# National Summit on Healthcare Price, Cost and Quality Transparency How and Why Hospitals Set Prices December 2, 2013

Presented by

William O. Cleverley, Ph.D.

**President** 

Suite 200

438 East Wilson Bridge Road

Worthington OH 43085-2382

888-779-5663, ext .222

bcleverley@cleverleyassociates.com

#### **Outline**

- 1. How do hospitals set prices?
- 2. What are the real facts regarding hospital prices?
- 3. How real is transparency?
- 4. How can you assess the reasonableness of hospital prices?

# How do hospitals set prices?

#### What prices must cover

- Average costs
- Losses on patients who pay less than cost
- Discounts to patients who pay charges
  - Uninsured
  - Commercial
- Reasonable return on investment
  - Sustainable growth

# **Simple Pricing Example**

Payer Mix	# Patients	Payment
Medicare	50	94% Cost
Medicaid	16	80% Cost
Insured (Fee)	16	130% Cost
Insured (% Charge)	12	65% Charges
Uninsured	6	5% Charges

- > Cost
  - \$100/Unit
- Profit Requirement
  - 4% or \$400

# **Pricing Required**

	Gross Revenue @ \$288.90	Net Revenue	Profit (Loss)
Medicare	\$14,445	\$4,700	(\$300)
Medicaid	4,622	1,280	(320)
Insured Fee	4,622	2,080	480
Insured % of Charge	3,467	2,253	1,053
Uninsured	1,733	87	(513)
	\$28,889	\$10,400	\$400

Markup = 
$$\frac{28,889}{10,000}$$
 = 2.89

#### PRICING MODEL-ALTERNATIVE PAYMENT ARRANGEMENTS

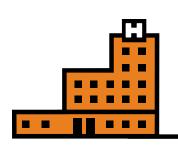
Payer	Volume	Payment 1- Current World	Payment 2 Maryland / All Payer Equity	Payment 3 Commercial Payer Equity
Medicare	50	94% of Cost	95% of Charges	94% of Cost
Medicaid	16	80% of Cost	95% of Charges	80% of Cost
Uninsured	6	5% of Charges	5% of Charges	5% of Charges
Insured Fee Based	16	130% of Cost	95% of Charges	95% of Charges
Insured Charge Based	12	60% of Charges	95% of Charges	95% of Charges
Volume	100			
Cost/Unit \$100 or \$10,000 Total				
	Р	rofit 4% or \$400 To	tal	

# **Impact of Alternative Payment on Price**

	Payment 1 – Current World	Payment 2 – Maryland/All Payer Equity	Payment 3 – Commercial Payer Equity
Net Patient Revenue			
Medicare	4,700	5,513	4,700
Medicaid	1,280	1,764	1,280
Uninsured	87	35	49
Insured Fee Based	2,080	1,764	2,498
Insured Charge Based	2,253	1,323	1,873
Total Net Patient Revenue	10,400	10,400	10,400
Costs	10,000	10,000	10,000
Net Income	400	400	400
Required Price/Markup	288.87	116.07	164.31

What are the real facts of Hospital Pricing?

# ? Are prices high?



#### **Facility-level charge measure:**

Hospital Charge Index®

#### **Inpatient Charges**

Inpatient Charge Index

#### Formula:

Your Medicare Charge per Discharge (CMI/WI adj) US Median Medicare Charge per Discharge (CMI/WI adj)

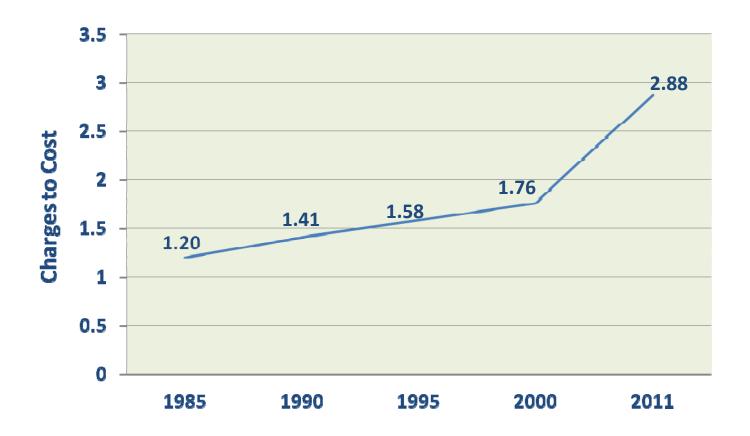
#### **Outpatient Charges**

Outpatient Charge Index

#### Formula:

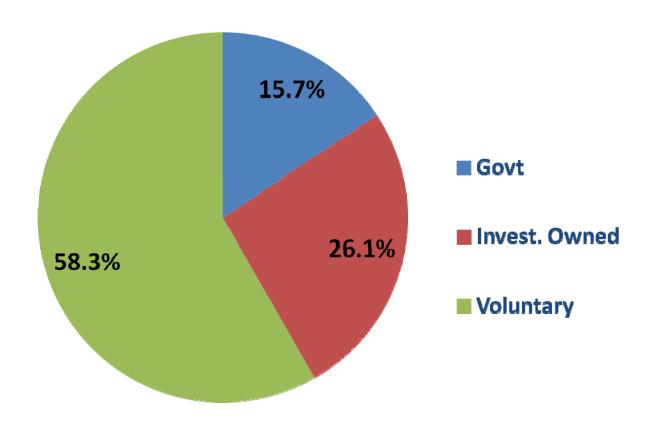
Your Medicare Charge per Visit (RW/WI adj) US Median Medicare Charge per Visit (RW/WI adj) The Hospital Charge Index®, developed by Cleverley + Associates, compares the Medicare charge per discharge and Medicare charge per visit at the hospital (both adjusted for case complexity and wage index differences) to the US median value for each measure. The result is the most objective overall charge comparison available. A high index score indicates a higher relative charge position.

#### **PRICE-TO-COST RELATIONSHIPS**



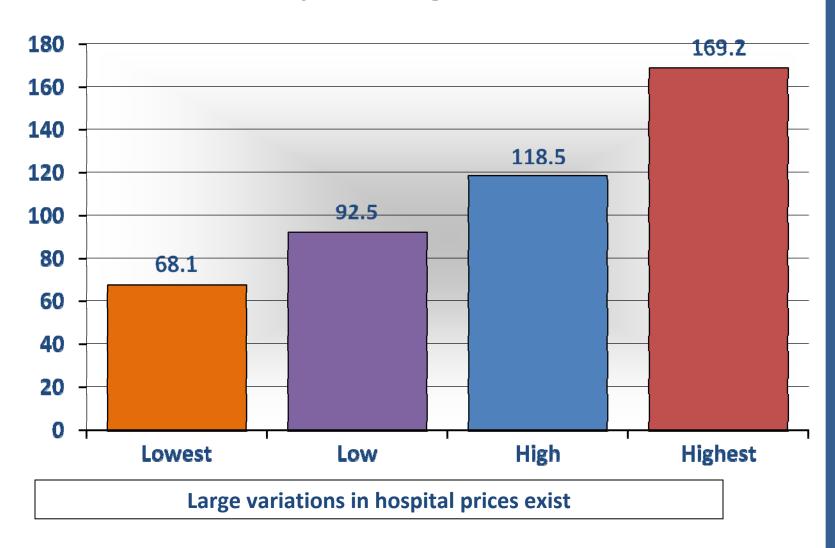
Prices are increasing in latter years due to payment deficiencies

# Composition of Hospitals (2953 Acute Care – Non Critical Access Hospitals with 2012 Data)



#### **Hospital Charge Index 2012 Quartile Medians**

# **Hospital Charge Index**



#### **Cost and Price Relationship)**

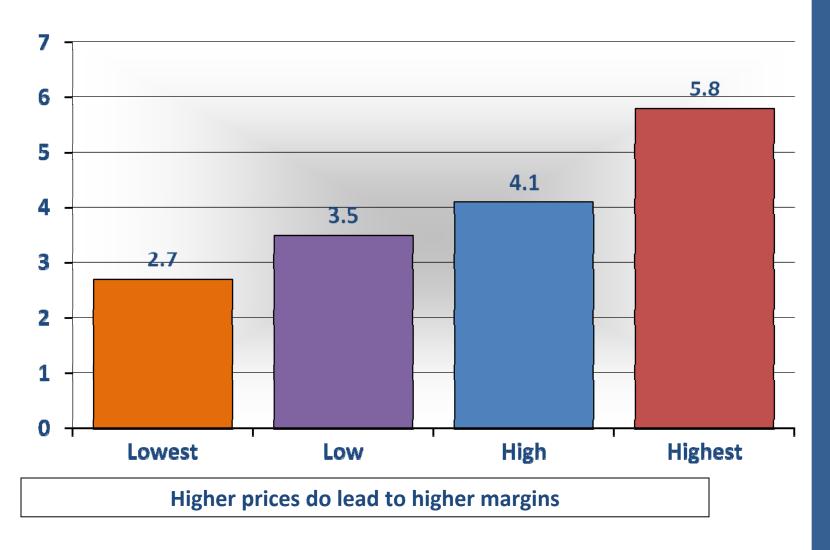
#### Median Cost per Discharge (CMI and WI Adj)



Costs do affect prices but other factors are more critical

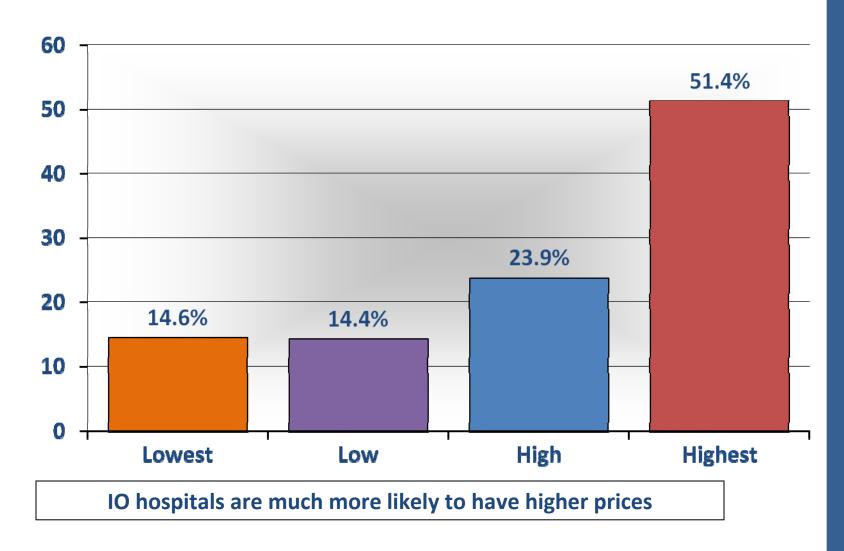
#### **Profits and Pricing**

## **Median Total Operating Margin %**



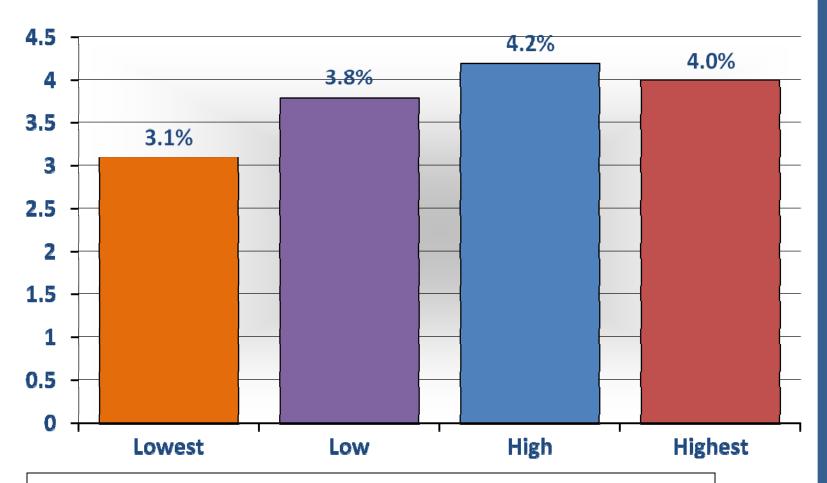
# **Ownership and Pricing**

#### % Investor Owned



# **Profits for Voluntary Non-Profit (VNP) Hospitals**

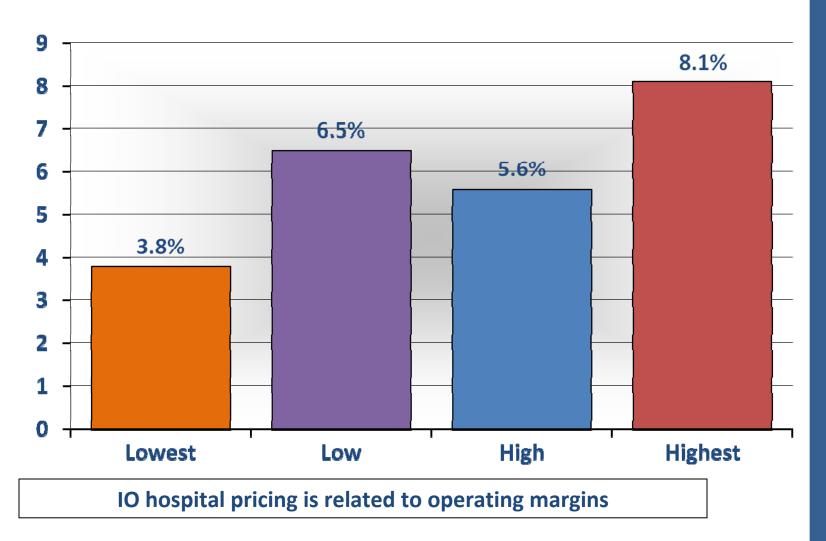
#### **Median Operating Margin %**



VNP hospitals appear to price services to achieve a target operating margin

#### **Profits for Investor Owned Hospitals**

# **Median Operating Margin %**



# **Uncompensated Care (WKS S-10) 2012 Medicare Cost Reports**

	Medicaid, SCHTP	Charity	Bad Debt	Total
Lowest	2.6	1.5	2.5	6.8
Low	2.8	1.8	2.4	7.8
High	2.3	2.3	2.5	8.0
Highest	2.9	1.8	2.1	7.4

There is some association between pricing and uncompensated care

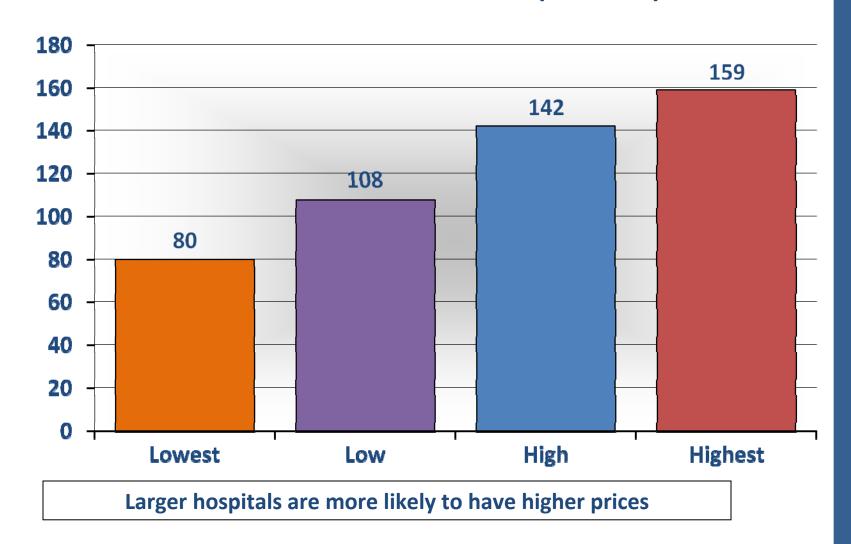
# **Charity Care (WKS S-10) 2012 Medicare Cost Reports**

	Govt.	10	VNP
Lowest	1.6	0.5	1.5
Low	1.8	0.5	2.0
High	2.6	0.9	2.7
Highest	4.3	1.3	2.7

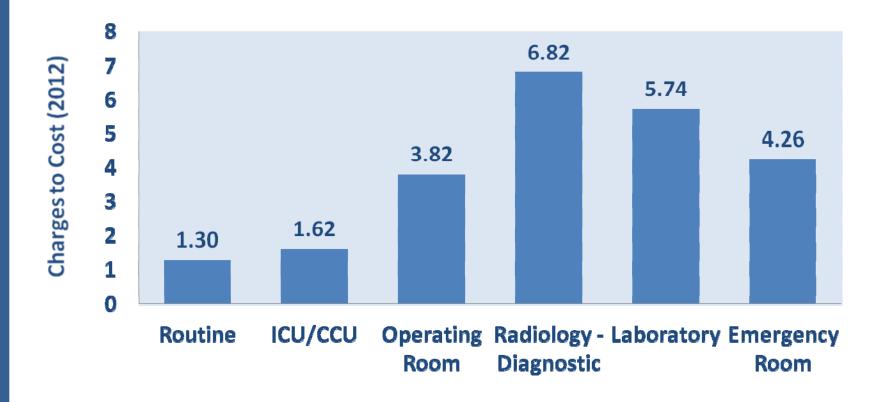
Charity care increases are associated with higher prices across all ownership groups

#### **Size and Pricing**

## **Median Net Patient Revenue (Millions)**



#### **DEPARTMENTAL PRICE-TO-COST RELATIONSHIPS**



Prices have increased more in areas with percent of charge payment

# **How Real is Price Transparency**

# States with Existing Legislation and Disclosure of Healthcare Costs (National Conference of State Legislatures)

AZ	NV
AR	NH
CA	NC
СО	ОН
DE	ОК
FL	OR
IL	PA
IN	RI
IA	SD
KY	TX
ME	UT
MA	VT
MN	VA
МО	WA
NE	WI

## **State Example - California**

- Prices for top 25 most common OP procedures
- Written estimates of charges for expected services
- CDM disclosure
- Fair pricing

## **Apples to Apples Issues**

# **Laproscopic Cholecystectomy (CPT- 47562) - 2012**

	Hospitals		
	А	В	С
OSHPD Reported	\$41,395	\$15,200	\$26,690
Average CMS Claim	53,638	19,894	28,529
CPT Price	31,145	10,292	21,562

# Fair Pricing Information Example - Required Payment by Federal Poverty Level (FPL)

Level	Payment
< 200% FPL	0
200 to 260% FPL	25% Medicare
260 to 320% FPL	50% Medicare
320 to 350% FPL	75% Medicare

# **Reasonableness of Hospital Prices**

# Price defense

#### Relating pricing to ROI: the public-utility approach

Public utilities have used a Return on Investment (ROI) model to justify price increases to rate regulatory boards. The approach isolates the price variable from the ROI formula (below) and "tests" the remaining elements. If it can be proved that ROI, Cost, and Investment are not excessive, then price must also not be excessive. In the following pages, we present these tests.

# ROI Formula

ROI =

(volume x price) - (volume x cost)
investment

#### **Tests**

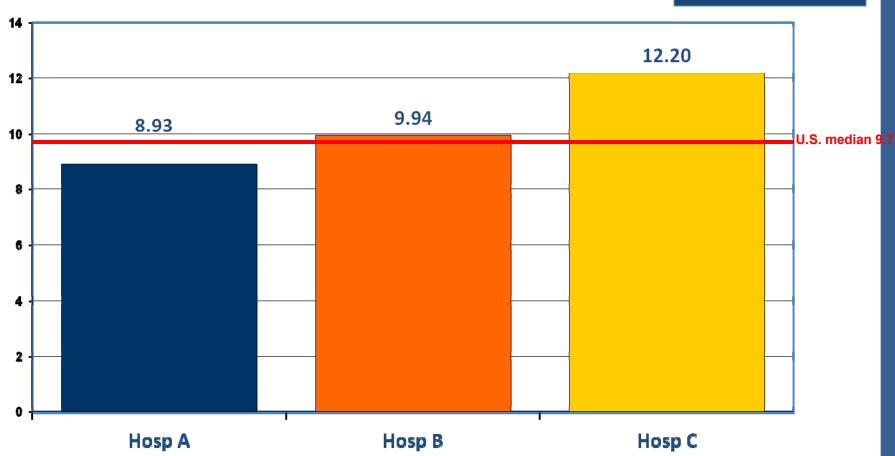
- 1. Is ROI excessive?
- 2. Is cost excessive?
- 3. Is investment excessive?

If "no" to all three, price is not excessive.

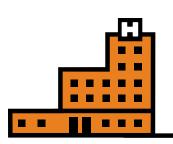


# ROI is not excessive

#### **EBIDA to Assets %**







#### **Facility-level cost measure:**

Hospital Cost Index®

#### **Inpatient Costs**

Inpatient Cost Index Formula:

Your Medicare Cost per Discharge (CMI/WI adj) US Median Medicare Cost per Discharge (CMI/WI adj)

#### **Outpatient Costs**

Outpatient Cost Index Formula:
Your Medicare Cost

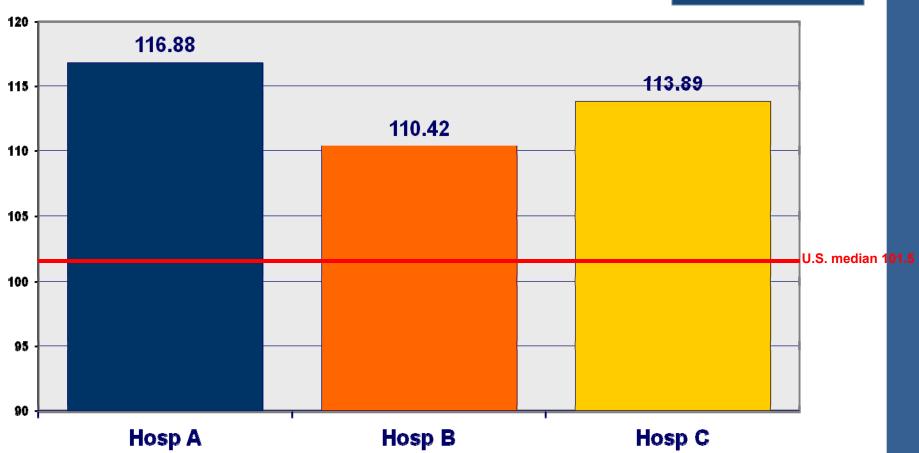
per Visit (RW/WI adj)
US Median Medicare Cost
per Visit (RW/WI adj)

The Hospital Cost Index®, developed by Cleverley + Associates, compares the Medicare cost per discharge and Medicare cost per visit at the hospital (both adjusted for case complexity and wage index differences) to the US median value for each measure. The result is the most objective overall cost comparison available. A high index score indicates a higher relative cost position.



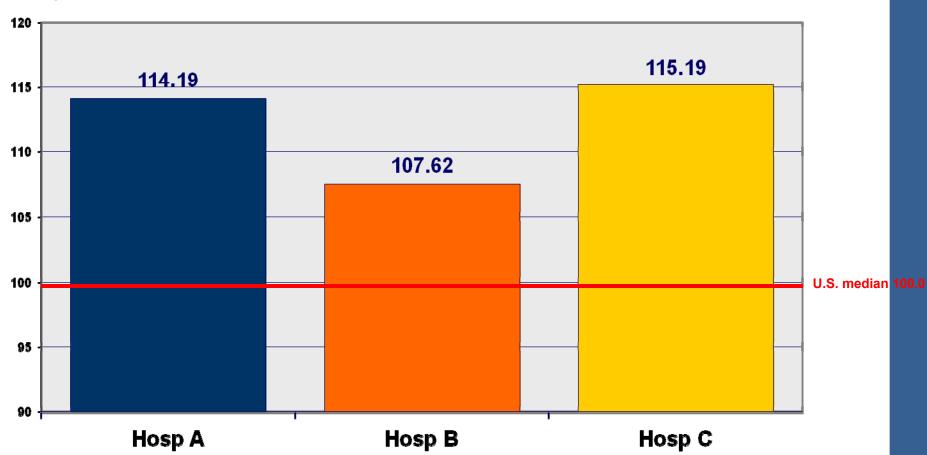


Hospital Cost Index® — 2012



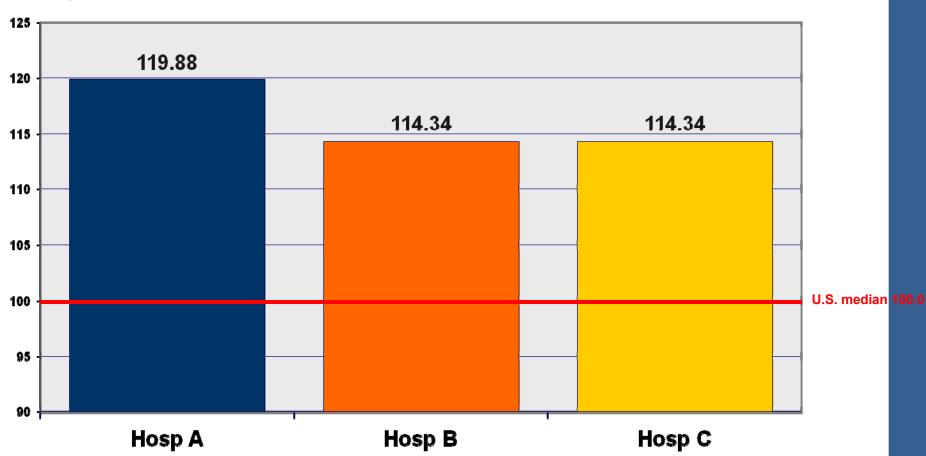


#### **Inpatient Cost Index — 2012**





#### **Outpatient Cost Index — 2012**







	Revenue to Net Fixed Assets (FAT)	Average Age of Plant
Hosp A	1.32	9.80
Hosp B	1.64	9.60
Hosp C	1.79	52.03
US Avg	2.55	10.00

#### **Conclusions**

- Cost shifting has been the primary driver behind hospital price increases.
- Most VNP hospitals set prices to recover costs and earn a reasonable margin.
- Hospitals with low costs and reasonable profit levels should not be criticized for prices which appear high.