

Healthcare Market Structure and Its Implication for Valuation of Privately Held Provider Entities: An Empirical Analysis

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Introduction

The explosion in healthcare transactions after a ten-year hiatus has created a booming market for appraisal and valuation services. One of the peculiar aspects of the healthcare industry is that many if not most transactions must be supported by an independent appraisal due to governmental regulatory concerns. As such, failure of appraisers or valuation analysts to understand healthcare markets and government regulations can lead to transactions taking place at prices inconsistent with both economic reality and regulatory parameters. These transactions can then find their way into databases relied upon by other appraisers, resulting in further transactions based upon suspect opinions of value.

The degree of revenue and profit for healthcare provider entities varies significantly from state to state and even within different regions of individual states. As a threshold matter, areas with high healthcare spending and, in particular, high Medicare¹ spending tend to offer the greatest opportunity for profit. The elderly, of course, receive the bulk of medical care. Given that high localized spending is the primary driver of profit, what other factors contribute to the pattern of location of larger for-profit providers?

- The presence and market strength of Blue Cross plans,
- The degree of market strength of local nonprofit hospitals versus for-profit hospitals,
- The degree of market strength of local nonprofit health insurers versus for-profit health insurers,
- Certificate of Need laws, and
- Other local demographic and economic factors.

As discussed later with respect to Blue Cross plans and nonprofit hospitals, these primary indicators reflect prevailing attitudes in different areas of the nation about the appropriateness of “profit” motivation in the provision of healthcare. In turn, the presence or lack thereof of these larger for-profit providers and insurers has a substantial impact on the acquisition/sales value of provider entities. This impact can be traced to at least two specific factors: the likelihood that for-profit entities will be

acquirers of providers in a given area and the revenue and profit growth potential inherent in such acquisitions.

Growth potential in the form of acquisition growth is typically only available to publicly traded companies whose stock prices are in large part driven by expected growth rates. High growth rates typically result in high valuation multiples due to low capitalization rates. Economies of scale from acquisitions that affect future “same store” profit growth also contribute to localized valuation differences. As such, all things being equal, a growth-driven public company is able to pay a higher value for a given business because the stock market rewards growth.²

The Stark laws contain restrictions on the use of “comparable” market data, much of which is pegged to local market conditions. As far back as 1994, published statements of the Internal Revenue Service focused on local factors that determined the character of a market. The factors discussed in this paper suggest that the government agencies’ views of “fair market value” should be seriously considered by appraisers and analysts in their own opinions of fair market value.

This study offers appraisers and valuation analysts a foundation for comparing market conditions in different areas of the country. In turn, it provides a basis for determining whether market data in the form of merged and acquired companies or guideline companies are comparable to a given subject company that is being valued.

Data Sources and Impact on Analysis

Sources of data utilized in this study include that maintained by The Kaiser Family Foundation (KFF). KFF maintains data on the breakdown of for-profit and not-for-profit hospitals for each of the fifty states along with Medicare and Medicaid enrollment, spending, length of stay, and other detailed statistical data, some of which is described and utilized in this article. Detail of the market share of each state’s HMO and PPO enrollment is available from each state’s division or department of insurance or, for example, from Lehman Brothers’ *Managed Care Guidebook*.³ States often will provide detail at the county level as well. Data on local Medicare spending from the Centers for Medicare and

¹Medicare is a federal program primarily for the elderly and is distinct from Medicaid, a state-determined program for the poor that is funded 50% by federal funds and 50% by state funds.

²See “Understanding the Difference between Strategic Value and Fair Market Value in Consolidating Industries,” *Business Valuation Review*, June 2002, by the author.

³Used in this study’s market analysis.

Medicaid (CMS) was also utilized along with information taken directly from the SEC filings of the public companies discussed.

Local market conditions can lead to dramatic differences in provider revenue, profitability, and related acquisition demand. This affects both the relevance of transaction data in determining fair market value as well as the perceived risk of provider entities in a given market area, which in turn affect the discount rate and value determined under the income approach.

As will be seen from the analysis, for-profit public companies engaged in the healthcare industry tend to concentrate their activities in certain states, notably Texas and Florida, which have specific characteristics discernible from the data sources. The analysis considers the market presence and dominance of the following companies and certain of their competitors.

- Ambulatory Surgery: AmSurg (AMSG)
- Hospitals: Hospital Corporation of America (HCA), Tenet, Health Management Associates (HMA), Vanguard
- Health Insurers: United Healthcare (United), as well as Aetna, Cigna, Humana, and Health Net, collectively referred to here as “Other Public”
- Imaging: RadNet

Public Healthcare Insurers

One key to understanding the strategy of provider entities like AMMSG is to examine the presence of the for-profit health insurers in a given state as well as the concentration of market power by those companies along with Blue Cross plans and local HMOs. The more concentrated a market is in terms of health insurers, the less likely a healthcare services provider will be able to negotiate favorable contracts. This is because market control over pricing is then held by those few insurers.⁴ That, of course, leads to an expectation of lower profits.

There are a number of large publicly traded companies engaged in providing health insurance primarily in a managed care format. These include United Healthcare, Aetna, Cigna, Humana, and Health Net.⁵ There has been a spate of consolidation in the industry stemming back to the late 1990s when a number of smaller entities got burned at the bottom of the so-called Underwriting Cycle.⁶ Aggressive setting of premiums over multi-year

⁴The Federal Trade Commission and Department of Justice Anti-Trust Division favor insurers over providers.

⁵Wellpoint is a large public company; however, it owns Blue plans, including Anthem, which are otherwise addressed.

⁶This is the business cycle for the insurance industry and refers generally to the annual gap between premium increases and cost increases and the medical loss ratio, that portion of the premium expended on medical costs.

contracts in order to build market share resulted in bankruptcy or near-bankruptcy for such companies as Oxford when the costs increased more rapidly than expected. The consolidation trend continues today, driven in part by Medicare Advantage contracts as reflected in the acquisition of PacifiCare—the originator of Secure Horizons, the oldest Medicare HMO in the country—by United. Given the present backlash against managed care, Medicare HMOs are the principal source of growth for these public health insurers.

For purpose of this analysis, using data from Lehman Brothers’ *2007 Managed Care Guidebook*, the market shares of each of the fifty states was divided into sub-groupings based upon (a) Blue Cross plans, (b) United (the largest public health insurer), (c) Aetna, Cigna, Health Net, and Humana, and (d) local HMOs with strong market presence (e.g., Harvard Pilgrim and Tufts in Massachusetts). After eliminating states⁷ where for-profit insurers had small market share, where for-profit providers had little or no market presence, and/or rural states were eliminated, thirty-five states were left in the sample.

The remaining states were then ranked by the concentration of market power in the hands of those insurers as well as by the number of insurers⁸ operating in each market. Concentration percentages were as high as 98% in Alaska, where the Blue Cross plan had a 49% share and the named public companies collectively had a 49% share as well. Rhode Island’s market consolidation ratio was 97%, with 58% in the Blue plan and 26% in United. The lowest concentrations were in Wisconsin and Kansas. The latter market is highly stratified, however, as described later herein.

Market share

Figures 1, 2, and 3 summarize the analysis for eight states, divided into those where public for-profit providers are principally present (Florida, Texas, California, and Tennessee) and those where they have little or no presence (New York, North Carolina, Massachusetts, and Michigan). Market Concentration is defined here as the total market share of the Blue plans, public health insurers, and large local health insurers. Average is the Market Concentration divided by the number of insurers included in the Market Concentration total. Blue plans are discussed in the next section.

Figure 1 lists the larger states where for profit providers are prevalent. Although market concentration varies, these states generally have smaller Blue plans

⁷Hawaii, Idaho, Iowa, Maine, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, South Dakota, Utah, Vermont, and West Virginia.

⁸For example, New York has multiple Blue Cross plans.

Insurance Market Concentration in States Where For-Profit Providers are Prevalent

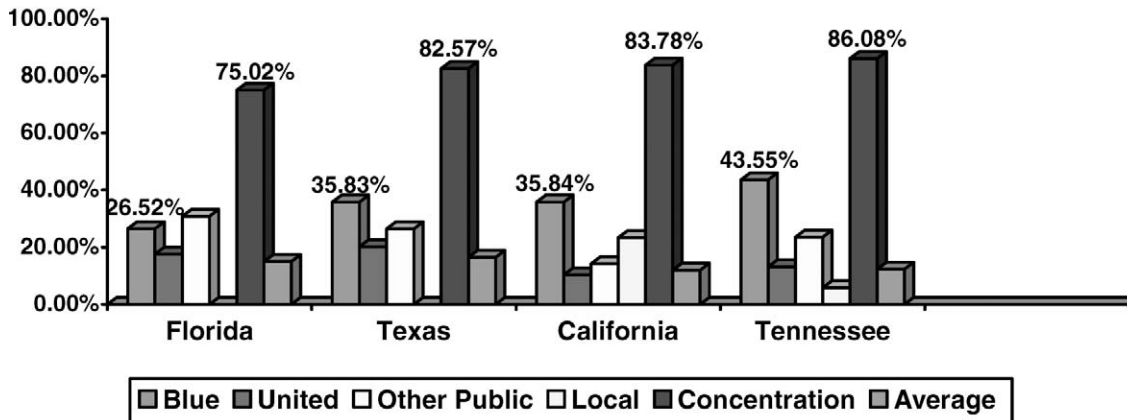


Figure 1

In California, Kaiser has a market share of 23.40% and there are two Blue plans. In Tennessee, John Deere Health (owned by United) and Cariten have significant market share. Even at that, much of Cariten’s market is in eastern Tennessee, where Deere and the Blue plan have significant market share as well.

Insurance Market Concentration States Where For-Profit Providers are not Prevalent

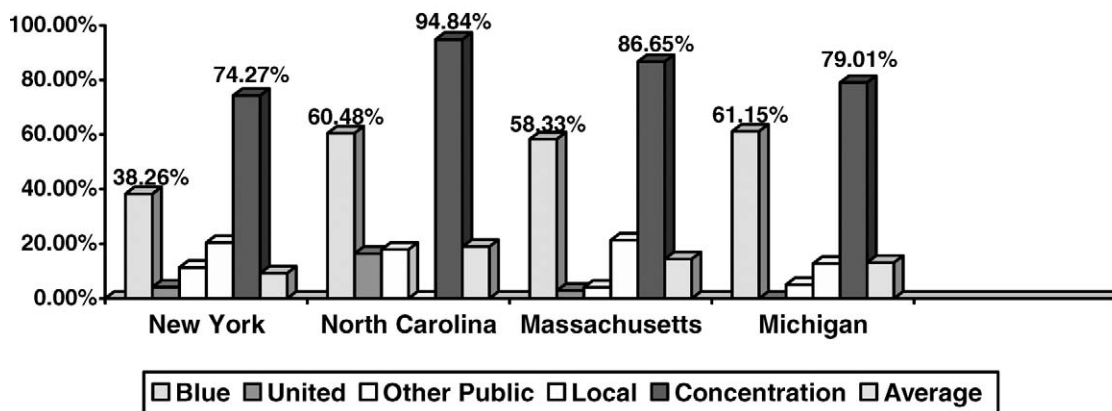


Figure 2

and a large market presence of for-profit health insurers (shown as United and Other Public). Tennessee is the only state in the top half of market concentration⁹ where for-profit providers are prevalent—and it is the location of the headquarters of many of those companies.

Figure 2 is of representative larger states where for-profit providers are not prevalent. Although market concentration again varies, these states generally have very large Blue plans and a small market presence of for-profit health insurers.

⁹The median is 85% versus 86% for Tennessee.

History of Blue plans

The history of Blue Cross plans plays an important part in the structure of today’s health insurance and provider markets. Blue Cross plans expanded rapidly during the Second World War’s period of wage and price controls as unions sought enhanced benefits to supplement their members’ limited incomes. At one point there were more than 100 Blue plans, the majority of which were located in the industrialized states primarily north of the Mason-Dixon Line in what is sometimes called the Rust Belt. There were certain plans that refused to contract with for-profit hospitals, thus serving

Comparative Insurance Market Consolidation

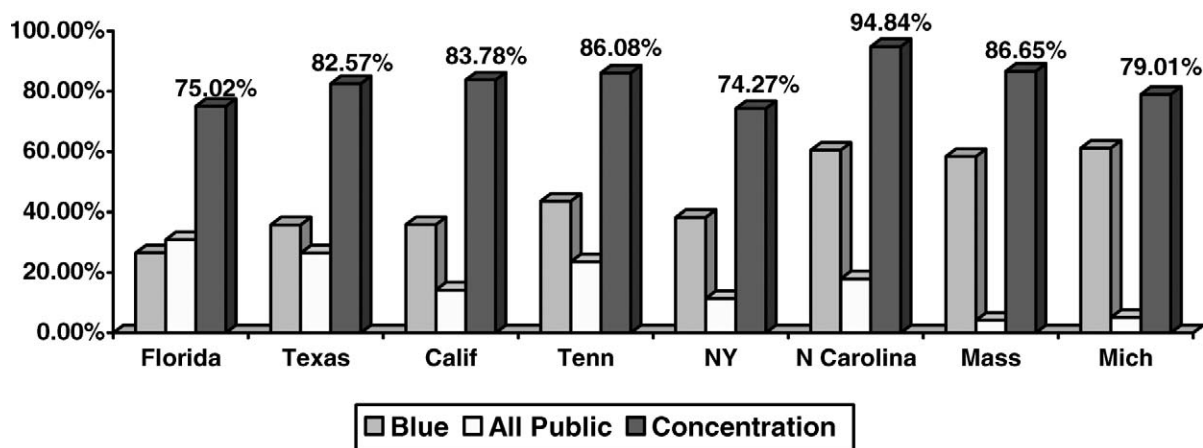


Figure 3

as an effective barrier to market entry. Blue plans also enjoyed a tax-exempt status¹⁰ for many years and protection from antitrust action in many states.

As will be seen below, this type of insurance market analysis is one critical element in understanding why public healthcare companies locate in some states and not others. In turn, the acquisition transactions of those public companies are likely only relevant in such states. Further, if an analyst or appraiser is considering the Guideline Publicly Trade Company method, it is likely only relevant in those states where the purported Guideline Companies are active.

Figure 3 combines the earlier two charts to compare Blue, For-Profit (the combined United and Other Public companies' share), and Market Concentration. In markets where for-profit insurers are prevalent (Florida, Texas, California, and Tennessee), Blue plans are less so and for-profit hospitals also tend to be more prevalent, as seen in the next section.

Public Hospital Companies

As a basis for the analysis of four¹¹ public, for-profit hospital providers, extracts from their 2006 Form 10Ks follow below. From these extracts, the primary state locations and the extent of concentration can be observed as well as the rationale for locating there (see Tenet and Vanguard Health below). Two other hospital chains not discussed below are Lifepoint and Community Health. Lifepoint,¹² based in Brentwood, Tennessee, has operations primarily in the rural South and border states, includ-

¹⁰Repealed in the Tax Reform Act of 1986.

¹¹HCA has since been taken private in one of the largest leveraged buyouts ever.

¹²Lifepoint Hospitals operated fifty hospitals in nineteen states as of May 2007.

ing Alabama, Louisiana, Kentucky, Tennessee, and Virginia. Community Health,¹³ based in Franklin, Tennessee, has many of its facilities in Texas, Alabama, Tennessee, northeastern Illinois, and southeastern Pennsylvania.

HCA (now privately held)

"We operated 173 hospitals at December 31, 2006, and 73 of those hospitals are located in Florida and Texas. Our Florida and Texas facilities' combined revenues represented approximately 51% of our consolidated revenues for the year ended December 31, 2006. This concentration makes us particularly sensitive to regulatory, economic, environmental and competition changes in those states."

Tenet

"As of December 31, 2006, the largest concentrations of licensed beds in our general hospitals were in California (23.6%), Florida (22.8%) and Texas (18.3%). Strong concentrations of hospital beds within market areas help us contract more successfully with managed care payers, reduce management, marketing and other expenses, and more efficiently utilize resources. However, such concentrations increase the risk that, should any adverse economic, regulatory, environmental or other development occur in these areas, our business, financial condition, results of operations or cash flows could be materially adversely affected."

HMA Health Management Associates, Inc.

"As of December 31, 2006, we operated 60 hospitals with a total of 8,589 licensed beds. During the year ended December 31, 2006, we operated facilities in

¹³As of December 31, 2006, it owned, leased, or operated seventy-seven hospitals, with an aggregate of 9,117 licensed beds in twenty-two states.

Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, Missouri, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington and West Virginia.

“Our facilities are heavily concentrated in Florida and Mississippi, which makes us sensitive to regulatory, economic and competitive changes in those states, as well as the harmful effects of hurricanes and other severe weather activity in such states. We operated 61 hospitals on February 23, 2007, with 29 of those hospitals in Florida and Mississippi. Such geographic concentration of our hospitals makes us particularly sensitive to regulatory, economic, environmental and competitive changes in those states. Any material changes therein in Florida or Mississippi could have a disproportionate effect on our business.”

Vanguard Health

“Our ability to negotiate favorable contracts with health maintenance organizations, insurers offering preferred provider arrangements and other managed care plans significantly affects the revenues and operating results of our hospitals. Revenues derived from health maintenance organizations, insurers offering preferred provider arrangements and other managed care plans, including Medicare and Medicaid managed care plans, accounted for approximately 52% of our net patient revenues for the year ended June 30, 2007. Managed care organizations offering prepaid and discounted medical services packages represent an increasing portion of our admissions, a general trend in the industry which has limited hospital revenue growth nationwide and a trend that may continue if the Medicare Modernization Act increases enrollment in Medicare managed care plans. In addition, private payers are increasingly attempting to control healthcare costs through direct contracting with hospitals to provide services on a discounted basis, increased utilization review, including the use of hospitalists, and greater enrollment in managed care programs such as health maintenance organizations and preferred provider organizations. Additionally, the trend towards consolidation among private managed care payers tends to increase their bargaining prices over fee structures.

“Approximately 35% of our net patient revenues for the year ended June 30, 2007 came from Medicare and Medicaid programs, excluding Medicare and Medicaid managed plans. In recent years, federal and state governments have made significant changes in the Medicare and Medicaid programs. Some of those changes adversely affect the reimbursement we receive for certain services. In addition, due to budget deficits in many states, significant decreases in state funding for Medicaid programs have occurred or are being proposed.

“Historically, we have concentrated our operations in markets with high population growth and median income in excess of the national average.”

At first glance, Vanguard may represent a partial anomaly in the public companies discussed herein. Seventeen percent of its hospital beds are located in Massachusetts, with approximately half of those in Framingham/Natick¹⁴ and the other half in Worcester, twenty miles west. The Framingham/Natick facilities were acquired from Tenet after that entity’s difficulties stemming from a federal government investigation of its Alvarado facility in San Diego, California; Tenet had acquired them in 1999 from the predecessor of HCA after that entity encountered regulatory problems leading to a fine of nearly \$1 billion. Prior to that, Columbia/HCA acquired the facilities as a result of financial difficulties experienced by the local nonprofit institutions in competing with larger nonprofit entities.

Vanguard is a much smaller entity than either HCA or Tenet, as can be seen from the graph (in Figure 4) of the total number of beds each entity has, and therefore is less significant to the analysis. It is clear once again that Florida and Texas are primary locations for for-profit hospital providers. On a percentage basis (Figure 5), HCA and Tenet each have more than 40% of their hospital beds in Florida and Texas.

For the valuation of an individual hospital in a state other than Florida, Texas, or California, what is the relevance of transactions by one of these publicly traded entities? As the author and Reed Tinsley, CPA, CVA noted in a co-authored article in the December 2006 American Bar Association’s *The Health Lawyer*:

“What does [out of market] transaction data say or reveal about the value of a hospital with EBITDA of \$1.0 million located in North Carolina? Does it tell a valuator that it could be worth the median [multiple] value of \$5 million or the [average multiple] value of \$7.5 million—the average being 50% greater than the median? Could it be worth [the highest multiple value of] \$18.2 million? Given the Stark regulations requirement that comparable transactions be in a particular market at the time of acquisition, can any of these [out of market] multiples be used?”

Medicare Part A Spending

Medicare divides providers into two general groupings: Part A Hospital Insurance, which is paid for by the combined employer-employee 2.9% Medicare tax, and Part B Physician Insurance, which is paid for out of general federal revenues after a nominal premium contri-

¹⁴The author lives in Framingham and formerly resided in Natick, a bordering community; located in Middlesex County, which has the 19th highest total Medicare spending in the nation.

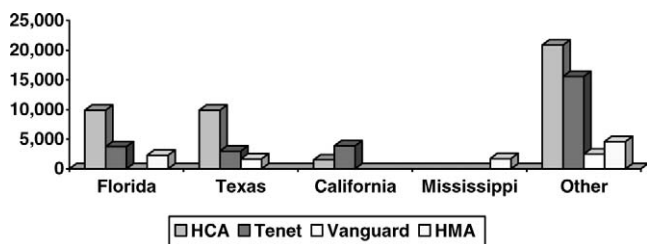


Figure 4

Percent of Beds by Company by State

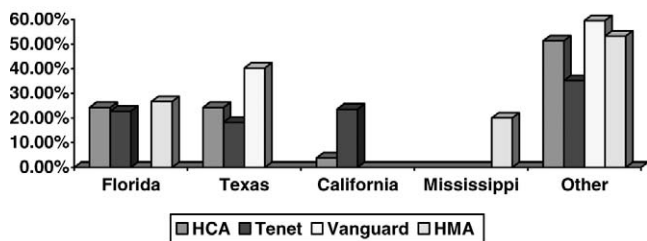


Figure 5

bution by beneficiaries withheld from Social Security checks. Medicare Advantage, the risk-based Medicare HMO program, publishes per capita rates county by county across the country split into Part A and Part B components. There are more than 3,200 counties, including Puerto Rico and Guam, with published rates. Because these rates are one proxy for local county Medicare spending,¹⁵ they provide useful insight into a public healthcare provider's location strategy.

Medicare spending is driven by two principal factors: utilization or volume of service, typically expressed in per beneficiary measures, and price or rate per unit of service. Although beyond the scope of this article, utilization data is readily available from such sources as the Medicare Payment Advisory Commission's (MedPAC) 2007 report *Assessing Alternatives to SGR*.¹⁶ While price or rate is a function of statutory formulas and local cost of service differences, utilization is a function of medical practice styles. The differences in utilization are dramatic and warrant study by an appraiser looking to use out of market valuation multiples.

The previous sections' discussion on location of for-profit hospitals is consistent with high levels of Medicare spending. Of the top fifty counties, five are in Florida (which has nine of the top 100), four in Texas (which has fifteen of the top 100 and another twenty-two in the next

¹⁵At least for the high-cost counties; low-cost counties have artificially higher rates than their fee-for-service equivalents as a means of inducing Medicare Advantage Plans to offer coverage.

¹⁶Utilization and utilization growth is very high in Florida, for example, and low in mature managed care markets like San Francisco and Portland, Oregon.

of Top 200 Counties for Part A Per Capita Spending

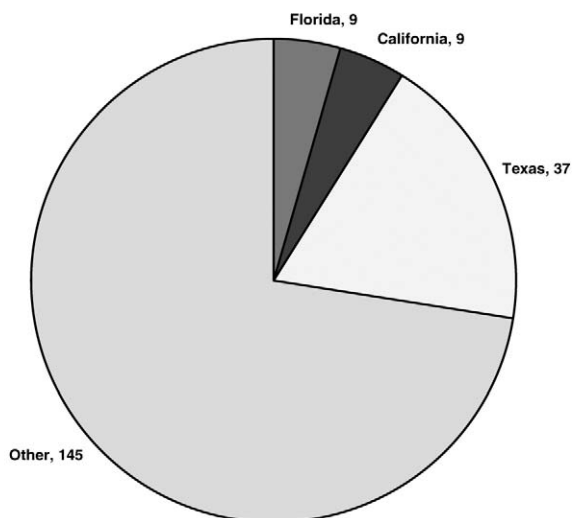


Figure 6

200 as seen in Figure 6) and one in California (which also has nine of the top 100). Two of the top ten counties (Dade and Okeechobee) are in Florida. The location of individual facilities in other states, such as Louisiana, is typically driven by high localized spending as reflected in Medicare Part A or B statistics. For total Medicare spending (Figure 7), both Part A and Part B, the pattern is similar but more dramatic for Florida and California.

The counties shown in Figure 8 have the largest total dollar Medicare spending. Two counties—Maricopa County, Arizona and Middlesex County, Massachusetts—which appear elsewhere in the article where the presence of public for-profit providers was not explained by other factors are clearly explained in this chart. Despite the high levels of Medicare spending, there are no significant for-profit hospitals present in Cook County (Chicago) or the various boroughs of New York City,¹⁷ for example. These are counties where unions have historically been very strong.

Other Hospital Market Factors

Perhaps the most difficult factor to quantify without local market knowledge or study is the presence of not-for-profit hospitals and particularly large, wealthy teaching hospitals. These institutions tend to be present in large urban markets. Examples include the Harvard-Affiliated Partners Health System in Boston, which includes the Massachusetts General and Brigham & Women's Hospitals; Baylor Health Care System in Dallas,¹⁸ Texas; Yale-New Haven Hospital in New Haven,

¹⁷Less than 3.2 % and 1% of hospital beds in Illinois and New York, respectively, are for-profit according to the Kaiser Family Foundation.

¹⁸A highly competitive market with both for-profit and nonprofit hospitals.

of Top 200 Counties for Part A & B Total Spending

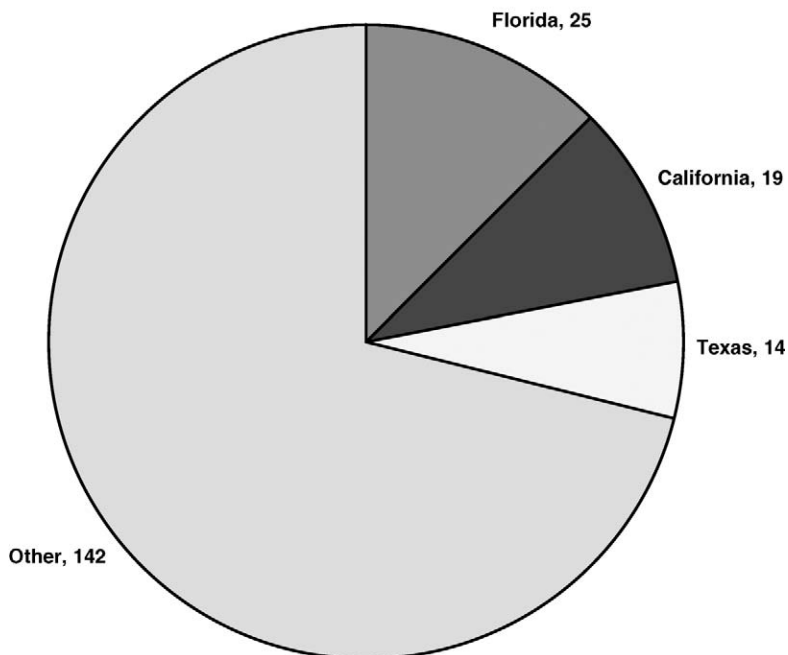


Figure 7

Connecticut; any number of institutions in New York City, including Mt. Sinai Hospital, Beth Israel Medical Center, and NYU Medical Center; The University of Chicago Health System and Northwestern Memorial Hospital and Health System in Chicago; and Johns Hopkins Hospital and Health System in Baltimore. These institutions frequently have market power not only in terms of hospital volume but also in terms of physician affiliations, managed care contracts, and political influence.

Another example of nonprofit hospitals is the multi-state religious health systems such as Ascension Health. Many times these institutions are located in underserved areas where access to healthcare is limited by income considerations. They may also be small institutions located in rural areas where providing multi-discipline and emergency care is unprofitable and requires charitable support.

There is nothing that precludes the reporting of acquisitions by not-for-profit hospitals of other hospitals, physician practices, surgery centers, and the like. However, there is often no requirement of reporting and it is certainly less common than reporting by the public for-profit companies described herein.¹⁹ Some transactions may warrant reporting under GAAP and/or GAAS and many states require not for profits to file financial statements with the state Attorney General's office; fairness opinions may also be required. Analysts and appraisers

¹⁹For competitive reasons and regulatory fear, among others.

need to keep in mind that single-state or single-locale not-for-profit transactions²⁰ likewise reflect only that local market's considerations and are equally suspect as value indicators in other markets.

Valuation imperative

Appraisers and analysts should bear in mind that in addition to the Stark law and Anti-Kickback statute that apply to all healthcare providers, nonprofit/tax-exempt providers are subject to the requirements of the Internal Revenue Code including anti-inurement and intermediate sanctions provisions.

Example

One common business strategy that hospitals utilize in acquiring physician-owned entities such as ambulatory surgery centers and imaging centers include converting them to hospital outpatient billing or so-called "provider-based billing."²¹ This typically results in a higher revenue stream for the same services, as both

²⁰For example, Novant Health (a not-for-profit integrated healthcare system in North and South Carolina) acquired imaging provider MQ Associates.

²¹Medicare requires eligible healthcare providers to bill services in two parts: one for the facility or technical fee to the hospital or facility (for owning the building and equipment and employing nonphysician staff) and one for physicians for performing and interpreting the test or procedure (known as the professional fee); a hospital-owned facility may be able to bill under higher hospital rates.

20 Largest Counties for 2005 Medicare Spending (\$Billions)

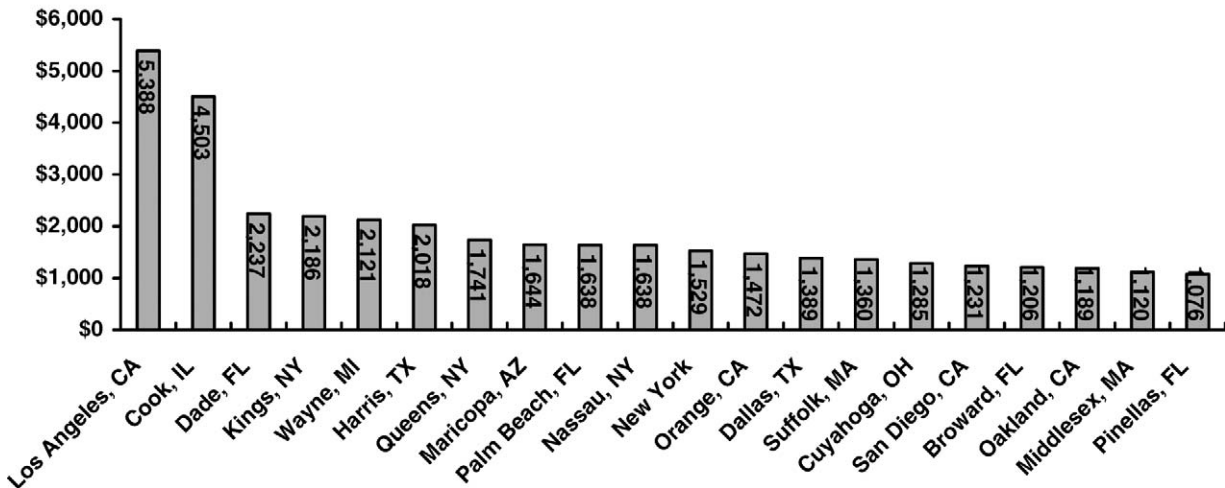


Figure 8

AMSG Cumulative Acquisitions

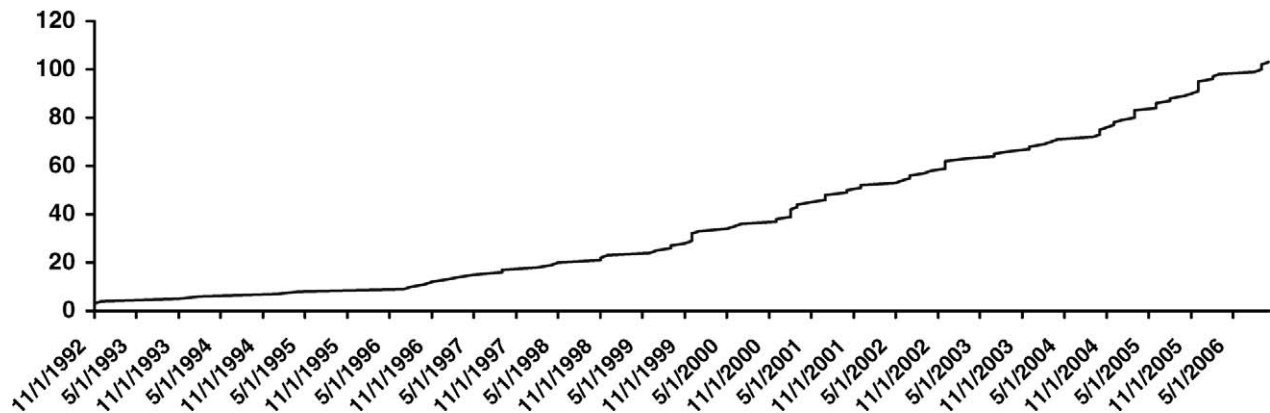


Figure 9

government and nongovernmental insurers frequently have different payment levels for the same service based upon the type of provider submitting the bill (i.e., higher revenue for hospital entities than physician entities). Notwithstanding the business strategy, including the enhanced revenue in a valuation where the standard is fair market value raises serious concerns. Since physicians cannot access this billing routine when they own the entity outright, including the enhanced revenue available to a hospital owner creates issues under both the Stark law and Anti-Kickback statute as well as anti-inurement issues for tax-exempt entities.

Surgery Centers

After medical practice purchases, surgery center transaction are perhaps the most common form of healthcare

transaction. As a result of private equity deals, Amsurg is one of the few remaining public companies in this line of business. Due to the importance of acquisitions to the value of this company and to the valuation of individual surgery centers, the article addresses AMMSG in detail. Although the primary location of its facilities is Florida followed by Tennessee and California, it does in fact have locations in many other states (Figure 11), which makes it a particularly interesting subject for analysis. A number of these other locations are examined for consistency with the factors discussed elsewhere. A review of AMMSG's December 31, 2006, 10K filing with the SEC revealed the following statements:

"Practice-based ASCs, such as those in which we own a majority interest, depend upon third-party reimbursement programs, including governmental and private in-

AMSG Cumulative Centers

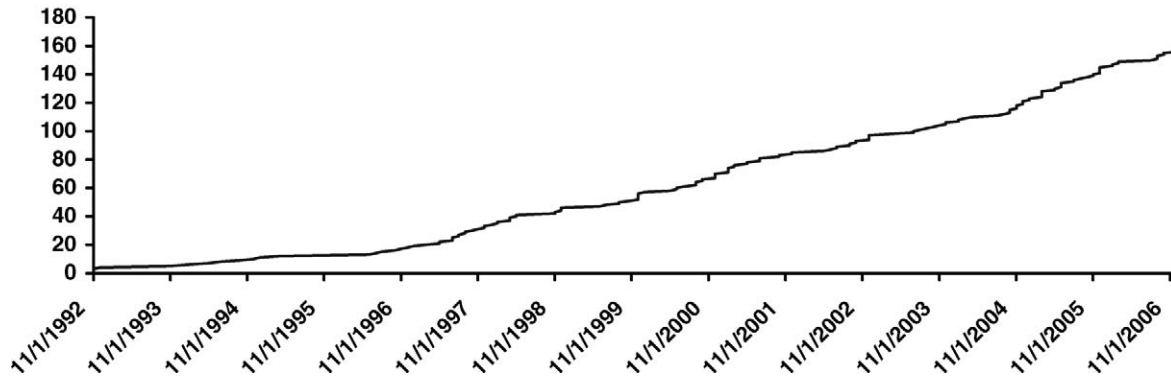


Figure 10

AMSG ORs by State

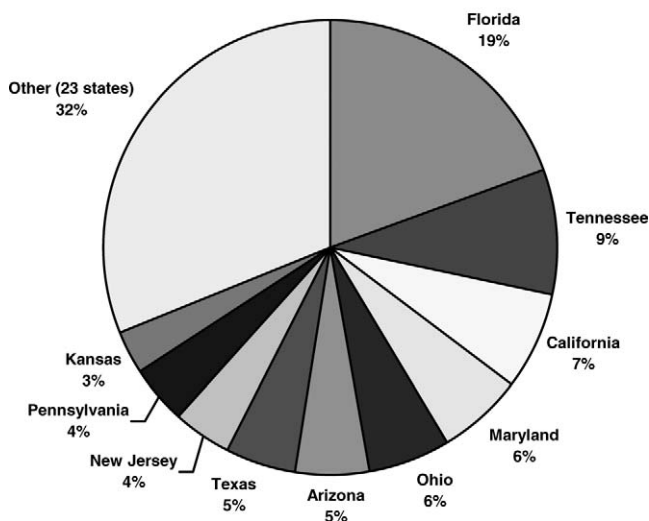


Figure 11

insurance programs, to pay for services rendered to patients. We derived approximately 35%, 35%, and 37% of our revenues in the years ended December 31, 2006, 2005, and 2004, respectively, from governmental health-care programs, primarily Medicare. The Medicare program currently pays ASCs and physicians in accordance with predetermined fee schedules.”

“At December 31, 2006, 30 of the 156 surgery centers we operated were located in the State of Florida. This concentration makes us particularly sensitive to adverse weather conditions and other factors that affect the State of Florida.

“Ninety-two percent of our centers specialize in gastroenterology or ophthalmology procedures. These specialties have a higher concentration of older patients than other specialties, such as orthopedic or [gastro]enterolo-

gy. We believe the aging demographics of the U.S. population will be a source of procedure growth for these specialties. We target these medical specialties because they generally involve a high volume of lower-risk procedures that can be performed in an outpatient setting on a safe and cost-effective basis.

“We begin our acquisition process with a due diligence review of the target center and its market. We use experienced teams of operations and financial personnel to conduct a thorough review of all aspects of the center’s operations, including the following:

- market position of the center and the physicians affiliated with the center;
- payor and case mix;
- growth opportunities;
- staffing and supply review; and
- equipment assessment.

“In presenting the advantages to physicians of developing a new practice-based ASC in partnership with us, our development staff emphasizes the proximity of a practice based surgery center to a physician’s office, the simplified administrative procedures, the ability to schedule consecutive cases without preemption by inpatient or emergency procedures, the rapid turnaround time between cases, the high technical competency of the center’s clinical staff that performs only a limited number of specialized procedures and the state-of-the-art surgical equipment. We also focus on our expertise in developing and operating centers. In addition, as part of our role as the manager of our surgery center limited partnerships and limited liability companies, we market the centers to third-party payors.”

The 10K also reveals that 105 of the 156 centers are gastroenterology, four multi-specialty, forty ophthalmic, and seven orthopedic also called endoscopy. Appraisers and analysts should consider the prospects for these

of Top 200 Counties for Part B Per Capita Spending

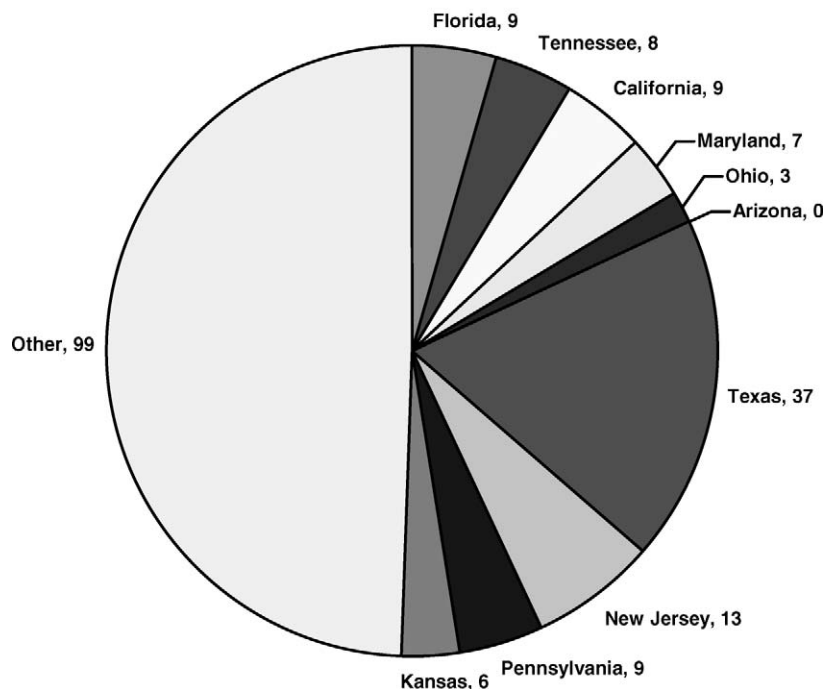


Figure 12

service lines versus other (*non-gastroenterology* or *ophthalmology*) medical service lines when contemplating using AMSC acquisition multiples. It is critical to understand precisely what types of procedures a facility is performing as part of the assessment of market data's relevance.

Figure 9 displays AMSC's historical cumulative acquisitions of surgery centers (103, or 66% of the total) followed by cumulative total centers (Figure 10) (156) to emphasize the importance of acquisition growth to the value of the company.

Figure 11 shows the location of AMSC's operating rooms (ORs) by state for purposes of the later analysis of the reason for locating in certain states and not others.

Medicare Part B spending

The states in which AMSC is located consistently have the highest rates for Part B physician spending—and that is where such transactions are or may be relevant depending upon further analysis. Of the 200 counties (Figure 12) with the highest Part B Medicare Advantage rates, half (101) are located in the ten states in which AMSC has most of its facilities. Of the top fifty counties, five are in Florida, four in Texas (which has 15 of the top 100 and another 22 in the next 200), and six in New Jersey. Two of the top ten counties (Dade and Okeechobee) are in Florida. Only Arizona does not appear in the top 200.

Prevalence of for-profit hospitals

Earlier, the presence of for-profit hospitals and health insurers was examined. Figure 13 shows the percentage of for-profit hospitals²² for each of the ten states where AMSC has the largest number of ORs, with the largest states at the left. Florida, Tennessee, and California have 35% of AMSC's capacity. Florida has the second-highest percentage of for-profit hospitals in the country with Tennessee seventh.

Pennsylvania is below the national average but the activity in this state could be explained in part by a strong state government commitment to rating outpatient surgery facilities including going so far as to require extensive financial disclosure²³ on top of clinical quality.

Another manner to evaluate for-profit presence is by the number of hospital beds (Figure 14) as opposed to the number of hospitals. Both data sets are relevant as there are a number of specialty hospitals, such as cardiac and orthopedic, that may have relatively few beds but extremely high profitability. Cardiac and orthopedic care is at the core of most hospitals' profitability. Appraisers seeking to value a hospital should be certain to understand the underlying case mix of both the purported

²²Kaiser Family Foundation State Health Facts, <http://www.statehealthfacts.kff.org/>.

²³Pennsylvania Health Care Cost Containment Council, <http://www.phc4.org>.

Prevalence of For Profit Hospitals For AMMSG's Major States

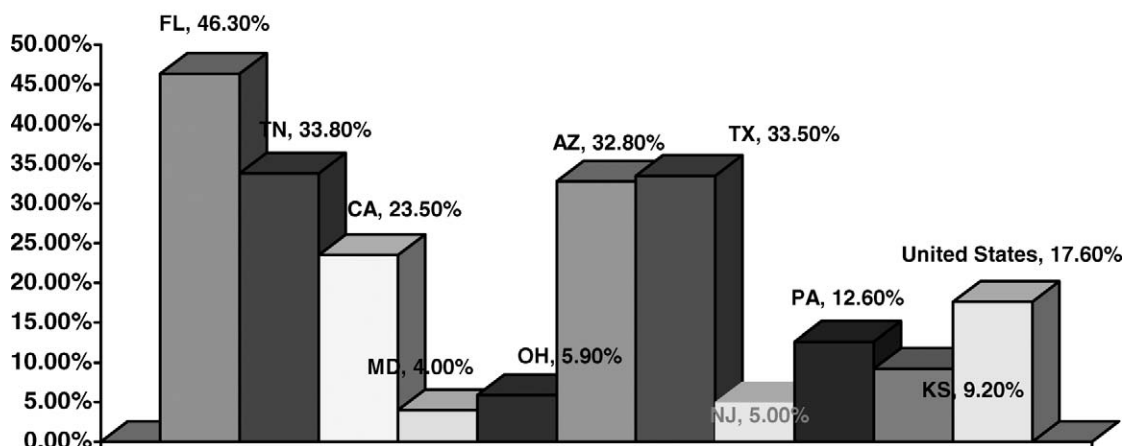


Figure 13

Prevalence of For Profit Beds For AMMSG's Major States

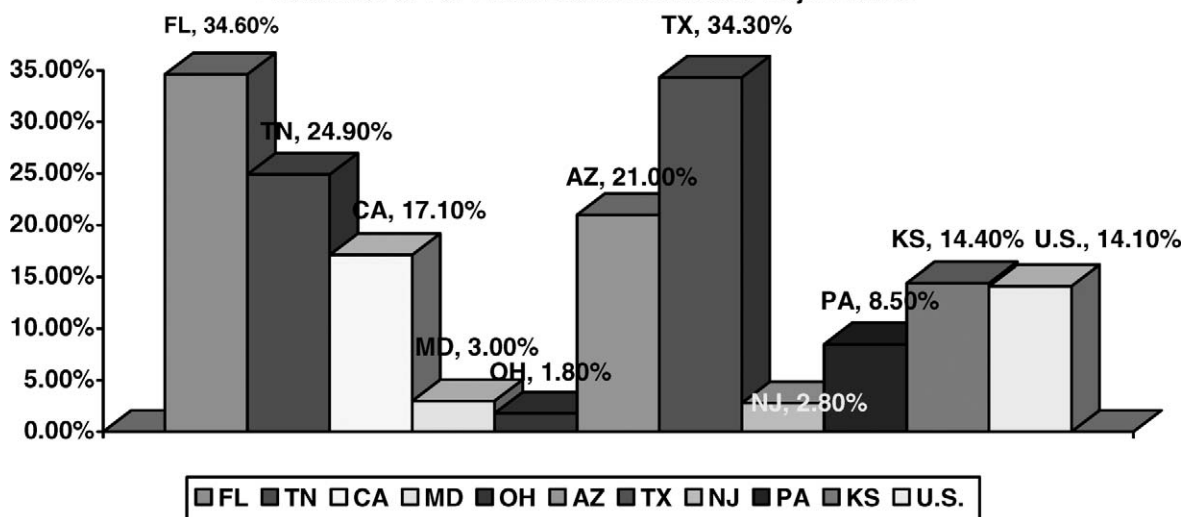


Figure 14

comparables and the subject. A specialty orthopedic hospital transaction is likely of little use in valuing a general hospital.

Table 1 summarizes criteria that impact the desirability of locating a surgery center in a given state based upon the ten states above. Bold items are those which appear partially determinative. For example, Florida has the third-highest number of for-profit hospital beds in the country, is ranked 4th in overall healthcare spending, 6th in the concentration of population in metropolitan areas, 9th in spending on physician services, and 19th in per capita healthcare spending. The percentage of overall spending in the state on physician services is more than 3% greater than the national average.

For certain states in which AMMSG does business, the listed factors do not appear to readily explain the desir-

ability. For example, Kansas is ranked 8th in overall physician spending as a percentage (31.50%) of healthcare expenses but otherwise does not appear attractive based on the criteria. This is where individual local market conditions become important.

Kansas is a largely rural state with population centers in larger cities. The list below is the location of the AMMSG facilities. Overland Park and Shawnee are part of suburban Kansas City (the metropolitan area includes the larger Kansas City, Missouri) while Hutchinson is a suburb of Wichita. Thus, the ranking of Kansas as a rural state is misleading with respect to the location of the AMMSG facilities.

- Hutchinson, Kansas
- Overland Park, Kansas

For Profit Beds in AMSG's No Facility States

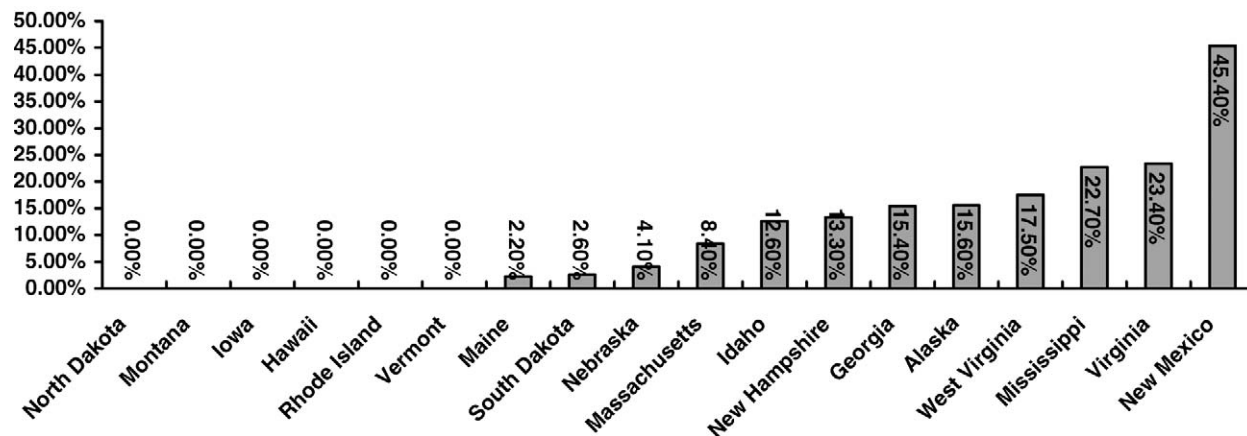


Figure 15

Shawnee, Kansas
 Topeka, Kansas
 Wichita, Kansas

Similarly, Arizona has only high total spending for healthcare as a positive criteria in the analysis. Arizona, however, has a very high percentage of Medicare-eligible retirees and as noted earlier, Medicare is a key source of revenue for AMSG. Below is a listing of AMSG's Arizona locations.

Mesa, Arizona
 Peoria, Arizona
 Phoenix, Arizona
 Sun City, Arizona
 Sun City, Arizona
 Sun City, Arizona
 Yuma, Arizona

Sun City, Mesa, and Peoria are part of greater Phoenix (Maricopa County), one of the fastest-growing metropolitan areas in the nation with Sun City a prime locale for retirees. Maricopa County has the third-highest total Medicare spending in the country at \$1.64 billion. Yuma is near the Mexican border and an even more localized market analysis would be in order.

New Jersey is a particularly interesting case in point where the criteria do not appear to explain the presence of AMSG. Fortunately, the Center for Studying Health System Change,²⁴ which tracks development in twelve markets nationally, includes northern New Jersey, where three of the facilities are located. This is an area where specialist physicians—which would include gastroenterology and ophthalmology—have been terminating provider agreements with insurers to compel higher fees as

“out of network” providers. Ambulatory surgery centers are being developed as part of this strategy to shift revenue from hospitals to physicians.

Characteristics of areas with no AMSG locations

AMSG has no facilities in Vermont, Massachusetts, Maine, New Hampshire, or Rhode Island and a single one in Connecticut. Thus, the New England area, for example, would not appear to be a target market. These states have comparatively few for-profit beds (Figure 15) (Rhode Island and Vermont have none) and high market concentration of insurers as shown in Figure 2. Maine, New Hampshire, Connecticut, and Vermont have more than 94% market concentration, as defined earlier, and the largest insurer in each market is a Blue plan, with 67%, 38%, 33%, and 60% Blue market shares, respectively.

Valuation Imperative

An appraiser or analyst should also consider the requirement or lack thereof for a Certificate of Need (CON) in each state²⁵ where a purported comparable operates and in the state where the valuation subject is located. Florida, Texas, Pennsylvania, and California do not require a CON for an ASC. A lack of a CON makes it easier to establish an ASC—although actually having a difficult-to-obtain CON in a state that requires them is generally deemed to be a valuation positive, assuming the CON is transferable. Some states waive a CON for expenditures below a specified level (e.g., \$1 million for an MRI in Missouri).

²⁴See www.hschange.org.

²⁵A CON is basically a form of state-issued license (see <http://www.ncsl.org/programs/health/cert-need.htm>).

Table 1
Attributes of States with AMSG Locations

Top 10 AMSG States	For-Profit Beds, %*	MD Spending, %†	Rankings				
			For-Profit Beds‡	Total Healthcare Spending**	Metropolitan Population††	MD Spending**	Per Capita‡‡
Florida	34.60	31.50	3	4	6	9	19
Tennessee	24.90	31.40	10	15	26	10	21
California	17.10	33.40	18	1	2	3	44
Maryland	3.00	28.70	34	19	7	20	18
Ohio	1.80	26.80	39	7	25	35	15
Arizona	21.00	33.00	15	21	14	5	50
Texas	34.30	30.80	4	3	11	11	45
New Jersey	2.80	28.20	35	9	1	27	13
Pennsylvania	8.50	26.60	28	5	22	38	11
Kansas	14.40	31.50	22	31	35	8	24
United States	14.10	28.20	NA	NA	NA	NA	

* Percentage of all hospitals beds owned by for-profit hospitals.

† Portion of the state's healthcare spending that goes to physician services.

‡ Ranking based on total for-profit beds, with 1 being highest.

** Ranking based on total dollars spent.

†† Ranking based on the percentage of the state's population located in metropolitan areas (as opposed to rural areas).

‡‡ Ranking based on per capita income.

RadNet

The one large publicly traded²⁶ provider of fixed location imaging services, RadNet—which acquired its principal competitor Radiologix in the fall of 2006—has the majority of its facilities in three of the same states (California, Maryland, and Florida) listed above, with a concentration in California. An appraiser or analyst should consider the requirement or lack thereof for a Certificate of Need in each state²⁷ where a purported comparable operates and in the state where the valuation subject is located. Figure 16 reflects total units of equipment (e.g., MRI, CT, etc.).

Certainly, a substantive argument could be made that the multiples paid by RadNet for imaging centers in California would be relevant to the valuation of an imaging center located in California. It seems questionable, particularly in light of regulatory considerations, that those transactions would be relevant in New Mexico or Georgia, for example. At best, the multiples might provide some insight, especially if the effect of acquisition growth could be eliminated.

Acquisition vs. Same-Store Growth

One of the most important and fundamental differences between a single location valuation subject and a large

multi-location, multi-market alleged comparable is the availability of acquisition growth to enhance value through the earnings or cashflow capitalization rate²⁸ or to offset a decline in same-store revenue and profit growth. Consider the following statement from Lehman Brothers analyst Adam Feinstein about AMSG in anticipation of the announcement of the Final Rule by the Centers for Medicare and Medicaid with respect to the adoption of a new revenue model for ASCs that would contain significant cutbacks for endoscopy:

“In regards to an LBO, AMSG has noted that it believes that the overhang created by the proposed changes in Medicare reimbursement (with a final rule expected sometime this summer [2007] and the changes expected to take effect on January 1, 2008) reduces the likelihood that a financial sponsor would be interested in acquiring the company (due to the anticipated negative impact in 2008 and 2009). In addition, we get the sense that the company is not interested in going private since *the company has noted that it believes it needs to undertake 12–15 acquisitions per year in 2008 and 2009 in order to generate the same cash flow in those years as it will in 2007 (with the anticipated negative impact from the changes in Medicare reimbursement being offset by the cash flow the company acquires).*”²⁹ (Emphasis added)

²⁶Alliance is the other, with primarily mobile imaging and locations in many states. It has recently turned its attention to development of PET/CT. The revenue prospects for different types of imaging can vary dramatically.

²⁷See <http://www.ncsl.org/programs/health/cert-need.htm>.

²⁸Defined as the discount rate less the long-term or perpetual growth rate.

²⁹See Lehman Brothers Health Care Facilities March Quarterly Review: “Buyouts Rule The Day,” May 8, 2007.

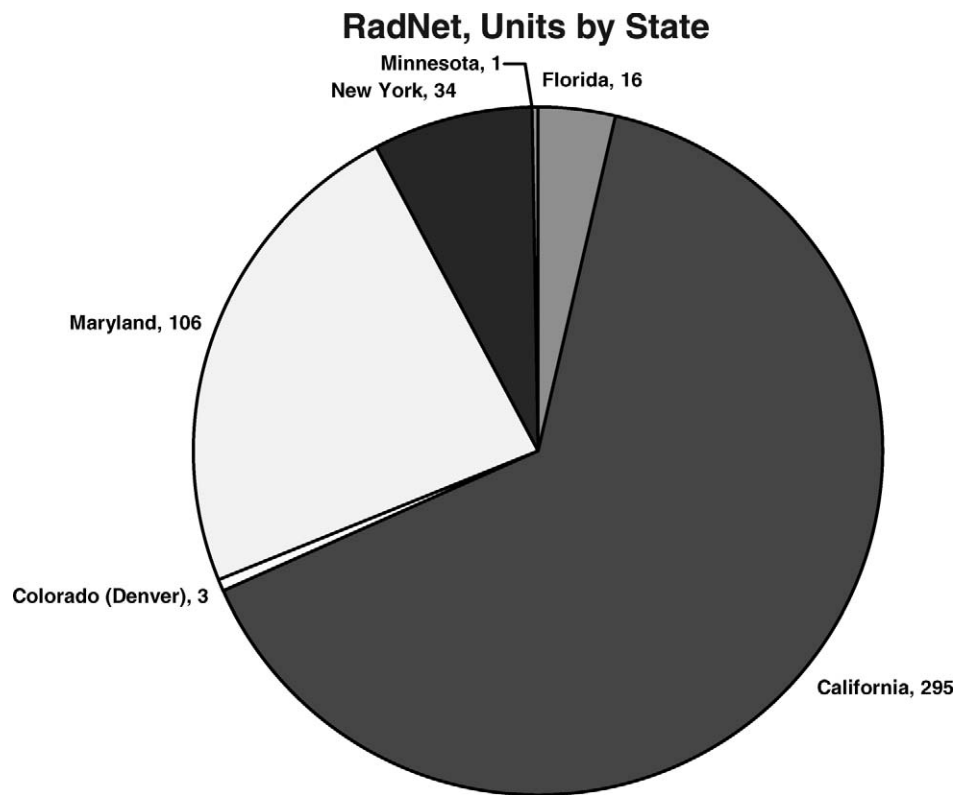


Figure 16

Valuation Imperative

One observation about the valuation implication of AMSC’s statement regarding new acquisitions is that in order for those acquisitions to be accretive to earnings—a necessity if the stock price is to be maintained—acquisition multiples are likely to drop! This is a key test that the appraiser or analyst should employ as part of the reality check for an ultimate valuation conclusion if the merged and acquired company method is being used: Would the acquisition be accretive to earnings?

Another observation is that a single location endoscopy center, for example, is unlikely to be in a position to respond to per-unit revenue cutbacks by acquiring other endoscopy centers; at best, it might hope to attract additional providers to its facility, assuming it had excess capacity.

How would the plan by a public surgery center consolidator to offset per-unit revenue declines impact the transaction price for a single location provider? Unless that provider is located in a state that the consolidator is active in or likely to become active in, there would be no impact. The universe of hypothetical buyers under the fair market value standard or even for strategic value does not include buyers who are not present in the market. Figure 18 presents AMSC 35 most recent centers by state.

Implications for Valuation of Private Healthcare Providers

Follow the money

The old adage “follow the money” is employed in many professions. As the analysis in this article demonstrates, to some extent you can find large for-profit providers by looking at high local rates of healthcare spending. Or perhaps it is more accurate to say you will not find those providers where there is low healthcare spending. Factors in addition to total and per capita spending play a significant role in the desirability of a particular location for larger for-profit entities and highlight the importance of understanding local market conditions, including:

- Income levels of population
- Health insurance coverage statistics, including coverage by Medicaid
- Hospital spending per capita and in total
- Physician spending per capita and in total
- Competing nonprofit providers, including whether the entities have established integrated healthcare networks
- Identity and market share of health insurers; in large states, regional market concentration should be considered along with statewide data; HMO penetration

RadNet, California Units

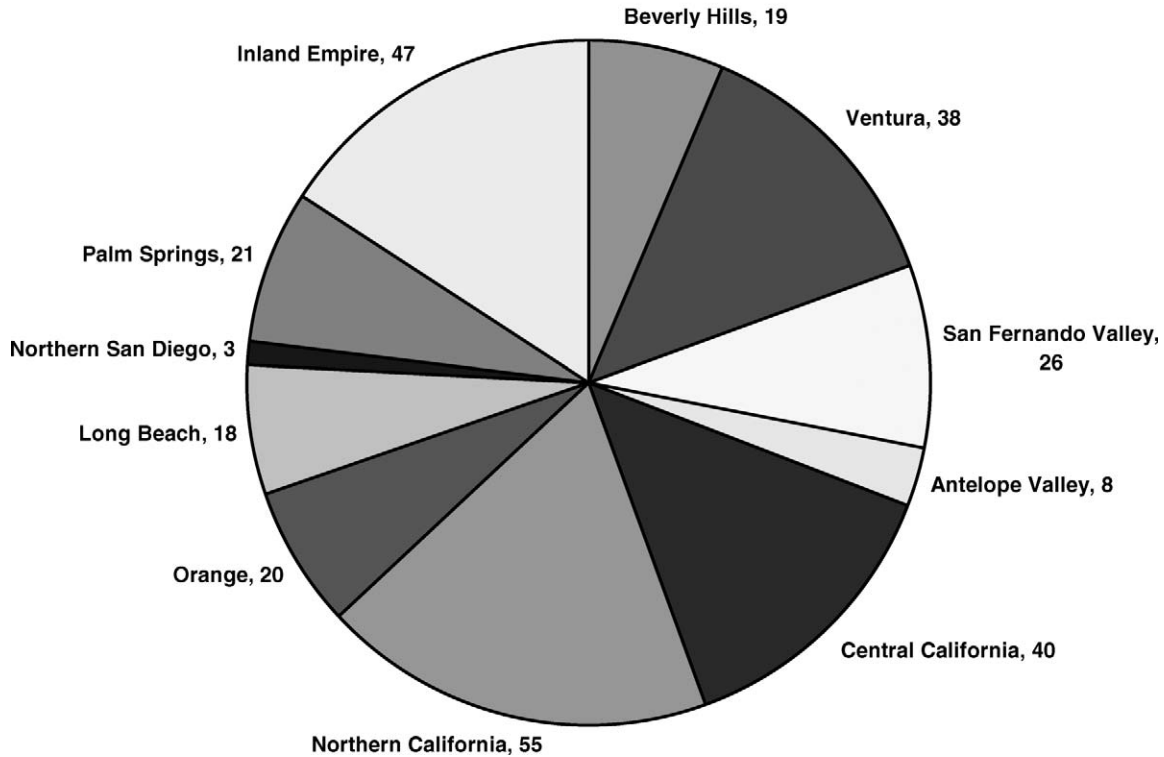


Figure 17

(reported by KFF) versus indemnity and other types of health insurance should also be considered

- Competing for-profit local providers (e.g., Shields MRI in Massachusetts)

All healthcare is local

Healthcare markets are highly localized. When seeking to apply comparable transactions under the Merged and Acquired Company method or the Guideline Publicly Traded Company method, it is incumbent on the appraiser or analyst to establish that an acquirer or public company is likely to be active in the market of the valuation subject. Failure to establish that limits the usefulness of the market data and may, in fact, lead to an erroneous conclusion of value. Other relevant local market factors:

- The concentration of the population in urban versus rural areas; urban areas provide easier access
- In rural areas, the extent and quality of road systems enabling access to healthcare providers; barriers to access such as bridges or ferries from peninsula or island communities
- Age distribution of population

Earlier, portions of public hospital company 10-Ks were cited that described the economies of scale and negotiating leverage with managed care insurers that was obtained through concentrating activities in a given state. It stands to reason that acquisition multiples in that state could properly reflect the inherent value from the economies of scale, but it is difficult to see how that acquisition multiple could be applied to a valuation subject in another state.

Another element to consider is localized supply and demand for a particular healthcare provider. Hospitals often compete to acquire physician practices, seeking to increase or defensively maintain inpatient admissions and referrals for tests. Nonetheless, there are regulatory prohibitions against considering such admissions and referrals in the purchase price and any demand-driven increase in value is limited to factors not precluded by law. Many times, it is difficult to appropriately include even factors such as reduced cost of capital or economies of scale due to the need to rely upon the fair market value standard.

Other Uses of Market Data

There is an arbitrage effect when private company cashflows are moved into the public markets via acquisi-

New Centers: 2005-2006

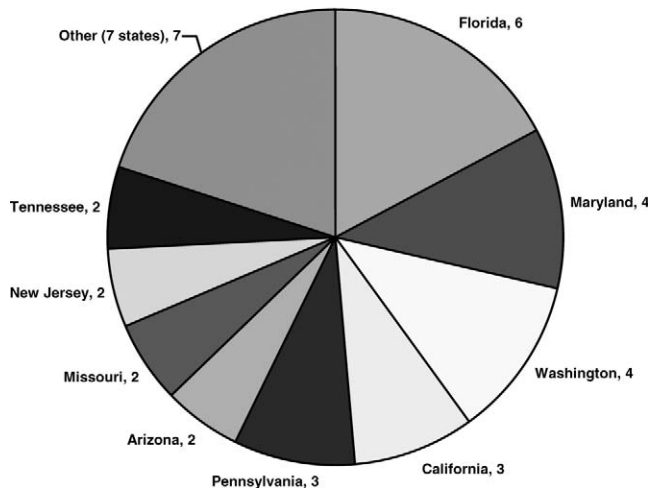


Figure 18

tion, as described earlier with respect to evaluating whether a particular acquisition would be accretive to earnings. If possible, an appraiser or analyst might attempt to extract acquisition growth from valuation multiples to obtain an indication of market value when acquisition-driven market data are used to value a subject in a market where no such buyer is present. This would require analyzing the out-of-market acquirer's stock and EBITDA valuation multiples and extracting that portion representing acquisition-driven growth. A fundamental analysis can also be performed on the subject to derive discounts from the public company's value for size and growth, for example.³⁰

Valuation imperative

Of course, not all transaction data represents activity of publicly traded companies. However, it is reasonable to believe that privately held or nonprofit buyers of healthcare entities in markets dominated by public for-profits find acquisition prices driven by what the public for-profit is willing to pay, even if the nonprofit cannot match the growth rate. There are many policy and economic implications beyond the scope of this article with respect to the availability of tax-exempt bonds to lower a nonprofit's cost of capital.

Regulatory Issues

At the outset of the article, it was stated that the government agencies' views of fair market value should be seriously considered by appraisers and analysts in

³⁰See Goeldner's "Adjusting Market Multiples of Public Guideline Companies for the Closely Held Business," ASA 8th Annual BV Conference, October 1999.

their own opinions of fair market value. The core of the Stark regulations' limitations on use of market data in establishing fair market value can be found in the following extract:

Usually the fair market price is the price at which bona fide sales have been consummated for assets of like type, quality, and quantity in a particular market at the time of acquisition. . . .³¹

The presence of this statement, drafted at the Department of Health and Human Services, which operates the Medicare program, likely reflects that agency's intimate familiarity with differences in local healthcare spending and local healthcare providers.

Appraisers conforming to USPAP and other standards frequently cite those standards as the basis for employing certain methods even in the face of apparent government rejection, typically in Tax Court or other tax-oriented proceedings. For example, USPAP Standards Rule 9-4 provides in part that "An appraiser must, when necessary for credible assignment results, analyze the effect on value, if any, of: . . . sales of capital stock or other ownership interests in similar business enterprises." However, according to the Jurisdictional Exception Rule, "If any part of USPAP is contrary to the law or public policy of any jurisdiction, only that part shall be void and of no force or effect in that jurisdiction."

Appraisers and analysts should not assume that government's views of fair market value are inconsistent with the usage of that term in the appraisal profession and do well to remember that the law always trumps professional standards. Improper use of market data in the face of the above regulation could result in unlawful conduct.

Conclusion

The results of this study are critically important to appraisers and analysts working in the healthcare industry. Healthcare markets are highly localized and use of out-of-market data for the valuation of a healthcare business requires a detailed analysis of conditions in the source market as well as the subject market. Regulatory restrictions on the use of market data in the Stark laws cannot be dismissed as there are fundamental economic reasons for those restrictions as well as professional standards that require they be respected.

Markets in which larger for-profit provider entities are present will have transactions that reflect not only the local market conditions but the revenue and earnings growth inherent in the motivation of public companies. Public healthcare providers such as AMSC are consolidators driven by acquisition growth. Even those nonprofit markets where healthcare spending and insurer

³¹See 420 CFR 411.351.

concentration are otherwise similar to for-profit markets may have very different values for local entities than are indicated by consolidator-driven multiples. Thus, methods under the Market Approach have to be used with considerable skill and intensive analysis.

There are few absolutes in valuation in general and healthcare valuation in particular. However, terms such as “north,” “south,” “Rust Belt” and “Mason-Dixon Line” seem to have consequential importance. Finally, there is an abundance of readily available and often free data on local healthcare markets that enable the appraiser or analyst to accomplish the tasks necessary for the

appropriate application and weighting of the Market Approach.

Mark O. Dietrich, CPA, ABV, is located in Framingham, Massachusetts. The author extends his thanks to Barry Sziklay, James Rigby, Michael Crain, Nancy Fannon, Don Barbo, Kevin Yeanoplos, and Carol Carden, who contributed to the review of this paper but may or may not agree with its conclusions.