Healthcare Valuation
An Interdisciplinary Approach

Presented By:
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Phoenix, AZ
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This presentation addresses information and developments in the admittedly broad and rapidly changing regulatory environment as it relates to healthcare assets. Neither the presenters nor the sponsor intend this presentation to render any legal or accounting advice, but rather to provide general information and sources. Neither the presenter, nor the sponsor, assume any liability with respect to the use of information contained in this presentation. For legal or accounting advice, individuals and their firms are urged to consult their attorney or CPA.
ABOUT THE PANEL

Moderator

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Health Capital Consultants, St. Louis, MO (Business Valuation)

Panelists

Ernest A. Demba, MS, MBA, FASA, FRICS, PE
Demba Valuation Services, St. Louis, MO (Real Property)

Edward G. Detwiler, ASA
Edward G. Detwiler & Associates, Chicago, IL (FF&E)

Sandra Tropper, ASA
Artemis, Inc., Bethesda, MD (Personal Property)

Charles Wilhoite, CPA, CMA, ASA
FOUR PILLARS OF THE HEALTHCARE INDUSTRY
Opportunities & Challenges

**Opportunities:** Many healthcare related valuation engagements require the knowledge and expertise of the various appraiser disciplines.
INTERDISCIPLINARY ENGAGEMENTS

Opportunities & Challenges

Opportunities: Typical healthcare related business valuations have many discrete tangible and intangible assets to be appraised

Intangible Assets
Non-physical items that grant certain specified property rights and privileges of ownership and that have or promise economic benefits to the owner(s) of the subject enterprise

Tangible Assets
Items owned by the subject enterprise that possess a physicality (i.e., they can be seen or touched)
### Valuation Approaches – R.E. Appraisal & Business Valuation

#### Different Expressions that Represent the Same or Similar Valuation Principles

<table>
<thead>
<tr>
<th>Valuation Approach</th>
<th>Real Estate Appraisal</th>
<th>Business Valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income Approach</strong></td>
<td>Yield Capitalization</td>
<td>Discounted Future Economic Income Method</td>
</tr>
<tr>
<td></td>
<td>Direct Capitalization</td>
<td>Capitalization of Future Economic Income Method</td>
</tr>
<tr>
<td></td>
<td>Valuation Procedures Similar; Selection of Appropriate Rates More Difficult for Business Valuation; Real Estate uses Lower ROR (Tax Deductions and Lower Risk)</td>
<td></td>
</tr>
</tbody>
</table>

| **Market Approach**      | Sales of Comparable Properties         | Transactions of Comparable Businesses                   |
|                          |                                        | More Volatility in Business Transactional Market        |

| **Asset-Based Approach** | Cost-Based Approach                    | Discrete Asset Accumulation Method or Collective Capitalized Excess Earnings Method |
|                        |                                        | Don’t Confuse With Liquidation Premise of Value; Instead Premise of Value (i.e., (1) Value as a Going Concern; or, (2) Value in Exchange) |

Each approach requires some market value observations and all are interrelated

SELECTION OF RISK PREMIA

Real Estate v. Business Appraisal

Whether valuing real estate or a going concern business enterprise, both disciplines utilize risk premia to determine the indicated risk adjusted required rate of return.

The derivation of the risk premia will differ between real estate and business appraisal disciplines.

**Business Valuation**

Risk premia measures difference between government treasury bonds and various equity market indices (e.g., S&P 500; Dow Jones Industrial Average; or, Wilshire 5,000).

**Real Estate Appraisal**

Risk premia measures difference between government treasury bonds and implied capitalization rates.
Wealth Indices of Investments in the U.S. Capital Markets (S&P 500 Composite)

“Same but Different”

Implied Cap Rates versus Bond Yields

Wealth Indices of Investments in the U.S. Capital Markets – Total Returns

<table>
<thead>
<tr>
<th>Investment Indices</th>
<th>Total Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Company Stocks</td>
<td>16.7</td>
</tr>
<tr>
<td>Large Company Stocks</td>
<td>11.9</td>
</tr>
<tr>
<td>Long-Term Government Bonds</td>
<td>5.9</td>
</tr>
<tr>
<td>Treasury Bills</td>
<td>3.7</td>
</tr>
</tbody>
</table>

# HEALTHCARE REITS

## Volatility & Returns

### As of 12-31-2011

<table>
<thead>
<tr>
<th>REIT</th>
<th>Implied Volatility (1)</th>
<th>TTM Volatility (2)</th>
<th>Average Annual Returns Over TTM (2)</th>
<th>Trailing 3 Year Volatility (2)</th>
<th>Average Annual Returns Over Trailing 3 Years (2)</th>
<th>Trailing 5 Year Volatility (2)</th>
<th>Average Annual Returns Over Trailing 5 Years (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care REIT, Inc. (HCN)</td>
<td>17.00%</td>
<td>28.72%</td>
<td>19.07%</td>
<td>38.04%</td>
<td>14.76%</td>
<td>39.82%</td>
<td>10.74%</td>
</tr>
<tr>
<td>HCP, Inc. (HCP)</td>
<td>21.00%</td>
<td>31.43%</td>
<td>17.02%</td>
<td>47.71%</td>
<td>19.44%</td>
<td>54.00%</td>
<td>8.22%</td>
</tr>
<tr>
<td>Ventas, Inc. (VTR)</td>
<td>19.00%</td>
<td>29.71%</td>
<td>8.99%</td>
<td>44.83%</td>
<td>21.42%</td>
<td>51.45%</td>
<td>10.40%</td>
</tr>
<tr>
<td>Universal Health Realty Income Trust (UHT)</td>
<td>N/A</td>
<td>33.21%</td>
<td>12.94%</td>
<td>35.06%</td>
<td>12.70%</td>
<td>42.61%</td>
<td>6.85%</td>
</tr>
<tr>
<td>Medical Properties Trust, Inc. (MPW)</td>
<td>N/A</td>
<td>37.13%</td>
<td>-1.70%</td>
<td>49.94%</td>
<td>24.21%</td>
<td>52.40%</td>
<td>0.66%</td>
</tr>
<tr>
<td>Healthcare Realty Trust, Inc. (HR)</td>
<td>20.00%</td>
<td>31.47%</td>
<td>-12.94%</td>
<td>44.50%</td>
<td>-7.77%</td>
<td>51.26%</td>
<td>-15.17%</td>
</tr>
<tr>
<td>National Health Investors, Inc. (NHI)</td>
<td>N/A</td>
<td>29.97%</td>
<td>-2.33%</td>
<td>35.67%</td>
<td>15.72%</td>
<td>39.28%</td>
<td>5.72%</td>
</tr>
<tr>
<td>Cogdell Spencer Inc. (CSA)</td>
<td>N/A</td>
<td>41.19%</td>
<td>-22.37%</td>
<td>51.61%</td>
<td>-17.27%</td>
<td>48.26%</td>
<td>-23.83%</td>
</tr>
<tr>
<td>Omega Healthcare Investors, Inc. (OHI)</td>
<td>32.00%</td>
<td>38.44%</td>
<td>-7.29%</td>
<td>43.91%</td>
<td>13.59%</td>
<td>46.20%</td>
<td>8.86%</td>
</tr>
<tr>
<td>Sabra Health Care REIT, Inc. (SBRA)</td>
<td>N/A</td>
<td>44.40%</td>
<td>-34.11%</td>
<td>48.12%</td>
<td>-18.65%</td>
<td>46.26%</td>
<td>-18.51%</td>
</tr>
<tr>
<td>LTC Properties, Inc. (LTC)</td>
<td>17.00%</td>
<td>29.39%</td>
<td>-31.20%</td>
<td>36.63%</td>
<td>-17.62%</td>
<td>42.73%</td>
<td>-17.91%</td>
</tr>
<tr>
<td>Senior Housing Properties Trust (SNH)</td>
<td>22.00%</td>
<td>30.28%</td>
<td>8.82%</td>
<td>45.72%</td>
<td>14.66%</td>
<td>56.22%</td>
<td>5.19%</td>
</tr>
<tr>
<td>Average</td>
<td>21.14%</td>
<td>33.78%</td>
<td>-3.76%</td>
<td>43.48%</td>
<td>6.27%</td>
<td>47.54%</td>
<td>-1.57%</td>
</tr>
</tbody>
</table>

Source: Stock Quotes and Volatility, [http://www.optionistics.com/](http://www.optionistics.com/) (Accessed 3/21/2012); TTM, Three Year, and Five Year Volatility calculated using daily pricing for each REIT listed. The daily standard deviation was calculated for each time period (i.e., TTM, Three Year, and Five Year look back) then multiplied by the square root of 252 (since there are 252 trading days and 252 data points for one year) to annualize the daily amount; [http://finance.yahoo.com](http://finance.yahoo.com) accessed 3/21/2012.
## HEALTHCARE REITS

### Volatility & Returns

**As of 12-31-2011**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>AmSurg Corp. (AMSG)</td>
<td>N/A</td>
<td>32.77%</td>
<td>21.66%</td>
<td>34.36%</td>
<td>3.64%</td>
<td>34.62%</td>
<td>2.21%</td>
<td>1</td>
</tr>
<tr>
<td>Community Health Systems, Inc. (CYH)</td>
<td>41.00%</td>
<td>69.50%</td>
<td>-75.85%</td>
<td>57.71%</td>
<td>5.98%</td>
<td>54.48%</td>
<td>-14.69%</td>
<td>2</td>
</tr>
<tr>
<td>Dynacq Healthcare, Inc. (DYII)</td>
<td>N/A</td>
<td>58.98%</td>
<td>-82.68%</td>
<td>65.14%</td>
<td>-44.26%</td>
<td>91.87%</td>
<td>-5.29%</td>
<td>3</td>
</tr>
<tr>
<td>Health Management Associates, Inc. (HMA)</td>
<td>39.00%</td>
<td>45.13%</td>
<td>-25.71%</td>
<td>58.21%</td>
<td>47.11%</td>
<td>66.68%</td>
<td>-6.87%</td>
<td>4</td>
</tr>
<tr>
<td>LifePoint Hospitals, Inc. (LPNT)</td>
<td>27.00%</td>
<td>34.29%</td>
<td>1.08%</td>
<td>35.42%</td>
<td>16.19%</td>
<td>37.26%</td>
<td>2.01%</td>
<td>5</td>
</tr>
<tr>
<td>MedCath Corp. (MDTH)</td>
<td>N/A</td>
<td>69.50%</td>
<td>-64.64%</td>
<td>70.85%</td>
<td>-11.96%</td>
<td>70.13%</td>
<td>-26.77%</td>
<td>6</td>
</tr>
<tr>
<td>Select Medical Holdings Corporation (SEM)</td>
<td>N/A</td>
<td>45.03%</td>
<td>14.79%</td>
<td>58.07%</td>
<td>-6.92%</td>
<td>62.67%</td>
<td>-23.75%</td>
<td>7</td>
</tr>
<tr>
<td>SunLink Health Systems, Inc. (SSY)</td>
<td>N/A</td>
<td>70.46%</td>
<td>1.22%</td>
<td>94.63%</td>
<td>21.49%</td>
<td>83.35%</td>
<td>-28.91%</td>
<td>8</td>
</tr>
<tr>
<td>Tenet Healthcare Corporation (THC)</td>
<td>45.00%</td>
<td>49.63%</td>
<td>-26.45%</td>
<td>68.03%</td>
<td>49.78%</td>
<td>69.14%</td>
<td>-6.61%</td>
<td>9</td>
</tr>
<tr>
<td>Universal Health Services, Inc. (UHS)</td>
<td>26.00%</td>
<td>40.26%</td>
<td>-10.58%</td>
<td>37.74%</td>
<td>24.73%</td>
<td>35.53%</td>
<td>7.19%</td>
<td>10</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>35.60%</strong></td>
<td><strong>51.55%</strong></td>
<td><strong>-24.72%</strong></td>
<td><strong>58.02%</strong></td>
<td><strong>10.58%</strong></td>
<td><strong>60.57%</strong></td>
<td><strong>-10.15%</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

Source: Stock Quotes and Volatility, http://www.optionistics.com/ (Accessed 3/21/2012); TTM, Three Year, and Five Year Volatility calculated using daily pricing for each REIT listed. The daily standard deviation was calculated for each time period (i.e., TTM, Three Year, and Five Year look back) then multiplied by the square root of 252 (since there are 252 trading days and 252 data points for one year) to annualize the daily amount; http://finance.yahoo.com accessed 3/21/2012.
## VARIANCE IN CHARACTERISTICS OF SECURITIES TRANSACTION EXCHANGE & REAL PROPERTY EXCHANGE MARKETS

<table>
<thead>
<tr>
<th>Securities Transactions Markets</th>
<th>Operating Real Property Transactions Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Large number of buyers and sellers.</td>
<td>2. Few buyers and sellers in any one price range at any one location (particularly for special purpose assets).</td>
</tr>
<tr>
<td>3. Relatively uniform, stable, and low transaction prices.</td>
<td>3. Relatively high and fluctuating transaction prices.</td>
</tr>
<tr>
<td>4. Low cost of individual transactions (including brokerage, information, and title-transfer fees).</td>
<td>4. High cost of individual transactions (including brokerage, information, and title-transfer fees).</td>
</tr>
<tr>
<td>5. Relatively few government restrictions on secondary market transactions.</td>
<td>5. Secondary market transactions subject to regulations, registration, and legislation at all levels.</td>
</tr>
<tr>
<td>7. Reasonably knowledgeable and generally informed buyers and sellers.</td>
<td>7. Potentially uninformed buyers and sellers who interact infrequently.</td>
</tr>
<tr>
<td>8. Public disclosure of substantial financial and operational information regarding properties.</td>
<td>8. Restricted disclosure of limited information (if any disclosure at all) regarding properties.</td>
</tr>
<tr>
<td>9. Organized market mechanism, allowing for rapid consummation and confirmation of transaction.</td>
<td>9. Small, fragmented, overlapping market segments causing delayed consummation of transaction.</td>
</tr>
<tr>
<td>10. Readily &quot;consumed,&quot; quickly supplied, and easily transported properties.</td>
<td>10. Durable, relatively immobile, and illiquid properties.</td>
</tr>
</tbody>
</table>

INTERDISCIPLINARY ENGAGEMENTS

Opportunities & Challenges

**Opportunities:** Benefits to an Interdisciplinary Approach to Valuation Engagements

- Unity and Organizational
- Business Referral
- Educational Understandings
- Similar Problems
- Mutual Clients
INTERDISCIPLINARY ENGAGEMENTS

Opportunities & Challenges

Opportunities: Despite challenges, there is overlap between the appraisal disciplines

“Several otherwise diverse disciplines have or use certain principles in common. The general principals and methods apply for the most part to all appraisal disciplines.”¹ – Richard Rickert, PhD, ASA

• All appraisers draw from the same “body of interdisciplinary principles, concepts and methods ... then apply them to diverse types of property”²

• This holds true for the type of property being valued and the method used as well
  – Exception: methods used to describe technical data

INTERDISCIPLINARY ENGAGEMENTS

Opportunities & Challenges

Challenges: Areas of Disagreement Between Appraisal Disciplines

- Use of real estate income method to appraise a going concern enterprise
- Definition of Terms, e.g., premise of value
  - **Value in Use:** assumes that the assets will continue to be used as part of an ongoing business enterprise, producing profits as a benefit of ownership of a going concern
  - **Value in Exchange:** appraiser may be required to select value in exchange as either
    1. An orderly disposition of a mass assemblage of the assets, in place;
    2. An orderly disposition of assets; or,
    3. A forced liquidation
INTERDISCIPLINARY ENGAGEMENTS

Opportunities & Challenges

Challenges: Areas of Disagreement Between Appraisal Disciplines

• Identification and Definition of Assets to be Appraised
  – Some healthcare organizations will only want to pay for the tangible assets of a physician practice, citing concern over regulatory scrutiny (e.g., Thornton Letter, Anti-kickback statute)
  – Business appraisers often lack requisite knowledge regarding the value of tangible personal property (e.g., FF&E)

• Valuation Methodology
  – Use of real estate income method to appraise a going concern enterprise
  – Definition of terms (e.g., Premise of Value)

• Format and Delivery of Valuation Report
INTERDISCIPLINARY ENGAGEMENTS

Opportunities & Challenges

Challenges: Defining the Respective Appraiser Roles in the Engagement

• Who will be primarily responsible for the business development activities?

• Who will be designated “lead appraiser”, i.e., the appraiser to be engaged by the CLIENT (and ultimately paid)?

• Who will have the primary “day to day” contact with CLIENT?

• Who will be responsible for collecting the CLIENT’s fees?

• What will be the respective responsibilities for delivering the ultimate work product to the CLIENT?

• Who will maintain the appraiser’s work file?
INTERDISCIPLINARY ENGAGEMENTS

Opportunities & Challenges

Tools and Techniques for Coordinating an Interdisciplinary Team

• Proper Prior Planning Prevents Poor Performance
  – Identify at the outset of the prospective project the agreed upon allocation of appraiser Tasks, Duties, Responsibilities, and Accountabilities

• Form Before Function
  – Establish: Data Status Tracking Summaries, Milestone Chronologies, Project Plans & Budgets

• Utilize Technology to Effectively and Efficiently Communicate Information
  – Maintain a confidential “Back Office” website for each project
### INTERDISCIPLINARY ENGAGEMENTS

#### Opportunities & Challenges

Allocation of Appraiser Tasks, Duties, Responsibilities & Accountabilities

<table>
<thead>
<tr>
<th>I. Pre-engagement and Business Development</th>
<th>Allocated Percentage (%)</th>
<th>Lead Appraiser (%)</th>
<th>Consulting Appraiser #1 (%)</th>
<th>Consulting Appraiser #2 (%)</th>
<th>Consulting Appraiser #3 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Obtaining Prospect/Lead</td>
<td></td>
<td></td>
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<tr>
<td>B. Sending Out Capabilities Information (Brochure)</td>
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<tr>
<td>C. Follow up and Responding to Prospect Inquiries</td>
<td></td>
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<tr>
<td>D. Engagement Definition</td>
<td></td>
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<tr>
<td>E. Negotiating Terms of Engagement</td>
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<tr>
<td>F. Developing and Submitting Client Engagement Agreements</td>
<td></td>
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<tr>
<td>G. Securing Execution of Agreements and Retainer</td>
<td></td>
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<tr>
<td>H. Define Project Parameters &amp; Assumptions</td>
<td></td>
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<td></td>
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<tr>
<td><strong>Subtotal - Pre-engagement and Business Development</strong></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Engagement</th>
<th>Allocated Percentage (%)</th>
<th>Lead Appraiser (%)</th>
<th>Consulting Appraiser #1 (%)</th>
<th>Consulting Appraiser #2 (%)</th>
<th>Consulting Appraiser #3 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Develop a Detailed Work Program</td>
<td></td>
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<tr>
<td>B. Gather Necessary Data</td>
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<tr>
<td>1. General Data – Research</td>
<td></td>
<td></td>
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<tr>
<td>2. Specific Data – Request for Documents &amp; Survey</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2a. Preliminary Site Visit &amp; Interviews</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2b. Follow-up on Documents and Survey Request</td>
<td></td>
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<tr>
<td>C. Analyze Data</td>
<td></td>
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<tr>
<td>D. Estimate the Value of the Interest Being Appraised</td>
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<tr>
<td>E. Write the Report</td>
<td></td>
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<tr>
<td>F. Review Preliminary Draft Report with Client</td>
<td></td>
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<tr>
<td>G. Tic and Tie Report</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>H. Final Revisions to Report and Issue Final Bound Certified Report(s)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal - Engagement</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Post Engagement</th>
<th>Allocated Percentage (%)</th>
<th>Lead Appraiser (%)</th>
<th>Consulting Appraiser #1 (%)</th>
<th>Consulting Appraiser #2 (%)</th>
<th>Consulting Appraiser #3 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Prepare and Submit Final Billing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. On-site Presentation to Client</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Records Retention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal - Post-Engagement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTALS**
OVERVIEW OF BUSINESS VALUATION

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OVERVIEW OF BUSINESS VALUATION

• Two Regulatory Thresholds Related to Value
  – *Fair Market Value* = *Standard of Value*
  – *Commercial Reasonableness*

• Standard of Value
  – Typically either *Fair Market Value* or *Acquisition Value*

• Definition of *Commercial Reasonableness*
  – “…a sensible, prudent business agreement, from the perspective of the particular parties involved, even in the absence of any potential referrals[,]”¹ and that, in the absence of referrals, “…the arrangement would make commercial sense if entered into by a reasonable entity of similar type and size and a reasonable physician (or family member or group practice) of similar scope and specialty, even if there were no potential DHS referrals.”²

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² “Medicare Program; Physicians’ Referrals to Health Care Entities With Which They Have Financial Relationships (Phase II),” Centers for Medicare and Medicaid Services, Federal Register, Vol. 69, No. 59 (March 26, 2004), p. 16093.
OVERVIEW OF BUSINESS VALUATION

Premise of Value

- **Value in Use**: assumes that the assets will continue to be used as part of an ongoing business enterprise, producing profits as a benefit of ownership of a going concern.

- **Value in Exchange**: appraiser may be required to select value in exchange as either:
  1. An orderly disposition of a mass assemblage of the assets in place;
  2. An orderly disposition of assets; or,
  3. A forced liquidation.
OVERVIEW OF BUSINESS VALUATION

Typical Approaches and Methods

• Income Approach
  – Discounted net Cash Flow Method
  – Single Period Capitalization Method
  – Discounted Future Benefit Method

• Market Approach
  – Direct Market Comparable Transactions Methods
  – Guideline Publicly Traded Company Method
OVERVIEW OF BUSINESS VALUATION

Typical Approaches and Methods

• Asset/Cost Approach
  – Adjusted Book Value Method
  – Liquidation Value Methods
  – Excess Earning Method

• Cost of Capital Considerations
  – Capital Structure
  – Cost of Debt
  – Cost of Equity/Equity Discount Rate
    • Market Return
    • Company Specific Risk
OVERVIEW OF BUSINESS VALUATION

Valuation of Enterprises, Assets, & Services

- Business Enterprises
  - Total Invested Capital
  - Equity
- Assets
  - Tangible Assets
    - Tangible Personal Property (FF&E)
    - Accounts Receivable
    - Cash
  - Intangible Assets
    - Trained and Assembled Workforce (TAWF)
    - Intellectual Property (IP)
    - Trade Name
    - Goodwill
      - Enterprise/Commercial
      - Personal/Professional
      - Services
        - Clinical productivity, coverage and call, medical directorships, executive and administrative services
OVERVIEW OF INTANGIBLE ASSETS AND INTELLECUTAL PROPERTY (IP)

Charles Wilhoite, CPA/ABV/CFF, CMA, ASA, CFM
Managing Director
Willamette Management Associates
• In addition to financial accounting purposes, analysts are often asked to estimate the value of intangible assets for various transaction, taxation, financing, litigation, bankruptcy, and planning purposes.

• Regardless of the purpose, analysts should consider all generally accepted valuation approaches, methods, and procedures when estimating the value of intangible assets.

• Generally, analysts are more familiar with market approach and income approach valuation methods.

• However, there are circumstances when cost approach valuation methods are particularly applicable for the purpose of completing an intangible asset valuation analysis.
REASONS TO USE THE COST APPROACH

• The selection of the applicable valuation approaches is a process of elimination.
• If there are sufficient reliable data, then the analyst will typically apply all three approaches.
• If there are insufficient guideline sale or license transaction data available, then the analyst may have to rely on the cost approach by default.
• If the intangible asset is not the type of asset that generates a measurable amount of income (however defined), then the analyst may have to rely on the cost approach by default.
INTERNAL REVENUE CODE SECTION 197

List of Amortizable Intangible Assets

• Goodwill
• Going concern value
• Any of the following items:
  1. Workforce in place
  2. Business books and records, operating systems, or any other information base
  3. Any patent, copyright, formula, process, design, pattern, know-how, format, or other similar item
  4. Any customer-based intangible
  5. Any supplier-based intangible, and any other similar item
• Any license, permit, or other right granted by a governmental unit or agency or instrumentality thereof.
• Any covenant not to compete entered into in connection with an acquisition of a trade or business.
• Any franchise, trademark, or trade name.
COMMON HEALTH CARE INDUSTRY
INTANGIBLE ASSETS

- Medical, dental, and other professional licenses
- Certificates of need
- Patient relationships
- Patent files and records (manual and electronic)
- Electronic medical records computer software
- Medical and administrative assembled workforce
- Office systems, procedures, and manuals
- Position or “station” procedures and manuals
- Facility operating licenses and permits
- Physician (and other professional) employment agreements
- Physician (and other professional) noncompetition agreements
- Executive (and other administrator) employment agreements
- Executive (and other administrator) noncompetition agreements
- Administrative services agreements
- Medical (and other professional) services agreements
- Facility or function management agreements
- Equipment and other supplier purchase agreements
- Service marks and service names
- Joint venture agreements
- A professional’s personal goodwill
- An entity’s institutional goodwill
- Equipment use or license agreements
- Medical (other professional) staff privileges
- Joint development or promotion agreements
WHY ASSET-BASED VALUATION APPROACH IS OFTEN USED IN REGULATORY FAIR MARKET VALUE VALUATION

• Most transactions are cash for assets deals, so the asset-based approach is particularly applicable.

• To comply with Stark, OIG regulations, IRS regulations, etc., a not-for-profit entity has to establish that it did not pay more than/receive less than FMV for the target entity assets, due to:
  1. Private benefit/inurement concerns (Sec. 501(c)(3))
  2. Excess benefits concerns (Sec. 4958)
  3. Intermediate sanction concerns (Sec. 4958)

• Income approach methods are sometimes used, but future income could be interpreted to include patient referrals value.

• Market approach methods are sometimes used, but capitalized income could be interpreted to include patient referrals value.
REGULATORY FAIR MARKET VALUE VALUATION
PROHIBITED INTANGIBLE ASSETS

• Under various anti-kickback statutes, any patient referral-related intangible asset is a prohibited intangible asset.

  1. The value of current or future patients to the current entity is allowable.
  2. The value of incremental income from current or future patients to the acquirer is prohibited.
  3. This regulation does not mean that practice/entity goodwill is a prohibited intangible asset.
Consistent with business valuation practice, there are three generally accepted intangible asset valuation approaches: the cost approach, the market approach, and the income approach.

The analyst should consider, and attempt to implement, all three approaches in an intangible asset valuation.

The application of multiple approaches provides the analyst with multiple value indications.

Due to data limitations, most intangible asset valuations primarily are based on a single approach. The analyst typically selects the approach (or approaches):

1. For which there are the greatest quantity and quality of available data.
2. That best reflect the actual transactional negotiations of market participants in the industry.
3. That best fit the characteristics (e.g., use, age, etc.) of the subject intangible asset.
4. That are most consistent with the practical experience and professional judgment of the individual analyst.
THE COST APPROACH AND INTELLECTUAL PROPERTY

• Some analysts believe that the cost approach cannot be used to value an intellectual property (IP), such as a patent, copyright, trademark, or trade secret.

• That is based on the assumption that the marketplace cannot actually provide a replacement IP for the subject IP.

• Further, the subject is a legally protected IP, and it is assumed that the replacement IP would infringe on the subject.

• The analyst should note that the cost approach considers the cost to replace the *utility* of the subject IP. The application of the cost approach assumes that the actual IP does not already exist.
HEALTHCARE REIMBURSEMENT, TECHNOLOGY & REGULATORY ISSUES

Edward G. Detwiler, ASA
Accredited Senior Appraiser
M&TS, M&E
American Society of Appraisers
INTRODUCTION

• Many imaging facilities operate near break-even, with some modalities, such as MRI, PET/CT and CT usually making a profit, while others such as Ultrasound, Mammography and General Radiology are marginal or experience losses.

• Cuts in reimbursements will cause some to go under as profits become negative.
IMPACT ON EQUIPMENT VALUES

• Anti-Kickback and Self-Referral legislation referred to as “Stark-II” put a large number of imaging and therapy centers at risk or out of business.

• From one of my presentations in 1993...
THE HILLARY FACTOR - 1993

• The number of MRI procedures dropped by 30% and the price per procedure dropped by up to 50% overnight!

• Prices for new equipment plummeted, sometimes by 50% or more. Values for existing equipment decreased proportionally, as there was a glut of equipment that was sitting and out of use due to violations of Stark-II.
STARK II...OBRA 93

• Fraud & Abuse
• Safe Harbor Leasing contracts allowed many imaging centers to avoid problems
• Leasing became a solution and a problem
• Enron and other disasters have led to new accounting standards ending operating leases...Maybe...
REGULATORY ENVIRONMENT AND ECONOMIC OBsolescence

- Forecasting Values based on changes in Regulatory Environment
- Requires Knowledge of the impact of the historical regulation on values
  - We have monitored and lived through many changes in regulations, mostly Medicare-related, of values back to 1964, allowing us to look at trends
TECHNOLOGICAL OBSOLESCENCE

• Forecasting and Valuing Obsolescence
  – PACS
  – Medical Records
  – Automated Chemistry
  – Robotic Surgery
  – DNA - Clean Room Laboratories
  – Proton Therapy
HEALTHCARE MEETS ECONOMICS
MEETS POLITICS 2000-2012

• Start with Gradual Market De-Regulation
• Add Increasing Health Insurance Premiums
• Add Denial of Claims (pre-existing)
• Add Business Failures (benefits lost)
• Add Financial Melt-Down (unemployment)
• Add Market Collapse (loss of investments)
• Add General Market Regulation
FAIR MARKET VALUE IN PLACE AND IN USE

• Market Approach
  – Comparable sales of similar equipment in similar conditions

• Cost Approach
  – Formula starting with Replacement Cost for new equipment of same utility, then deducting for all forms of depreciation

• Income Approach
  – Current value is capitalized future income expectations (the least frequently used approach to value in equipment valuations)
NEED FOR BUSINESS VALUATION

• Medical Practices – Typically low tangible asset value
• Referral Centers – Typically higher tangible asset value
• Both can have limited tangible asset value due to age of equipment, financial structure and use of leasing
NEED FOR MULTI-DISCIPLINE VALUATION

• Many Hospitals and Health Systems think they must purchase a practice for the tangible asset value only to comply with CMS rules.

• They then tend to over-compensate employed physicians to reflect the profitability of the practice.
MULTI-DISCIPLINARY APPROACH

• Best solution is to present a combined approach, valuing:
  – Tangible Equipment
  – Personal Property
  – Real Property
  – Intangible Assets

• and finally, Total Business Value
OVERVIEW OF TANGIBLE PERSONAL PROPERTY (FF&E)

*FF&E Appraisal Partnerships with Other Appraisers for Practice Valuations*

- Business Appraisers
  - FF&E Appraisal done as part of overall practice valuation
  - FF&E valuation and business valuation done at FMV
  - Meet requirements under IRS and Stark II (prohibition on payment for physician self-referral)
  - Challenge: question as to whether appraiser in the various disciplines posses the requisite expertise/knowledge regarding the regulatory scrutiny related to payment intangibles
OVERVIEW OF TANGIBLE PERSONAL PROPERTY (FF&E)

*FF&E Appraisal Partnerships with Other Appraisers for Practice Valuations*

- Real Estate Appraisers
  - Many licensed locally
  - Quality and knowledge differs
  - “Fuzzy Area” between M&E, Leasehold Improvements, and Infrastructure
OVERVIEW OF TANGIBLE PERSONAL PROPERTY (FF&E)

*FF&E Appraisal Partnerships with Other Appraisers for Practice Valuations*

- Gems and Jewelry Appraisals
  - Typically has not been needed for practice valuations
- Insurance Appraisals
  - Loss has occurred and all contents in the building/office must be valued)
- Appraisals Done for Donations Purposes
  - Occasionally practices/hospitals have art collections and antiques – became more rare
OVERVIEW OF PERSONAL PROPERTY

Sandra Tropper, ASA
Artemis, Inc., Bethesda, MD
OVERVIEW OF PERSONAL PROPERTY

Personal Property includes artwork, furnishings, general contents of private and public spaces

Family Room in Cedar Park Regional Medical Center, Cedar Park Texas
OVERVIEW OF PERSONAL PROPERTY

Possible Intended Uses of Appraisal

– Insurance Coverage
– Insurance: Damage and Loss Claims
– Non-Cash Charitable Contributions
– Estates
– Valuation of Property for Disposition
– Valuation of Property for Liquidation
OVERVIEW OF PERSONAL PROPERTY

• Types of Value depends on Intended Use of the Appraisal
  – Replacement Value
    • New
    • Reproduction
  – Fair Market Value
  – Market Value
  – Liquidation Value
PERSONAL PROPERTY VALUATION

Typical Approaches and Methods for Personal Property Valuation

• Sales Comparison Approach to Value
  – A procedure to conclude an opinion of value for a property by comparing it with similar properties that have been sold or are for sale in the relevant marketplace by making adjustments to prices based on marketplace conditions and the properties’ characteristics of value.
PERSONAL PROPERTY VALUATION

Typical Approaches and Methods for Personal Property Valuation

• Cost Approach to Value
  – A procedure to estimate the current costs to reproduce or create a property with another of comparable use and marketability.

Doylestown Hospital, Pennsylvania
PERSONAL PROPERTY VALUATION

• General Contents, Fine Art and even Antiques Appraisers
  – Health care organizations often have limited funds for artwork
  – Health care professional(s) often maintain personal ownership of office personal property
  – Art in office can exceed value of the equipment
ARTWORK IN MEDICAL OFFICES

A mural used in a dental surgery room

By Luminous Sky Ceilings
ARTWORK IN MEDICAL OFFICE

A mural used in a Veterinarian office in Chicago

Artist: Darin Knupp
PERSONAL PROPERTY VALUATION

• Personal Property Appraisers
  – Usually engaged after preliminary inspection visits that determine need
  – PP appraisers inspect the artwork, antiques furnishings, etc.
HOSPITAL LOBBY

Cedar Park Regional Medical Center, Cedar Park Texas

Personal Property includes artwork, seating, planters, etc.
OVERVIEW OF REAL PROPERTY

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MS, MBA, FASA, FRICS, PE
Demba Valuation Services
OVERVIEW OF REAL PROPERTY

• Possible the oldest documented discipline
• Serves as a basis for professional organizations
• More laws involving real property issues than an others up to the early 1960s
• More public interaction and information regarding real estate
OVERVIEW OF REAL PROPERTY

This led to most education, definitions, laws, and understandings around:

REAL PROPERTY TERMS
USPAP developed concerning public perceptions and participants involving:

REAL PROPERTY
And state laws were implemented to control appraisers in only the area of:

REAL PROPERTY
And therefore, WE question WHY there are only:

REAL and non-real APPRAISERS
OVERVIEW OF REAL PROPERTY

Real Property and Other Appraisers

• Definitions of terms:
  – Values
  – Market Value
  – Fair Value
  – Highest and Best Value
  – Fair Market Value

• State Laws restricting appraisal practice
OVERVIEW OF REAL PROPERTY

• This past division between real property appraisers and the other appraisal disciplines has caused problems related to:
  – Laws in appraisals and for appraisers in some states
  – Definitions in appraisals in courts
  – Definitions in education materials
  – Standards for users of appraisals (nationally and internationally)
AMERICAN SOCIETY OF APPRAISERS
HEALTHCARE SPECIAL INTEREST GROUP (HSIG)

MULTIDISCIPLINARY ADVANCED EDUCATION IN HEALTHCARE VALUATION
KEY GOALS AND OBJECTIVES

• In participating in ASA’s Healthcare Special Interest Group, qualified healthcare valuation professionals will be able to develop and demonstrate a level of knowledge that will best allow them to serve clients and the public in an informed manner that distinguishes their work with an in-depth understanding of the key regulatory, reimbursement, competitive, and technological factors of the healthcare industry.

• Clients and users of healthcare valuation services will be better served in identifying and relying on informed, experienced valuation professionals who have achieved the ASA Multidisciplinary Advanced Education in Healthcare Valuation Certificate of Completion (CERTIFICATE).
KEY GOALS AND OBJECTIVES

• Valuation professionals seeking the CERTIFICATE will be:
  • Presented with a multidisciplinary framework for analyzing healthcare enterprises, assets, and services
  • Introduced to the primary value drivers for the appraisal of healthcare enterprises, assets, and services
  • Equipped with a broad perspective and in-depth understanding of “The Four Pillars of the Healthcare Industry”, as it applies to general valuation principles and processes
  • Instructed at how to efficiently and seamlessly work with other professionals from within the valuation discipline to better engage client needs

• The ultimate objective of ASA CERTIFICATE education is to foster the development of credible valuation opinions in the healthcare industry
The CERTIFICATE is a Certificate of Completion of Advanced Education.

It is not an additional ASA certification or designation.

As a part of the application to the CERTIFICATE education program, valuation professionals will be required to agree in advance on how they are permitted to communicate and advertise their CERTIFICATE.

The CERTIFICATE is distinguished from the recently created ASA Intangible Asset Specialty Designation.
## ASA HSIG SUB-COMMITTEE

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<th>Committee Participants</th>
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<tr>
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<td>Business Valuation</td>
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CONCLUSION

*We Can All Work Together!*

- In the current era of healthcare reform, valuation professionals advising individuals and businesses should develop and maintain an in-depth understanding of the history and the development of healthcare under the changing reimbursement, regulatory, competitive, and technological environment of the healthcare industry, as well as the unique dynamics of the business arrangements that comprise emerging healthcare organizations, in order to obtain the requisite background for forecasting the future performance of these enterprises, assets, and services.
CONCLUSION

We Can All Work Together!

- When developing an understanding of the forces and stakeholders that have the potential to drive healthcare markets, valuation professional must examine the professional practice’s enterprises, assets, and services as they relate to “The Four Pillars of the Healthcare Industry” i.e. reimbursement, regulatory, competition, and technology, as these four elements shape the professional practice-provider dynamic, while serving as a framework for analyzing the viability, efficiency, efficacy, and productivity of healthcare organizations.
CONCLUSION

*We Can All Work Together!*

- More informed and uniform valuation practice would benefit the users of healthcare valuations and improve confidence in valuations.

- To help ensure competency, significant specialized education and training is imperative for those performing healthcare valuations.

- Given these issues, a multidisciplinary approach towards the healthcare industry and valuation assignment makes sense and should be promoted by the ASA, as the premiere multidisciplinary valuation society of professional appraisers.
CONCLUSION

*We Can All Work Together!*

- We are all in the same profession
- Distinct disciplines in essentially the same profession
- Similar tools to solve problems
CONCLUSION

We Can All Work Together!

• We have distinct disciplines with shared clients
• Valuation of healthcare related transactions provides the opportunity to put together a team of specialists across several appraisal disciplines whereby the skills and resources of these various specialists may be combined to deliver high-quality work product to the CLIENT
CONCLUSION

_We Can All Work Together!_

• An interdisciplinary approach to valuation allows appraisers to collaborate with one another and exchange ideas; theories, and professional experiences, which will ultimately benefit not only the CLIENT, but also the future careers of the respective appraisers

• Interdisciplinary approach yields significant benefit to both CLIENTs and appraisers