Valuation of Healthcare Intangible Assets & Intellectual Property

Presenters

Todd A. Zigrang, MBA, MHA, FACHE, ASA HEALTH CAPITAL CONSULTANTS

American Society of Appraisers Providing Value Worldwide Healthcare Special Interest Group Robert James Cimasi MHA, ASA, MCBA, FRICS, CVA, CM&AA HEALTH CAPITAL CONSULTANTS

> Thursday, September 3, 2015 1 to 3 PM EST

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 and other healthcare enterprises. Mr. Zigrang has significant physician integration and financial analysis experience, and has participated in the development of a physician-owned multi-specialty MSO and networks involving a wide range of specialties; physician-owned hospitals, as well as several limited liability companies for the purpose of acquiring acute care and specialty hospitals, ASCs and other ancillary facilities; participated in the evaluation and negotiation of managed care contracts, performed and assisted in the valuation of various healthcare entities and related litigation support engagements; created pro-forma financials; written business plans; conducted a range of industry research; completed due diligence practice analysis; overseen the selection process for vendors, contractors, and architects; and, worked on the arrangement of financing.

Mr. Zigrang holds a Master of Science in Health Administration and a Master of Business Administration from the University of Missouri at Columbia. He is a Fellow of the American College of Healthcare Executives, and serves current Chair of the ASA HSIG Committee.





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 soon-to-be released "Adviser's Guide to Healthcare – 2nd 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 Committee Members

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

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

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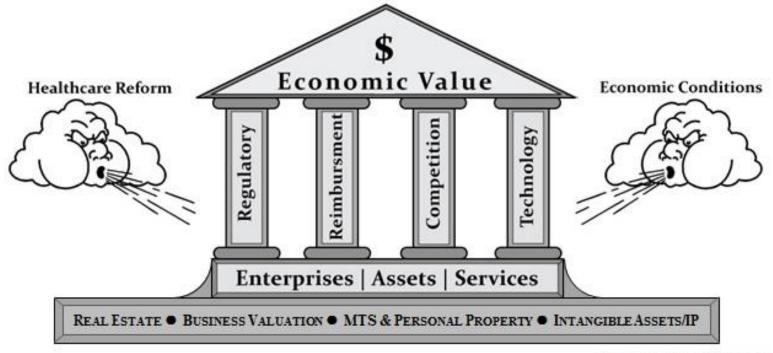
*Any opinions presented are those of the instructor(s) and do not represent the official position of the firms the individual instructors represent, sponsors of the ASA Healthcare Special Interest Group's Multidisciplinary Advanced Education in Healthcare Program or the American Society of Appraisers.

Overview of Presentation

- Overview of Intangible Assets
- Classification & Valuation of Intangible Assets
 - Intangible Real Property
 - Intangible Personal Property
 - Intellectual Property
 - Goodwill
- Concluding Remarks



Healthcare Trends Related to Intangible Assets: *The Four Pillars*



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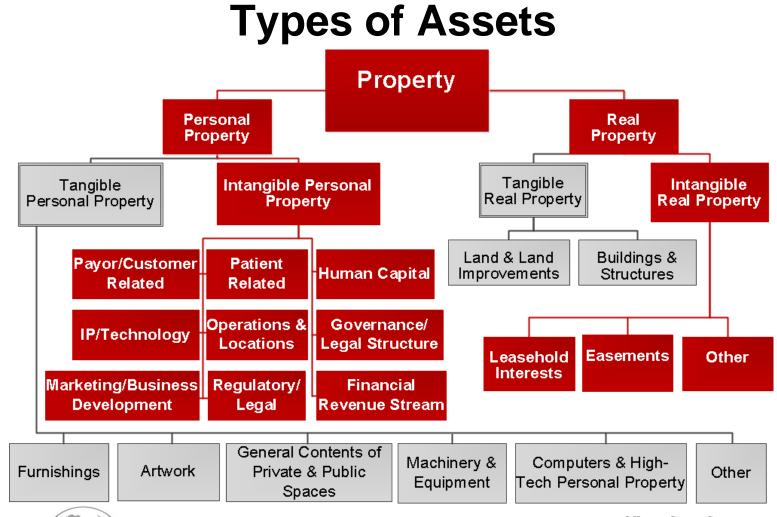
Identification and Classification of Assets

"These perplexing questions as to the nature of the thing to be valued might seem to be of no concern to the student of valuation, however...[h]ow one shall define property in a given case is bound up with the question how one shall find value in that same case.

The two problems must be treated together by persons who understand their interrelationship."

- James C. Bonbright

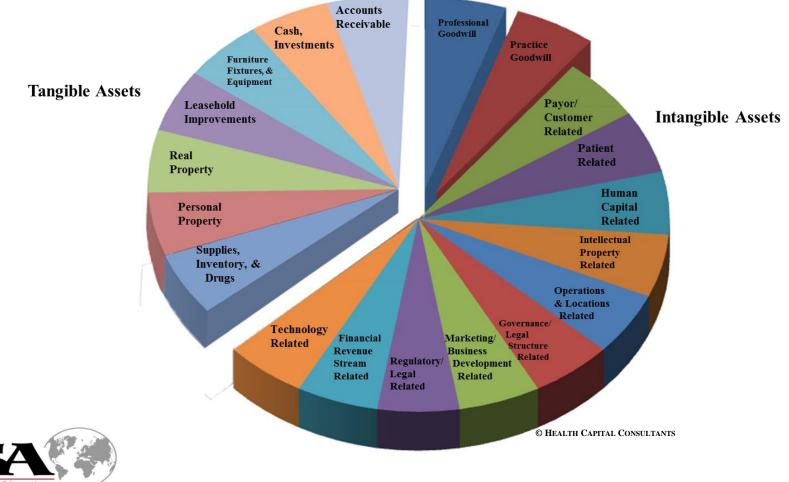






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Identification and Classification of Assets





"Valuation of Healthcare Intangible Assets: Utilization of the Cost Approach" By Robert Cimasi et al, Consultants Training Institute, Las Vegas NV December 9-14, 2012.

Identification and Classification of Assets

Tangible Assets

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

Intangible Assets

• "Assets (not including financial assets) that lack physical substance."



"Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets" By American Society of Appraisers, Third Edition, Washington, DC: 2011, p. 127. "Statement of Financial Accounting Standards No. 142: Goodwill and Other Intangible Assets" Financial Accounting Standards Board of the Financial Accounting Foundation, Norwalk, CT: 2001, p. 105.

Types of Tangible and Intangible Assets

 From an economic perspective, it may be useful to consider assets, or property, within the context of four principal categories:

	Tangible Assets	Intangible Assets
Real Property	Land, Buildings, Leasehold Improvements	Easements, Permits, Leasehold Interests, In-Place Leases, Zoning Waivers, Variances, Use Rights
Personal Property	Furniture Fixtures and Equipment, Cash, Accounts Receivable, Investments, Litigation Awards & Liquidated Damages, Supplies, Inventory, Drugs	Payor/Client Relationships, Human Capital, Intellectual Property, Operations, Governance, Marketing/Business Development, Technology Development

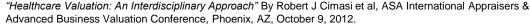


Examples of Intangible Assets in Healthcare

- Medical, dental, and other professional licenses
- Certificates of need
- Patient relationships
- Patient 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

- Executive (and other administrator) noncompetition agreements
- Administrative services agreements
- Medical (and other professional) services 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
- Physician (and other professional) noncompetition agreements





Existence of Intangible Assets

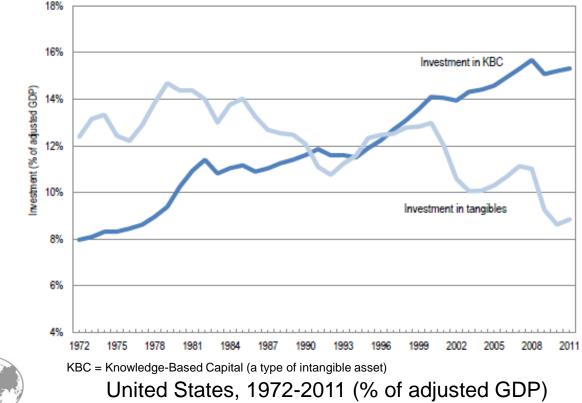
- To determine whether some nonphysical aspect, operation, or performance of a business enterprise qualifies as an intangible asset for the purposes of a valuation, the item should possess several attributes characteristic of "property," including:
 - Recognizable as a legal property right which can be defended in court
 - Evidentiary support and documentation for its existence
 - Generates a measure of economic benefit to its owner
- "Certainly the aggregate of a business' employees, even if they be individually not property, is 'property' within the meaning of the Bankruptcy Act..."
- "The fair value of an intangible asset is often measured for financial accounting purposes. An intangible asset is considered to be identifiable if it can be sold separately from a business or if it arises from a legal right."



"Valuing Intangible Assets" By Robert F Reilly and Robert P. Schweihs, New York, NY: McGraw-Hill, 1999, p. 5. "Glosband v. Watts Detective Agency, Inc." 21 B.R. 963, 971-2 (D.C. Mass. 1981). "Guide to Intangible Asset Valuation" by Robert F. Reilly and Robert P. Schweihs, New York, NY: American Institute of Certified Public Accountants, Inc., 2013, p. 407.

Increasing Importance of Intangible Assets

"Intangible assets and intellectual property have become the source of earning power in our most important and fastest-growing corporations"

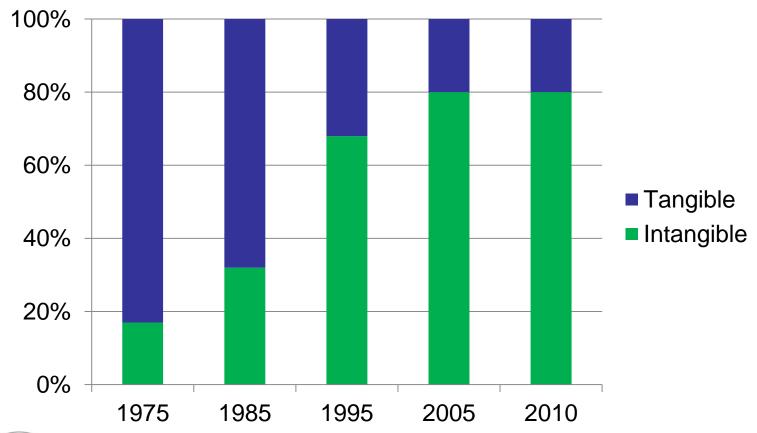




"Intellectual Property: Licensing and Joint Venture Profit Strategies" By Gordon V. Smith and Russell L. Parr, Second Edition, Hoboken, NJ: 2003, p. 9.

"New Sources of Growth: Knowledge-Based Capital: Key Analyses and Policy Conclusions" By Organisation for Economic Co-operation and Development, 2013, http://www.oecd.org/sti/inno/knowledge-based-capital-synthesis.pdf (Accessed 9/24/13), p. 14.

Increasing Importance of Intangible Assets





Source: "Intangible Asset Market Value" Ocean Tomo, 2014, http://www.oceantomo.com/productsandservices/investments/intangible-market-value (Accessed 9/15/2014).

Value of Intangible Assets

- In June 2014, Microsoft had about \$13 billion worth of tangible property and equipment, yet its market capitalization was about \$343 billion
- "The average value of all companies traded on the New York Stock Exchange is **two and half times greater** than the declared book value. And companies working in information-related fields have a market value on average ten times higher than their book value" [emphasis added.]



"Financial Statements for Microsoft Corporation" Google Finance, 2014,

http://www.google.com/finance?q=NASDAQ%3AMSFT&fstype=ii&ei=KnETVKquCMT_sgeTpIGADg (Accessed 9/12/2014). *"Microsoft market Cap (MSFT)*" Ycharts, 2014, http://ycharts.com/companies/MSFT/market_cap (Accessed 9/12/2014). *"Weightless Wealth: Find your real value in a future of intangible assets"* By Daniel Andriessen and Rene Tissen, London England: Pearson Education Limited, 2000, p. 1.

Importance of Intangible Asset Appraisal

- Intangibles are harder to measure and quantify than tangibles
- Many intangible assets have a finite life and require periodic replacement
- Often do not appear on corporate balance sheets
- Represent a large portion of value within businesses
- "Intangible assets and intellectual property have become the source of earning power in our most important and fastest-growing corporations"



Reasons for Intangible Asset Appraisal

In addition to financial accounting purposes, analysts are often asked to estimate the value of intangible assets for various reasons:

- Taxation
- Transactions
- Royalty Rates
- Acquisitions

- Financing
- Litigation
- Reorganization
- Bankruptcy



Intangible Asset Trends Reimbursement Environment Related to an Intangible Asset Transaction

- The *quality of reimbursement yield* that the subject enterprise receives for the provision of certain clinical services is often related to those *intangible assets* that the enterprise has in place
 - Examples:
 - Enterprises that use electronic medical records may qualify for certain *meaningful use* payments if they meet the applicable requirements
 - An enterprise may receive different reimbursement rates for services provided by various members of its *trained and assembled workforce* (i.e., *midlevel providers*)



Intangible Asset Trends

Regulatory Environment Related to an Intangible Asset Transaction

- National Health Expenditures (NHE) predicted to be 20% of GDP by 2020, increasing the potential for fraud and abuse in the industry
- HEAT, FERA, other regulatory enforcement issues part of healthcare reform aimed at curbing fraud and abuse in the healthcare industry
- Thornton Letters from 1990s caused significant confusion related to the legal permissibility of paying for intangibles in healthcare
- Payments made in healthcare transactions may <u>not be determined</u> in a manner that takes into account the volume or value of any referrals or other business generated between the parties



"Valuing Intangible Assets in Exempt Healthcare Organizations" By Robert James Cimasi, Valuation Strategies, WG&L, Jan/Feb 2013. "National Health Expenditure Projections 2010-2020" By Center for Medicare and Medicaid Services, June 29, 2009, https://www.cms.gov/NationalHealthExpendData/downloads/proj2010.pdf (Accessed 10/27/2011).

"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. 262-264.

Intangible Asset Trends

Competition in the Intangible Asset Market

- The transition to Accountable Care Organizations (ACO) has increased the need for expansion in terms of geographic reach and services offered
- Increased integration efforts due to ACO expansion driving asset purchases, both tangible and intangible



Intangible Asset Trends

Technology in the Intangible Asset Market

- Data collection and analysis afforded by new technologies may pave the way for new types of intangibles
- Other industry trends, e.g., ACO creation, are creating the need for new policies, procedures and processes that may prove to be intangible assets



"New sources of growth: Knowledge-based capital: Key Analyses and Policy Conclusions Synthesis Report" OECD, May 2013 presentation at Ministerial Meeting, http://www.oecd.org/sti/inno/knowledge-based-capital-synthesis.pdf (Accessed 9/24/2013). "Accountable Care Organizations: Value Metrics and Capital Formation" By Robert James Cimasi, CRC Press Taylor & Francis Group, 2013.

Polling Question 1



Standard of Value vs. Premise of Value

Standard of Value	Premise of Value
Value to Whom?	Value under what Further Defining Circumstances?
 Outlines type of value to be determined Standards of Value include: Fair Market Value (FMV) Fair Value Market Value Market Value Acquisition Value Use Value Investment (Investor) Value Owner Value Insurable Value Collateral Value Ad Valorem Value Divorce Value 	 Further defines the Standard of Value to be used, including additional facts and circumstances considered Hypothetical terms of the sale (1) Value in Use, As a Going-Concern (2) Value in Exchange As an orderly disposition of a mass assemblage of assets in-place; As an orderly disposition of individual assets; or, As a forced liquidation of individual assets



"Valuing Intangible Assets" By Robert F Reilly and Robert P. Schweihs, New York, NY: McGraw-Hill, 1999, p. 59-61, 63-64. "Valuation of Healthcare Entities and Assets: The Impact of 2010 Legislation" By Robert James Cimasi, CPA Leadership Institute (11/6/2012) p. 39.

Standards of Value

Fair Market Value (FMV)

- Price at which property would move between hypothetical seller and hypothetical buyer at arm's length in open unrestricted market with no compulsion and reasonable knowledge
- Used in healthcare transactions

Fair Value

• The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date

Investment (Strategic) Value

• The value to a particular party



"Introduction to Business Valuation: Section 1" American Society of Appraisers, 2010 p. 14-20.

Valuation of Intangible Property

Consistent with business valuation practice, there are three generally accepted intangible asset valuation approaches:

- Asset/Cost Approach
- Market Approach
- Income Approach
- Due to data limitations, most intangible asset valuations are based primarily on a single selected approach:
 - For which there are the greatest quantity and quality of available data
 - That best reflects the actual transactional negotiations of market participants in the industry
 - That best fit the characteristics (e.g., use, age, etc.) of the subject intangible asset
 - That are most consistent with the practical experience and professional judgment of the individual analyst



Valuation of Intangible Real Property

- Intangible real property, generally regarded as the legal rights to use real estate, includes categories such as:
 - Easements
 - Permits
 - Leasehold Interests
 - In-Place Leases

- Zoning Waivers
- Variances
- Use Rights
- These intangible real property interests are typically valued by Real Property Appraisers



Valuation of Intangible Real Property

Valuation Approaches – Intangible Real Property

Market Approach

Guideline Transaction Method

Asset/Cost Approach

Replacement Cost Method

Income Approach

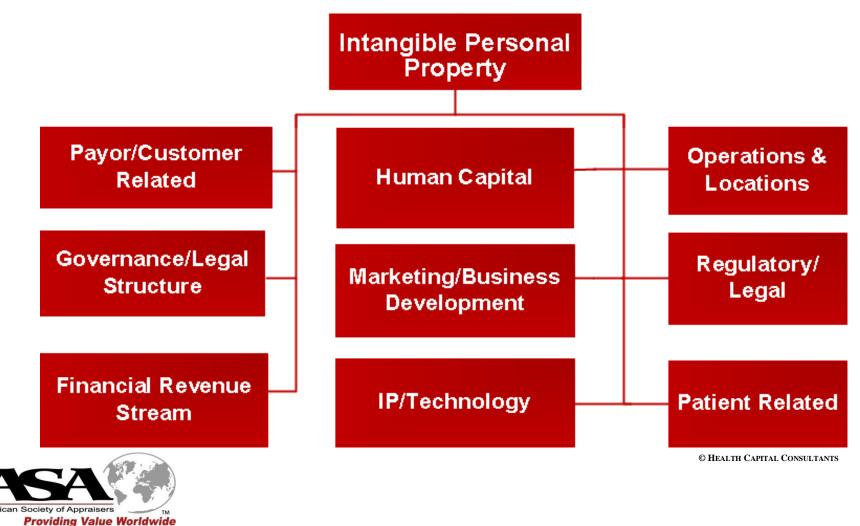
Discounted Net Cash Flow Method



Polling Question 2

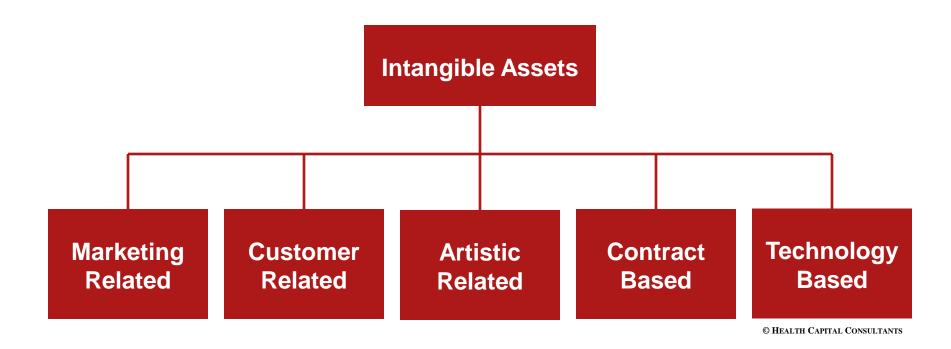


Classification of Intangible Personal Property



Healthcare Special Interest Group

Classification of Intangible Personal Property for Financial Reporting





"Guide to Intangible Asset Valuation" by Robert F. Reilly and Robert P. Schweihs, New York, NY: American Institute of Certified Public Accountants, Inc., 2013, p. 424.

Valuation Approaches – **Intangible Personal Property**

Market Approach

- Rarely used because sales of individual intangibles are infrequent
- Guideline Transaction Method (not commonly utilized)

Asset/Cost Approach

- Generally effective for valuation of intangible personal property
- **Replacement Cost Method**

Income Approach

- Useful if an income stream for a specific intangible can be isolated
- Limited data available and often significant judgment involved •
- Discounted Cash Flow Method With-and-Without Method
- Relief From Royalty Method



Multi-Period Excess Earnings Method

Valuation Approaches – Intangible Personal Property

Asset/Cost Approach Based Methods

- Replacement Cost Method
 - The current cost to recreate an intangible asset with same utility
 - Summation of direct costs, indirect costs, developer's profit margin, and entrepreneurial incentive
 - Functional and/or economic obsolescence deducted from summation of various development costs
- Trended Historical Cost Method
 - The inflated historical cost with depreciation and obsolescence taken into account



"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. 764, 775.

Valuation Approaches – Intangible Personal Property

Income Approach Based Methods

- Discounted Cash Flow Method
 - Determination of economic benefit stream
 - Development of appropriate risk-adjusted required rate of return
- Relief from Royalty Method
 - Determine appropriate royalty rates from market data
 - Calculate economic benefit using royalty rate data



Valuation Approaches – Intangible Personal Property

Income Approach Based Methods

- With-and-Without Method
 - Analysis of economic benefit with and without the subject intangible asset
- Multi-Period Excess Earnings Method
 - Isolate economic benefit associated with the subject intangible asset from those of current, fixed and other intangible assets
 - Use a residual technique



"Valuing Intangible Assets" By Robert F Reilly and Robert P. Schweihs, New York, NY: McGraw-Hill, 1999, p. 326-327. "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. 791-792.

Potential Regulatory Issues with Certain Valuation Approaches in Healthcare

- Volume or Value Standard of Anti-kickback Statute
 - Valuation methods for appraising intangibles *cannot* take into account the *volume or value* of referrals
- Income Approach based methods are particularly scrutinized, especially when consideration is being paid to a physician since they often refer patients to the acquirer post transaction



Payor or Client-Related Intangible Assets

- Created by contractual terms from agreements such as:
 - Provider service agreements (PSA)
 - Managed care agreements (MCA)
 - HMO enrollment lists
- These assets may provide a reliable, continued revenue stream in hopes of reducing volatility in an enterprise's future net economic benefit stream



Human Capital-Related Intangible Assets

- Broadly consists of an enterprise's assembled workforce and contracts with employees
- Trained & Assembled Workforce (TAWF)
 - Going-concerns have existing, skilled employees in place
 - Not a recognized asset for financial reporting

Covenant Not to Compete / Noncompete Agreement

- An agreement that precludes certain competition for a specified period of time
- May be treated as a separate asset sold to the buyer



"Guide to Intangible Asset Valuation" By Robert Reilly and Robert Schweis, New York, NY: AICPA, 2013. "Valuing an Assembled Workforce" By Elizabeth King, PhD, published in the book "Valuation of Intangible assets in Global Operations" edited by Farok J. Contractor, Westport, CT, Quorum Books, 2001, p. 265. "Valuation of Intellectual Property and Intangible Assets" By Gordon V. Smith and Russell L. Parr, Third Edition, Hoboken, NJ: John Wiley & Sons Inc., 2000, p. 89.

Operations & Location-Related Intangible Assets

- The components of an enterprise which generate positive economic benefits through operational efficiencies
- Healthcare specific components include:
 - Historical information and documentation
 - Supplier contracts
 - Other specific elements of going-concern value



"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. 800.

Polling Question 3



Governance or Legal Structure-Related Intangible Assets

- Assets generally attributable to an enterprise as a result of written and legally enforceable arrangement
- Healthcare specific components may include:
 - Organizational documents
 - Income distribution plans
 - Right of first refusal
 - Anti-piracy provisions



Marketing and Business Development-Related Intangible Assets

- Generate revenue for an enterprise through enhanced recognition; often intertwined with intellectual property intangible assets (e.g., Trademark/Trade Name)
- Healthcare specific components may include:
 - Advertising
 - Franchise/licensing agreements
 - Joint ventures/alliances
 - Brand management services



"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. 812-818.

Regulatory or Legal-Related Intangible Assets

- Derived from rules and regulations
- Generally comprised of a *market entrance barrier*
 - Allows incumbents to earn higher profits through less competition
 - Under certain circumstances, may be one of the most significant elements of value of an enterprise
- Healthcare specific components may include:
 - Provider medical licenses
 - Provider permits
 - Certificates of Need (CON)
 - Medicare certification



Healthcare Special Interest Group

"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. 818-822. "Cost Approach of Health Care Entity Intangible Asset Valuation" By Robert F. Reilly, Journal of Health Care Finance, Vol. 39, No. 2, Winter 2012, p. 11.

Financial or Revenue Stream-Related Intangible Assets

- Provide value through:
 - Financial arrangements
 - Qualitative attributes of an enterprise's revenue stream
- Healthcare specific components may include:
 - Office share arrangements (OSA)
 - Management services agreements (MSA)
 - Financing agreements
 - Financial derivatives (swaps and purchase options)



"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. 826-839.

Technology-Related Intangible Assets

- Ascertain value by providing efficiencies to avoid expense and thus produce a net economic benefit
- Switching costs (expense required to "switch" information systems)
- Separate from intellectual property because
 - Generally not a new technology
 - Often not protected legally
- Healthcare specific components may include:
 - Computer software/network integration
 - Electronic medical records
 - Technical/software documentation
 - Maintenance/support agreements



Patient-Related Intangible Assets

- Assemblage of patient information helps reduce cost and therefore provides a net economic benefit
- Healthcare specific components include:
 - Custodial rights to patient medical charts and records
 - Significant value difference between paper and electronic
 - Patient recall lists
- Special Note: These types of intangible assets are distinguished elements of value separate and distinct from goodwill



Polling Question 4



Classification of Intellectual Property

- A specialized category of intangible personal property
- Created by human intellectual or inspirational activity
- Benefits can be utilized by its owner or transferred for exploitation by other parties
 - Discoveries and inventions
 - Words and phrases
 - Symbols and designs



Classification and Valuation of Intellectual Property

- Shares similar existence and economic value attributes as other intangible assets
- Afforded special legal recognition and protection
- Value generally attributed to potential to provide significant competitive advantages or product differentiation
- Intellectual Property pertinent to healthcare include:
 - Copyrights
 - Patents
 - Trademarks

- Trade Names
- Trade Secrets
- Protocols & Treatment Plans



"Valuation of Intellectual Property and intangible Assets" By Gordon V. Smith and Russell L. Parr, Third Edition, Hoboken, NJ: John Wiley & Sons Inc., 2000, p. 35. "Valuing Intangible Assets" By Robert F Reilly and Robert P. Schweihs, New York, NY: McGraw-Hill, 1999, p. 20-22, 435.

Intellectual Property Valuation Methods

Market Approach

- Used when direct market transactions of similar asset(s) exist
- Intangibles rarely sold individually, information often not available and comparability may be limited

Asset/Cost Approach

- Applicable when historical costs to create are available and a meaningful basis for value
- May not accurately reflect economic benefit of ownership of IP

Income Approach

 Used when economic benefit and/or revenue stream data is available



Copyright

- The legal protection regarding original expression of ideas
- A bundle of exclusive rights that permits authors the sole right to authorize:
 - Reproduction of part or all of the work
 - Distribution (e.g. selling)
 - Public performance (e.g. acting)
 - Public display (e.g. TV)



Term of Copyright Protection & Transferability

Protection Period

- Copyright created by individual(s) lasts the life of the author plus 70 years
- Copyright created by employee(s) lasts 95 years from publication, or 120 years from date of creation, whichever expires first

Transfers

- Assignment
 - The unconditional transfer of the copyright
- Licenses
 - The limited transfer (time, geography, type of use, other) of certain rights associated with the copyright



Copyrights: Healthcare Specific

Healthcare enterprises may utilize a copyright in order to protect the programming code of proprietary software applications which in turn:

- Generate schedules and patient encounter/billing forms
- Track patient care across multiple providers
- Produce utilization and outcome reports
- Maintain clinical records
- Perform revenue cycle tasks



"Intellectual Property: Valuation, Exploitation, and Infringement Damages" by Gordon V. Smith and Russell L. Parr, John Wiley & Sons, Inc., Hoboken, NJ: 2005, p. 31-34. *"Copyrighting Your Software – Why Bother?"* by Richard Stim, Stanford University Libraries, 2014, http://fairuse.stanford.edu/overview/faqs/software/ (Accessed 9/15/2014). *"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. 791-792.

Trademarks and Trade Names

- A trademark is generally regarded as "any device used to identify the origin of goods"
- A trade name refers to the commercial name that an enterprise uses to sell products and services

Value is ascertained through:

- Recognition
- Brand loyalty
- Perception of quality assurance

Benefits may include:

- Higher revenues due to higher rate or market share
- Reduced marketing 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. 793-794 *"Valuing Intangible Assets"* By Robert F Reilly and Robert P. Schweihs, New York, NY: McGraw-Hill, 1999, p 425.

Patents

"The legal process whereby technology is turned into controllable property with defined rights associated with its ownership"

Patentable inventions as defined by the U.S. Code:

"any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof..."



"Valuation of Intellectual Property and intangible Assets" By Gordon V. Smith and Russell L. Parr, Third Edition, Hoboken, NJ: John Wiley & Sons Inc., 2000, p. 35. "General Information Concerning Patents- What Can Be Patented" United States Patent and Trademark Office, November 2011, www.uspto.gov.

Patent Subcategories

Three types of patents as designated by the U.S. Patent and Trademark Office:

- **Utility Patents** "may be granted to anyone who invents or discovers any new process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof"
- **Design Patents** "may be granted to anyone who invents a new, original, and ornamental design for an article of manufacture"
- **Plant Patents** "may be granted to anyone who invents or discovers and asexually reproduces any distinct and new variety of plant"



Patent Protection

- Provides legal protection for a fixed period of time
 - 20 years from earliest filing date within the U.S.
- The Patent and Trademark office also accepts "provisional" patent applications
 - Used to prove owner knew of invention at time of filing
 - Provides legal protection and allows 12 months for further development
 - Will be kept secret if patent protection only sought in U.S.



Patent Damages

When a patent is infringed, an owner has two options for calculating damages

- *Lost Profits* option based on:
 - Loss of sales due to competitor's sales
 - Price erosion due to unlawful competition
- *Reasonable Royalties* based on:
 - Royalty rates based on a previous "hypothetical negotiation"
 - "Willfulness" of infringement



Pharmaceutical Patents

- Ironically, many do not cover the compound
- Instead, most are ancillary, covering minor aspects of drugs – produces longer patent protection to branded drugs
- In recent years, generic drug companies have challenged branded drug companies to secure early market entry
 - Hatch-Waxman Act regulates competition between brand name and generic pharmaceutical manufacturers
- Over the last 25 years, generic drugs have risen from 20% to 70% of prescriptions



Patent Approval Process

- Patents for pharmaceuticals vary in value based on the perception of the probability of obtaining FDA approval
- Stratification of levels to obtain FDA approval for a patent includes:
 - Investigational New Drug permission
 - New Drug Application Phase 1 Clinical Trials
 - New Drug Application Phase 2 Clinical Trials
 - New Drug Application Phase 3 Clinical Trials



Risks Associated with Patents

- Perceived strength of patent protection
- Uncertainty related to market adoption
- Amount of competition from competing patents
- Variability in future brand affinity
- Remaining useful life of patent protection
- Future changes in science and technology



Padlock or Patent?

Factors in the decision to *padlock* or patent:

- The amount of expenditure invested in R&D
- Depth and breadth of the market for the technology
- The amount of competition pursuing similar research
- The ability to keep the technology confidential
- The pace of technological advancement in the industry



Additional Patent Considerations

Increasing Patent Complexity

- Products can incorporate multiple patents
- Patents are owned by a variety of industry participants
- Broadening of the geopolitical scope of intellectual property
- Tightening of intellectual property enforcement
- Appraisal thus becoming more complex



Trade Secrets and Other Know How

- The "work-in-progress" of patents, copyrights, trademarks, or other intangible assets
- Not all trade secrets can be patented
- Exist because competitive advantage is sought more than a public invention
- Possible for multiple enterprises to independently and simultaneously hold the same information as a trade secret
- Healthcare specific components may include:
 - Technical and specialty research
 - Clinical protocol and treatment plans



Value of Trade Secrets and Know How

- Trade secrets may be an effective means of "ownership"
 - Reduce public knowledge and potential for reverse engineering associated with a patent
- Potential useful life of a trade secret could exceed that if patented due to avoidance of information disclosure but risk of competitor discovery
- Trade secrets and know-how can be valuable when a significant competitive advantage exists



"The Value of A Trade Secret" By Robert P. Schweihs, Willamette Management Associates Insights, Portland, OR, Autumn 2009, p. 48-53.

Clinical Protocols and Treatment Plans

- Comprised of standardized steps and agreed upon processes related to patient's care
- Ascertain value when consistently followed, recorded, and reported
- Can lead to gains in competitive advantage



Clinical Protocols and Treatment Plans

Medical Procedure Act of 1996

- Protects medical practitioners from liability of infringement in regard to *"medical activities"* patented after 1996
- Medical activities defined as "the performance of a medical or surgical procedure on a body"
- Non-applicable if:
 - Medical practitioner uses a patented machine, manufacture, composition of matter, or biotechnology



Additional Intellectual Property Considerations

- Increasingly cohesive decisions between:
 - Business modeling
 - Corporate strategy
 - Marketing and branding
 - Intellectual property
- Intellectual property is becoming:
 - Increasingly related and factored into every part of an enterprise
 - A significant portion of an enterprise's worth
 - An increasingly important appraisal subject



"Communicating the value of your intellectual property to Wall Street: a properly-constructed IP story can benefit a company and its stockholders" By Chris Rose et al, Research-Technology Management, March 1, 2007, p. 36-40. "Towards the (Strategic) Management of Intellectual Property: Retrospective and Prospective" By Abdulrahman Y. Al-Aali et al, California Management Review, Vol. 55, No. 4, Summer 2013, p. 15-18.

Additional Intellectual Property Considerations

- Technologies that qualify for patent protection have expanded over the years (but recent trends are being reconsidered)
 - Business methods
 - Synthetic DNA
- Market for intellectual property has expanded
 - Yet still not a liquid open market
- Intellectual property rights enforcement is difficult
- Thus, for enterprises which are not in a strong IP position, licensing and selling IP is becoming actively considered

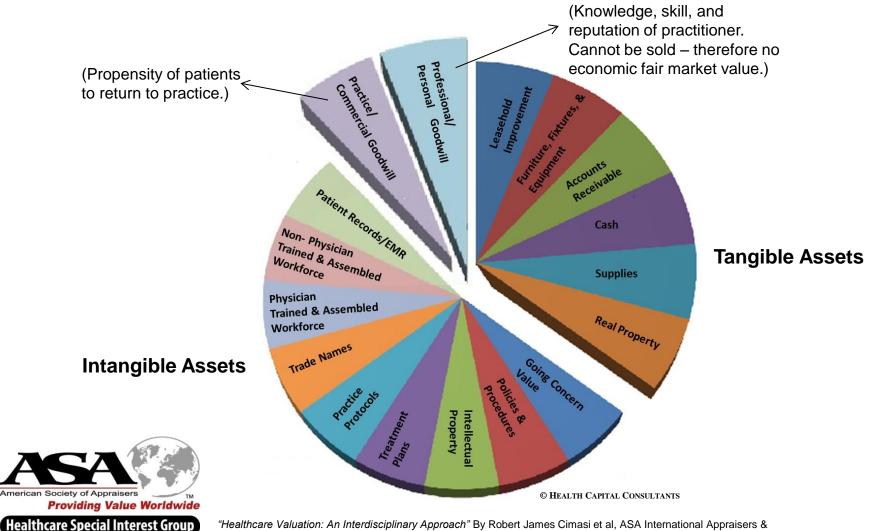


"Towards the (Strategic) Management of Intellectual Property: Retrospective and Prospective" By Abdulrahman Y. Al-Aali et al, California Management Review, Vol. 55, No. 4, Summer 2013, p. 15-18.

Polling Question 5



Classification and Valuation of Goodwill



"Healthcare Valuation: An Interdisciplinary Approach" By Robert James Cimasi et al, ASA International Appraisers & Advanced Business Valuation Conference, Las Vegas, NV, July 27, 2010, p. 46.

Accounting v. Appraisal Definitions of Goodwill

Accounting Definition of Goodwill:

- "The excess of the cost of the acquired interest in an investee over the sum of the amounts assigned to identifiable assets acquired less liabilities assumed."
- "The excess of the cost of an acquisition price over the fair value of acquired net assets which is recorded as an asset and written down only when, and if, impairment is identified and measured, based on future events and conditions."

Appraisal Definition of Goodwill:

- The *residual* amount of intangible asset value which may exist after the separately *identified*, separately *distinguishable*, and separately *appraised* elements of intangible value have been determined
- Goodwill is "calculated as the overall purchase price minus the value of both the tangible assets and identifiable intangible assets that have a finite useful life."



"GAAP: 2003" By Delaney et al., 2003 Edition, John Wiley and Sons, Inc., 2002, p. 389, 440. "Grasping the Value of Intangible Assets" By Phillip A. Beutel & Bryan Ray, International Tax Journal, Vol. 30, No. 1, Winter 2004, p. 36. "Healthcare Valuation: An Interdisciplinary Approach" By Robert James Cimasi et al, ASA International Appraisers & Advanced Business Valuation Conference, Las Vegas, NV, July 27, 2010.

Accounting v. Appraisal Definitions of Goodwill

Intangible Assets ≠ Goodwill

- Goodwill is only one type of intangible asset that may (or may not) exist and be considered in the valuation of healthcare enterprises
- "There are many interpretations (and misinterpretations) of goodwill. All of these interpretations can generally be grouped into two categories: accounting interpretations and economic interpretations." [emphasis added]
- Accounting interpretations are rapidly evolving to a *"market"* basis versus a *"cost"* basis, reflecting more of an economic interpretation (e.g., ASC 805 for financial reporting)



Goodwill

- The expectation as to the propensity of patients (and the revenue stream thereof) to be maintained by the subject enterprise
 - "[Goodwill is] the probability that the old customers will resort to the old place." -Lord Eldon
 - Professional/Personal Goodwill
 - Practice/Commercial Goodwill



"Hints to Young Valuers: A Practical Treatise on the Valuation of Property" By Anthony Richard Cragg and James Robert Vernam Marchant, Second Edition, The Land Agents' Record, Ltd., 1901, p. 518. *"Valuation of Healthcare Intangible Assets: Utilization of the Cost Approach"* By Robert Cimasi et al, Consultants Training Institute, Las Vegas NV December 9-14, 2012.

Professional/Personal Goodwill

- Produced by the reputation and personal/professional attributes of a professional
 - Examples: Charisma, Board Certification
- These attributes "go to the grave" with specific physician
- Cannot be utilized by any other practitioner, nor sold, thus has no economic *fair market value*
- In divorce-related appraisals, value may be attributed to:
 - Enhanced earning capacity
 - Professional licensure
 - Credentialing
 - Other judicially-decreed definitions of value



Practice/Commercial Goodwill

- The propensity of the continuity of patients (and thus revenue stream) to be maintained by an enterprise
 - In contrast to Personal/Professional Goodwill, Practice/Commercial Goodwill can be transferred and, therefore, has economic value



Goodwill Valuation

"...the capitalization of all of the economic income from a business enterprise that cannot be associated with any other asset (tangible or intangible) of the business"

Inverse Asset/Cost Approach

- Subject enterprise is valued through Income or Market Approaches, less all identifiable tangible and intangible assets
- Inverse Adjusted Net Asset Method utilized
- Appraised tangible and intangible assets are deducted from value
- Residual value is considered the value of goodwill



Polling Question 6



Variations in Valuation Practice

 "Correct identification and measurement of revenue and income from intangible assets that require reporting separate from goodwill may be an area of variation in valuation practice"



Concluding Remarks

- Assets provide the company with future economic benefit
- As all value is forward looking, without assets to produce a future economic benefit, a company would have no value
- The value of any enterprise is bound up in the value of each of its discrete, separately identifiable assets
- Each and every asset, tangible and intangible, must be identified and appropriately valued, utilizing the most appropriate valuation methodologies, to estimate the value of the subject enterprise



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 premier multidisciplinary valuation society of professional appraisers

