissioner,* T.C. Memo. 2008-45, United States Tax Court (2008), 10.
[90]*Derby et al., v. Commissioner,* T.C. Memo. 2008-45, United States Tax Court (2008), 10–11.
[91]*Derby et al., v. Commissioner,* T.C. Memo. 2008-45, United States Tax Court (2008), 15–16.
[92]*Derby et al., v. Commissioner,* T.C. Memo. 2008-45, United States Tax Court (2008), 17–18.
[93]*Derby et al., v. Commissioner,* T.C. Memo. 2008-45, United States Tax Court (2008), 48.
[94]Sutter Medical Foundation was Sutter Health's tax-exempt subsidiary organization, which managed the group medical practices affiliated with the Sutter hospitals. *Derby et al., v. Commissioner,* T.C. Memo. 2008-45, United States Tax Court (2008), 17.
[95]*Derby et al., v. Commissioner,* T.C. Memo. 2008-45, United States Tax Court (2008), 38.
[96]*Derby et al., v. Commissioner,* T.C. Memo. 2008-45, United States Tax Court (2008), 38.
[97]*Derby et al., v. Commissioner,* T.C. Memo. 2008-45, United States Tax Court (2008), 37.
[98]These nonfinancial benefits included the right to participate in the management of the foundation; more autonomy; and a provision in their agreements that allowed the physicians to take his or her patients with him or her upon a termination of employment with the foundation. See *Derby et al., v.* Commissioner, T.C. Memo. 2008-45, United States Tax Court (2008), 57.
[99]*Derby et al., v. Commissioner,* T.C. Memo. 2008-45, United States Tax Court (2008), 72.
[100]Mark O. Dietrich, CPA/ABV and Todd Sorensen, AVA, "Fair Market Value Requires the Demonstration of Income to a Hypothetical Owner." In *The AHLA/BVR Guide to Healthcare Valuation*. (2010). 340.
[101]*Derby et al., v. Commissioner,* T.C. Memo. 2008-45, United States Tax Court (2008), 56.
[102]Robert James Cimasi, *Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services,* Volume II (Hoboken, NJ: John Wiley & Sons, 2014), 912. *Nose coverage* is the *"[p]rofessional liability insurance coverage related to future services rendered after employment has terminated, or covering prior acts, respectively*." See Robert James Cimasi, *Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services,* Volume II (Hoboken, NJ: John Wiley & Sons, 2014), 913.

FMV of intangible assets if they are appropriately appraised utilizing a methodology: (a) that does not take into account the volume or value of referrals; (b) that does not surreptitiously purchase one property interest through the payment of another, e.g., enhanced physician compensation as payment for intangible assets; and (c) that reflects the economic *FMV* of each distinct property interest.

Some authors have suggested that when utilizing an *income approach–based method*, the Derby case indicates that increased *posttransaction compensation* should be utilized in the cash flow projections,[103] and that use of this amount may somehow limit the value of all intangible assets of the enterprise.[104] As set forth above in our discussion regarding *contributory cash flows*, the aggregate cash flows to the enterprise in its entirety are composed of the *contributory cash flows* of each individual asset (both tangible and intangible) of the organization. To presume that negative *aggregate* cash flows of the enterprise in its entirety somehow diminish the value of every asset of the organization is not supported by sound business valuation theory.

Business valuation theory holds that, when using an income approach to value an enterprise under the premise of value in use as a going-concern enterprise, the owner compensation should be adjusted to reflect *reasonable* compensation levels for the tasks, duties, responsibilities, and accountabilities (TDRAs) contributed to the business by the owner. For medical practices, this *FMV* compensation amount may be above the historical compensation distributed by the practice to the owner physicians. In fact, it quite often is, due to various factors that may have limited the amount of economic benefit derived from the assets of the practice by the existing owners, "*including but not necessarily limited to: (1) the respective marketing leverage and contract negotiating ability of the practice to achieve favorable reimbursement yields and the revenue therefrom; (2) the practice's operating expense structure as regards its ability to achieve favorable supply-side pricing and labor costs; and (3) reasonable access to financing from capital markets at favorable terms.*[105]

Also, the level of compensation distributed by the practice to the owner physicians may be below normative benchmark industry amounts due to the level of intrinsic value the selling physicians have derived from maintaining their autonomy in private practice (which intrinsic value of autonomy they heretofore implicitly accepted in lieu of the extrinsic value of higher compensation).

According to the theory of *utility maximization*, *rational market participants* tend to make decisions in order to maximize their own expected personal utility,[106] with further assumptions pertaining to each participant's decision-making criterion, to wit:

(1) *perfect rationality* (e.g., in that they prefer more benefit to less);[107]
(2) *perfect self-interest* (i.e., the decisions people make are based solely on the consequences to themselves);[108] and
(3) *perfect information* (i.e., an equivalency of knowledge between the parties of all information pertinent to the transaction—a key criterion in definition of *FMV*).[109]

This concept of *utility maximization* was described by Jeremy Bentham (regarded as the founder of modern utilitarianism) as being based on the premise that utility derived from an object is its ability to:

> *…produce benefit, advantage, pleasure, good, or happiness or prevent the happening of mischief, pain, evil, or unhappiness to the party whose interest is considered.*[110]

Based on this concept of *utility maximization*, it is rational to assume that physicians who accept compensation levels above the amount they were able to generate from their own practice would do so in pursuing the level of remuneration that maximizes their individual *compensation*, *wealth*, or *other measure of utility*. Additionally, those physicians receiving compensation for their services at rates (e.g., $ per work relative value unit [RVU]) above the most probable price (as set forth by the point of central tendency of the normative industry benchmark survey data) would also be acting in their own rational economic self-interest by not pursuing a transaction where they would be paid less

[103]This author agrees that posttransaction compensation that is at FMV should be utilized.
[104]See Mark Dietrich et al., "Assessing Intangible Value in a Physician Practice Acquisition." White Paper, February 2011.
[105]Robert James Cimasi, *Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services,* Volume II (Hoboken, NJ: John Wiley & Sons, 2014), 885–886.
[106]William Jevons, *The Theory of Political Economy*. 3rd ed. (original work published London: Macmillan and Co., 1888; electronic version from Library of Economics and Liberty utilized, accessed at http://www.econlib.org/library/YPDBooks/Jevons/jvnPE3.html#Chapter3, September 13, 2012), chap. 3, p. 2.
[107]John Stuart Mill, *Essays on Some Unsettled Questions of Political Economy* (London: Library of Economics and Liberty, 1874; electronic version accessed at http://www.econlib.org/library/Mill/mlUQP5.html, December 18, 2014).
[108]Jeremy Bentham, *Introduction to the Principles of Morals and Legislation* (Oxford: Clarendon Press, 1907), chap. I.4.
[109]William Jevons, *The Theory of Political Economy*, 3rd ed. (original work published by Macmillan and Co., London, 1888, electronic version from Library of Economics and Liberty utilized), accessed at http://www.econlib.org/library/YPDBooks/Jevons/jvnPE4.html#Chapter 4, August 14, 2015.
[110]Jeremy Bentham, *Introduction to the Principles of Morals and Legislation* (Oxford: Clarendon Press, 1907), chap. I.4.

for their services than what they were able to generate from their private practice.[111]

In addition, the more value a physician expects may be derived from the intrinsic and extrinsic utility that would be expected to result from their autonomy, the higher the price they would demand to receive in order for them to give up that autonomy, or in other words, the less willing they would be to become direct employees (in contrast to operating as a private practice). As negative economic forces continue to affect solo practitioners and physicians in small group practices, e.g., decreased reimbursement rates and increased regulatory scrutiny regarding their ownership in higher margin ancillary services, it appears that a *tipping point* may have been reached and that autonomy is increasingly being given up for the relative certainty and comfort that employment may bring.[112]

As previously discussed in the section on *Highest and Best Use of the Invested Capital,* in those instances when using an income approach to value a healthcare enterprise, and the adjustment made to reflect the *FMV* compensation for the services to be provided by the sellers posttransaction reduces the cash flow of the enterprise in its entirety to a level that is *insufficient* to support the invested capital of the business, the resulting highest and best use of the assets may not be as *FMV*, in use as a going concern. However, the practice may still have distinct intangible assets that provide economic benefit to their owner, and therefore have economic value, which can be ascertained through use of an asset/cost approach, under the premise of: (a) the *value in exchange as an* ***orderly disposition of an assemblage of assets in place***; (b) *the value in exchange as an* ***orderly disposition of assets, with no assemblage in place***; or (c) *forced liquidation*.

Conclusion

In summary, the valuation of healthcare intangible assets in the absence of positive net cash flows, and the utilization of an asset approach–based cost method under the *FMV-in-exchange* premise to determine the value of those intangible assets: [113]

(1) is ***not*** a violation of professional standards;
(2) is ***not*** legally impermissible under the Anti-Kickback Statute, Stark Law, or other regulatory edicts; and
(3) ***is*** substantially supported in the canon of *professional valuation literature,* related *case law*, and applicable *regulatory pronouncements.*

Valuation professionals in their work product, presentations, and authored materials need to renew their efforts to understand and abide by the underlying economic concepts of valuation, even while being prudently aware of the added concerns arising from the unique restrictions of the healthcare regulatory environment. Special care and due diligence must be applied when asserting that certain valuation approaches, methods, and techniques are somehow *inherently legally impermissible,* or *do not meet professional valuation standards*, as these types of conclusory assertions may, regrettably, reverberate not only throughout the valuation community, but also throughout the healthcare provider, health law, and healthcare regulatory communities, raising undue concerns, notwithstanding that such assertions are not valid or efficacious. In fact, significant damage may be done to the valuation profession, as well as the healthcare providers who rely on valuation professionals, from the publication of imprudent assertions based on misconstrued case law and misunderstood concepts. This is especially so, in light of the current period of reform in the volatile and evolving transactional arena, and the intensity and uncertainty of the regulatory scrutiny on the underlying transactions for which the valuations are prepared.

To address these important issues, the American Society of Appraisers Healthcare Special Interest Group (ASA HSIG) has developed an advanced "*Certificate of Completion Program*" designed to meet the need for a comprehensive, multidisciplinary framework for analyzing healthcare enterprises, assets, and services, within the context of the four pillars of the healthcare industry, i.e., regulatory, reimbursement, competition, and technology. The "*Certificate of Completion Program*" consists of four (4) distinct two-hour webinar course sessions, and one (1) in-person course session, with five (5) learning modules, and it takes place over two (2) days, featuring renowned healthcare attorneys and healthcare industry experts as faculty.

Professionals seeking more information regarding the "*Certificate of Completion*" of the ASA HSIG Program can contact ASA by telephone at 800-ASA-VALU, or by visiting their website at: http://www.appraisers.org/Education/healthcare-valuation-program.

[111]Robert James Cimasi, Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services, Volume II (Hoboken, NJ: John Wiley & Sons, 2014), 883–884.
[112]Robert James Cimasi, Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services, Volume II (Hoboken, NJ: John Wiley & Sons, 2014), 884–888.
[113]Robert James Cimasi, "Valuation of Intangible Assets in Exempt Hospital Acquisitions of Physician Practices." In CTI 2012 Annual Consultants Conference, June 20–23, 2012, Dallas, TX, slide 67.