

# Defensible Scorecards: Performance Measurement, Compensation for ACOs/PCMHs, and Finding High Value Providers

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# Problem

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**Physician performance**

**Bottom line**

**Complex**

**Reputation**

**Value delivery**

**Multiple performance measures**



# Agenda

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## Defensible Composites

- Sources of individual measures
- Why composites are good
- Structuring a composite
- Making composites defensible and fair
- Potential issues
- Composite suitable for payment

## Leveraging High Value Providers

- Identifying high value care providers
- Existing yardsticks for value
- Leveraging national quality/cost to identify value care
- Identifying and accelerating features of practitioners of high value care

# Large numbers of individual measures available

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- Performance measurement need well recognized
- Set of nationally recognized and vetted measures growing
- Diverse set of specialties and wide range of practice require a broad set of measures
- Measurement should encompass the full scope of practice, frequently expressed as domains

- Satisfaction
- Quality
  - Screening
  - Preventative care
  - Medication management
  - Outcomes
- Potentially Avoidable
  - Admissions
  - ED use
  - Readmissions
  - Complications
- Cost

# Large library of “compositable” quality measures

<b>Healthcare Effectiveness Data and Information Set (HEDIS)</b>	<b>Process of Care and Outcomes Evaluation (POC)</b>	<b>Medication Treatment Quality (MTQ)</b>	<b>IMS Potentially Avoidable Events (I-PAE)</b>	<b>3M™ Potentially Preventable Events (3M™ - PPE)</b>
<p><b>65+ measures</b></p> <ul style="list-style-type: none"> <li>• Effectiveness of Care (EOC)</li> <li>• Access/Availability of Care</li> <li>• Utilization</li> <li>• Relative Resource Use (RRU)</li> <li>• Health Plan Descriptive Information</li> </ul>	<p><b>50+ measures</b></p> <ul style="list-style-type: none"> <li>• POC measures with versions optimized for transparency and care gap detection</li> <li>• Prospective Alerts</li> <li>• Disease Detectors</li> <li>• Composite Measures</li> </ul>	<p><b>50+ measures</b></p> <ul style="list-style-type: none"> <li>• Proportion of Days Covered (PDC)</li> <li>• Appropriate Medication Use (AMU)</li> <li>• Medication Safety (HRM &amp; DDI)</li> <li>• Medication Possession Ratio (MPR)</li> </ul>	<p><b>65+ measures</b></p> <ul style="list-style-type: none"> <li>• IMS Potentially Avoidable Complications (I-PAC)</li> <li>• AHRQ based IMS Potentially Avoidable Admissions (I-PAA)</li> <li>• IMS Potentially Avoidable Readmissions (I-PAR)</li> </ul>	<p><b>40+ measures</b></p> <ul style="list-style-type: none"> <li>• 3M™ APR-DRG Risk Model based</li> <li>• Potentially Preventable RE-admissions (PPR)</li> <li>• Potentially Preventable Complications (PPC)</li> </ul>
<p>For Health Plan HEDIS reporting</p>	<p>For transparency and incentive programs</p>	<p>For MTQ Programs and Medicare 5 star ratings</p>	<p>For Inpatient, outpatient, hospital and ambulatory surgery centers</p>	<p>For Inpatient surgeries</p>
<p>No physician attribution</p>	<p>For Primary and Outpatient Specialty Physicians</p>	<p>For Primary and Outpatient Specialty Physicians</p>	<p>For Surgeons and Hospital Based Specialty Physicians</p>	<p>For Surgeons and Hospital Based Specialty Physicians</p>

# Large library of “compositable” cost measures

Overall Cost	Condition, Disease or Episode	Surgeries	Procedures, Tests & Visits
<ul style="list-style-type: none"><li>• Across population or by disease and/or place of service</li><li>• All Episodes / CRGs</li><li>• Risk adjusted or stratified</li><li>• Provider attribution by specialty</li><li>• Applicable to a primary care, specialties, and surgeons</li></ul>	<ul style="list-style-type: none"><li>• 220 conditions</li><li>• Episode based – total condition related cost</li><li>• Admission based – total cost of admission</li><li>• Attribution to primary care, specialties, and facility</li><li>• Risk adjusted or stratified</li><li>• Applicable to Primary and non-surgical specialties</li></ul>	<ul style="list-style-type: none"><li>• 85 Surgeries</li><li>• Episode Based – total picture of surgery</li><li>• Admission Based – total cost of surgical admission</li><li>• Inpatient and outpatient surgeries</li><li>• Risk adjusted or stratified</li><li>• Attribution to surgeon, consultants, and facility</li><li>• Admissions applicable to surgeons and facility</li></ul>	<ul style="list-style-type: none"><li>• 160 common procedures</li><li>• 200+ test/visits</li><li>• Total cost of procedure</li><li>• Attributed to ordering physician</li><li>• Applicable to a physicians and facility</li></ul>

- Physicians & Facilities are segment into below/at/above peer & benchmark
- Segmentation based on two statistical methods
- Useful for contracting, incentive programs, tiering

# Why composites are a good thing

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1

**Simplify managing a program**

2

**Simplify building a program**

3

**Composites or domains**

# Options for structuring a composite

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## Single composite vs multi domain composite

- Single measure that combines individual measures that cross domains
- Composite of composites
  - Composite is made up of component measures
  - Mutually exclusive clusters of related measures grouped into domains
  - Overlapping clusters of related measures



# Options for structuring a composite

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Choosing which measures to include in the composite

1

**Clinical/business basis**

2

**Empirical basis**

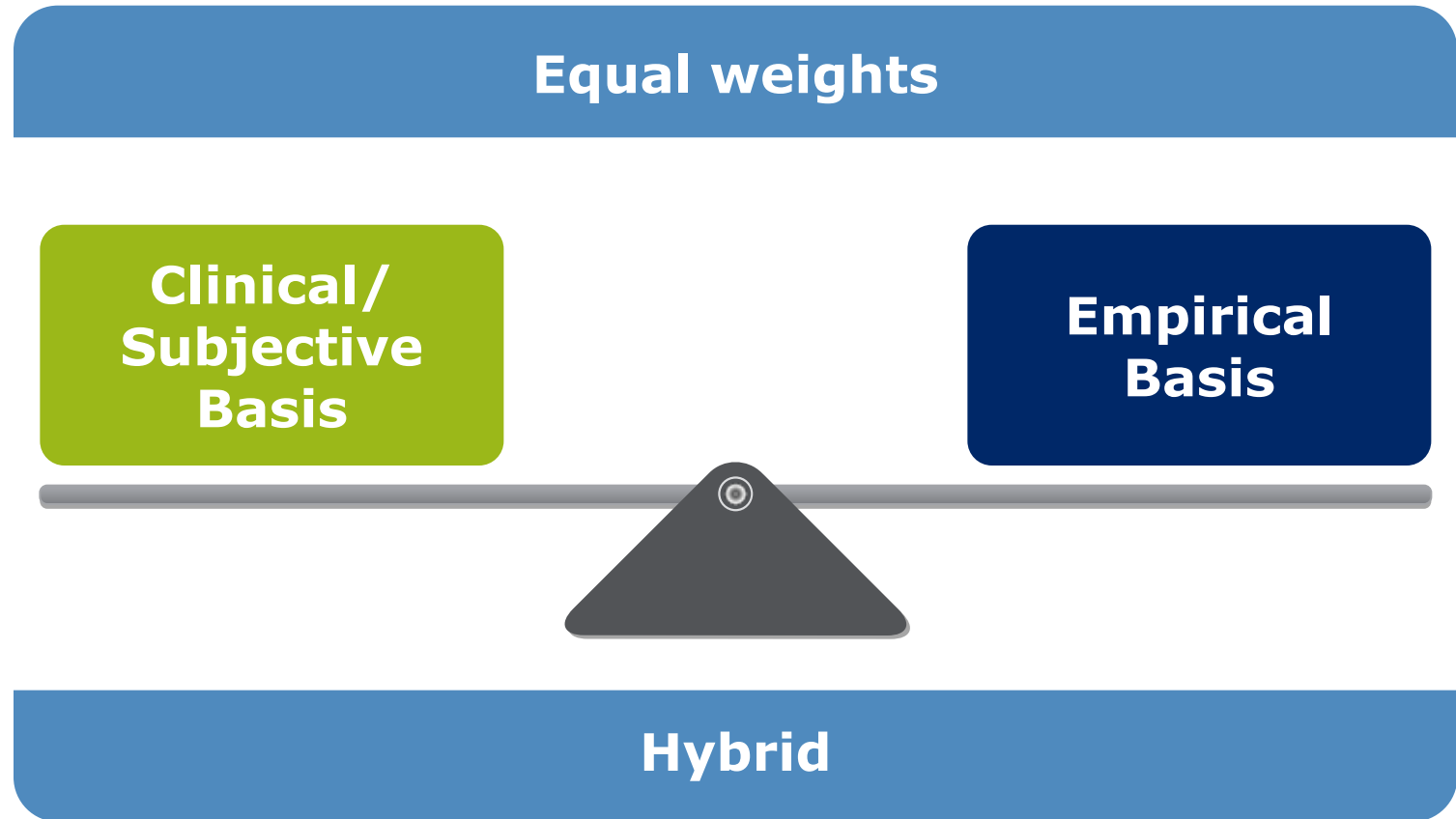
3

**Hybrid**

# Options for structuring a composite

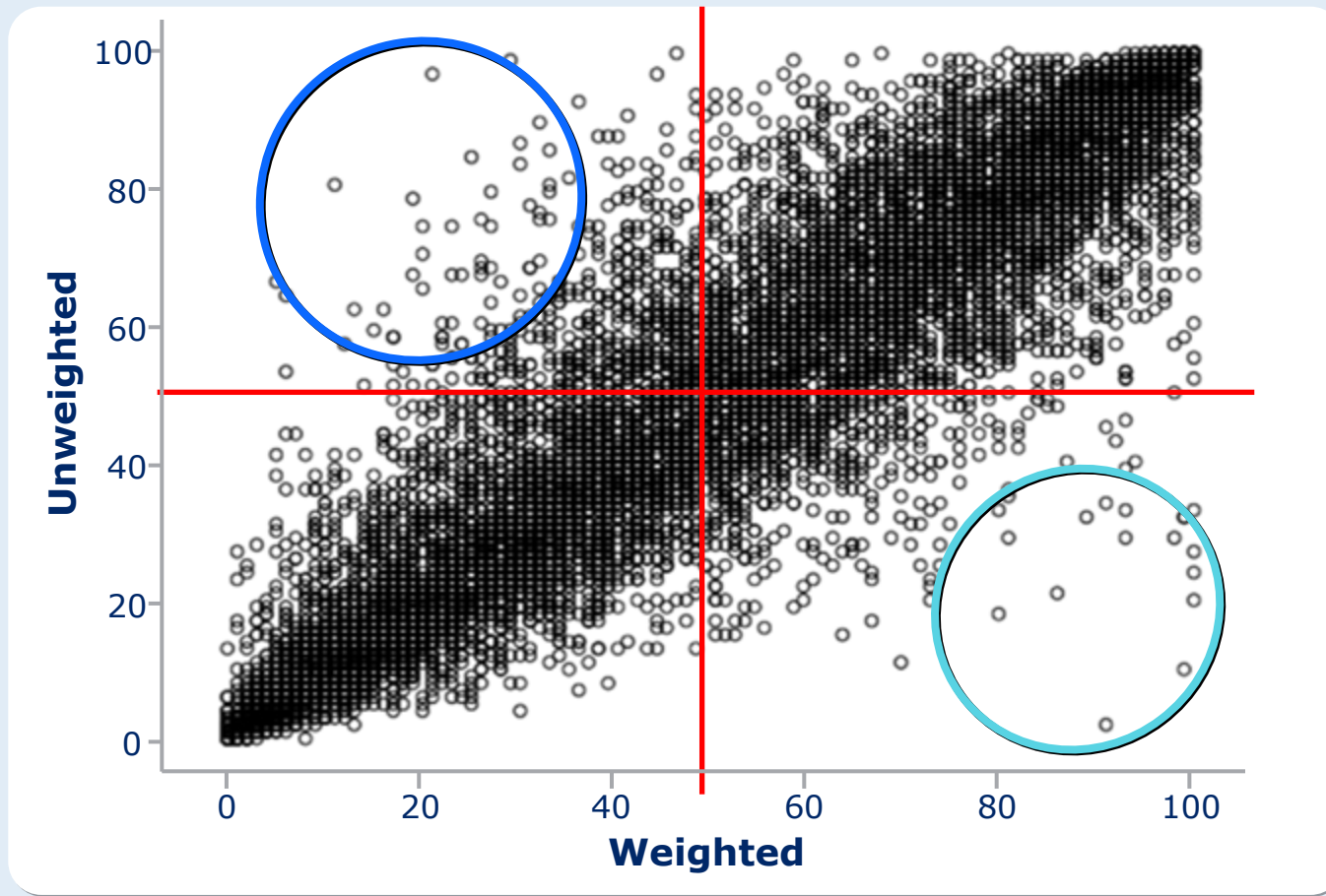
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Weighting the importance of component measures



# Weighting makes a difference

**Percentile rank of Observed/Expected Quality Composite  
Weighted vs Unweighted**



# Making composites defensible and fair

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- ▶ Use recognized methods
- ▶ Use appropriate composite methods
- ▶ Have a statistical basis for segmenting/scoring providers
- ▶ Adjust for different mixes of measures/cases and severity of illness
- ▶ Choose appropriate thresholds for inclusion

# Composite methods combine and/or score

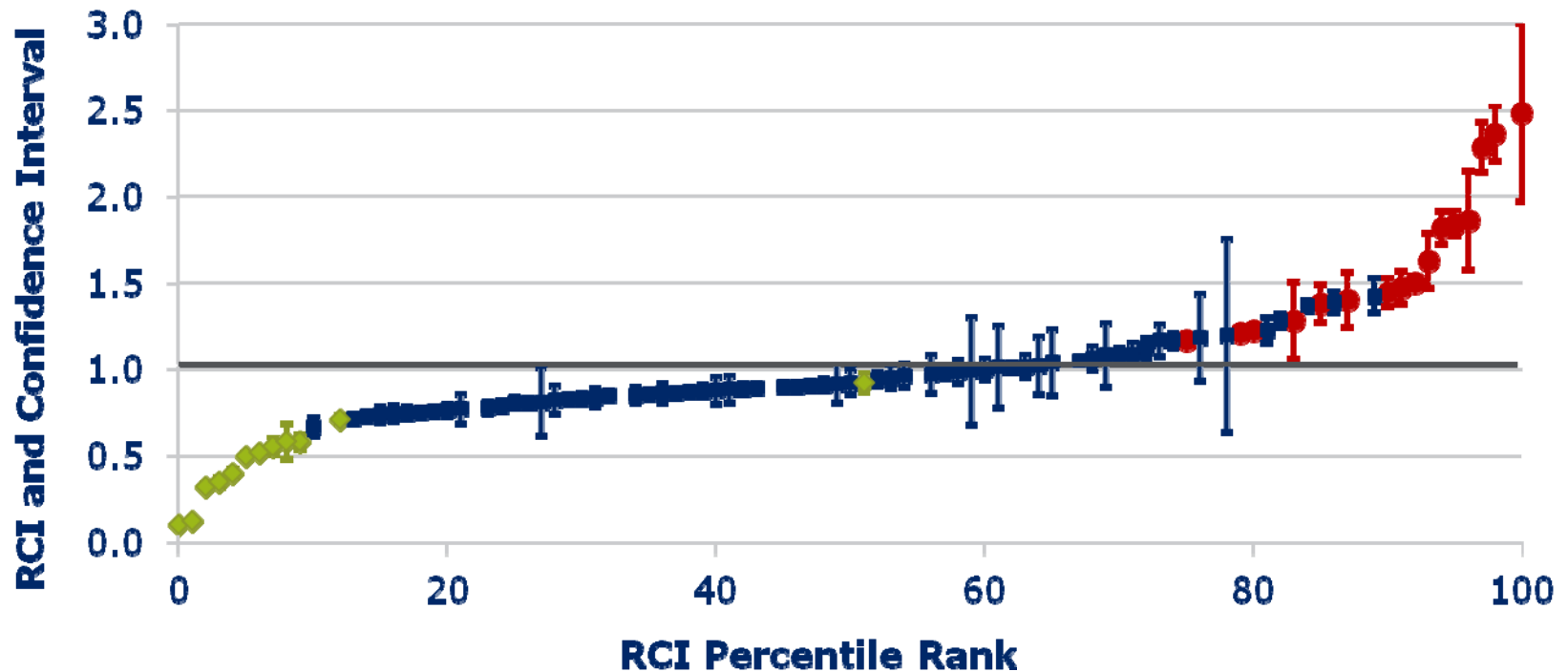
Use appropriate composite methods for the type of results being combined

Composite Method	Required Input for Component Measures	Provider Composite Calculation	Basis for Scoring	Case Mix Adj	Severity Adj
<b>Simple Composite Measure (SCM)</b>	Numerators and Denominators	SCM=Sum of Num/Sum of Den	<ul style="list-style-type: none"> <li>Peer SCM</li> <li>Conf Interval around Provider SCM</li> </ul>		
<b>Mean Standardized Difference (MSD)</b>	Numerators and Denominators	None	Avg of standardized Prov – Peer component rates	✓	
<b>Indirectly Standardized Composite (ISC)</b>	Numerators and Denominators	Standardized Rate	Confidence Interval around Obs/Exp ratio	✓	✓
<b>Standardized Composite Difference (SCD)</b>	Rates	Avg of Components	Confidence Interval around Peer Composite	✓	
<b>Percentile Rank (PR)</b>	Rates	(Case Mix Adj) SCM or Avg of Components	Percentile Rank grouping of Provider Composite	✓	
<b>Value Based</b>					
<b>Relative Cost Index (RCI)</b>	Cost for cost-homogeneous category	Average Observed/Expected	Confidence Interval around Obs/Exp ratio	✓	✓

# Statistical basis for segmenting/scoring

Is Confidence Interval around Observed to Expected sufficient?

**Figure 1. Provider's RCI and Confidence Interval by RCI Percentile Rank**

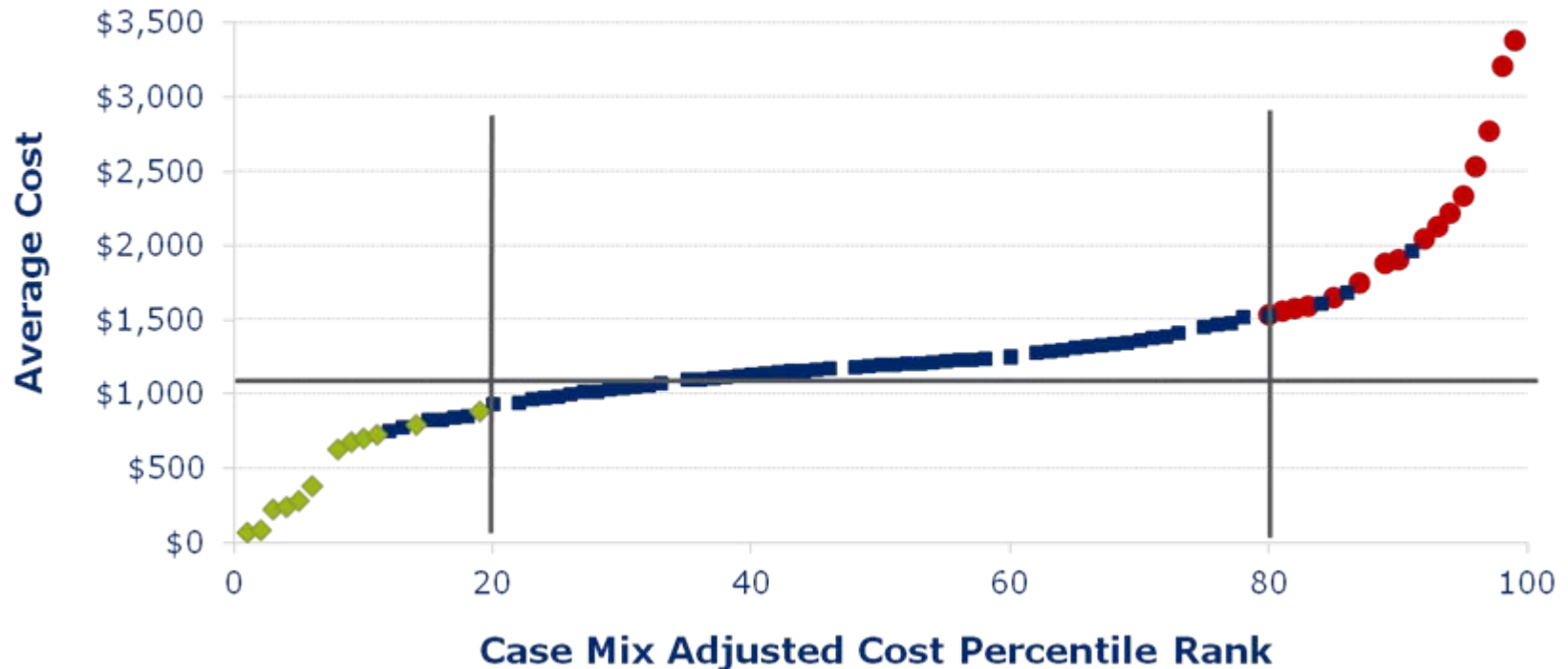


Sample data is based on cost of myocardial imaging procedures. Showing subsample, 92 providers. CI = 0.90.

# Statistical basis for segmenting/scoring

## Is Case Mix Adjusted Average Procedure Cost Sufficient?

**Figure 2. Provider's Average Cost for Procedure by Cost Percentile Rank**



# Examples of dual scoring

Measure	Primary Method	Secondary Method
CMS Process of Care Measures	SCM, MSD or ISC	PR of Case Mix Adj SCM
CMS HCAHPS - Patient Experience	SCD	None
Hospital-Acquired Conditions (HAC)	SCD	None
CMS Mortality (PN, HF and AMI)	Modified MSD	PR of Adj Rates
AHRQ Patient Safety Indicators	Modified MSD	PR of Adj Rates
Potentially Avoidable Readmissions	ISC	
Physician Cost of Care (Episode based)	Relative Cost Index (O/E)	PR of Case Mix Adj Cost
Physician Cost of Care (Total cost of care)	Relative Cost Index (O/E)	PR of Case Mix Adj Cost
Hospital/Facility Cost of Care	Relative Cost Index (O/E)	PR of Case Mix Adj Cost

SCM - Simple Composite Measure  
 MSD - Mean Standardized Difference  
 PR - Percentile Rank

ISC - Indirectly Standardized Composite  
 SCD - Standardized Composite Difference



# Potential issues with composite

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**1**

**Each physician will have a different mix of measures**

**2**

**Multiple measures could assess the 'same thing'**

# Potential issues with composite

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3

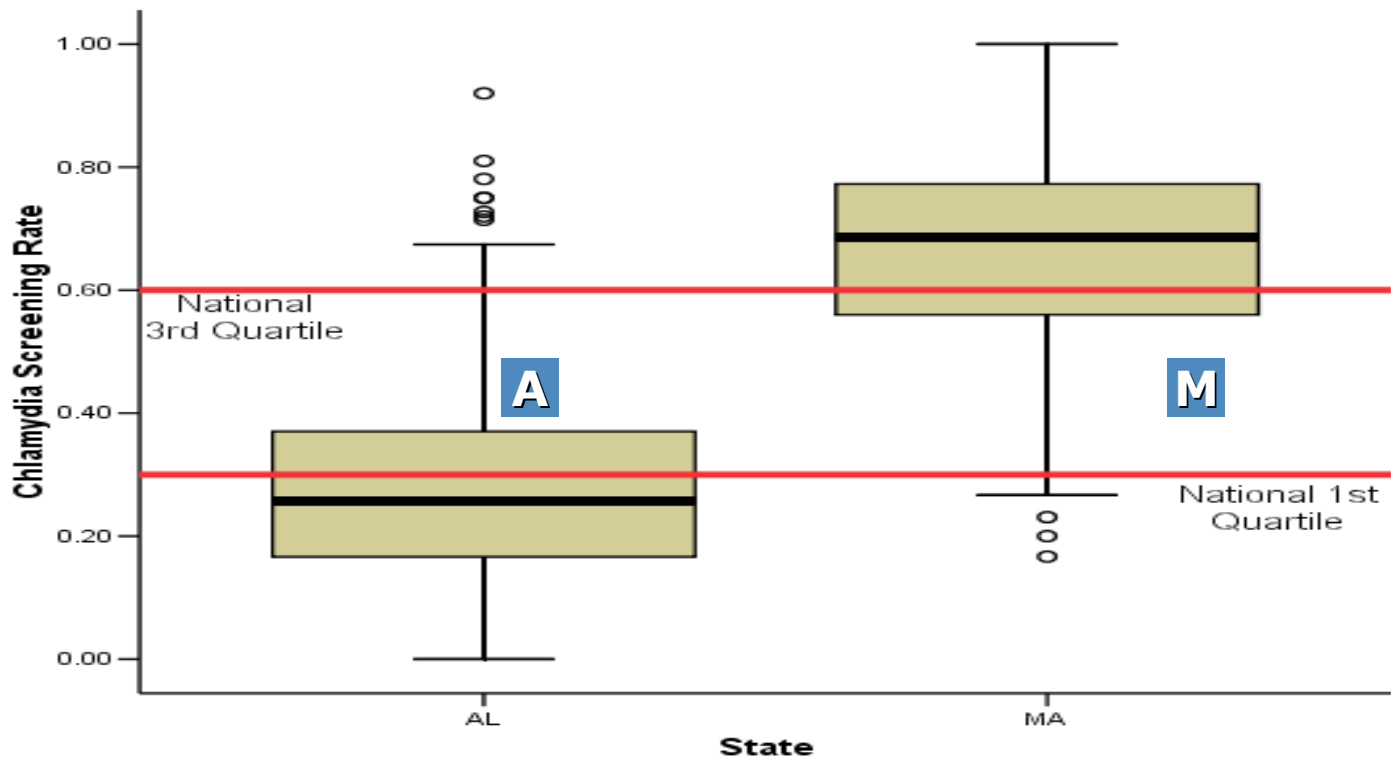
**Component domains/measures have different data types**

4

**PCMH / ACO / small-medium health plan may not have sufficient volume to form a peer group for each measure**

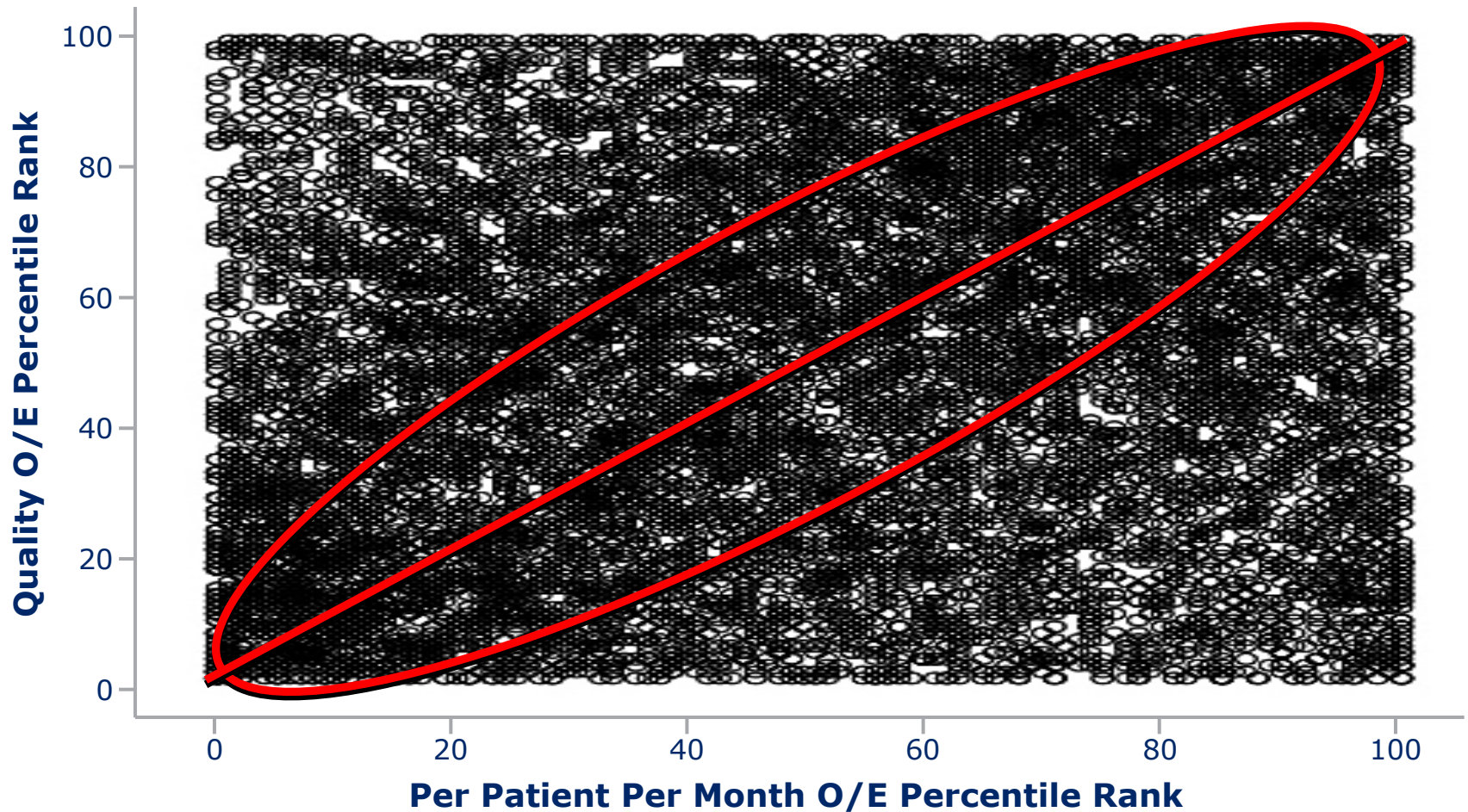
# Benchmarking matters

## Chlamydia Screening Rate by State



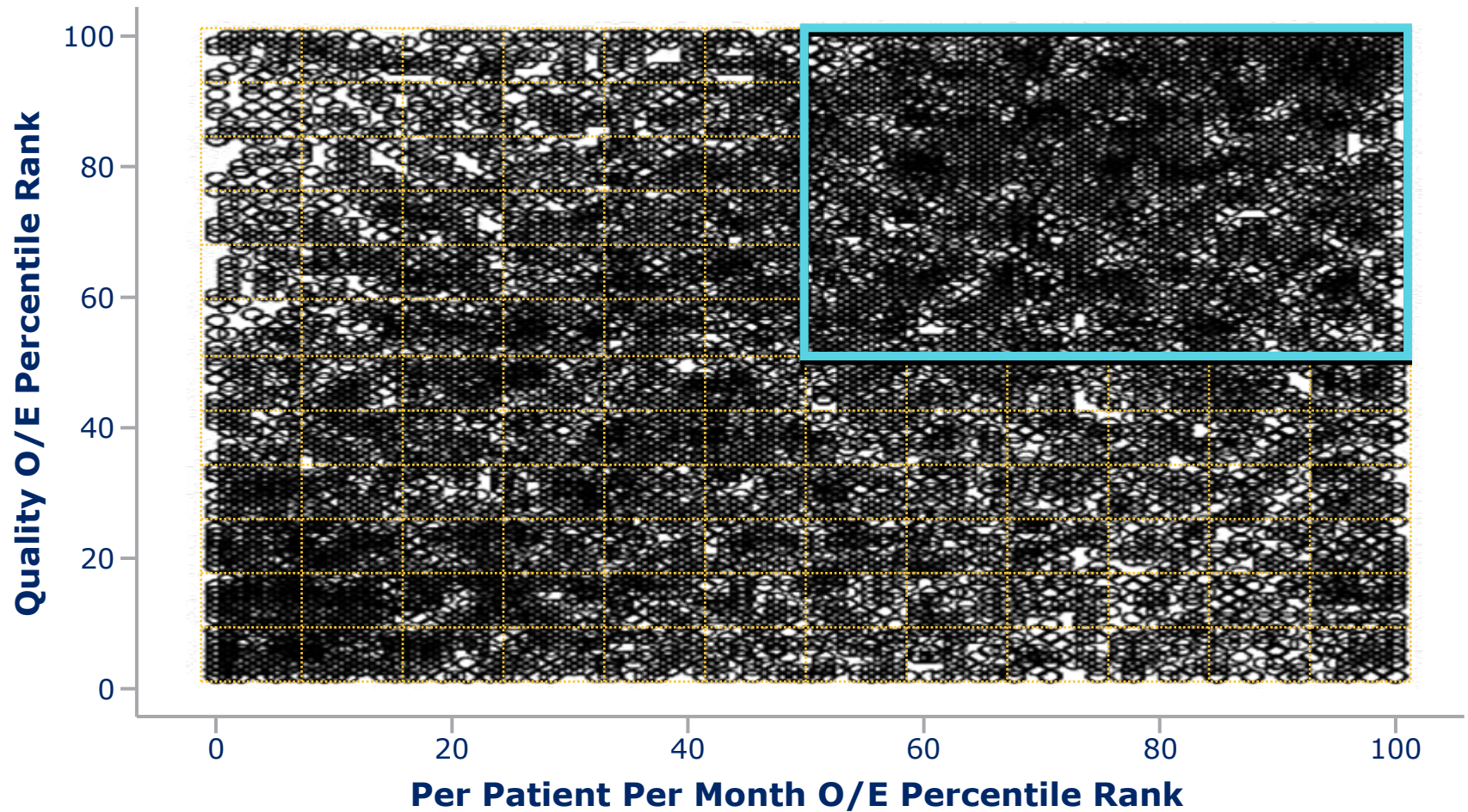
# Combining quality and cost

Quality and Cost are very poorly correlated



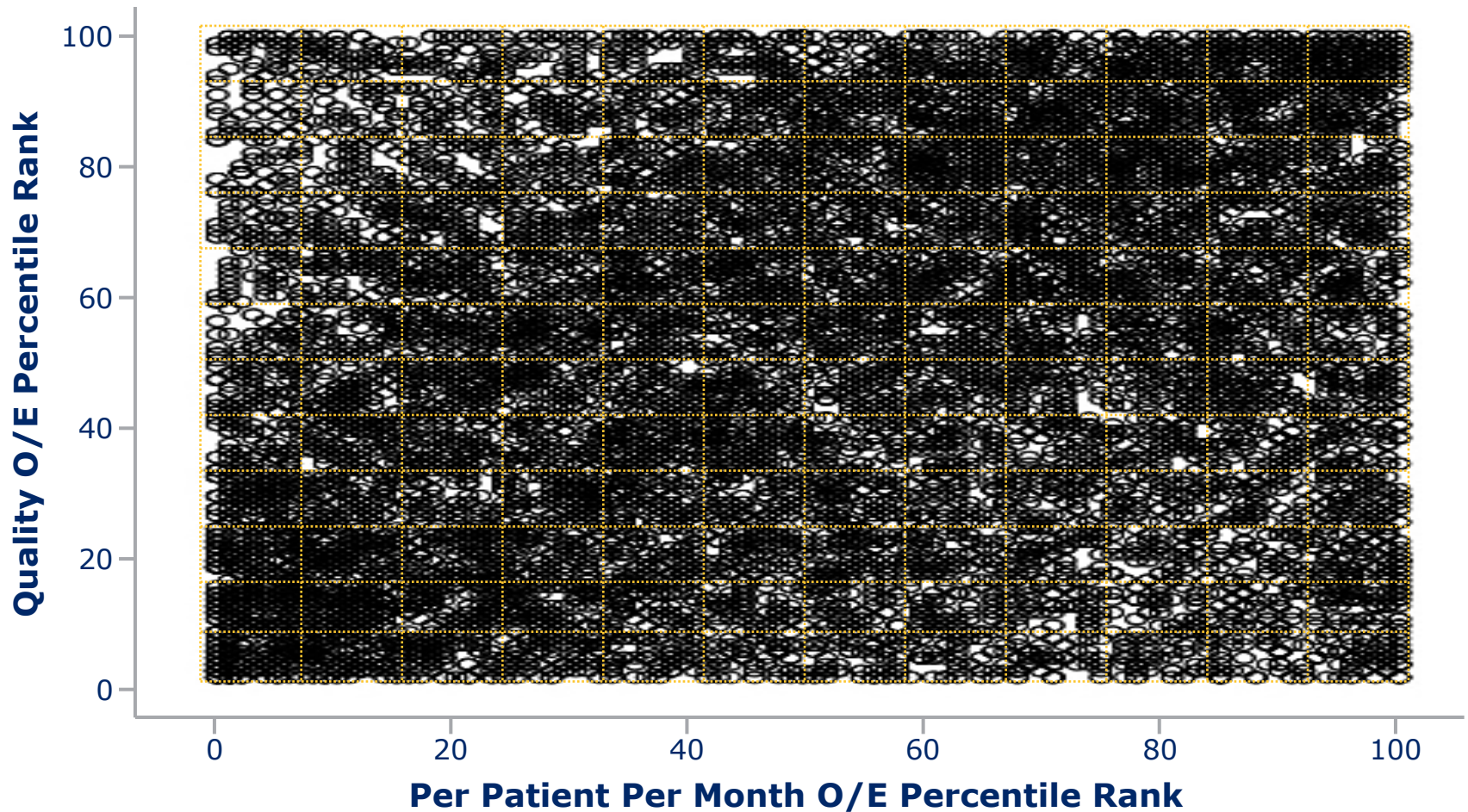
# Combining quality and cost

## How to use for tiering



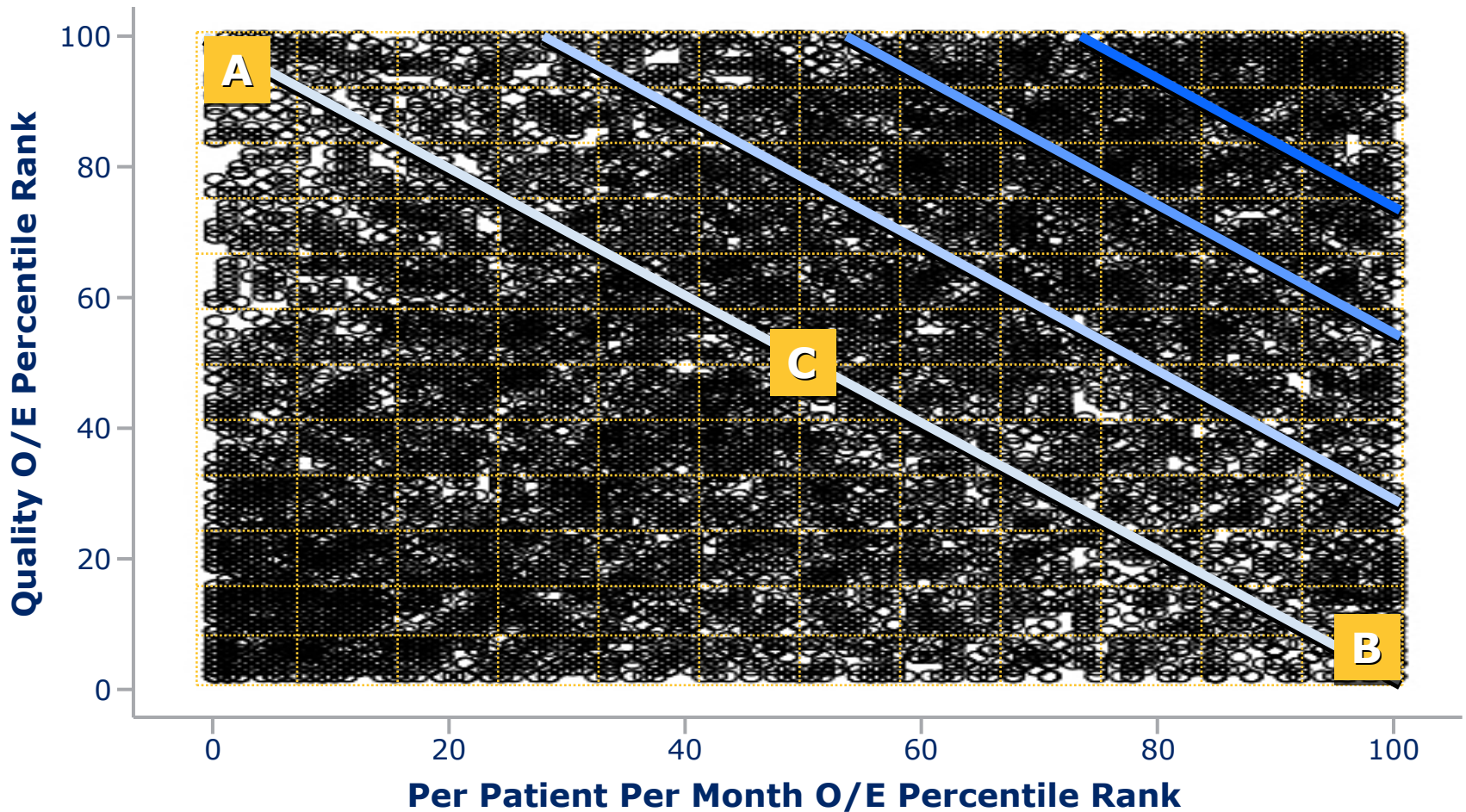
# Combining quality and cost

## Cell placement determines compensation



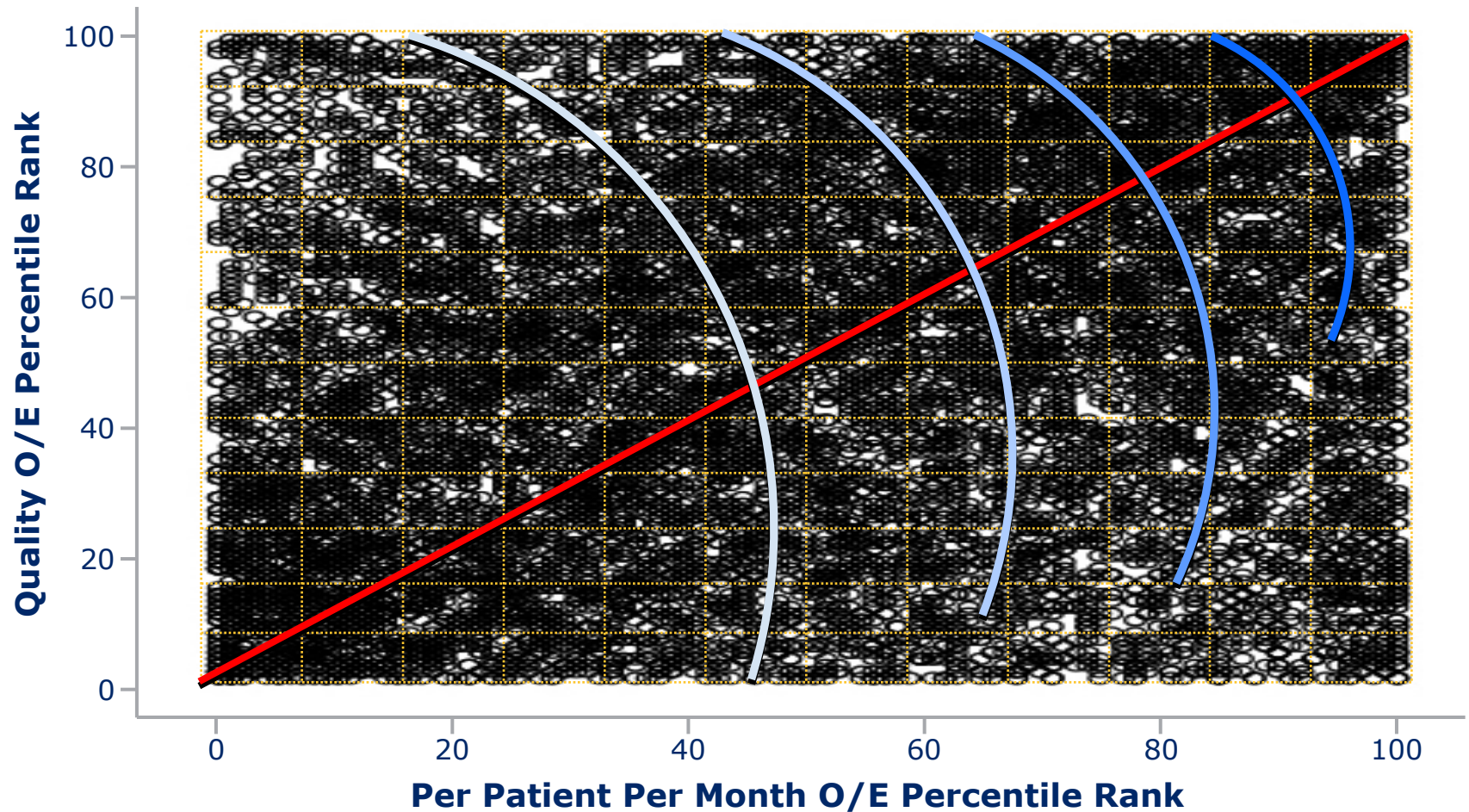
# Combining quality and cost

Result based on Cost + Quality



# Combining quality and cost

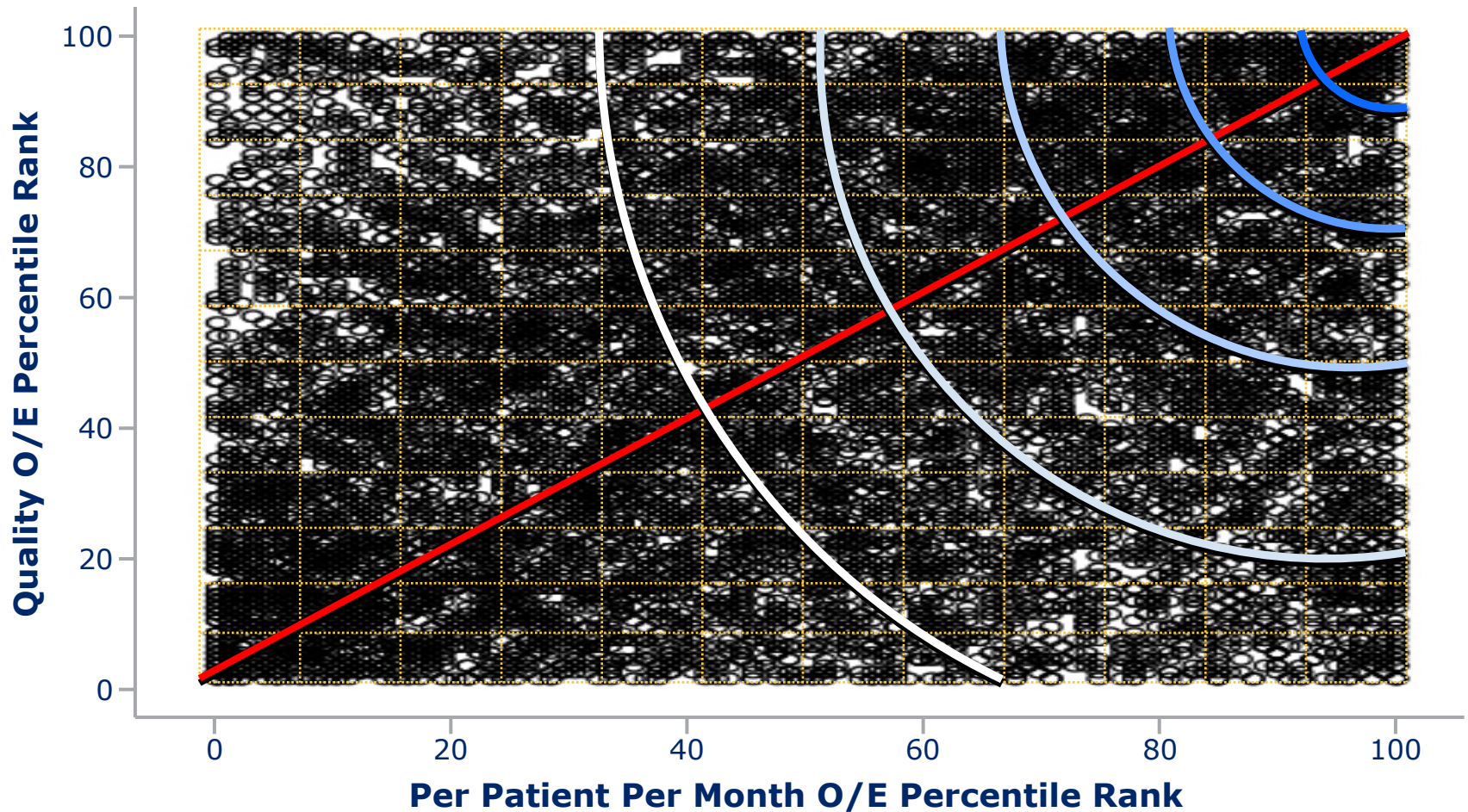
Results based on value (quality/cost)





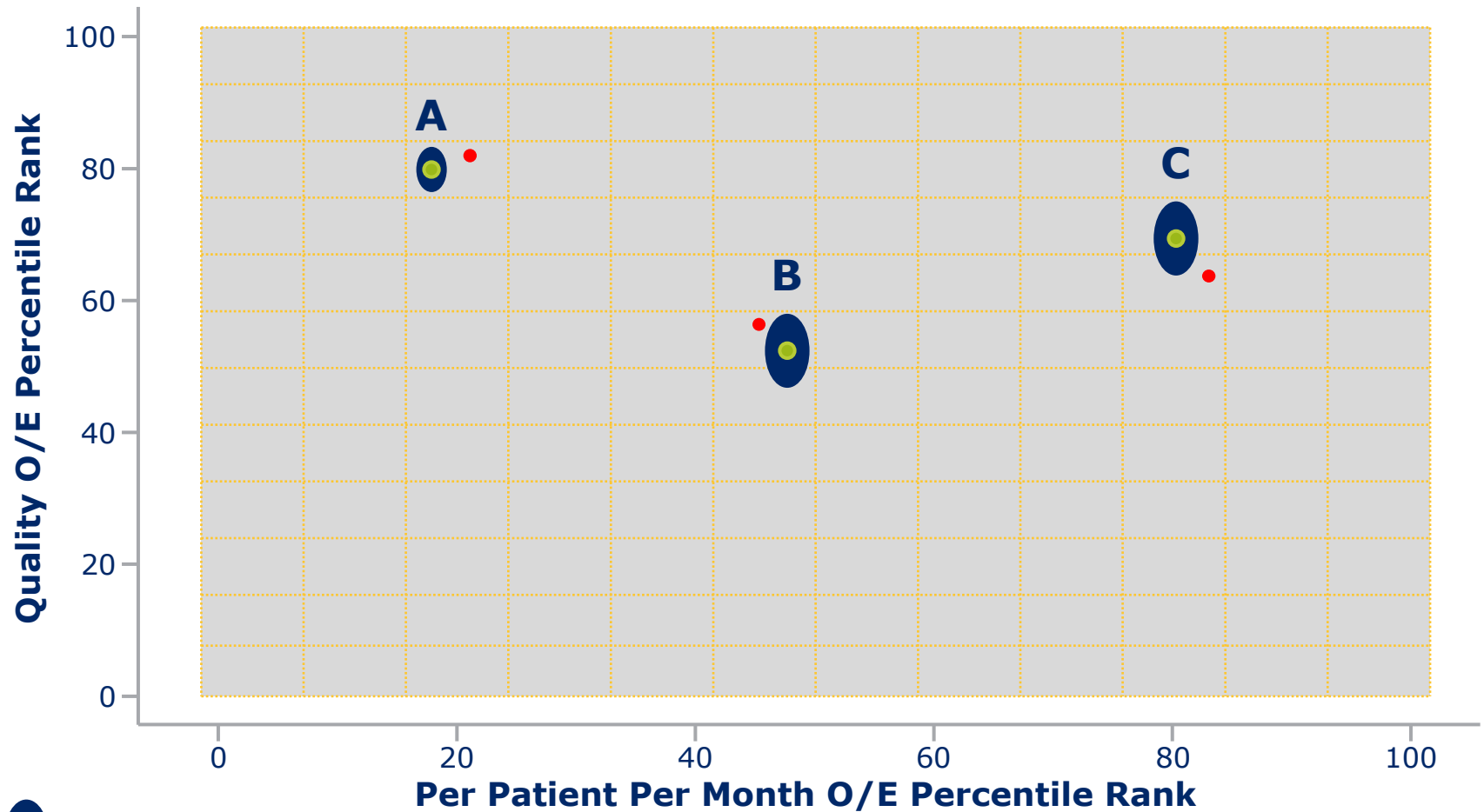
# Combining quality and cost

Results based on the distance from best in Q and C



# Combining quality and cost

## Adding a second scoring criteria



 green = cost + quality composite result, blue = confidence interval

# Objectives

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- ✓ Understand quality and cost measures in a single composite
- ✓ Identify the factors that influence composite measure choices
- ✓ Learn how a single measure can be fairly and defensibly used
- ✓ Gain insight into a meaningful difference when physicians have similar composite results

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