Spend more? Ration care?

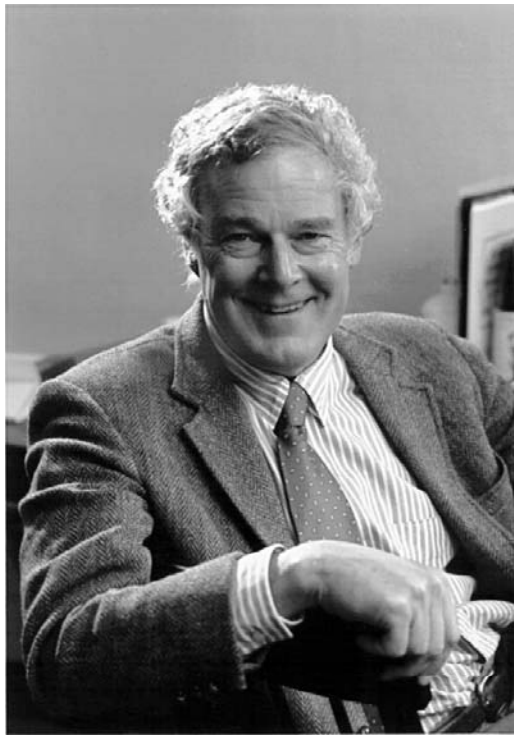
Might we have another choice?

Elliott S. Fisher, MD, MPH

Professor of Medicine and Community
and Family Medicine
Dartmouth Medical School

Director for Population Health and Policy
The Dartmouth Institute for Health Policy
and Clinical Practice

Variations in practice and spending
Origins



Science, December 14, 1973;
Volume 182, pp 1102-08

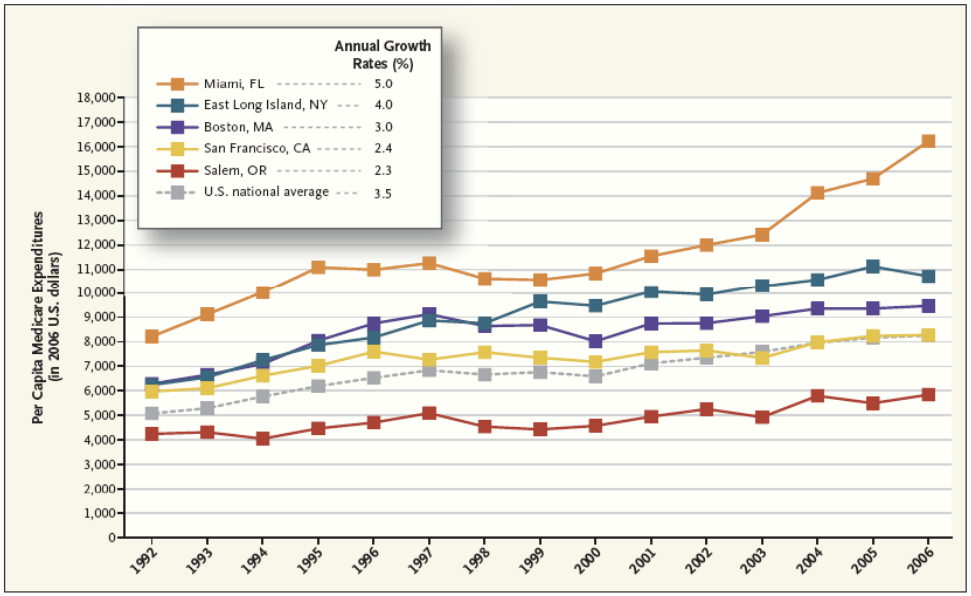
Small Area Variations in Health Care Delivery

A population-based health information system can guide planning and regulatory decision-making.

John Wennberg and Alan Gittelsohn

Recent legislation has extended planning and regulatory authority in the health field in a number of important areas. The 1972 amendments to the impact of regulatory decisions on the equality of distribution of resources and dollars and the effectiveness of medical care services.

Per-capita Medicare Spending
Trends: 1992 to 2006



Annual Growth Rates of per Capita Medicare Spending in Five U.S. Hospital-Referral Regions, 1992–2006.
Data are in 2006 dollars and were adjusted with the use of the gross domestic product implicit price deflator (from the Economic Report of the President, 2008) and for age, sex, and race. Data are from the Dartmouth Atlas Project.

	Per-Capita Spending	Annual Growth Rate
Miami	**$16,351**	**5.0**
E. Long Island	**$10,801**	**4.0**
Boston	**$9,526**	**3.0**
San Francisco	**$8,331**	**2.4**
Salem, OR	**$5,877**	**2.3**
US Average	**$8,304**	**3.5**

Annual savings if Long Island had grown at San Francisco rate: $1 billion

Projected savings if US grew at San Francisco rate from now to 2023: $1.42 trillion

Source: Slowing the Growth of Health Care Spending: Lessons from Regional Variation
Fisher, Skinner, Bynum, New England Journal of Medicine, February 26, 2009

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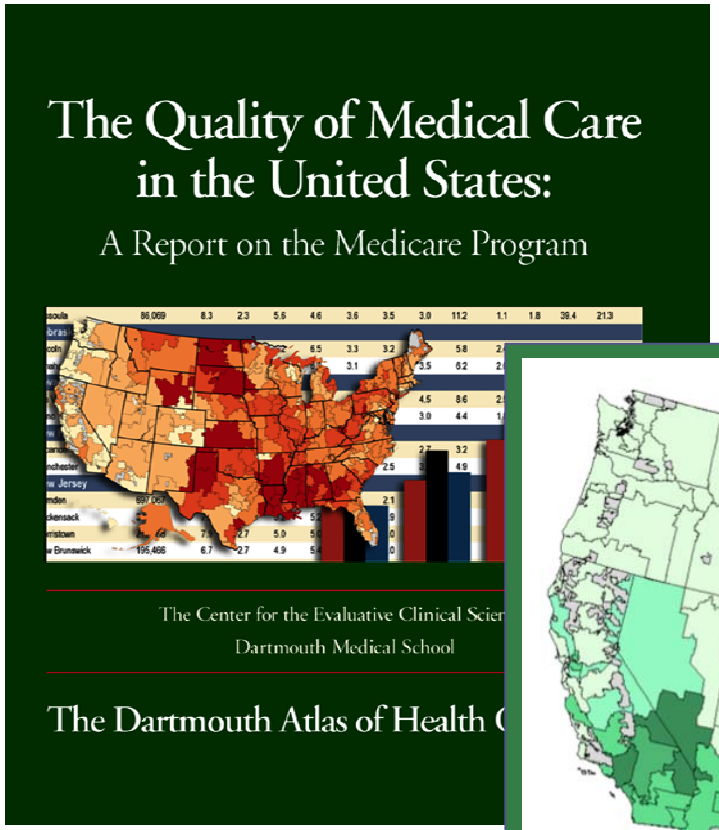
Variations in practice and spending

The Dartmouth Atlas



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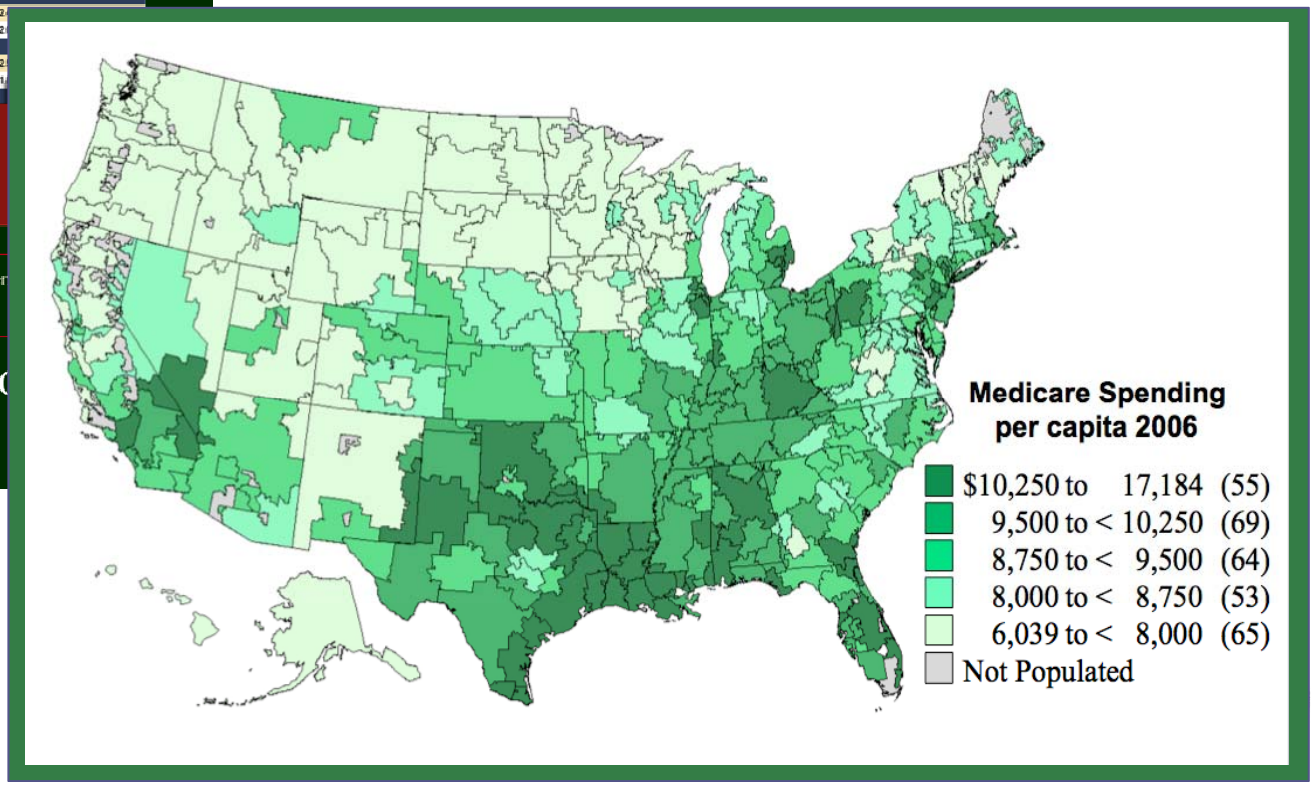
2. **Some current points of confusion**
3. **What's going on? What might we do?**
4. **Moving forward**



Variations in spending and quality

RWJF, National Institutes of Aging funded research

Health implications of regional variations in spending

Initial study: About 1 million Medicare beneficiaries with AMI, colon cancer and hip fracture

Compared content, quality and outcomes across high and low spending regions

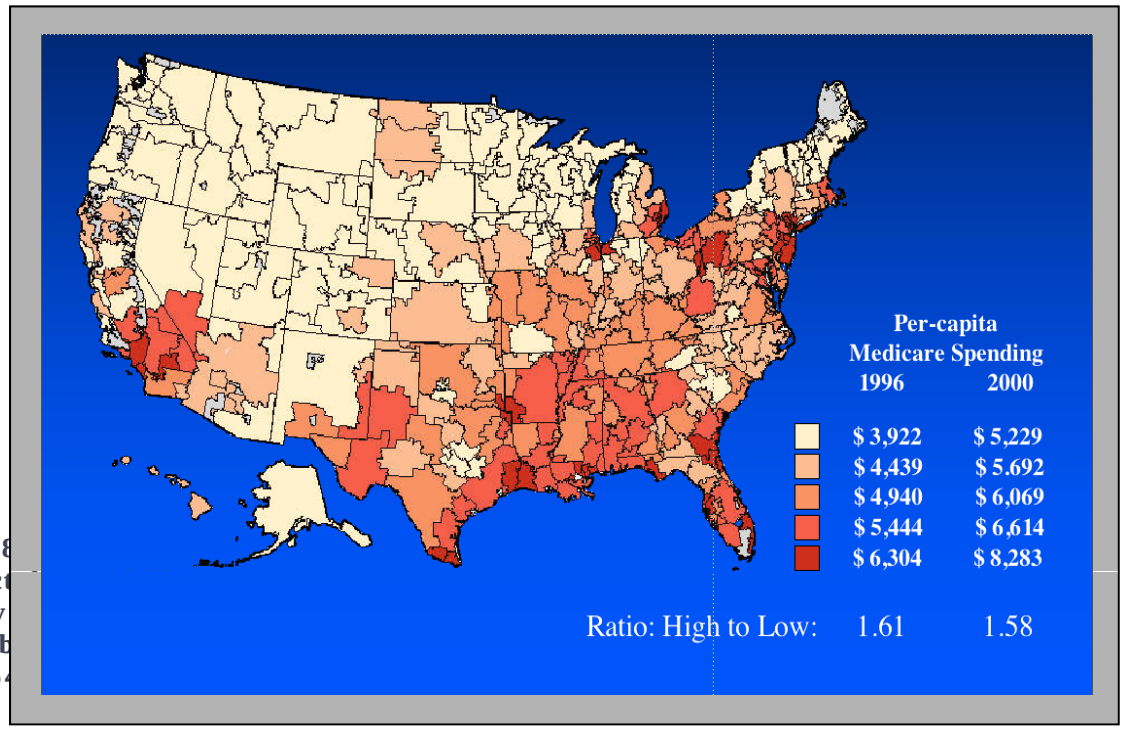
Per-capita Spending

Low (pale): $3,992

High (red): $6,304

Difference: $2,312

(61% higher)



(1) Fisher et al. Ann Intern Med: 2003; 138: 273-298
(2) Baicker et al. Health Affairs web exclusives, Oct
(3) Fisher et al. Health Affairs, web exclusives, Nov
(4) Skinner et al. Health Affairs web exclusives, Feb
(5) Sirovich et al Ann Intern Med: 2006; 144: 641-64
(6) Fowler et al. JAMA: 299: 2406-2412

Variations in spending and quality

Where does the money go?

Effective Care: *benefit clear for all*

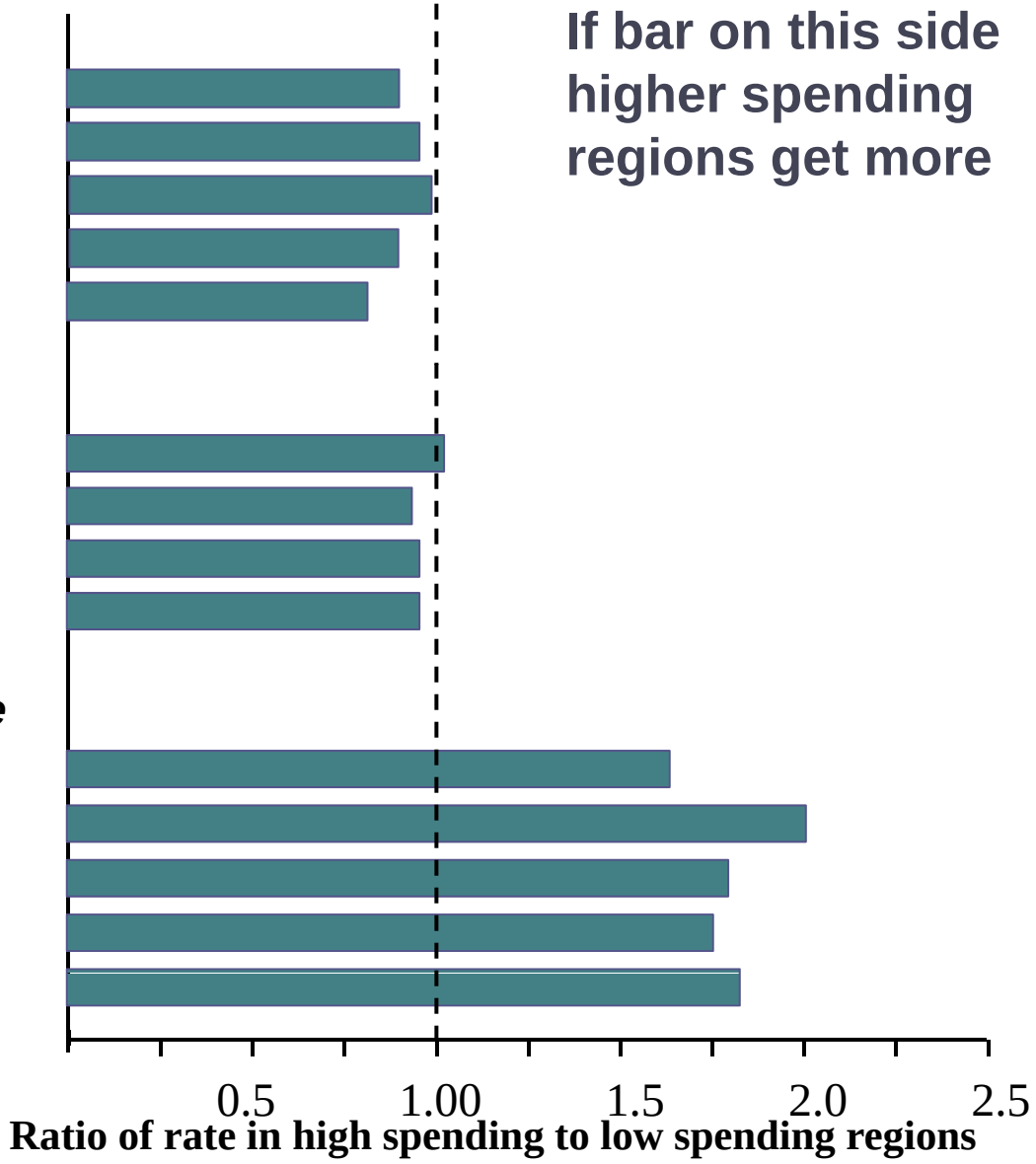
- Reperfusion in 12 hours (Heart attack)
- Aspirin at admission (Heart attack)
- Mammogram, Women 65-69
- Pap Smear, Women 65+
- Pneumococcal Immunization (ever)

Preference Sensitive: *values matter*

- Total Hip Replacement
- Total Knee Replacement
- Back Surgery
- CABG following heart attack

Supply sensitive: *often avoidable care*

- Total Inpatient Days
- Inpatient Days in ICU or CCU
- Evaluation and Management (visits)
- Imaging
- Diagnostic Tests



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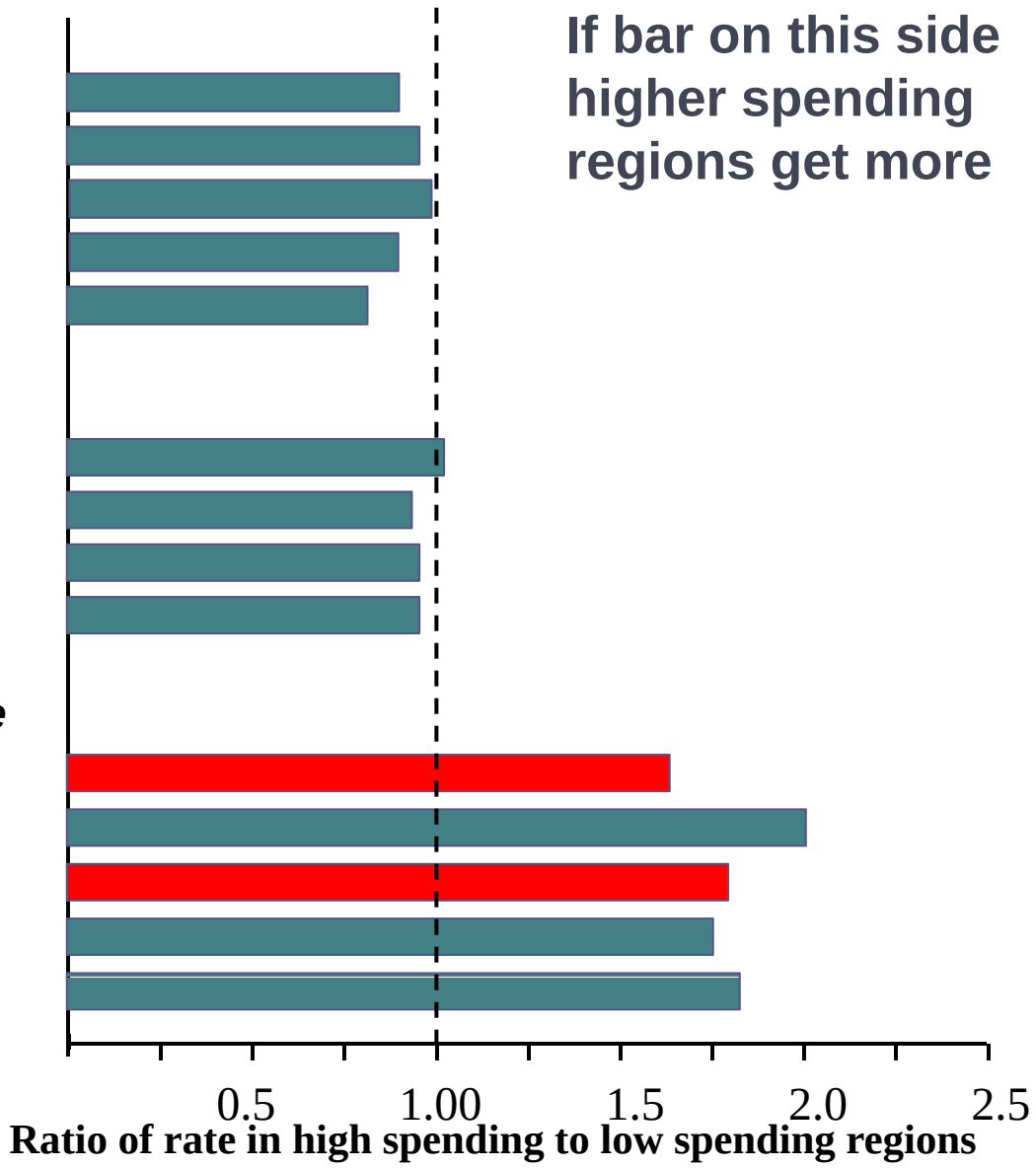
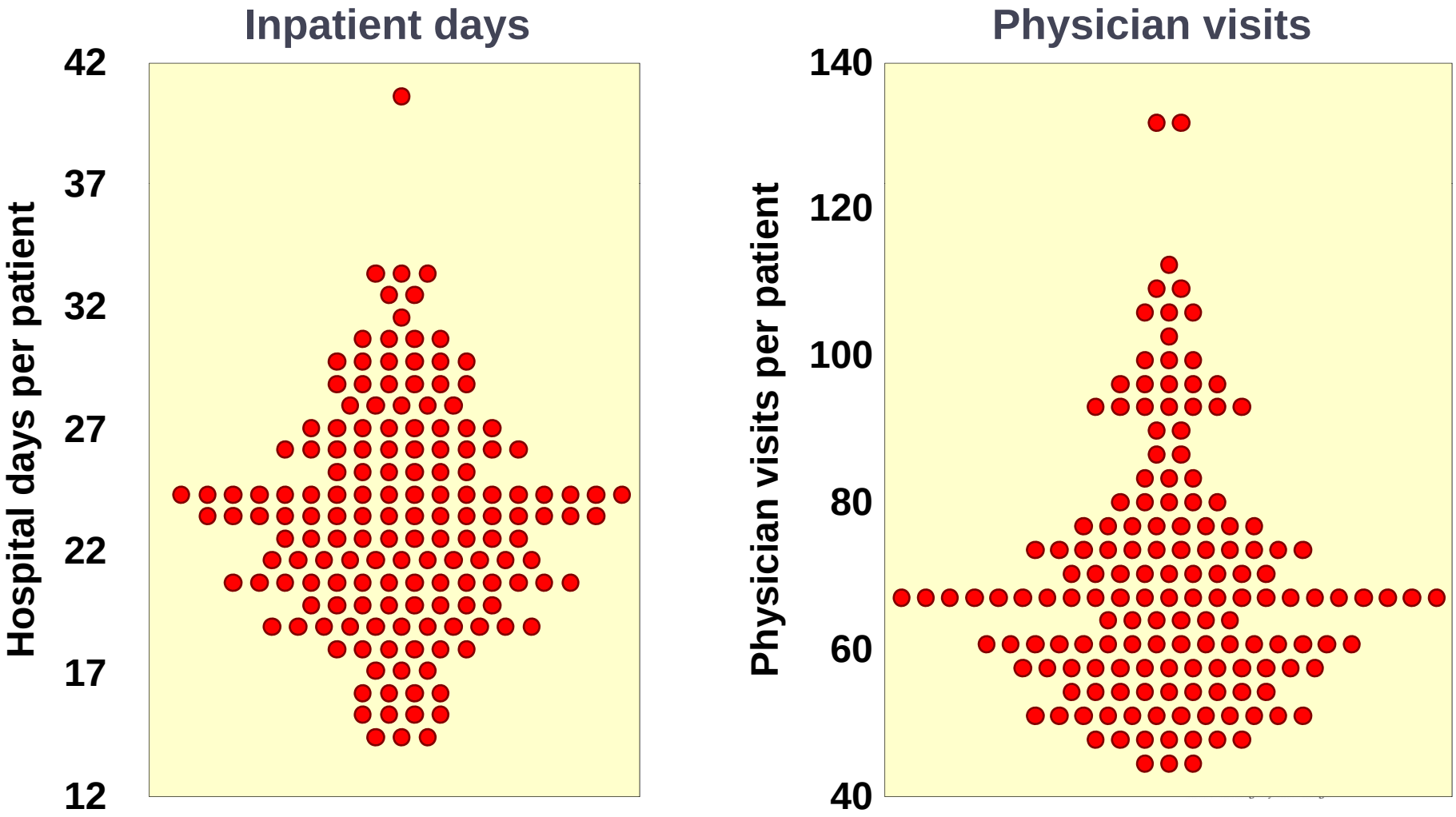


What does higher spending buy?

Utilization of supply-sensitive care among patients with serious chronic illness at Premier's QUEST hospitals (last 2 years of life)



Variations in spending and quality

What is the relationship between spending and quality?

Health Outcomes	Physician's Perceptions	Patient-Perceived Quality
No gain in survival	Worse communication	Lower satisfaction with hospital care
No better function	Greater difficulty ensuring coordination	Worse access to primary care
	Greater perception of scarcity	No less sense that care is rationed

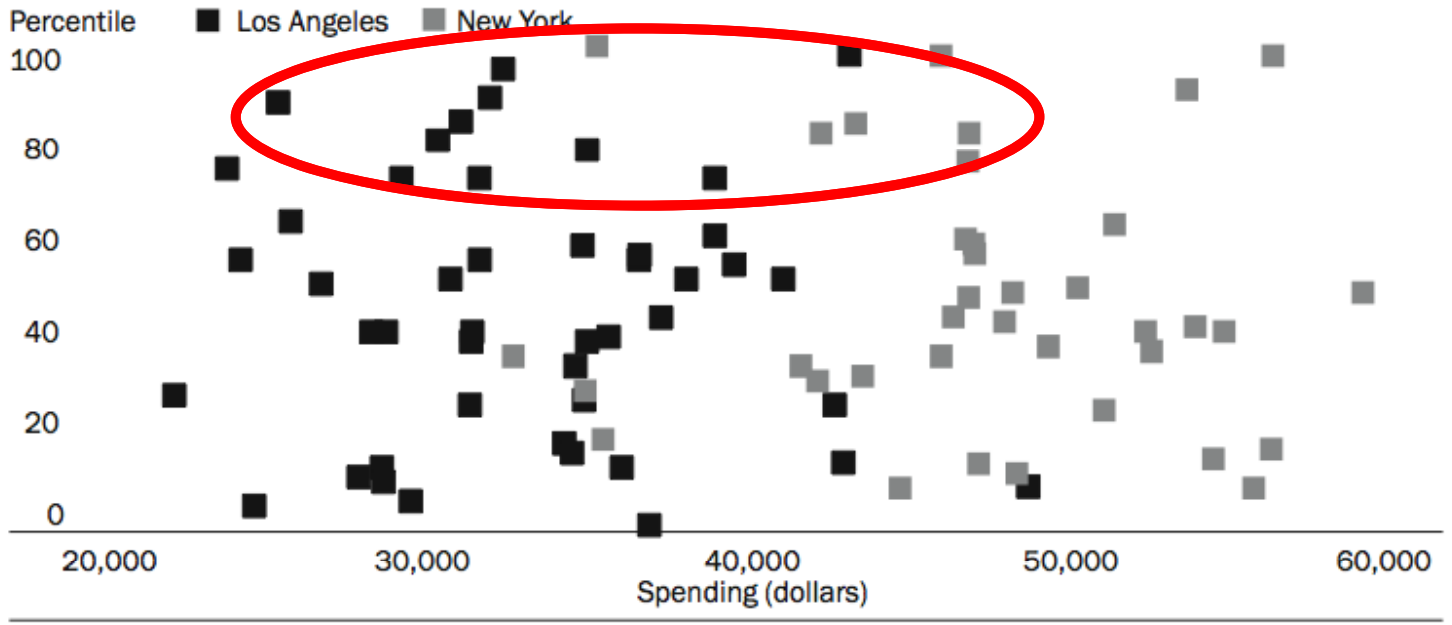
(1) Fisher et al. Ann Intern Med: 2003; 138: 273-298
(2) Baicker et al. Health Affairs web exclusives, October 7, 2004
(3) Fisher et al. Health Affairs, web exclusives, Nov 16, 2005
(4) Skinner et al. Health Affairs web exclusives, Feb 7, 2006
(5) Sirovich et al Ann Intern Med: 2006; 144: 641-649
(6) Fowler et al. JAMA: 299: 2406-2412
(7) Wennberg et al; Health Affairs 2009; 28: 103-112
(8) Yasaitis et al; Health Affairs; web exclusive, May 21, 2009

Variations in spending and quality

What is the relationship between spending and quality?

EXHIBIT 5

Percentile Ranking And Spending For Individual Hospitals In New York (Manhattan And The Bronx) And Los Angeles, 2004–2007



SOURCE: Authors' analysis (see text for complete details).

(1) Fisher et al. Ann Intern Med: 2003; 138: 273-298
(2) Baicker et al. Health Affairs web exclusives, Oct
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(6) Fowler et al. JAMA: 299: 2406-2412
(7) Wennberg et al; Health Affairs 2009; 28: 103-112
(8) Yasaitis et al; Health Affairs; web exclusive, May

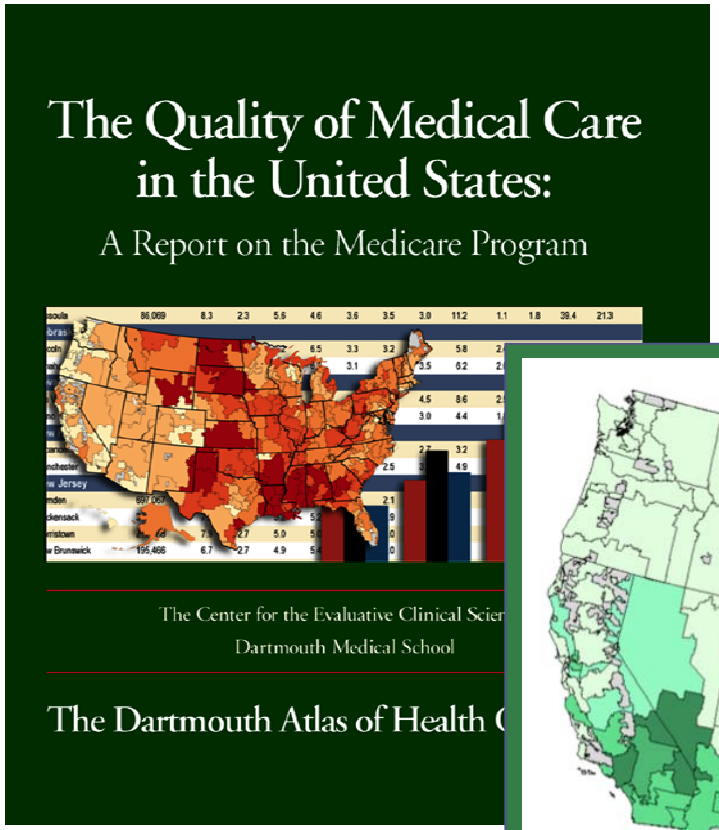
Key finding: per-capita costs of care over time are essentially unrelated to quality or outcomes.

Some systems achieve high quality and low costs

It matters what you spend the money on.

Variations in practice and spending

The Dartmouth Atlas



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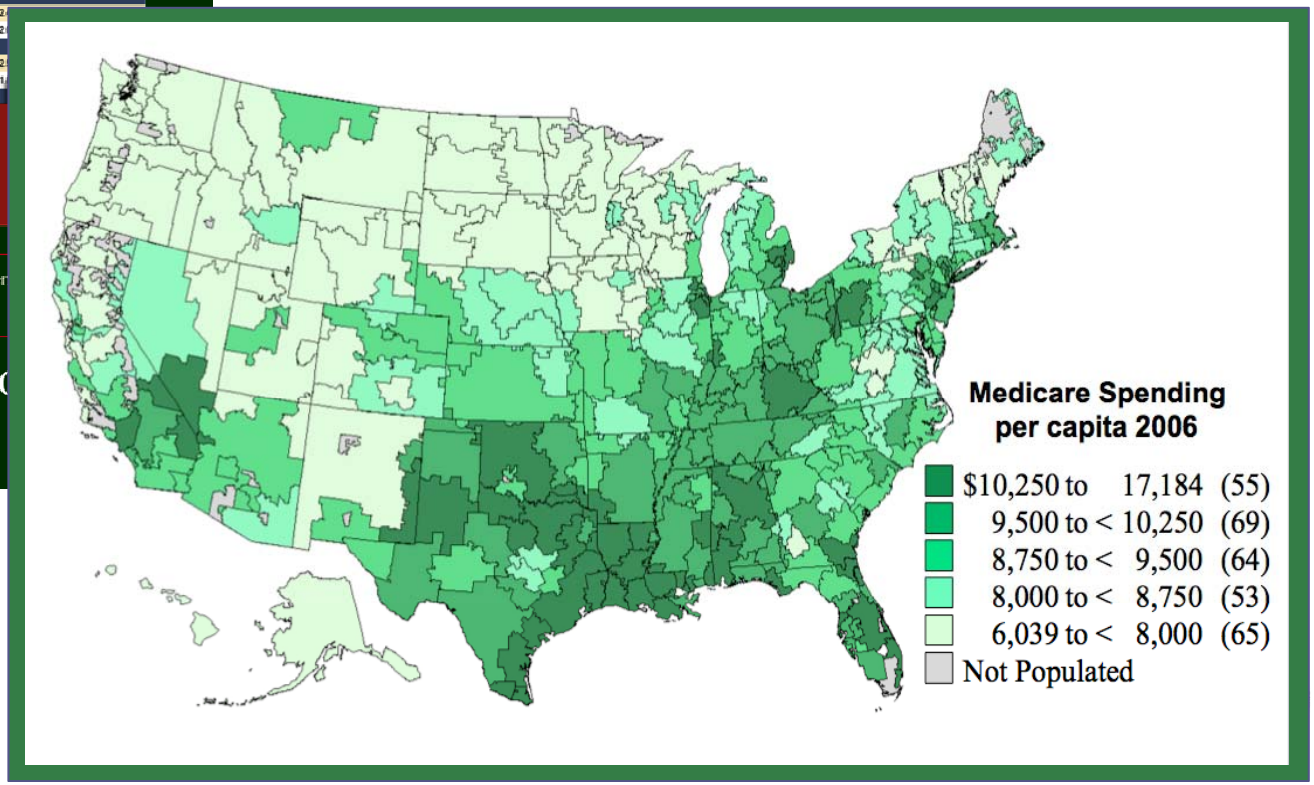
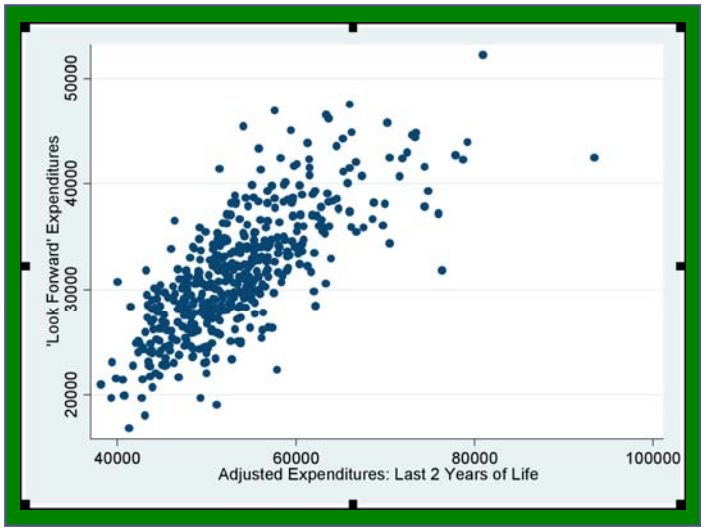


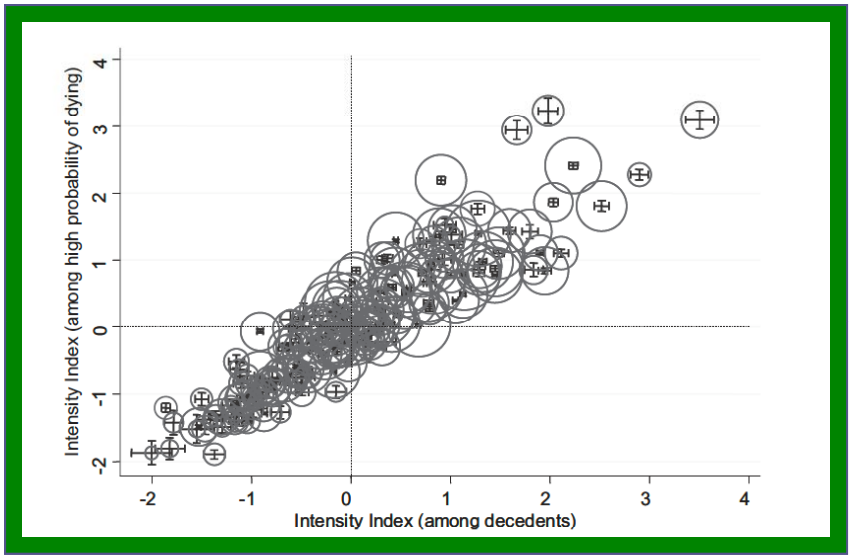
Some current points of confusion

Look forward or look back?



End-of-life spending (2001-2005) vs average one-year spending for AMI, hip fracture and colon cancer patients (98-01) in 480 large U.S. hospitals with at least 50 patients.

Skinner – under preparation

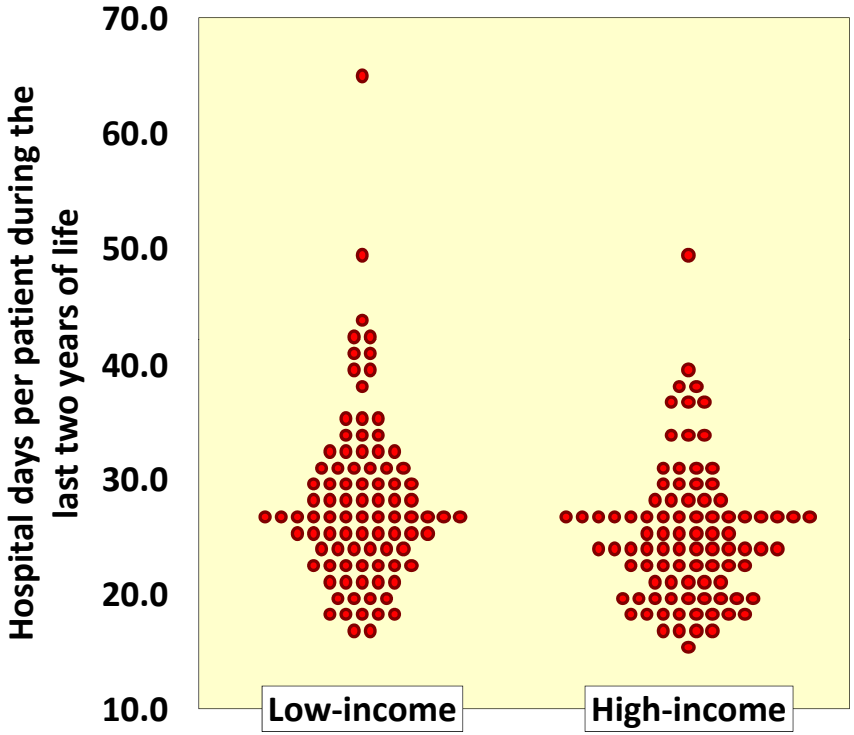


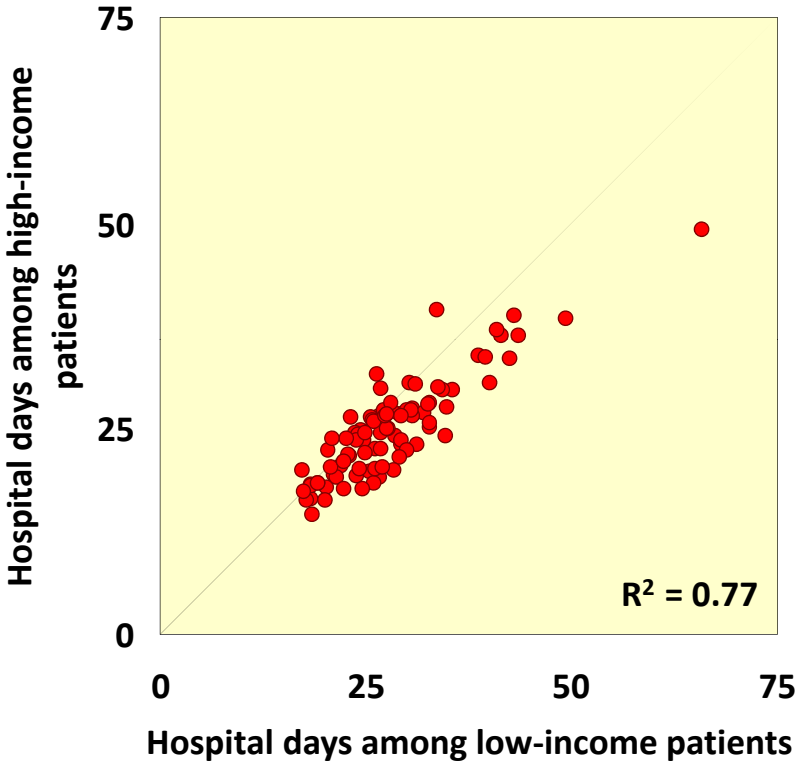
Association between look forward treatment intensity measure and look back intensity (end-of-life patients only) in Pennsylvania hospitals.

Barnato et al *Med Care 2009;47: 1098–1105*

Some current points of confusion

Poverty





Across large U.S. hospitals, hospital use (and spending, not shown) varies by over two fold for both low income and high income beneficiaries.

Systems that use the hospital as site of care for high income patients do the same for their low income patients.

Wennberg, Skinner. Forthcoming

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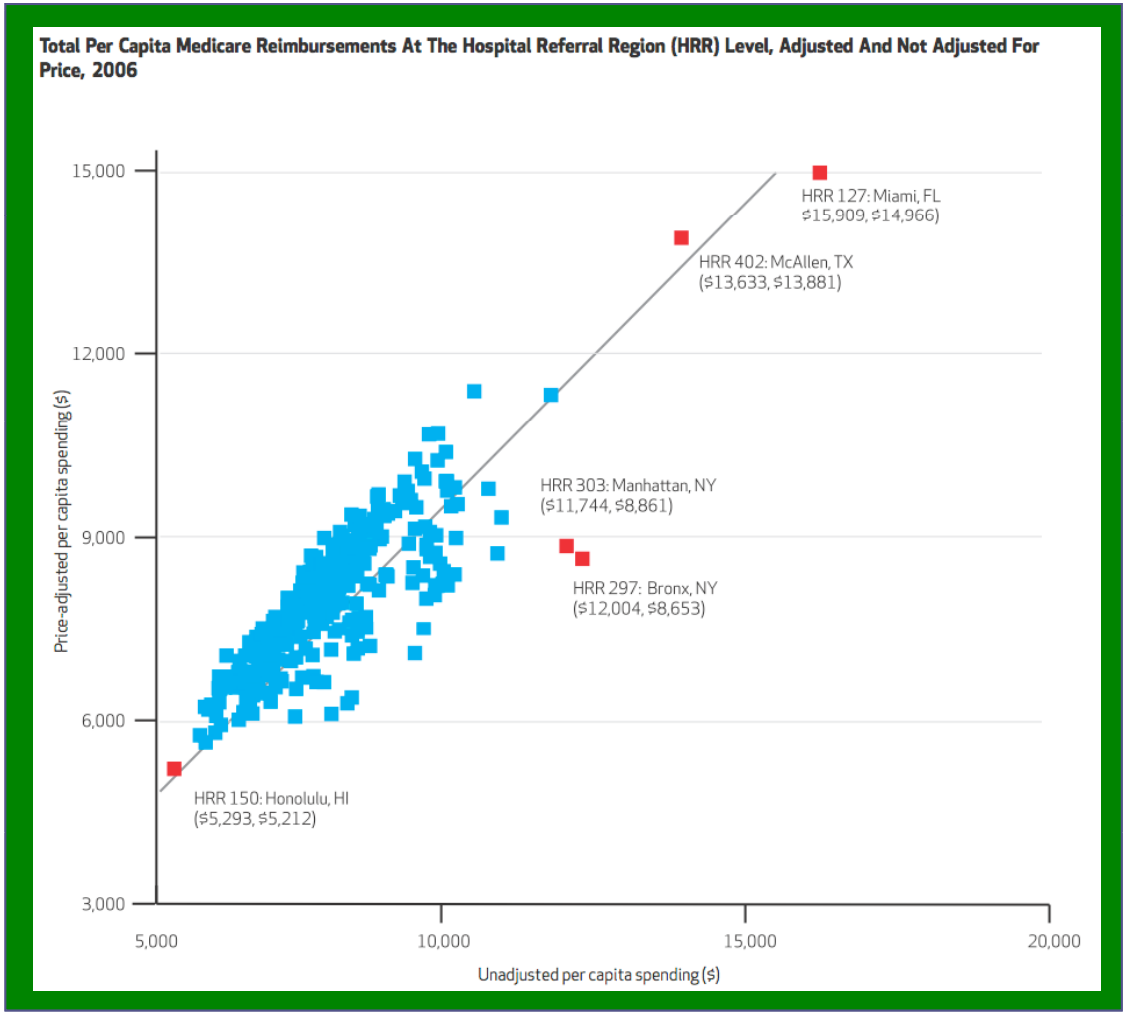
Some current points of confusion

Poverty, Prices

Analysis compared unadjusted and price-adjusted per-capita spending across all U.S. HRRs.

Slight reduction in magnitude of variation.

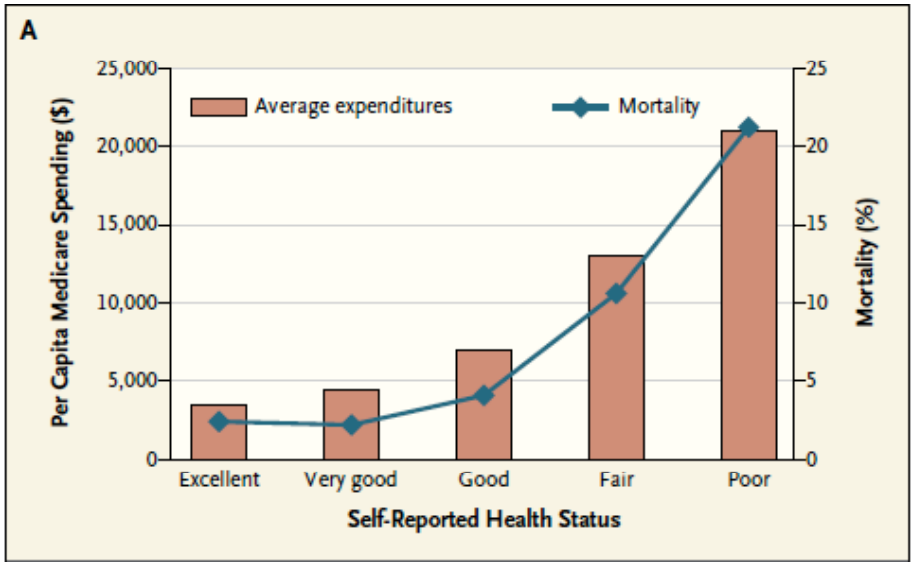
Medical education and DSH payments were important in a few areas (notably NYC).



Gottlieb et al. Health Affairs 2010 published online, January 28.

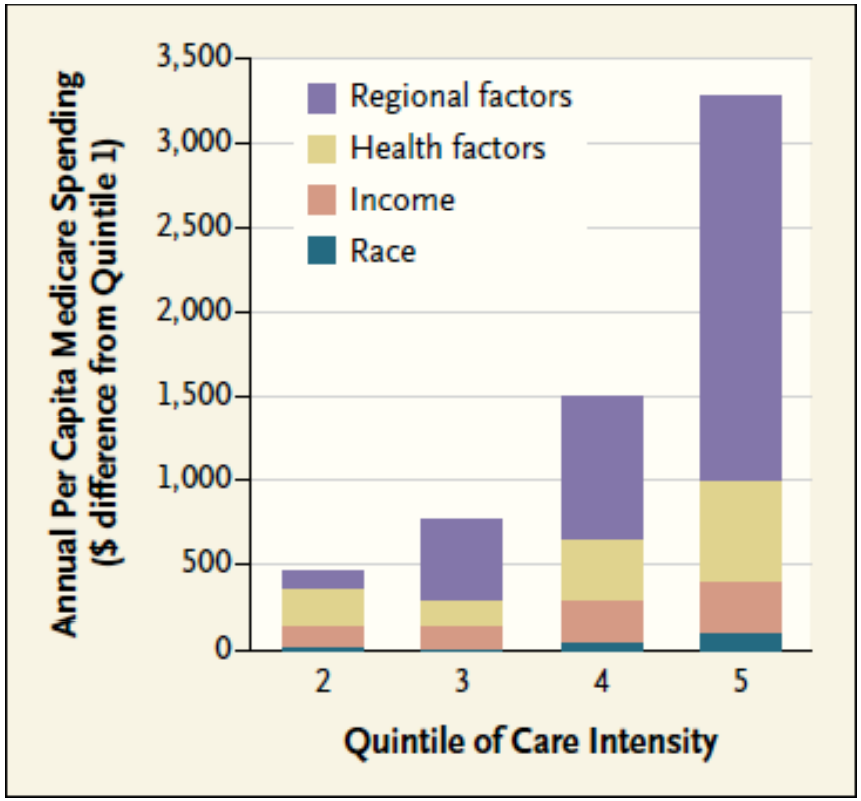
Some current points of confusion

Poverty, Prices, Health



Health is the most important determinant of spending

But explains only a small fraction of regional differences in spending



Sutherland, Skinner, Fisher. NEJM 2009; 366:1227

Understanding variations

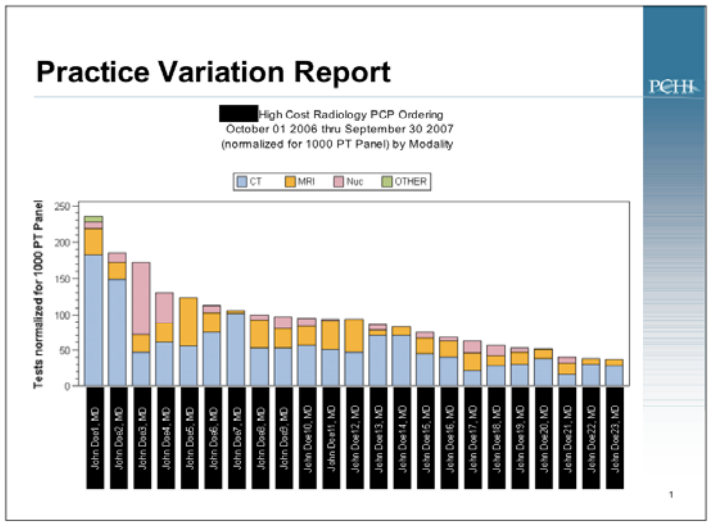
Not “either-or”, rather “both-and”

Some differences are due to forces beyond providers control

- Poverty – poor patients may have inadequate social supports at home
- Health status – some providers and regions have sicker patients
- Prices differ across regions
- Academic missions are variably subsidized through current payments

Dramatic differences in utilization remain

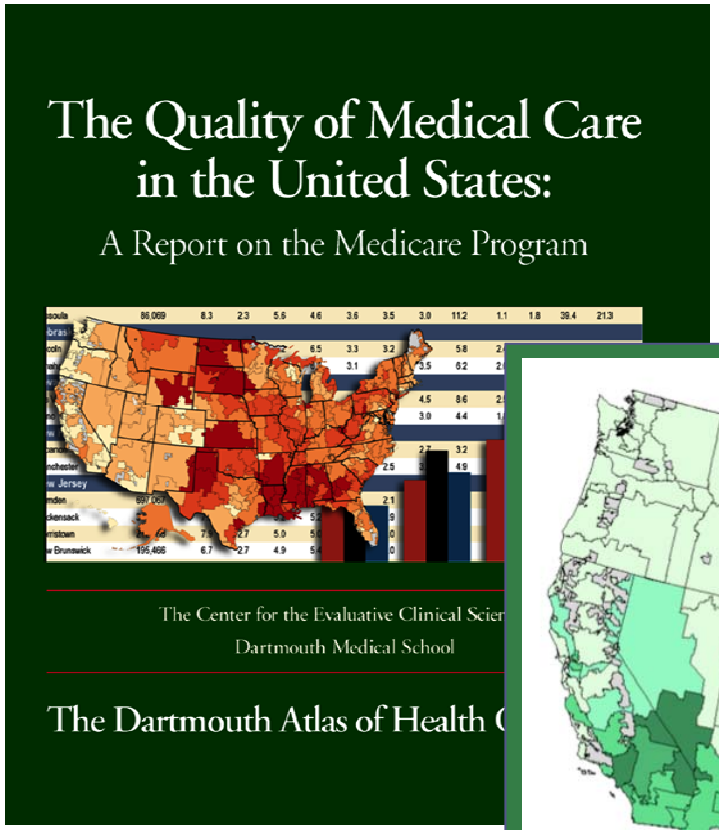
- Across physicians, across care systems, across regions
- Higher use of hospital as site of care (admissions and readmissions)
- More frequent discretionary physician services



High cost imaging rates, PCPs in a single practice at Partners
May 29, 2008 Presentation at Federal Trade Commission
Tom Lee, MD (Partners Healthcare System) (with permission)

Variations in practice and spending

The Dartmouth Atlas



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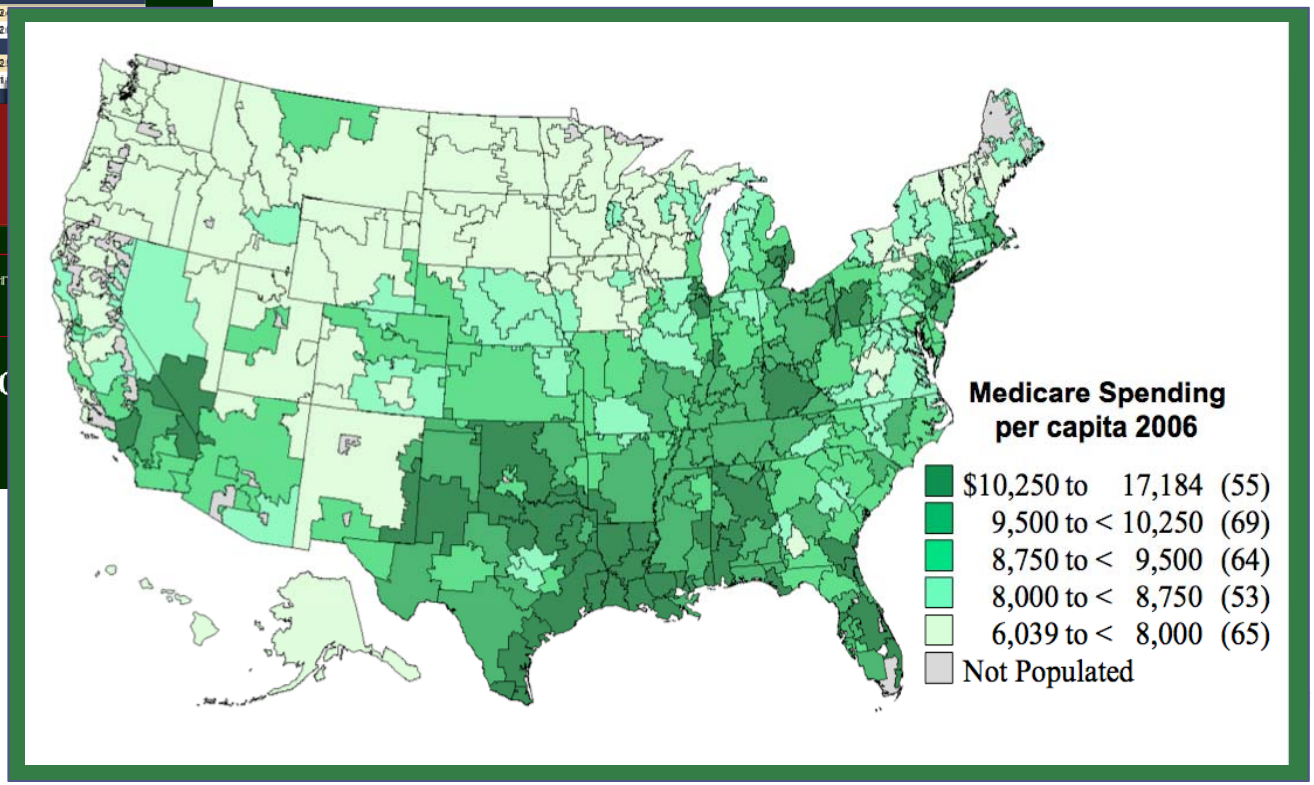

What's going on?

Research on causes of regional variations

Patient Preferences	Malpractice Environment	Capacity & Payment System	Clinical Judgment
Slight preference for specialists in high specialist regions	Explains less than 10% state differences in spending	Payment system ensures that all stay busy	
No difference in wish for test MD says not needed		Capacity thus strongly correlated, but explains less than 50%	
No difference in wish for aggressive EOL care			

(1) Pritchard et al. J Am Geriatric Society 1998, 46:1242-1250
(2) Barnato et al. Medical Care 2007; 45:386-393
(3) Kessler et al. Quarterly Journal of Medicine 1996;111(2):353-90
(4) Baicker, et al. Health Affairs 2007; 26: 841-852
(5) Fisher et al. Ann Intern Med: 2003; 138: 273-298
(6) Sirovich et al. Archives of Internal Medicine. 165(19):2252-6
(7) Sirovich et al. Health Affairs 27, no. 3 (2008): 813-823
(7) Sirovich et al, J Gen Intern Med. 2006;21(Suppl4):164.

What's going on?

The role of clinical judgment

Evidenc

Doctors
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Other gu

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chest CT
H
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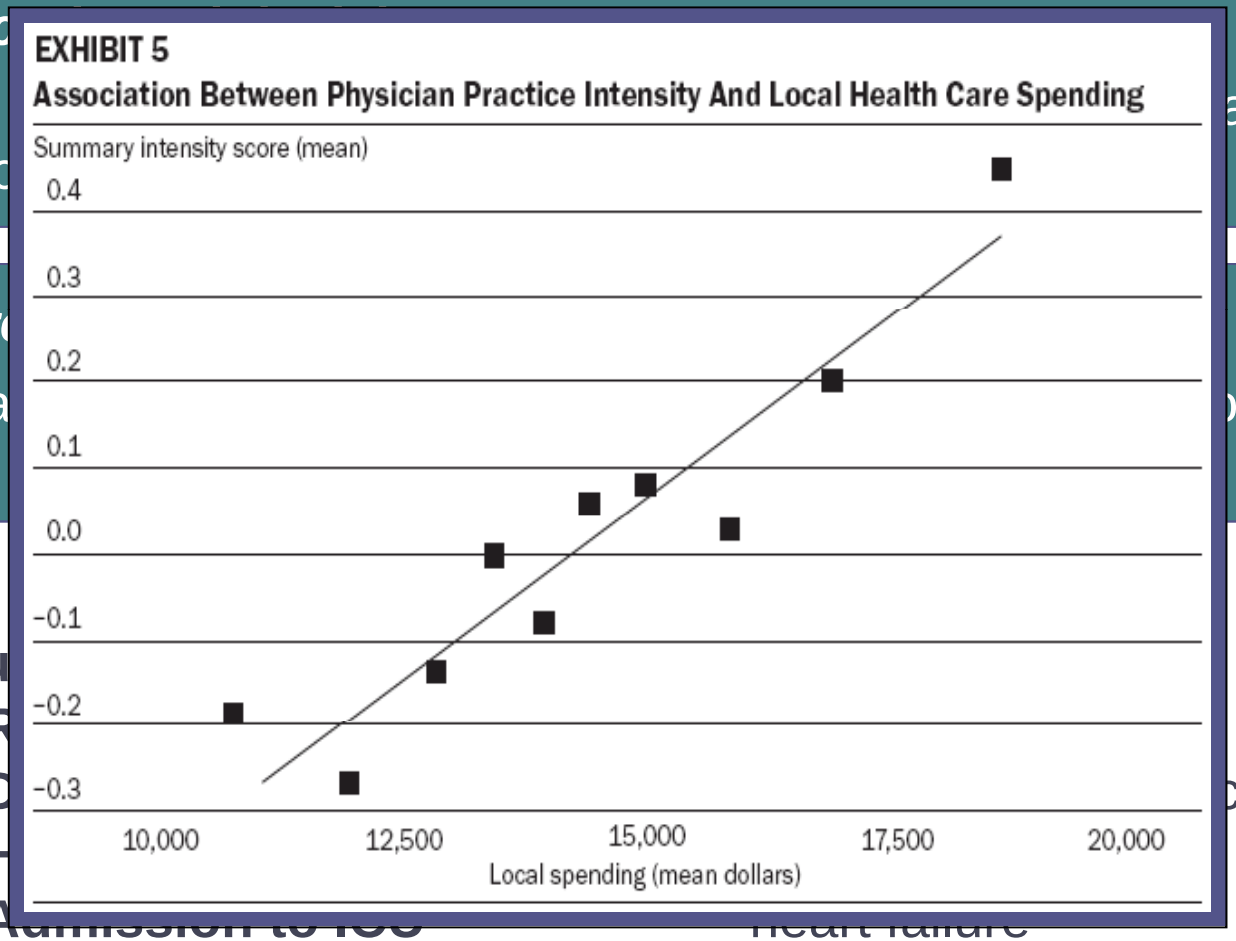
heart failure
Referral to palliative care heart failure



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Sirovich et al. Health Affairs 27, no. 3 (2008): 813-823

What's going on?

Research on causes of regional variations

Patient Preferences	Malpractice Environment	Capacity & Payment System	Clinical Judgment
Slight preference for specialists in high specialist regions	Explains less than 10% state differences in spending	Payment system ensures that all stay busy	No difference in decisions with strong evidence
No difference in wish for test MD says not needed		Capacity thus strongly correlated, but explains less than 50%	More likely to intervene in gray areas
No difference in wish for aggressive EOL care			

(1) Pritchard et al. J Am Geriatric Society 1998, 46:1242-1250
(2) Barnato et al. Medical Care 2007; 45:386-393
(3) Kessler et al. Quarterly Journal of Medicine 1996;111(2):353-90
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(7) Sirovich et al, J Gen Intern Med. 2006;21(Suppl4):164.

What's going on?

Case studies beginning to shed some light

"Here … a medical community came to treat patients the way subprime mortgage lenders treated home buyers: as profit centers."

Atul Gawande

	2006 Spending	92-06 Growth
McAllen	$14,946	8.3%
La Crosse	$5,812	3.9%

"…a culture that focuses on the wellbeing of the community, not just the financial health of our system."

Jeff Thompson, MD
CEO Gunderson-Lutheran
La Crosse, WI

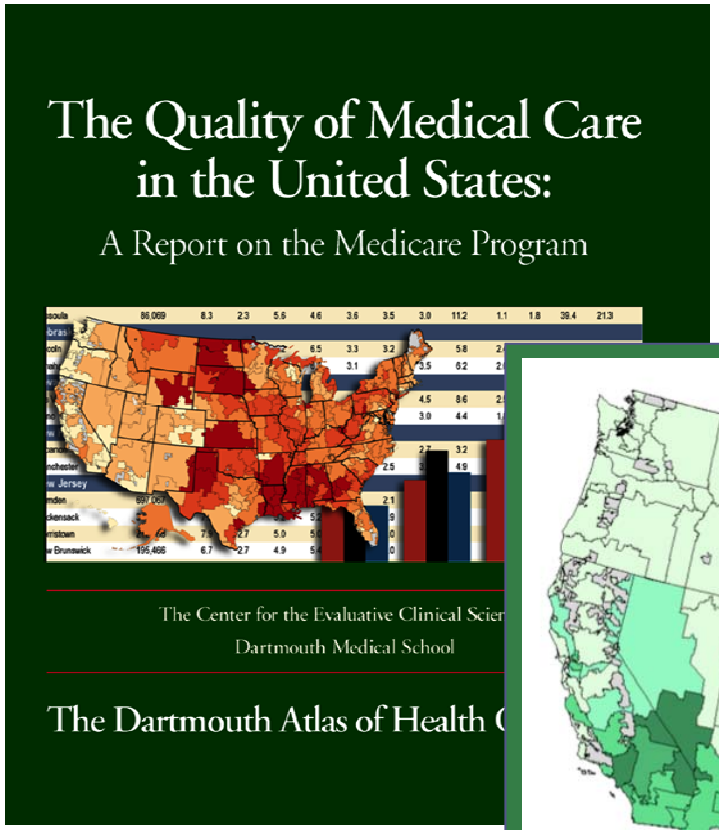
Some principles to guide reform

Aims, Accountability, Integration, Incentives

Underlying problem	Key principles
Confusion about aims – what we're trying to produce	**Clarify aims:** Better health, better care lower costs – for patients and communities
Absent or poor data leaves practice unexamined and public assuming that more is always better.	**Better information** that engages physicians, supports improvement; informs consumers
Flawed conceptual model. Health is produced only by individual actions of "good" clinicians, working hard.	**New model: It's the system.** Establish organizations *accountable for aims* and capable of *redesigning practice* and *managing capacity*
Wrong incentives reinforce model, reward fragmentation, induce more care and entrepreneurial behavior.	**Rethink our incentives:** Realign incentives – both financial and professional – with aims.

Variations in practice and spending

The Dartmouth Atlas



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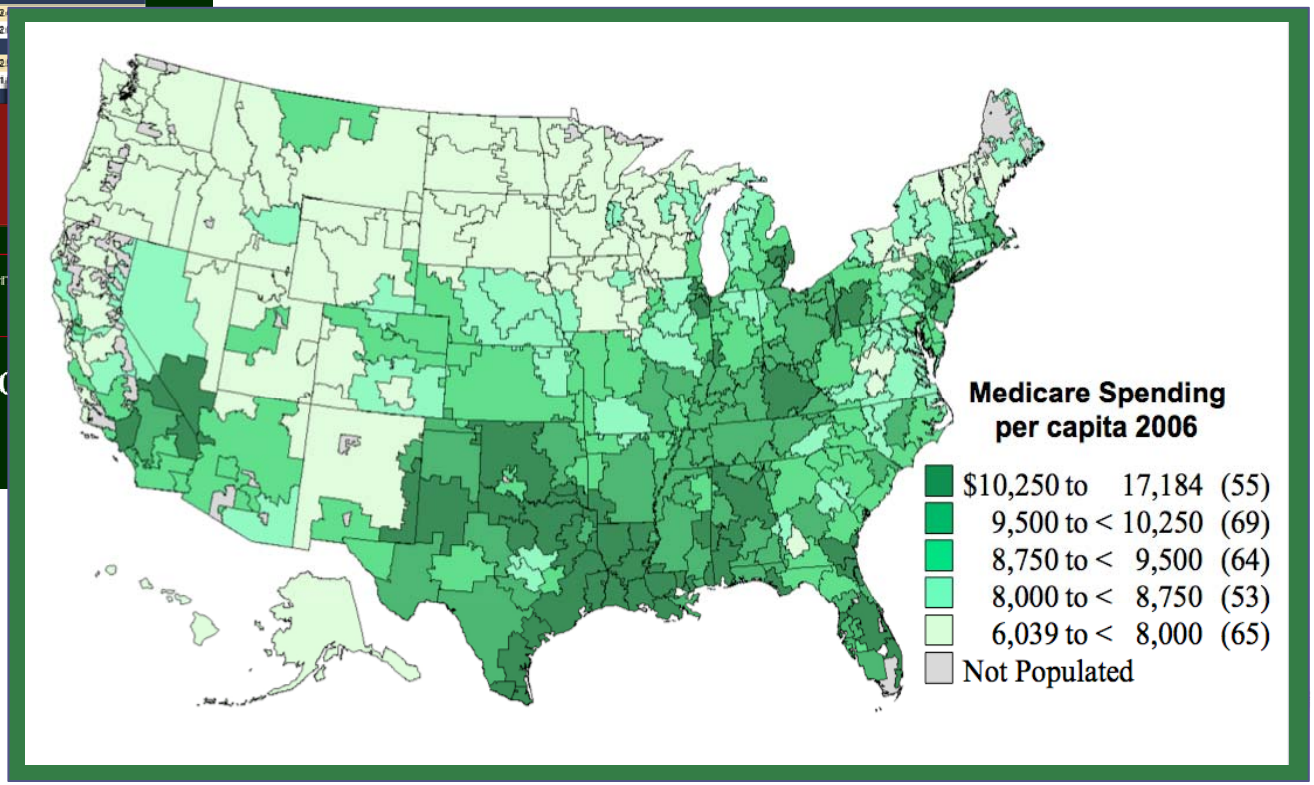


The new policy environment

Clarifying aims and performance measures

Emerging alignment on aims: National Priorities Partners

Better health: improving population health

Better care: improving safety, reliability, coordination and patient engagement

Lower costs: eliminating overuse

Performance measurement – the critical lever

National Quality Forum "Episode Measurement Framework"

Core issue: *how did the patient do over the relevant time-course?*

Value is multidimensional: outcomes, risks, quality, costs

Requires organizational accountability for patients over time

The new policy environment

Aside: a well-intentioned, but not-quite-right approach

The Value Index

Intent – improve value of care

Approach: create simple regional score of quality and per-capita costs

High quality, low cost: fees are increased on each service

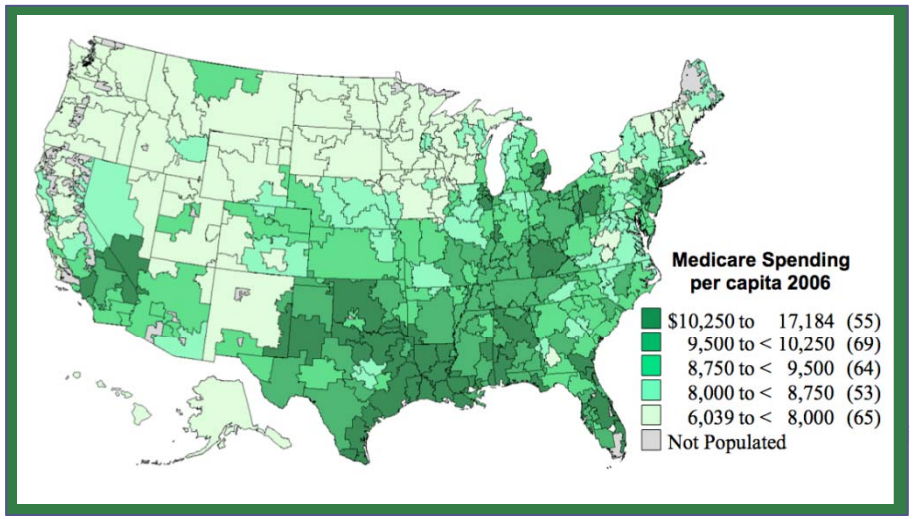
Low quality, high cost: fees are decreased on each service

The problem

Punishes good providers in poorly performing regions (and vice-versa)

Response of those with cuts? Increase volume of positive-margin services

We need to help all providers improve



New Models of Care and Payment
Episode (bundled) payments

Approach:

Single payment creates incentive for providers to work together to improve care and reduce costs within the episode

Examples: inpatient and post acute care; major elective procedures

Current status and evidence

Efforts to develop and test approaches underway: Geisinger – Provencare

Not much evidence

Challenges:

Requires an organization to either accept or distribute payments;

Quality and outcome measures available, but difficult to deploy;

May not reduce overall costs: *incentive remains to increase number of episodes*

New Models of Care and Payment
Patient Centered Medical Home

Approach:

Practice redesign to support core functions of primary care: enhanced access; pro-active care management of population; team-based care

Payment reform to support currently non-reimbursed activities

Current status: numerous pilots underway,

Group Health: better care experience (including md-pt interaction, informed choice, access; activation, goal setting); technical quality; reduced ER & hospital use; year 2 (unpublished) – reduced total costs; much lower staff burnout

Challenges

Responsibility for coordination lies entirely with primary care practice

Impact on costs uncertain

(1) No explicit incentives or accountability for overall costs

(2) Community costs may not be affected. (specialists and hospitals unlikely to allow incomes to fall)

Grumbach: Outcomes of Implementing PCMH Interventions: Review of the Evidence, August 2009 Center for Excellence in Primary Care.

New Models of Care and Payment
Accountable Care Organizations

Theory

Establish provider organizations that can effectively manage the full continuum of care as a real or virtually integrated local delivery system

Performance measurement – to ensure focus on demonstrably improving care and lowering costs

Payment reform: establish target spending levels; shared savings – under fee-for-service or partial capitation; no beneficiary “lock-in”.

Fisher et al. Creating Accountable Care Organizations, Health Affairs 26(1) 2007:w44-w57.

New Models of Care and Payment
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- Performance measurement – to ensure focus on demonstrably improving care and lowering costs
- Payment reform: establish target spending levels; shared savings – under fee-for-service or partial capitation; no beneficiary "lock-in".

Potential ACOs

- Integrated delivery systems – academic medical centers
- Hospitals with aligned (or owned) physician practices
- Physician networks (e.g. Independent Practice Associations)
- Community networks / community foundations (putting both hospitals and physicians under community governance with common aims)

Would entail little disruption of current referral patterns

Fisher et al. Creating Accountable Care Organizations, Health Affairs 26(1) 2007:w44-w57.

New Models of Care and Payment
Accountable Care Organizations

Evidence limited but promising

Physician Group Practice demonstration – mixed results

Where critical mass of payers engaged – more promising results

Geisinger Health System: (1) Medicare spending fell by 15% relative to US (92-96) (2) Teachers given $7,000 raise (over 3 years)

ACOs only reform approach that provides accountability for total costs – and incentives to eliminate unneeded capacity (and share in savings)

National interest, federal support likely, payers engaged

Legislation includes ACOs as national program (Senate) or pilots (House)

Several states moving forward: MA, VT, NC (network)

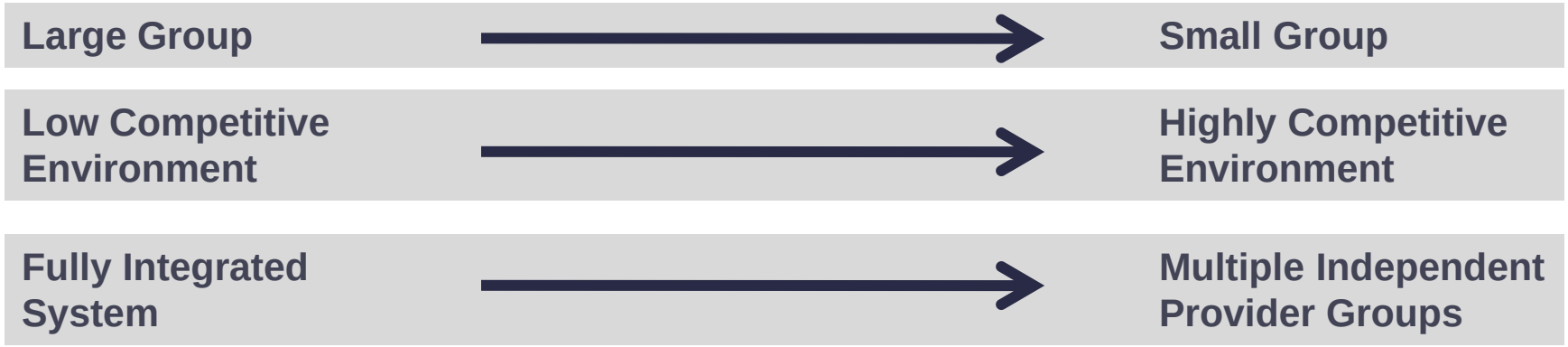
Brookings-Dartmouth collaborative – strong interest

Fisher et al. Creating Accountable Care Organizations, Health Affairs 26(1) 2007:w44-w57.

New Models of Care and Payment

Accountable Care Organizations: Initial Pilot Sites

Carilion Clinic Roanoke, VA	Norton Healthcare Louisville, KY	Tucson Medical Center Tucson, AZ
• ~900 Providers • 60,000 Medicare Patients Assigned	• ~400 Providers • 30,000 Medicare Patients Assigned	• ~80 Providers • 10,000 Medicare Patients Assigned



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Moving forward

Playing value-based payment forward

ACO's seek:

To improve care management (e.g. home-based care, e-health, etc.)

To reduce costs compared to alternative: Cost-effectiveness considered

To align care with patients and caregivers' values

To make careful "buy vs build" decisions

Referral centers should seek:

To demonstrate value (and deliver high quality / low cost episodes)

To manage their own primary care populations as ACOs

Implications for hospital leaders:

Variations in discretionary use of hospital are substantial

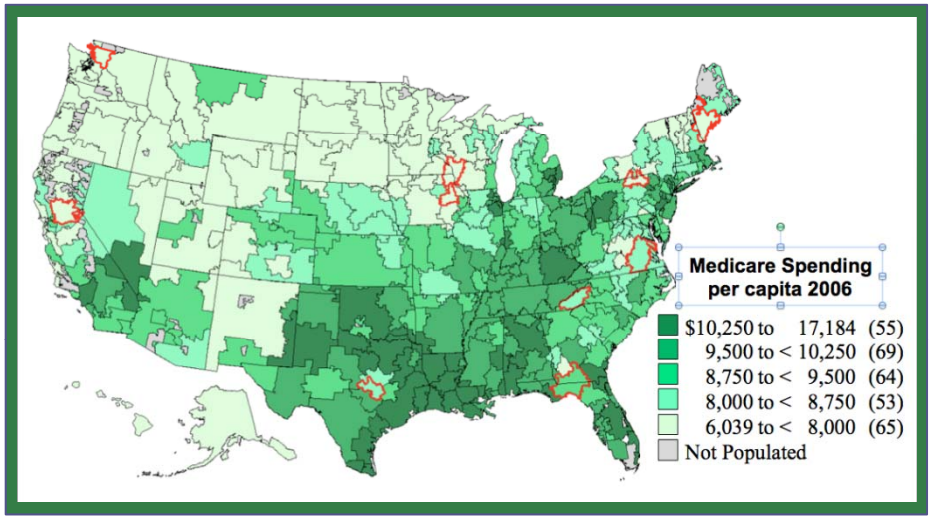
Consider the future role of the hospital – given aim of lower costs

How should you prepare for a new payment environment?

ACOs could be a promising path forward

Moving forward

Local leadership and engagement likely to be critical



"How do they do that?" conference

Everett, WA
Sacramento, CA
La Crosse, WI
Cedar Rapids, IA
Temple, TX
Portland, ME
Sayre, PA
Richmond, VA
Asheville, NC
Tallahassee, FL

Lighter colors = lower spending

Common themes

Shared aims, accountable to community

Strong foundation of primary care

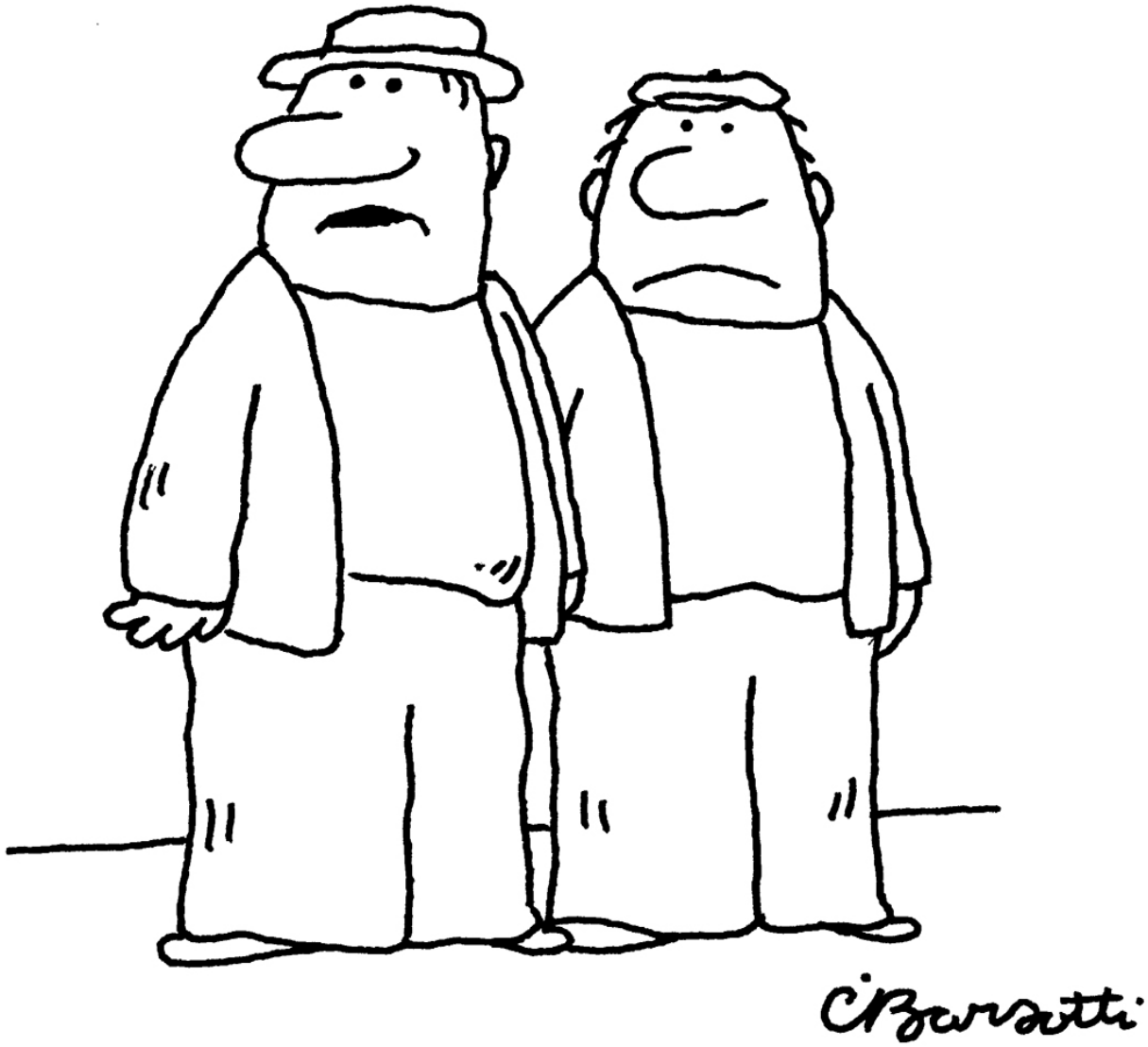
Physician engagement as leaders

Savings through reduced use of hospital

Use of data to drive change

Moving forward

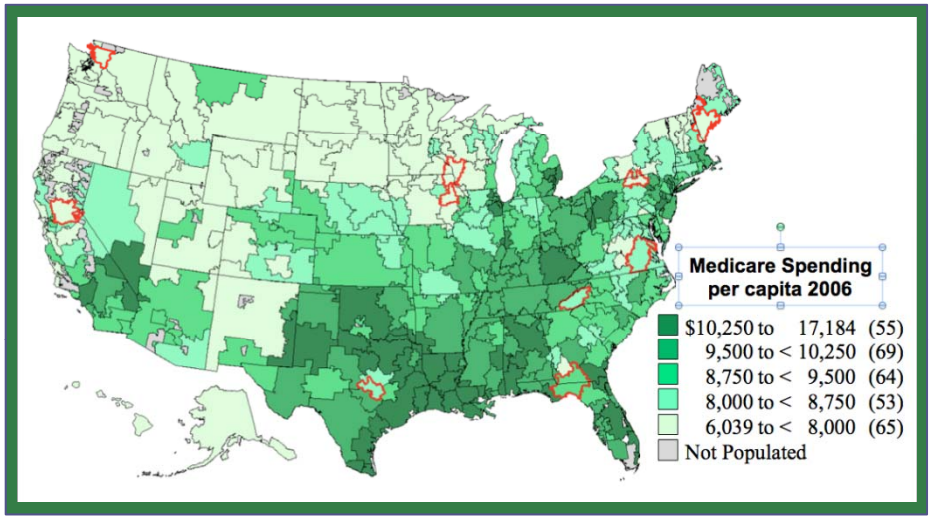
Local leadership and enga



"There, there it is again—the invisible hand of the marketplace giving us the finger."

Moving forward

Local leadership and engagement likely to be important



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Self-confident, engaged, "if not us, who?"