# Valuation of Healthcare Tangible Personal Property

#### **Presenters:**

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Thursday, April 7, 2016 1 to 3 PM EST

### **Presenter Bio**

Lez A. McKenzie, ASA, is a senior equipment professional with experience in valuation, residual setting, end of lease remarketing and industry research. Strong negotiation background with extensive equipment contacts in middle market and large ticket asset types. I also have the ability to immediately establish credibility, trust and rapport with customers and potential vendors while maximizing gains or minimizing potential downside risk to the institutions represented. Solution oriented who works well in a team environment with an eye toward win/win solutions and bottom line results.

Mr. McKenzie is the Director of Healthcare Valuations & Remarketing Services for Vista Consulting Group (VCG), where he is responsible for creating and implementing business development strategies to increase VCG's position in the healthcare market. He is also the President/Owner for Sonoran Medical Resources, LLC, an independent remarketing and equipment management company.





### **Presenter Bio**

**Todd A. Zigrang, MBA, MHA, FACHE, ASA** is the President of **HEALTH CAPITAL CONSULTANTS** (HCC), where he focuses on the areas of valuation and financial analysis for hospitals, physician practices, and other healthcare enterprises. Mr. Zigrang has over 20 years of experience providing valuation, financial, transaction and strategic advisory services nationwide in over 1,000 transactions and joint ventures involving acute care hospitals and health systems; physician practices; ambulatory surgery centers; diagnostic imaging centers; accountable care organizations, managed care organizations, and other third-party payors; dialysis centers; home health agencies; long-term care facilities; and, numerous other ancillary healthcare service businesses. Mr. Zigrang is also considered an expert in the field of healthcare compensation for physicians, executives and other professionals.

Mr. Zigrang is the co-author of "*The Adviser's Guide to Healthcare – 2<sup>nd</sup> Edition*" [2015 – AICPA], numerous chapters in legal treatises and anthologies, and peer-reviewed and industry articles such as: *The Accountant's Business Manual* (AICPA); *Valuing Professional Practices and Licenses* (Aspen Publishers); *Valuation Strategies*; *Business Appraisal Practice*; and, *NACVA QuickRead*. Additionally, Mr. Zigrang has served as faculty before professional and trade associations such as the American Bar Association (ABA); the National Association of Certified Valuators and Analysts (NACVA); the Physician Hospitals of America (PHA); the Institute of Business Appraisers (IBA); the Healthcare Financial Management Association (HFMA); and, the CPA Leadership Institute.





### **Presenter Bio**

**Robert James Cimasi, MHA, ASA, MCBA, FRICS, CVA, CM&AA**, serves as Chief Executive Officer of **HEALTH CAPITAL CONSULTANTS** (HCC), a nationally recognized healthcare financial and economic consulting firm headquartered in St. Louis, MO, serving clients in 49 states since 1993. Mr. Cimasi has over thirty years of experience in serving clients, with a professional focus on the financial and economic aspects of healthcare service sector entities including valuation consulting and capital formation services; healthcare industry transactions, including joint ventures, mergers, acquisitions, and divestitures; litigation support & expert testimony; and certificate-of-need and other regulatory and policy planning consulting.

Mr. Cimasi is a nationally known speaker on healthcare industry topics and the author of numerous peer-reviewed articles, chapters in legal treatises and anthologies, and nationally published books, including: "Accountable Care Organizations: Value Metrics and Capital Formation" [2013 - Taylor & Francis]; "Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services" [2014 - John Wiley & Sons]; and, his most recent book, "The Adviser's Guide to Healthcare – 2<sup>nd</sup> Edition" [2015 - AICPA].

In 2006, Mr. Cimasi was honored with the prestigious "Shannon Pratt Award in Business Valuation" conferred by the Institute of Business Appraisers (IBA). He serves on the Editorial Board of the Business Appraisals Practice of the IBA, of which he is a member of the College of Fellows; and, as *Chair Emeritus* of the American Society of Appraisers Healthcare Special Interest Group (ASA HSIG). In 2011, he was named a Fellow of the Royal Institution of Chartered Surveyors (RICS).





### About the American Society of Appraisers

The American Society of Appraisers is an international organization of appraisal professionals, founded in 1952 to provide a comprehensive, profession wide organization for appraisers and valuation engineers.

As a comprehensive body, the ASA pursues accurate valuation for all classes of property and hence examines multiple levels of economic activity. As such, the ASA seeks to foster cooperation between professionals of several valuation disciplines, and this spirit of cooperation may help engender multidisciplinary approaches to the art and science of valuation.



## Mission of the Healthcare Special Interest Group (HSIG)

The *Healthcare Special Interest Group* (HSIG) is a Subcommittee of the ASA's International Education Committee and dedicated to the advancement of multidisciplinary education in healthcare valuation.

HSIG views the field of healthcare valuation as a complex area affecting multiple disciplines and requiring unique approaches for study and solutions. At the same time, the field also holds much promise for those willing to pursue new, multidisciplinary answers in this ever-changing healthcare market environment.



#### **ASA HSIG Members**

**Robert James Cimasi** (Chair Emeritus) MHA, ASA, FRICS, MCBA, CVA, CM&AA Chief Executive Officer HEALTH CAPITAL CONSULTANTS St. Louis, MO

**Todd A. Zigrang** (Chair) MBA, MHA, FACHE, ASA President **HEALTH CAPITAL CONSULTANTS** St. Louis, MO

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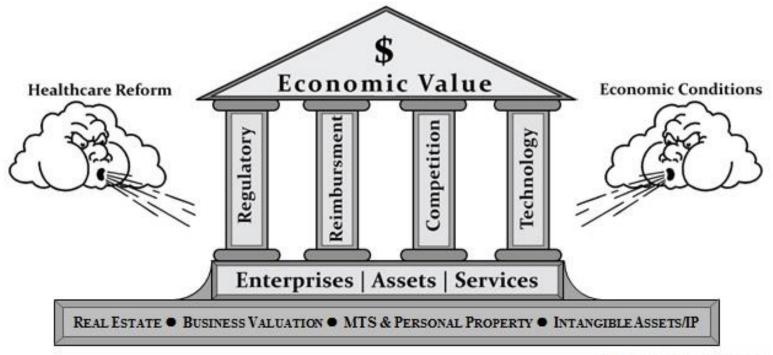
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### **Presentation Overview**

- Part 1 Types of Property/Assets
- Part 2 Tangible Personal Property
- Part 3 Overview of Valuation Approaches
- Part 4 Classification & Valuation of Tangible Personal Property (within MTS Discipline)
- Part 5 Classification & Valuation of Tangible Personal Property (within Personal Property Discipline)
- Part 6 Concluding Remarks



### Healthcare Trends Related to Tangible Personal Property: *The Four Pillars*



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### Regulatory

- Healthcare transactions are subject to regulatory scrutiny, including:
  - Federal and state fraud and abuse laws
    - Stark Law
    - Anti-Kickback Statute
  - IRS regulations pertaining to excess benefit and inurement of private benefit
- Tax-Exempt donations of personal property (e.g., art, collectibles)



"Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services" By Robert James Cimasi, MHA, ASA, FRICS, MCBA, AVA, CM&AA, John Wiley & Sons Inc.., 2014 p. 717. "Monetization Trends In Health System and Physician-Owned Real Estate" By Greg Gheen and Scott Evans, Realty Trust Group, 1/18/2013, http://www.realtytrustgroup.com/RTG\_011813\_Monetization.pdf, (Accessed 2/6/2013). "Monetization Trends in Health System and Physician-Owned Real Estate" Realty Trust Group, 2013 p. 2. http://www.realtytrustgroup.com/RTG\_011813\_Monetization.pdf (Accessed 08/12/13)

### Reimbursement

- Healthcare entities are directly reimbursed not only for services rendered, but also for *tangible assets* such as:
  - Durable medical equipment (DME)
  - Medical devices
  - Supplies used during the provision of healthcare services
- Tangible assets are directly reimbursed under the prospective payment systems used for Medicare and Medicaid under the *Resource-Based Relative Value System* through the inclusion of the *Practice Expense Relative Value Unit* (PE RVU)
  - Reflects costs of a physician practice, including the operating expenses and capital expenses



"Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services" By Robert James Cimasi, MHA, ASA, FRICS, MCBA, AVA, CM&AA, John Wiley & Sons Inc., 2014 p. 718-719. Centers for Medicare and Medicaid Services, "Medicare Physician Fee Schedule— Payment System Fact Sheet Series," December 2011, Department of Health and Human Services.

### Competition

- Increasing focus on ownership of *tangible assets* such as new, high quality, technologically advanced services provided in part via physical premises and technology has increased the need for MTS services
- Increased use of personal property in healthcare settings
  - Examples:
    - Effects of "Evidence-Based" Art and Design



"Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services" By Robert James Cimasi, MHA, ASA, FRICS, MCBA, AVA, CM&AA, John Wiley & Sons Inc.., 2014, p. 719-720. "Monetization Trends in Health System and Physician-Owned Real Estate" Realty Trust Group, 2013 p. 2. http://www.realtytrustgroup.com/RTG\_011813\_Monetization.pdf (Accessed 08/12/13). "Contemporary Art in Medicine: The Cleveland Art Collection" By Jennifer Finkel, Cardiovascular Diagnosis and Therapy, Vol. 1, No.1, 2011, p. 71-75. "Arts Program – Art Collection," Stanford Hospital & Clinics, http://stanfordhospital.org/forPatients/patientServices/ArtCollection.html (Accessed 6/16/14).

### Technology

- Rapidly changing technology drives the need and creation of newer, machinery and equipment while also often diminishing the value of those already in place
  - Digital requirements for data driven hospitals
  - Energy use/efficiencies
  - Aging patient population
  - Accommodations in caring for obese patients

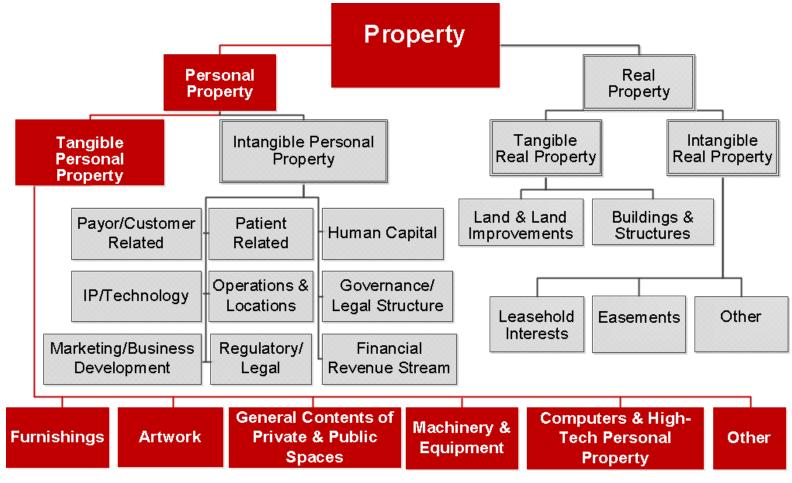


"Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services" By Robert James Cimasi, MHA, ASA, FRICS, MCBA, AVA, CM&AA, John Wiley & Sons Inc., 2014, p. 720-721.

### Part 1 Types of Property/Assets



### **Types of Property/Assets**





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# **Types of Property/Assets**

### **Tangible Property**

 "[Property] that [is] of a physical and material nature" such as land, buildings, machinery and equipment, furniture, artwork, and others

### Intangible Property

 An asset having no *physical existence* yet having value based on rights or privileges accruing to an enterprise



"Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Third Edition, Washington, DC: 2011, p. 127. Miscellaneous Terms in "ME202: M&E Valuation Methodology" By American Society of Appraisers, 2008, p. 18.

# **Tangible vs. Intangible Property/Assets**

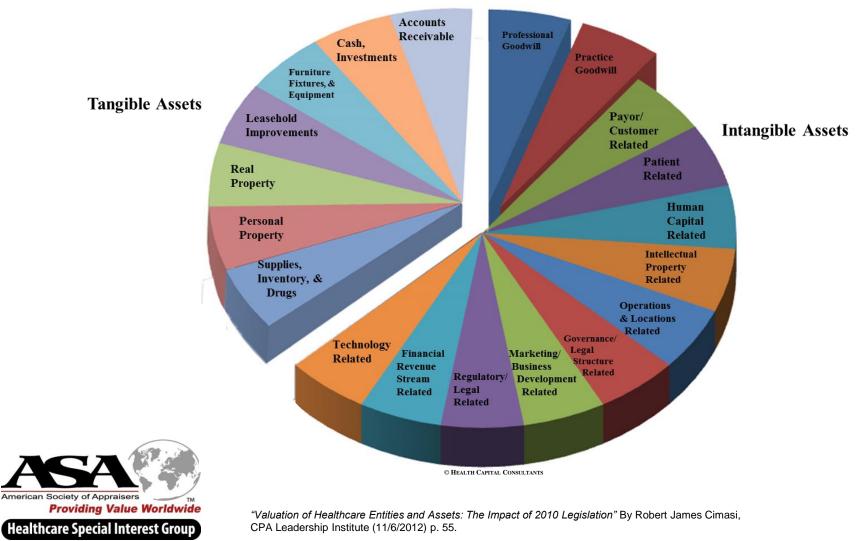
- The major distinction The aspect of their physicality (not an exclusive definitional barrier)
- Physical tangible assets may possess an intangible aspect as regards to the legal rights of property ownership attached to them
  - Examples: Reproduction rights, copyrights, licensing rights



# **Polling Question 1**



### Types of Tangible and Intangible Property/Assets in Healthcare



### Types of Tangible and Intangible Property/Assets in Healthcare

#### • Examples:

- Tangible assets in healthcare: Furniture, fixtures, and equipment (FF&E); leasehold improvements; real property; supplies; inventories; and, drugs
- Intangible assets in healthcare: Patents, trained and assembled workforce in-place (provider and nonprovider), custodial rights to patient medical records, going-concern value, licenses, permits, certificate of need, etc.



"Financial Accounting: An Introduction to Concepts, Methods, and Uses" By Clyde P. Stickney, et al., South-Western Cengage Learning, Mason, OH: 2010, p. 878. "Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services" By Robert James Cimasi, MHA, ASA, FRICS, MCBA, AVA, CM&AA, John Wiley & Sons Inc., 2014, p. 712-714 "Dictionary of Health Economics and Finance" By David Edward Marcinko, New York, NY: Springer Publishing Company, LLC, 2007, p. 197.

# **Types of Tangible Property/Assets**

#### **Tangible Real Property**

 Physical land and appurtenances attached to the land including buildings, structures, standing timber, parking lots, etc.

#### **Tangible Personal Property**

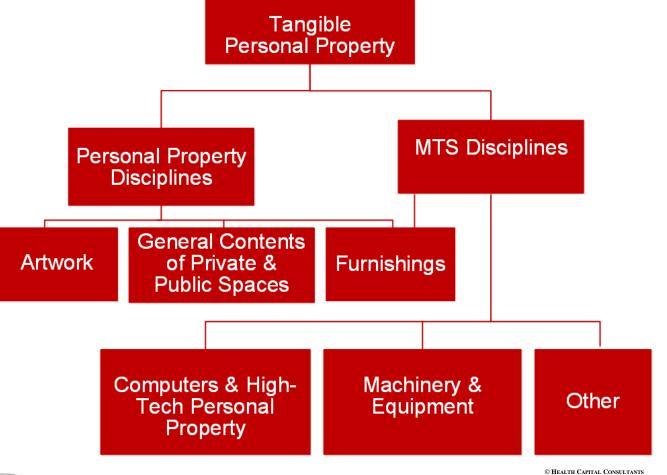
- Identifiable tangible (perceptible by touch) objects that are considered by the general public as being *"personal"*
  - Examples: furnishings, artwork, antiques, gems and jewelry, collectibles, machinery and equipment (tangible property not classified as real estate)



### Part 2 Tangible Personal Property



#### Valuation Disciplines for Tangible Personal Property





### **Tangible Personal Property**

- "Tangible things capable of ownership not classed as realty, they being furniture, fixtures, equipment, machinery, inventories, vessels, precious metals, vehicles, gems, evidences of debt and money" [emphasis added]
  - Example: Ventilation for a specific piece of equipment, e.g., fume exhaust for a chemotherapy center, may be classified as *tangible personal property* while ventilation for the office space the equipment occupies would be classified as *tangible real estate*



"The Appraisal of Machinery and Equipment "By American Society of Appraisers, ASA Monograph #2, Washington D.C., 1969, p. 3, 10. "Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services" By Robert James Cimasi, MHA, ASA, FRICS, MCBA, AVA, CM&AA, John Wiley & Sons Inc., 2014, p. 734.

# **Tangible Personal Property**

Types of Tangible Personal Property

- Furniture, Fixtures & Equipment (FF&E)
- Machinery & Technical Assets (MTS)
- Inventories
- Commodities
- Cash & Equivalents



Cedars-Sinai Deluxe Maternity Suite



"Here are some frequently asked questions about becoming a Personal Property Appraiser" American Society of Appraisers, 2013, http://www.appraisers.org/PPHome/PPProfessionalInformation.aspx (Accessed 9/4/13).

### **Tangible Personal Property & MTS**

- All MTS falls under the classification of Tangible Personal Property
- BUT, not all Tangible Personal Property can be classified as MTS





### Part 3 Overview of Valuation Approaches



### **Need for Multidisciplinary Valuation**

"Several otherwise diverse disciplines have or use certain principles in common. The general principles and methods apply for the most part to all appraisal disciplines."

#### Richard Rickert, PhD, ASA



"The Principles and Concepts of Valuation: Theory of Utility and Value, Value Influences, and Value Concepts" By Richard Rickert, Appraisal and Valuation: An Interdisciplinary Approach, Volume I, Washington DC: American Society of Appraisers, 1987, p 5.

# **Types of Valuation Approaches**

#### **Income Approach**

• Estimates present value of anticipated future economic benefits

### Market (Sales Comparison) Approach

 Premised on foundation that actual transactions of similar property or assets provide guidance to value

#### Asset / Cost Approach

- Determines the current *replacement* or *reproduction* cost new of the subject asset and then deducts economic depreciation
  - Grounded in economic *Principle of Substitution* (i.e., a prudent buyer will typically not pay more for an asset than the cost of buying a substitute of equal utility)



"ME202: Machinery and Equipment Valuation Methodology" By American Society of Appraisers, Washington, DC: 2002, p.25. "Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Third Edition, Washington DC: 2011, p. 532.

# **Polling Question 2**



### Terminology Used in Certain Asset / Cost Approach Based Methods

- Replacement Cost New: The cost to replace the subject asset with a new asset of *nearest equivalent utility*
- Reproduction Cost New: The current cost of reproducing an *exact replica* of a property with the same or closely similar materials



"Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Second Edition, Washington DC: 2005, p. 44-45.

### Terminology Used in Certain Asset / Cost Approach Based Methods

- Economic Depreciation (Factors Contributing to Diminished Property Value) - deficiencies in the ability of subject asset to generate revenue due to impairment in its utility
  - (1) Physical Deterioration Wear and tear, deterioration, exposure, physical stresses, etc.
  - (2) Functional Obsolescence The loss of utility resulting from the inefficiencies of the asset
  - (3) Technological Obsolescence Inefficiencies in the property itself compared to a more efficient or less costly replacement property
  - (4) Economic Obsolescence Factors external to the property, such as industry economics, regulatory change, availability of financing, labor or utilities, etc.
- Note that the definition of *economic depreciation* is separate & distinct from the definition of depreciation utilized for accounting/insurance purposes



"Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services" By Robert James Cimasi, MHA, ASA, FRICS, MCBA, AVA, CM&AA, John Wiley & Sons Inc., 2014, p. 749-750. "Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Third Edition, Washington DC: 2011, p. 522, 528, 551.

# **Consideration of Valuation Approaches**

- All approaches should be considered when performing an appraisal assignment
- The selection of approaches to be utilized is based upon, but not limited to the following:
  - The intended use of the appraisal assignment
  - The nature of the property
  - The availability of data



### **Typical Intended Uses of Valuations**

- Insurance Coverage / Damage and Loss Claims
- Taxation
- Litigation Damages Calculation
- Anticipated Transaction
  - Valuation of Property for Acquisition & Disposition
  - Purchase or Sale of Property



*"Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services"* By Robert James Cimasi, MHA, ASA, FRICS, MCBA, AVA, CM&AA, John Wiley & Sons Inc., 2014, p. 215-266. *"Types of Value for Varied Intended Uses"* By American Society of Appraisers, ASA Monograph #2, 2012, p. 2-2.

# **Type and Definition of Value**

	MTS		PP
•	Replacement Cost New	•	Replacement Value
•	Reproduction Cost New*		Comparable
•	Fair Market Value		• New
•	Fair Market Value in Continued Use		<ul> <li>Reproduction</li> </ul>
•	Fair Market Value – Installed	•	Fair Market Value
•	Fair Market Value – Removal	•	Market Value (Marketable Cash Value)
•	Liquidation Value in Place	•	Liquidation Value
•	Orderly Liquidation Value	•	Salvage and Scrap Value
•	Forced Liquidation Value	•	Fair Value
•	Salvage Value		
•	Scrap Value		
•	Insurance Replacement Cost		
•	Insurance Value Depreciated		



\* (Not prevalent in healthcare valuation)

*"ME201: Introduction to Machinery and Equipment Valuation",* American Society of Appraisers, v.2.2i (6/08), p. 9-10. *"Healthcare Valuation An Interdisciplinary Approach",* American Society of Appraisers (10/9/12), Slide 52. *"Types of Value for Varied Intended Uses"* By American Society of Appraisers, ASA Monograph #2, 2012, p. 2-2.

### **Type and Definition of Value - Healthcare**

In healthcare, the type of definition of value is *typically* Fair Market Value (FMV)

- Healthcare transactions are subject to regulatory scrutiny:
  - Anti-kickback Statute Prohibition against referrals
    - No consideration in valuation of the "volume or value of referrals"
  - Stark Law Prohibition against physician self-referrals of designated health services (DHS) if physician has a financial relationship
  - IRC 501(c)(3) Law of tax-exempt organizations



### Fair Market Value

- Typical Assumptions of FMV:
  - Typical *universe* of potential purchasers for the subject property not a *specific purchaser* or *specific class* of purchaser
  - Buyer and seller are typically motivated
  - Both parties are well informed and acting in their respective rational economic self-interests
  - Both parties are professionally advised and the hypothetical transaction is assumed to be closed on the effective date of value with the typical legal protections in place to safeguard the transfer of ownership of the legal bundle of rights which define and encompass the transacted property or interest



### Fair Market Value

- Typical Assumptions of FMV, continued:
  - Payment is made in cash or its equivalent
  - A sufficiently reasonable amount of time is allowed for exposure in the open market
  - A reasonable availability of transactional capital in the marketplace
  - Sales are made to the final buyer (not a wholesaler)
  - Sales occur in the most common (relevant) market(s)
  - Relevant market(s) need to be defined for each appraisal assignment



### Fair Market Value

## Anti-kickback Statute further defines above FMV assumptions

• "...fair market value in arms-length transactions...not determined in a manner that takes into account the volume or value of any referrals or business otherwise generated between the parties for which payment may be made in whole or in part under Medicare or a State health care program."



"Program Integrity; Medicare and State Health Care Programs; Permissive Exclusions" 42 CFR 1001.952(b)(5), (2009), p. 735.

### Fair Market Value

#### **Stark Law further defines above FMV assumptions**

- *"The value in arm's-length transactions, consistent with the General Market Value"*
- *"The price that an asset would bring, as the result of bona fide bargaining between well-informed buyers and sellers who are not otherwise in a position to generate business for the other party..."*
- "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...where the price...has not been determined in any manner that takes into account the volume or value of anticipated or actual referrals."



### Fair Market Value

#### The IRS further defines above FMV assumptions

- 501(c)(3) enterprises must avoid "excess benefit" transactions
- Valuation standard is *Fair Market Value* 
  - "...price at which property or the right to use property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy, sell, or transfer property or the right to use property, and both having reasonable knowledge of relevant facts."



"Valuation of Healthcare Entities and Assets: The Impact of 2010 Legislation" By Robert James Cimasi, CPA Leadership Institute (11/6/2012) p. 42. "Excess Benefit Transaction" 26 CFR § 53.4958-4 (January 23, 2002).

### **Regulatory Thresholds Related to Value**

- In addition to FMV, healthcare transactions often must meet the threshold of Commercial Reasonableness, i.e.,
  - "...a sensible, prudent business agreement, from the perspective of the particular parties involved, even in the absence of any potential referrals."



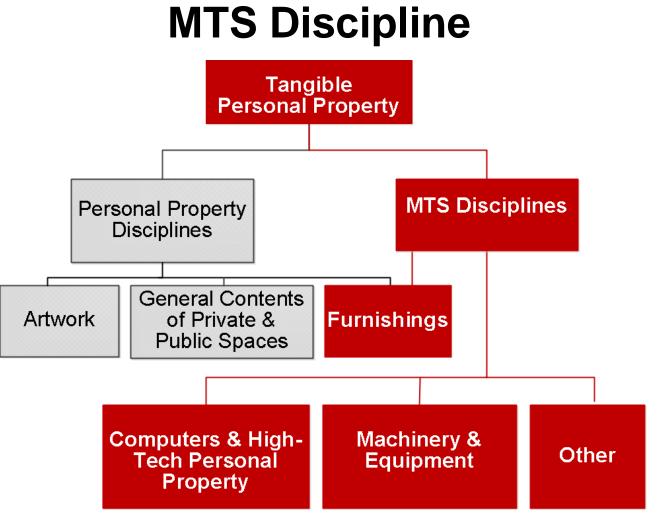
*"Medicare and Medicaid Programs; Physicians' Referrals to Health Care Entities With Which They Have Financial Relationships"* Centers for Medicare and Medicaid Services, Federal Register, Vol. 63, No. 6 (January 9, 1998), p. 1700.

### **Polling Question 3**



### Part 4 Classification & Valuation of Tangible Personal Property (within MTS Discipline)







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### **Machinery & Technical Specialties (MTS)**

- Aircraft
- Cost Surveys
- Industrials
- Marine Survey
- Mines and Quarries

- Oil and Gas
- Public Utilities
- Machinery & Equipment
- Computers & High-Tech Personal Property



*"What is Machinery and Technical Specialties?"* By American Society of Appraisers, 2013, http://www.appraisers.org/mtshome/WhatIsMTS.aspx (Accessed 8/15/2013).

### **MTS Discipline**

#### Machinery & Equipment

- Relevant Statistic: U.S. Medical device market revenue in the first 5 months of 2014 was \$37.6 billion
  - By 2016, the machinery & equipment market size is expected to increase to \$133 billion
- Example: Prosthetics, MRIs, Catheters (surgical apparatuses)

#### Computers & High-Tech Personal Property

- Relevant Statistic: Diagnostic & medical laboratory market revenue in the first 5 months of 2014 was \$52.7 billion
- Examples: Diagnostic imaging equipment, Zero-Client terminals



*"IBIS World Industry Report* 33451*b Medical Device Manufacturing in the US"* By Anna Son, IBIS World, Industry Report 33451*b*, May 2014, p. 3. *"IBIS World Industry Report* 62151 *Diagnostic & Medical Laboratories in the US"* By Anna Son, IBIS World, Industry Report 62151, April 2014, p. 4. *"The Medical Device Industry in the United States"* United States Department of Commerce, http://selectusa.commerce.gov/industry-snapshots/medical-device-industry-united-states (Accessed 7/7/2014).

### **MTS** Discipline

### Computers & High-Tech Personal Property Future Trends

- Integrated automation of operating room equipment and hospital information systems
- Acuity-flexible patient care areas
- Automated medication management and distribution
- Telemedicine and mobile medicine



"Medical Equipment Planning" By Emergency Care Research Institute, 2013, https://www.ecri.org/Products/Pages/medical\_equipment\_planning.aspx?sub=Capital%20Equipment (Accessed 8/15/2013).

## Income Approach – MTS Discipline

#### Methods:

- Direct Capitalization Method
  - Assumes there will be *no variation* in the capitalization rate & no termination of the income stream
- Discounted Cash Flow (DCF) Method
  - Measures the direct economic benefits derived from the present value of *varying* future cash inflows & outflows
- Not widely used by most MTS Appraisers



### Market (Sales Comparison) Approach -MTS Discipline

#### Techniques of Comparison within the Market (Sales Comparison) Method:

- **Direct Match**: Value based on a *direct match* of the subject asset to an identical asset or comparable
- Comparable Match: Analyzes similar assets using some measure of utility
- **Percent of Cost**: Institutes a ratio between selling price and current cost new of the asset at time of sale (not often used in healthcare valuation)



"Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Third Edition, Washington, DC: 2011, p. 100.

### Market (Sales Comparison) Approach -MTS Discipline

# Elements of Comparability within the Market (Sales Comparison) Method:

- Chronological age & effective age
- Condition
- Capacity
- Features (accessories)
- Location

- Manufacturer & quality
- Motivation of parties
- Price
- Quantity
- Time of sale
- Type of sale



"Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Third Edition, Washington, DC: 2011, p. 98-99.

### Market (Sales Comparison) Approach -MTS Discipline

# Type and Definition for a Group of Assets within the Market (Sales Comparison) Method:

- Fair Market Value in Continued Use or Installed: Estimate the cost to disassemble and remove the asset, along with maintenance or rebuilding costs
  - Fair Market Value
  - Fair Market Value in Continued Use
  - Fair Market Value Installed
  - Fair Market Value Removal



"Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Third Edition, Washington, DC: 2011, p. 106-113.

### Market (Sales Comparison) Approach -MTS Discipline

Type and Definition of Value for Individual Units within the Market (Sales Comparison) Method:

- Liquidation Value: Search data for comparable sales at a liquidation level of trade; compare sales to the subject property
  - Orderly Liquidation Value
  - Forced Liquidation Value
  - Liquidation Value in Place



"Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Third Edition, Washington, DC: 2011, p. 131-36.

### **Polling Question 4**



### **Asset/Cost Approach - MTS Discipline**

## Methods for determining new cost of Machinery and Equipment (before deductions for economic depreciation):

- **Detail Method**: Assigns a current new cost to each component
- **Cost-to-Capacity Method**: Determines value relative to size
- Other Engineering Methods\*: Estimates cost of entire facilities or facilities' components
- Trending Method\*: Estimates a property's reproduction cost new by applying an index/trend factor to asset's historical cost



\* (Not prevalent in healthcare valuation)

*"Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets"* By American Society of Appraisers, Third Edition, Washington, DC: 2011, p. 45-46, 52-53, 57.

### **Asset/Cost Approach - MTS Discipline**

**Techniques for Determining Economic Depreciation:** 

#### Physical Deterioration

- Observation
- Formula Ratio
- Direct Dollar Measurement



"Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Third Edition, Washington, DC: 2011, p. 61.

### **Asset/Cost Approach - MTS Discipline**

**Techniques for Determining Economic Depreciation:** 

#### Functional Obsolescence

- Lack of utility
- Excess operating cost
- Excess construction
- Over-capacity
- Inadequacy



"Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Third Edition, Washington, DC: 2011, p. 528.

### Asset/Cost Approach - MTS Discipline

**Techniques for Determining Economic Depreciation:** 

#### Economic Obsolescence

- Increased cost of raw materials, labor, or utilities
- Reduced demand for the product
- Increased competition
- Environmental or other regulations
- Similar factors



"Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Third Edition, Washington, DC: 2011, p. 78.

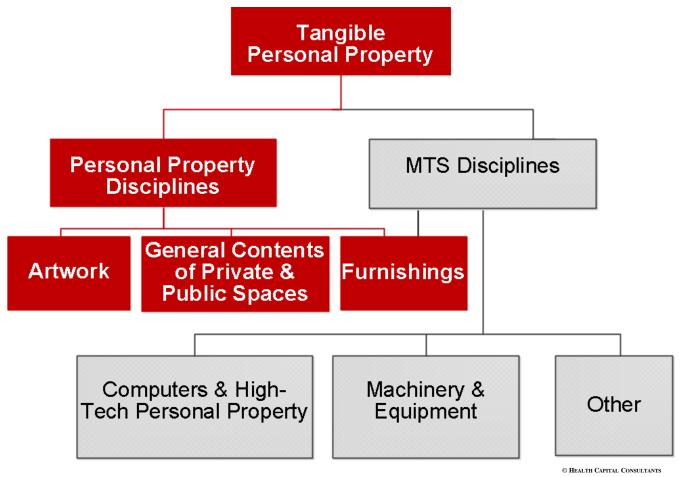
### **Polling Question 5**



### Part 5 Classification & Valuation of Tangible Personal Property (within Personal Property Discipline)



### **Personal Property Discipline**





### **Personal Property Discipline**

#### Artwork

- As of 2009, over 50% of all U.S. hospitals had art programs
- Over \$200 million expended on artwork in 2008
  - Example: Cleveland Clinic has a \$1.5 million art budget
- Example: "Evidence-Based" Art and Design
  - Kaiser Permanente's Westside Medical Center – Hillsboro, OR





Healthcare Special Interest Group

"A Guide to Evidence-based Art" By Kathy Hathorn and Upali Nanda, The Center for Health Design, 2008, http://www.healthdesign.org/sites/default/files/Hathorn\_Nanda\_Mar08.pdf (Accessed 9/9/2013), p. 2-3. "Contemporary Art in Medicine: The Cleveland Art Collection" By Jennifer Finkel, Cardiovascular Diagnosis and Therapy, Vol. 1, No.1, December 2011, p. 71-75. "January 2014 Construction at \$943.1 Billion Annual Rate" U.S. Census Bureau, March 3, 2014, p. 5. "Helping patients heal through the arts," By Amanda Gardner, CNN, July 5, 2013, http://www.cnn.com/2013/07/05/health/arts-in-medicine/, p. 1. Art Plays Starring Role at Kaiser Permanente's New Oregon Hospital," By Anne DiNardo, Healthcare Design, Nov. 5, 2013, http://www.healthcaredesignmagazine.com/print/article/art-plays-starringrole-kaiser-permanente-s-new-oregon-hospital (Accessed 9/11/14).

### **Personal Property Discipline**

- Furnishings
  - Hospital furniture manufacturing industry revenue was approximately \$690 million (as of 2012)
    - Projected to increase to \$844 million by 2017
  - Example: Equipment & furniture in offices & patient rooms
- General contents of private & public spaces
  - Example: Fixtures



<sup>&</sup>quot;Supply and Demand: Furnishings take design cues from hospital requirements" By Steven K. Wagner, Health Facilities Management, May 2008,

http://www.hfmmagazine.com/hfmmagazine/jsp/articledisplay.jsp?dcrpath=HFMMAGAZINE/Article/data/05MAY2008/0805HFM\_FEA\_Inte riors&domain=HFMMAGAZINE (Accessed 9/10/13), p. 1.7 "*IBIS World Industry Report OD5769" Hospital Furniture Manufacturing in the US"* By Nima Samadi, IBIS World, Industry Report OD5769, August 2012, p. 3.

### **Polling Question 6**



### Sales Comparison (Market) Approach – Personal Property

 Compare the subject asset with similar assets that have been sold or are for sale in the relevant marketplace by making adjustments to prices based on marketplace conditions and the assets' characteristics of value



Cedars-Sinai Deluxe Maternity Suite



*"Healthcare Valuation: An Interdisciplinary Approach"* By American Society of Appraisers, ASA International Appraisers & Advanced Business Valuation Conferences, Phoenix, AZ, 10/9/2012, p. 54.

### Market (Sales Comparison) Approach Based Method

#### Levels of Trade:

- Above Retail (designers/decorators)
- Retail
- Auction & Resale (low retail or retail)
- Distributor (jobber)
- Wholesale
- Consignment Shops
- Estate / Yard Sale / "Tag" Sale



*"Glossary of Terms"* By American Society of Appraisers, Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets, Second Edition, Washington DC: 2005, p. 587-88. "ME201: Introduction to Machinery and Equipment Valuation", American Society of Appraisers, v.2.2i (6/08), p. 105. *"Markets: Navigating & Analyzing the Options"* By American Society of Appraisers, ASA Monograph #4, 2013, p. 4-5 – 4-17.

### Sales Comparison (Market) Approach – Personal Property

#### Adjustments Made to the Prices Paid for Comparable Properties

- Aspects of Comparison to Subject Asset Based On:
  - Characteristics of value (i.e. condition, quality, size)
  - Date of sale of comparable property (and exposure time)
  - Level of trade of transaction of sale of comparable property
  - History of the object (provenance)
- Adjustments Made Based On:
  - Percentage (increased by or decreased by percentage)
  - Monetary amounts (\$100 more or less)



### Asset/Cost Approach – Personal Property Discipline

Estimate all costs to produce an asset with equal utility to the subject property, accounting for all factors that contribute to diminished property value





*"The Financial Appraisal of Enterprises, Assets, and Services"* By Robert James Cimasi, MHA, ASA, FRICS, MCBA, AVA, CM&AA, John Wiley & Sons Inc., 2014, p. 739-740. *"Marshall Valuation Service"* Los Angeles, CA: Marshall & Swift/Boeckh, LLC, 2013.

### Part 6 Concluding Remarks



### **Concluding Remarks**

#### **Pursuing Interdisciplinary Collaboration**

Healthcare Industry Specific Appraisal Assignments

Real Estate Appraisal • Machinery & Technical Specialties Personal Property • Business Valuation • Intangible Assets/IP Separate and Distinct Disciplines in the Same Profession

- Similar Tools to Solve Similar Problems
- Shared Clients
- Interdisciplinary Approach Yields Significant Benefit to Both *Clients* and *Appraisers*

### We <u>CAN</u> Work Together!



### **Concluding Remarks** We Can (and should) All Work Together!

- To obtain the requisite background for forecasting the future performance of healthcare enterprises, assets, and services in the current dynamic era of healthcare reform, valuation professionals should develop and maintain an in-depth understanding of the history and the development of healthcare delivery, as well as, the unique dynamics of those often complex business arrangements that comprise newly emerging healthcare organizations and the various elements of property value involved in each.
- A multidisciplinary project team of appraisers has the potential to provide an enhanced scope and diversity of knowledge and breadth of experience to the benefit of both the *appraisers* and the *client*.



### **Concluding Remarks** We Can (and should) All Work Together!

- When developing an understanding of the forces and stakeholders that have the potential to drive healthcare markets, valuation professionals must examine the subject enterprises, assets, and services as they relate to and within the context of:
- *"The Four Pillars of the Healthcare Industry"* 
  - Reimbursement
  - Regulatory
  - Competition
  - Technology
- These four elements serve as a conceptual framework for analyzing the viability, efficiency, efficacy, and productivity of the subject property interest(s)



### **Concluding Remarks**

#### We Can All Work Together!

- More informed and uniform valuation practice would benefit the users of healthcare valuations and *improve public confidence in appraisers*
- To enhance competency, significant specialized education and training is an important benefit for healthcare appraisers and clients
- Given these issues, a multidisciplinary approach toward advanced education related to healthcare industry valuation is an important initiative of the ASA, as the premiere multidisciplinary valuation society of professional appraisers

