## Four Pillars of Healthcare Value in an Era of Reform

HFMA Joint Spring Conference

#### **Presenters**

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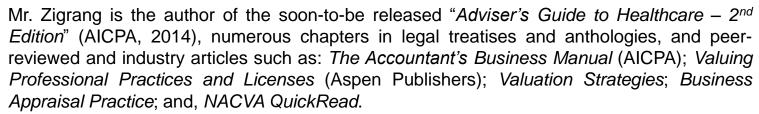
Robert James Cimasi MHA, ASA, FRICS, MCBA, CVA, CM&AA **HEALTH CAPITAL CONSULTANTS** 



Wednesday, May 13, 2015 River City Hotel & Casino St. Louis, MO

#### **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.



Additionally, Mr. Zigrang has served as faculty before professional and trade associations such as the American Society of Appraisers (ASA); 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. He holds a Master of Science in Health Administration (MHA) and a Master of Business Administration (MBA) from the University of Missouri at Columbia. He is a Fellow of the American College of Healthcare Executives (FACHE) and holds the Accredited Senior Appraiser (ASA) designation from the American Society of Appraisers, where he has served as President of the St. Louis Chapter, and is Chair of the American Society of Appraisers Healthcare Special Interest Group (ASA HSIG).



#### **Presenter Bio**

Robert James Cimasi, MHA, ASA, FRICS, MCBA, 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: healthcare valuation consulting and capital formation services; healthcare industry transactions; litigation support & expert testimony; and, certificate-of-need and other regulatory and policy planning consulting. He is a nationally known speaker on healthcare industry topics, the author of seven books, the latest being *Accountable Care Organizations: Value Metrics and Capital Formation (Taylor & Francis, 2013)* and *Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services* (John Wiley & Sons, 2013).

Mr. Cimasi serves as Vice Chair of the American Health Lawyers Association Accountable Care Organization (ACO) Task Force, and as Chair Emeritus of the American Society of Appraisers Healthcare Special Interest Group (ASA HSIG).



#### The Four Pillars of Healthcare



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#### Overview of the Presentation

- What's Driving Healthcare Reform
- Healthcare Reimbursement
- Regulatory Environment of the Healthcare Industry
- Competitive Forces
- Technology Development
- Concluding Remarks

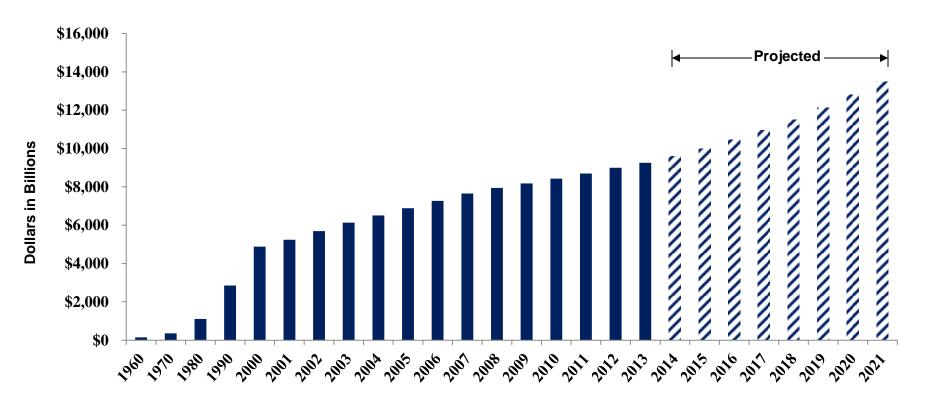
#### **Overview**

"The only thing new in this world is the history that you don't know"

– Harry S. Truman

## What's Driving Healthcare Reform

### What's Driving Healthcare Reform



**National Health Expenditures Per Capita** 

<sup>&</sup>quot;National Health Expenditure Projections 2013-2023" Center for Medicare & Medicaid Services (Accessed 4/21/15). "Table 1: National Health Expenditures; Aggregate and Per Capita Amounts, Annual Percent Change and Percent Distribution: Calendar Years 1960-2013" (Accessed 4/21/15).

## Allocation of 2013 Healthcare Expenditures by Type of Service – the Almighty Dollar

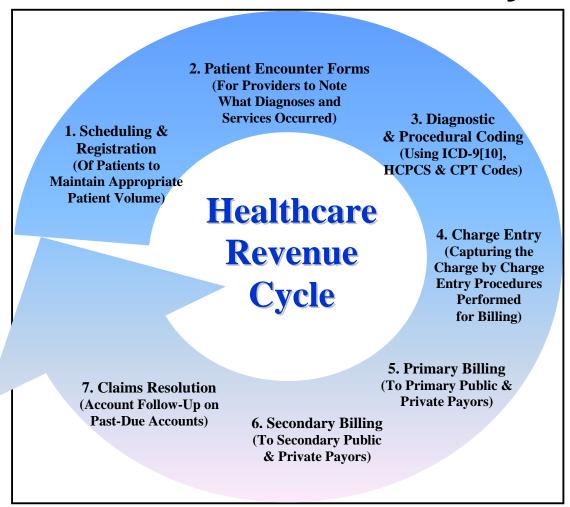
Other Physician/Clinical Home Rx Personal **Hospital Care** Health Services Health Health Drugs 32.9% Spending Care 13.1% 20.1% 9.3% 15.4% 9.9% DAYDUD 11180

<sup>\*</sup>Note: Other Personal Health Care includes dental and other professional health services, as well as durable and non-durable medical equipment. Other Health Spending includes administration and net cost of health insurance, public health activity, research, as well as structures and equipment.

<sup>&</sup>quot;National Health Expenditures by Type of Service and Source of Funds, CY 1960-2013" Centers for Medicare & Medicaid Services, http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/National

### **Healthcare Reimbursement**

## The Healthcare Revenue Cycle



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## **Diagnostic Coding**

**Diagnostic Code**: A numerical representation of the provider's *observations* and *conclusions* as to what health problem(s) or diagnoses the patient presents with during a particular patient encounter

- If a patient is treated for more than one condition, there may be both a primary and a secondary diagnosis
  - If the secondary condition affects the treatment or recovery of the primary diagnosis, it is classified as a coexisting condition
- Established within the International Classification of Diseases and Related Health Problems 9<sup>th</sup> Revision (ICD-9)
- Soon to be replaced by the ICD-10 on October 1, 2015

### **Procedural Coding**

**Procedural Codes**: Used to *identify* and *classify* medical services

 Examples: Surgical procedures and diagnostic tests, evaluation and management (E/M) codes for patient visits and examinations

#### Depends on:

- Whether designated provider is a physician or a facility
- When a facility provider, whether service was performed in an inpatient or outpatient setting
  - Services submitted for payment must be linked by an appropriate procedure code that corresponds to the diagnostic reasoning behind the claim
    - Used by payors to evaluate medical necessity of reported charges

## The Link Between Diagnostic & Procedural Coding

#### **HIPAA-Designated Coding**

		Inpatient		Outpatient	
		Diagnosis	Procedure	Diagnosis	Procedure
1	Physician	ICD-9-CM	CPT	ICD-9-CM	CPT
2	Facility	ICD-9-CM	ICD-9-CM	ICD-9-CM	HCPCS (CPT & HCPCS Level II)

## Shift from ICD-9 to ICD-10 Coding

- ICD-9 excludes many recently discovered diseases, conditions, and treatments currently utilized
  - Produces limited data about a patient's medical conditions and hospital inpatient procedures
- 2009 HHS Final Rule Replacement of current ICD-9 code with ICD-10 code
  - Hospitals with less than 100 beds expected to pay \$100,000 -\$250,000 for conversion
  - Hospitals with more than 400 beds expected to pay \$1.5 million \$5 million for conversion
  - Implementation of ICD-10 recently delayed until October 1, 2015

"ICD-10 Cost, Timing Concerns Explain AMA Vote" By Cheryl Clark, HealthLeaders Media, November 17, 2011, http://www.healthleadersmedia.com/print/TEC-273412/ICD10-Cost-Timi (Accessed 11/18/2011). "Administrative Simplification: Adoption of a Standard for a Unique Health Plan Identifier; Addition to the National Provider Identifier Requirements; and a Change to the Compliance Date for the International Classification of Diseases, 10th Edition (ICD-10-CM and ICD-10-PCS) Medical Data Code Sets: Final Rule" 45 CFR Part 162 (Pre-Federal Registrar Publication), August 24, 2012.

"Engage Your Bottom Line: Understanding the Financial Implications of ICD-10" By Denise Hall and June St. John, Healthcare Information and Management Systems Society, Virtual Briefing, October 12, 2011, p. 6; citing "HIPAA Administrative Simplification: Modifications to Medical Data Code Set Standards To Adopt ICD-10-CM and ICD-10-PCS: Final Rule" Federal Register, Vol. 74, No. 11 (January 16, 2009).

## Resource Based Relative Value Scale (RBRVS)

#### Three Relative Value Unit (RVU) Components:

- **Physician Work (wRVU)** "The relative levels of time, effort, skill, and stress associated with providing each service"; approximately 55% of RVU value
- Practice Expense (PE RVU) "The expenses physicians incur when they rent office space, buy supplies and equipment, and hire nonphysician clinical and administrative staff"; approximately 42% of RVU value
- Malpractice Expense (MP RVU) The "premiums physicians pay for professional liability insurance, also known as medical malpractice insurance"; approximately 3% of RVU value

## Medicare Access and CHIP Reauthorization Act of 2015

- Replaces the Sustainable Growth Rate (SGR) with a set of pre-determined schedule of updates to Medicare Payments for physician services:
  - 0.0% through June 2015
  - 0.5% for July 2015 through December 2015
  - 0.5% for 2016-2019
  - 0.0% for 2020-2025
  - 2026 and beyond:
    - Alternative Payment Model (APM) Participant 0.75%
    - Not Qualified to Participate in APM 0.25%

<sup>&</sup>quot;"Summary: H.R.2 – 114th Congress (2015-2016)" Congress.gov, April 16, 2015, https://www.congress.gov/bill/114th-congress/house-bill/2 (Accessed 4/22/2015); "Medicare Access and CHIP Reauthorization Act of 2015" H.R. 2, § 101, (April 16, 2015), p. 3-4.

## Medicare Access and CHIP Reauthorization Act of 2015

- To qualify as an APM participant:
  - 2019-2020 25% of payments through an alternative payment entity
  - 2021-2022 50% of payments through an alternative payment entity
  - 2023 forward 75% of payments through an alternative payment entity
  - Alternative Payment Entities require participants to:
  - Utilize certified electronic health record (EHR) technology;
  - Payment for professional services based on quality measures; and,
  - Bear risk for monetary losses that are in excess of a nominal amount
- Also combines the EHR meaningful use, the value based payment modifier, and the physician quality reporting system into a single Merit-Based Incentive Payment System

### The Two Types of Revenue

Professional Component (RVU)

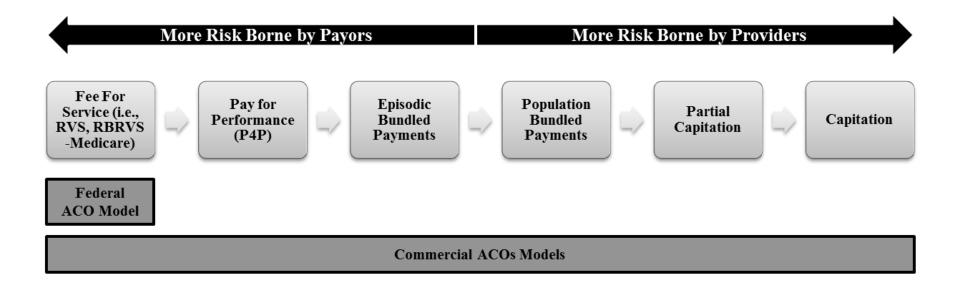
Medicare reimbursement for RVUs has been stagnant or decreasing for physician professional fees since the 1990s

Ancillary Services
& Technical Component
(ASTC)

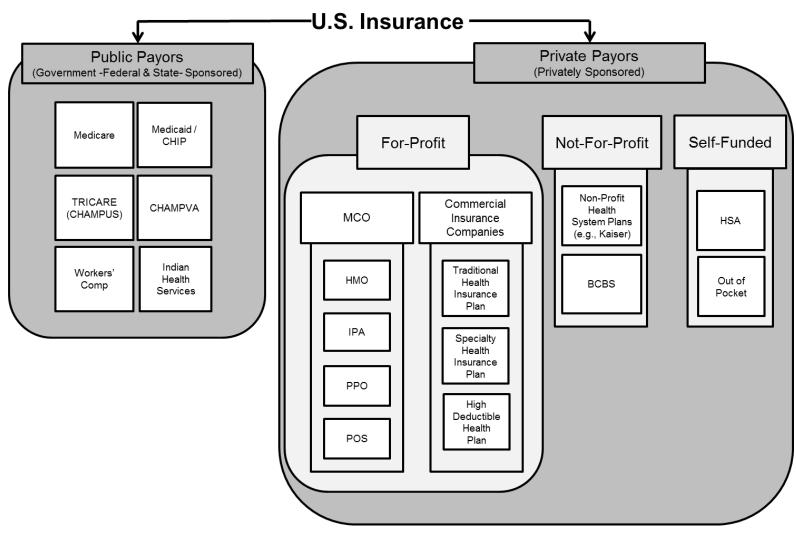
Professional practice physician owners have pursued supplementary profits via the ASTC revenue stream

#### **Methods of Reimbursement**

#### **U.S. Health Insurance Reimbursement Options**



#### **U.S. Health Insurance Providers and Plans**



### **Private Payors**

- Consist of:
  - For-profit commercial insurers
  - Not-for-profit commercial insurers
  - Self-funded plans
- Private health insurance accounted for an estimated \$948 billion, or 33.8% of the total national expenditures in 2013

#### **Consumer Driven Health Plans**

- Many employers have begun to implement defined contribution health insurance plans instead of the traditional defined benefit plans
  - Modeled after defined contribution pension programs, e.g., 401(k)
- Allows the employer to contribute a designated amount of funding
- Gives the employee the freedom to choose how to spend it

## Payor Mix & the Effect on the Revenue Cycle

- Payor Mix: The percentage mix of different payors representing the patient population served
- An appropriate payor mix may ensure financial viability
  - Too many or too few of one type of method may negatively impact practice revenue
  - Complementary reimbursement models incentivize and reward providers for various activities

## **Emerging Reimbursement Trends & the Impact of Healthcare Reform**

- The Affordable Care Act (ACA) provisions aim to utilize financial incentives and policies to:
  - Address the rising cost of services
  - Improve health outcomes
  - Improve access to healthcare services
- Shift from fee-for-service (FFS)
  - The pendulum has swung back and forth between FFS and capitation throughout the years
  - Currently, capitation and other reimbursement models that shift risk to providers have been gaining acceptance throughout the healthcare delivery market

## The Patient Protection & Affordable Care Act (ACA)

#### Provisions include:

- The formation of risk pools
- Increased transparency through publication of outcomes and fraud and abuse audits
- Expanded access to affordable insurance
- Expanded access to care

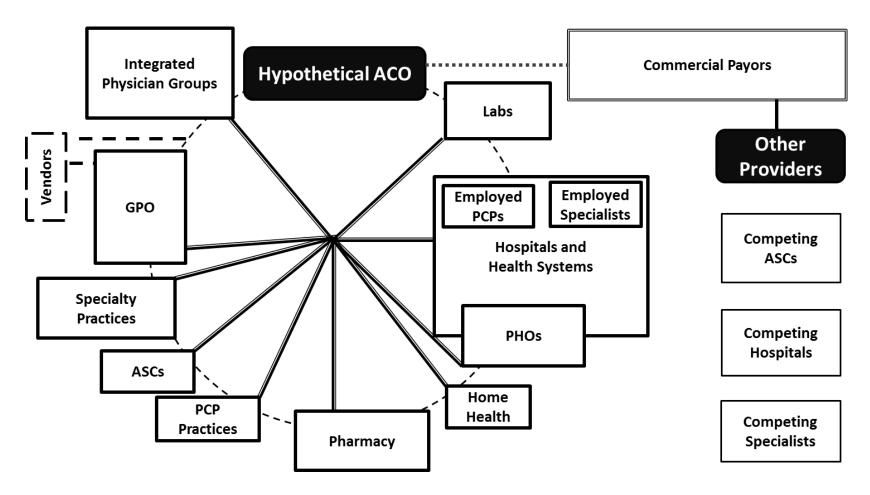
## **Background & the Path to Accountable Care**

- Latest version in an evolving dialogue as to how to manage the rising cost of healthcare in a manner that addresses both cost & quality
  - Began as early as 1932 with the Committee on the Costs of Medical Care (CCMC)
- Health Maintenance Organization Act of 1973
  - Funded the development and spread of HMOs
  - Promised some of the same major fundamental objectives of accountable care (lower costs & higher quality outcomes)
- ACOs have certain tenants similar to managed care, but are more akin to the theory of managed competition

## **ACOs by Participating Provider Type**

Provider Type	ider Type Description	
Insurer ACO	An insurance company that accepts responsibility and accountability for the care provided to a patient population	8%
Insurer-Provider ACO	An insurance company and a provider organization are equally responsible and accountable for the care provided to a patient population	6%
Single Provider ACO	Typically an integrated delivery system that accepts responsibility and accountability for the care provided to a patient population, while the payors involvement is limited to providing reimbursement under a risk-based reimbursement model	67%
Multiple Provider ACOs	Two, or more, providers, e.g., a hospital and a physician group, partner to be responsible and accountable for the care provided to a patient population, while the payors involvement is limited to providing reimbursement under a risk-based reimbursement model	19%

#### **Potential Commercial ACO Structure**



<sup>&</sup>quot;Accountable Care Organizations: Value Metrics and Capital Formation" By Robert James Cimasi, MHA, ASA, FRICS, MCBA, AVA, CM&AA, Boca Raton, FL: Taylor & Francis Group, LLC, 2013, p. 104.

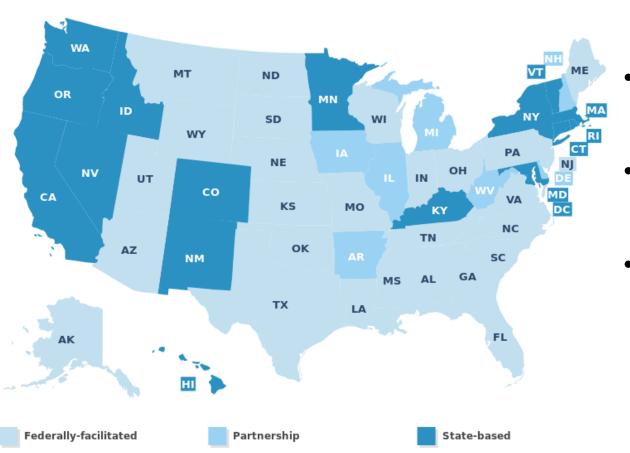
## **Health Insurance Exchanges**

- Purpose Make health insurance more affordable and easier to purchase by creating an organized and competitive market
  - In 2013, 85% of individual health insurance in 16 states were covered by the two largest insurers
  - In 28 states, >50% of enrollees were covered by a single issuer
- ACA required development of state health insurance exchanges
  - Exchange may be run by the state, federal government, or a partnership of both

## **Health Insurance Exchanges**

- Entities will be set up in states to create a more organized and competitive market for health insurance
  - Will offer a choice of health plans
  - Will establish common rules regarding the offering and pricing of insurance
  - Will provide information to help consumers better understand the options available to them
- Will initially serve individuals purchasing insurance on their own and smaller employers

## **Health Insurance Exchanges**



- 17 State-Based Marketplaces
- 7 Partnership Marketplaces
- 27 Federally-Facilitated Marketplaces

## **Medicaid Expansion**

- The Supreme Court struck as unconstitutional the portion of the ACA that would allow the federal government to withdraw all federal Medicaid funding from states that do not participate in the ACA's Medicaid expansion, essentially making Medicaid Expansion optional
  - 30 states are implementing Medicaid Expansion
  - 17 states are not implementing expanding Medicaid at this time
  - Medicaid Expansion is subject to open debate in 4 states

# Regulatory Environment of the Healthcare Industry

## 501(c)(3) Tax Exempt Organizations

#### The 3-Legged Stool of Tax Exempt Organizations:

"Charitable purpose" and community benefit

Prohibition against excess benefit transactions and "inurement of private benefit"

Charitable purpose and community benefit must be legally permissible

## Bona Fide Employees vs. Form 1099 Independent Contractors

- IRS definition of "employees" versus "1099 independent contractors" is significant for fraud and abuse regulations governing healthcare providers
- 11 factor test, broken into 3 general categories:
  - Behavioral control
  - Financial control
  - Type of relationship between the parties
- Not necessary that all 11 factors be met, and no single factor is dispositive in determining employment status

## The Anti-kickback Statute

- A felony for any person to "knowingly and willfully" solicit or receive, or to offer or pay, any "remuneration", directly or indirectly, in exchange for the referral of a patient for a healthcare service paid for by a federal healthcare program
  - Affordable Care Act "With respect to violations of [the Anti-Kickback Statute] a person need not have actual knowledge of this section or specific intent to commit a violation of this section"
- Punishable by up to five years in prison and/or criminal fines up to \$25,000

<sup>&</sup>quot;Chapter 15: Covered Medical and Other Health Services," Medicare Benefit Policy Manual, Centers for Medicare and Medicaid Services, Department of Health and Human Services, Aug. 7, 2009, Section 30, 150-250, http://www.cms.hhs.gov/manuals/Downloads/bp102c15.pdf (Accessed 9/21/09);

<sup>&</sup>quot;Criminal Penalties for Acts Involving Federal Health Care Programs" 42 U.S.C.A. § 1320a-7b(b);

<sup>&</sup>quot;Hanlester Network v. Shalala" 51 F.3d 1390 (9th Cir. 1995);

<sup>&</sup>quot;Patient Protection and Affordable Care Act, Sec. 10606" Pub. Law 111-148, 124 Stat. 119 (March 23, 2010), p. 689.

## **Stark Law**

- Federal prohibition against physician self-referral
- Prohibits physicians from referring Medicare or Medicaid patients to an entity for Designated Health Services (DHS) if the physician, or an immediate family member, has a financial relationship with that entity

# **Designated Health Services**

### **List of Designated Health Services**

Clinical laboratory services

Physical therapy, occupational therapy, and speech-language pathology services

Radiology and certain other imaging services, including:

- Magnetic resonance imaging
- Computerized axial tomography scans
- Ultrasound services

Radiation therapy services and supplies

Durable medical equipment and supplies

Parenteral and enteral nutrients, equipment, and supplies

Prosthetics, orthotics, and prosthetic devices and supplies

Home health services

Outpatient prescription drugs

Inpatient and outpatient hospital services

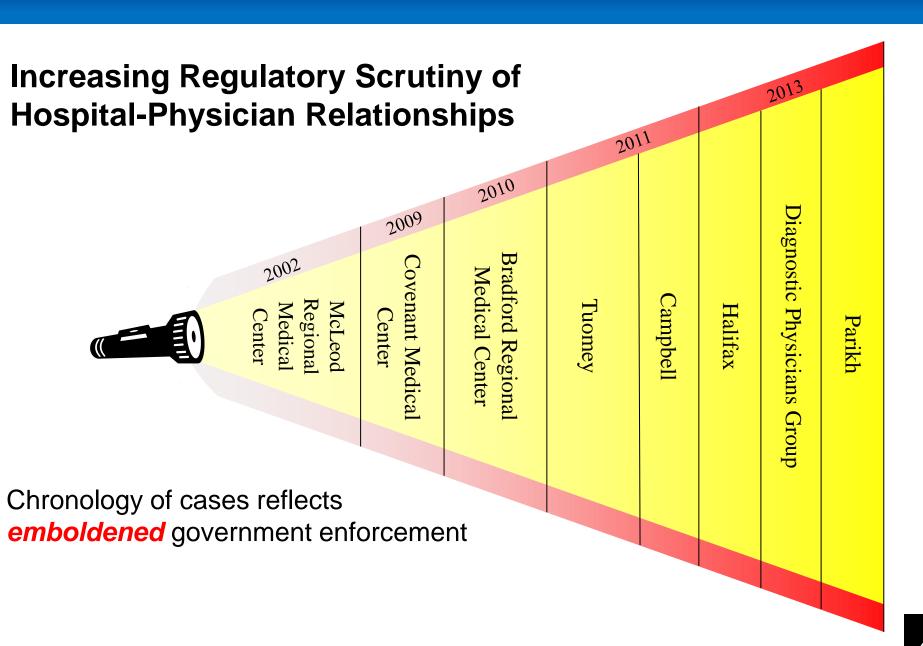
# Differences between Anti-kickback Statute and Stark

	Anti-kickback Statute	Stark Law
Referrals	From anyone	From a physician
Items/Services	Any items/services	Designated health services
Intent	Must be proven (knowing & willful)	No intent required Intent required for civil monetary penalties for knowing violations
Penalties	Criminal and civil penalties	Civil penalties only
Exceptions	Voluntary safe harbors	Mandatory exceptions
Federal Health Care Programs	All	Medicare/Medicaid

<sup>&</sup>quot;Comparison of the Anti-Kickback Statute and Stark Law" Health Care Fraud Prevention and Enforcement Action Team (HEAT), Office of Inspector General (OIG), http://oig.hhs.gov/compliance/provider-compliance-training/files/StarkandAKSChartHandout508.pdf (Accessed 10/7/13).

# **False Claims Act (FCA)**

- When one "knowingly presents, or causes to be presented, to an officer or employee of the United States government or a member of the Armed Forces of the United States a false or fraudulent claim for payment or approval, e.g., upcoding"
- Civil penalties for false claims violations
- Whistleblower Provision (Qui Tam)
- State FCA statutes Can expand/alter provisions of federal law (state claims reviewed by OIG)



## **FMV & Commercial Reasonableness**

- An arrangement must simultaneously be at Fair Market
   Value and be Commercially Reasonable to be deemed
   legally permissible
  - Fair Market Value Looks to the reasonableness of the range of dollars paid for a product or service
  - Commercial Reasonableness Looks to the reasonableness of the business arrangement generally

# Fair Market Value (FMV) Defined

- FMV The value in arm's-length transactions, consistent with the General Market Value
- General Market Value "...the price that an asset would bring as a 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..."

# Definitions of Commercial Reasonableness HHS

Arrangement appears to be "...a sensible prudent business arrangement, from the perspective of the particular parties involved, even in the absence of any potential referrals"

## Stark II, Phase II

"An arrangement will be considered 'commercially reasonable' in the absence of referrals if the arrangement would make commercial sense if entered into by a reasonable entity of similar type and size and a reasonable physician of similar scope and specialty, even if there were no potential for DHS referrals"

## **Definitions of Commercial Reasonableness**

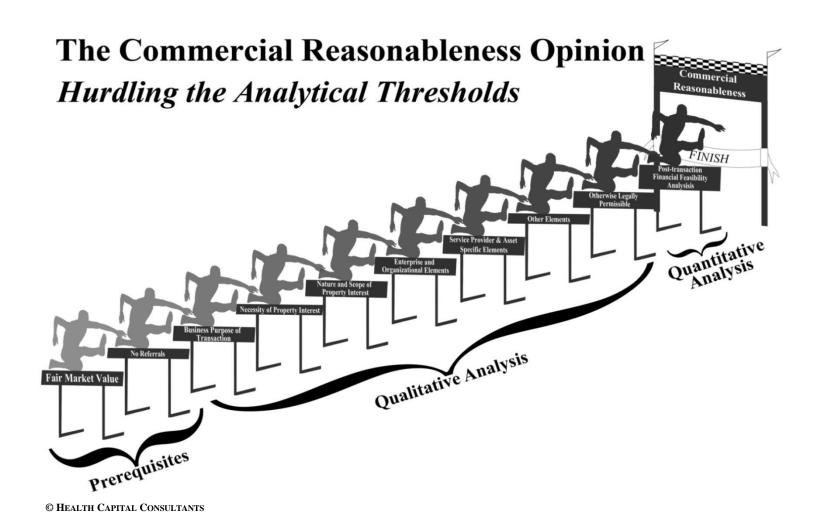
## **IRS**

- Factors considered when determining the *commercial* reasonableness of a physician compensation arrangement:
  - Specialized training and experience of the physician
  - The nature of duties performed and the amount of responsibility
  - Time spent performing duties
  - Size of the organization
  - The physician's contribution to profits
  - National and local economic conditions

## **Definitions of Commercial Reasonableness**

## **IRS**

- Factors considered when determining the *commercial* reasonableness of a physician compensation arrangement:
  - Time of year when compensation is determined
  - Whether the compensation is in part or in whole payment for a business or assets
  - Salary ranges for equivalent physicians in comparable organizations
  - Independence of the board or committee that determines physician compensation arrangement



## **Commercial Reasonableness**

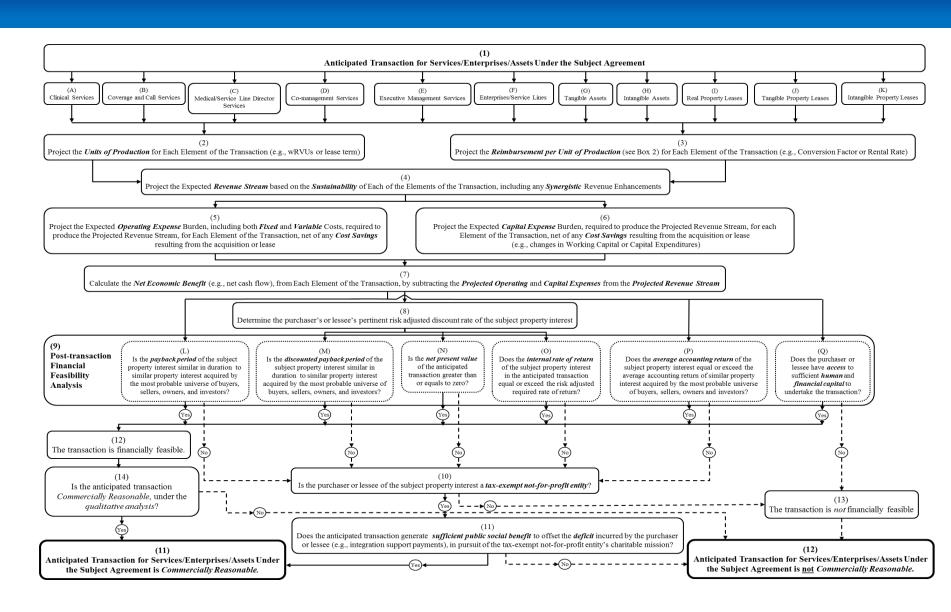
## **Qualitative Factors**

- Does the arrangement accomplish a business purpose?
  - Necessity of subject property interest
  - Nature/Scope of subject property interest
  - Enterprise/Organizational elements
  - Quality, comparability, & availability of subject property interest
  - Ongoing assessment, management control & other elements
- Is the anticipated transaction for services/enterprises/assets under the subject agreement otherwise legally permissible?

## **Commercial Reasonableness**

# Quantitative Factors/Post-Transaction Financial Feasibility Analysis

- Payback period & discounted payback period
- Net present value analysis
- Internal rate of return
- Average accounting rate of return



# **Antitrust Regulations**

### The Sherman Act

Prohibits any "contract, combination. . .or conspiracy, in restraint of trade or commerce"

## The Clayton Act

### **Prohibits:**

- Price discrimination
- Exclusive dealing arrangements
- Mergers and joint ventures that could create a monopoly

Example – FTC v. Phoebe Putney

# **Antitrust Regulations**

## **Section 5 – Federal Trade Commission (FTC) Act**

Prohibits "unfair methods of competition in or affecting commerce," and gives the FTC authority to bring enforcement actions against anti-competitive practices

Goal – To ensure a competitive marketplace in which consumers will have high quality, cost-effective health care and a wide range of choices

# **Certificate of Need (CON)**

- State government determines where, when, and how capital expenditures will be made for public healthcare facilities, services and major equipment
- Aimed at restraining health care facility costs and allowing coordinated planning of new services and construction
- Originated to regulate the number of beds in hospitals and nursing homes, and to prevent overbuying of expensive equipment
- 35 states (and Washington DC) still retain some type of CON program, law, or agency

# Health Insurance Portability & Accountability Act of 1996 (HIPAA)

- Possession of confidential healthcare information is regulated on a federal level
- Most widely used for safeguarding the privacy of Protected Health Information (PHI)
- HIPAA Privacy Rule Provides standards for use and disclosure of individuals' PHI
  - Goal To assure that individuals' health information is properly protected while allowing the flow of health information needed to provide and promote high quality health care and to protect the public's health and well-being

# **Competitive Forces**

## The Corporatization of Medicine

- At the turn of the century, the medical profession was relatively free from government regulation
  - The profession had control over its organization; standards of practice; and the markets in which it operated
- More recently, the rise of the "corporatization of medicine" has led to "[e]mployers and the government becom[ing] critical intermediaries in the system because of their financial role, and they are using their power to reorient the system"

## The Commoditization of Healthcare

- Healthcare services have evolved into homogenous, fungible units that are bought and sold
- "Commoditization": The process of making an item, which is not distinguished by a brand name or label, into something that can be purchased in bulk quantities and sold by retailers at a standardized per unit basis

## The Economics of Healthcare

### Healthcare Costs and GDP in the U.S.

- The portion of the U.S. gross domestic product (GDP) related to healthcare has risen from 5.0% in 1960 to 17.4% in 2013
  - Predicted to be 19.3% by 2023
- This discrepancy may be caused by the 2008 recession, which had a greater impact on GDP than on healthcare spending
- "...the relative increase in healthcare costs compared with the rest of the economy is inevitable and ineradicable part of a developed economy. The attempt [to control relative costs] may be as foolhardy as impossible."

"National Health Expenditure Projections: 2013-2023" Centers for Medicare and Medicaid Services, http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/Proj2013.pdf (Accessed 3/25/15); "Three Decades of Government-Financed Health Care in the United States" By Patrick Fleenor, Tax Foundation, August 1994, http://www.taxfoundation.org/files/bd006ece1a4b8166023dbc913175b7b7.pdf (Accessed 11/11/09); "Health Spending Projections Through 2018: Recession Effects Add Uncertainty to the Outlook," By Andrea Sisko, et al., Health Affairs, Web Exclusive, Feb. 24, 2009, p. w346. "Do Health Care Costs Matter?" By William J. Baumol, The New Republic, Nov. 22, 1993, p. 16; "Table 1: National Health Expenditures; Aggregate and Per Capita Amounts, Annual Percent Change and Percent Distribution: Calendar Years 1960-2013" Center for Medicare & Medicaid Services, http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-

# **Supply and Demand in Healthcare**

## **Healthcare Services: Supply-Side**

- Smaller hospitals merge with larger ones to remain viable
- The "geographic expansion race" Hospitals are looking to expand and compete for valuable insured patients
  - Acquiring existing full-service hospitals or building new ones
  - Building freestanding ambulatory surgery centers (ASCs)
  - Strengthening relationships with emergency medical transport systems or operating their own
- Patients in lower income communities may not see improvement in access to care

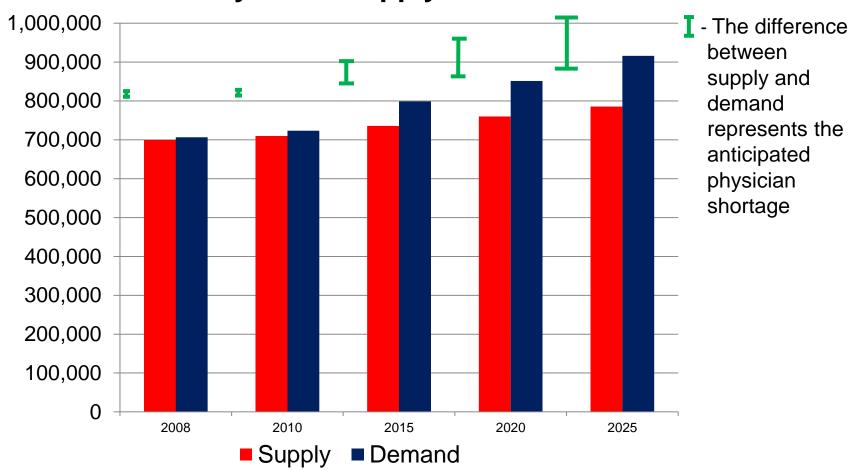
# **Supply and Demand in Healthcare**

### **Healthcare Services: Demand-Side**

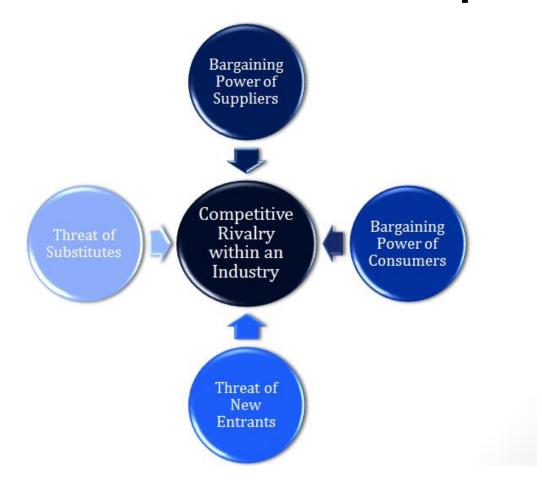
- Third party payors shift direct financial risks to a third party who pays for services and management of risks (defined benefits model)
- Consumers are insulated from direct costs of the services needed to manage their health, and therefore most often do not consciously balance costs with benefits when making choices regarding their care
  - Results in an imperfect demand curve
  - Creates the diminishing applicability of a traditional supply and demand model
  - Insurance companies do not reap the full benefit or consequence of care provided

## **Supply and Demand in Healthcare**

## **Physician Supply and Demand**



## Porter's Five Forces of Competition



# **Bargaining Power of Buyers**

- Healthcare services primarily paid for by private or government insurance
  - Most private healthcare insurance purchased through employers
  - Prior to the Patient Protection and Affordable Care Act (ACA), businesses did not receive discounts on health insurance plans
    - On average, small firms paid up to 18% more in premiums

## **Threat of New Market Entrants**

- Historically, healthcare providers believed there was little to no risk of new market competitors due to entry barriers (e.g., certificate of need, state licensure)
- Technology and communication advancements mean new entrants no longer have to be based in local market, e.g. outsourcing of x-ray film readings, use of telemedicine
- Goals of charity, education, and community service make some decisions in the business of healthcare seem financially or economically irrational
  - The interest(s) held by society in the consolidation and creation of new entrants represents a positive social externality

# Barriers to Free Market Competition in Healthcare

Patients	Patients Do Not Purchase Services Directly from Providers	
	Patients Do Not Compare Prices Between Providers	
Payors	The Government is the Largest Purchaser of Healthcare	
	Private Purchasers Often Lack Market Power	
Providers	Many Providers Have Monopoly or Near Monopoly Power (Yet Antitrust Laws Prevent Some Potentially Beneficial Integration)	
	Providers Are Rewarded for Increasing Costs	
	Capital Investments Are Overly Subsidized	
	Certificate of Need, Regulation, and Licensing Laws are an Entry Barrier to Competing and Substitute Providers and Services	
	Exit Barriers Protect Low Quality Providers	
Patients, Purchasers, and Providers Lack Information		

## Reform of the Insurance Industry

- From 2000 to 2009, over 400 health insurance company mergers occurred
  - Reason for consolidation trend
    - Lack of legislation concerning merger agreements
  - Resulted in a highly consolidated market and negative consequences for consumers
- Mergers, without strong enforcement of antitrust laws, have permitted a variety of anticompetitive behaviors by major insurance companies
  - Resulted in higher costs, compromised patient care, and a record high level of uninsured in the U.S.

<sup>&</sup>quot;The Next Antitrust Agenda: The American Antitrust Institute's Transition Report on Competition Policy to the 44th President of the United States," By The American Antitrust Institute, Albert A. Foer, Ed., Vandeplas Publishing (2008), p. 323; Citing "Consolidation in the Pennsylvania Health Insurance Industry: The Right Prescription? Hearing Before the Subcomm. On Antitrust, Competition Policy and Consumer Rights of the S. Comm. on the Judiciary," 110th Cong. (2008) (Testimony of David Balto) http://judiciary.senate.gov/testimony.cfm?id=3522&wit\_id=7367 (Accessed 8/27/2012).

# **Medical Loss Ratio (MLR)**

- Limits the portion of premium dollars health insurers may spend on administration, marketing, and profits
  - Most insurance companies that cover individuals and small businesses must spend at least 80% of premium income on health care claims and quality improvement
  - Only 20% premium income spent on administration, marketing, and profit
    - MLR threshold is higher for large group plans, which must spend at least 85% of premium dollars on health care and quality improvement

# Pressures of Market Competition vs. Community Benefit

- Gatekeeper HMOs and patient protection legislation
- For profit vs. not-for-profit healthcare
- Physician participation in managed care and level of charity care

# **Antitrust Regulations**

- Purpose
  - To prevent monopolies, predatory pricing, and encourage competition in the marketplace
- Substantial regulation has the capacity to limit free market competition in the healthcare industry
- Traditionally used to combat:
  - Anticompetitive behavior arising from provider- and payorimposed barriers to competition
  - Consolidations (either by collaboration or merger) by provider groups and health systems

# **Affiliation Arrangements**

## **Expanded Contracting Arrangements**

• Exclusive clinical services arrangements (e.g., radiology, pain management, anesthesiology), contracts for specific physician services (e.g., hospitalists, laborists, surgicalists, intensivists) and/or for specific diagnostic services (e.g., the interpretation of EKGs), leased practices, and a surge in the direct employment of physicians

## **Provider Consolidation**

- The mid-1990s experienced a frenzy of physician practice acquisitions by hospitals, health systems, and large integrated groups as managed care organizations (and HMOs) boomed
- Consolidation efforts have rekindled in recent years due to:
  - Reimbursement cuts
  - Restrictions on physician ownership
  - Increased regulatory scrutiny
  - Increased technological demands for reporting (i.e., ICD-10 conversion)
  - Changing physician demographics and demands

## **Technology Development**

## Technology as "Process"

The term *healthcare technology* goes beyond the simple hardware and software utilized by providers

- Includes such intangible concepts as:
  - Healthcare processes

**Process technologies** can affect the manner and structure by which healthcare is delivered and measured on both a clinical and management level, including:

- Treatment protocols
- Care mapping
- Case management

## **Overview of Healthcare Technology**

Range of technology in healthcare utilized during provision of healthcare clinical services:

- Tangible tools, e.g., medical devices, diagnostics and therapeutics
- Pharmaceuticals
- Computer hardware and software that providers utilize during provision of clinical services and treatment plans
- Patient record management
- Protocols, procedures, and treatment plans constituting the standardized course of care

Healthcare technology has been evolving since the beginning of medical science

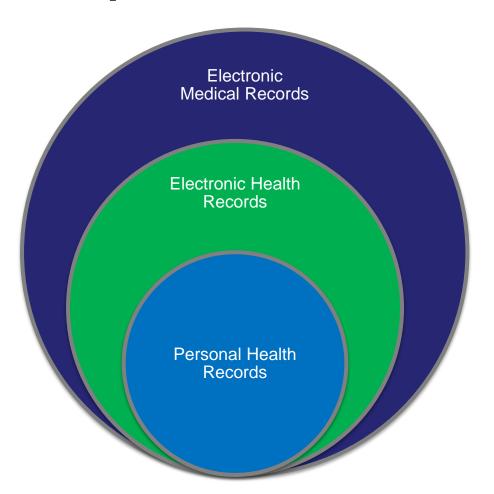
## **Management Technology**

Management technologies include:

- Processes and procedures through which providers organize patient encounters, charge entry, and the billing process
- The software and devices that support these endeavors

Most publicized healthcare management methods involve the interoperable exchange and consolidation of patient data and treatment standards

## Scope of Electronic Record Systems



- All electronic records containing health information
- All interoperable electronic records containing health information maintaining certain standards
- All interoperable electronic records containing health information maintaining certain standards that allow a level of control by the patient

#### **Electronic Records – Retrieval Issues**

#### **Paper records** do not allow for:

- Efficient search for requisite data extraction
- Analysis of voluminous patient clinical, demographic, and financial information

#### Unlike paper records:

- Electronic record systems can be electronically and instantly searched, categorized, and analyzed
- Electronic record systems improve providers' ability to provide more informed treatment plans to patients

## Patient Health Records (PHRs)

PHRs provide individuals with the means to document, track, and evaluate their health conditions to:

- Facilitate more informed healthcare decisions
- Improve personal health status
- Reduce costs
- Improve the quality of healthcare

# The American Recovery & Reinvestment Act of 2009 (ARRA)

In 2015, physicians who are not using EHRs will be penalized through reduced reimbursement

#### **Established:**

- The Health Information Technology for Economic and Clinical Health (HITECH) Act
- Office of National Coordinator for Health Information Technology (ONC) within the Department of Health and Human Services (HHS)

## Meaningful Use

**Meaningful Use:** Vague standard named by CMS to determine whether providers are eligible for EHR implementation incentive payments under the Medicare and Medicaid Electronic Health Record Incentive Program

HIMSS survey of healthcare IT executives

- Achieving the priority placed by healthcare care IT executives on achieving meaningful use requirements has fallen as a top priority status from nearly 50% in 2011 to 38% in 2012
  - Implies that many organizations believe they have achieved meaningful use

#### **Telemedicine and Telehealth**

#### **Cost-Benefit Analysis**

- For hospitals incurring physician shortages, telemedicine facilitates hospitalist recruitment
  - Provides more attractive work hours and the ability for a single practitioner to provide services to multiple hospitals at one time
- Telemedicine:
  - Has enhanced access between hospitalists and a patient's treating medical specialist provider
  - Allows hospitals to expand their market service area by employing telemedicine technology at outlying medical clinics and offices

## **Clinical Technology**

#### Advancements in clinical technology:

- Allow for more procedures to be offered in outpatient settings
- Make available:
  - Less invasive procedures
  - Shorter recovery times
  - Lower probability of complications during and after a procedure

## **Diagnostic Technology**

Diagnostic medicine is utilized in both the acute and chronic patient treatment setting for the purposes of:

- Prevention
- Screening
- Disease detection
- Care management

Diagnostic technology is the backbone of much technological advancement, including:

- Minimally invasive surgery
- Preventative procedures
- Telemedicine
- Therapeutics

## **Therapeutic Technology**

Range of uses for therapeutic technologies has grown substantially in the last century, and innovation in the field continues to lead to groundbreaking medical discoveries in:

- Radiation therapy
- Minimally invasive surgery
- Transplant technologies
- Home infusion therapy
- Pain management
- Molecular pharmacology

## **Radiation Therapy**

Uses high energy light beams or charged particles to stunt the proliferation of cancer cells by damaging the DNA within the cell, eliminating the cell's ability to divide, or killing the cell

The development of *linear accelerators* and *gamma knives* has increased the therapeutic capability, precision, and ease of use, in which they deliver radiation therapy used during:

- Intensity modulated radiation therapy An advanced form of radiation therapy using three-dimensional (3D) imaging and treatment delivery
- Stereotactic radiosurgery A non-surgical procedure involving the single, *high-dose delivery* of *targeted gamma-ray* or *x-ray beams* used to treat tumors and functional abnormalities in the brain

## Minimally Invasive Surgery

Minimally invasive surgery procedures typically lessen many risks traditionally associated with surgery through the use of several small incisions to guide fiber-optic cameras to the area(s) of interest

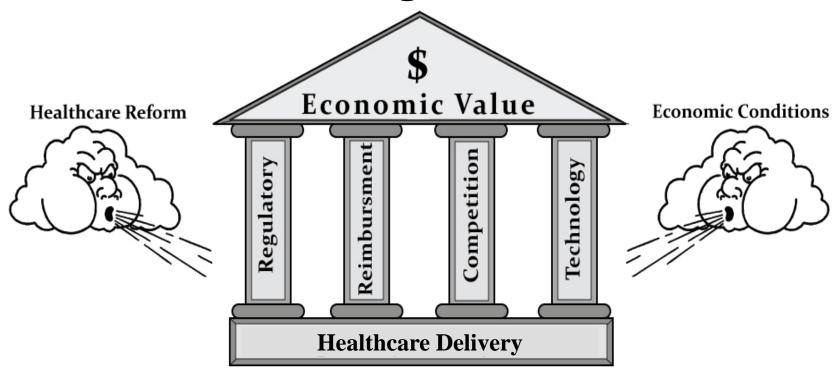
Developments in *laparoscopic technologies* and an increasing demand for *minimally invasive surgery* are driving growth in the minimally invasive surgical procedures market with advancements such as the creation of new and more precise *endo-mechanical devices* (small devices utilized minimally invasive surgery) and *camera systems* 

# Physicians are Using Smartphones and Tablets in Their Practices

Smartphones and tablets are getting significant use by physicians in their practice

- Smartphones are used by 80% of physicians
- Tablets are used by 45% of physicians

## **Concluding Remarks**



#### The Four Pillars of U.S. Healthcare Delivery

Recent healthcare initiatives have been precipitated by a "perfect storm," which may for the first time, fuel real change

## **Concluding Remarks**

- Healthcare reform's impact on the rapidly changing reimbursement, regulatory, competitive, and technological environment is accelerating the pace of healthcare transactional activity and driving changes in both the operational and financial aspects and, consequently, the value of enterprises, assets, and services.
- Healthcare Providers (both administration and clinicians) and Advisors should keep abreast of The Four Pillars in order to navigate the unique complexities of an increasingly volatile healthcare marketplace.

## **Concluding Remarks**

"Love everyone, trust no one, and paddle your own canoe."