OBJECTIVE HEALTH™
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Webinar : Are your cost estimates leading to the wrong decisions? (And what to do about it)

Becker's Hospital Review webinar

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Contents

Are your cost estimate leading you to the wrong decisions?

- **Most hospitals use cost-to-charge ratios**
- Cost-to-charge ratios can lead to sub-optimal operational and strategic decisions
- Without implementing cost accounting, hospitals can make some adjustments to improve

Influential strategy and healthcare leaders recognize how critical it is for hospitals to improve on cost-to-charge ratios (RCCs)

- Rising health care costs are busting the federal budget as well as those of states, counties and municipalities.
- Few acknowledge a fundamental source of escalating costs: the system by which those costs are measured. To put it bluntly, **there is an almost complete lack of understanding of how much it costs to deliver patient care**, much less how those costs compare with the outcomes achieved.
- **Providers themselves do not measure their costs correctly. They assign costs to patients based on what they charge,** not on the actual costs of the resources, like personnel and equipment, used to care for the patient.
- **Poor costing systems have disastrous consequences.** It is a well-known management axiom that what is not measured cannot be managed or improved.
- **The result is that attempts to cut costs fail**, and total health care costs just keep rising.

Robert Kaplan and Michael Porter

Source: "The Big Idea: How to Solve the Cost Crisis in Health Care", Harvard Business Review, Sept 2011 , "Why Medical Bills Are a Mystery" New York Times, April 14, 2012

What percentage of US hospitals use cost-to-charge ratios (RCCs) as primary form of cost estimation in their patient data?

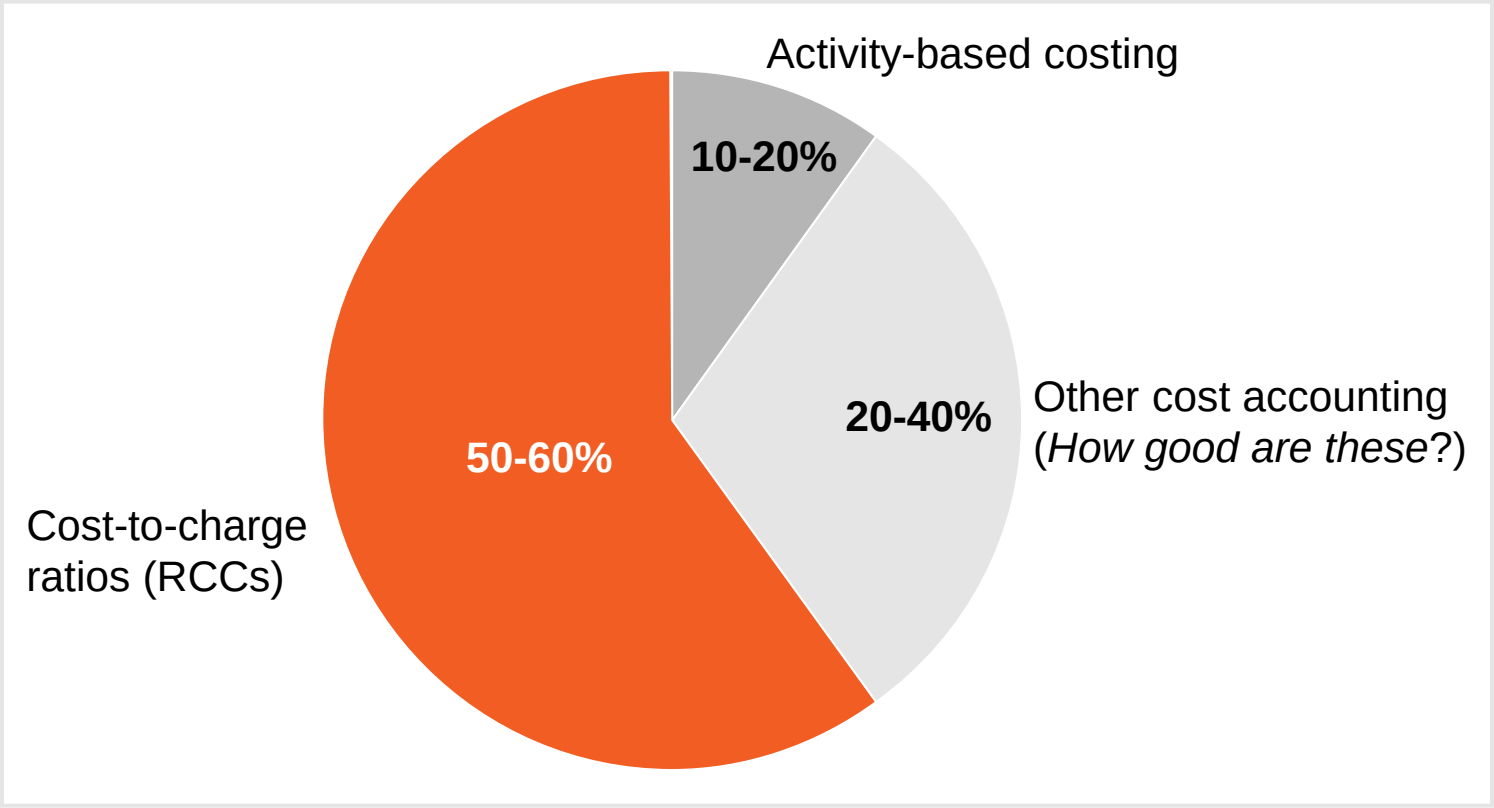
A. 10-20%

B. 30-40%

C. 50-60%

D. 70-80%

What percentage of US hospitals use cost-to-charge ratios (RCCs) as primary form of cost estimation in their patient data?



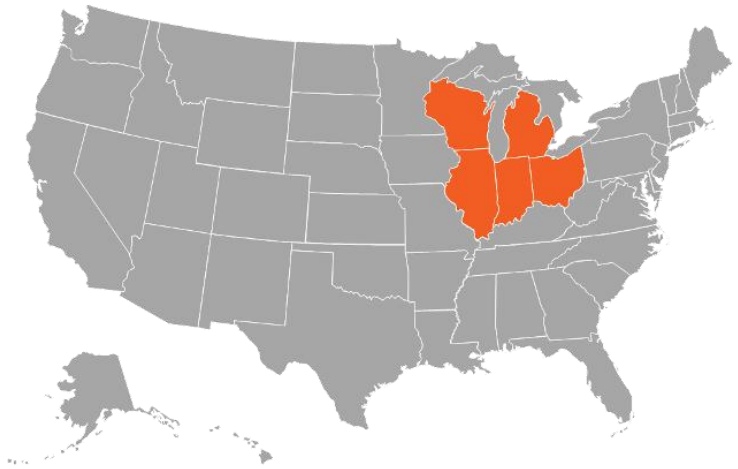
Source: Patient Friendly Billing survey, HFMA 2007, as published in Reconstructing Hospital Billing Systems. Emmett D, Forget R. The Utilization of Activity-based Cost Accounting in Hospitals, 2005

Are your cost estimate leading you to the wrong decisions?

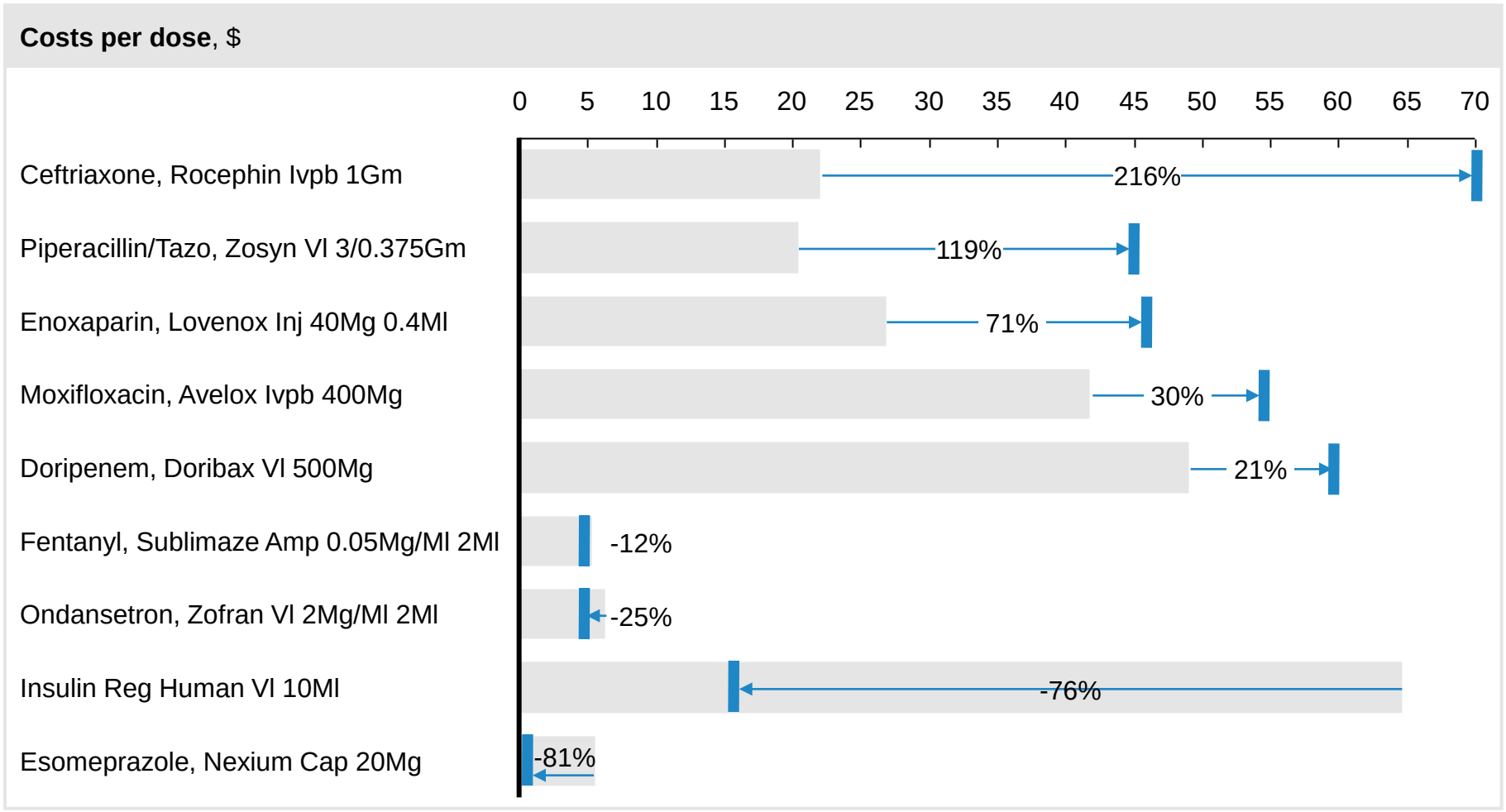
- Most hospitals use cost-to-charge ratios
- **Cost-to-charge ratios can lead to sub-optimal operational and strategic decisions**
- Without implementing cost accounting, hospitals can make some adjustments to improve

Who is Valley Hospital?

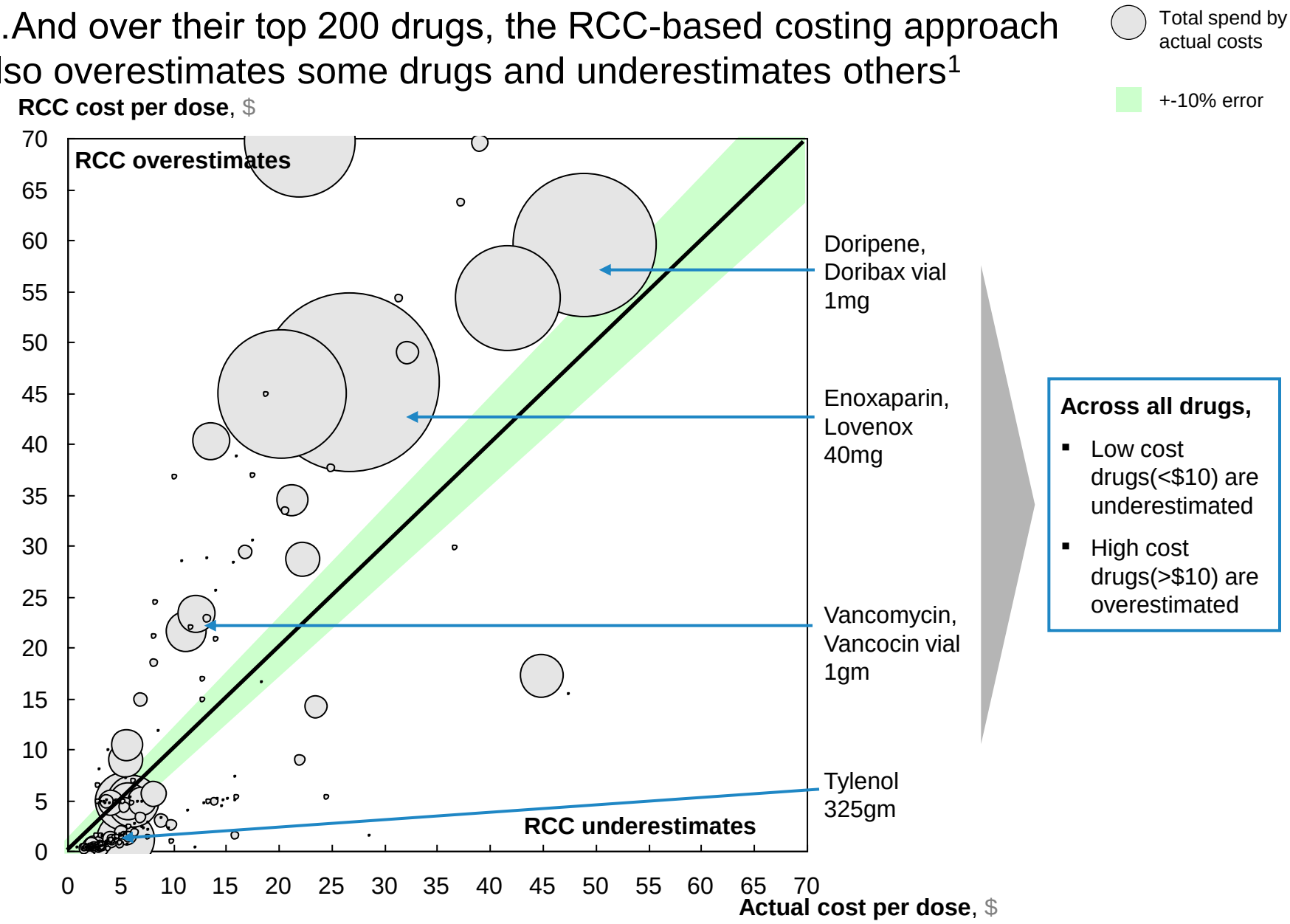
# of beds	250
Setting	Rural
Cost accounting method	Procedural
Region	East North Central (IL, IN, MI, OH, WI)



Over 10 top drugs, RCC-based costing approach overestimates some drugs and underestimates others…



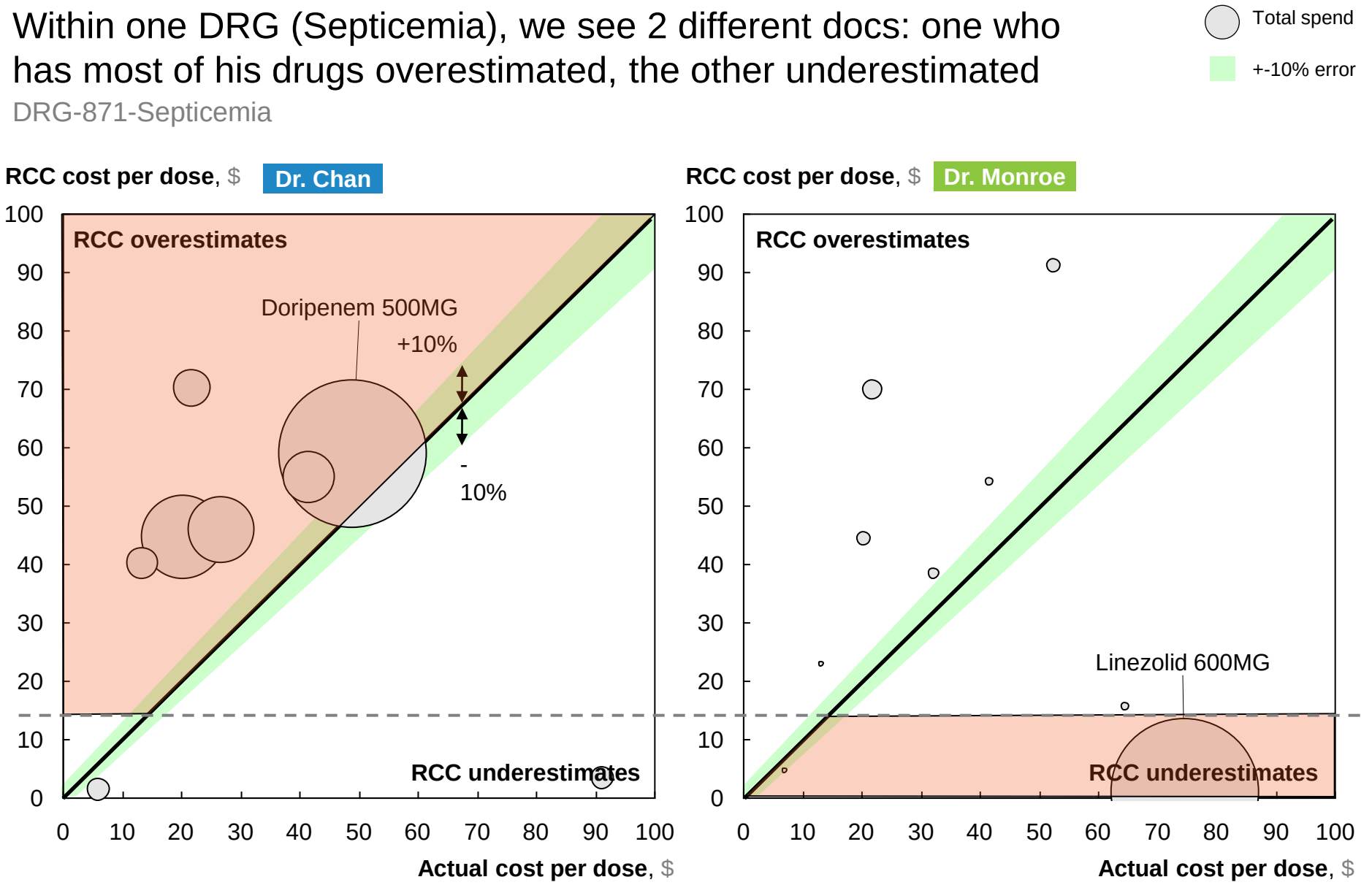
…And over their top 200 drugs, the RCC-based costing approach also overestimates some drugs and underestimates others[1]



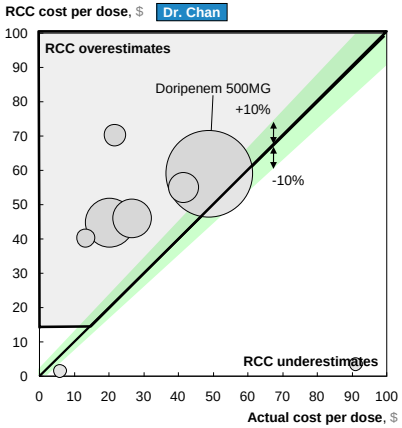
1 Only drugs with per dose cost of less than $70 are shown

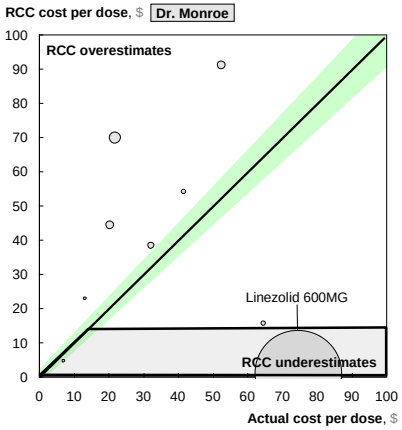
Within one DRG (Septicemia), we see 2 different docs: one who has most of his drugs overestimated, the other underestimated

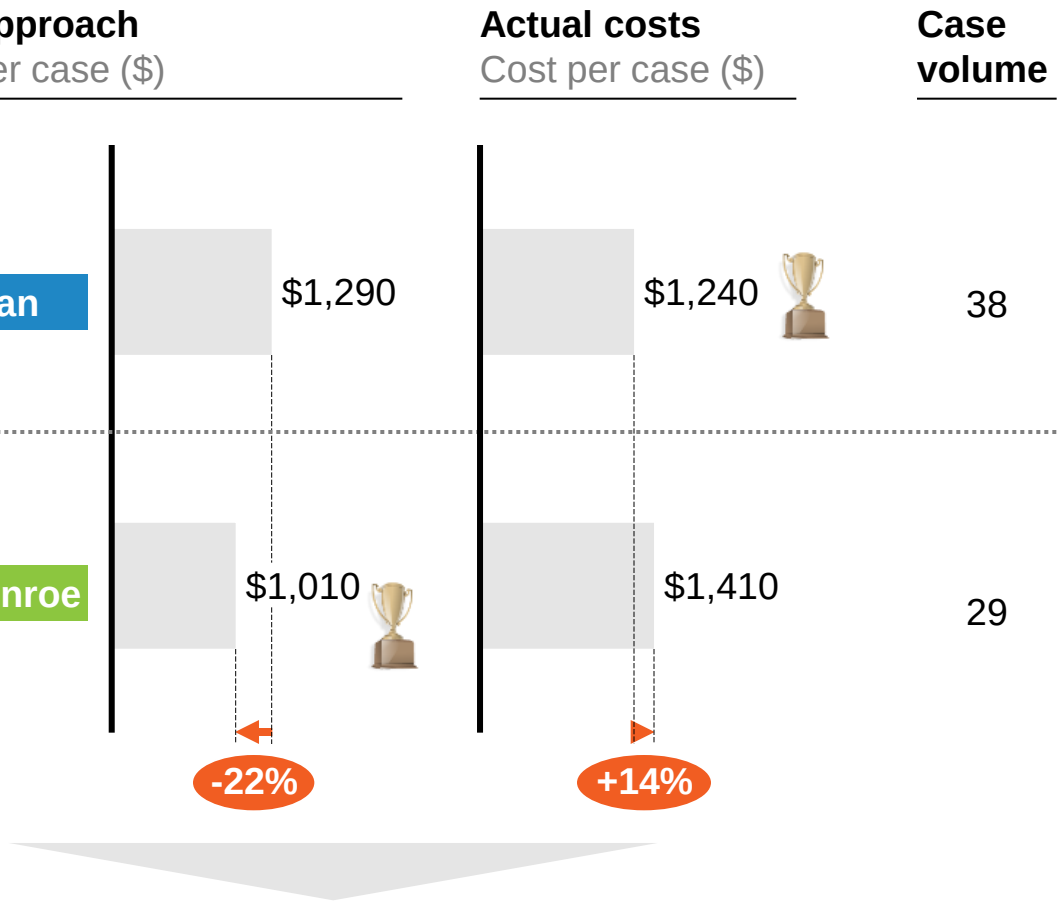
DRG-871-Septicemia



...And therefore when we look at the average drug cost/case of these 2 docs, RCC approach switches who appears to have the lowest cost







- RCC approach could lead the hospital to ask Dr Chan to use drugs more like Dr Monroe – which appears to be $11,000 / year savings…
- …But it would actually lose $ 6,500 / year

If you look across the top 20 DRGs in an average hospital, what % look like a “Dr Chan / Dr Monroe” case?

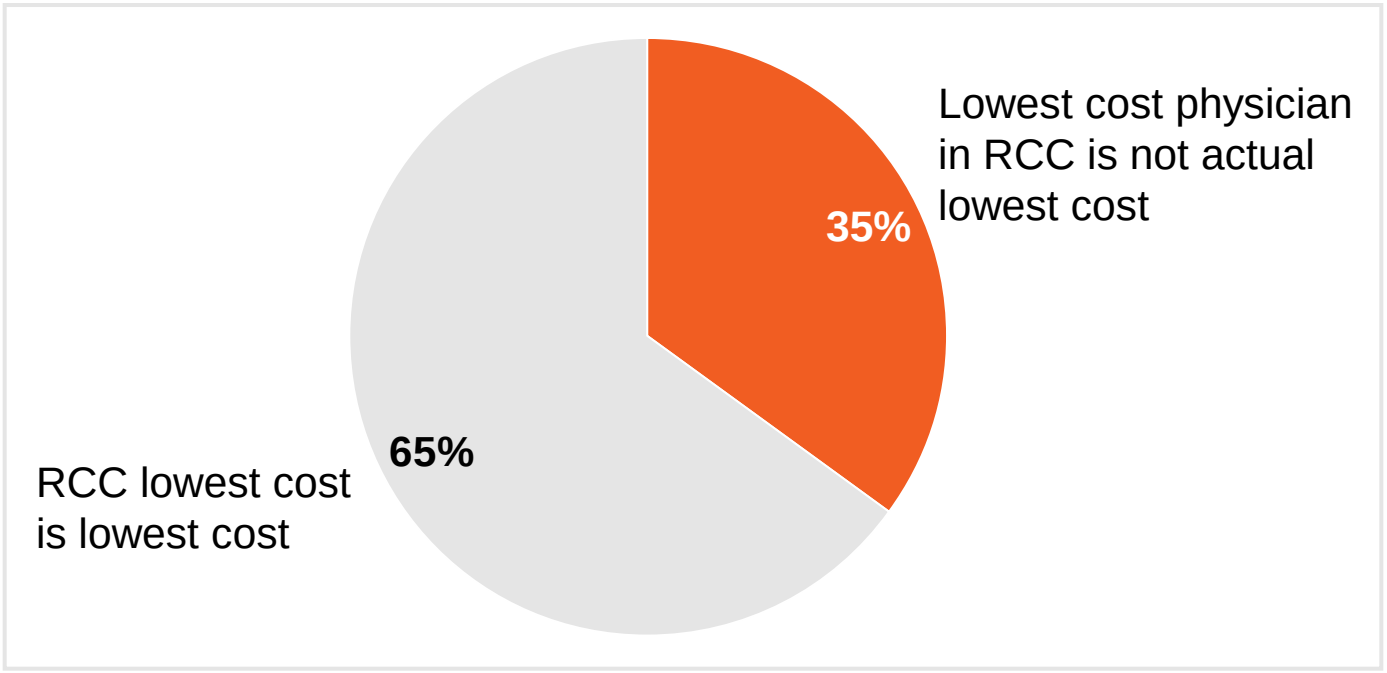
A. <5%

B. 5-20%

C. 20-40%

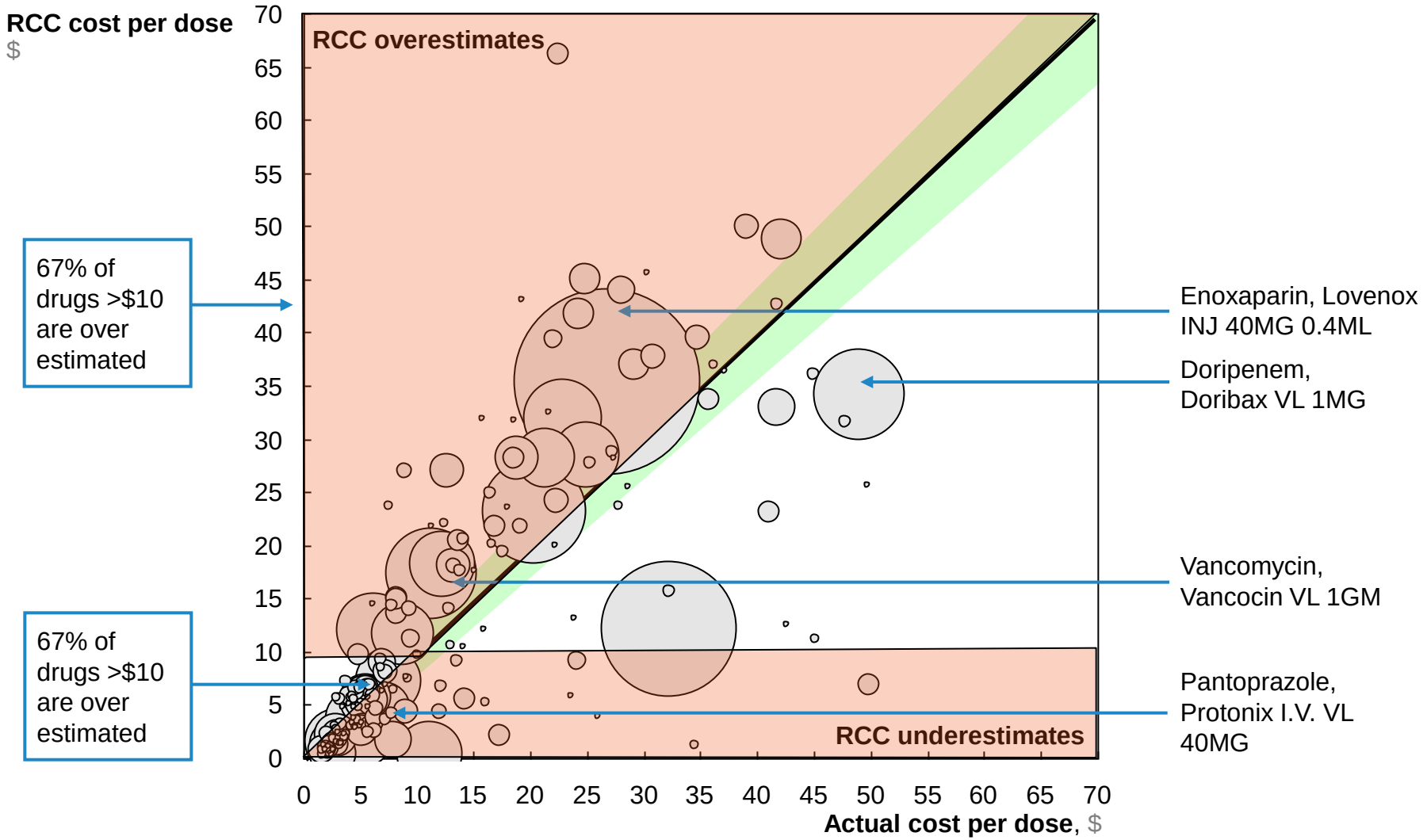
D. 40-60%

If you look across the top 20 DRGs in an average hospital, what % look like a “Dr Chan / Dr Monroe” case?



Across 200 hospitals, the same message appears: low cost drugs are underestimated and high cost drugs are overestimated

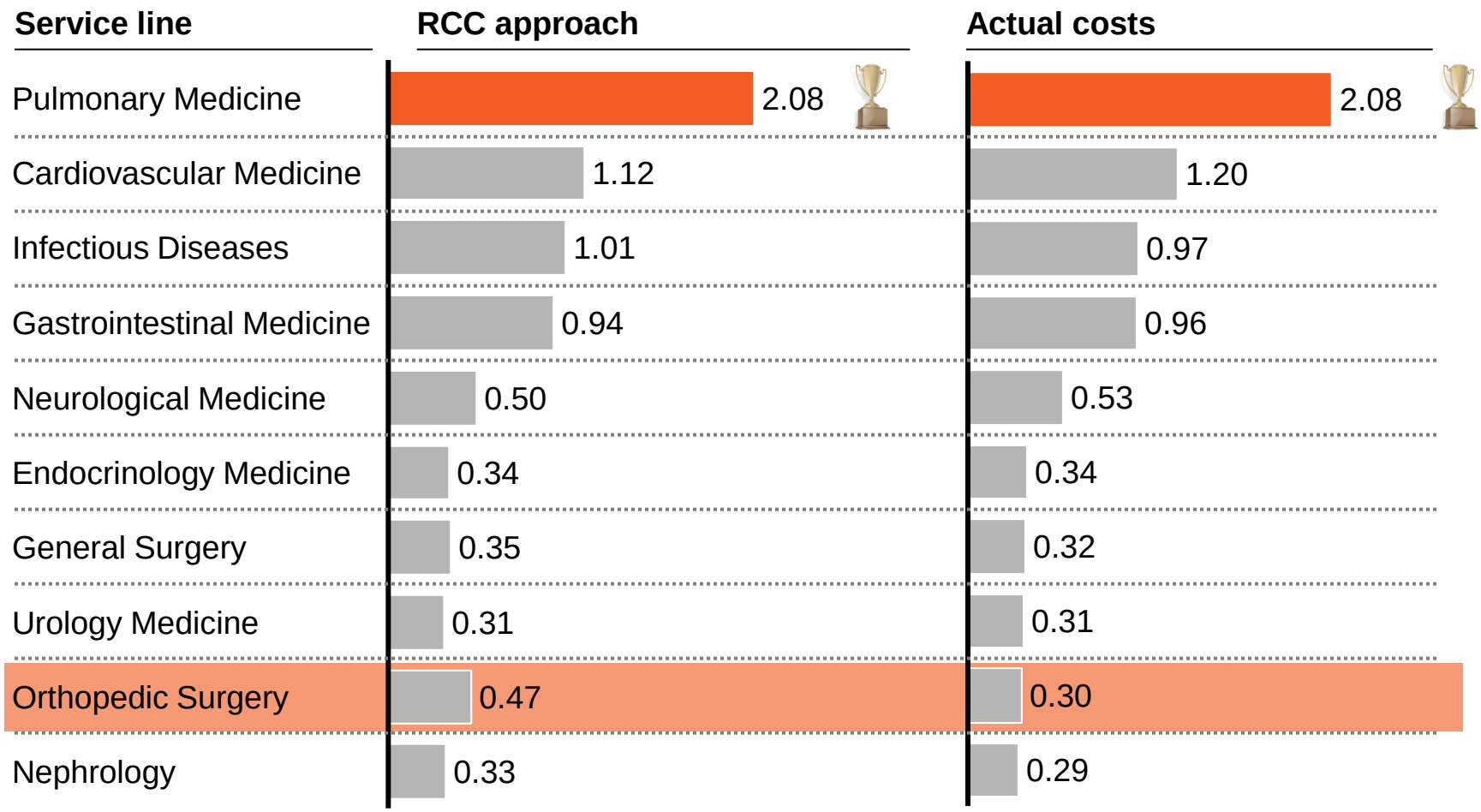
Drug cost/case; n=200 hospitals



Contribution of top service lines

$ millions

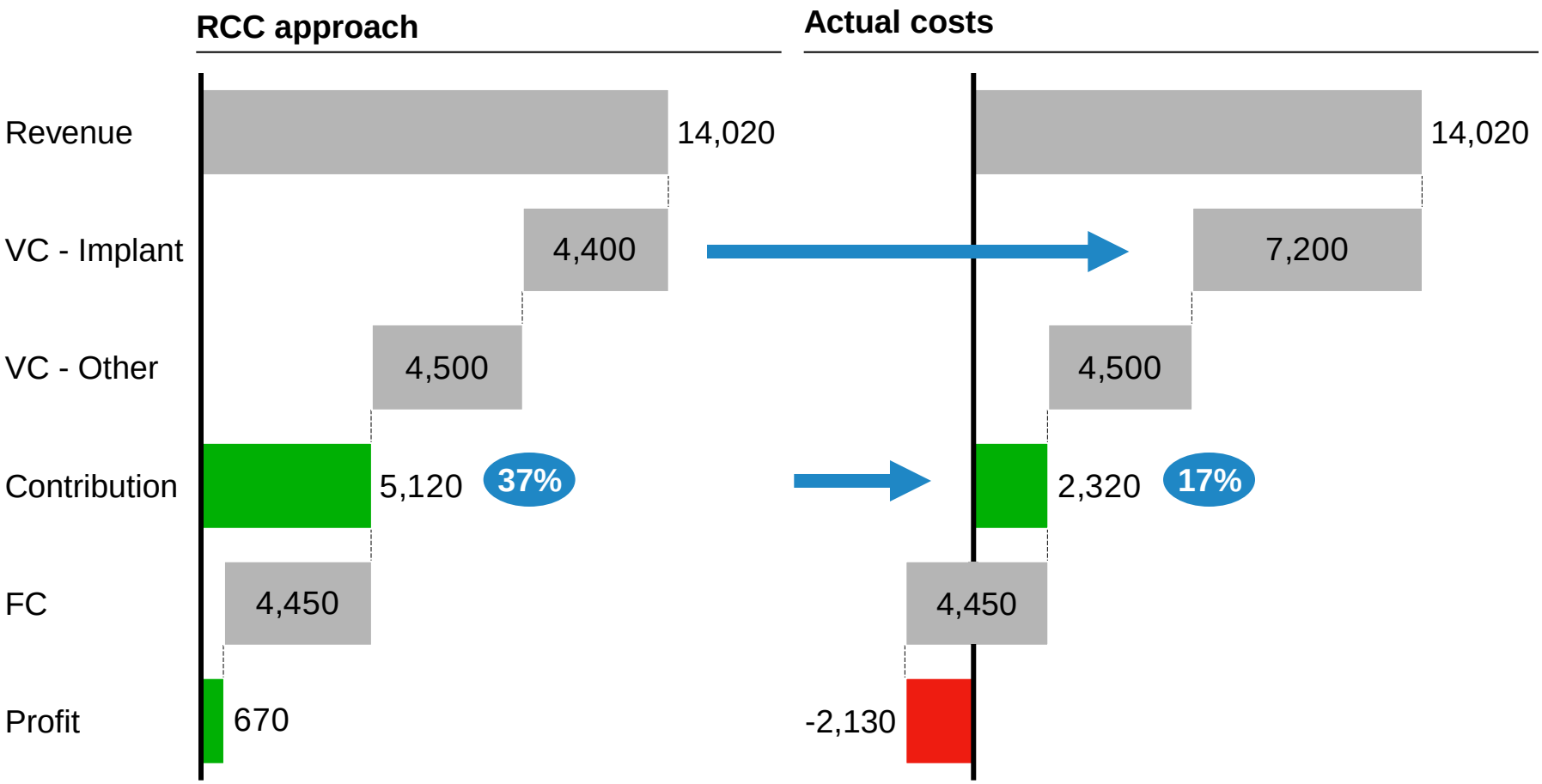
Detailed on next page



1 DRGs are grouped by removing complication flags like mcc and cc. Profitability is defined as (NR-total cost)/NR*100

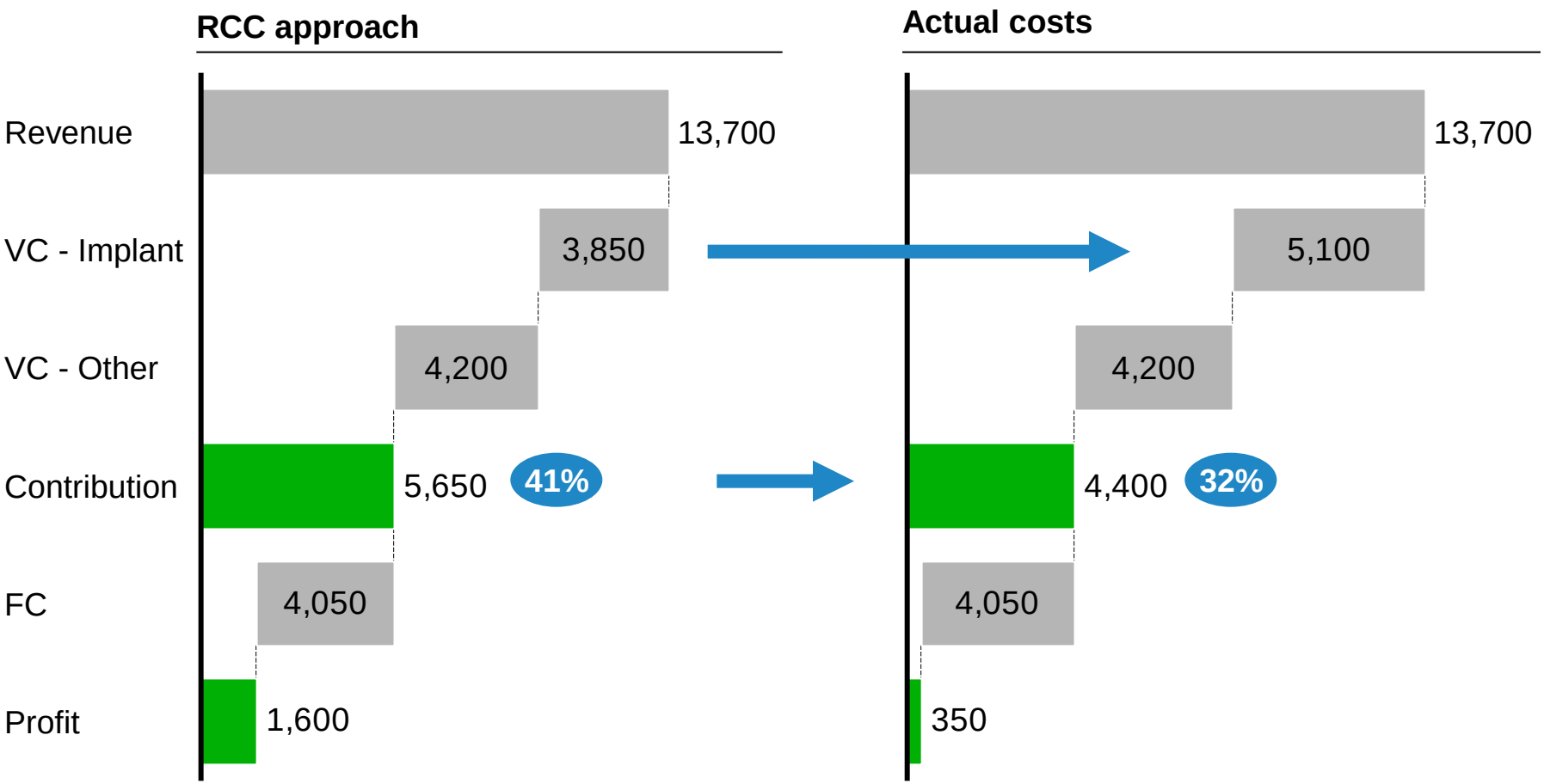
Contribution of hip replacement using RCC vs actual costs

$ per case



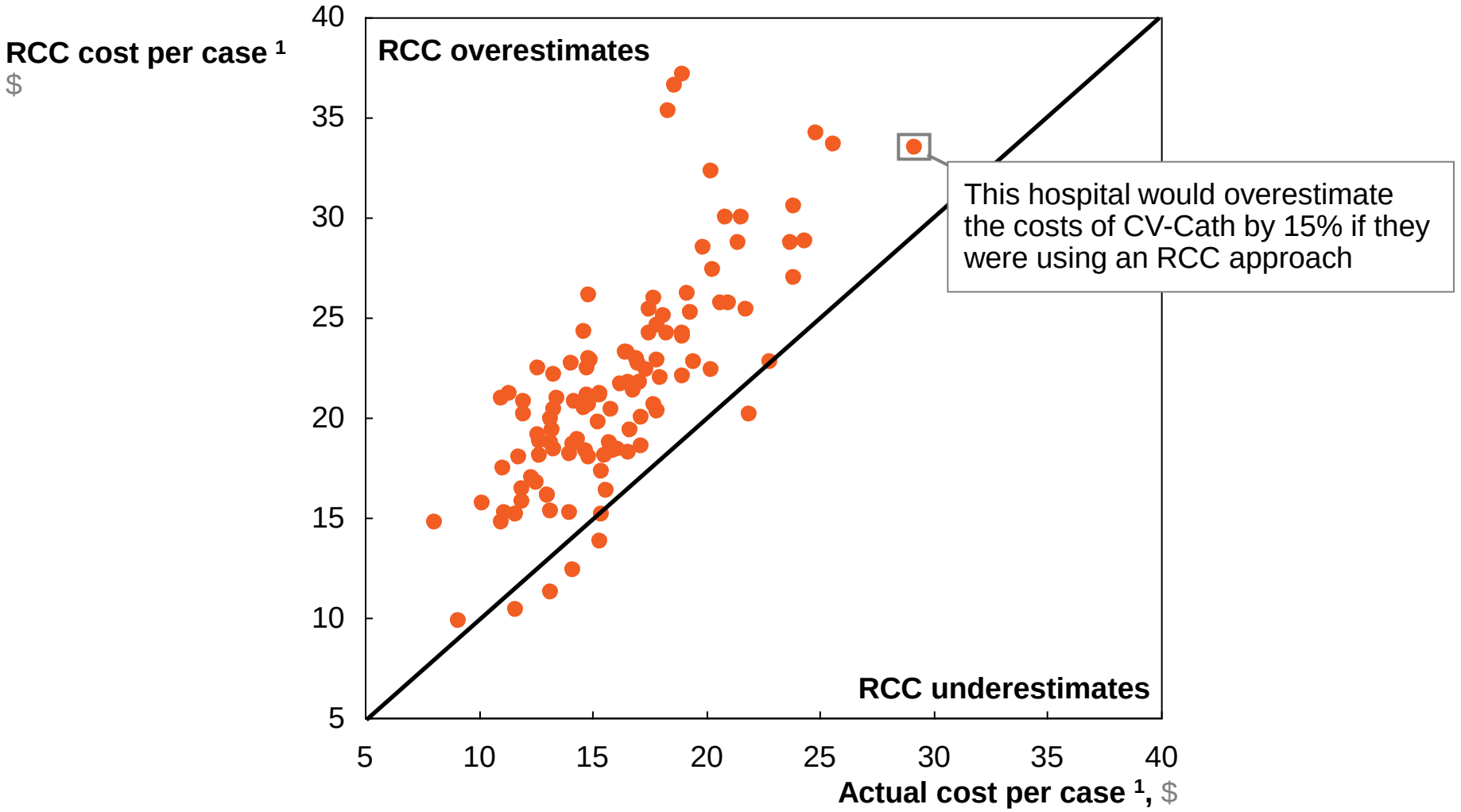
Contribution of knee replacement using RCC vs actual costs

$ per case



Many hospitals overestimate the costs of CV - Cath with RCC approach

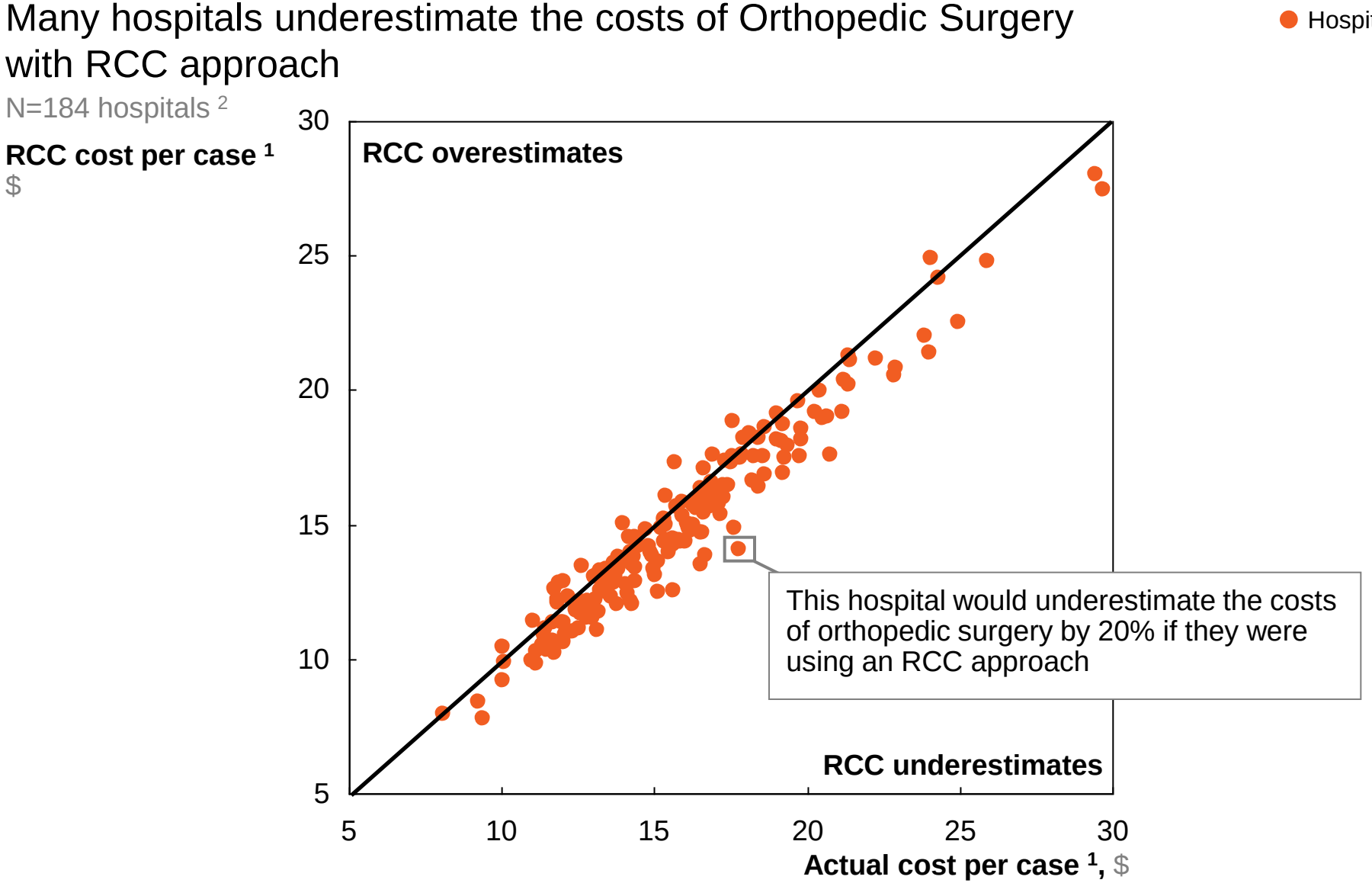
N=114 hospitals [2]



1 Represents total average cost per case across all payors
2 Hospitals > $5 Million in total spend on cath service line

Many hospitals underestimate the costs of Orthopedic Surgery with RCC approach

N=184 hospitals [2]



1 Represents total average cost per case across all payors
2 Hospitals with > $5M in total spend on orthopedic surgery service line

Recap of what we've learned and what it means

- Most hospitals use some form of cost-charge ratios (RCCs) to estimate patient costs
- Historically hospitals have used cost estimations to prioritize service lines and DRGs for growth. For this purpose, RCCs are OK – not perfect, but mostly suitable
- However, hospitals are increasingly looking at their cost data to determine more detailed insights …
  - Who is my lowest cost physician in drugs, for a given DRG?
  - Who is my lowest cost physician in big $ implants, for a given DRG?
  - How do I become more competitive in a world of increased cost and price transparency?

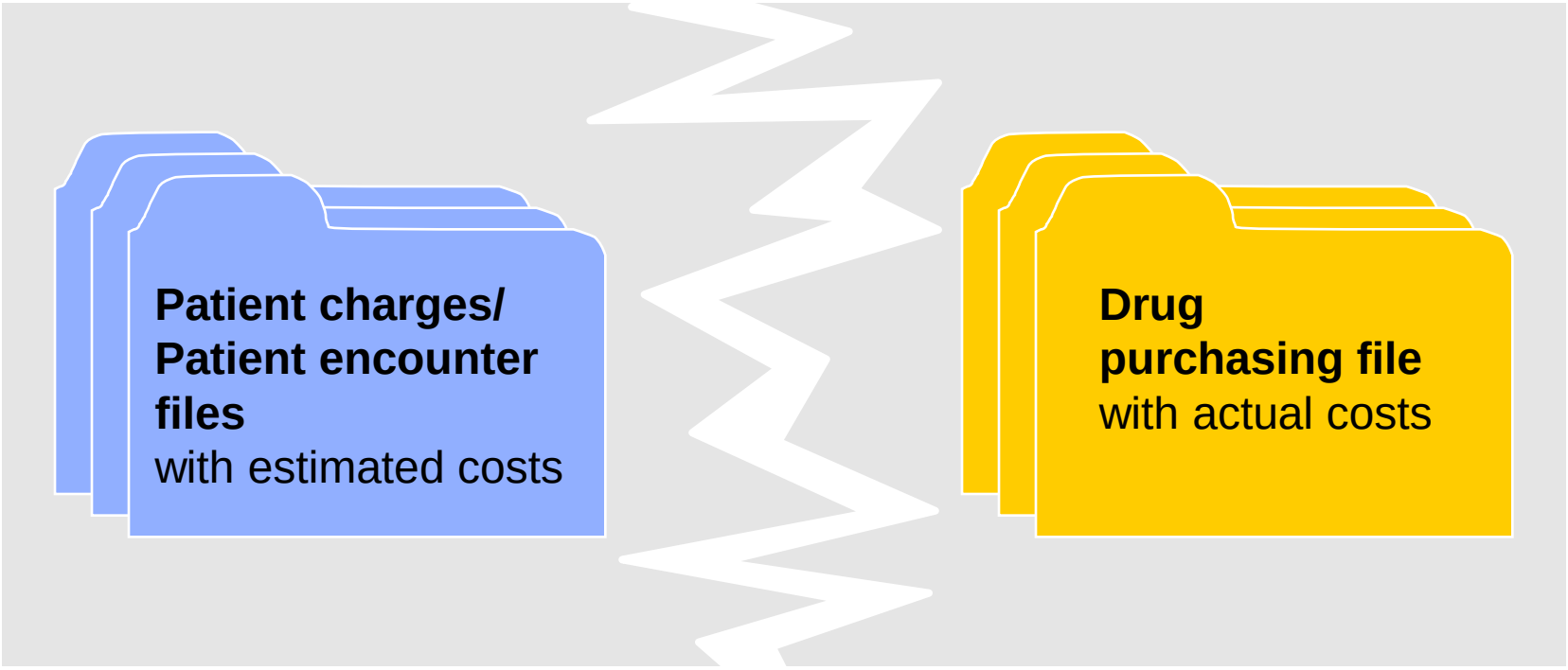
  … and here RCCs are largely not suitable and an improved form of patient cost accounting is a fundamental need

Source for all analyses: De-identified Objective Health client data; Premier discharge database; Objective Health analysis

Are your cost estimate leading you to the wrong decisions?

- Most hospitals use cost-to-charge ratios
- Cost-to-charge ratios can lead to sub-optimal operational and strategic decisions
- **Without implementing cost accounting, hospitals can make some adjustments to improve**

Most hospitals today do not connect patient files (where they estimate costs) to purchasing files (which have actual costs)



Connecting these datasets brings accurate costs to patient data

Patient charges/ encounter files
with estimated costs

Better cost estimates fed into base files

Supercharged **Patient charges/ encounter files**
with more accurately estimated costs

Drug purchasing file
with actual costs

Benchmark costs
(from database of 200+ hospitals)

The disconnect can be bridged by categorizing drugs into a common language across disparate data sources

	Source	Taxonomy					
		Pharmaceutical class	**Therapeutic class**	**Drug name**	**Route of adminis-tration**	**Dosage strength**	**Units**
Enoxaparin, Lovenox INJ 40mg 0.4ml	Detailed charge file	Blood modifier agent	Anticoagulant	Enoxaparin	Injection	40	MG
Lovenox SAF Syr 40 mg/0.4 ml 10	Purchasing file						
Tylenol Capl 325 mg Hosp 1000	Detailed charge file	Central Nervous System Agent	Analgesic	Acetaminophen	Capsule	325	MG
Acetamin, Tylenol Cap 325 mg	Purchasing file						
Albuterol, Proventil Syrp 2mg/5ml 1ml	Detailed charge file	Respiratory agent	Bronchodilator	Albuterol	Oral	0.4	MG

Q & A

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