REGIONAL & OPERATIONAL EFFECTS ON HOSPITAL PRICING & STRATEGIC RESPONSES FOR PRICE DEFENSE

19th Annual HFMA Western Region Symposium

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Today's Objectives

1) Understand the relationships of operating environment factors on hospital price through a national data study
   WHAT INFLUENCES HOSPITAL PRICING?
2) Defend hospital pricing in light of unique operating environments
   HOW DO WE DEFEND PRICES?
3) Follow a methodology to ensure price strategy is reasonable and viable
   HOW DO WE CREATE APPROPRIATE STRATEGY?

WHAT INFLUENCES HOSPITAL PRICE?

Three spheres of influence on price

Testing price variables

Who is likely to have the highest charges among hospitals that are:

-Urban vs Rural

-For-Profit vs Non-Profit

-Teaching vs Non-Teaching

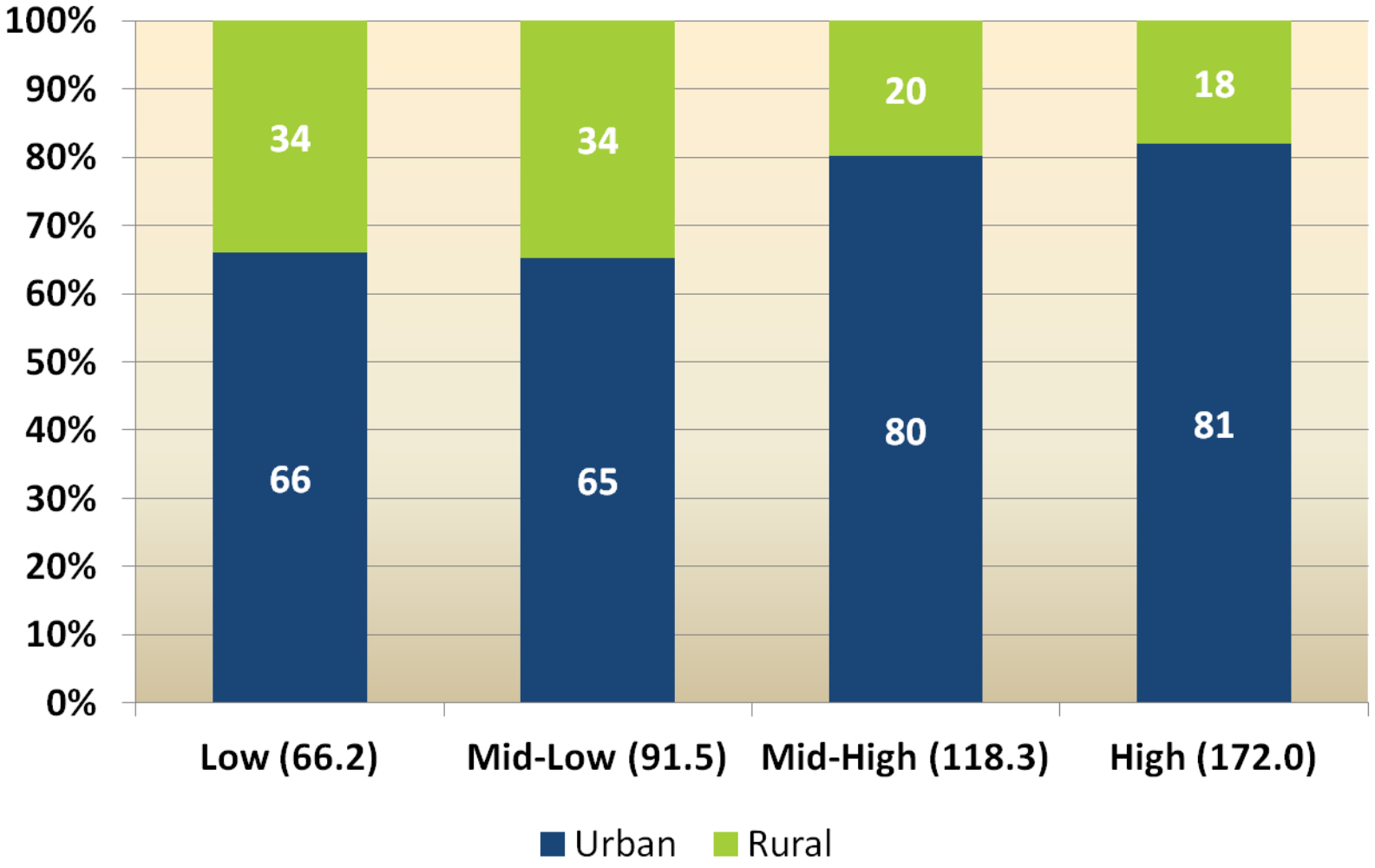
-Large vs Small

-High Market Share vs Low Market Share

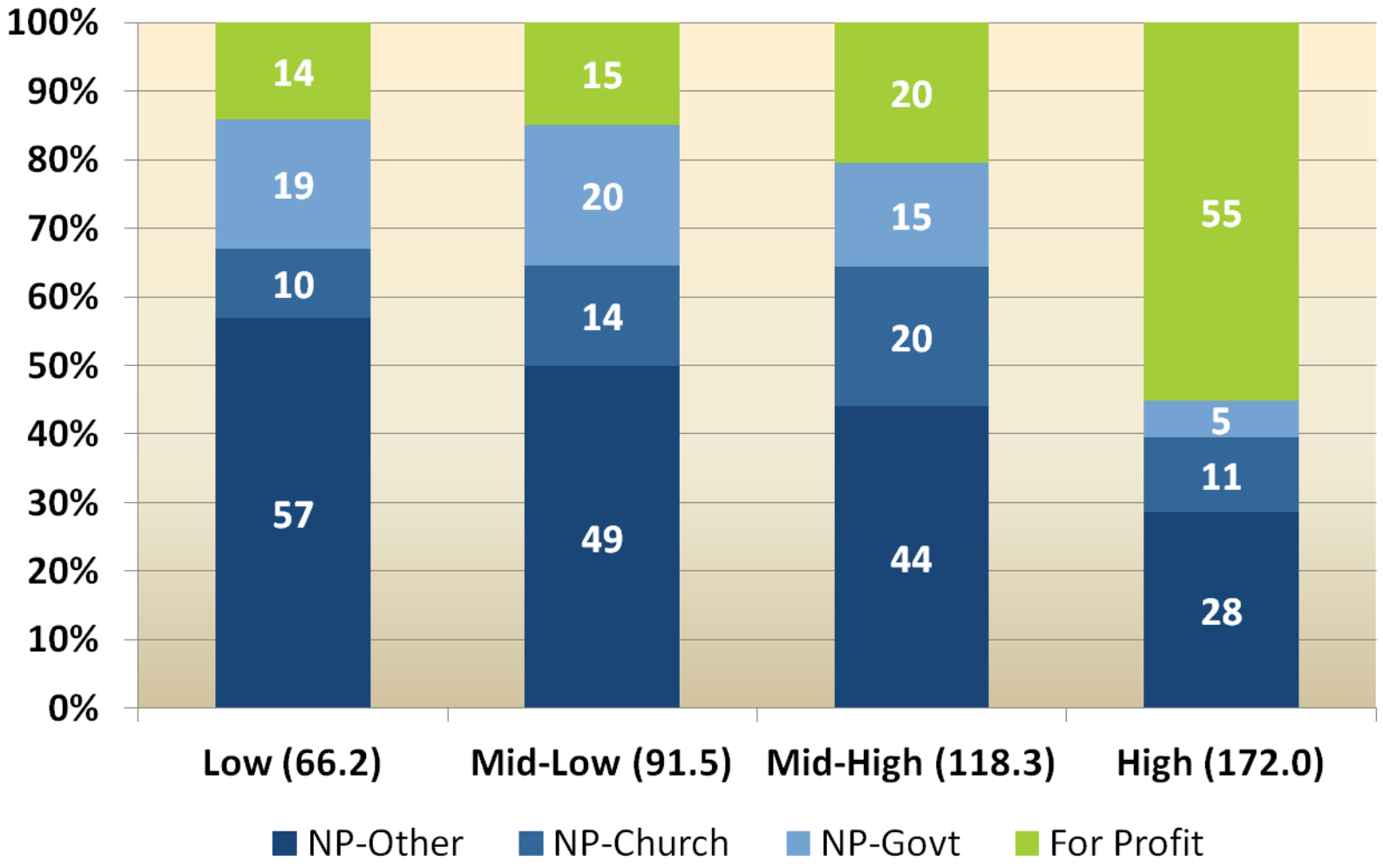
-High Medicaid vs Low Medicaid

-High Cost vs Low Cost

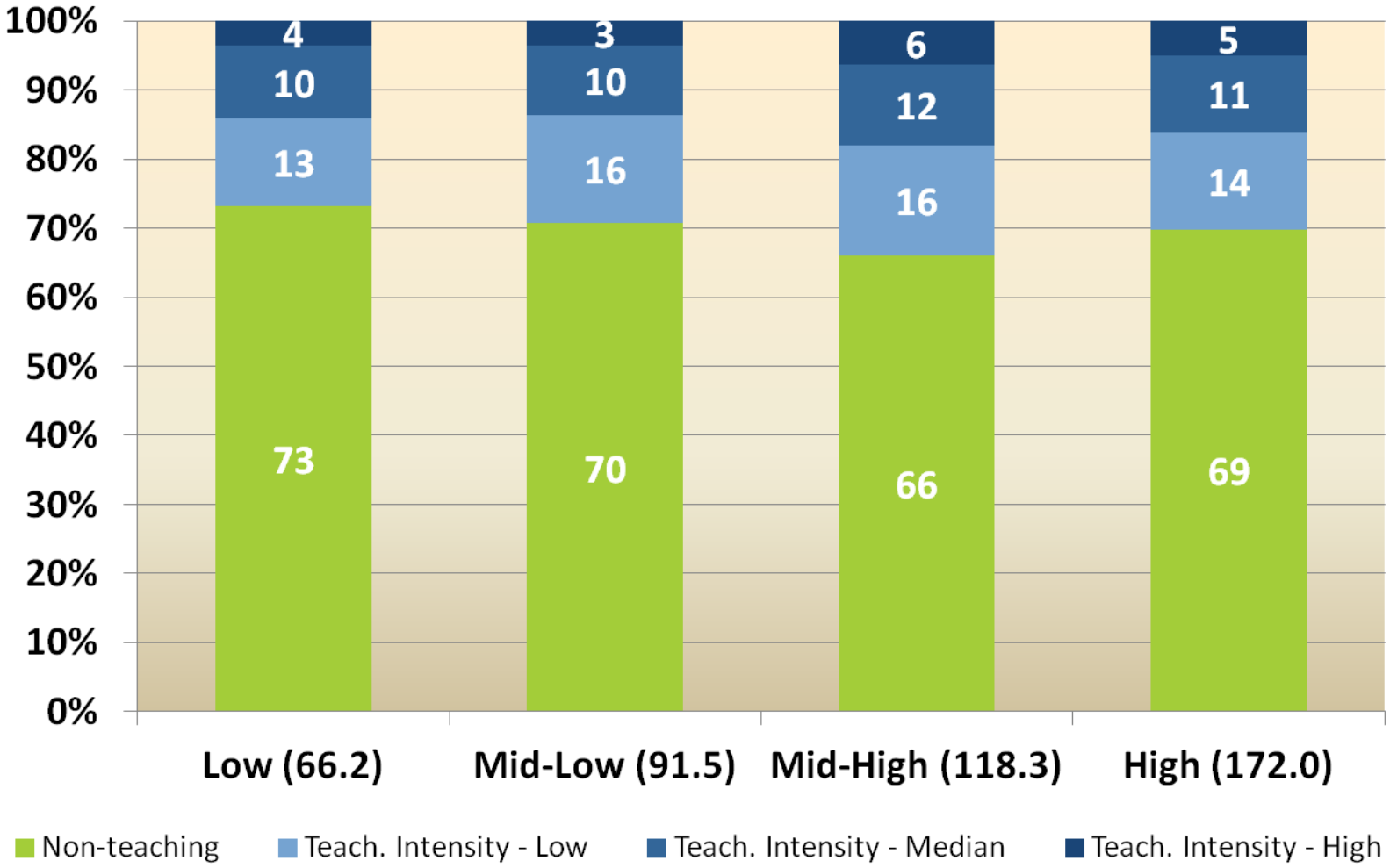
Urban/Rural Status by Hospital Charge Index® Quartiles



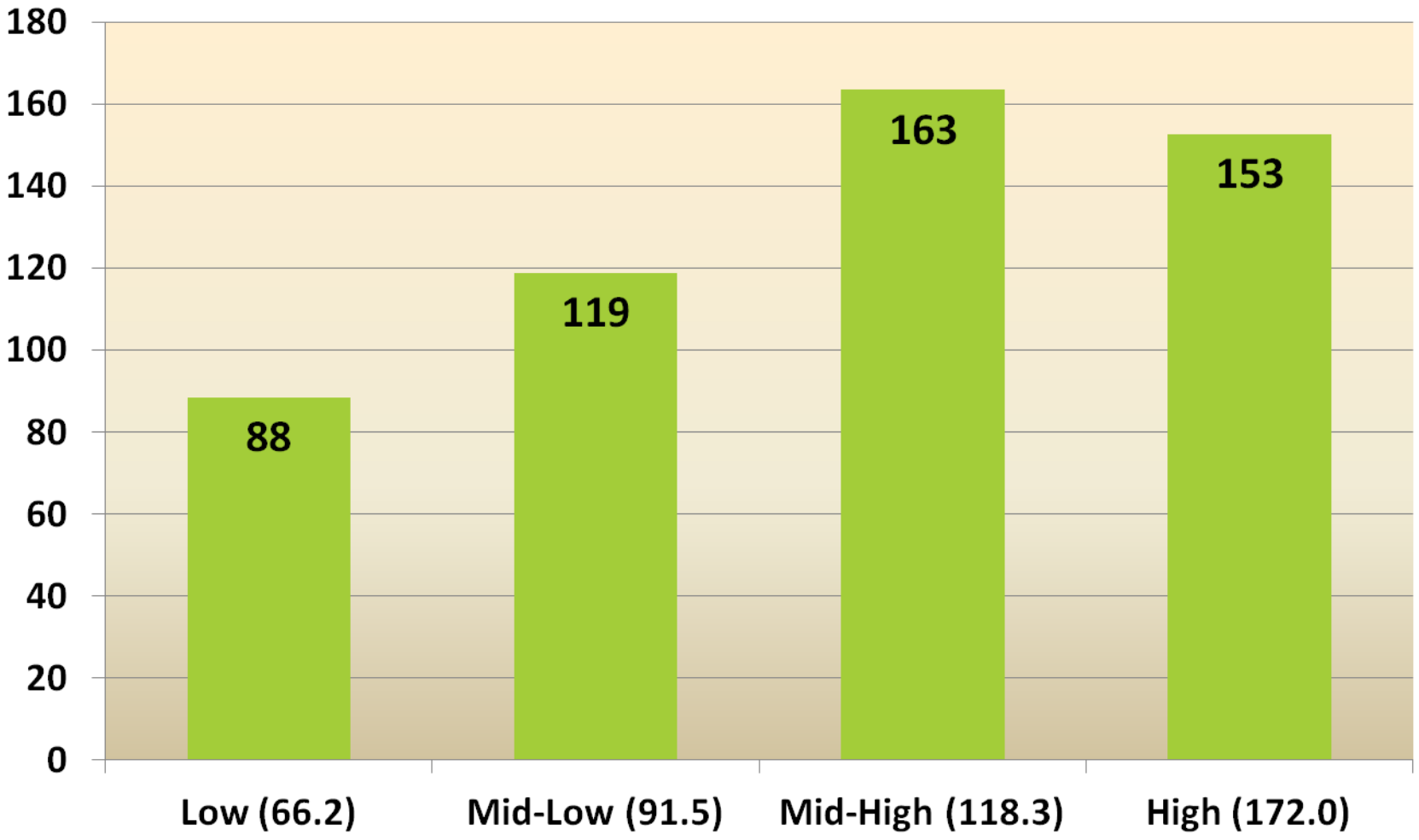
Organization Type by Hospital Charge Index® Quartiles



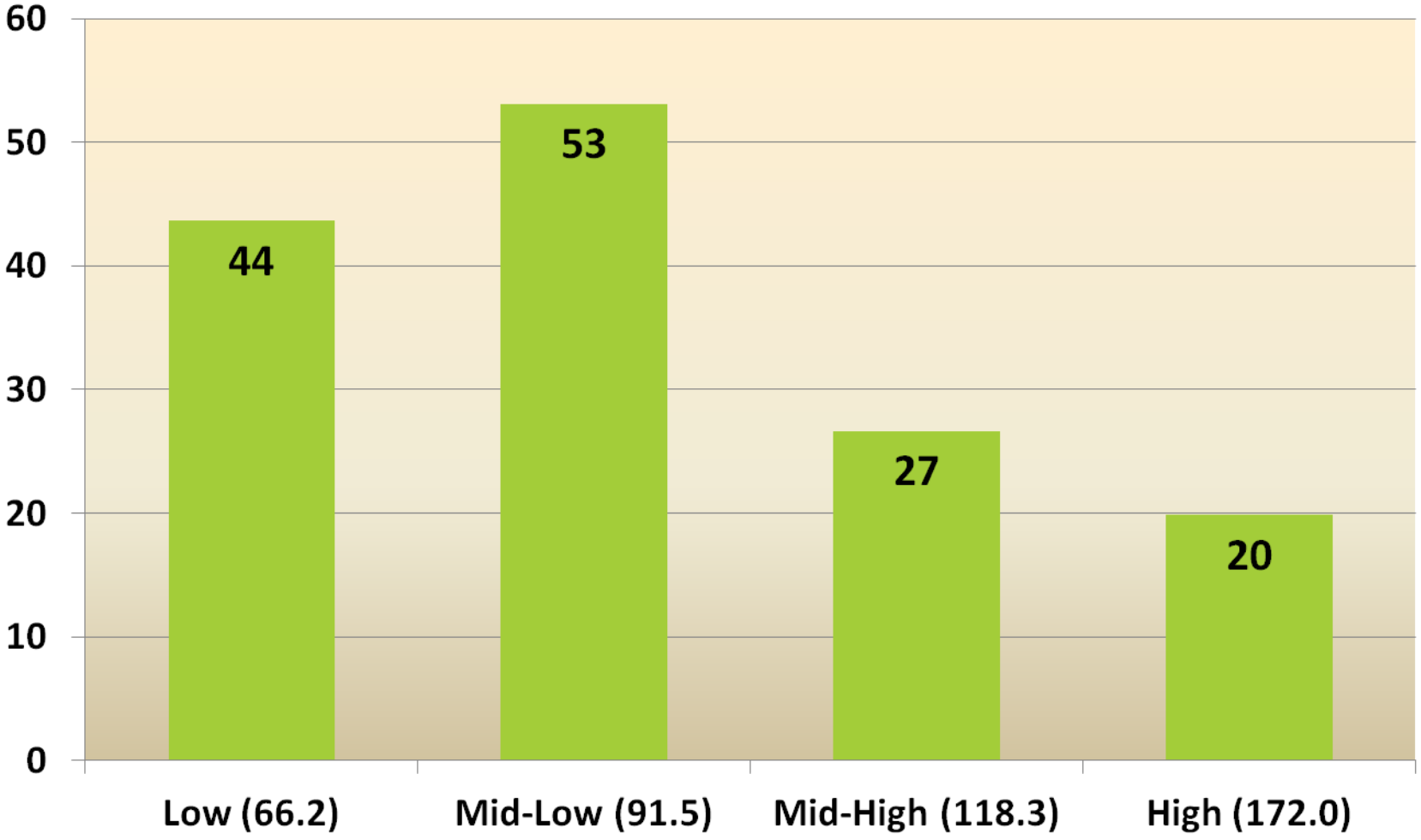
Teaching Status by Hospital Charge Index® Quartiles



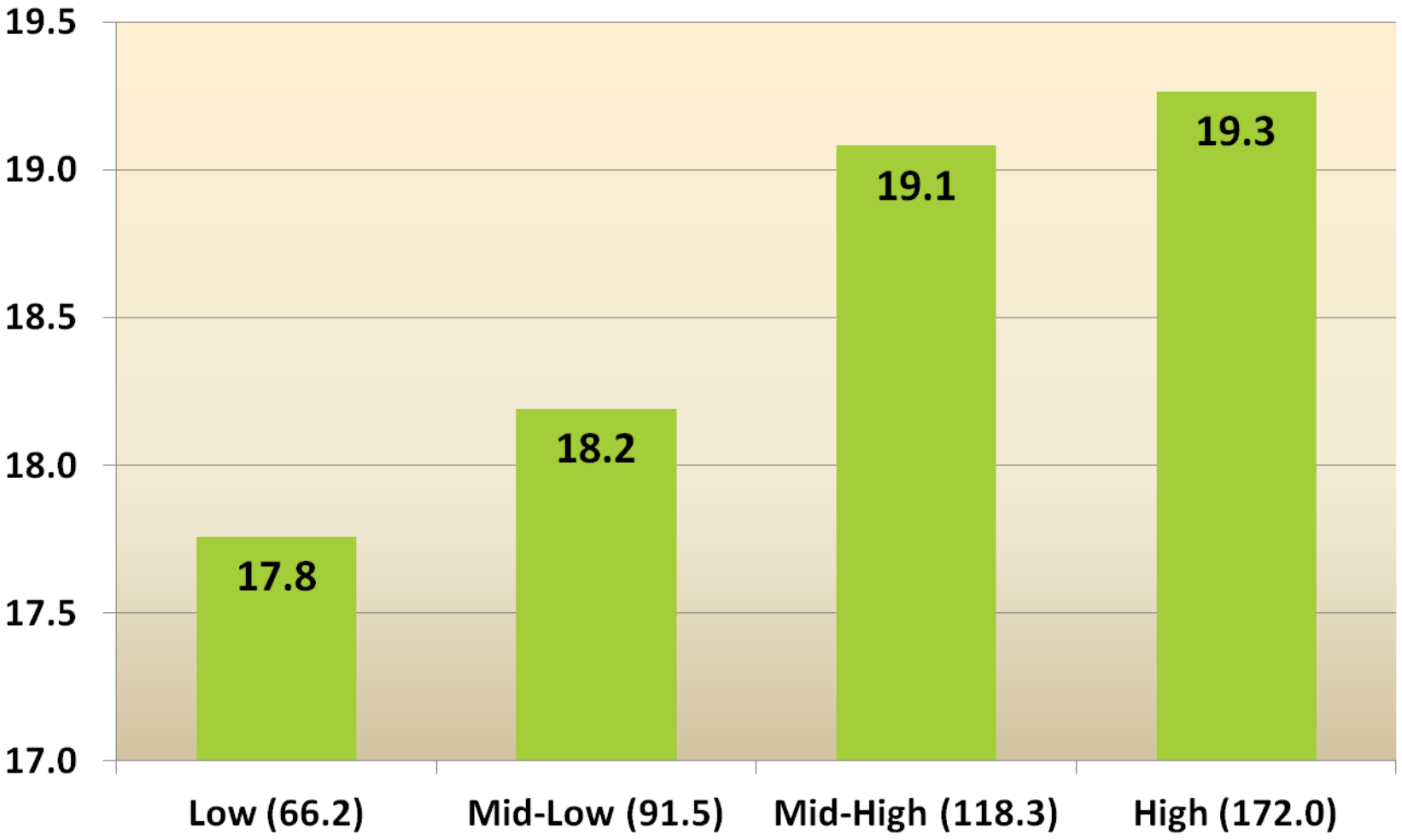
Median Net Patient Revenue (millions) by Hospital Charge Index® Quartiles



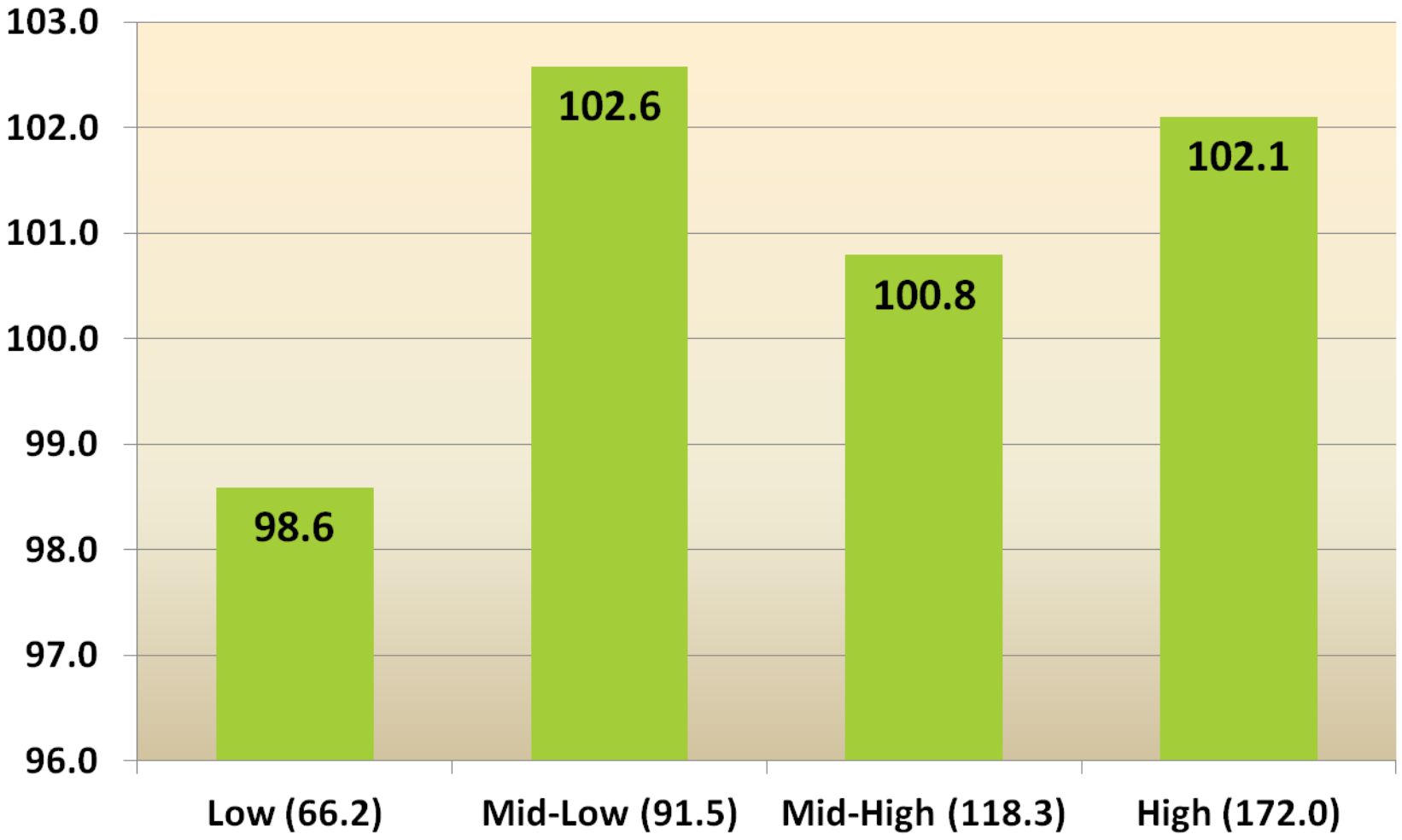
Median Market Share Percentage by Hospital Charge Index® Quartiles



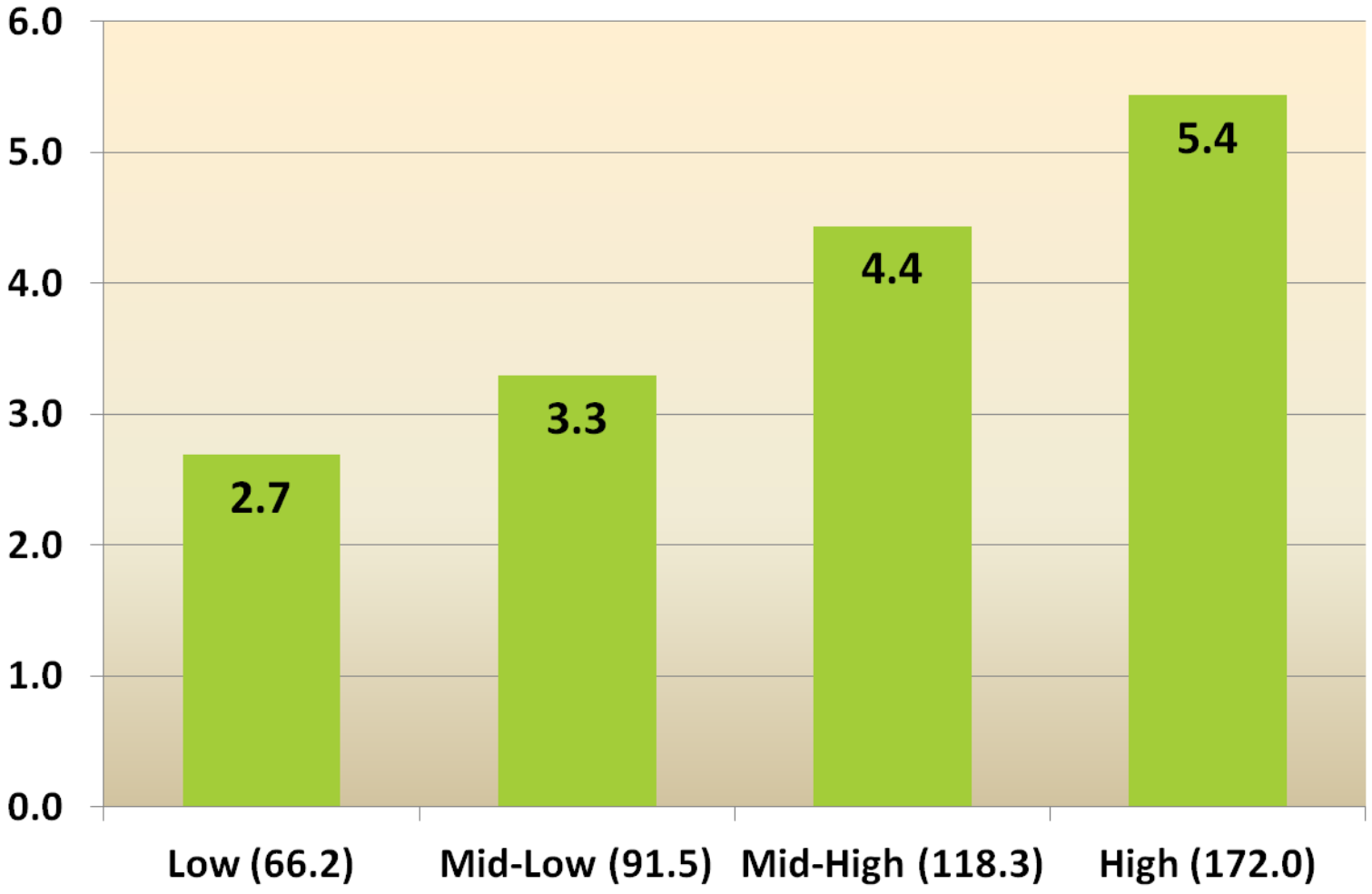
Median Medicaid Days Percentage by Hospital Charge Index® Quartiles



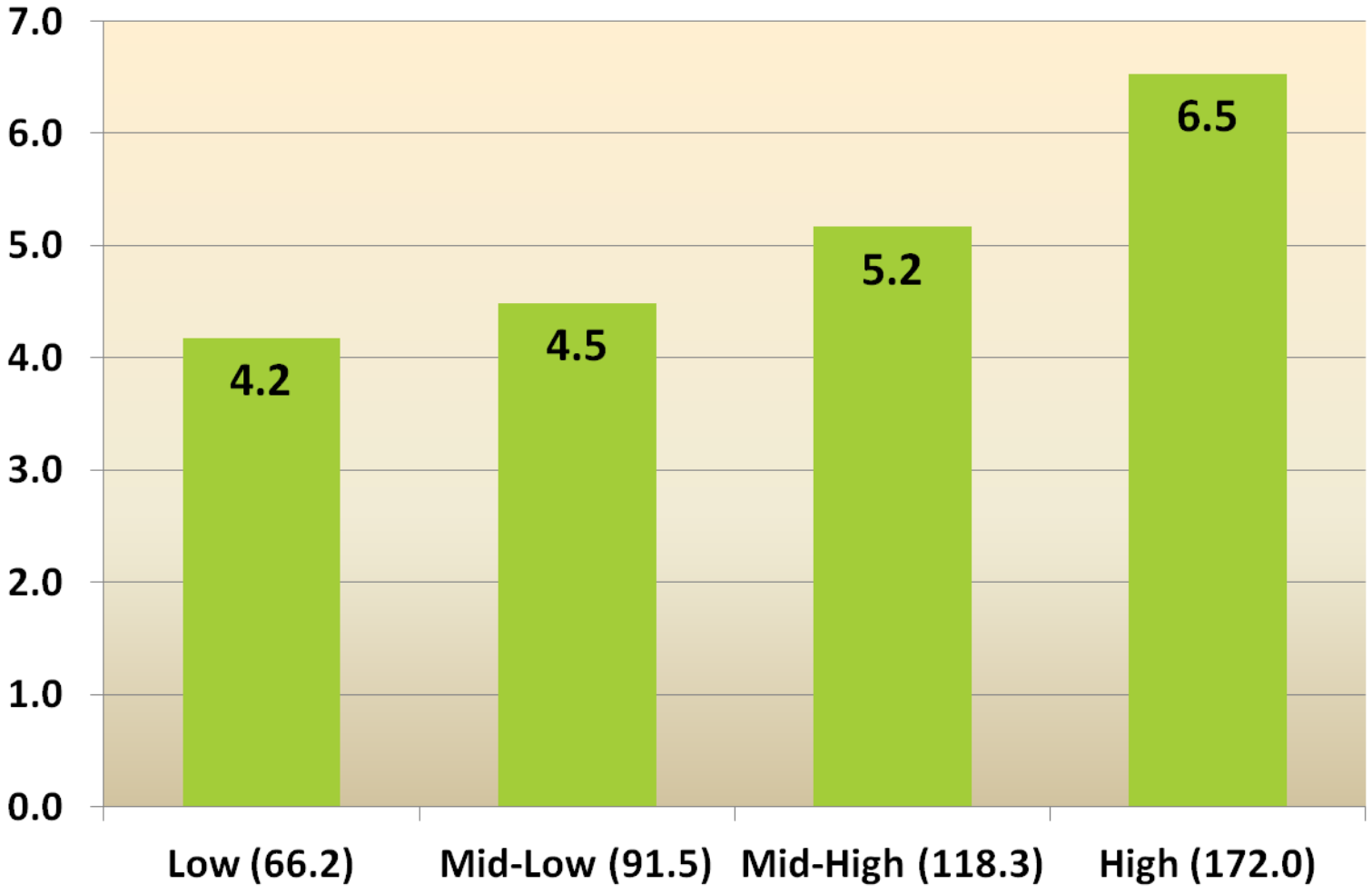
Median Hospital Cost Index® by Hospital Charge Index® Quartiles



Median Operating Margin by Hospital Charge Index® Quartiles



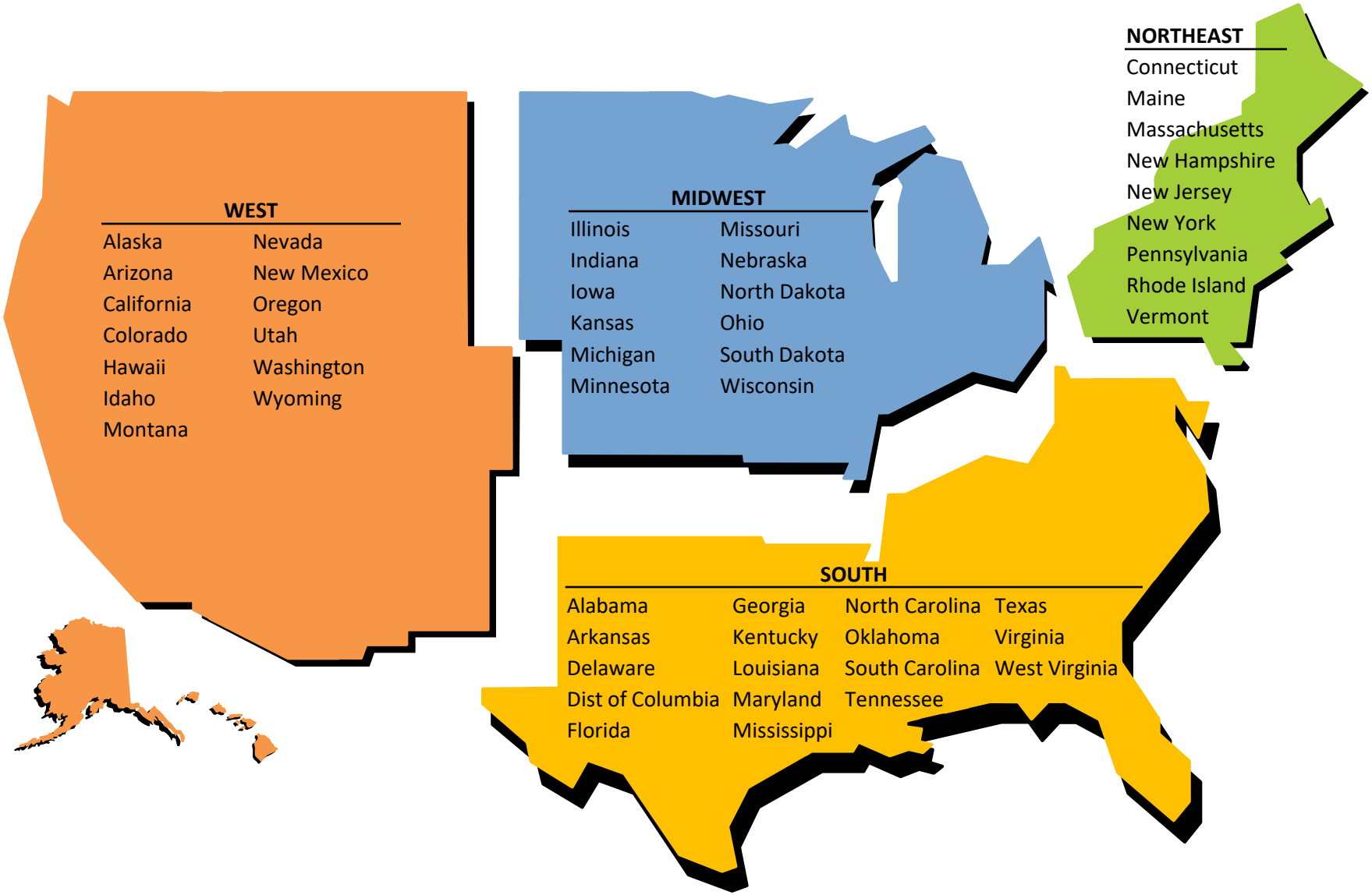
Median Payer Environment by Hospital Charge Index® Quartiles



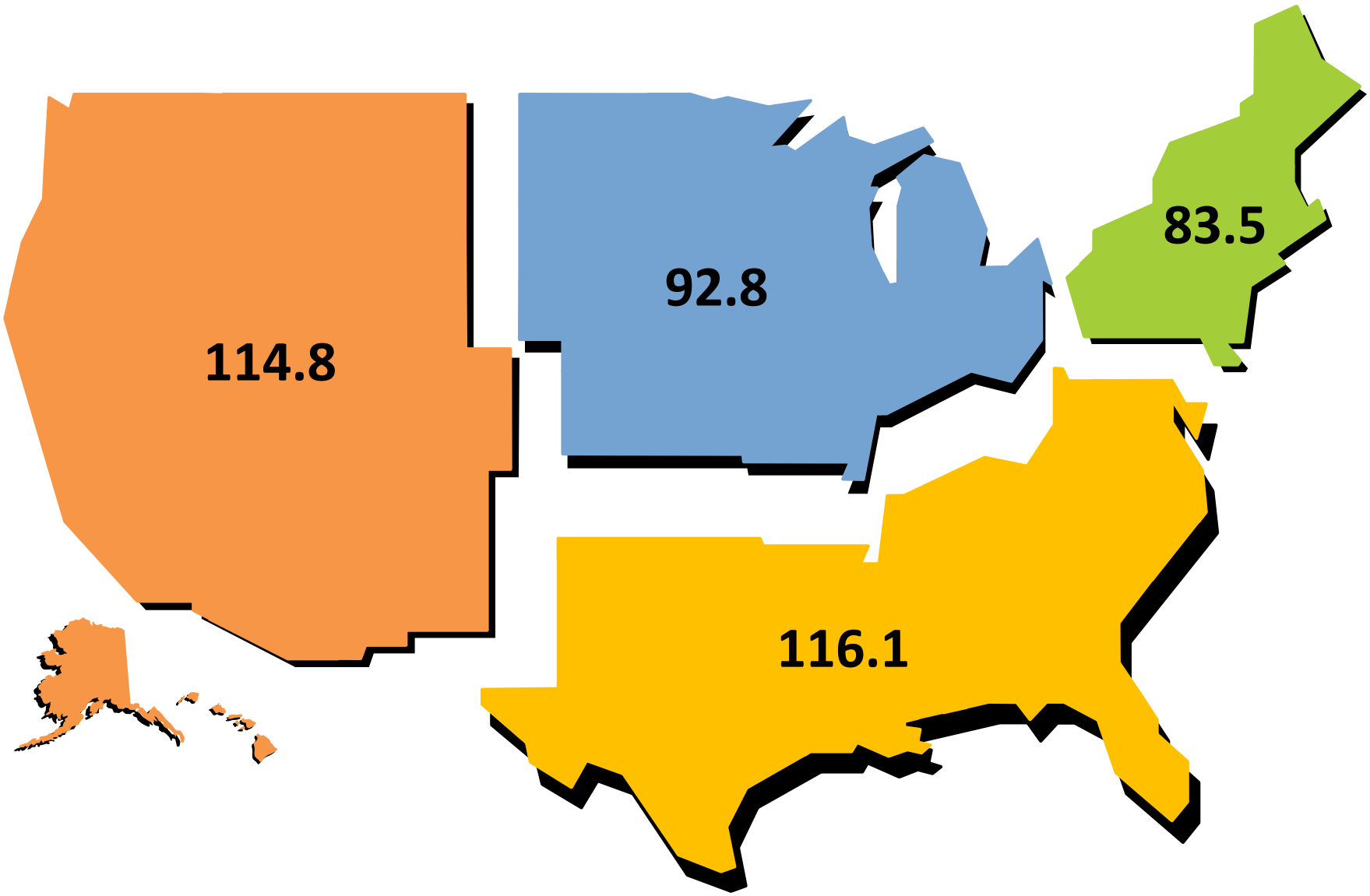
Payer Environment: Markup Ratio/Deductions %

Regional differences in hospital pricing

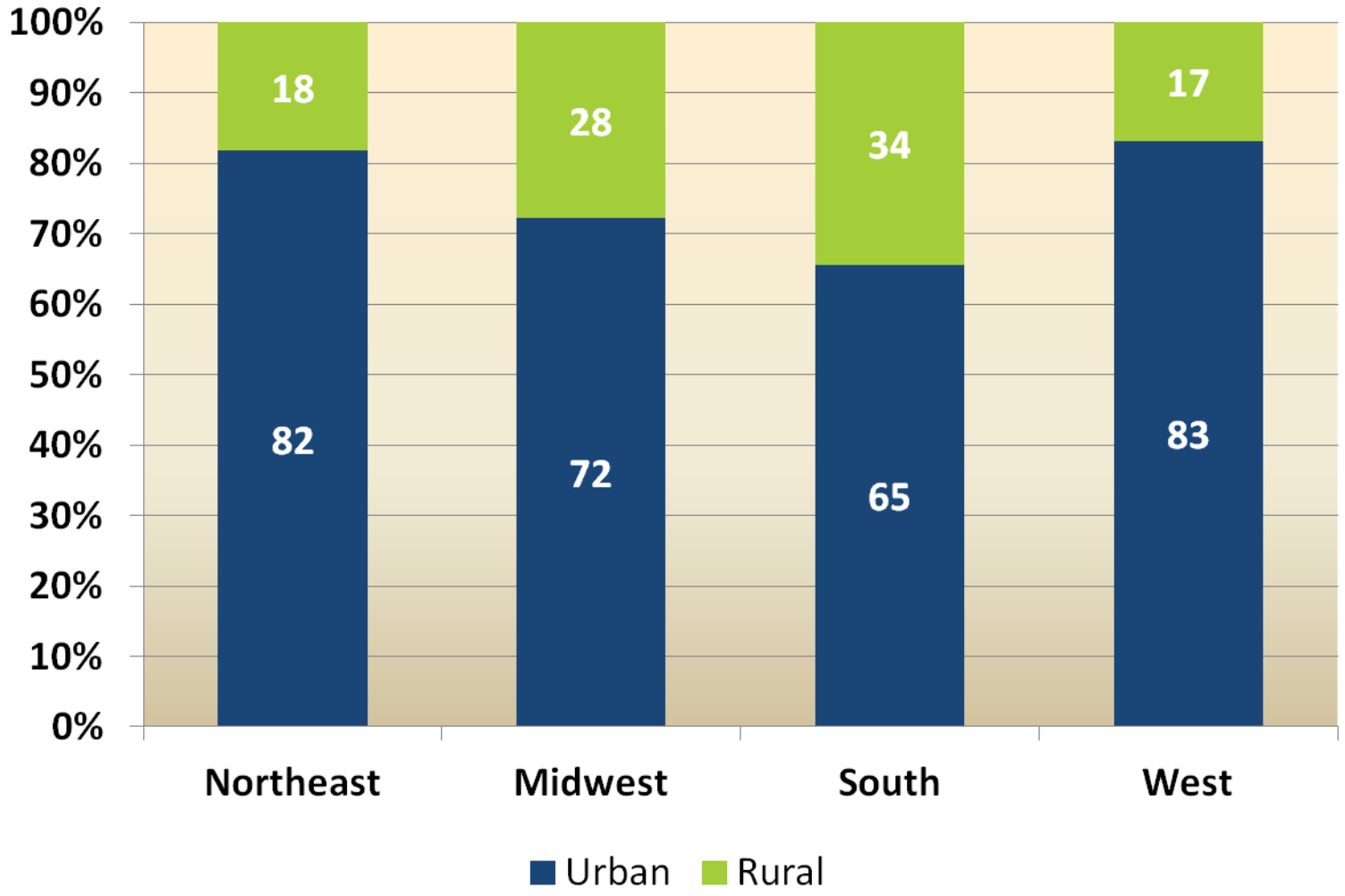
Regional Divisions Used by the United States Census Bureau



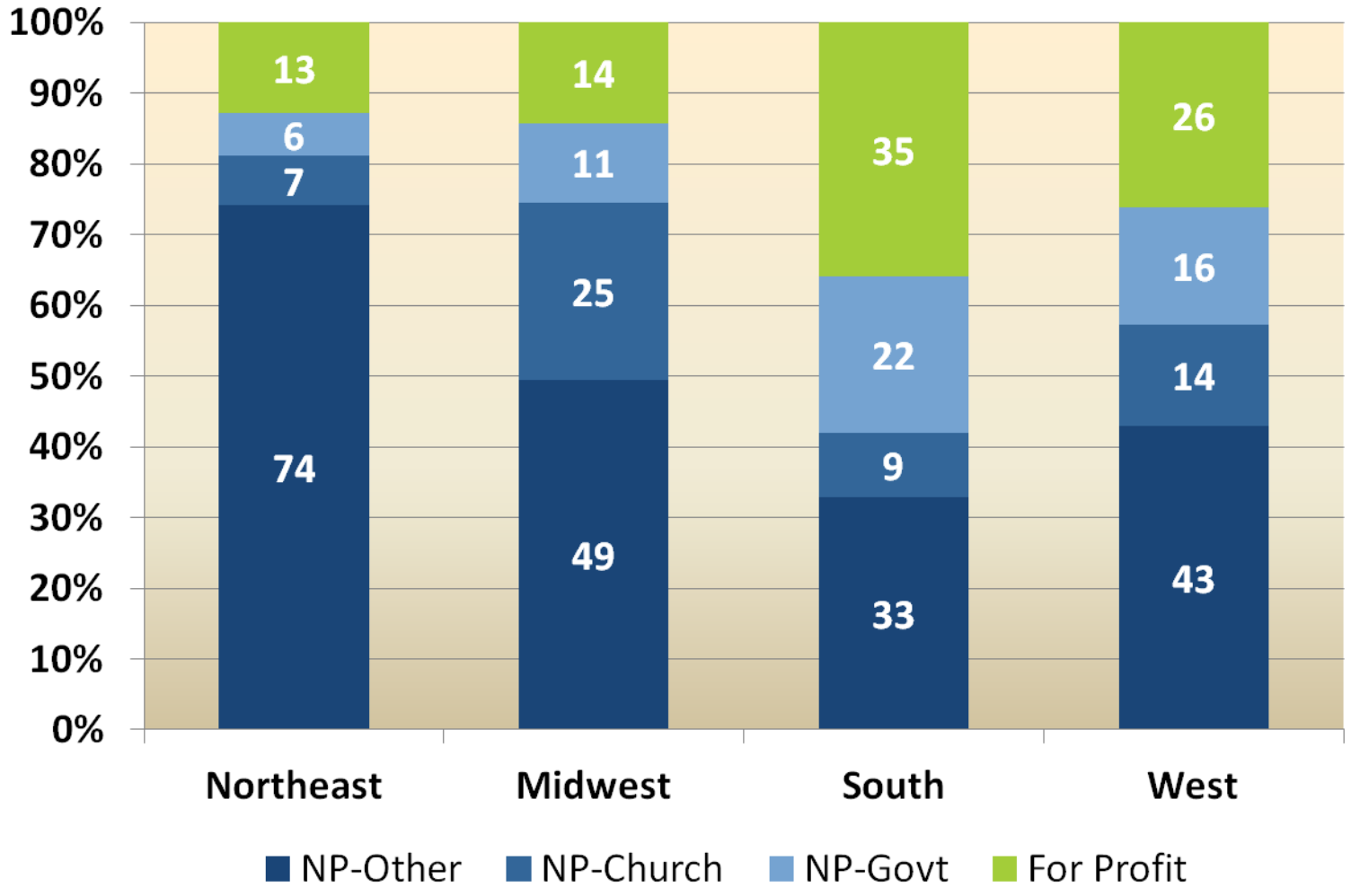
Median Hospital Charge Index® by Regional Divisions



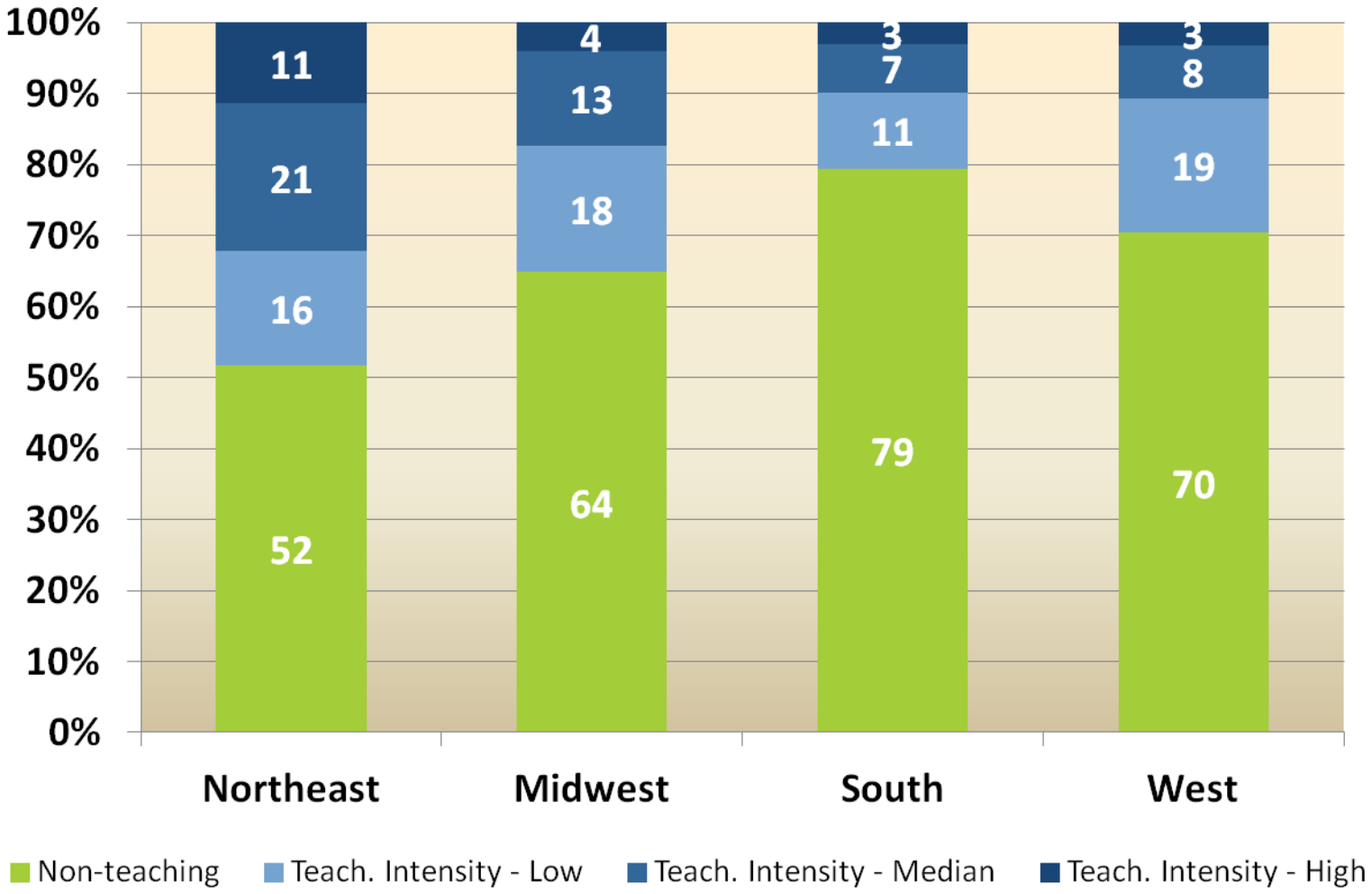
Urban/Rural Status by Regional Divisions



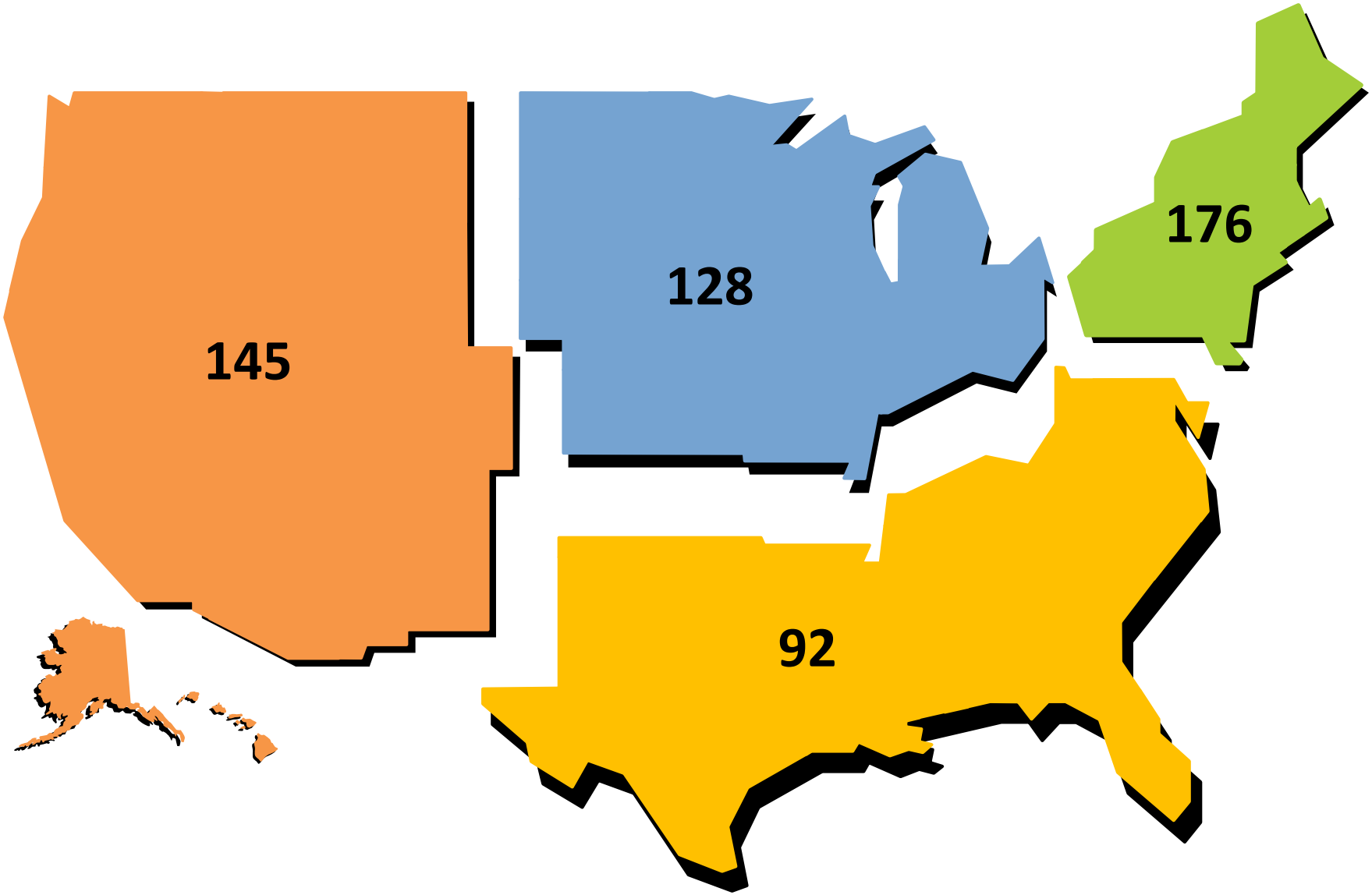
Organization Type by Regional Divisions



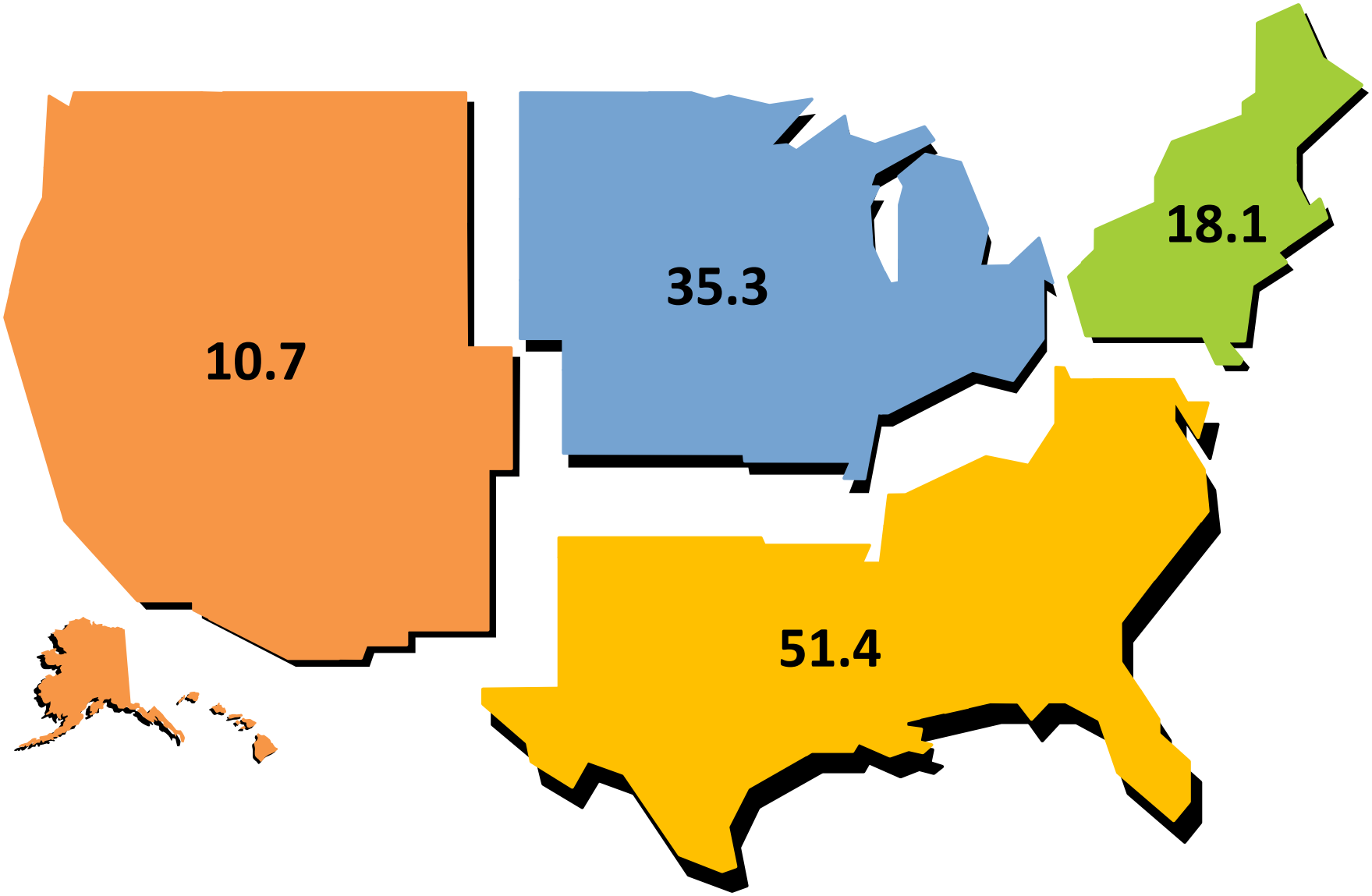
Teaching Status by Regional Divisions



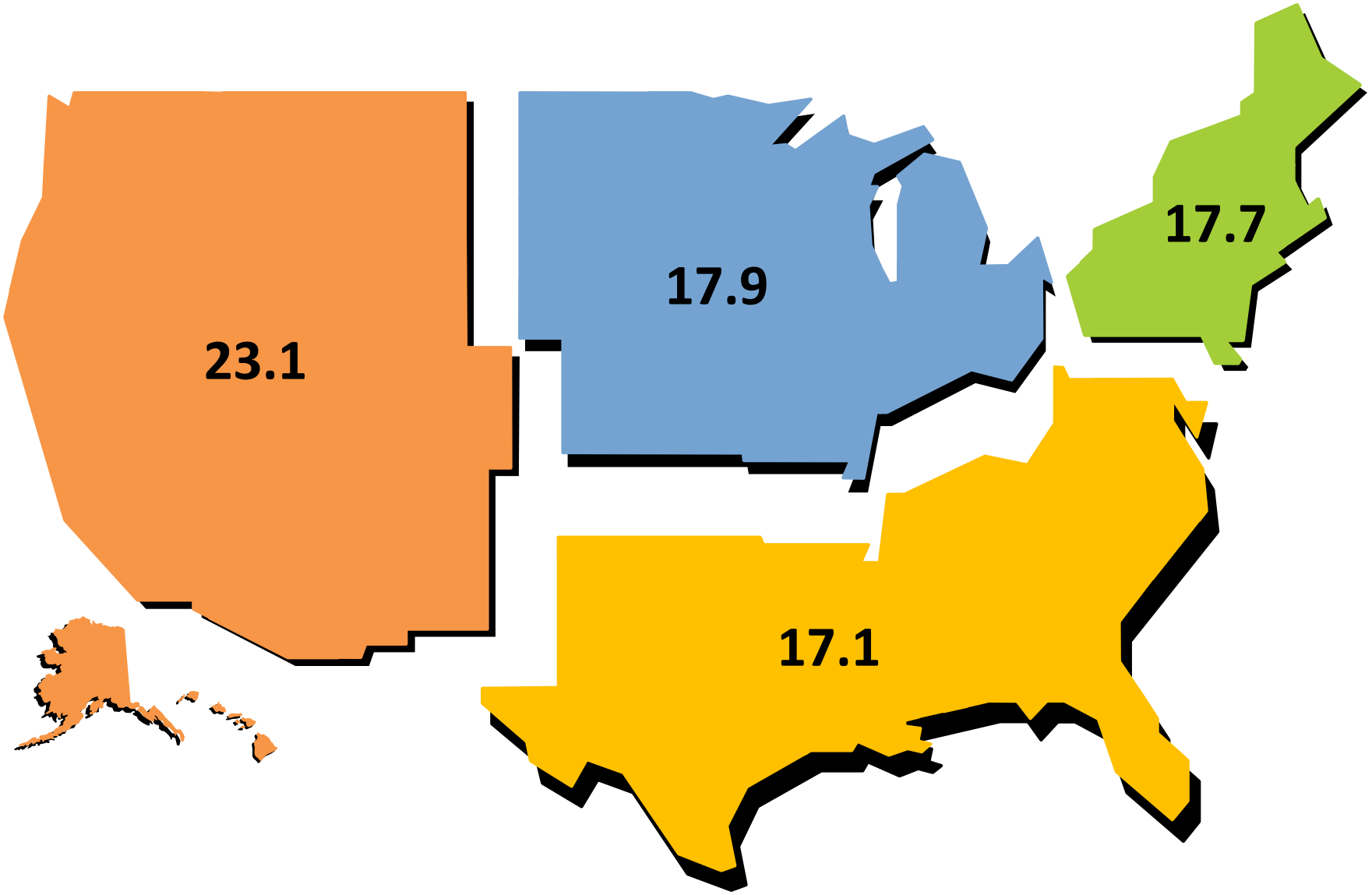
Median Net Patient Revenue (millions) by Regional Divisions



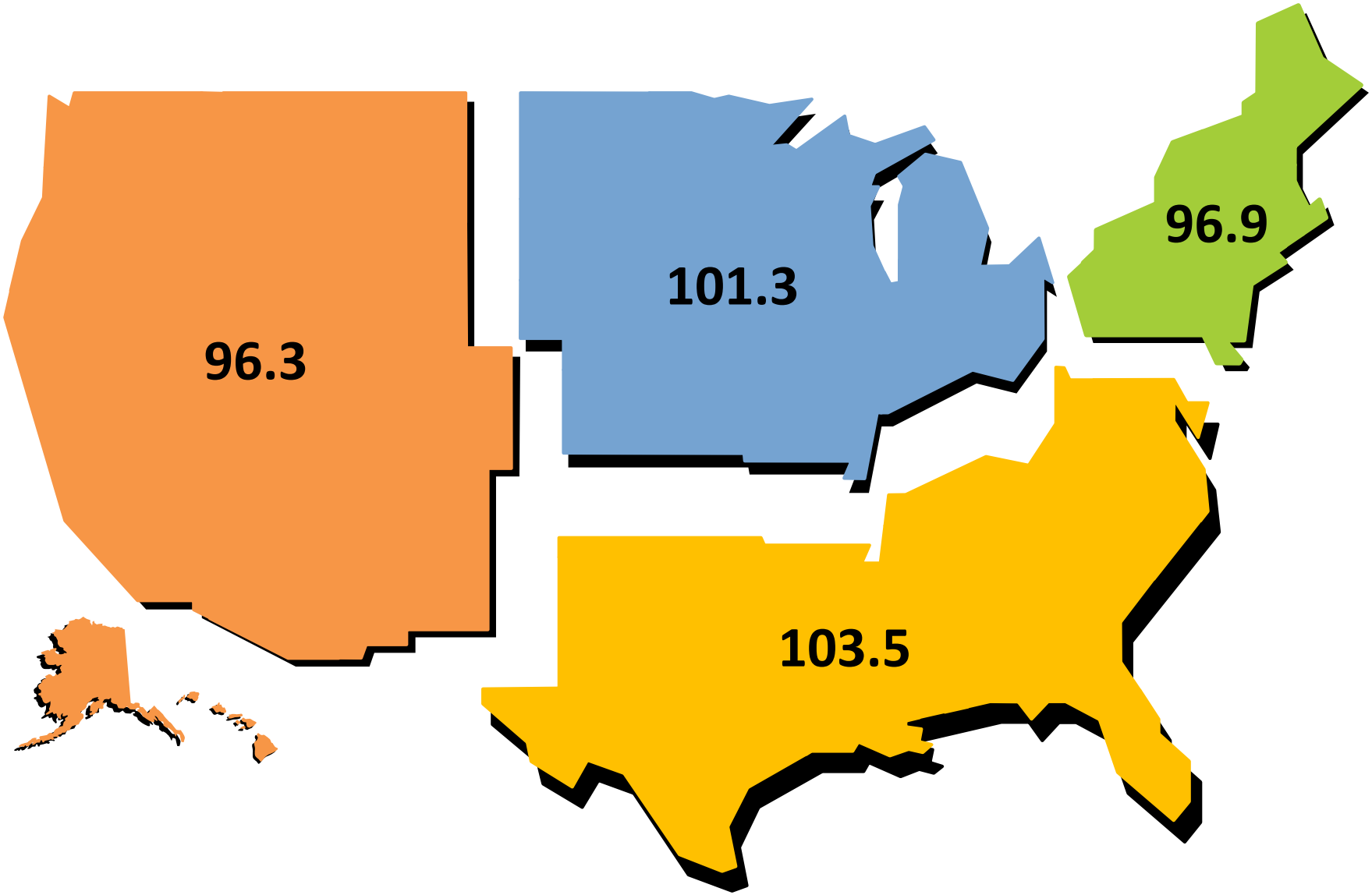
Median Market Share Percentage by Regional Divisions



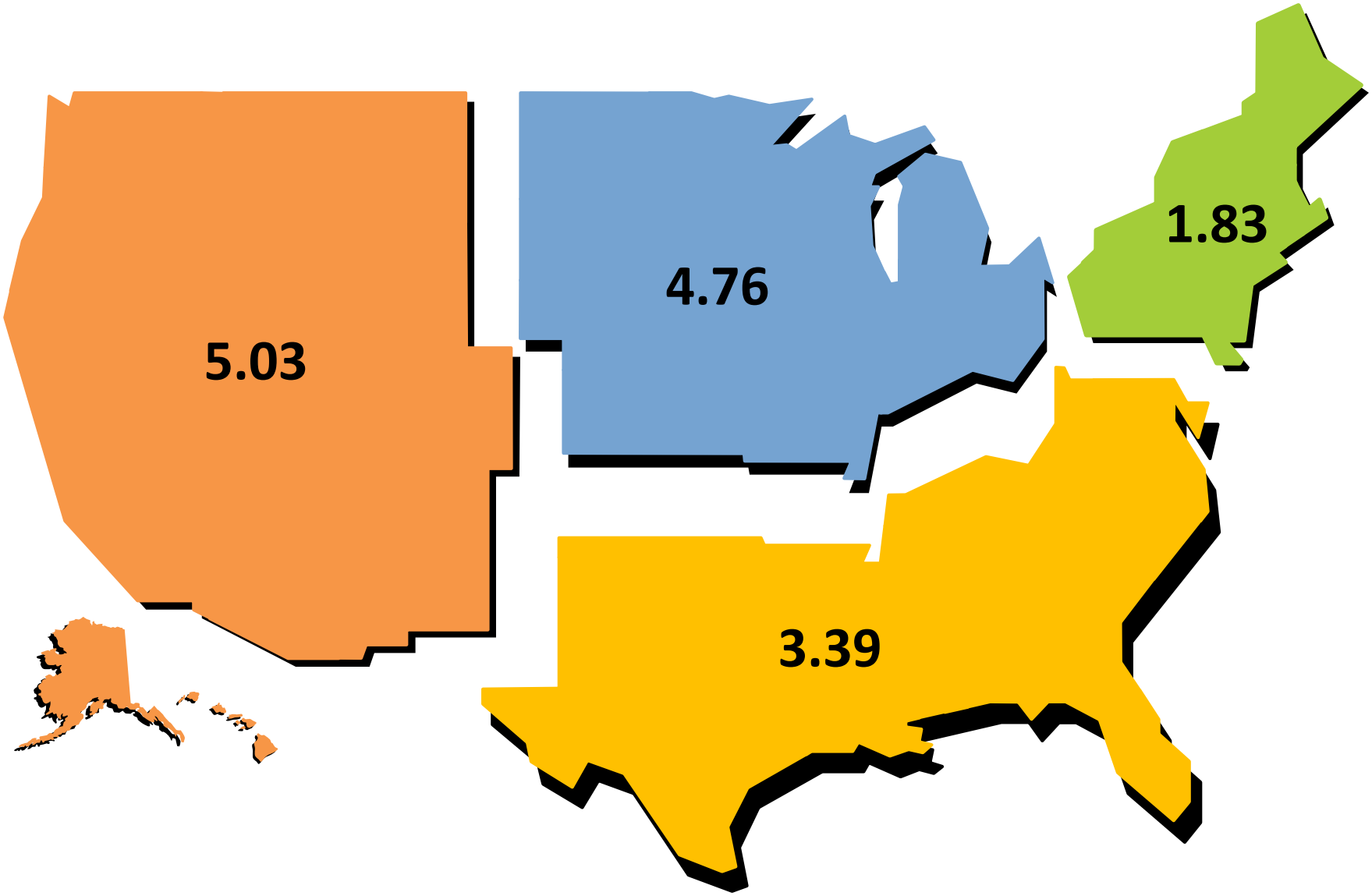
Median Medicaid Days Percentage by Regional Divisions



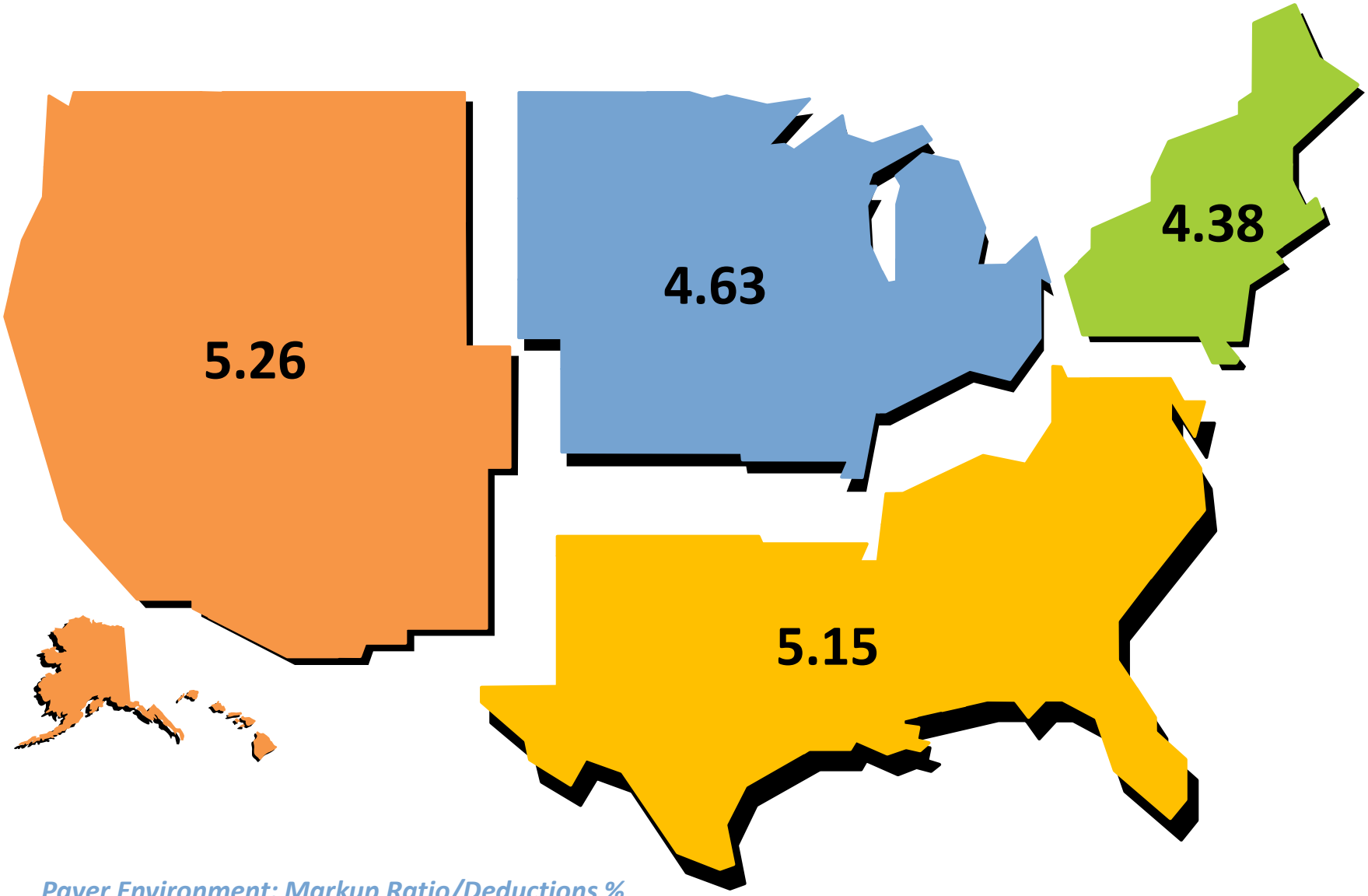
Median Hospital Cost Index® by Regional Divisions



Median Operating Margin by Regional Divisions



Median Payer Environment by Regional Divisions



Payer Environment: Markup Ratio/Deductions %

PAYMENT IS KEY IN HOSPITAL PRICING

Analysis of Payer Environment & Hospital Price

Average Cost per Patient = $100

Payer	Number of Patients	Net Payment per Patient	Total Payment	Total Cost
Medicare	50	$92.50	$4,625	$5,000
Medicaid	10	$75.00	$750	$1,000
Uninsured	5	$5.00	$25	$500
Managed Care	30	$125.00	$3,750	$3,000
Other	5	???	???	$500
Totals	100		$9,150	$10,000

less Total Cost	$10,000
less Required Profit	$500
Balance Remaining	($1,350)

Required Payment from Five Remaining Patients = **$270** *($1,350/5)*

Analysis of Payer Environment & Hospital Price

Pricing Model

Use this model for price-setting at facility level:

$$\text{Price} = \frac{\text{avg cost} + \frac{(\text{NI} + \text{fixed pay loss})}{\text{charge volume}}}{(1 - \text{charge discount})}$$

Price must increase when:

- Average cost increases
- Net income requirements increase
- Losses from fixed pay business increases
- The percentage of charge paying patients decreases
- The discount from charges increases

Analysis of Payer Environment & Hospital Price

Pricing Model – Sample Calculation

Average Cost per Patient = $100

Average cost =	**$100**
Net income =	**$4 (4%)**
Average fixed payment =	**$100**
Average fixed pay margin =	**$0**
Charge payers =	**20%**
Charge discount =	**30%**
Required price =	**$171.43**

Analysis of Payer Environment & Hospital Price

Pricing Model – Sensitivity Analysis

Average Cost per Patient = $100

	MODEL		
	# 1	# 2	# 3
Net income =	$4 (4%)	$4 (4%)	$4 (4%)
Fixed pay margin =	$1	-$3	$0
Charge payers =	30%	15%	100%
Charge discount =	50%	60%	5%
Required price =	$220	$367	$109

HOW DO WE DEFEND HOSPITAL PRICES?

Three approaches to hospital price defense

ROI Model

Peer Position

Cost Markup

1 Return on Investment Model

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

$$ROI = \frac{(volume \times price) - (volume \times cost)}{investment}$$

Tests

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

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

1 Return on Investment Model

	Group Median	Return on Equity
	West region	10.4
	US	9.1

ROE: Excess of Revenue over Expenses/Net Assets

Tests

- ✓ **Is ROI excessive?**
- ✓ Is investment excessive?
- ✓ Is cost excessive?

1 Return on Investment Model

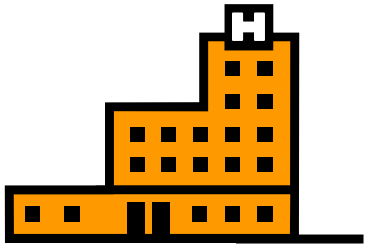
	Group Median	AAP	FAT
	West region	9.3	2.49
	US	10.6	2.45

Average Age of Plant: Accumulated Depreciation/Depreciation Expense
Fixed Asset Turnover: Total Revenue/Net Fixed Assets

Tests

- ✓ Is ROI excessive?
- ✓ **Is investment excessive?**
- ✓ Is cost excessive?

1 Return on Investment Model



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)

1 Return on Investment Model

	Group Median	Hospital Cost Index®
West region		96.3
US		101.0

Tests

- ✓ Is ROI excessive?
- ✓ Is investment excessive?
- ✓ **Is cost excessive?**

2 Peer Position Model

Comparing your pricing to pricing at peer facilities

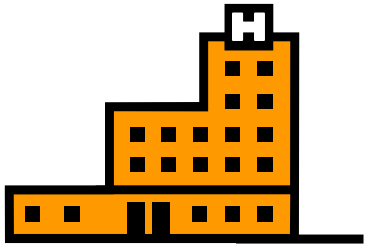
The second method used to assess the defensibility of your pricing is direct comparison with peers. Data at these levels is useful:

Level of Detail

Level of Comparison	Metric	
FACILITY	Hospital Charge Index®	
	Medicare Charge per Discharge (CMI/WI adj)	
	Medicare Charge per Visit (RW/WI adj)	
DEPARTMENT	BETOS Analysis	Bundling
INPATIENT CASE	Charge by MS-DRG	
OUTPATIENT CASE	Charge by APC	
PROCEDURE	Price by CPT®/HCPCS Code	Bundling

Key point: comparison can change at each level!

Facility-level price comparison



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)

	Inpatient Charge Index	Outpatient Charge Index	Hospital Charge Index®
Sample Hospital	136.1	119.4	128.9
Peer Average	96.6	65.9	85.2

2 Peer Position Model

Facility-level

	Group Median	Hospital Charge Index®
West region		114.8
US		103.3

2 Peer Position Model

Facility-level

	Group Median	Medicare Charge per Discharge (CMI/WI adj)
West region		26,083
US		23,366

2 Peer Position Model

Facility-level

	Group Median	Medicare Charge per Visit (RW/WI adj)
West region		400
US		391

2 Peer Position Model

Facility-level

	Group Median	Medicaid Days %
West region		23.1
US		18.2

3 Cost/Markup Model

Strategy:

Relate prices to cost markup (same or different by department)

Sources of cost data

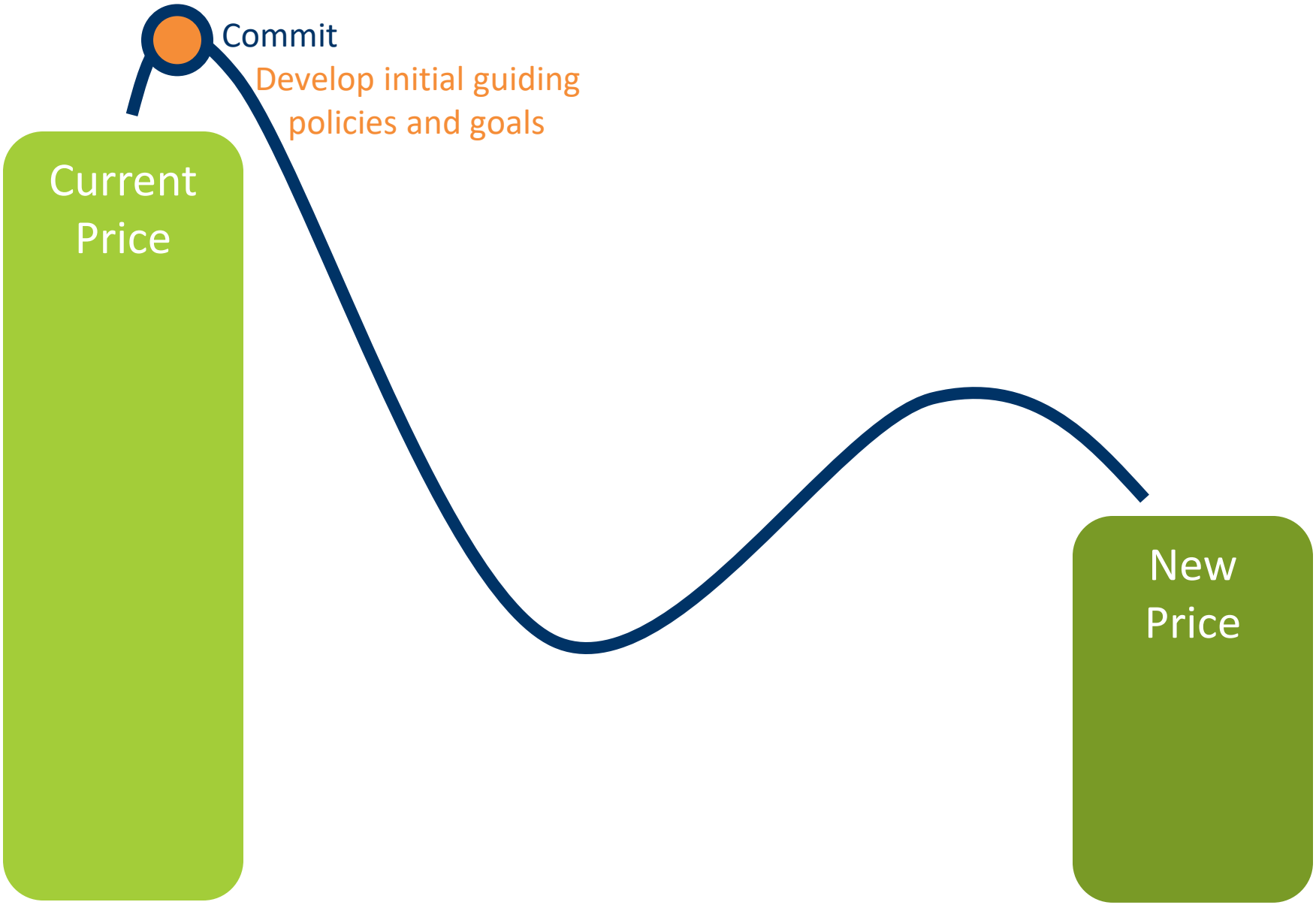
1) Hospital cost-accounting system
   - Direct Cost
   - Fully allocated cost
2) RCCs

Two usual outcomes

1) Reduced net patient revenue, e.g.,
   $5.1 million vs. $9.6 million in ATB
2) Major pricing changes
   -99% to 3,580%

CREATING AN APPROPRIATE PRICING STRATEGY

Process


Commit
Develop initial guiding policies and goals
Current Price
New Price

Commit to transparency/defensibility with clear policies and goals

External Policy

- Public facing document for patients to view
- Meets or exceeds national and state requirements (as applicable)

Internal Policy

- Goals for future release of pricing and payment information to the community
- Guiding principles on how strategic pricing and pricing transparency will be developed and evaluated

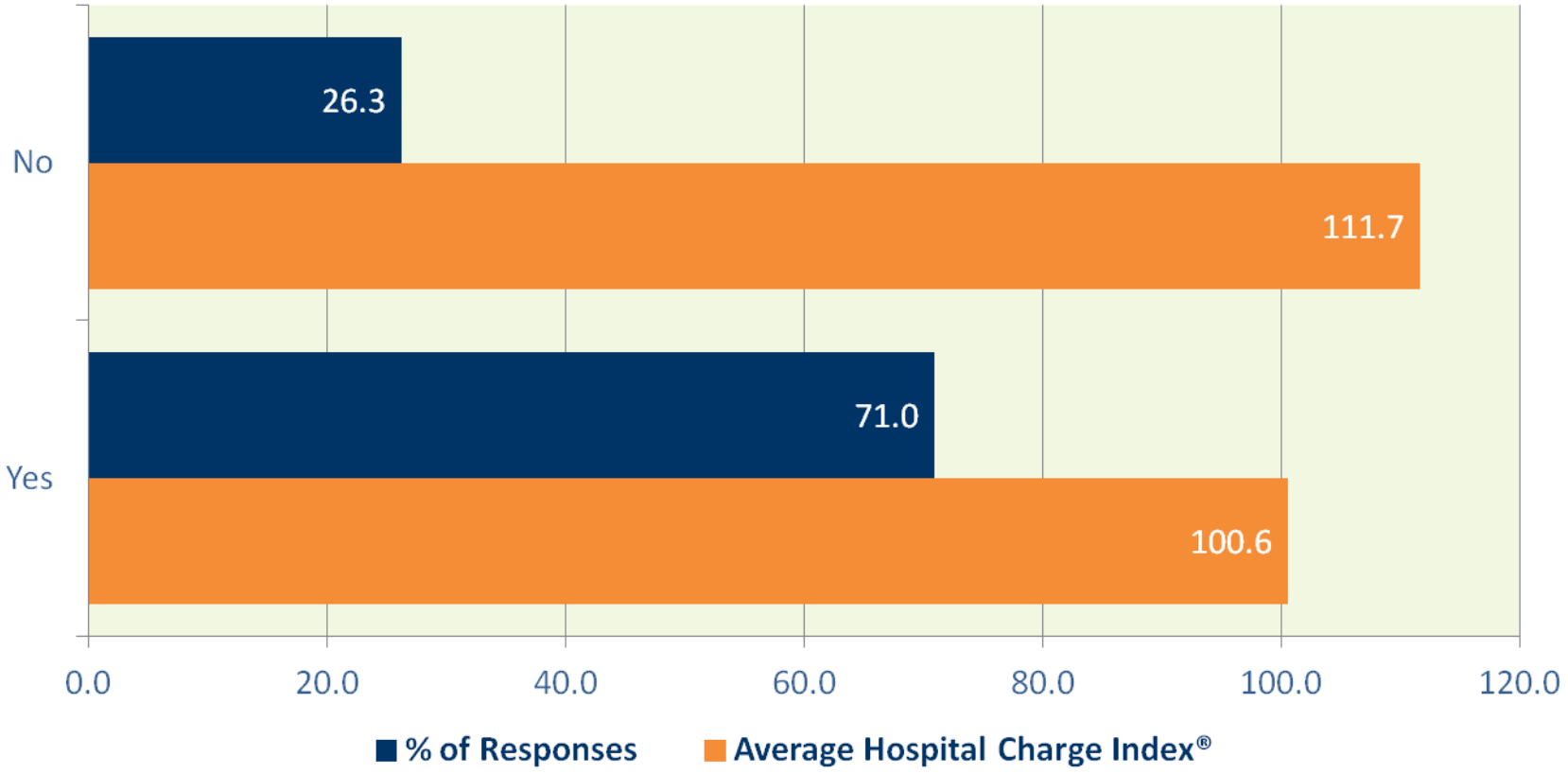
Commit to transparency/defensibility with clear policies and goals

FY 2015 Final Rule:

In the FY 2015 IPPS/LTCH PPS proposed rule (79 FR 28169), we reminded hospitals of their obligation to comply with the provisions of section 2718(e) of the Public Health Service Act. We appreciate the widespread public support we received for including the reminder in the proposed rule. **We reiterate that our guidelines for implementing section 2718(e) of the Public Health Service Act are that hospitals either make public a list of their standard charges (whether that be the chargemaster itself or in another form of their choice), or their policies for allowing the public to view a list of those charges in response to an inquiry.** MedPAC suggested that hospitals be required to CMS-1607-F 1205 post the list on the Internet, and while we agree that this would be one approach that would satisfy the guidelines, **we believe hospitals are in the best position to determine the exact manner and method by which to make the list public in accordance with the guidelines.**

Commit to transparency/defensibility with clear policies and goals

Is pricing transparency a factor you consider when planning yearly rate adjustments?

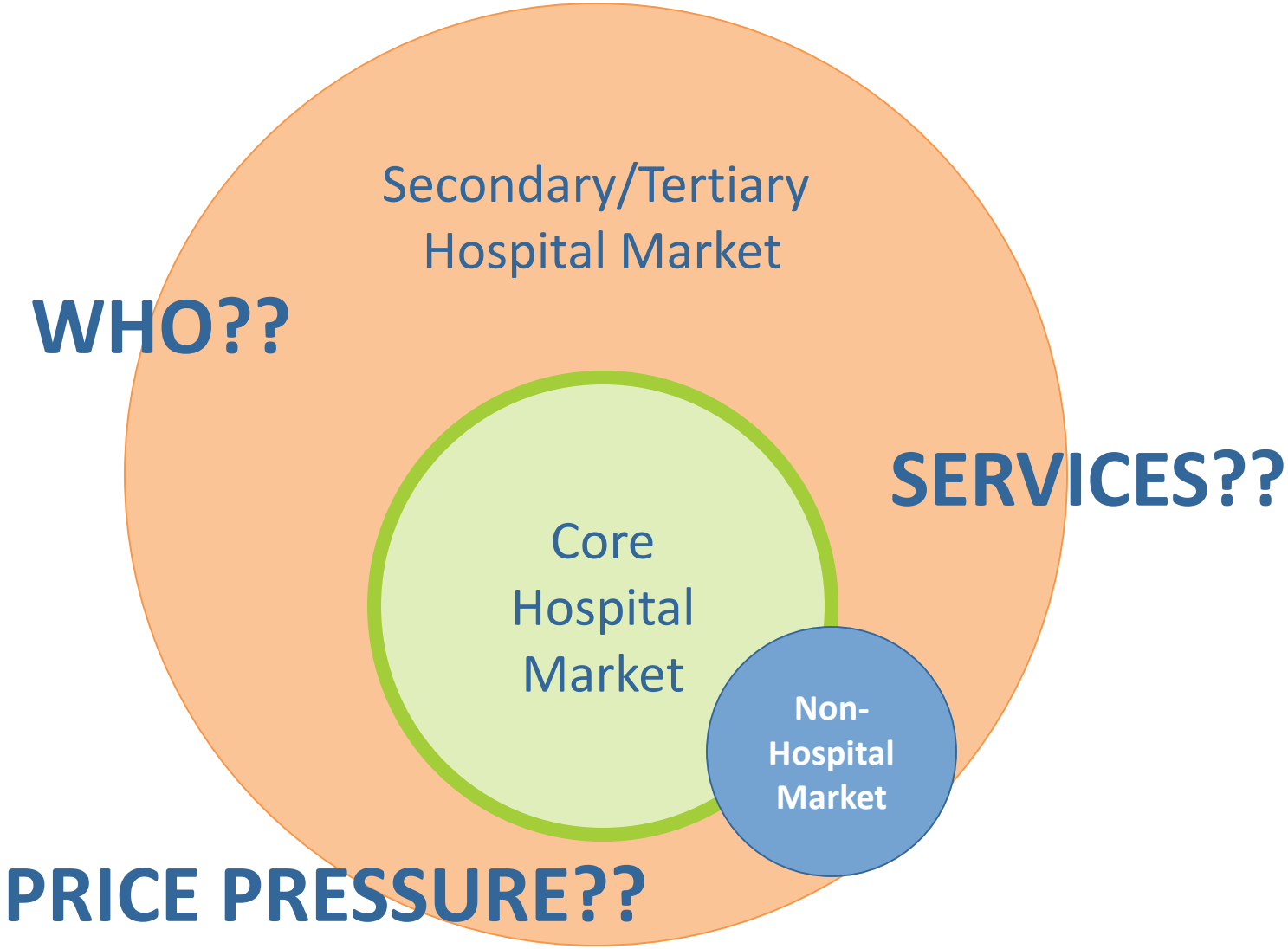


Source: results from industry survey conducted by Cleverley + Associates for HFMA articles

Process


Commit
Develop initial guiding policies and goals
Current Price
Understand your current position
Compare pricing and know where pressure exists
New Price

Compare prices from multiple perspectives



Determine where price pressures are coming from

Sources of Hospital Price Pressure

Source of Pressure	Strong Pressure	Some Pressure	Total
Patients	42%	49%	91%
Payers	41%	48%	89%
Free-standing providers	35%	42%	77%
Physicians	18%	55%	73%
Business/employer community	20%	50%	70%
Media	17%	42%	59%
Hospital providers	9%	40%	49%

Source: Cleverley & Associates. Used with permission. Data from a 2015 survey of 58 hospital executives representing 156 hospitals and health systems.

Patients, payers, and free-standing providers are putting the most pressure on hospitals to reduce prices.

Understand current margin levels by payer and product

Case Hospital's Losses and Profits by Payer

		Payment	Cost	Profit	Margin
Commercial	Inpatient	$14,174	$13,564	$610	4.3%
	Outpatient	28,807	14,053	14,754	51.2%
	Total	$42,981	27,617	15,364	35.7%
Medicare	Inpatient	$29,748	36,742	(6,995)	-23.5%
	Outpatient	9,277	12,138	(2,860)	-30.8%
	Total	$39,025	48,880	(9,855)	-25.3%
Medicaid	Inpatient	$7,652	10,478	(2,826)	-36.9%
	Outpatient	5,932	5,418	513	8.7%
	Total	$13,584	15,897	(2,313)	-17.0%
Charity/self-pay	Inpatient	$16	6,025	(6,009)	-37,145.5%
	Outpatient	292	5,482	(5,190)	-1,778.0%
	Total	$308	11,507	(11,199)	-3,635.3%
Workers compensation	Inpatient	$359	245	113	31.6%
	Outpatient	440	407	33	7.4%
	Total	$798	652	146	18.3%
CHAMPUS/ Tricare/VA	Inpatient	$2,618	3,450	(832)	-31.8%
	Outpatient	3,815	4,655	(841)	-22.0%
	Total	$6,432	8,105	(1,673)	-26.0%
Total		**$103,129**	**112,658**	**(9,529)**	**-9.2%**

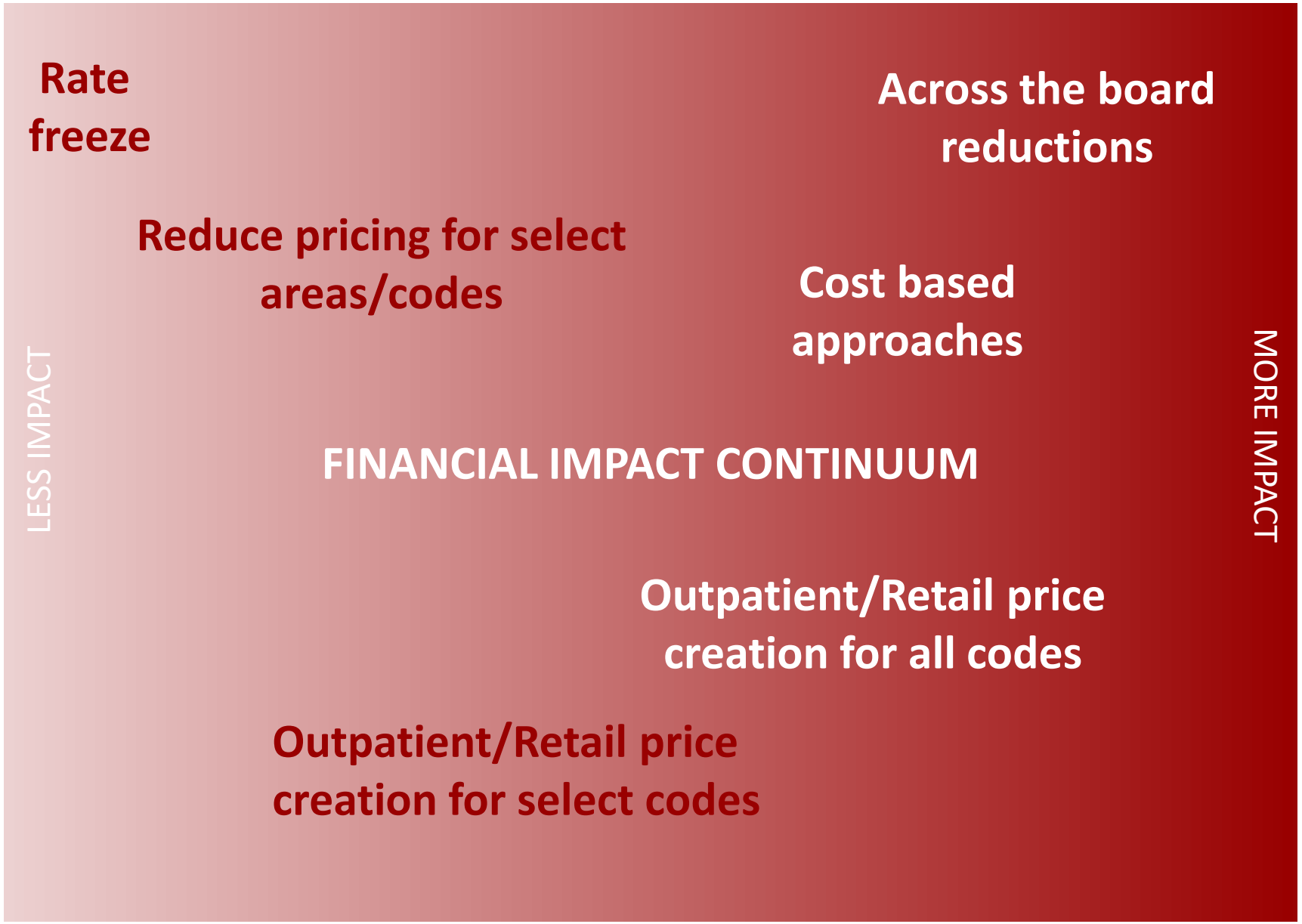
Source: Cleverley & Associates. Used with permission. Data from an actual hospital client.

Commercial payments for outpatient services bring in the most profit for Case Hospital, while government payments for all services represent a loss.

Process


Commit
Develop initial guiding policies and goals
Current Price
Understand your current position
Compare pricing and know where pressure exists
Model impact
Understand the financial implications through price, payment, cost and profit modeling
New Price

General impact associated with various rate strategies



Model impact of different strategies to determine best fit

Strategy	Incremental Charges	Net Revenue Impact	Additional impact from outlier/lesser-of change
Across the board reduction	$XXX	$XXX	$XXX
Cost based approach to 2X	$XXX	$XXX	$XXX
Imaging to free-standing average	$XXX	$XXX	$XXX
Retail pricing for lab	$XXX	$XXX	$XXX
Reduce outpatient prices by 40%	$XXX	$XXX	$XXX

Understand specific impact of different strategies

Net Effect of Proposed Changes to Case Hospital's Charges/ Payments

	Dollars in Thousands				
Ambulatory Payment Classification (APC) Title	**Change in Charges**	**Change in Payment**	**Total Proposed Profit**	**Original Profit**	**Profit Change to Charge Change**
Lower gastrointestinal endoscopy	(4,179)	(1,315)	997	2,312	31%
Level 3 type A emergency visits	(8,226)	(849)	(563)	286	10%
Combined abdomen and pelvis CT with contrast	(7,715)	(528)	251	779	7%
Level 4 type A emergency visits	(6,011)	(334)	(504)	(170)	6%
Combined abdomen and pelvis CT without contrast	(5,678)	(304)	87	390	5%
Largest five loss changes	(31,809)	(3,330)	267	3,597	10%
Total	(81,448)	(7,323)	(913)	6,410	9%

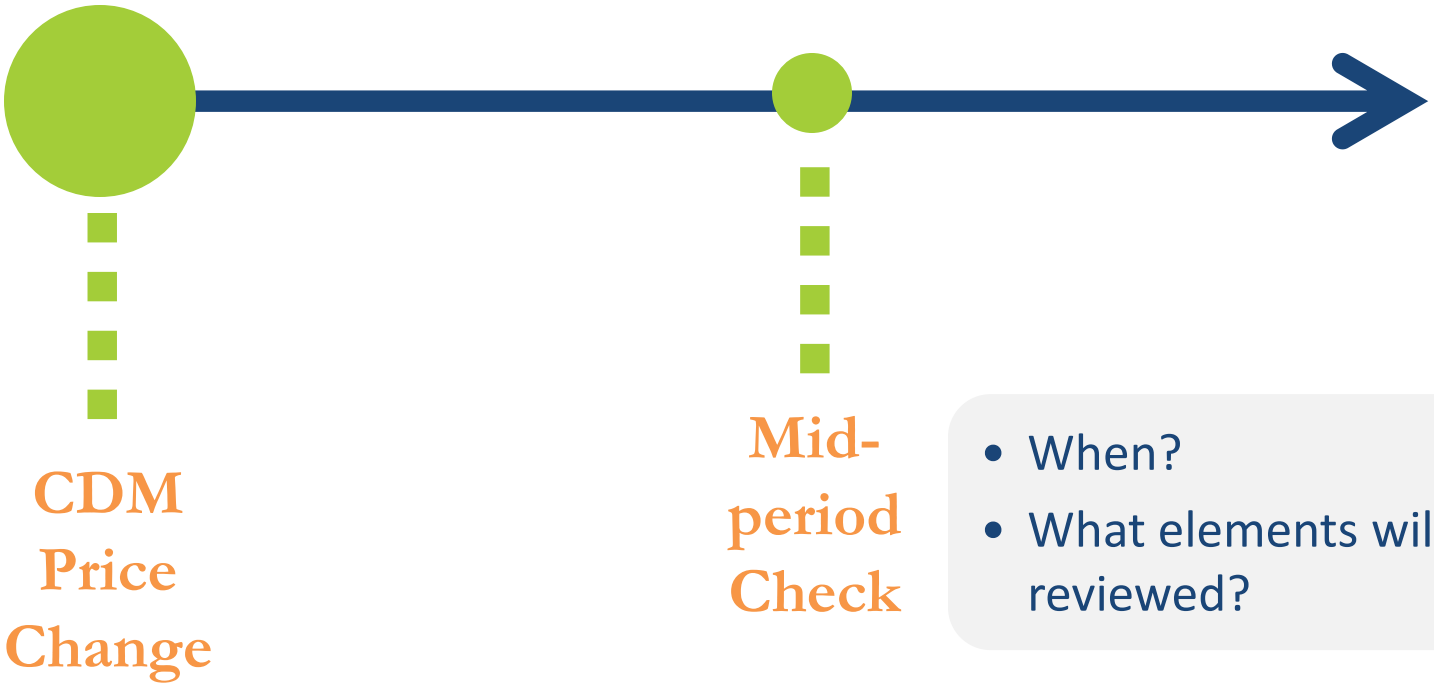
Source: Cleverley & Associates. Used with permission. Data from an actual hospital client.

Case Hospital leaders wanted to dramatically reduce charges and payment terms for commodity outpatient products. An analysis showed that approximately 45 percent of the payment reduction would be concentrated in five procedures.

Process

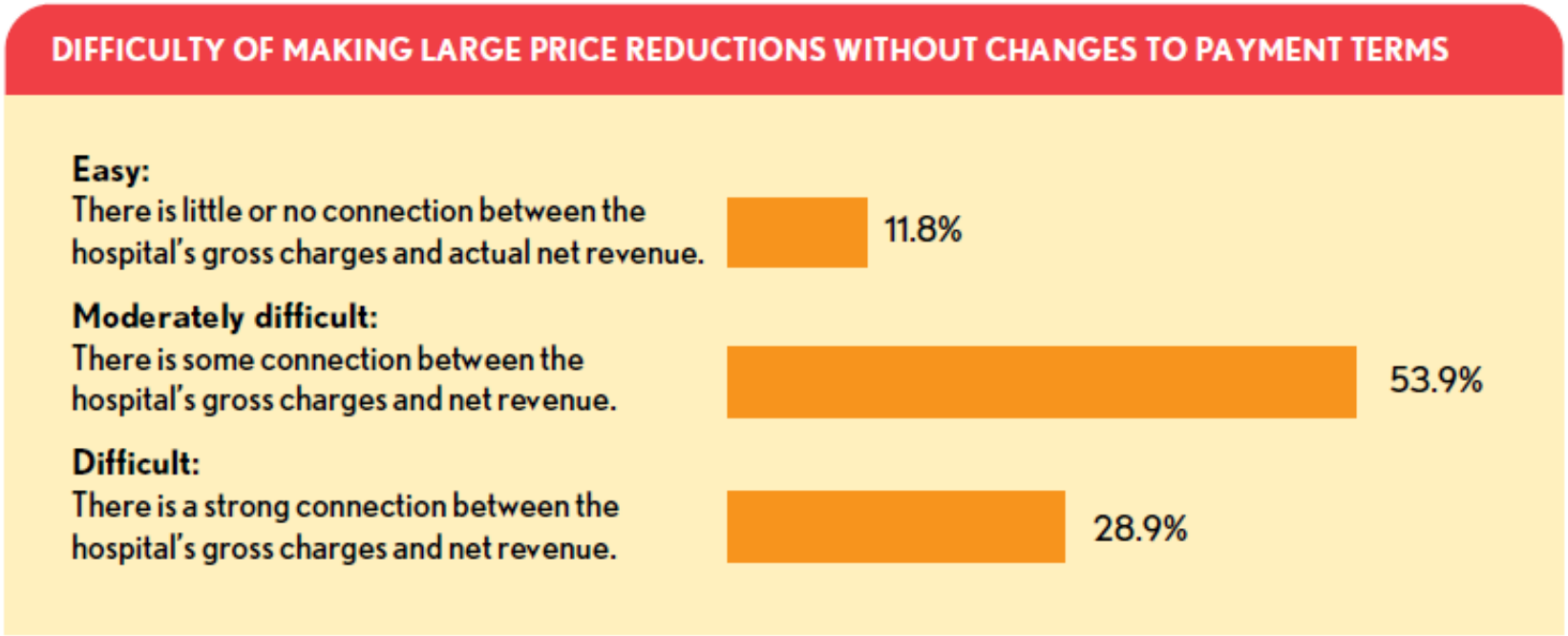

Current Price
Commit
Develop initial guiding policies and goals
Understand your current position
Compare pricing and know where pressure exists
Model impact
Understand the financial implications through price, payment, cost and profit modeling
Manage/ Mitigate
Monitor impact of implemented pricing
New Price

Establish checkpoints for impact to be compared with projections



- When?
- What elements will be reviewed?

Making large changes will likely require payment term changes



Source: Cleverley & Associates, 2014. Data from a survey of 78 hospital finance leaders representing 185 hospitals in April 2014. Used with permission.

Isolating specific term impact can facilitate easier discussions

Contract		Carve-out	Original Charges	Proposed Charges	Incremental Profit	% Change
Payer 1 - PPO	I	All Other	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	I	Csection DRG	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	I	Normal Delivery	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	I	Normal Newborn DRG - Per Diem	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	I	Nursery - General, Newborn - Level 1, Other	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	I	Nursery - General, Newborn - Level 1, Other Ancillary	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	I	Nursery - Newborn - Level 2	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	I	Nursery - Newborn - Level 2 Ancillary	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	I	Nursery - Newborn - Level 3	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	I	Nursery - Newborn - Level 3 Ancillary	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	All Other	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	Payer-Provider FS	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	Payer-Provider OP Surg	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	Critical Care	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	ER Level 1	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	ER Level 2	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	ER Level 3	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	ER Level 4	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	ER Level 5	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	Obs - Per Hour	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	Obs - Per Hour Ancillary	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	OP Cardiac Cath	$XXX	$XXX	$XXX	$XXX
Payer 1 - PPO	O	Trauma Act	$XXX	$XXX	$XXX	$XXX

Process


Current Price
Commit to transparency
Develop initial guiding policies and goals
Understand your current position
Compare pricing and know where pressure exists
Model impact
Understand the financial implications through price, payment, cost and profit modeling
Manage/ Mitigate
Monitor impact of implemented pricing
Evaluate
Revise policies and goals
New Price

Evaluating the rate strategy

Does the strategy:

Meet net income expectations?	
Maintain or enhance competitive position?	
Maintain or correct related pricing relationships?	
Establish equitable distribution to case categories?	
Establish equitable distribution to payers?	
Meet transparency/defensibility objectives?	

Summary

- Hospital pricing is impacted by various demographic and operating factors, however, hospitals in each “setting” have been able to achieve lower charge levels
- Payment is critical in rate establishment
- Defensibility and required net revenue production can be attained through strategic assessments and action

Thank you. Questions?

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