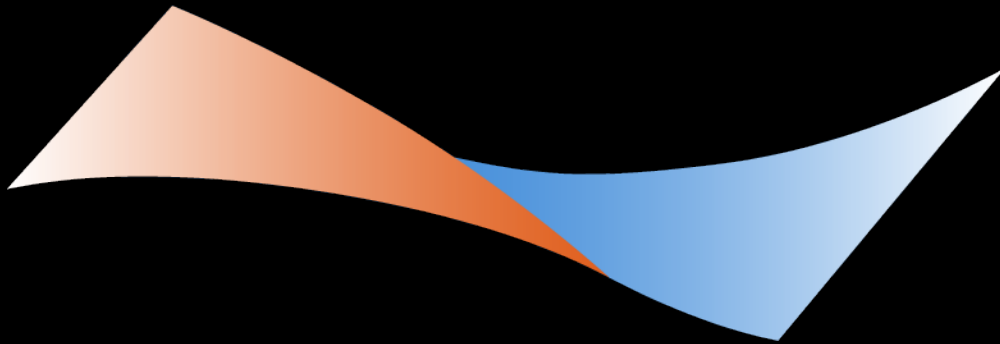


Hoag  
Orthopedic  
Institute



# Orthopedic Care Delivery 2011 and Beyond

James T. Caillouette, MD  
Surgeon –in-Chief  
Hoag Orthopedic Institute

# Disclosure

- Consultant for DePuy/J&J
- Equity shareholder Hoag Orthopedic Institute

# Why innovate?

**The status quo is not sustainable**

# Why innovate?

- It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change.

**Charles Darwin**

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# 2009 Study of High-Cost Conditions

Hospital Charges for Hip and Knee replacement surgery range from \$15,000 to \$110,000, with no measurable differences in outcome or quality.

# Why Orthopedics?

- Musculoskeletal Care is BIG
- 1 in 4 Americans has a musculoskeletal condition
- Direct and indirect cost of care = \$849 Billion annually
- 7.7% of GDP
- Aging population, obesity, increasing need

# Orthopedics costs

Total US cost of TKR ~ \$21 billion

- 583,000 TKR
- Purchasers' cost ~ \$8 billion
- 42% of procedures under age 65

Total US cost of THR ~ \$16 billion

- 408,000 THR
- Purchasers' cost ~ \$5 billion
- 45% of procedures under age 65



# Our Population is Aging...

- **42 % increase in persons > 65 years by 2030**
- **Obesity epidemic**
- **Projected increase in joint replacement by 2030 > 250%**



*The* NEW ENGLAND JOURNAL *of* MEDICINE

Perspective

DECEMBER 23, 2010

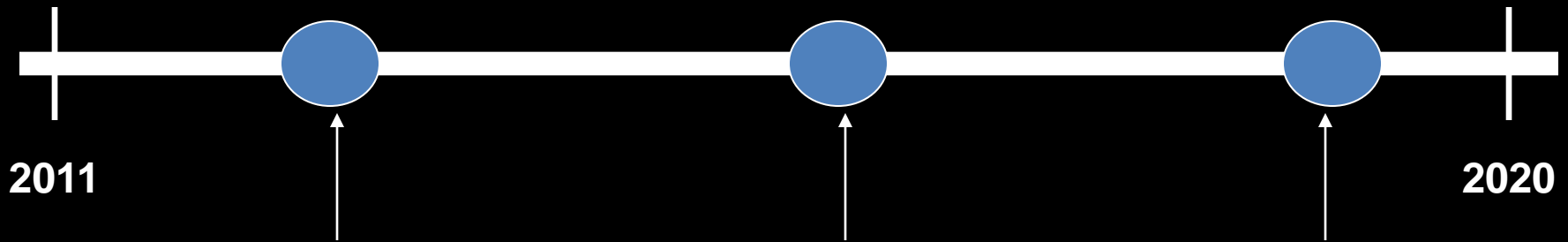
# What Is Value in Health Care?

Michael E. Porter, Ph.D.

# How does this impact me?

- Marketplace Shifts in Payment Methodologies
- Role of Health Plans
- Role of Employers
- California as “Ground Zero”
  - Bundled Payment 1.0
  - Bundled Payment 2.0
  - Narrow Networks

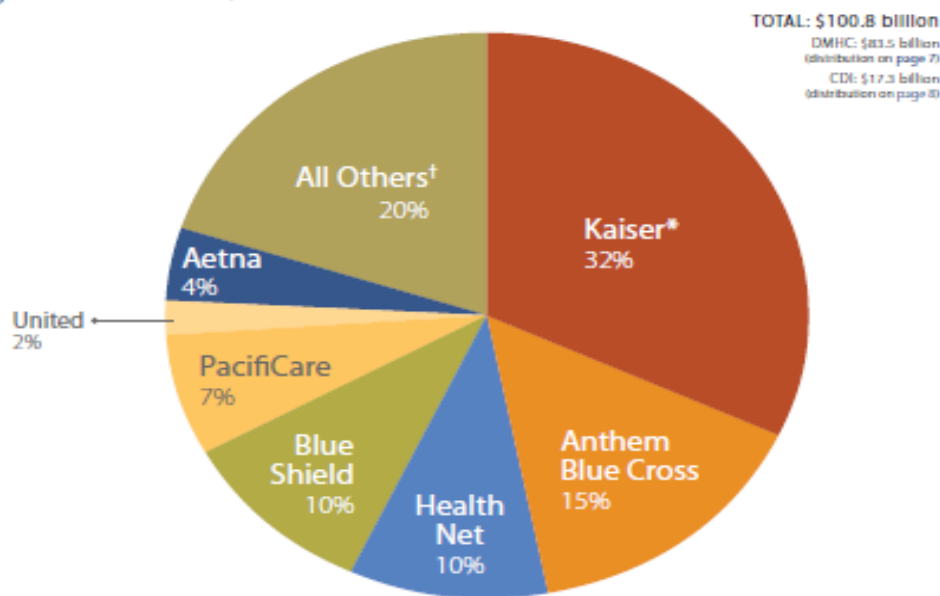
# Marketplace Shifts in Payment Methodologies



Period:	Transitional Positioning 2011 - 2013	Intermediate Influences 2014 – 2016	Longer-term Possibilities 2017 – 2020+
Themes:	Volume Cost Investment / Experimentation	Tension between “value” and “price” Outcomes Facing the market	Federally Driven Change Marketplace Driven Change
Forms of expression:	Narrow Networks High Deductibles Operating Efficiencies Bundled Payment	Public insurance exchanges Insurance reform Quality risk	“Medicare World” Capitation 2.0 Two-Tiered System
Accountability:	Episodic	Mixed: episodic & population based	Population based

# Health Plans in California Market Share

All Health Insurance Carriers,  
by Share of Revenue, 2009



Five players dominate the state's health insurance market, accounting for some three-fourths of all revenues.

Kaiser controls 9% of the inpatient market share in Orange County, but > 15% of the covered lives.

\*Kaiser figures adjusted to reflect only California business.

†All Others includes Connecticut General (CGNA), SCAN, L.A. Care, CalOptima, Contra Costa Health Plan, Care1st.

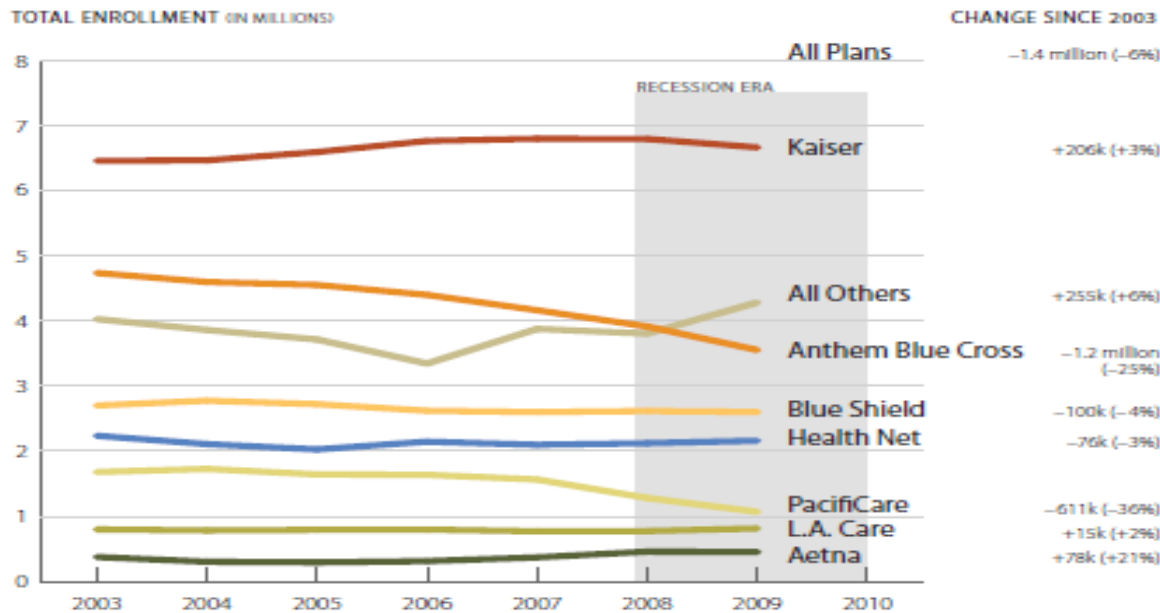
Notes: Share computation based on: 1) total revenues from DMHC-regulated carriers; and 2) CDI California direct premium revenues reported by CDI for the "Accident and Health" line of business. Figures may not add to 100 percent due to rounding. United-Healthcare, PacifiCare Life and Health Insurance Company, and PacifiCare of California are members of the same holding company.

Sources: Department of Managed Health Care (DMHC), Health Plan Financial Summary Data; California Department of Insurance (CDI), California Life and Annuity Market Share Report for Calendar Year 2009, Exhibit 4C, and Table No. 1b — Health California Direct Premiums Written, 2009.

# Health Plans in California

## Enrollment Trends – By Plan

Enrollment Trends in DMHC-Regulated Plans, Year-End 2003 to 2009



Notes: Plans shown are full-service DMHC plans with over 450,000 enrollees as of year-end 2009. PacifiCare reports merger-related activities have led to enrollment transfers to UnitedHealthcare; PacifiCare enrollment declined 1.7 percent in 2009 and 32 percent since year-end 2007. Largest plans were selected on the basis of enrollment at December, 2006.  
Sources: Department of Managed Health Care (DMHC), Health Plan Financial Summary Data, National Bureau of Economic Research.

Enrollment in DMHC regulated plans has dropped 6 percent since the end of 2003 — a loss of 1.4 million enrollees. The largest seven DMHC plans lost 9 percent of their enrollment in this period.

# Role of Employers / Purchasers

# Pacific Business Group on Health Members



**AEROJET**



**MCKESSON**  
Empowering Healthcare



**Pitney Bowes**



**TARGET CORPORATION**



**VARIAN**  
medical systems



© Pacific Business Group on Health, 2010





## Value Based Purchasing Design (VBPD) (continued)

- Benefits for these procedures at facilities designated in the VBPD pilot will apply in accordance to the member's plan
- Benefits for these procedures not performed by a VBPD pilot facility will be limited to \$30,000 per procedure
- Total of 44 hospitals chosen as Value Based Purchasing facilities

## Innovations in managing cost of care

Anthem Blue Cross has ... established a threshold of \$30,000 to cover inpatient services for routine single knee and hip joint replacement hospital stays. Using the CalPERS Choice plan design with an 80% in-network coinsurance (\$3,000 out-of-pocket maximum) and 60% out-of-network coinsurance (with no-out-of-pocket maximum), the following illustrates the member impact:

	Designated	In-network	Out-of-network
Hospital billed	\$60,000	\$60,000	\$60,000
Negotiated rate/C&R	\$30,000	\$40,000	\$50,000
Provider write-off	\$30,000	\$20,000	\$0
Member co-insurance annual OOP	\$3,000	\$3,000	\$20,000
Paid	\$27,000	\$27,000	\$30,000
Member obligation	\$3,000	\$13,000	\$30,000

# Narrow Networks

- Yes, it's all about cost for the Payers-no outcome data tie in for now...
- 3-Tier network for CalPERS PPO
  - Tier 1 – lower cost (i.e. rates) providers
  - Tier 2 – all other contracted providers
  - Tier 3 – anyone else
  - Financial exposure doubles between 1 and 2 (\$3,000/\$6,000 to \$6,000/\$12,000)

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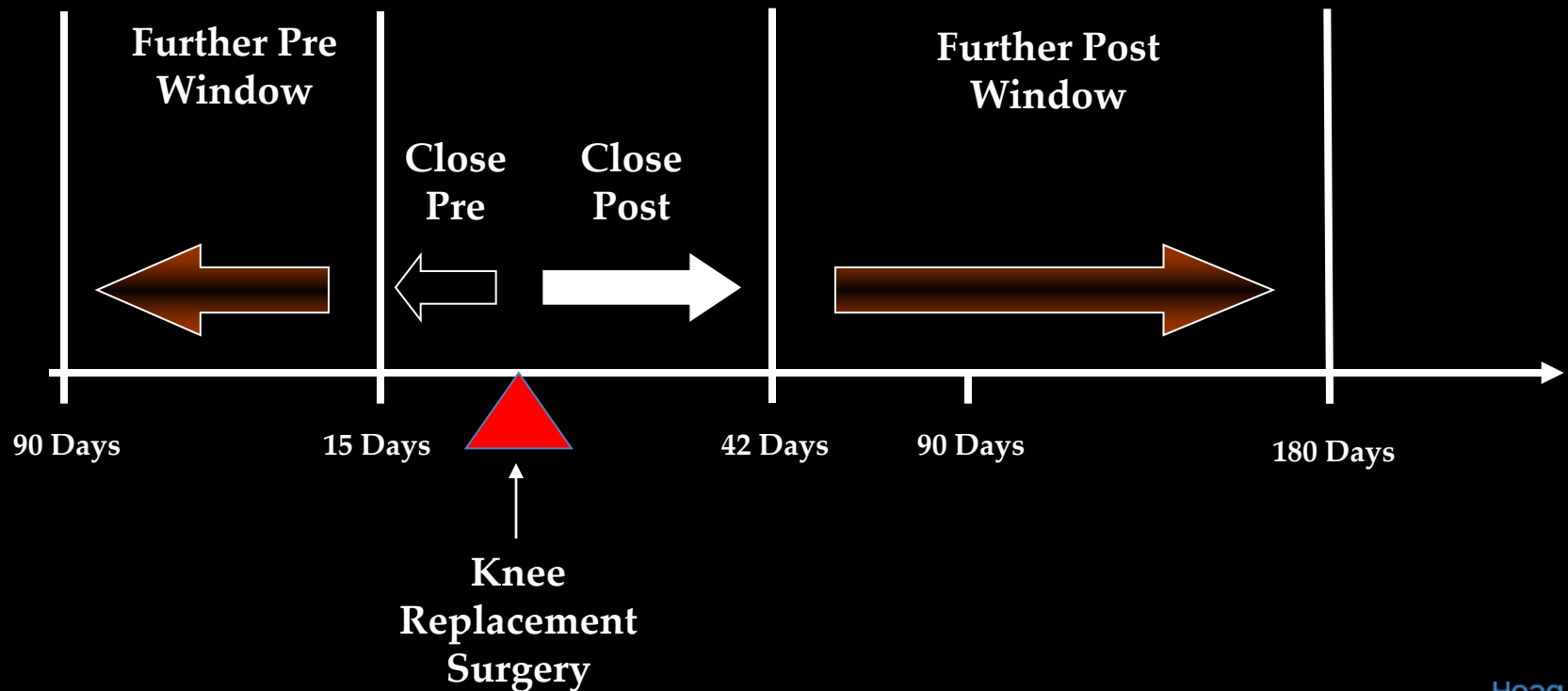
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# Bundled Payment 1.0

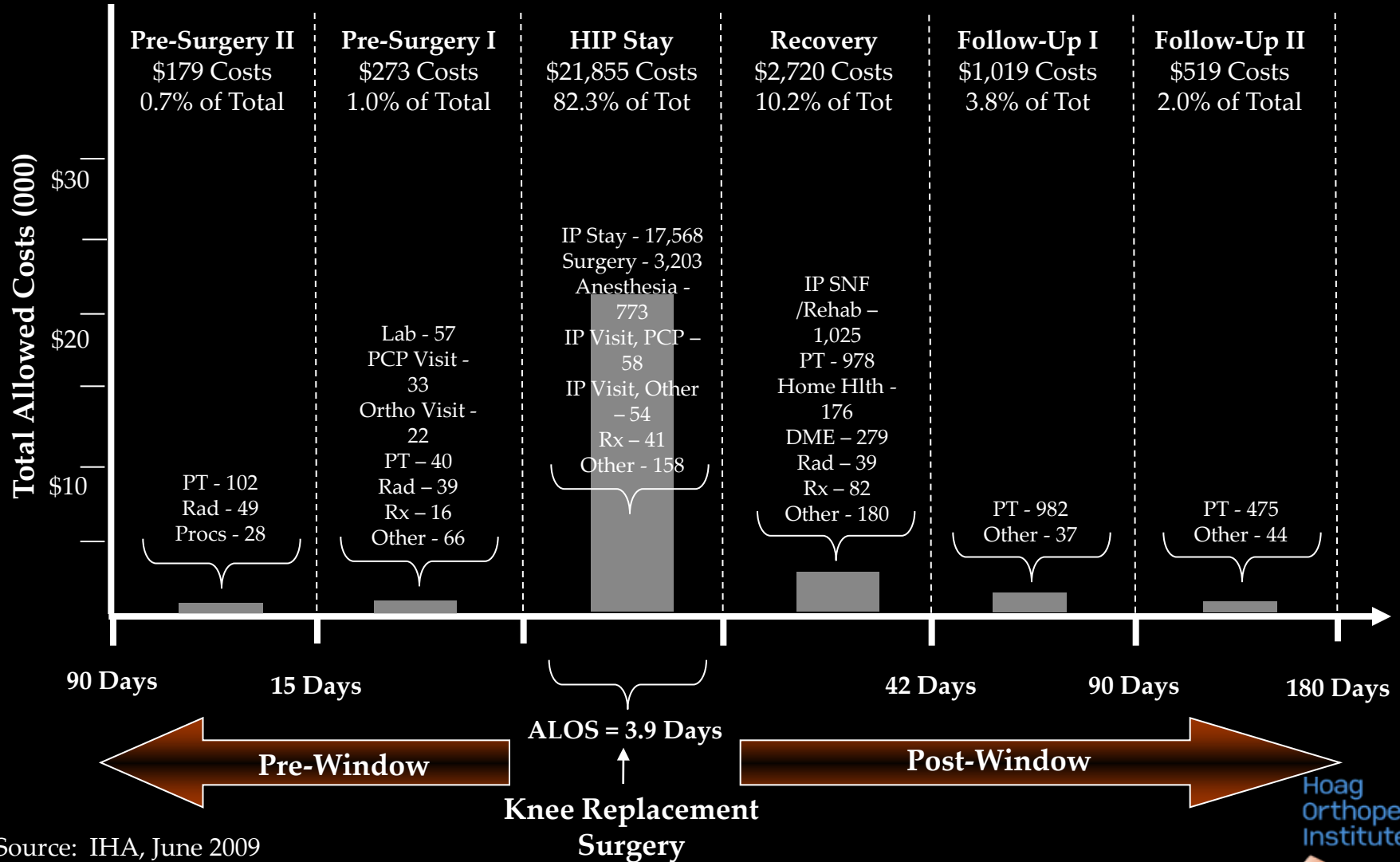
- IHA Bundled Payment Pilot
- PPO Pilot for TKR – Aetna, Blue Shield & CIGNA
- Single budget for Episode of Care (hospital IP stay, surgeon, HB physician, lab, rad, etc)
- Introduces warranty concept for care
  - 90-day warranty for readmission or complications

# Knee Replacement Definition Episode Time Windows





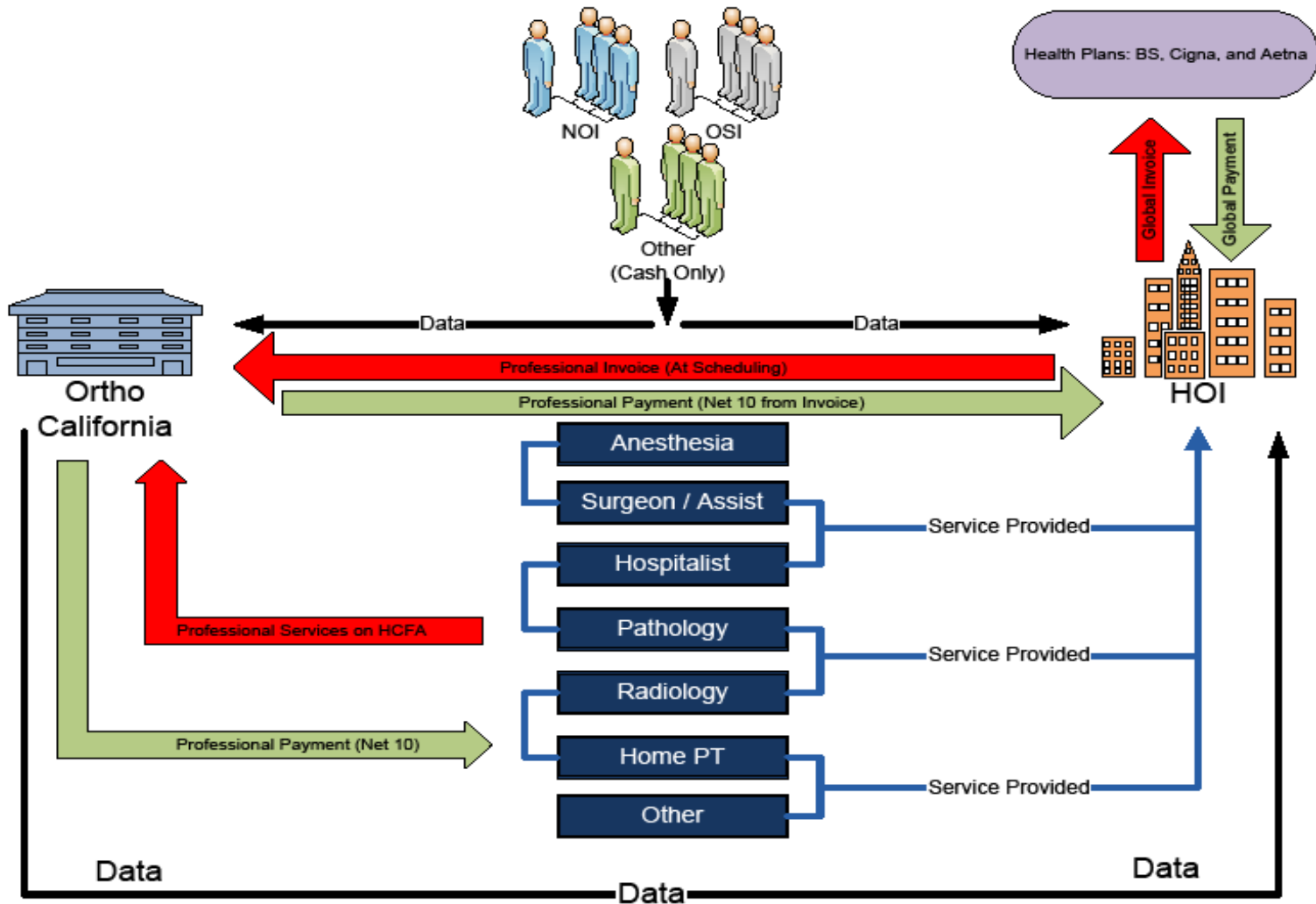
# Further Analysis: Knee Replacement Procedure Episode Group Average Commercial Population Costs <sup>1</sup>



Source: IHA, June 2009

Data: Ingenix Claims Data, n=602 (note: Ingenix cost is providers price)

# Simple?



# Bundled Payment 1.0

- Lessons Learned & Take-Aways
  - Common language & definitions
    - One party’s version of “cost neutral” is another’s “cost increase/decrease”
  - Specifics around what’s in and out of scope for warranty
  - Benefit Design – reward the innovators?
  - “To whom do the benefits accrue...”?
  - Sustainability ? – cycle of cost savings, followed by reduced payment, followed by cost savings, ... repeat

# Bundled Payment 2.0

*(aka Vouchers)*

- “Bundled Payment” is delegated to the consumer
- Anthem Value Based Purchasing Design
- Effective January 1, 2011 – it is here!

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# What is Value in Healthcare?

- “Value is health outcome achieved per dollar spent.” *Michael Porter HBS.*
- “Since value is defined as outcomes relative to costs, it encompasses efficiency. Cost reduction without regard to the outcomes achieved is dangerous and self-defeating, leading to false “savings” and potentially limiting effective care”.

*Michael Porter HBS.*

# Conclusions

- Pace of introduction of new models and pilots likely to increase
- Bundled payment seems well suited for Orthopedic model; however, long term sustainability in terms of value creation for providers uncertain
- Bundled payment in the form of consumer vouchers very likely in orthopedics – where will it be deployed next?

# Overriding Principals of Economic Survival

Efficiency wins

Alignment wins

No margin, no mission



# In Healthcare:

$$\text{Value} = \frac{\text{Outcome}}{\text{Cost}}$$

The greatest opportunity for efficiency is a frictionless combination that harnesses the deep knowledge of hospital and physician.

# Hospital's Strengths

- Resources - \$\$
- Depth of Human Resources
- Depth of Facilities Management
- Market Presence/Name Recognition
- Contracting Clout

# Physician's Strengths

- Physician – Patient Relationship
- Apex Care Provider
- Deep Specialty Expertise
- Cost Sensitive – It's my money!

# Physician Deep Knowledge

- Is a new technology worth the price?
- Complication prevention
- Does cost reduction increase risk?

# Physician Hospital Alignment

Both Sides must deliver on promises made in a timely fashion.

-Both sides benefit-

# The Key to Integration:

TRUST



# Hoag Memorial Hospital Presbyterian

- Largest health care provider in Orange County
- 12<sup>th</sup> largest hospital in California
- Ranked 2<sup>nd</sup> in State for patient satisfaction
- Highest volume joint replacement center in California



# What is HOI?

## *Current Members*

HOI is a joint venture that has brought together a leading hospital, two medical groups, two ASCs, and the only specialty hospital focused on orthopedic services in Orange County.



■ Hoag Memorial Hospital Presbyterian



■ Newport Orthopedic Institute (NOI)

■ Orthopedic Surgery Center of Orange County (OSCOC)



■ Orthopedic Specialty Institute (OSI)

■ Main Street Specialty Surgery Center (MSSSC)



■ Hoag Orthopedic Institute (hospital)

# HOI Orthopedic Hospital

- **Licensed November, 2010**
  - **Concerns: HR 3590--  
“Patient Protection &  
Affordable Care Act”**
- **70 beds**
- **9 Orthopedic OR’s**
- **Hoag Orthopedic Institute  
Inpatient Capacity –  
12,000 cases/yr.**
- **Outpatient Capacity-  
20,000 cases/yr.**



# What is Value in Healthcare?

- “Since value is defined as outcomes relative to costs, it encompasses efficiency. ***Cost reduction without regard to the outcomes achieved is dangerous and self-defeating, leading to false “savings” and potentially limiting effective care”***. Michael Porter HBS.

# Take Away Concepts

- Think long term and be proactive
- Learn from other industries-macro economics
- You have to be willing to give to get
- Efficiency will win
- Best outcomes will win
- Best patient experience will win
- Transparency to patients will win

# Must Read:

- The Innovator's Prescription
  - Clayton M Christensen

