What are the underlying causes of poor quality and high costs?

Elliott Fisher, MD, MPH
Professor of Medicine
Dartmouth Medical School

Overview of the argument

- Underlying causes of poor quality and high costs
  - Flawed understanding of medical care
  - Inadequate information to support wise decisions
  - Flawed incentives
- Solution
  - Expanded model of medical care
  - Organizational accountability -- for quality and costs
  - Better information
  - Fix the incentives

Outline

Part 1 The implications of regional variations in Medicare spending

Part 2 Causes and remedies

The implications of regional variations in Medicare spending

Motivation

Large disparities in spending across U.S. regions

- Longstanding -- first noted in early 1970s
- Not due to differences in price or illness
- Largely due to differences in *quantity of care: overall intensity*

Key Question: *What does the additional spending buy?*

- What kind of care?
- What are the implications for health?

Fisher et al. Ann Intern Med 2003
Part 1: 138:273-87; Part 2; 288-98

Study design

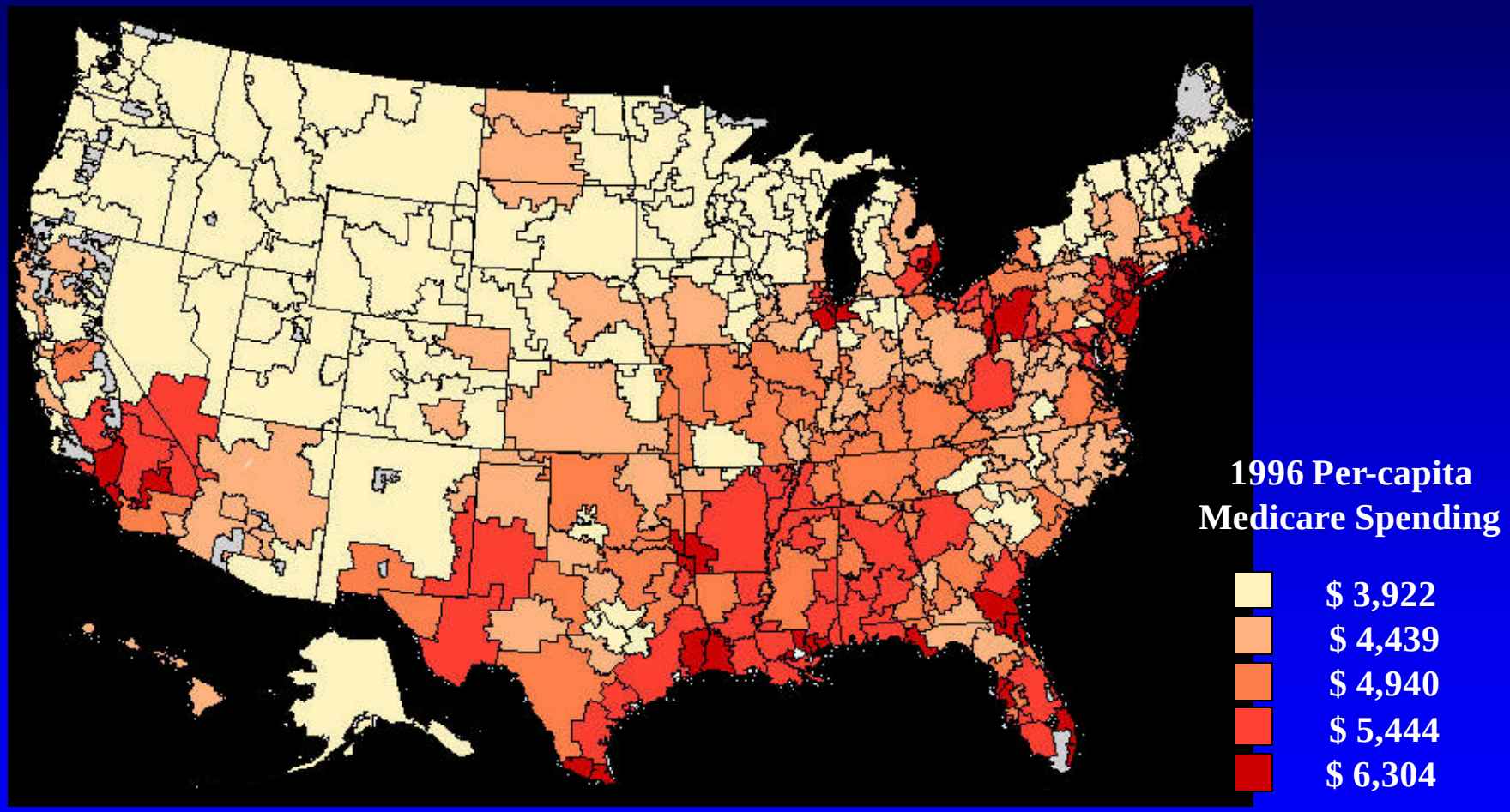
Study population -- Medicare enrollees

Acute myocardial infarction	n = 159,393
Colorectal Cancer	n = 195,429
Hip Fracture	n = 614,503
Medicare Current Beneficiary Survey	n = 18,190

Comparison: assigned each group into quintiles

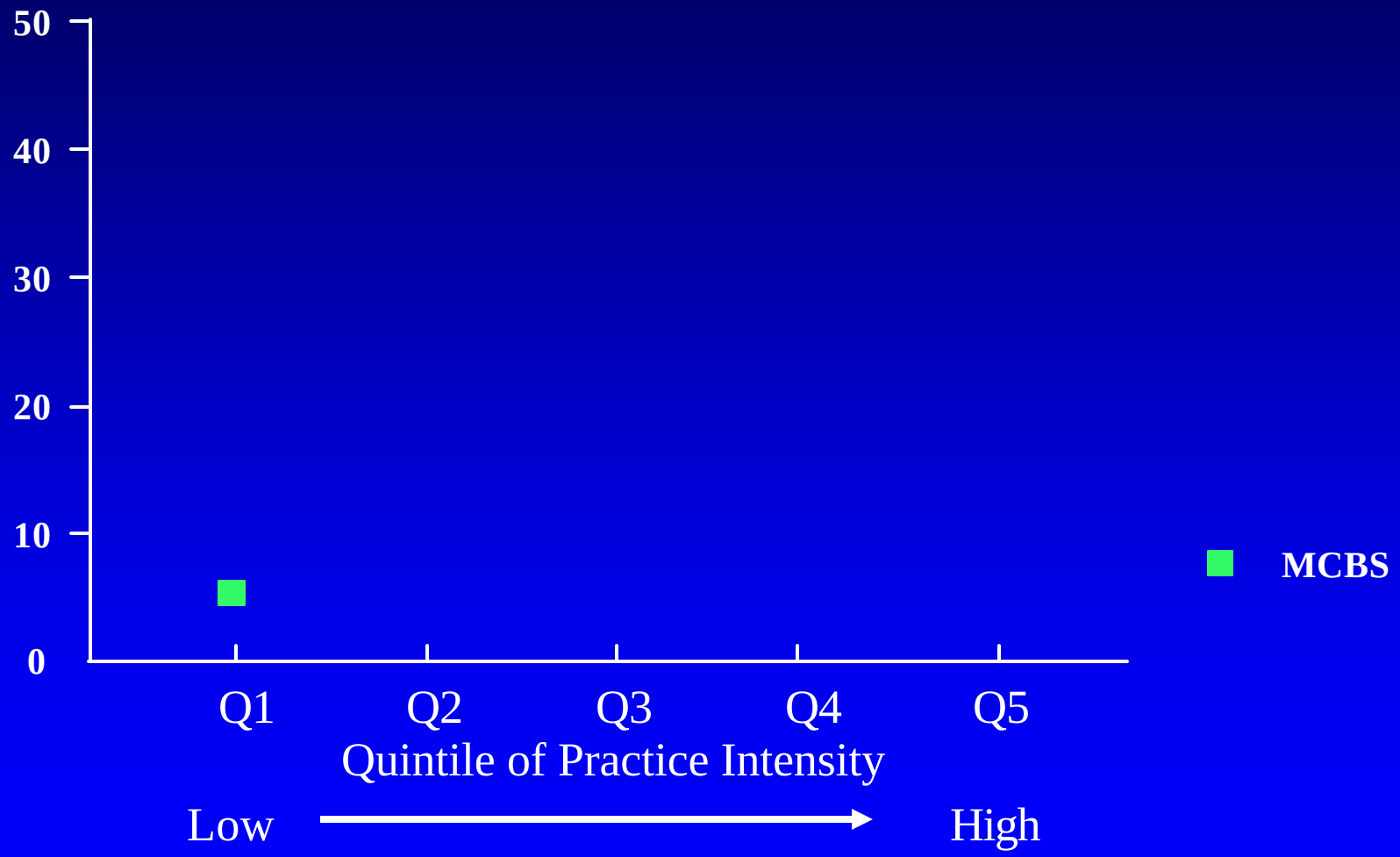
- Based upon practice intensity in region of residence
- Region defined using Dartmouth Atlas regions
- Used two different measures of intensity -- same results

Average age-sex race adjusted per-capita Medicare spending across quintiles of intensity examined in the current study



Ratio: High to Low: 1.61

Were the populations similar at baseline across quintiles?
Predicted one-year mortality



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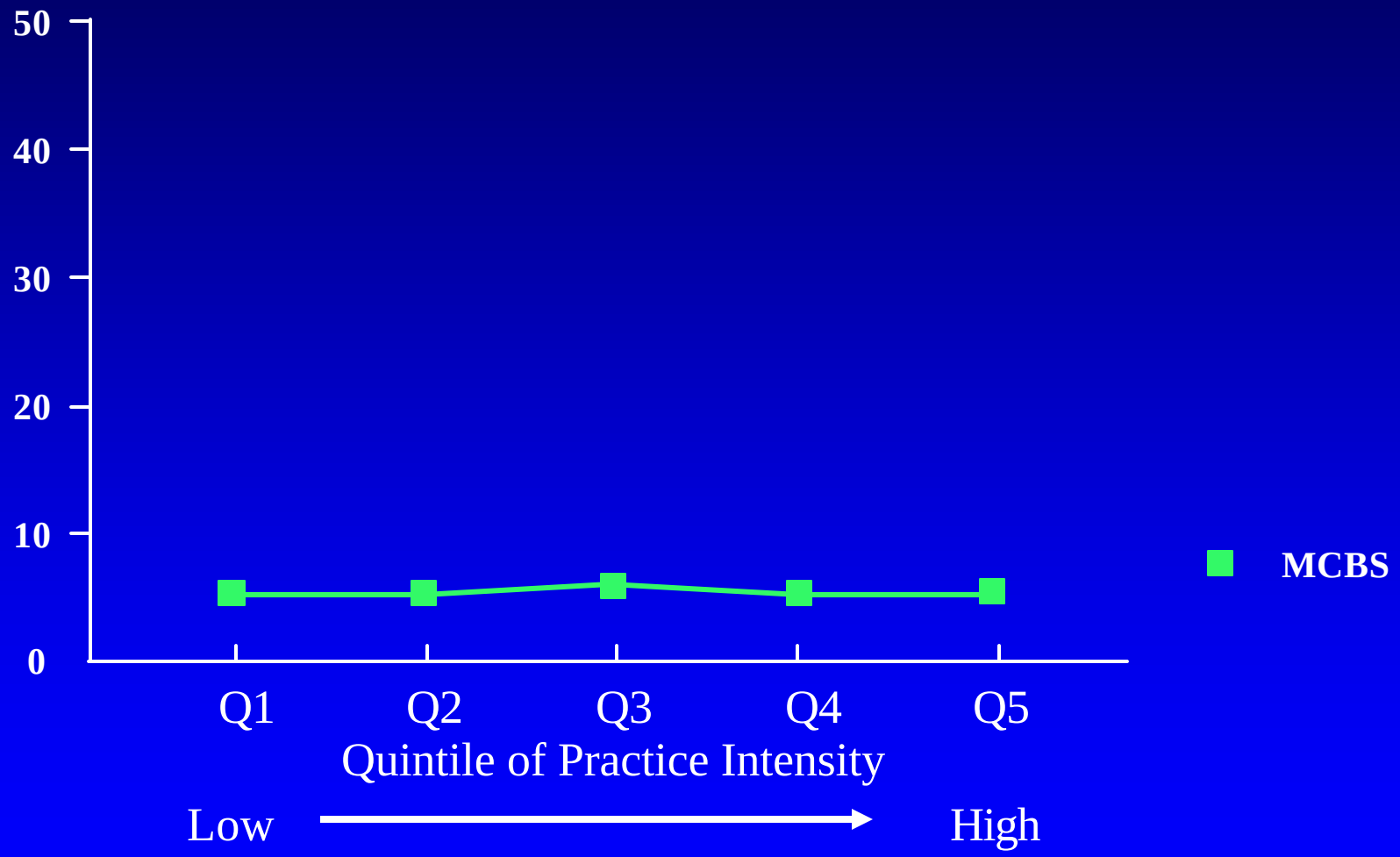

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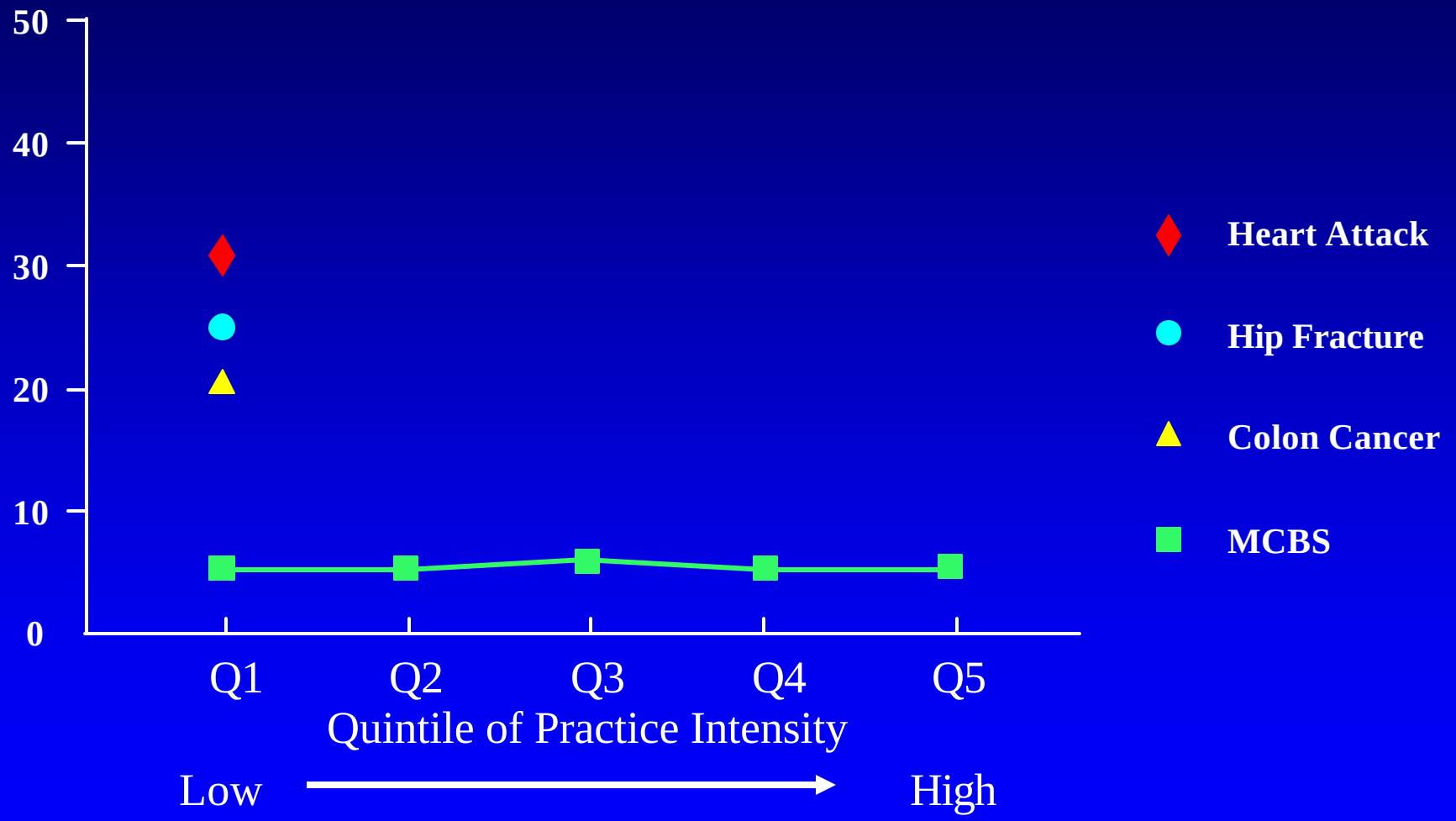

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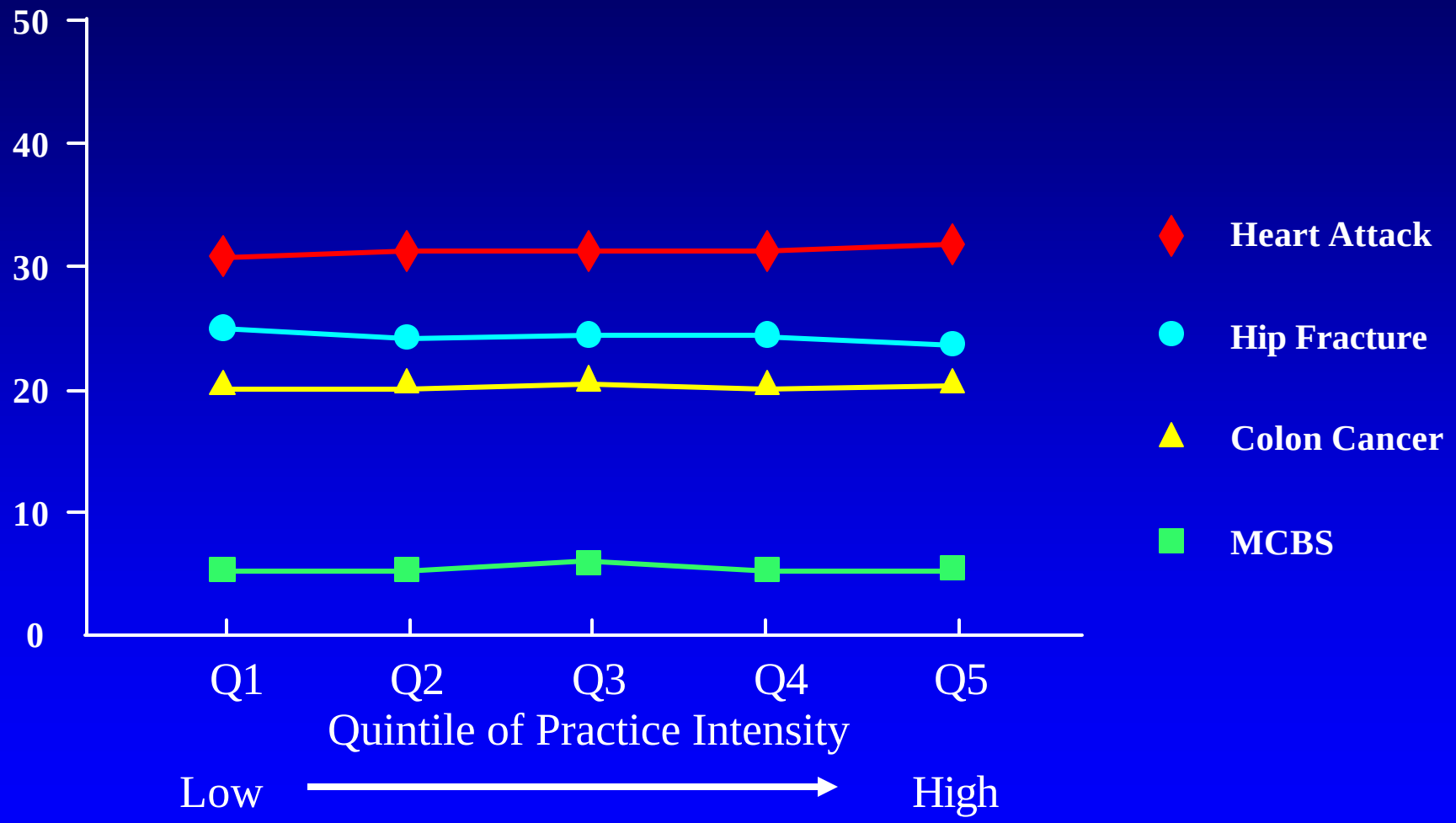
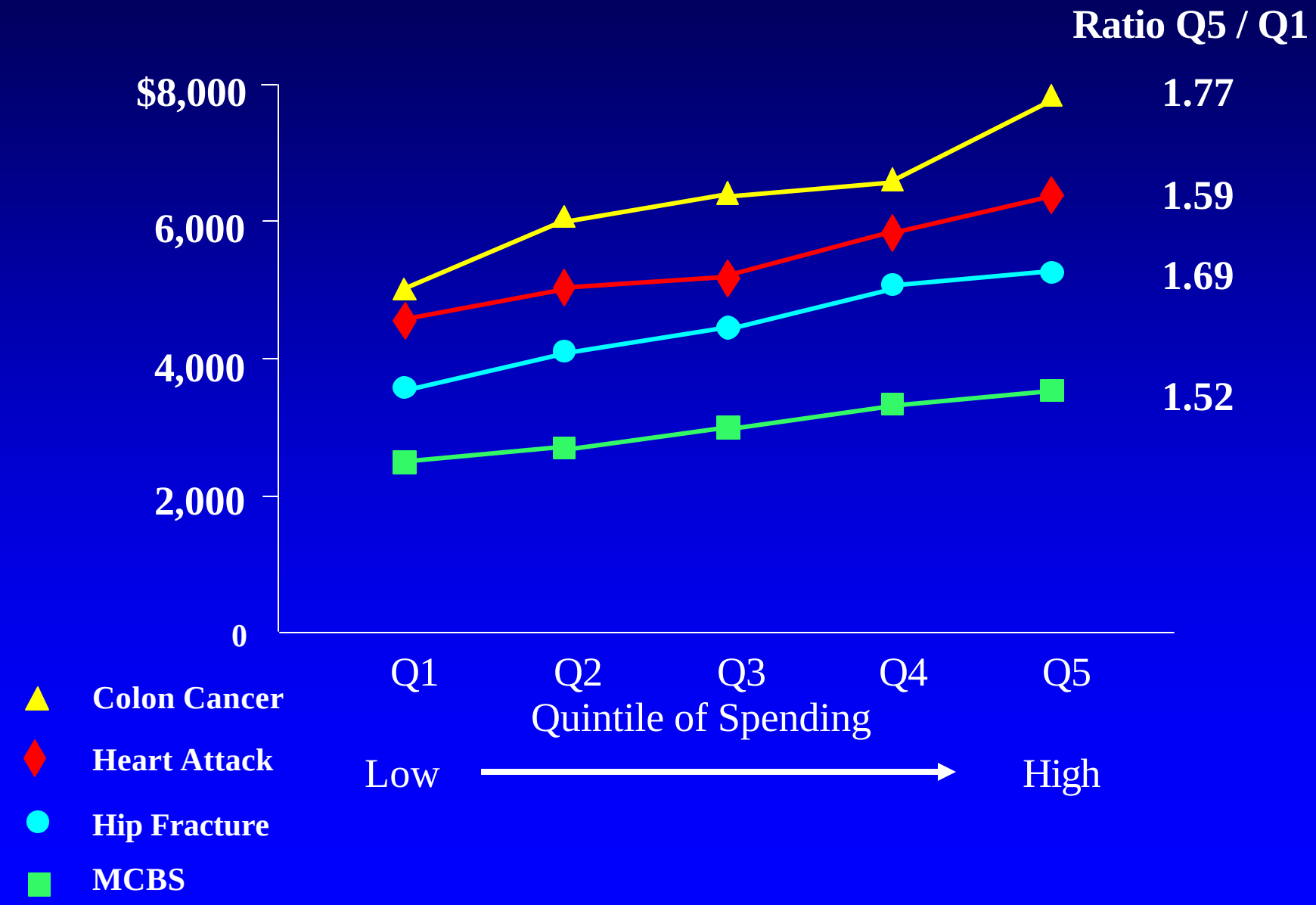


Were they treated differently?

Annual per-capita MD and Hospital resource use

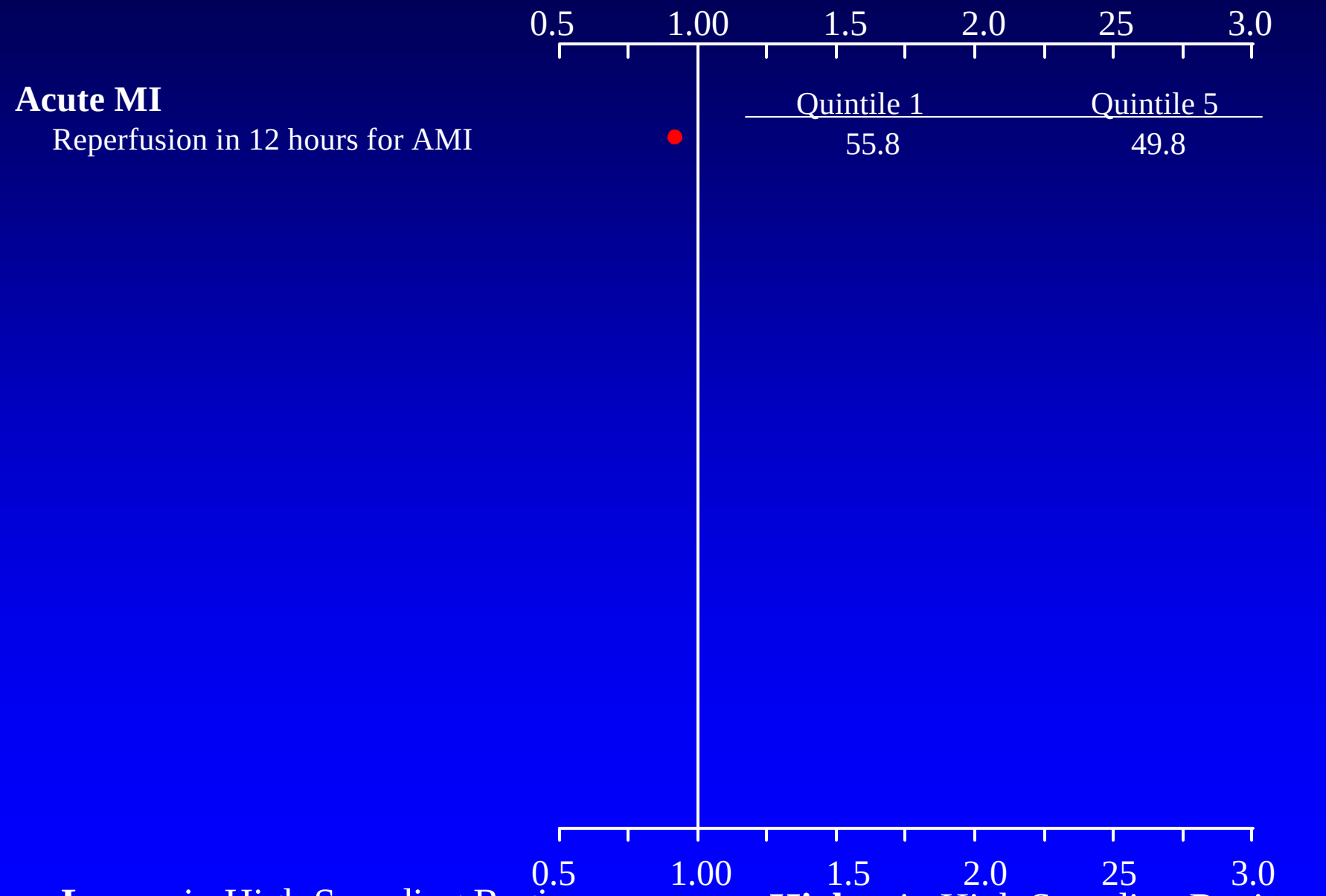


Outcomes Examined

Content and process of care

- **Effective care:** evidence based care all should receive
- **Preference sensitive care:** multiple options involved
- **Supply-sensitive services:** utilization associated with supply

Effective Care: Ratio of Rates in Highest vs Lowest Spending Regions



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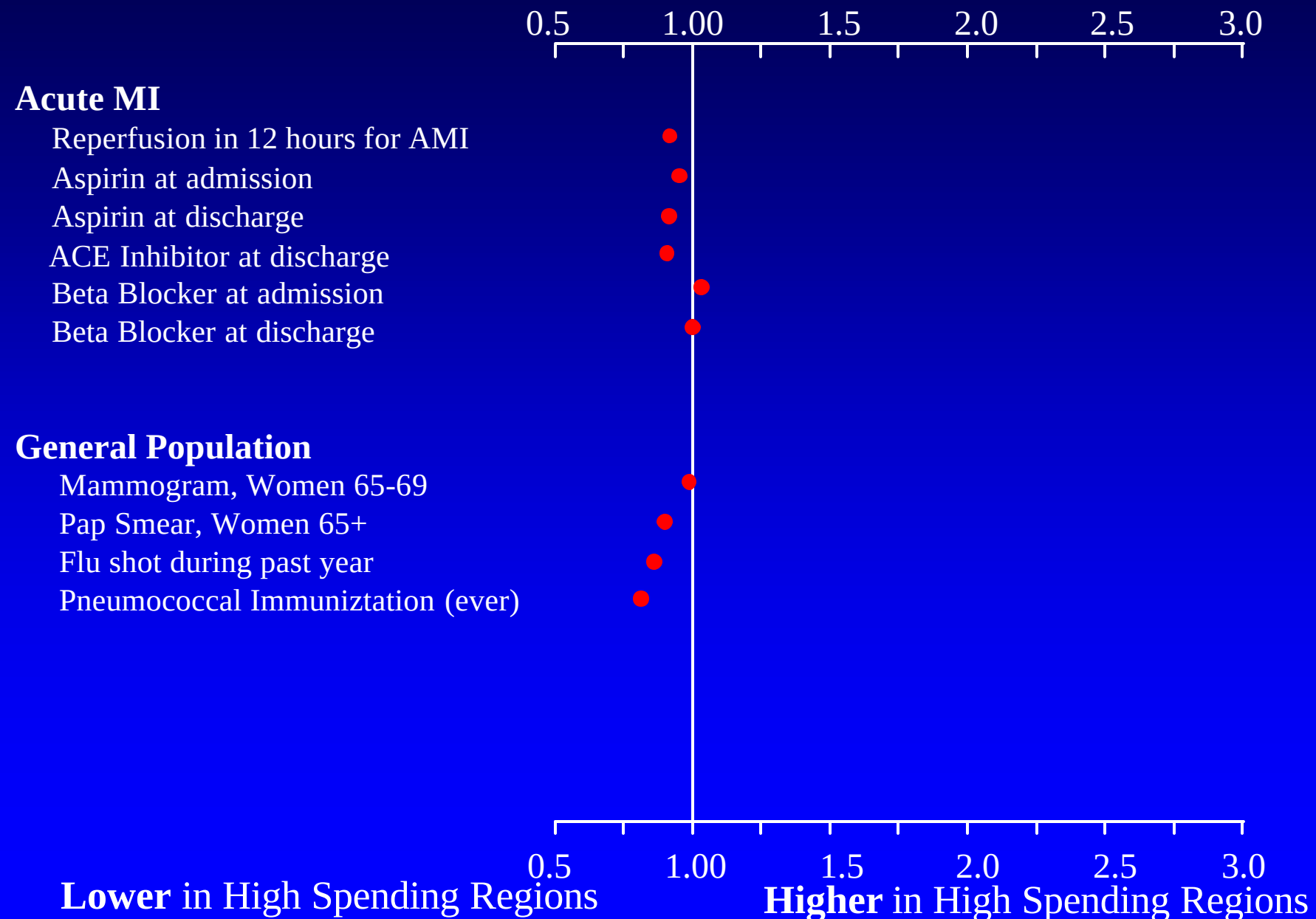
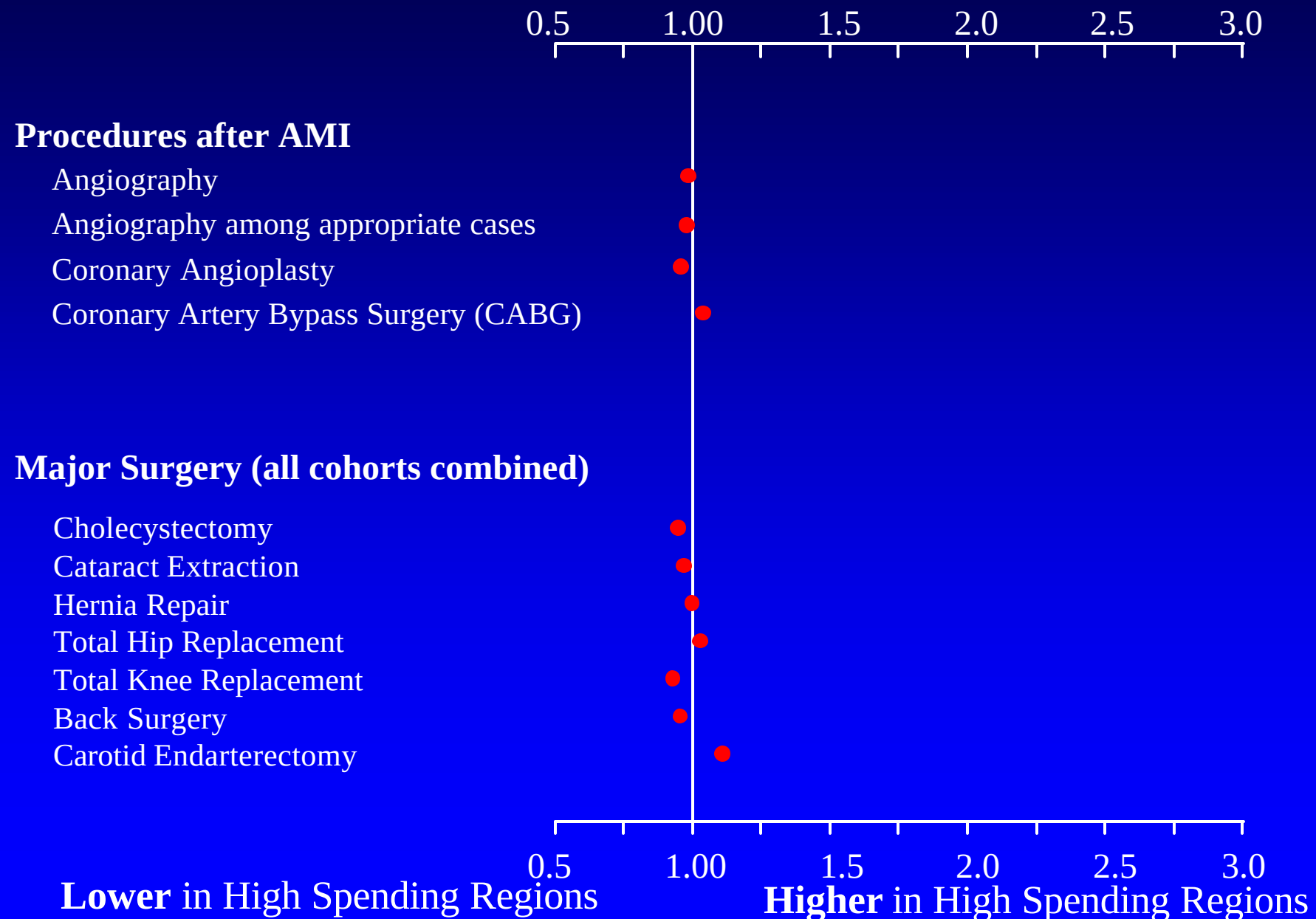
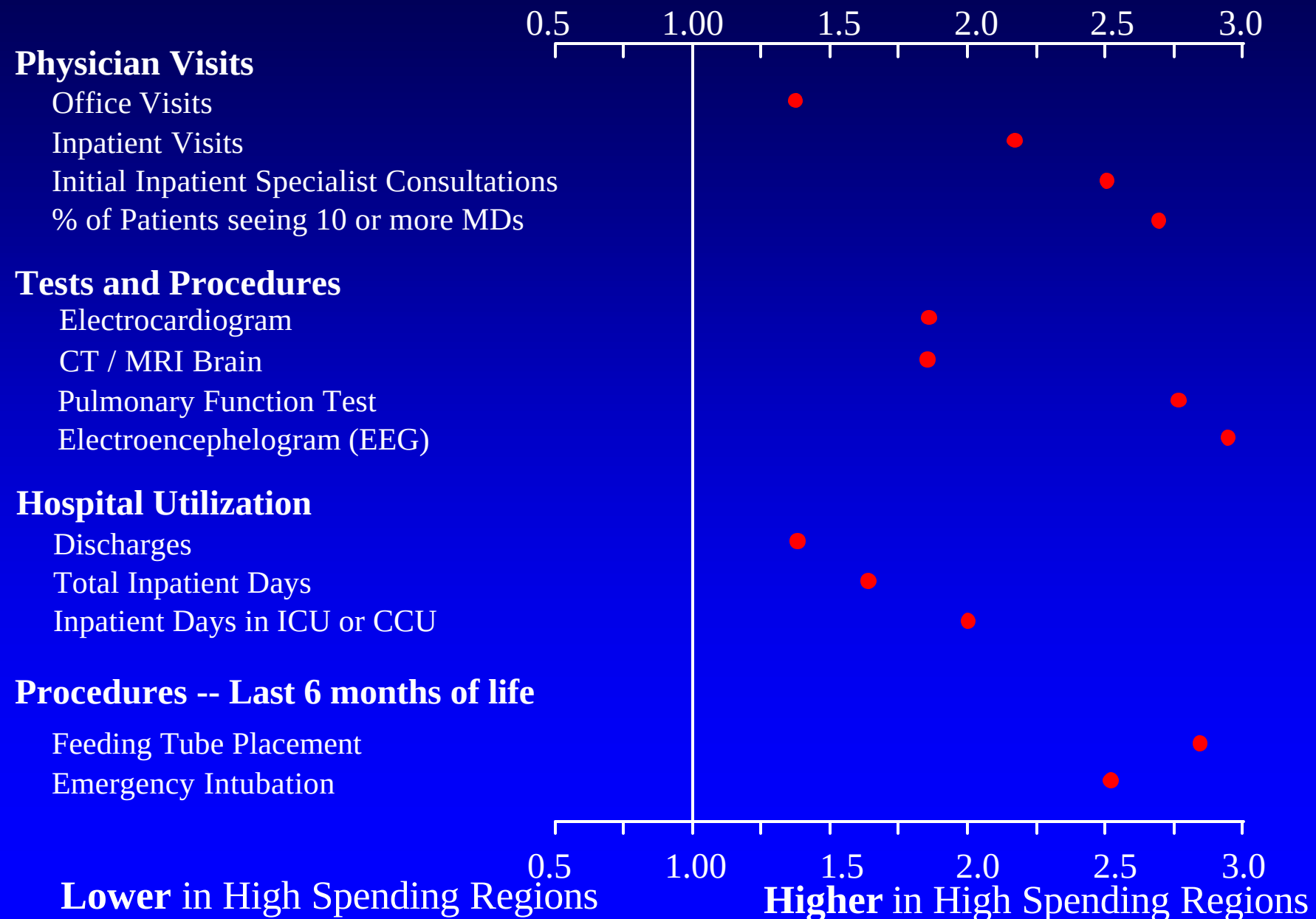


Preference-Sensitive Care: Highest vs Lowest Spending Regions



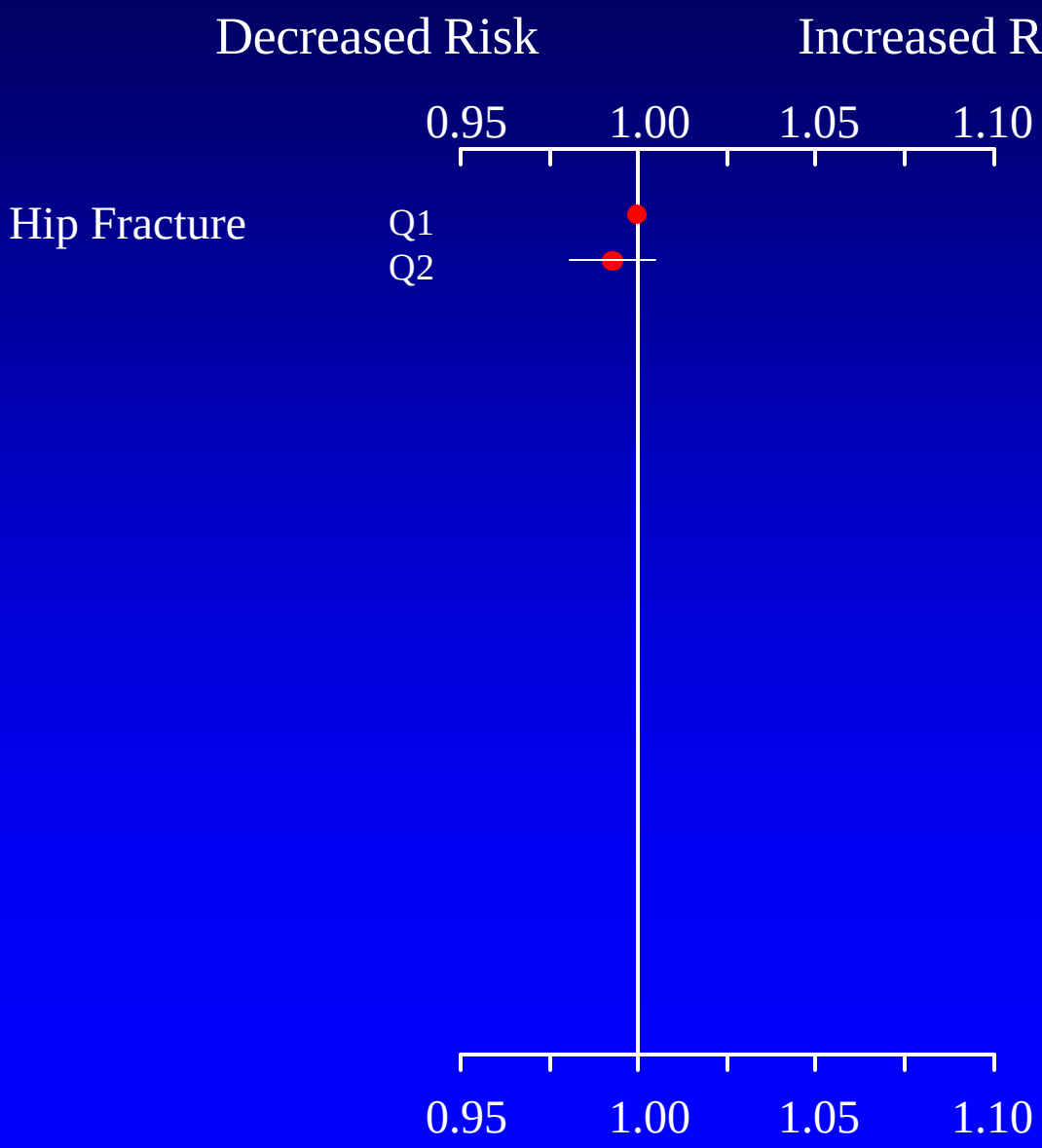
Supply-Sensitive Care : Highest vs Lowest Spending Regions



Outcomes Examined

	Higher spending regions
Content of care	
Effective care:	worse
Preference sensitive care:	no higher
Supply-sensitive services:	much higher
Access to Care	
Primary care	worse / no better
Waiting times	worse
Satisfaction	
18 Individual items	2 better, 2 worse
5 Summary scores	1 better, 1 worse
Functional status	no better
Mortality	

Relative Risk of Death across Quintiles of Spending



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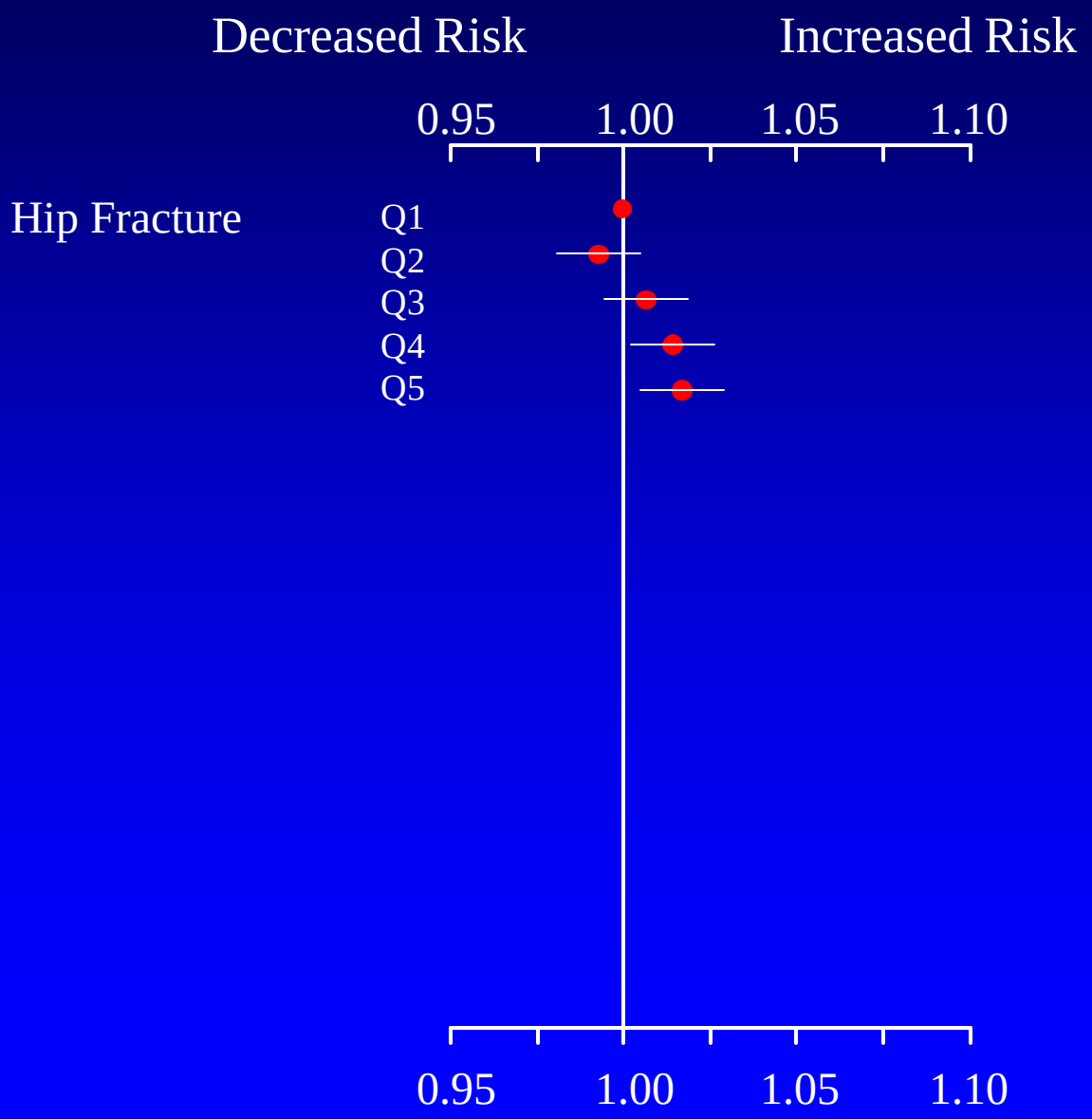

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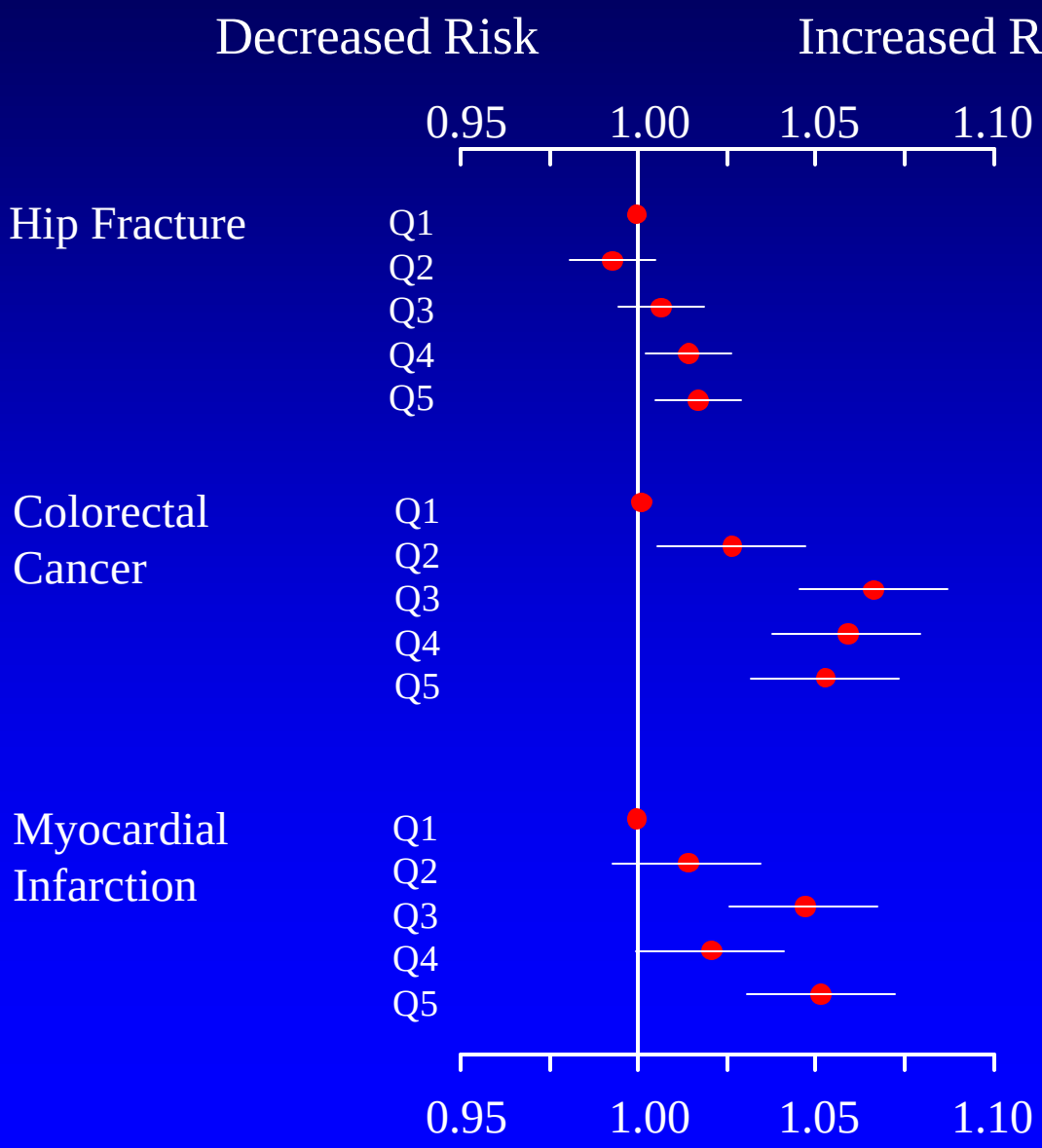

The implications of regional variations in Medicare spending

Increased spending across regions is largely devoted to "supply-sensitive services"

Higher spending is associated with lower quality, worse access to care, and no gain in satisfaction.

Higher spending -- across U.S. regions -- is associated with a small increase in the risk of death.

Outline

Part 1 The implications of regional variations in Medicare spending

Part 2 Causes and remedies

Costs reflect the capacity of the system

	Lowest Quintile	Highest Quintile	Ratio
Average Medicare Spending	**$3,922**	**$6,304**	**1.61**
Supply of Resources			
Hospital Beds / 1000	**2.4**	**3.2**	**1.32**
Physician Supply			
Medical Subspecialists	**28**	**44**	**1.65**
General Internists	**23**	**37**	**1.75**
Family practitioner / GP	**35**	**27**	**0.74**
Surgeons	**44**	**56**	**1.29**
All other specialties	**59**	**78**	**1.37**

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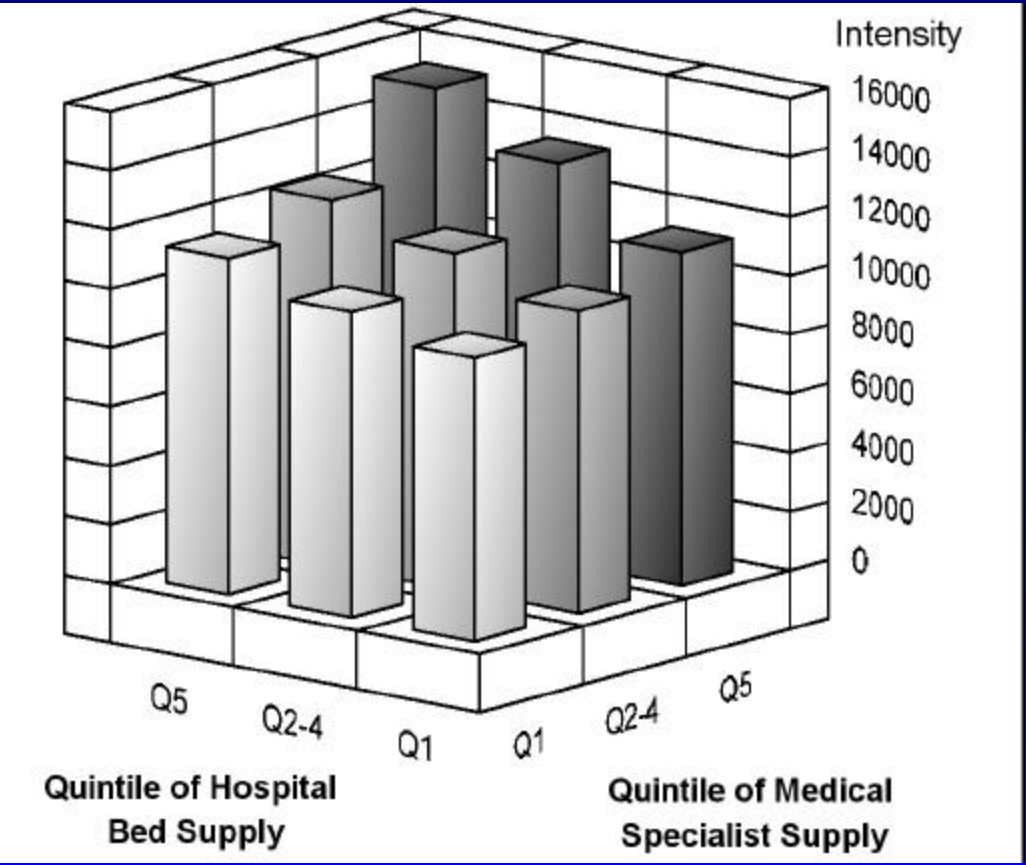
Spending and capacity:
the role of hospital beds medical specialists



Why was quality no better or worse?

Quality?

- Quality improvement requires infrastructure -- a system that can monitor and link processes and outcomes
- Spending more on visits does not result in improved infrastructure
- Incentives are for more care, not better care

Outcomes?

- Treatments of clear-cut benefit are relatively few (and similar in low and high spending regions)
- Complexity leads to errors
- Hospitals are dangerous places

Remedies

Poor quality reflects failure to manage unwarranted variations in practice

Choosing the correct remedy requires a clear understanding of the causes.

Geography and the Debate over Medicare Reform. Wennberg, Fisher and Skinner Health Affairs, web exclusives, Feb 2002

Category of service	Underlying cause of poor care	Remedy
Effective Care *Patient Safety*		

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Preference Sensitive Care	Scientific uncertainty	
	MD-dominated decisions	

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	Assumption that more is better	

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Supply Sensitive Services	Variations in supply	Manage capacity
	Assumption that more is better	Monitor performance

Putting it together….

Weak organizations
incapable of either improving overall quality or implementing private sector health care planning to control the growth of capacity and use of supply-sensitive services.

Accountable Care Organizations
Foster the development of organizations that can be held accountable for all 3 categories of care. These could be integrated delivery systems, large groups, or medical staffs and their hospital(s).

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Treatments: on the efficacy and effectiveness of new and existing technologies and treatment strategies.

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Flawed incentives
that encourage providers to provide more (or less), rather than better care.

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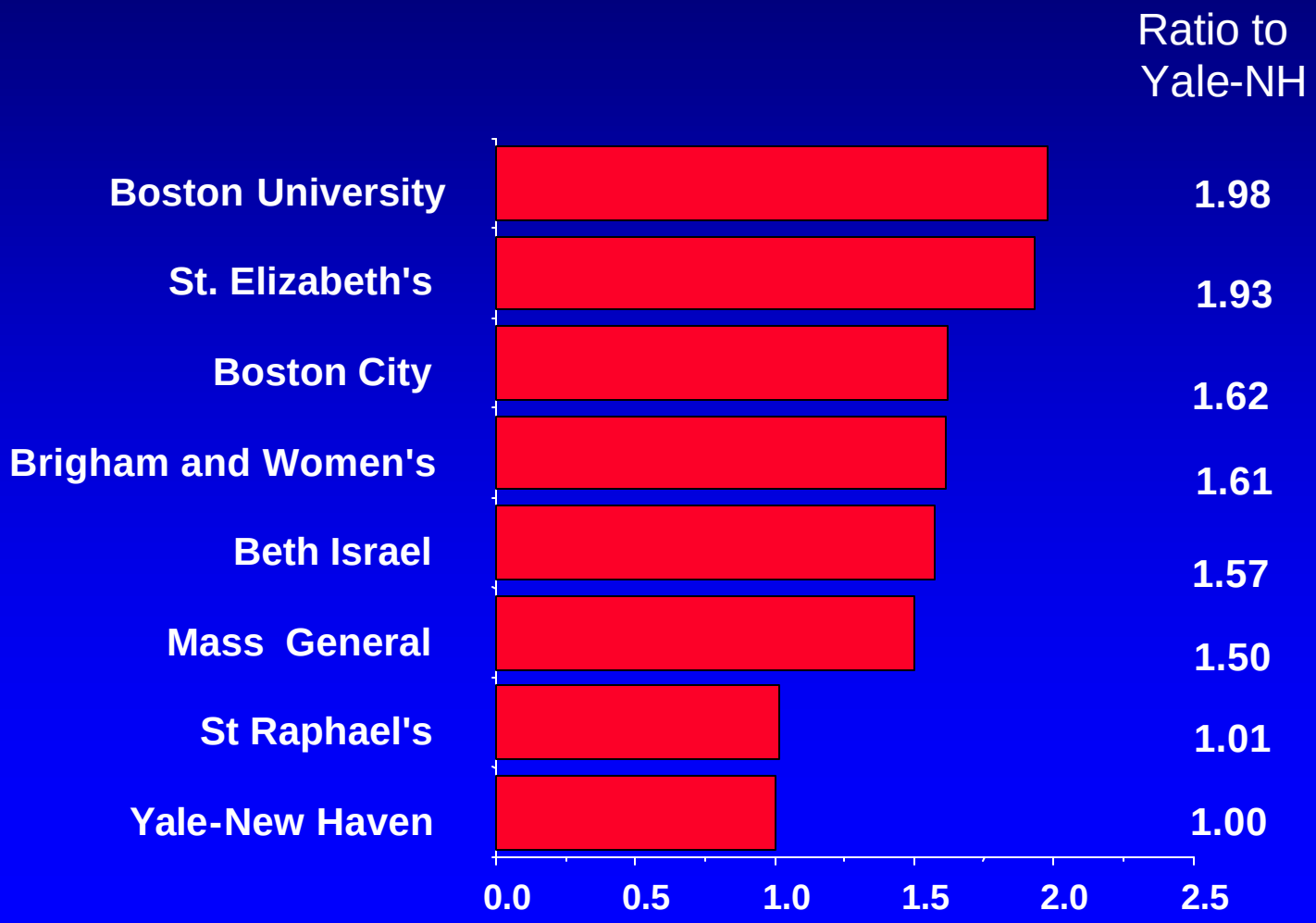
Improve information
Providers: Use claims data to monitor and report on organizational performance.

Treatments: Expand outcomes research

Reward improved performance

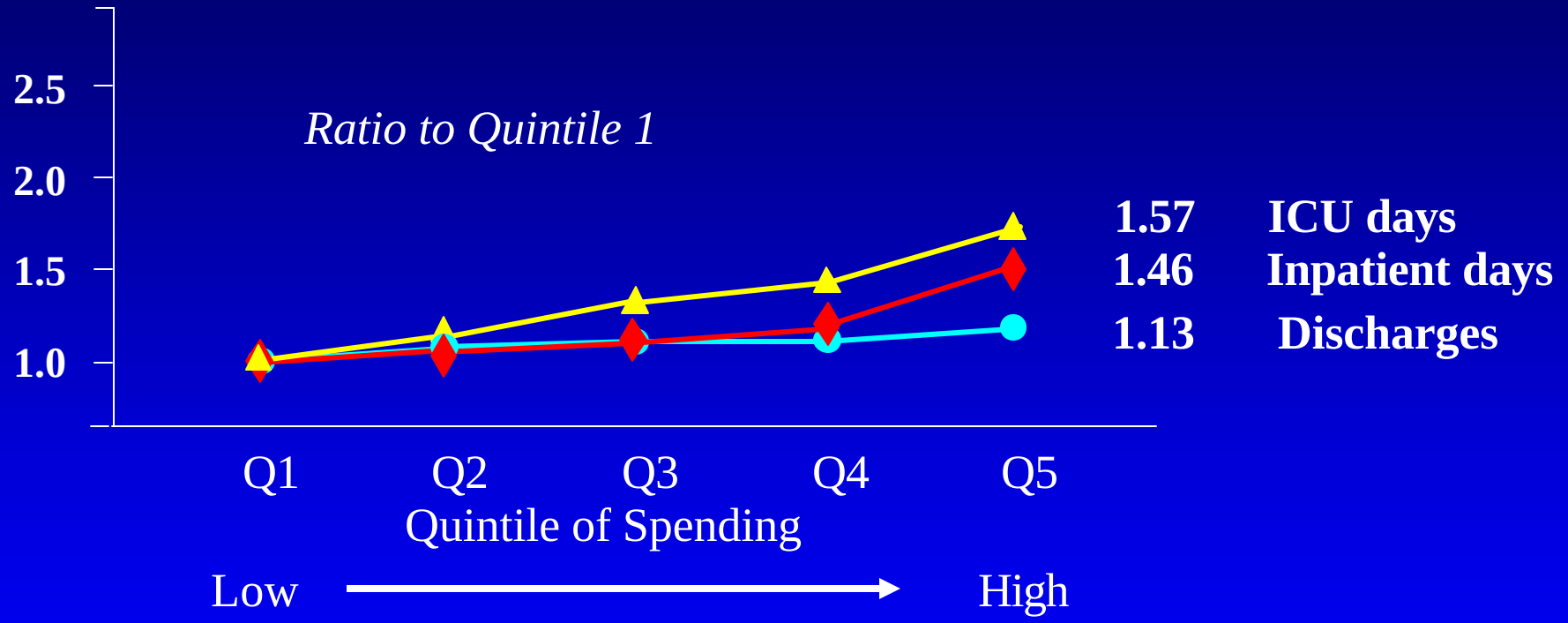
What's the right organizational level?

Hospital readmission rates over 3 years at Boston and New Haven Teaching hospitals for cohorts of chronic disease patients



Hospital Utilization during first year after hip fracture

Patients cared for by major teaching hospitals



Physician utilization during first year after hip fracture

Patients cared for by major teaching hospitals