BERKELEY CENTER
FOR HEALTH TECHNOLOGY

Hospital Consolidation:
The Good, the Bad, and the Backlash

James C. Robinson
Leonard D. Schaeffer Professor of Health Economics
Director, Berkeley Center for Health Technology
University of California, Berkeley

Overview

- The economics of organizational integration
- Integration of physicians and hospitals
  - Efficiencies
  - Pricing
- Whither the integrated delivery system?

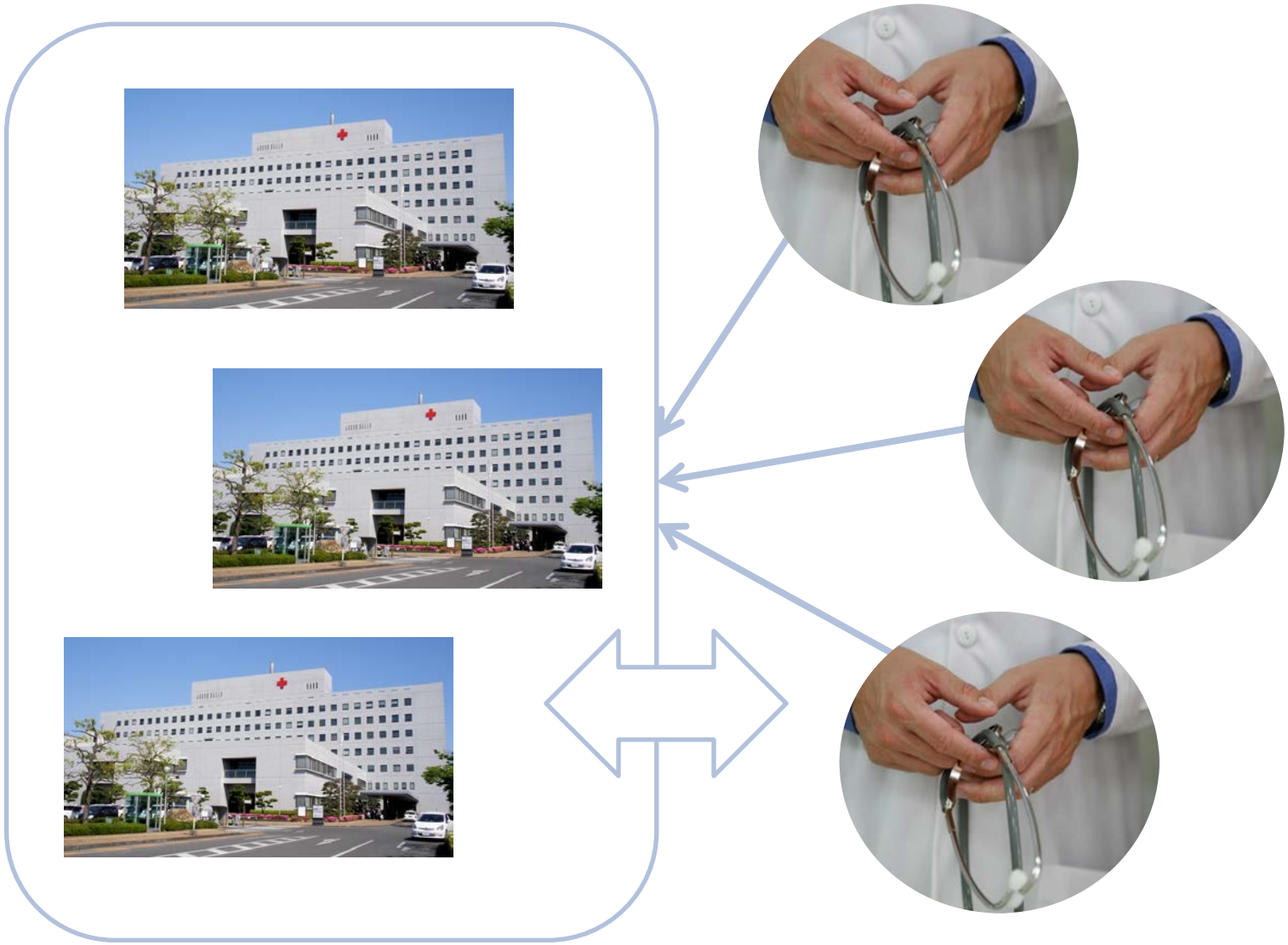
Three Forms of Integration

1. Horizontal mergers and acquisitions
   - Hospitals merge, or an existing hospital chain acquires a facility within the same market
   - Physician practices, health plans etc.
2. Diversification into new markets or services
   - Hospital chain acquires facilities in other markets or expands in ambulatory services
3. Vertical mergers and acquisitions
   - Hospital acquires or creates health plan
   - Hospital acquires medical group and/or employs physicians (this is both vertical and diversification)

Potential Effects of Integration

1. Increased efficiency (lower cost, higher quality)
   - Can lead to regionalization of services, with higher patient volumes and better outcomes
   - Reduced costs of supplies, access to capital
2. Decreased efficiency
   - Large firms can become complex, slow-moving, resistant to change and innovation
   - Incentives for employees are weakened
3. Increased pricing
   - Integrated firms may obtain efficiencies but then not pass them to customers through lower prices
   - Integrated firms can lose efficiency and then need to raise prices to compensate

The Most Important Integration is Between Hospitals and Physicians



THE GOOD

What are the Potential Efficiencies from Physician-Hospital Integration?

Improved assessment and purchasing of high-value physician preference items

- Orthopedic joints and ancillary supplies
- Spine fusion implants: rods, screws, plates, etc.
- Cardiac rhythm management: pacemaker, defibrillator, CRT

Improved coordination of care and discharge planning

- Faster OR throughput, more cases per day
- Reduced LOS and readmissions
- Better relationships with SNF, subacute, rehab, PT

Potential Savings from Effective Purchasing: Econometric Analyses of California Hospitals

- 10 hospitals provided patient-level cost, utilization, and revenue data to Integrated Healthcare Association
- Econometric analysis of variance in implant use and price for orthopedic (N=6055), spine (N=1846) , and cardiac patients (N=1877)
- Secondary analysis of discharge destination and LOS

American Journal of Managed Care, 2014

Quantifying Opportunities for Hospital Cost Control: Medical Device Purchasing and Patient Discharge Planning

James C. Robinson, PhD, and Timothy T. Brown, PhD

In the past decade, many hospitals have covered rising costs by merging with erstwhile competitors and demanding ever-higher payment rates from insurers.[1-4] This focus on revenue growth now appears to be of declining value. Private insurers are experimenting with narrow networks and consumer cost-sharing incentives that will channel patient volume away from facilities charging the highest prices.[5,6] CMS has proposed reductions in Medicare hospital payment updates.[7,8] Many hospitals are thus finding they need to shift to a focus on cost reduction to preserve their operating margins.

The changing economic environment presents opport... as well as challenges. Both public and...

ABSTRACT

Objectives

To quantify the potential reduction in hospital costs from adoption of best local practices in supply chain management and discharge planning.

Study Design

We performed multivariate statistical analyses of the association between total variable cost per procedure and medical device price and length of stay, controlling for patient and hospital characteristics.

Methods

Savings from Effective Purchasing and Discharge Planning, as % of Patient Care Expenditures

Table 4. Total Incurred Procedure Costs and Potential Savings for 10 Hospitals From Adoption of Local Best Practices in Supply Chain Management and Discharge Planning

	Joint Replacement Surgery	Spine Fusion Surgery	Cardiac Rhythm Management
Total incurred costs	$68,510,369	$33,989,730	$30,195,611
Total potential savings	$9,925,039	$6,403,655	$8,794,178
Savings as % of costs	14.5%	18.8%	29.1%
Number of patients	6055	1846	1877

THE BAD

What are the **potential vices** of integration?

If poorly executed, physician-hospital consolidation can…

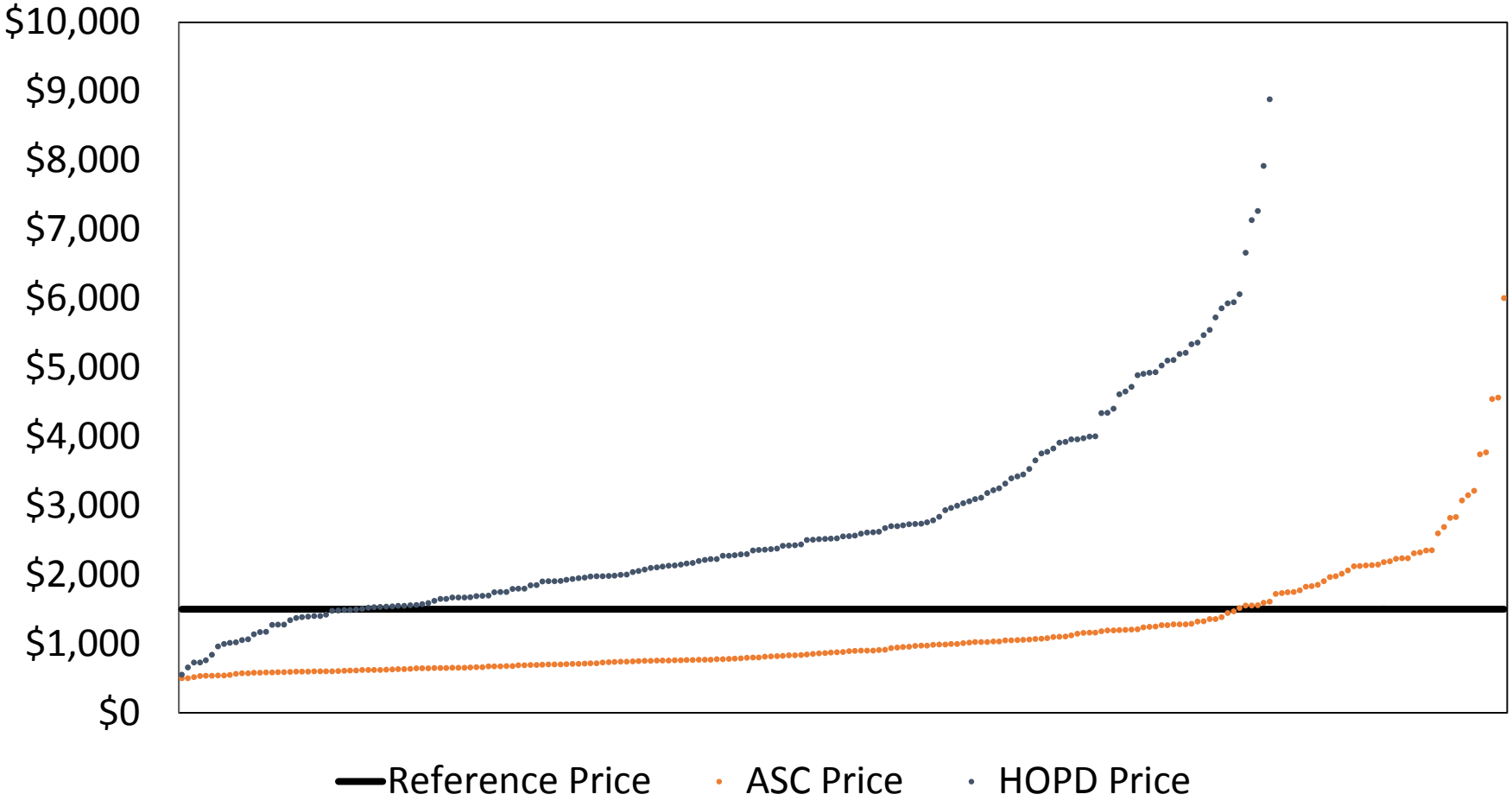
- Move care to high-cost rather than low-cost settings
- Create higher prices than in competitive markets
- Create complex, slow-moving, bureaucratic organizations

Price Per Procedure for Commercially Insured Patients in 61 Hospitals

	Angioplasty with Stent	Knee Replacement	Pacemaker Insertion	Lumbar Spine Fusion
Concentrated Markets	$30,610	$24,920	$23,354	$48,868
Competitive Markets	$19, 801	$18,505	$16,548	$39,318
% difference after controls for other factors	53%	32%	33%	30%

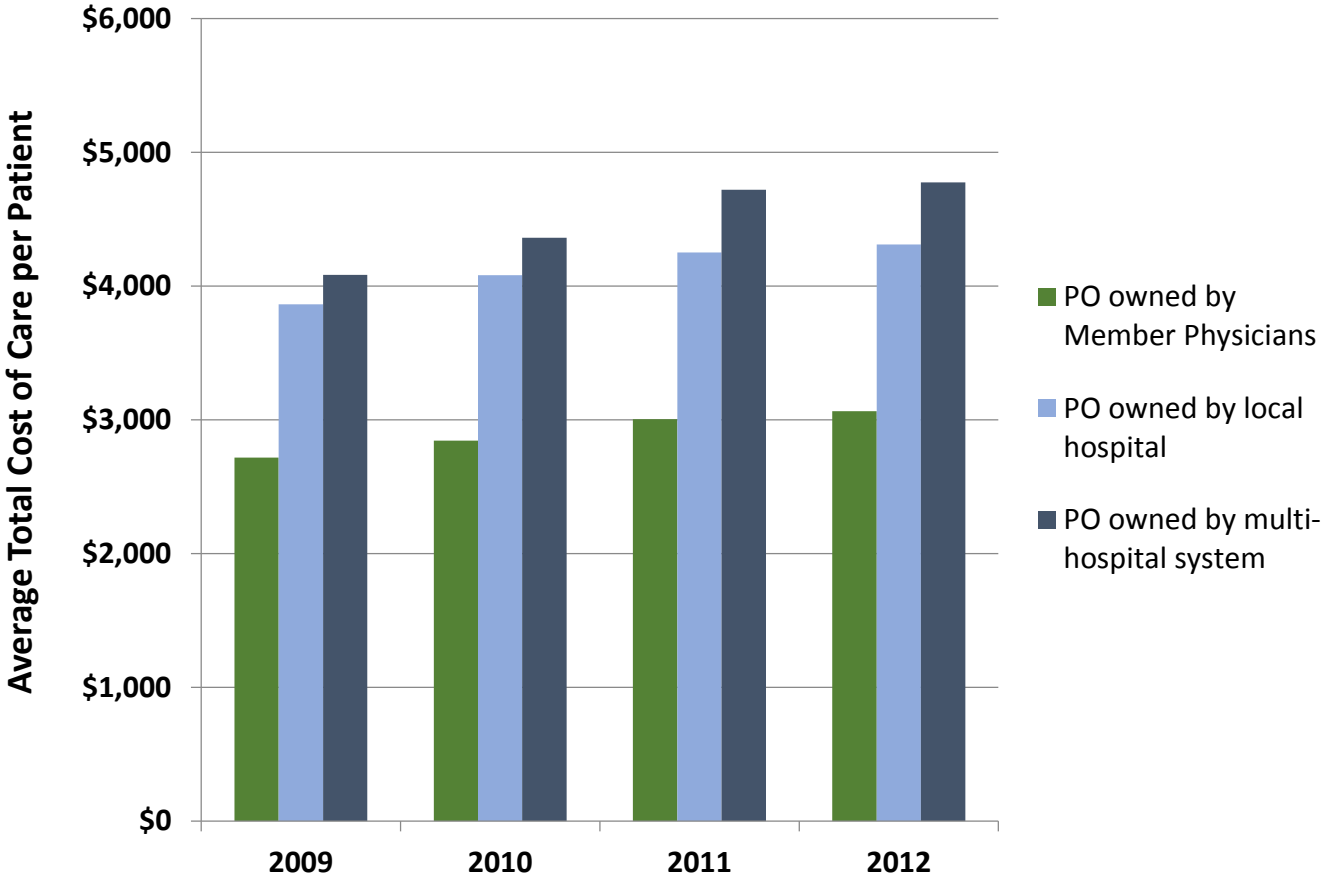
JC Robinson. Hospital Market Concentration, Pricing, and Profitability In Orthopedic Surgery and Interventional Cardiology. Am J Managed Care 2011; 17(6):e241-e248.

Figure 1
Prices in Hospital Outpatient Departments (HOPD) and Freestanding Ambulatory Surgery Centers (ASC) Prior to Implementation of Reference-Based Benefits



JC Robinson et al. Association of Reference Payment for Colonoscopy with Consumer Choices, Insurer Spending, And Procedural Complications. JAMA Internal Medicine 2015; online doi:10.1001/jamainternmed.2015.4588.

Total Cost of Care per Patient in Physician Organizations in California



JC Robinson, K Miller. Total Expenditures per Patient in Hospital-Owned and Physician-Owned Physician Organizations in California. JAMA 2014; 312(16):1663-69

THE BACKLASH

How are Payers (Insurers, Employers) Responding?

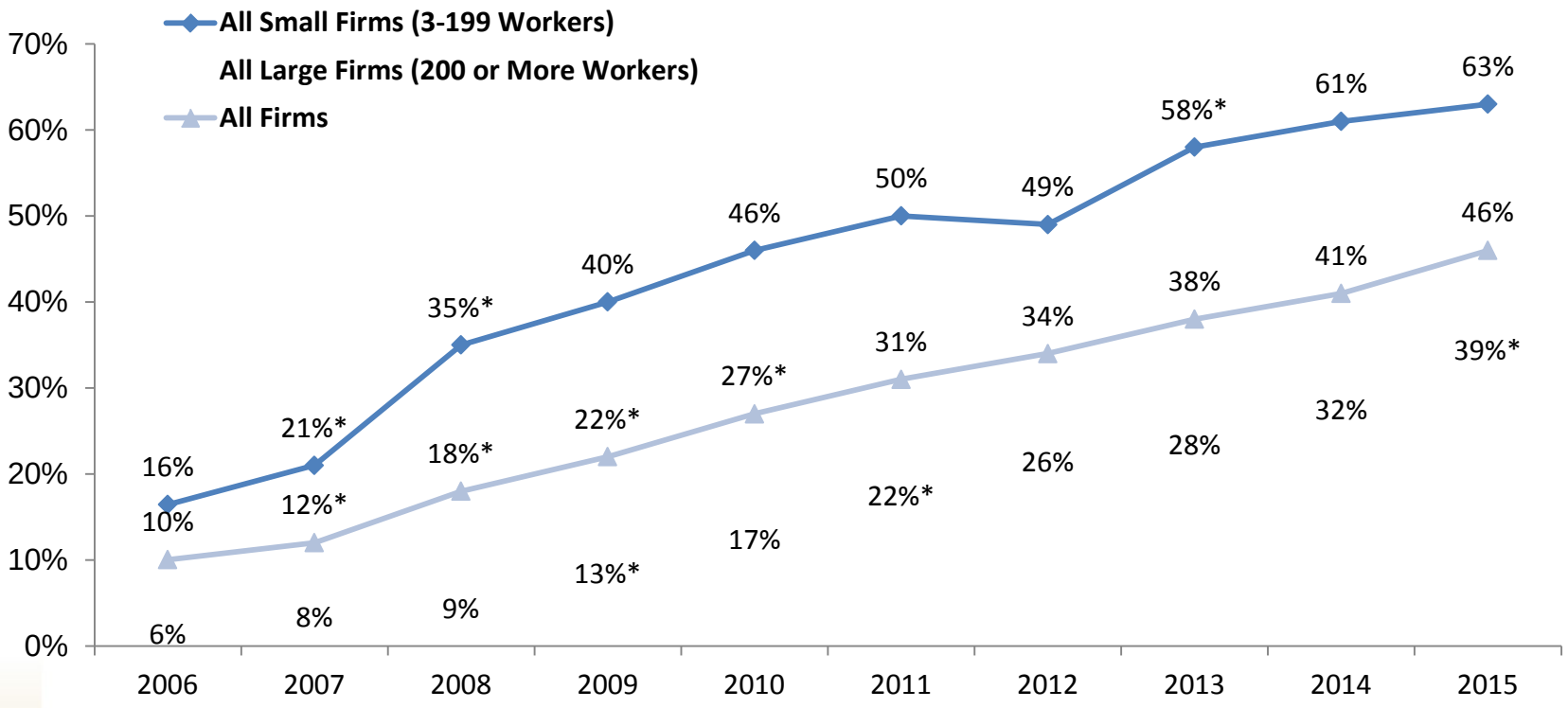
Benefit design: Increased cost shifting to patients
Network design: reduced provider choice for patients

Mix and match:

- High deductible health plans
- Narrow hospital networks
- Reference pricing
- Transparency tools

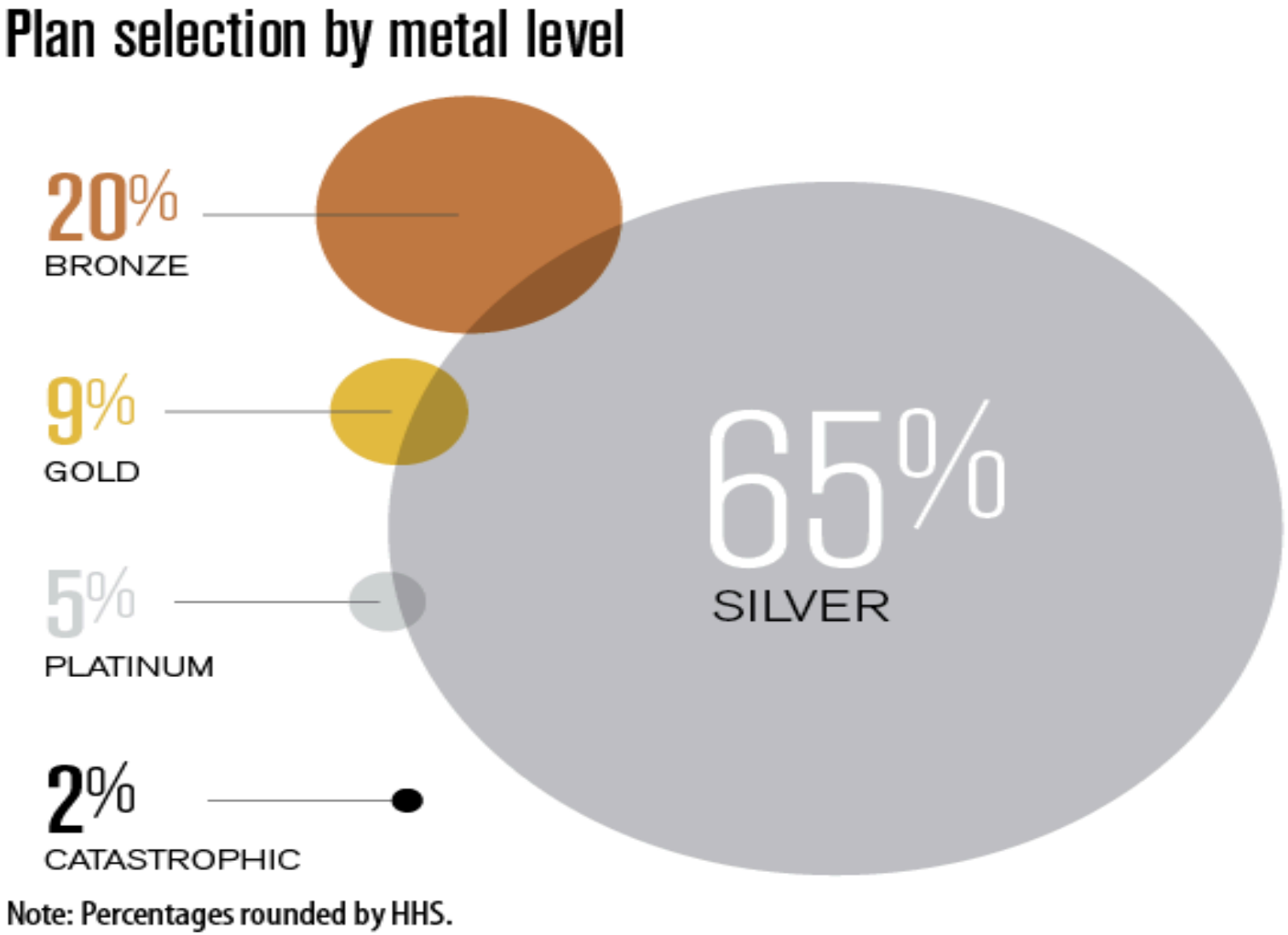
Employers Move towards High Deductibles

Require Patient to Pay Initial $1000- $5000 in Costs Incurred



Percentage of Covered Workers Enrolled in a Plan with a Deductible of $1,000 or More for Single Coverage
Source: Kaiser Family Foundation/HRET 2015 Employer Survey

Individual Consumers Favor High-Deductible Silver and Bronze Plans in ACA Insurance Exchanges

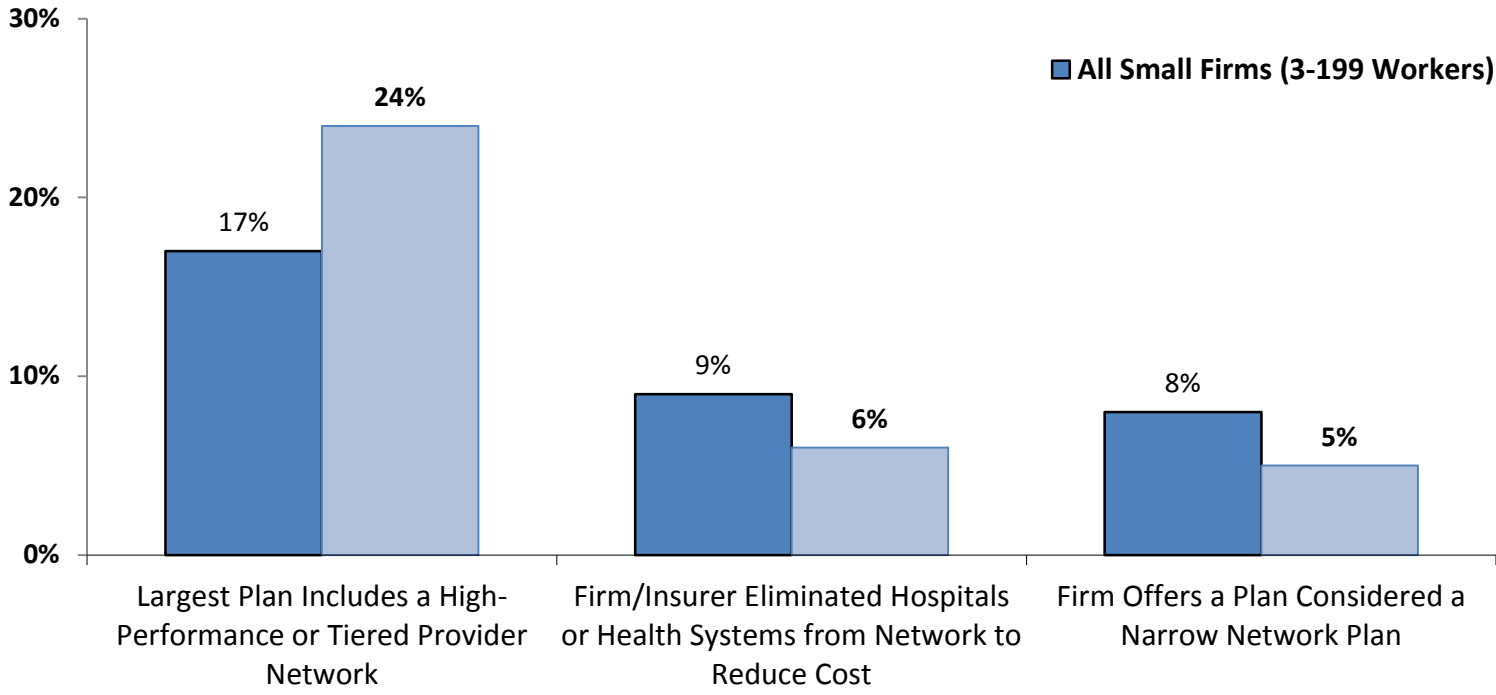


What is a Bronze or Silver Plan?

Service	Cost Sharing (Bronze)	Cost Sharing (Silver)
Deductible	$5,000	$2,000
PCP Office Visit	$60 (3 per year)	$45
SCP Office Visit	$70	$65
Urgent Care Visit	$120	$90
ER Visit	$300	$250
Lab Test	30%	$45
X-ray	30%	$65
Generic Drug	$25	$25
Brand Drug	$50	$50
Max OOP: Individual	$6,350	$6,350
Max OOP: Family	$12,700	$12,700

Source: Covered California *Plan Options Participant Guide*

Narrow Hospital Networks in Employment-Based Insurance



Source: Kaiser Family Foundation/HRET 2015 Employer Survey

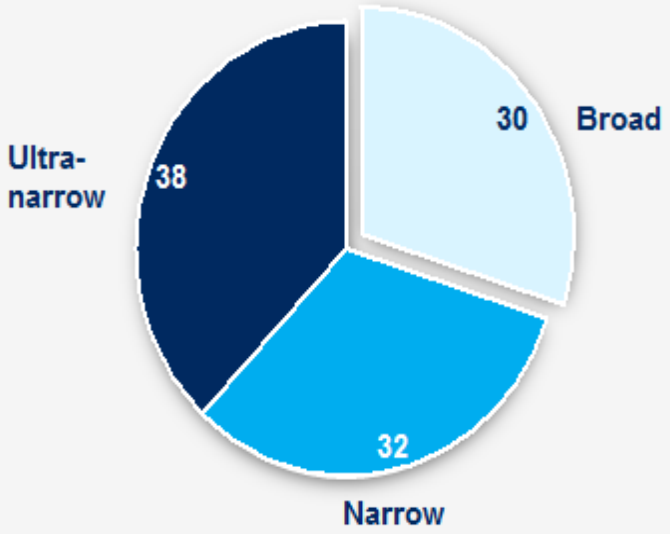
Narrow Networks in Insurance Exchanges

EXHIBIT 1

70 percent of hospital networks on exchanges are narrow or ultra-narrow

Distribution of networks by network breadth[1]

2014 individual exchange – Percent of analyzed silver networks (n = 120[2])



1 Broad networks: less than 30% of largest 20 hospitals by number of beds are not participating, Narrow networks: 30-69% of largest 20 hospitals are not participating, Ultra-narrow networks: at least 70% of largest 20 hospitals are not participating

2 Networks offered in silver in Atlanta, Bridgeport, Dallas, Nashville, Houston, Salt Lake City, Miami, Tampa, Louisville, Indianapolis, St. Louis, Los Angeles, San Jose, Pittsburgh, Denver, Philadelphia, Seattle, Chicago, Washington D.C., and Portland, ME

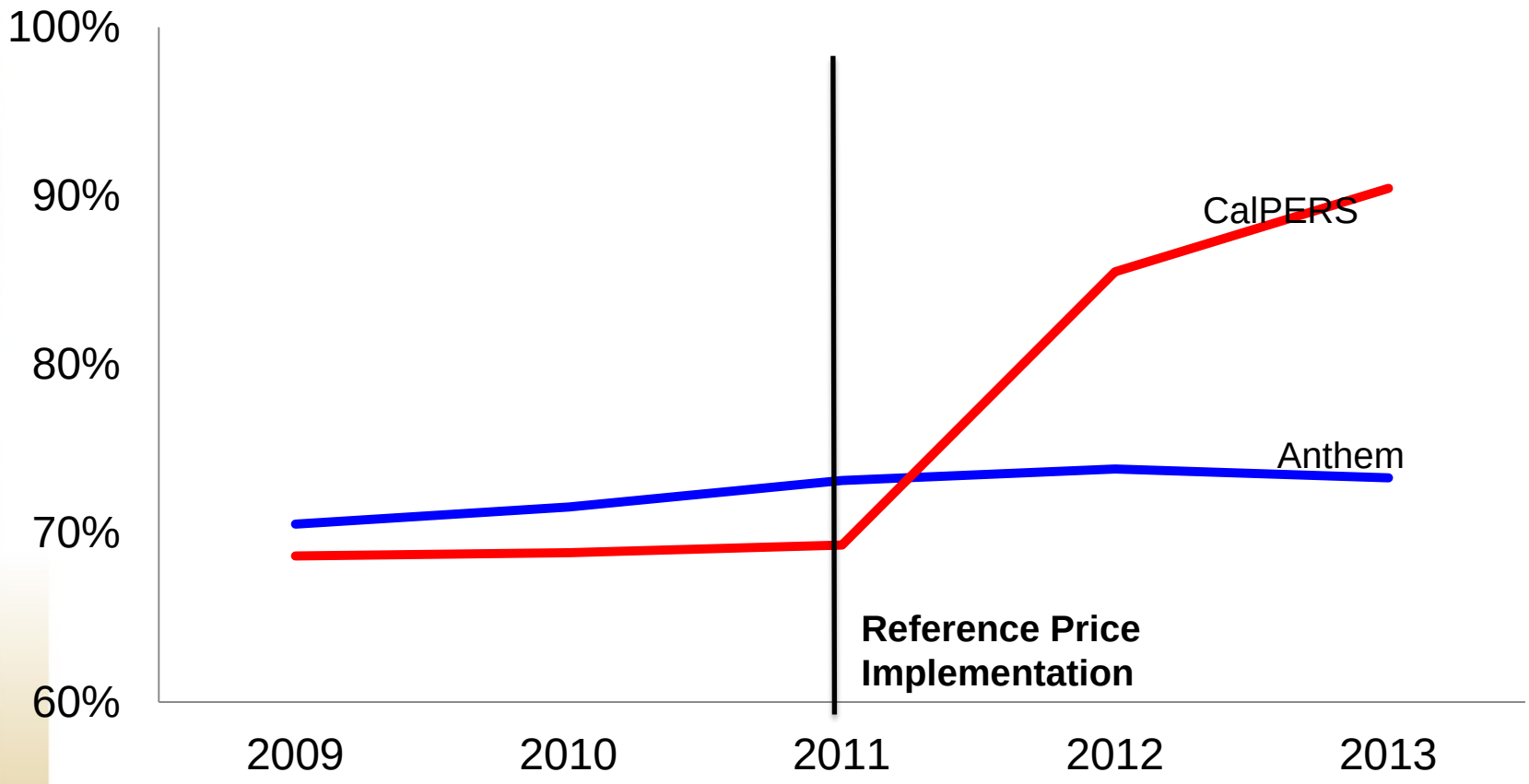
SOURCE: McKinsey Center for U.S. Health System Reform/McKinsey Advanced Healthcare Analytics analysis of publicly availablerate filings and carrier information; AHA database

Data as of 11.15.2013

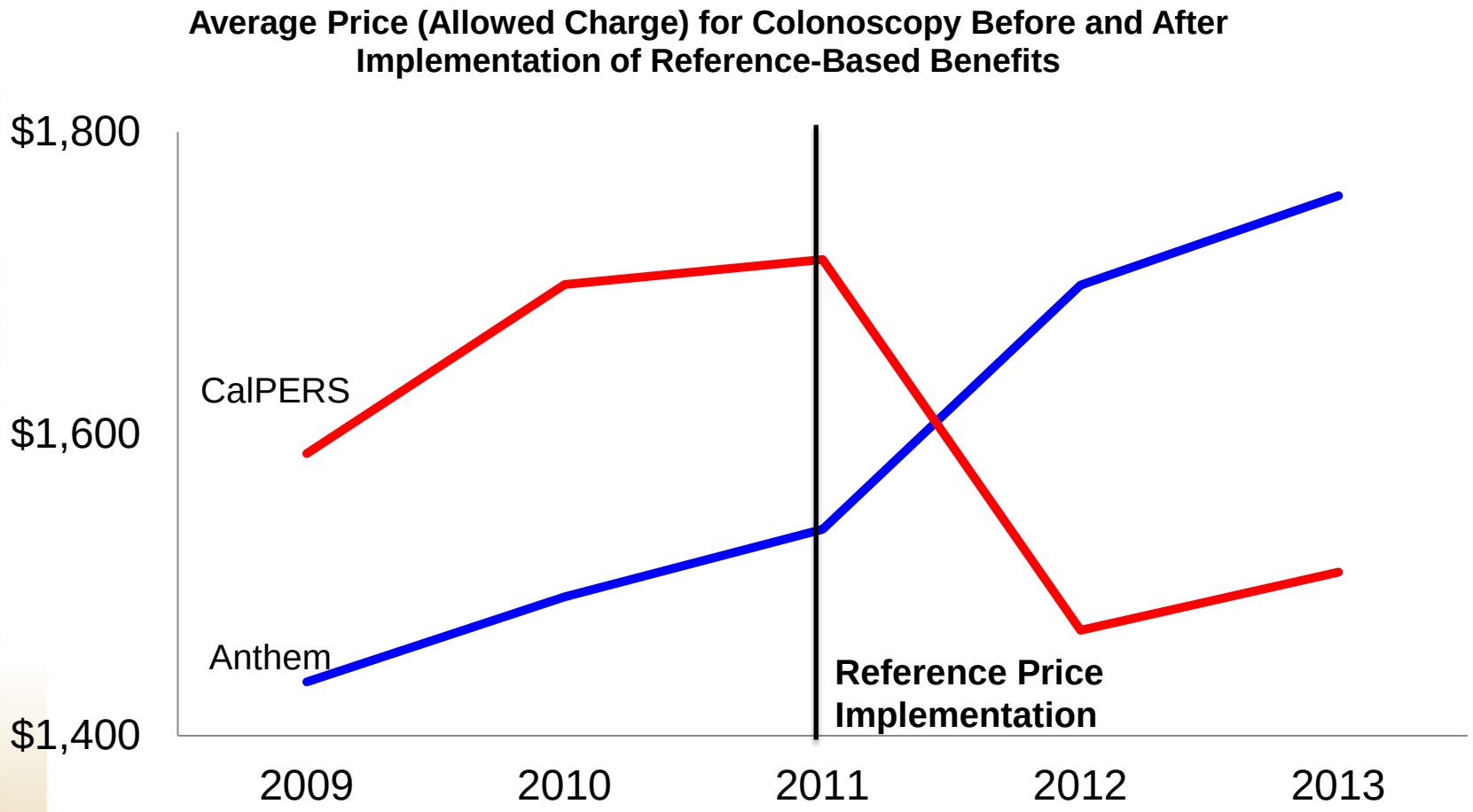
McKinsey & Company

Reference Pricing: Consumers Switch to Lower-Priced Facilities When Spending Their Own Money

Percentage of Patients Selecting Ambulatory Surgery Centers (ASC) over Hospital Outpatient Departments (HOPD) for Colonoscopy Before and After Implementation of Reference-Based Benefits

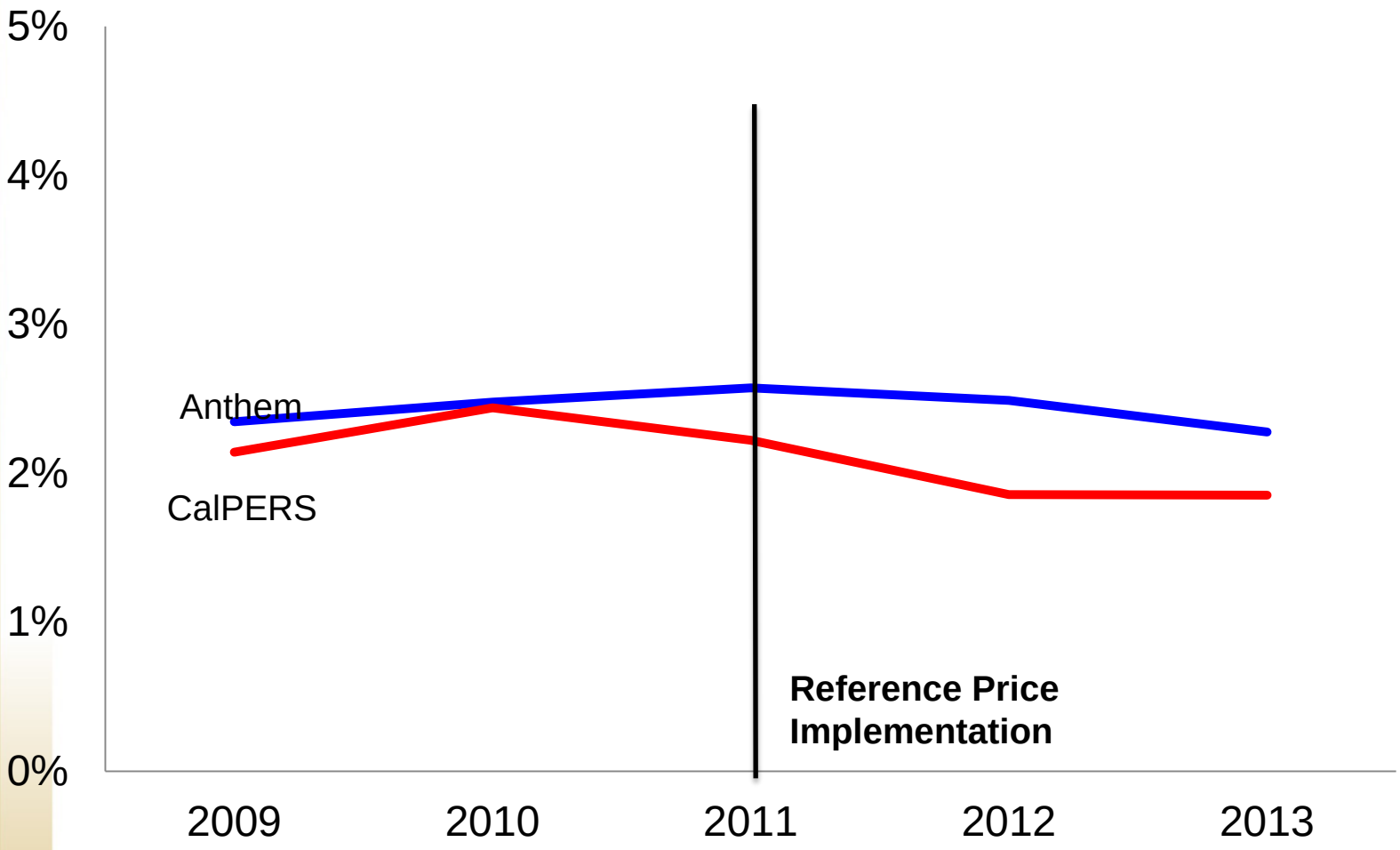


Price-Conscious Consumer Choices Reduce Spending by Employers and Insurers



Lower-Priced Providers are Not Lower Quality

Rate of Surgical Complications for Colonoscopy Before And After Implementation of Reference-Based Benefits



Price and Quality Transparency – Examples

Company and Product	Information Offered	Platform
Castlight Health	• Price transparency – flagship firm • Plan benefit information for consumers • Employer analytics	• Varied: web tools, delivered insights, mobile tools for employees
Aetna iTriage	• Price comparison information from Healthcare Bluebook • Healthcare services information • Adding new services in future	• Mobile integrated data platform, including an app
UnitedHealthcare	• Online health care shopping tool for consumers with high-deductible plans	• Integrated in with members' claims, transparency tools, and in-network providers
Guroo	• Cost information for over 70 common health conditions and services based on claims data from four major insurers	• Consumer-facing website • Has received Medicare data as a "qualified entity"
Health in Reach	• Comparison of licensed providers, including doctors and dentists • Discounts and deals • Online appointment system	• Consumer-facing website • Providers can sign up to create a profile

“Geez Louise—I left the price tag on.”