

THE JOURNEY TO ACCOUNTABLE CARE

ELLIOTT S. FISHER, MD, MPH

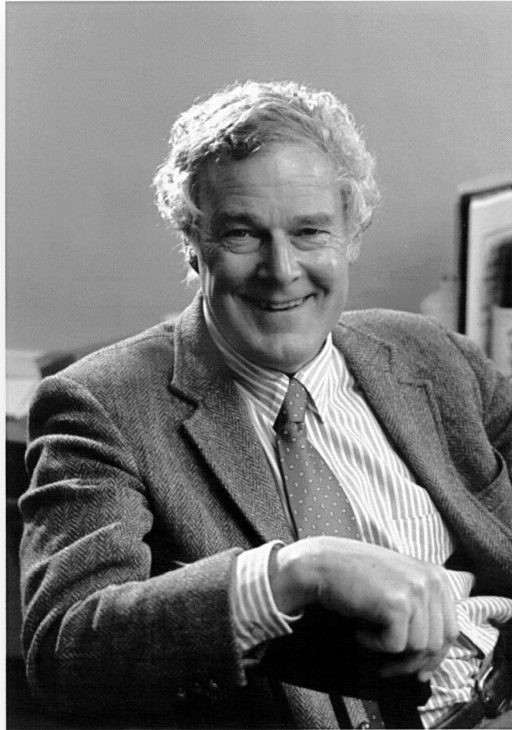
JAMES W. SQUIRES PROFESSOR OF MEDICINE
GEISEL SCHOOL OF MEDICINE AT DARTMOUTH

DIRECTOR, CENTER FOR POPULATION HEALTH
THE DARTMOUTH INSTITUTE FOR HEALTH POLICY AND CLINICAL
PRACTICE





Variations in Practice: Origins



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 plan-
ning 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.**

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



A brief summary

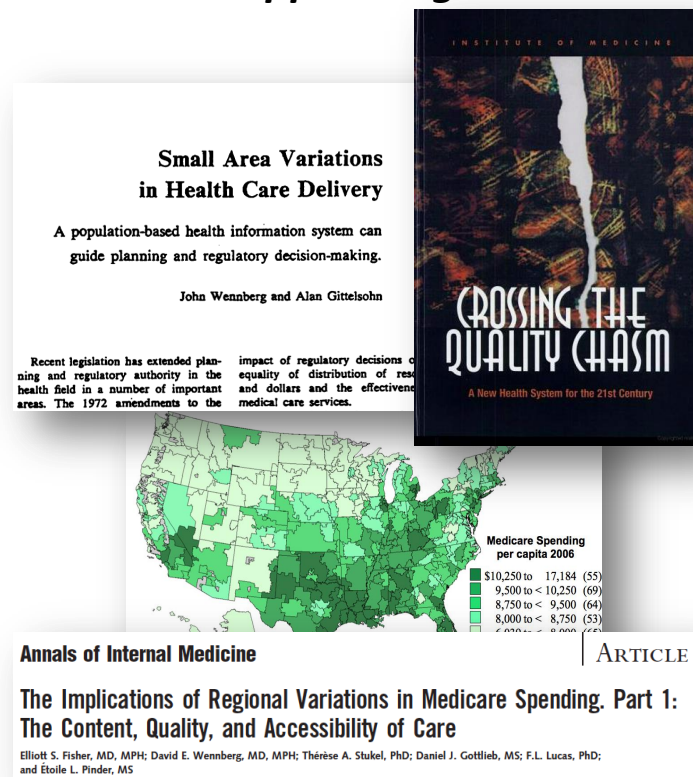
Health policy (generally) has assumed:

Science mediated through the professional authority granted to expert physicians produces the best care possible for both individuals and populations

With disappointing results

Science now tells us:

- (1) Evidence for many current treatments is insufficient. Even when evidence is good, failures of “execution” are common.
- (2) Whether a treatment is right for a patient depends on their preferences and values.
- (3) Waste is rampant, because supply and provider opinion determine utilization rates.



Suggesting an alternative path:

Doing the right thing – and doing it right
Doing the right thing – for the right patient
Doing the right thing – and no more

A learning system: improvement science
Make sure care is aligned with patient preferences
Integrate; monitor performance, align incentives

The Journey to Accountable Care

1. Rethinking Variation: Consider Three Categories of Care
2. Variation in Spending and Quality: Implications for Reform
3. The Beginnings of Accountable Care
4. Where are we now? What might we do?



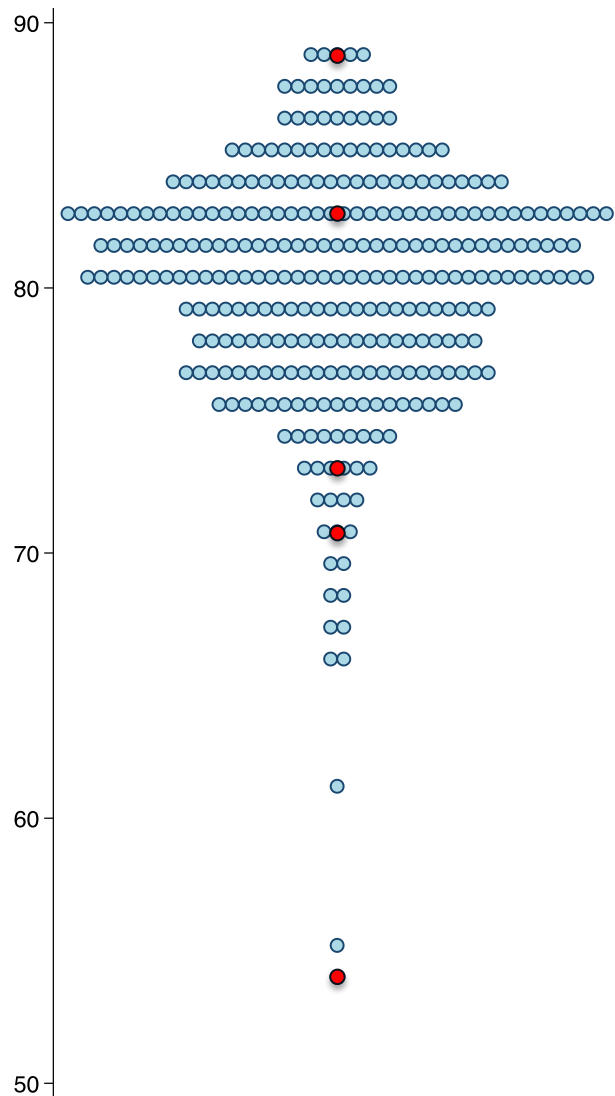
Categories of Variation

Category	Definition
Effective Care	<p><i>Services of proven effectiveness that involve no significant trade-offs — all patients with specific medical needs should receive them.</i></p> <ul style="list-style-type: none">• <i>Variation in process a major influence.</i>

Source: Wennberg et al., *Health Affairs*, 2002.



Effective Care: Regional Variation



Percent of Diabetic Medicare Enrollees Receiving Blood Lipids Test (2010)

Ocala, FL	89%
Atlanta, GA	83%
Denver, CO	76%
Grand Forks, ND	73%
Casper, WY	54%

Source: The Dartmouth Atlas



Effective Care: Hospital-Level Variation

Door to Balloon time in heart attack

THE NEW ENGLAND JOURNAL OF MEDICINE

SPECIAL ARTICLE

Strategies for Reducing the Door-to-Balloon Time in Acute Myocardial Infarction

Elizabeth H. Bradley, Ph.D., Jeph Herrin, Ph.D., Yongfei Wang, M.S.,
Barbara A. Barton, R.N., Tashonna R. Webster, M.P.H., Jennifer A. Mattera, M.P.H.,
Sarah A. Roumanis, R.N., Jephtha P. Curtis, M.D., Brahmajee K. Nallamothu, M.D.,
David J. Magid, M.D., M.P.H., Robert L. McNamara, M.D., M.H.S.,
Janet Parkosewich, R.N., M.S.N., Jerod M. Loeb, Ph.D., and Harlan M. Krumholz, M.D.

ABSTRACT

BACKGROUND
Prompt reperfusion treatment with ST-segment elevation myocardial infarction (STEMI) during primary percutaneous coronary intervention (PCI) is associated with significantly better outcomes. However, few hospitals have the resources to provide this treatment.

METHODS
We surveyed 365 hospitals in use. We used hierarchical regression to examine the relationship between hospital characteristics and door-to-balloon time.

RESULTS
In multivariate analysis, door-to-balloon times were significantly longer in hospitals that were not PCI-capable (13.8 minutes), had a lower volume of PCI (19.3 minutes), and had a lower volume of STEMI (19.3 minutes). Hospitals that were PCI-capable and had a higher volume of PCI had significantly shorter door-to-balloon times (8.2 minutes).

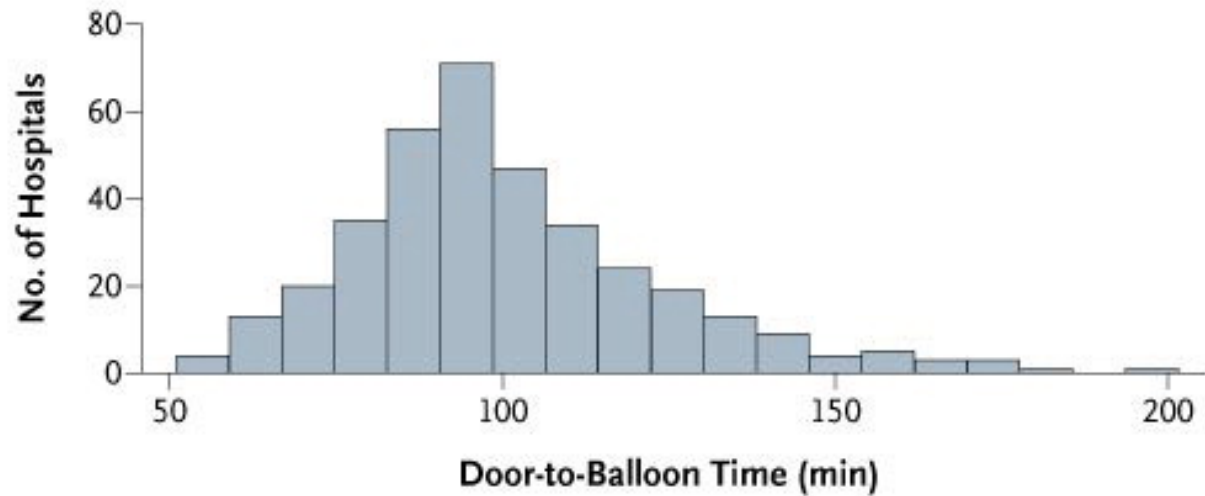
CONCLUSIONS
Several specific hospital characteristics are associated with longer door-to-balloon times. Improving these characteristics may reduce door-to-balloon times and improve outcomes in patients with STEMI.

From the Departments of Epidemiology and Public Health (E.H.B., T.R.W., H.M.K.) and Medicine (J.H., Y.W., J.P.C., R.L.M., H.M.K.), Yale University School of Medicine; Yale-New Haven Hospital (B.A.B., J.A.M., S.A.R., J.P., H.M.K.); and Yale University School of Nursing (J.P.)—all in New Haven, CT; the University of Michigan Veterans Affairs Medical Center and the Ann Arbor Veterans Affairs Medical Center, Ann Arbor (B.K.N.); Kaiser Permanente and the University of Colorado Health Sciences Center, Denver (D.J.M.); and the Joint Commission on Accreditation of Healthcare Organizations, Oakbrook Terrace, Ill. (J.M.L.).

This article was published at www.nejm.org on November 13, 2006.
N Engl J Med 2006;355:2308-20.
Copyright © 2006 Massachusetts Medical Society.

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N ENGL J MED 355:22 WWW.NEJM.ORG NOVEMBER 30, 2006



Categories of Variation

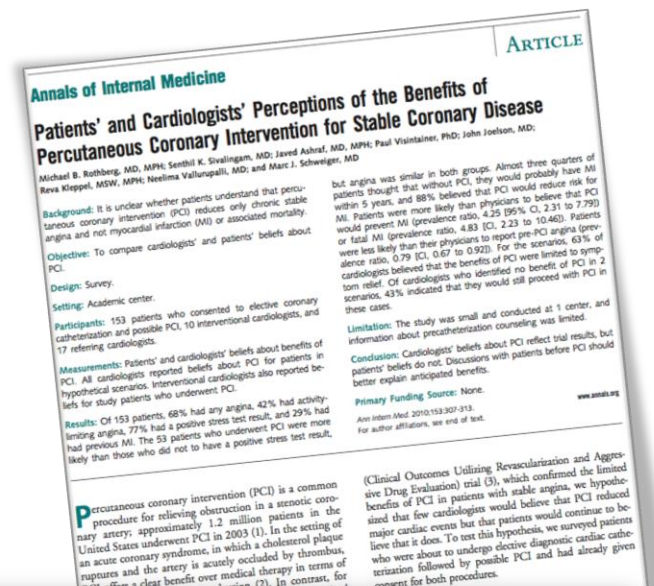
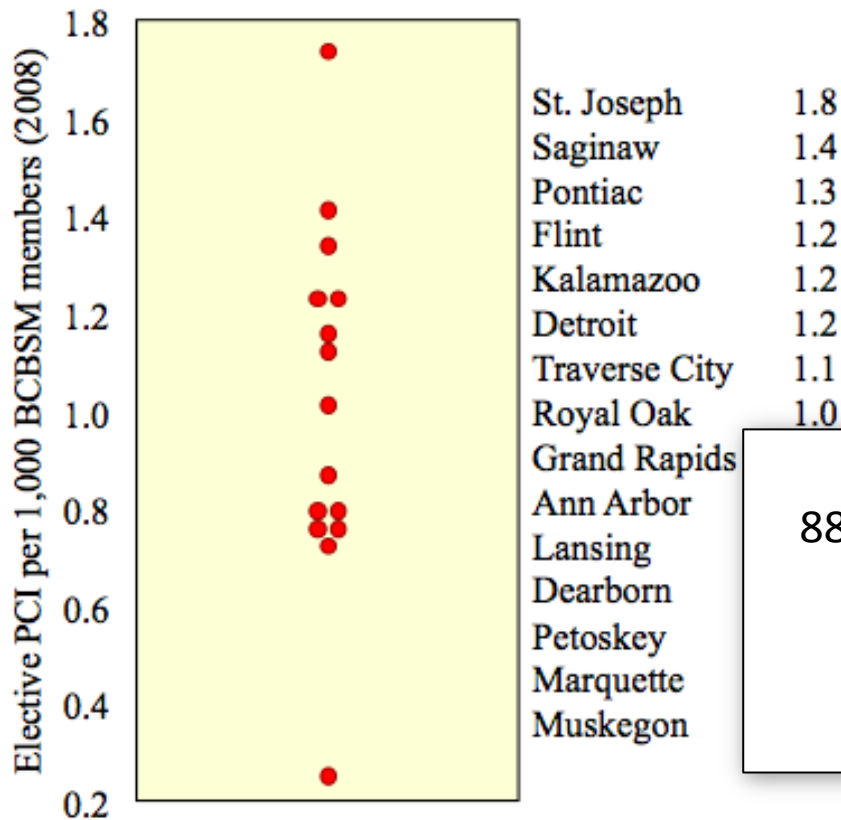
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Source: Wennberg et al., *Health Affairs*, 2002.



Preference-Sensitive Care: Regional Variation

Elective Percutaneous Coronary Interventions Per 1,000 Members



Patients:
 88% believed PCI would reduce risk of MI

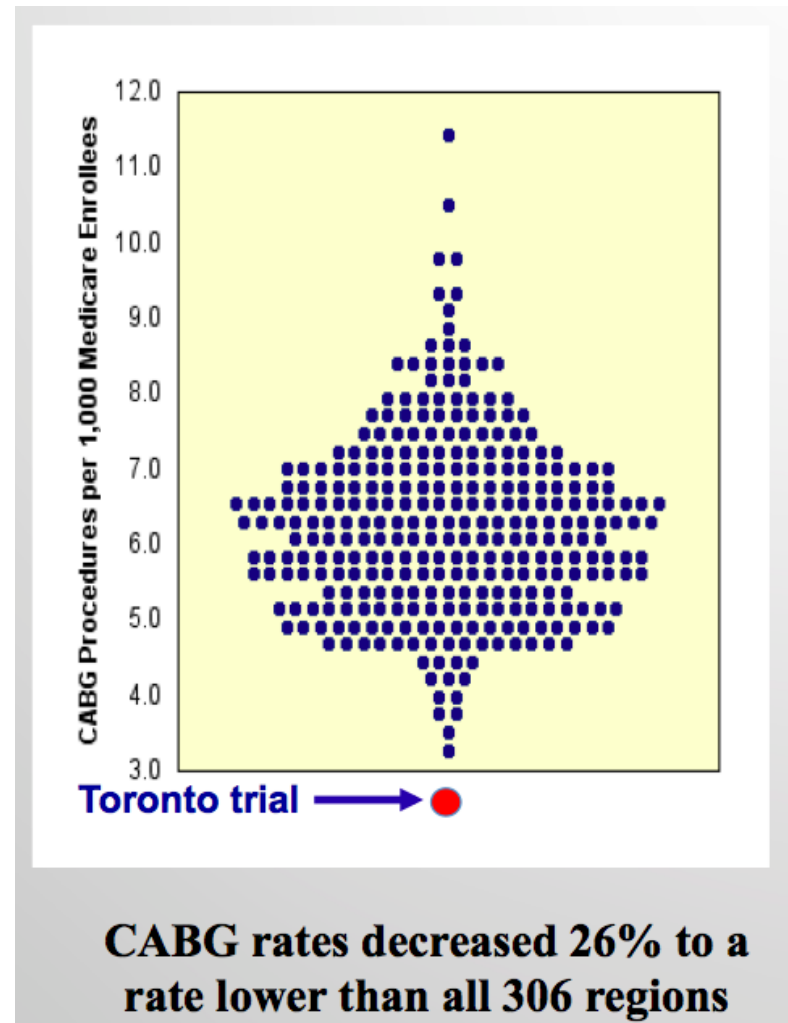
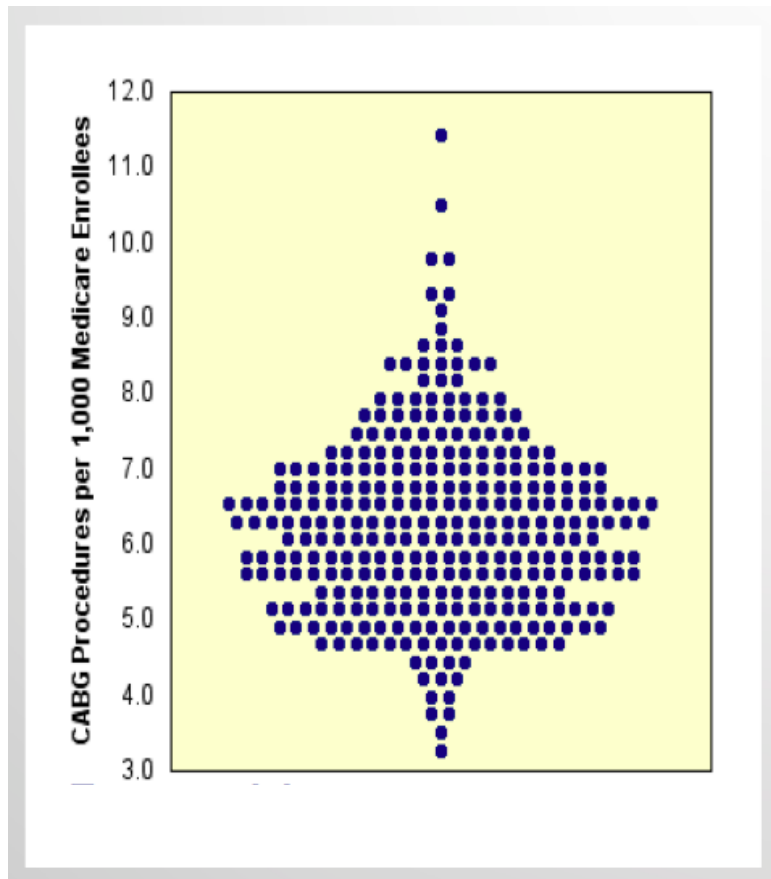
Cardiologists:
 43% would do PCI *even if no benefit*

Source: Center for Health Care Research and Transformation Issue Brief: Variation in Interventional Cardiac Care in Michigan (April 2012)



Preference-Sensitive Care: Role of shared decision-making

How many open heart programs might be needed in the U.S.?



Categories of Variation

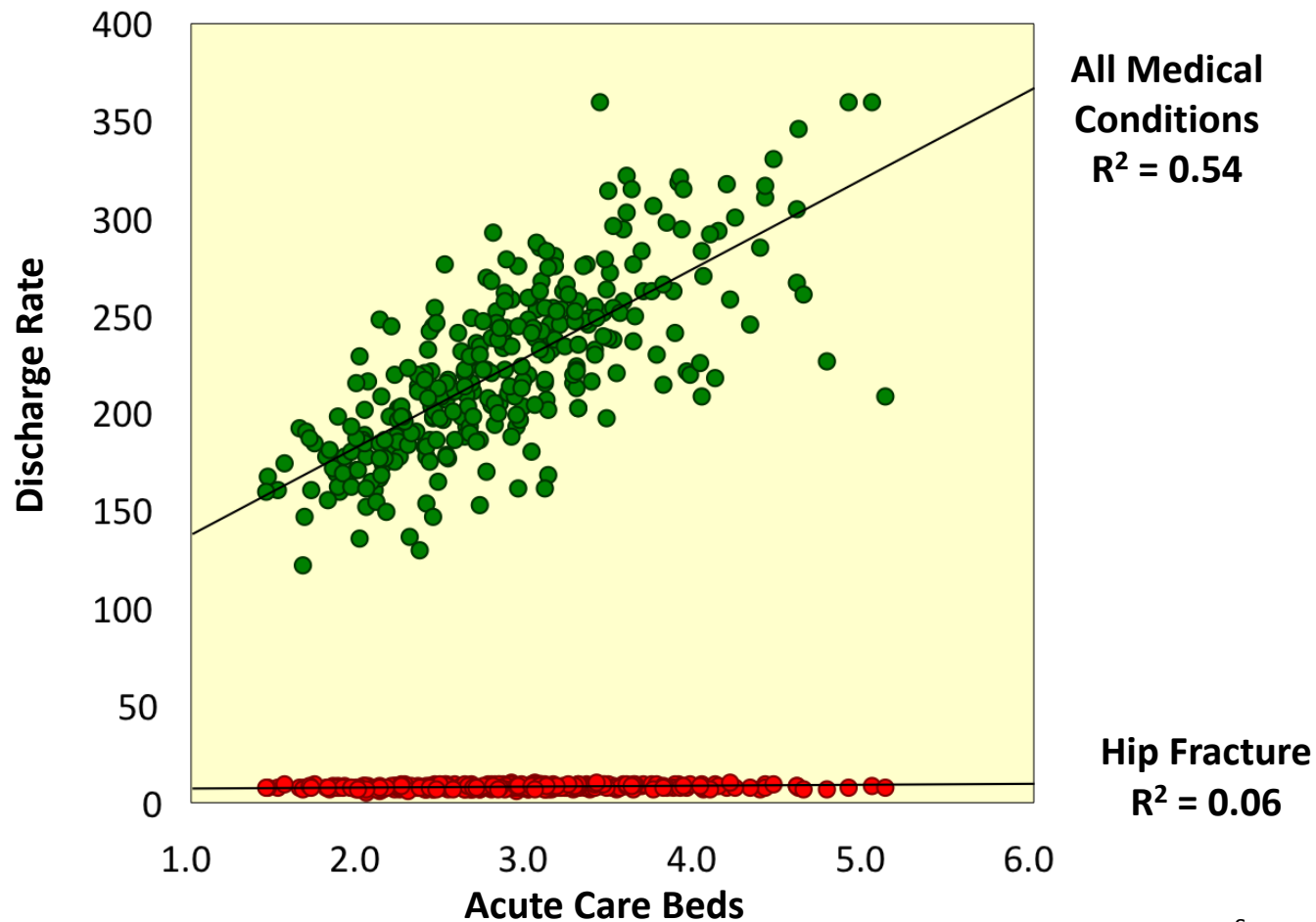
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Source: Wennberg et al., *Health Affairs*, 2002.



Supply-Sensitive Care: Regional Variation

Association Between Hospital Beds per 1,000 and Discharges per 1,000 Among Medicare Enrollees: 306 Hospital Regions

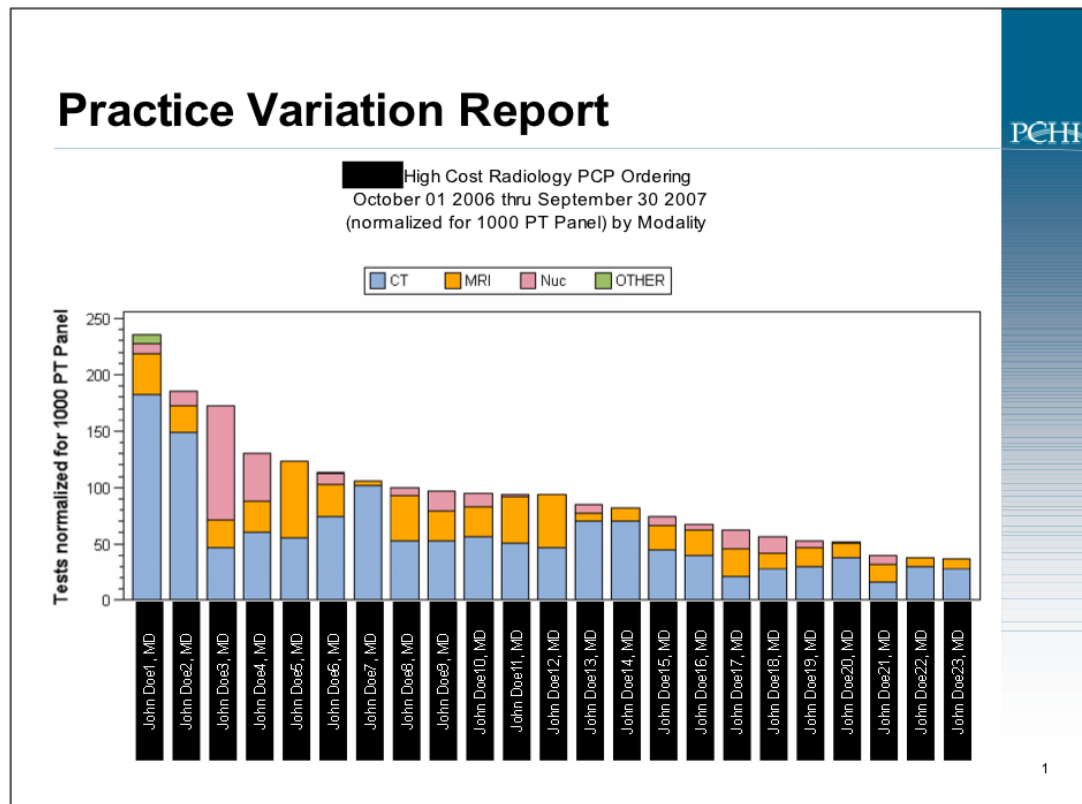


Source: The Dartmouth Atlas



Supply-Sensitive Care: Physician-Level Variation

Frequency of High Cost Imaging among Physicians in a Medical Group



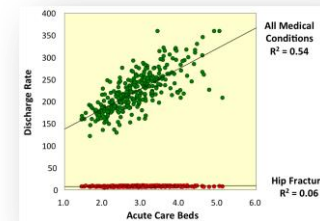
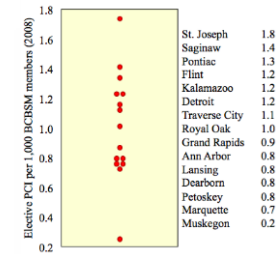
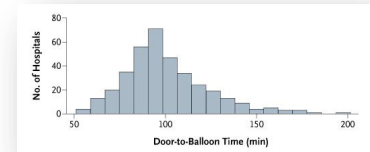
Source: May 29, 2008 Presentation at Federal Trade Commission, Tom Lee, MD (Partners Healthcare System) (used with permission)



Categories of Variation

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 Doing the right thing – for the right patient
 Doing the right thing – and no more

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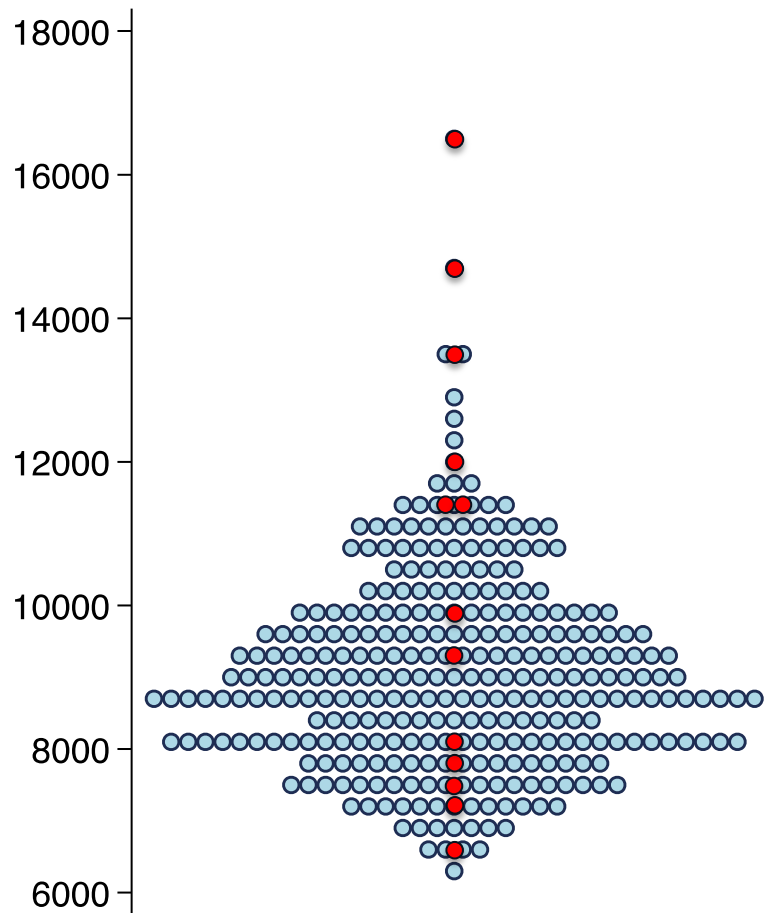
The Journey to Accountable Care

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2. Variation in Spending and Quality: Implications for Reform



Variations in Practice and Spending: Implications for Reform

Per-Capita 2009 Medicare Spending by HRR (Age, Sex, Race Adjusted)



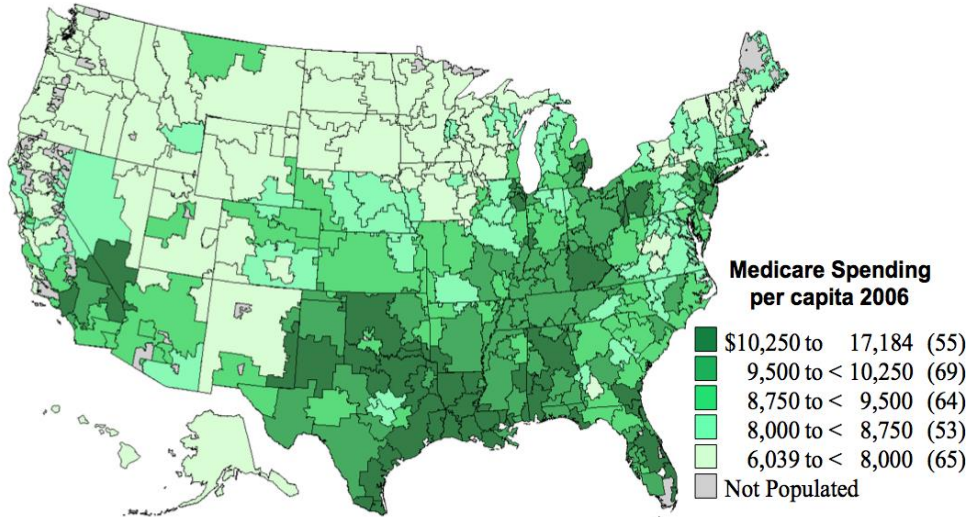
Miami, FL	\$16,639
McAllen, TX	\$14,576
Manhattan, NY	\$13,453
Los Angeles, CA	\$12,711
Detroit, MI	\$11,647
Chicago, IL	\$11,646
San Francisco, CA	\$9,913
Cincinnati, OH	\$9,388
Lebanon, NH	\$8,124
Minneapolis, MN	\$7,734
Des Moines, IA	\$7,382
Rochester, MN	\$7,120
La Crosse, WI	\$6,532

Source: The Dartmouth Atlas



Health Implications of Regional Variations in Spending

- Initial study: 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 (green): \$6,304

Difference: \$2,312 (61%)

Source: See slide notes.



Variations in Practice and Spending: Implications for Reform

Effective Care: *Benefit clear for all*

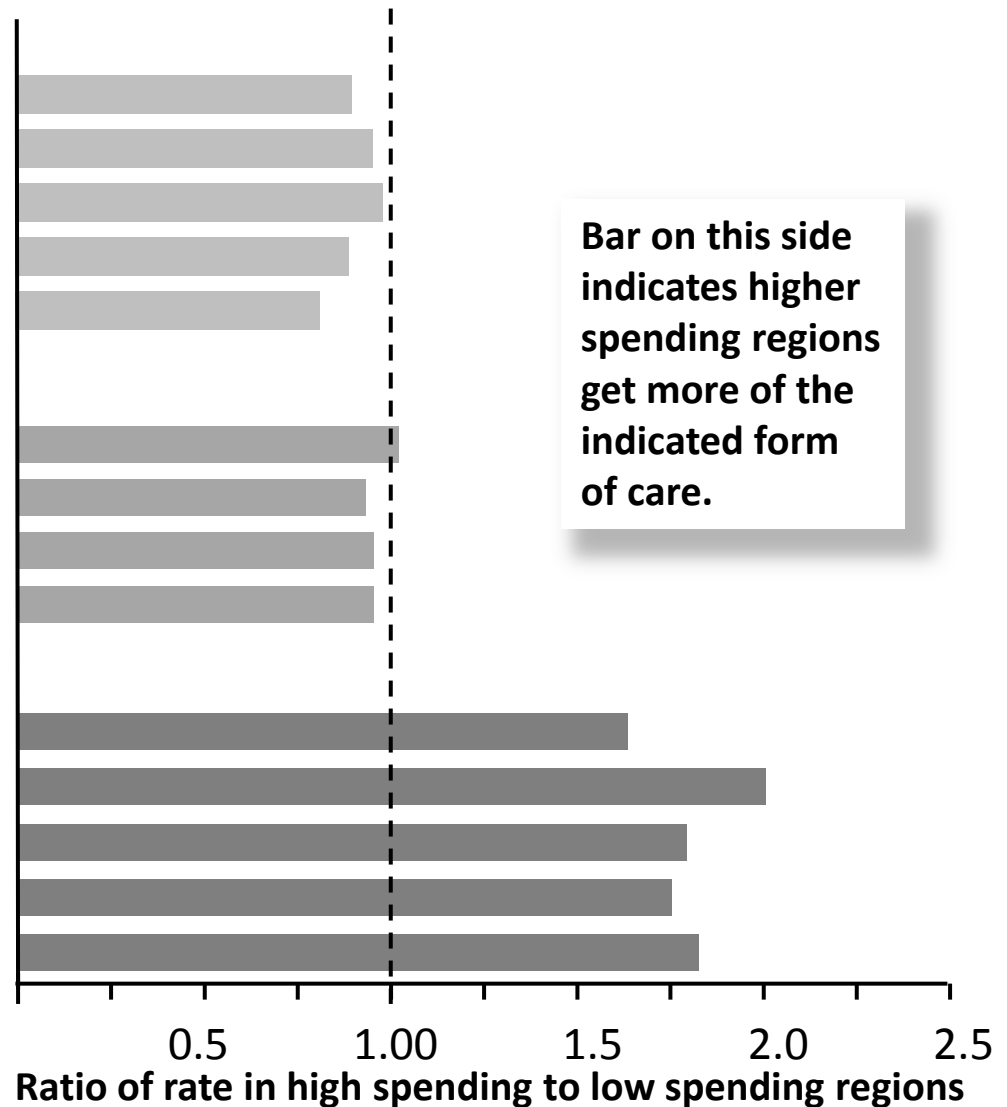
- Reperfusion in 12 hours (Heart attack)
- Aspirin at admission (Heart attack)
- Mammogram, Women 65-69
- Pap Smear, Women 65+
- Pneumococcal Immunization (ever)

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
- Visits (mostly to specialists)
- Imaging
- Diagnostic Tests



Variations in Practice and Spending: Implications for Reform

Health Outcomes

No gain in survival

No better function

Physician's Perceptions

Worse communication

Greater difficulty ensuring coordination

Greater perception of scarcity

Patient-Perceived Quality

Lower satisfaction with hospital care

Worse access to primary care

No less sense that care is rationed

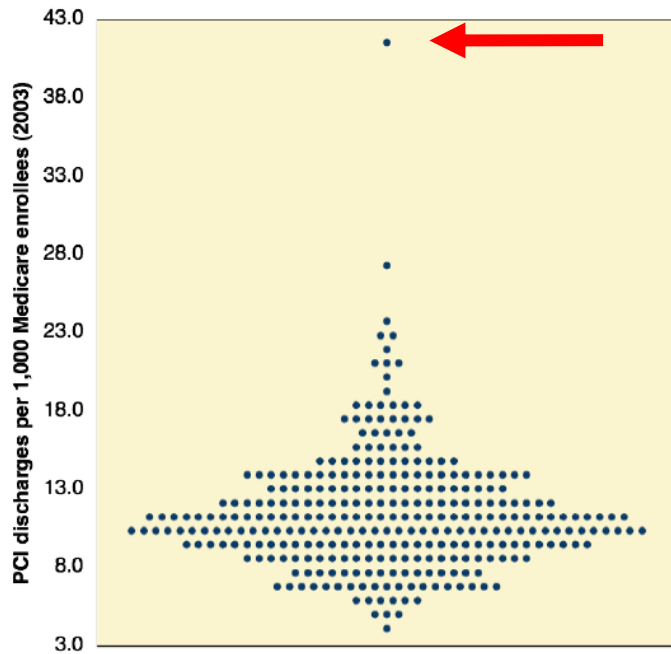


Why the variations?

- Not patient preferences or malpractice
- Capacity important, but explains less than half of the difference
- Clinical decision-making for preference and supply-sensitive care clearly important



Variations in Practice and Spending: Implications for Reform



SIDE EFFECTS

Heart Procedure Is Off the Charts in an Ohio City



David Maxwell for The New York Times

Dr. Charles D. O'Shaughnessy of North Ohio Heart Center does an angioplasty at EMH Regional Medical Center in Elyria, Ohio, with Susan Croston, a radiology technologist.

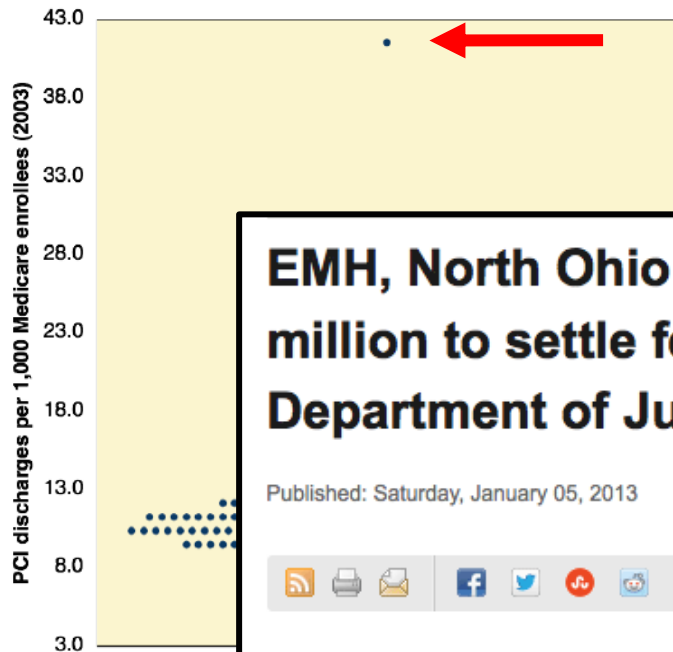
By REED ABELSON
Published: August 18, 2006

“We do manage very aggressively the patients we care for... We have excellent outcomes.”

Dr. John Schaeffer



Variations in Practice and Spending: Implications for Reform



SIDE EFFECTS

Heart Procedure Is Off the Charts in an Ohio City



David Maxwell for The New York Times
Regional Medical Center in Elyria, Ohio, with

EMH, North Ohio Heart Center paying \$4.4 million to settle federal allegations with Department of Justice

Published: Saturday, January 05, 2013



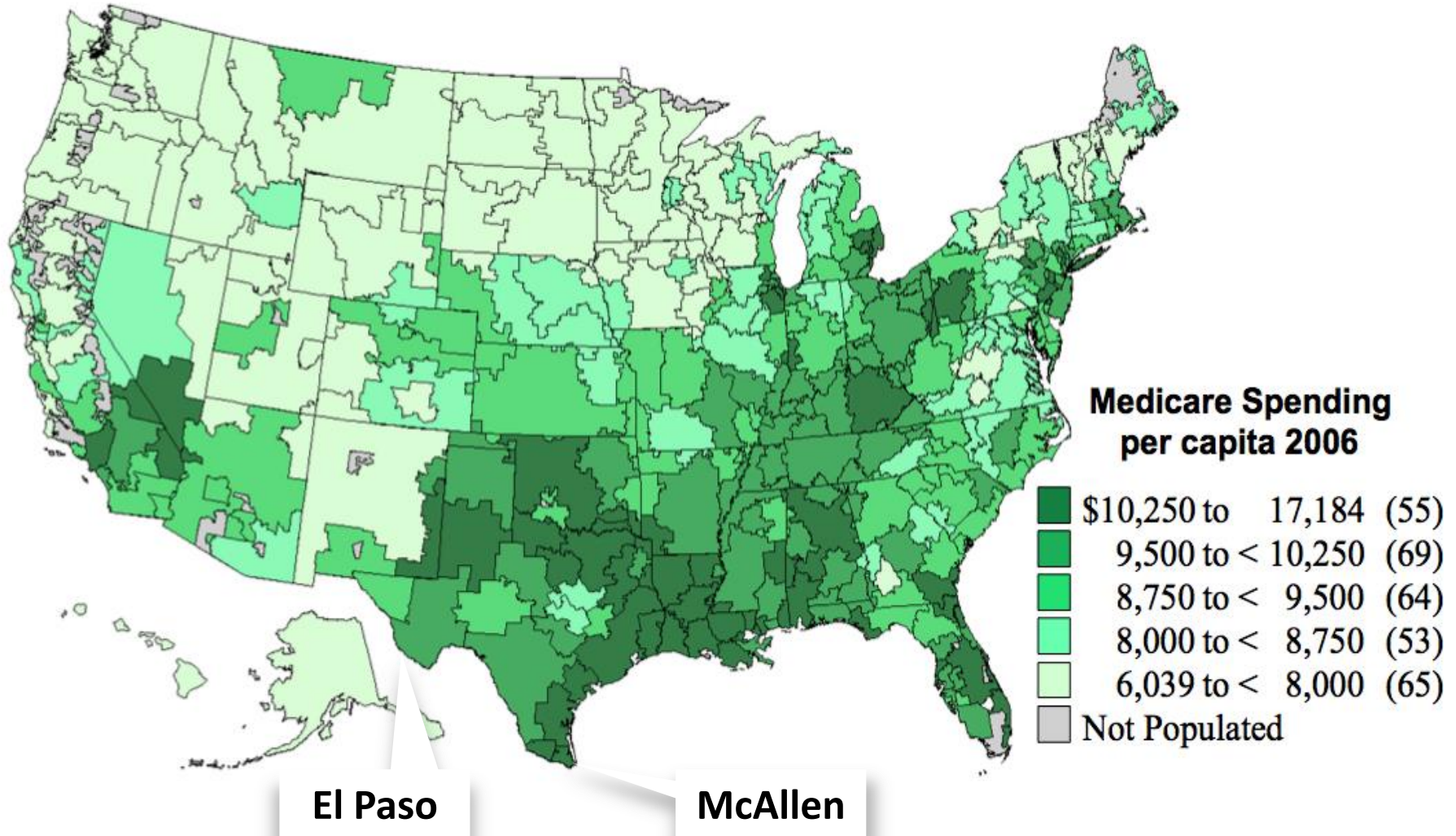
By KAYLEE REMINGTON
kremington@MorningJournal.com
@MJ_KRemington

ELYRIA — EMH Regional Medical Center and the North Ohio Heart Center have agreed to pay the federal government \$4.4 million to settle allegations that between 2001 and 2006, EMH and NOHC performed unnecessary cardiac procedures on Medicare patients.

the patients we
es.”
n Schaeffer



Variations in Practice and Spending: Why clustered regionally?



Source: The Dartmouth Atlas



Variations in Practice and Spending: Implications for Reform

THE NEW YORKER

ANNALS OF MEDICINE

THE COST CONUNDRUM

What a Texas town can teach us about health care.

BY ATUL GAWANDE

JUNE 1, 2009

It is spring in McAllen, Texas. The morning sun is warm. The streets are lined with palm trees and pickup trucks. McAllen is in Hidalgo County, which has the lowest household income in the country, but it's a border town, and a thriving foreign-trade zone has kept the unemployment rate below ten per cent. McAllen calls itself the Square Dance Capital of the World. "Lonesome Dove" was set around here.

McAllen has another distinction, too: it is one of the most expensive health-care markets in the country. Only Miami—which has much higher labor and living costs—spends more per person on health care. In 2006, Medicare spent fifteen thousand dollars per enrollee here, almost twice the national average. The income per capita is twelve thousand dollars. In other words, Medicare spends three thousand dollars more per person here than the average person earns.

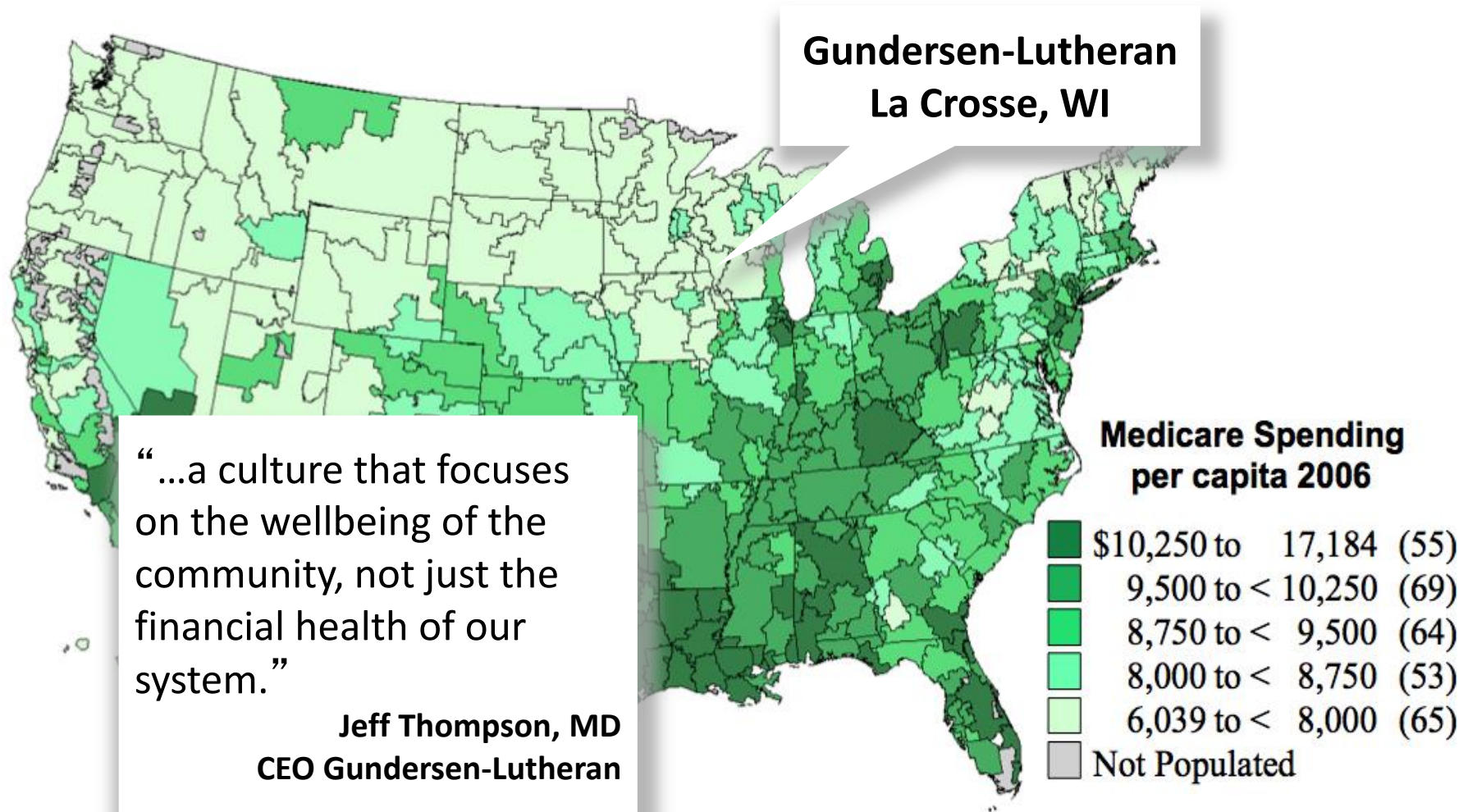
The explosive trend in American medical costs seems to have occurred here in an especially intense form. Our country's health care is by far the most expensive in the world. In Washington, the aim of health-care reform is not just to extend medical coverage to everybody but also to bring costs under control. Spending on doctors, hospitals, drugs, and the like now consumes more than one of every six dollars we earn. The financial burden has damaged the global competitiveness of American businesses and bankrupted millions of families, even those with insurance. It's also devouring our government. "The greatest threat to America's fiscal health is not Social Security," President Barack Obama said in a March speech at the White House. "It's not the investments that we've made to rescue our economy during this crisis. By a



*Costlier care is often worse care.
Photograph by Phillip Toledano.*

“[McAllen] ... a medical community came to treat patients the way subprime mortgage lenders treated home buyers: as profit centers.”

Variations in Practice and Spending: Implications for Reform



Source: The Dartmouth Atlas



Variations in Practice and Spending: Implications for Reform

Underlying Problem

Confusion about aims: Is it about money or something more?

Absent or poor data leaves practice unexamined and unable to improve; choices uninformed by evidence.

Flawed conceptual model: Health is produced by face-to-face visits with physicians. Care is fragmented.

Wrong incentives reinforce model, reward fragmentation, induce overuse of unnecessary care.

Key Principles

Clarify aims: Better health, better care, lower costs – for patients and communities.

Better information: to support improvement & shared decision-making; ***and determine true demand***

New model: *It's the system.* Establish organizations capable of redesigning practice , right-sizing capacity

Rethink our incentives: Realign incentives – both financial and professional – with aims.



The Journey to Accountable Care

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The Current Opportunity: Health Care Reform

H. R. 3590

One Hundred Eleventh Congress
of the
United States of America

AT THE SECOND SESSION

Began and held at the City of Washington on Tuesday,
the fifth day of January, two thousand and ten

An Act

Entitled The Patient Protection and Affordable Care Act.

Be it enacted by the Senate and House of Representatives of
the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS

(a) SHORT TITLE.—This Act may be cited as the “Patient Protection and Affordable Care Act”.

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—QUALITY, AFFORDABLE HEALTH CARE FOR ALL AMERICANS
Subtitle A—Immediate Improvements in Health Care Coverage for All Americans

Sec. 1001. Amendments to the Public Health Service Act.

*PART A—INDIVIDUAL AND GROUP MARKET REFORMS

*SUBPART B—IMPROVING COVERAGE

- *Sec. 2711. No lifetime or annual limits.
- *Sec. 2712. Prohibition on rescissions.
- *Sec. 2713. Coverage of preventive health services.
- *Sec. 2714. Extension of dependent coverage.
- *Sec. 2715. Development and standardization of uniform explanation of coverage documents and standardized definitions.
- *Sec. 2716. Prohibition of discrimination based on salary.
- *Sec. 2717. Ensuring the quality of care.
- *Sec. 2718. Bringing down the cost of health care coverage.
- *Sec. 2719. Appraisals process.
- *Sec. 2719. Appraisals process.

Sec. 1002. Health insurance consumer information.
Sec. 1003. Ensuring that consumers get value for their dollars.
Sec. 1004. Effective date.

Subtitles E—Immediate Actions to Preserve and Expand Coverage

- Sec. 1101. Immediate access to insurance for uninsured individuals with a pre-existing condition.
- Sec. 1102. Reinsurance for early retirees.
- Sec. 1103. Immediate information that allows consumers to identify affordable coverage options.
- Sec. 1104. Administrative simplification.
- Sec. 1105. Effective date.

Subtitle C—Quality Health Insurance Coverage for All Americans

PART I—HEALTH INSURANCE MARKET REFORMS

Sec. 1201. Amendment to the Public Health Service Act.

*SUBPART 1—GENERAL REFORM

- *Sec. 2704. Prohibition of preexisting condition exclusions or other discrimination based on health status.
- *Sec. 2701. Fair health insurance premiums.
- *Sec. 2702. Guaranteed availability of coverage.

Affordable Care Act

- Investments in public health
- Health information technology
- Expanded coverage
- **New payment models**

APPROVED

MAR 23 2010

Barack Obama



The Current Opportunity: New Payment Models

Episode (Bundled) Payments

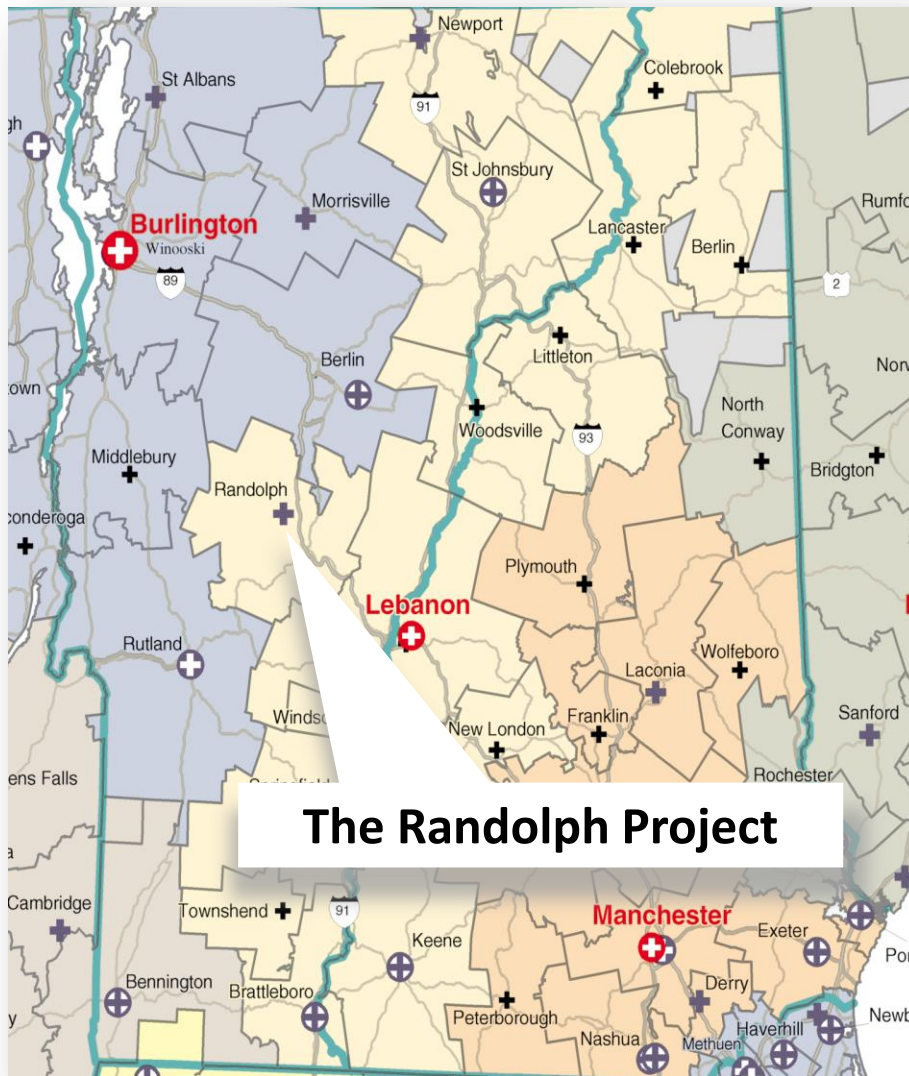
- **Theory:** Single payment encourages integration to improve care
- **Practice:** Many payers testing this approach
- **Limitations:** Boundaries contentious, incentive to do more remains
- **Evidence:** No evidence yet

Medical Home

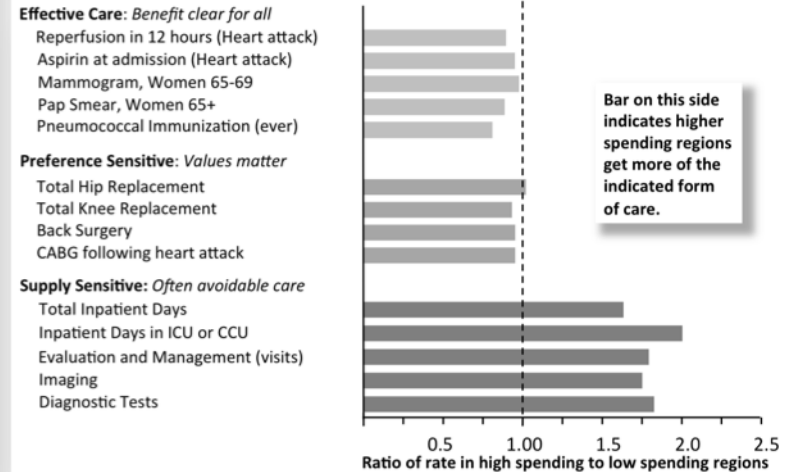
- **Theory:** Payment to support (currently unfunded) primary care functions
- **Practice:** Adoption underway with federal and private payers
- **Limitations:** Leaves responsibility with PCP; no incentive for specialists or hospitals to support improvement
- **Evidence:** No evidence yet in fee-for-service practice; emerging evidence within integrated systems under global payment



Origin: Population-Based Accountability for All Categories of Care



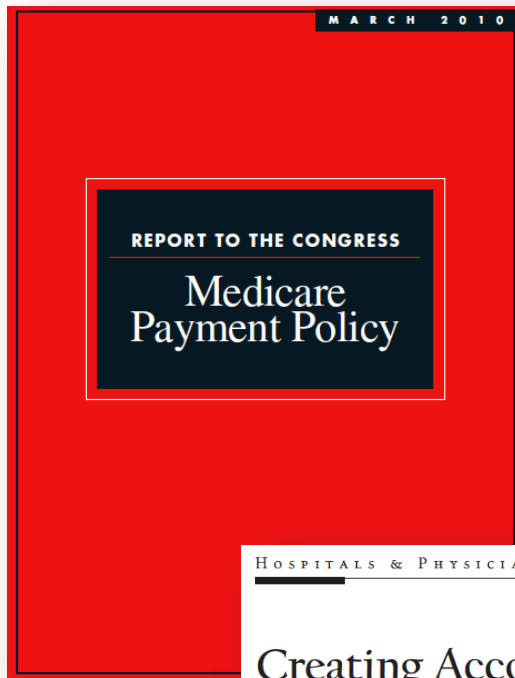
Higher vs. Lower Spending Regions



Purpose

- Ensure delivery of effective care
- Shared decision-making to get patients the care they want *and* right-size capacity
- Continually eliminate waste

The Current Opportunity: ACOs



Core Ideas

- Population-based virtual budgets
- Real or virtual organizations
- Performance measurement
- Patient choice
- Accommodate diversity

HOSPITALS & PHYSICIANS

Creating Accountable Care Organizations: The Extended Hospital Medical Staff

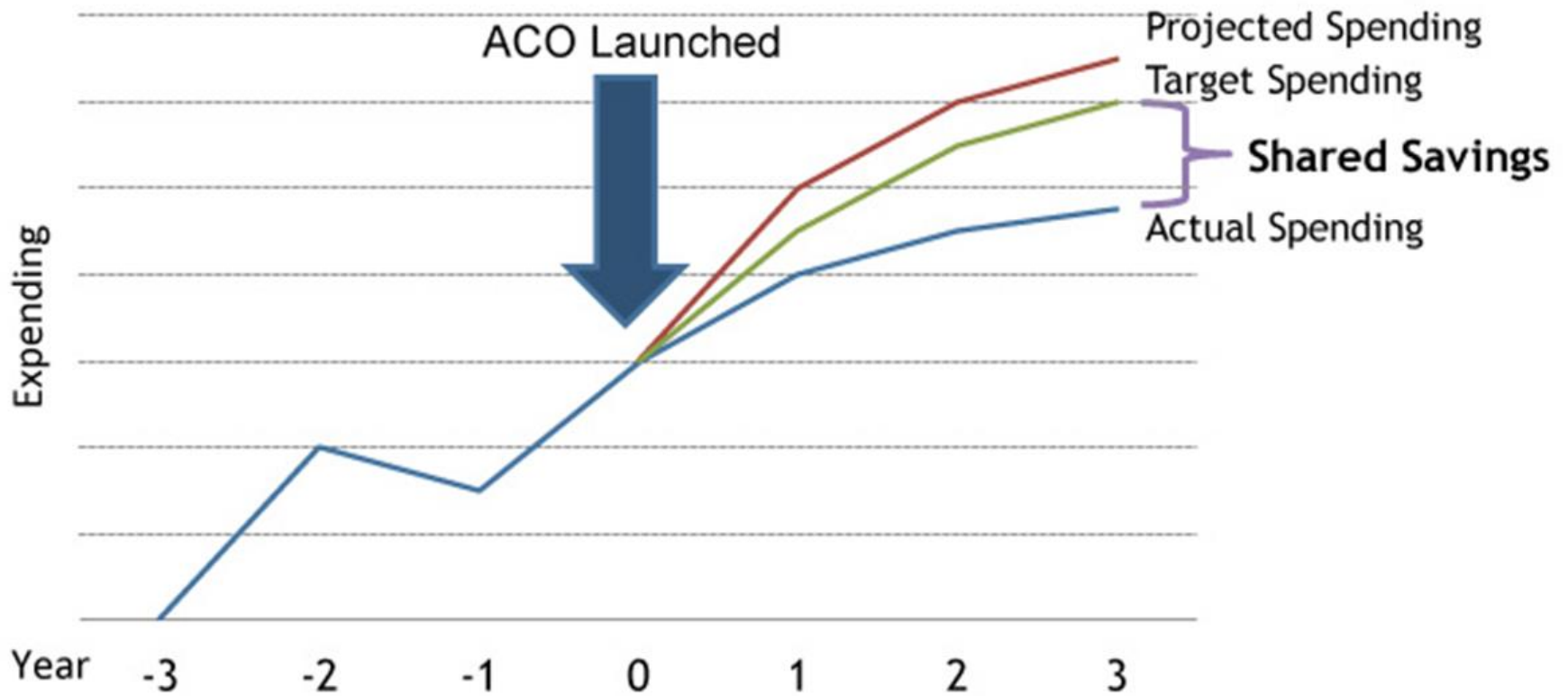
A new approach to organizing care and ensuring accountability.

by Elliott S. Fisher, Douglas O. Staiger, Julie P.W. Bynum, and Daniel J. Gottlieb



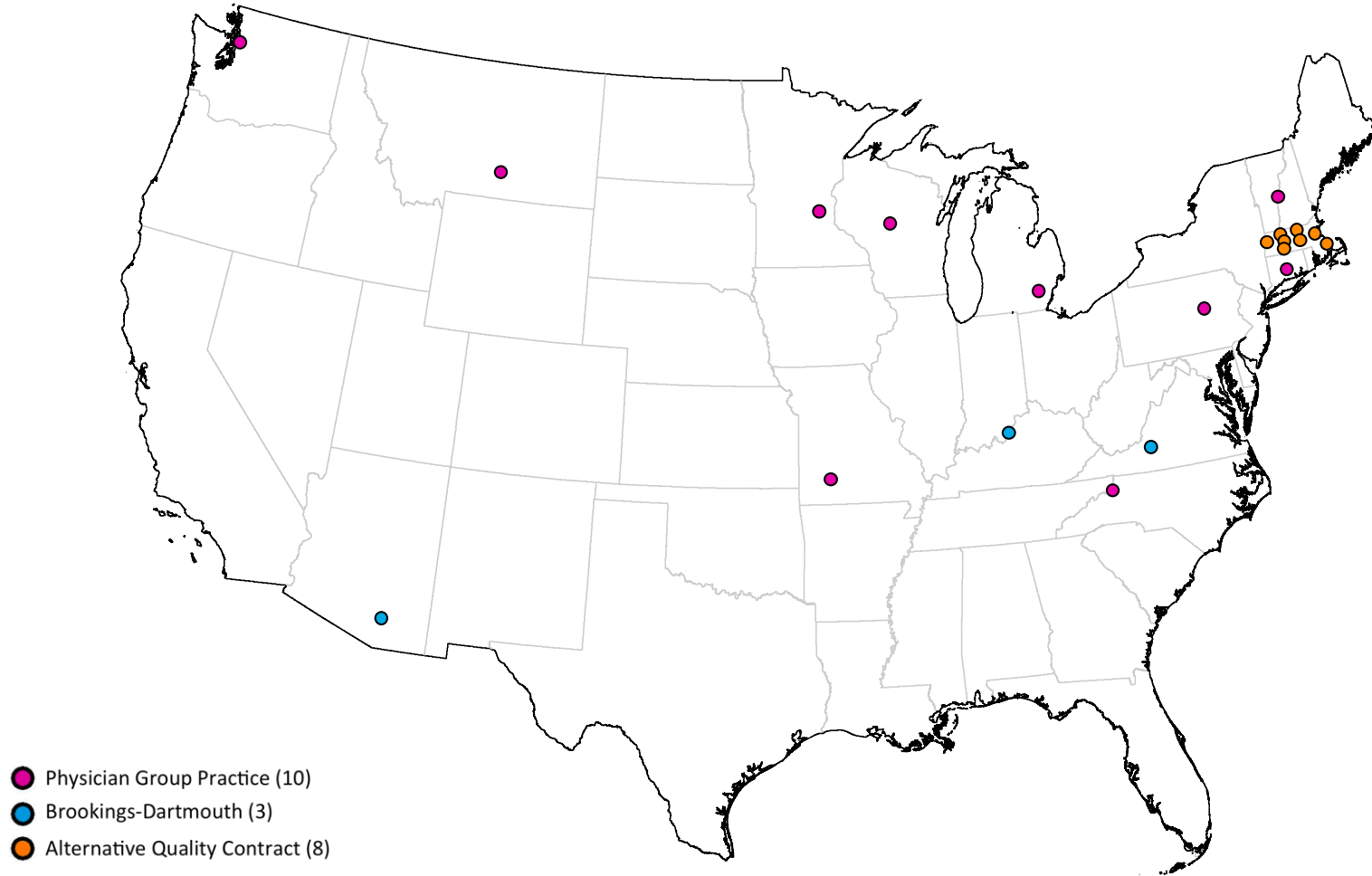
The Current Opportunity: ACOs

The ACO Shared Savings Opportunity



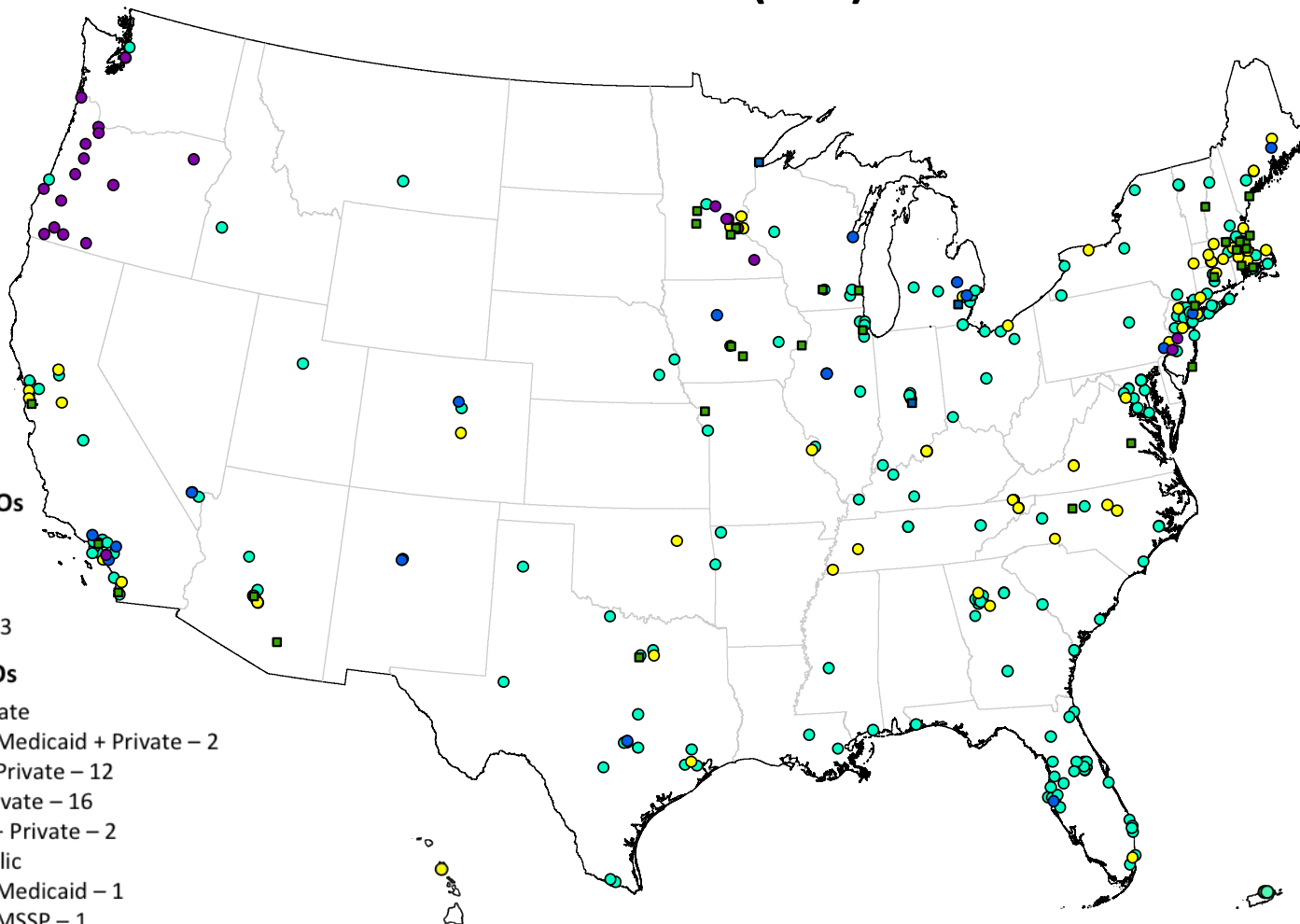
The Current Opportunity: ACOs

ACOs: 2009 (21)



The Current Opportunity: ACOs

ACOs: 2013 (328)



Single-Payer ACOs

- Private – 53
- Pioneer – 16
- MSSP – 201
- Medicaid – 23

Multi-Payer ACOs

- Public & Private
 - Pioneer + Medicaid + Private – 2
 - Pioneer + Private – 12
 - MSSP + Private – 16
 - Medicaid + Private – 2
- Multiple Public
 - Pioneer + Medicaid – 1
 - Pioneer + MSSP – 1
 - MSSP + Medicaid – 1

Note: The sum of ACOs reflects the total number of unique, publicly identifiable, confirmed private-payer ACOs as of 08/2012 and public-payer ACOs as of 01/2013.



The Current Opportunity: Accountable Care

A payment model focused on performance – not structural requirements – and focused on the overall care of a population

Diverse organizational forms are enabled

- **Integrated delivery systems**
- **Physician groups and networks**
- **Hospitals** (employing or contracting with their physicians)
- **Community clinics**
- **Pharmacy-supported MD networks**

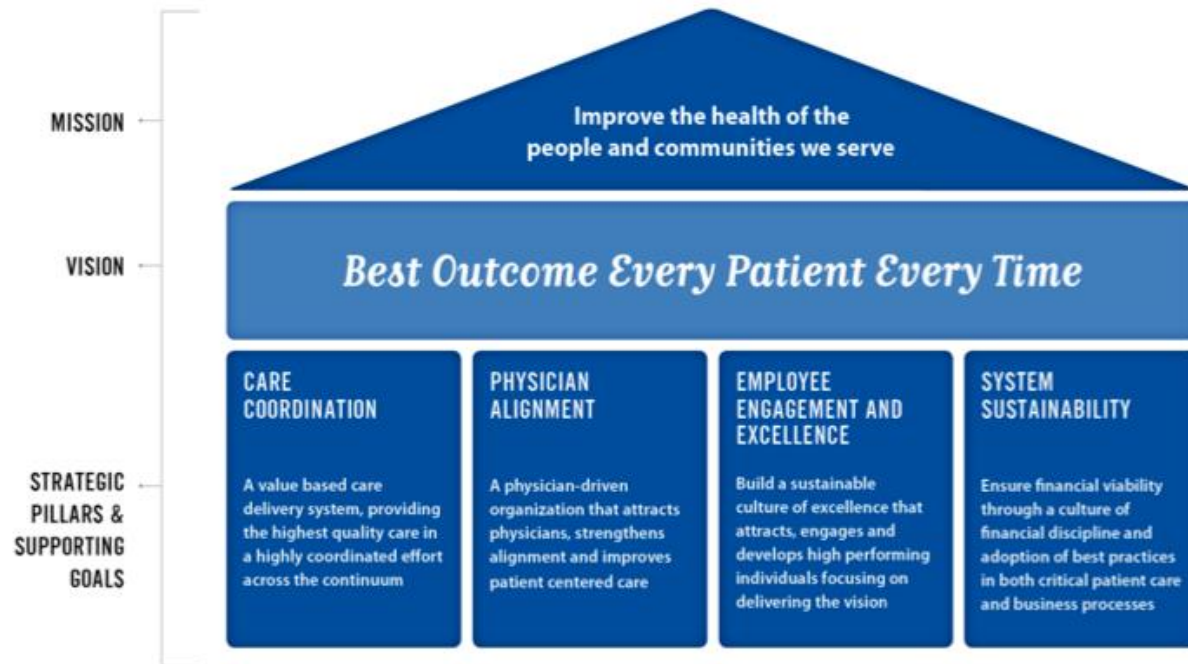


The Current Opportunity: Accountable Care

LONG-TERM STRATEGIC PLAN



REPOSITION IOWA HEALTH SYSTEM FROM A HOSPITAL-CENTRIC, EPISODIC DELIVERY MODEL TO A PHYSICIAN-DRIVEN, PATIENT-CENTERED INTEGRATED CARE SYSTEM



The Current Opportunity: Accountable Care

ORGANIZED SYSTEM OF CARE (“OSC”)

Leadership: physician directed “sites of care” leadership collaborating within a “defined authority matrix”

Community-based physician practices

Acute Care

Home Care

Long-Term Care

Community Health Centers

Other

VALUE BASED CARE - CAPABILITY SETS

Capabilities

- Quality measurement
- Financial reporting
- Risk stratification
- Population management
- Chronic disease management
- Care coordination
- Advanced IT tools
- Community-health provider collaboration



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Insights, Opportunities and Challenges

Underlying problem

Limited knowledge about what works, how, for whom, in what contexts

Possible approach

A learning health care system embedding measurement and improvement

- Practice networks
- Meaningful measures (PROMs, costs)
- Comparative effectiveness research
- Advanced technology and analytics

Opportunity:

Improvement in knowledge and care

Challenge:

Balancing public and private good

Addressing all 3 categories of variation

Q Manage Health Care
Vol. 18, No. 4, pp. 247-256
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Feed Forward Systems for Patient Participation and Provider Support: Adoption Results From the Original US Context to Sweden and Beyond

Helena Hvitfeldt, MSc; Cheryl Carli, PhD, RN; Eugene C. Nelson, DSc, MPH; Dawne M. Mortenson, RN; Birgit A. Ruppert, PT; Staffan Lindblad, MD, PhD



Insights, Opportunities and Challenges

Underlying problem

Flawed model: professional autonomy

Science mediated by expert physicians (in face-to-face visits) produces the best care possible

Opportunity:

Patients receive care aligned with goals
Capacity determined by true demand

Challenge:

Retraining the healthcare workforce
Right-sizing, redesigning physical plant

Possible approach

New model: organized care

Consumers empowered by technology and teams engage in self-care and informed decisions to achieve their goals



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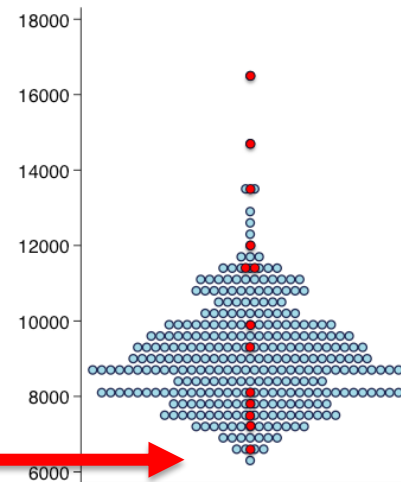
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Per-Capita 2009 Medicare Spending by HRR (Age, Sex, Race Adjusted)



Miami, FL	\$16,639
McAllen, TX	\$14,576
Manhattan, NY	\$13,453
Los Angeles, CA	\$12,711
Detroit, MI	\$11,647
Chicago, IL	\$11,646
San Francisco, CA	\$9,913
Cincinnati, OH	\$9,388
Lebanon, NH	\$8,124
Minneapolis, MN	\$7,734
Des Moines, IA	\$7,382
Rochester, MN	\$7,120
La Crosse, WI	\$6,532

A brief summary

Health policy (generally) has assumed:

Science mediated through the professional authority granted to expert physicians produces the best care possible for both individuals and populations

With disappointing results

Science now tells us:

- (1) Evidence for many current treatments is insufficient. Even when evidence is good, failures of “execution” are common.
- (2) Whether a treatment is right for a patient depends on their preferences and values.
- (3) Waste is rampant, because supply and provider opinion determine utilization rates.

Suggesting an alternative path:

Doing the right thing – and doing it right

Doing the right thing – for the right patient

Doing the right thing – and no more

A learning system: improvement science

Make sure care is aligned with patient preferences

Integrate; monitor performance, align incentives

