Measuring Health Care Efficiency

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AHA Taskforce on Variation in Health Care Spending
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LA Times

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Commentary

Organized Practice Fosters More Reliable Care

■ Health: Don't blame the mistake-makers; encourage physicians' groups to optimize treatment.

By J. THOMAS ROSENTHAL

The Institute of Medicine released a report recently on safety in health care. Its major conclusion: As many as 44,000 Americans die each year as a result of preventable medical errors—more people than die each year from breast cancer or AIDS, and many more are injured.

What kind of mistakes? They include the rare but obviously terrible cases such as operating on the wrong leg or the wrong side of the brain, all the way to the wrong medication being dispensed because a pharmacist misread a doctor's handwriting on a prescription. While you can argue about the data itself, because it eliminate most medical mistakes.

What does the report mean when it says that health care in the U.S. is not organized? One key group—physicians, who retain almost fierce independence—largely lies outside organized practice. As the report notes, "Physicians in community practice may be so tenuously connected that they do not even view themselves as part of a system of care." Hospitals do not, in reality, control their medical staffs. Unless physicians develop a greater culture of accountability, hospitals and nursing homes will have a hard time improving quality.

How can physicians working together improve medical quality? An example from our experience at UCLA may be instructive. Data emerged that patients having heart attacks are more likely to survive if they receive clot-dissolving drugs quickly after the attack.

It might seem simple to accomplish this, but to do so requires close coordina- system, developed a deserved reputation for a systematic approach to quality assurance and recently won the Pacific Business Group on Health's Blue Ribbon Award for Quality. But other medical groups in the state also have developed in the past 10 years in response to society's mandate to figure out how to deliver high-quality, cost-effective care.

Managed care has taken a beating recently because of consumer dissatisfaction, but it has created an incentive for physicians to create group practices. Now approximately 25% of doctors in California practice in groups. Unfortunately these groups are at risk due to the current instability in the health system in California. If physician groups are forced from the scene, a critical component capable of systematically improving safety in an organized health system will be lost. This fact has not been readily appreciated by policymakers, regulators, the media or the public.

California now has thousands of physi-

"California now has thousands of physicians who have stepped forward and expressed their willingness to be held accountable and to be a part of systems of care. Policies should be examined through the prism of whether they enhance and offer incentives to the continued development of physician groups."

What we've learned in the past year about geographic variation

Price differences matter

Medicare education payments matter

Health status matters

Socio-economic status matters

Patient preferences matter

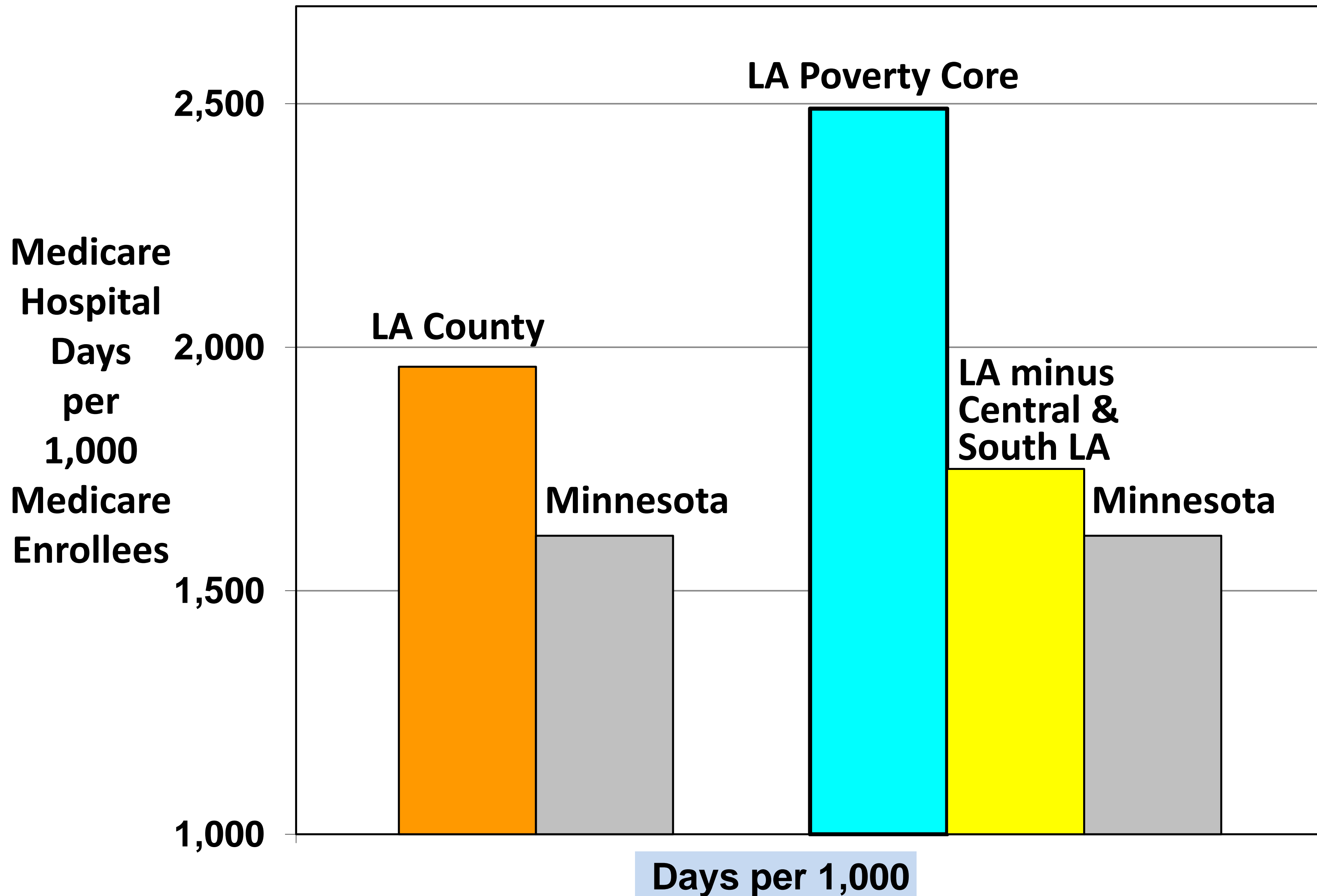
What we’ve learned in the past year about geographic variation

Geographic regions or states are not the best unit of measurement, because they mask important intra-regional differences.

Los Angeles County (HRR) demographics

	LA Co. total	LA Core	LA All other
Population	10.2M	2.3M	7.9M
Per Cap Income	$20,700	$11,500	$23,400
% Black & Latino	55%	80%	48%
% < 100% Poverty	15%	56%	3%
% Uninsured	28%	44%	23%

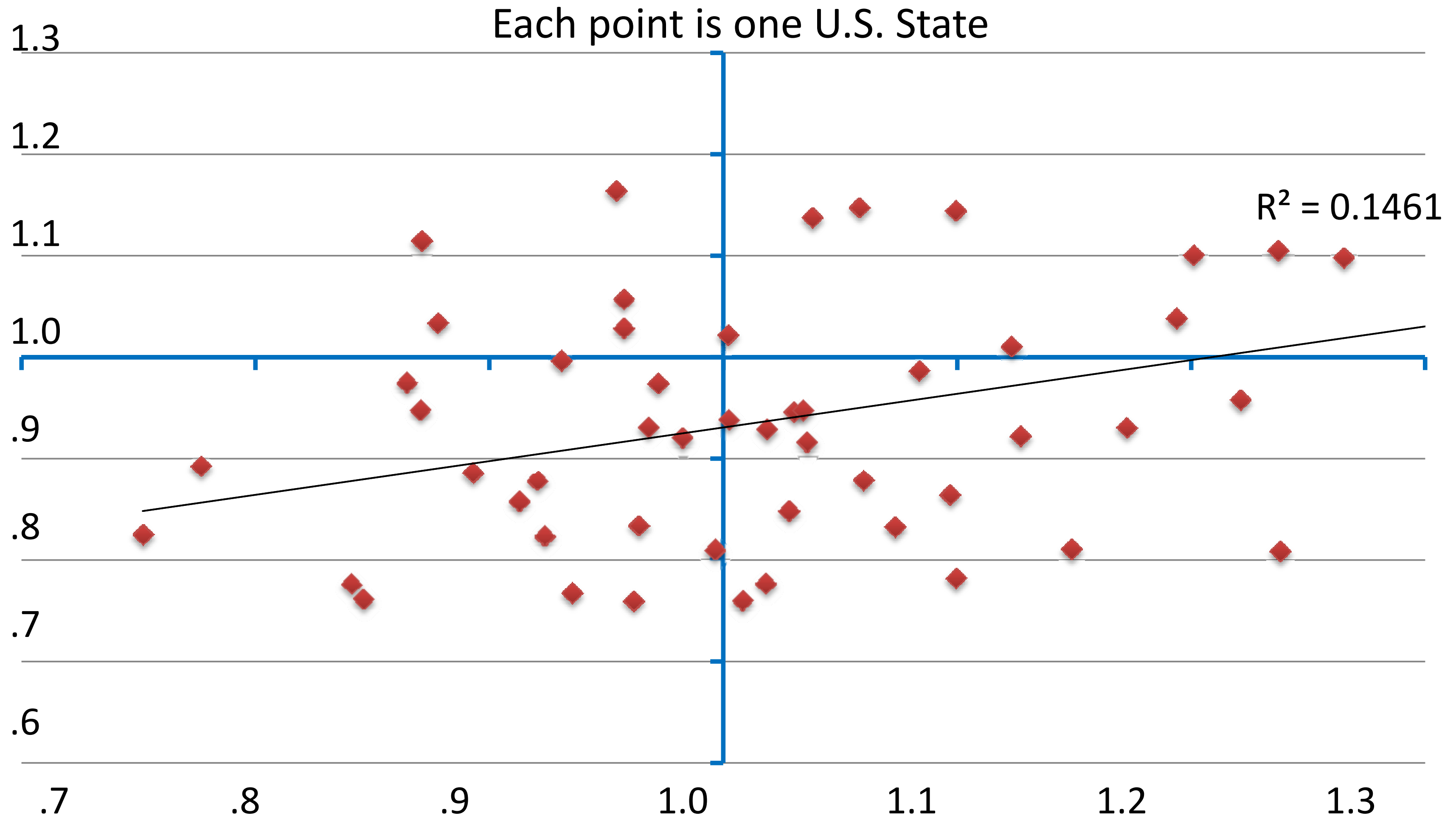
Impact of urban poverty on hospital utilization



What we’ve learned in the past year about geographic variation

Medicare spending does not correlate with overall health spending.

Medicare spending correlates poorly with total health care spending at state level



Per enrollee Medicare spending/U.S. Average

Per capita total health care spending /U.S. Average

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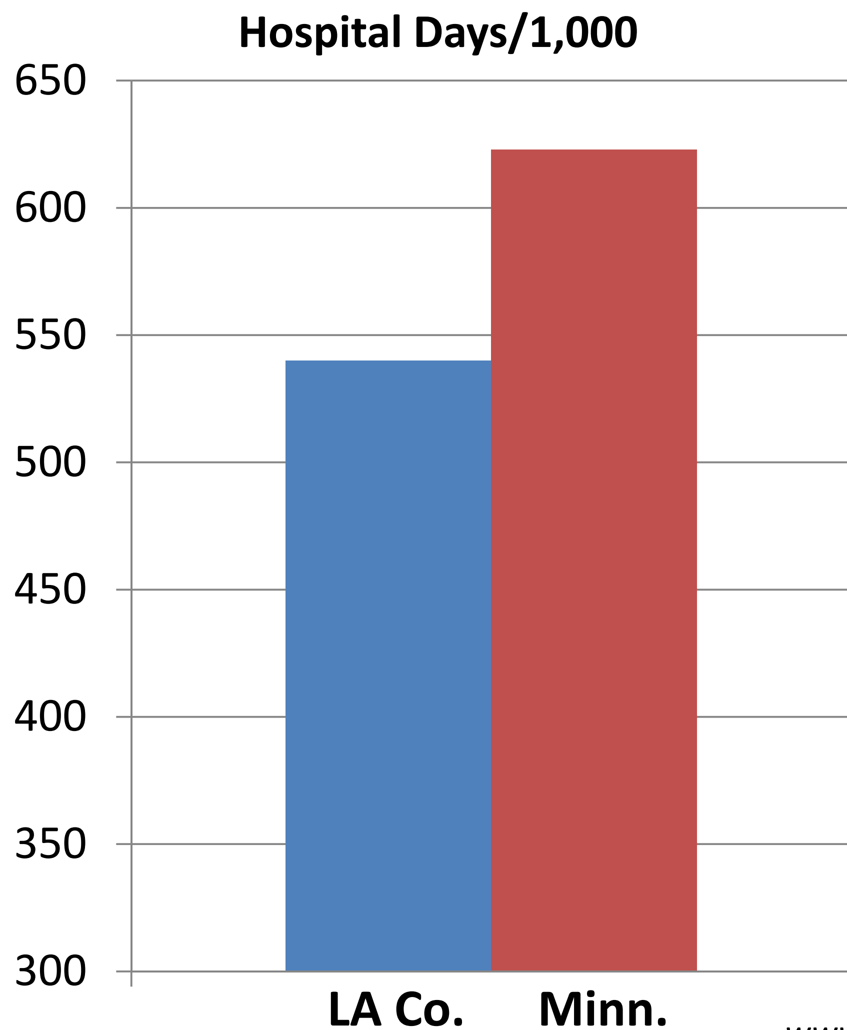

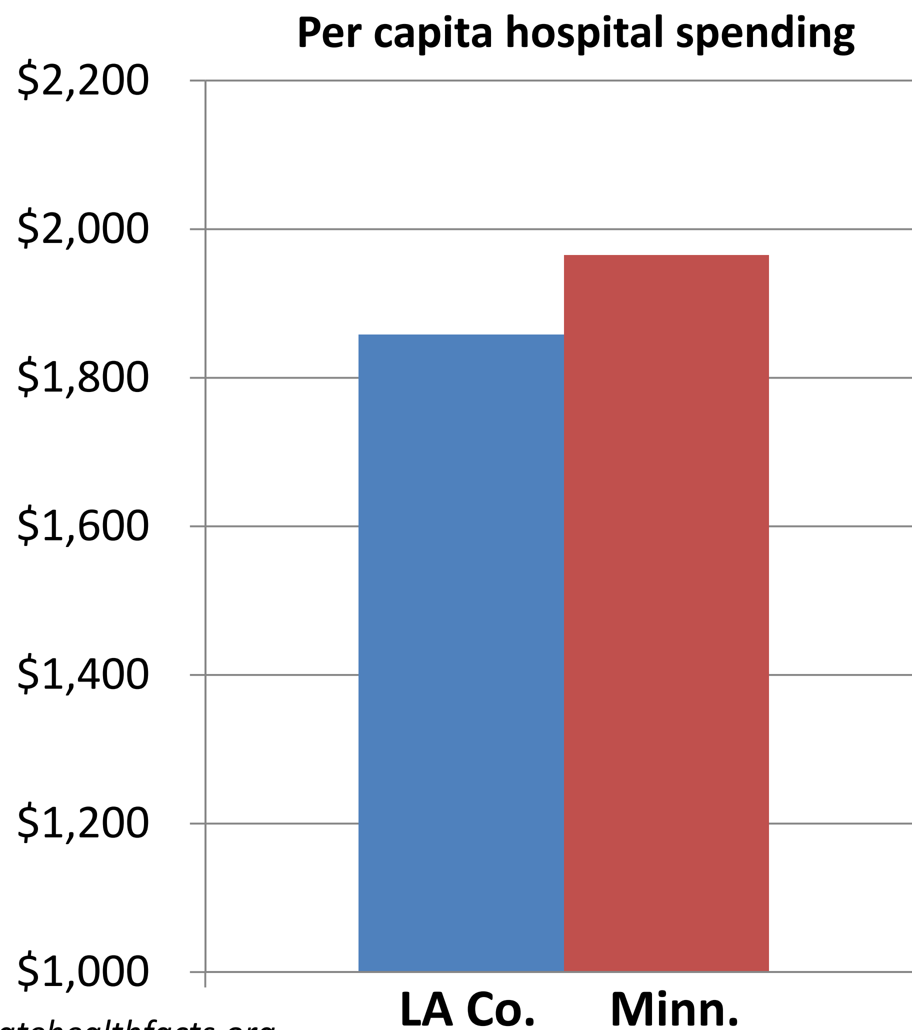

www.Statehealthfacts.org

Scientific principles of efficiency measurement

Evidence based risk-adjustment for factors known to affect metric that are present <u>at the start of care</u> including disparities & patient preferences

Information produced by the measure is useful for informing quality improvement initiatives

Quality and cost measures are integrated

Proper attribution of the measure

Cost improvement does not reduce quality

AHA/ACC guidelines. JAmCollCard. 52:1518, 2008
NQF. http://www.qualityforum.org/Measuring_Performance

Do Medicare death cases meet scientific standards as measure of efficiency?

	Yes	No
Prospective		✖
Risk adjusted (including patient preferences)		✖
Integrates quality and cost		✖
Proper attribution of cases		✖
Useful for quality improvement		✖

UC Consortium to study variation

Goals

- Carefully analyze variation
- Implement projects to reduce variation (lower cost/improve quality)
- Collaboration between outcomes researchers and clinician leadership

Project Team

P.I. Mike Ong

Research Investigators

- UCD: Patrick Romano
- UCI: Sheldon Greenfield
  Shaista Malik
- UCLA: Michael Ong
  Jose Escarce
  Carol Mangione
- UCSD: Theodore Ganiats
- UCSF: Andrew Auerbach
  Lee-lynn Chen
  Michael Gropper
- CSHS: Bruce Davidson

Chief Medical Officers

- UCD: Allan Siefkin
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- UCSD: Angela Scioscia
- UCSF: Ernest Ring
- CSHS: Michael Langberg

Research Staff (UCLA)

- Alfonso Ang
- Ben Leong
- Hope Watkins
- Wenyi Xiong
- Jo Ann Zhou

Supported by California Healthcare Foundation

Study Design

- All Medicare patients > age 65 with 1° congestive heart failure
- 2001-2005
- N=7,301 with 1,373 Deaths
- Exclude transfers and transplants
- Risk adjusted for demographics and co-morbidities
- Some chart review
- 180 Day cost & mortality analyzed

Circulation
Cardiovascular Quality and Outcomes
Journal of the American Heart Association
American Heart Association
Learn and Live

Looking Forward, Looking Back: Assessing Variations in Hospital Resource Use and Outcomes for Elderly Patients with Heart Failure

Michael K. Ong, Carol M. Mangione, Qiong Zhou, Andrew D. Auerbach, Alein Chun, Bruce Davidson, Theodore G. Ganiats, Sheldon Greenfield, Michael A. Gropper, Shaista Malik, Patrick S. Romano, J. Thomas Rosenthal, and Jose J. Escarce

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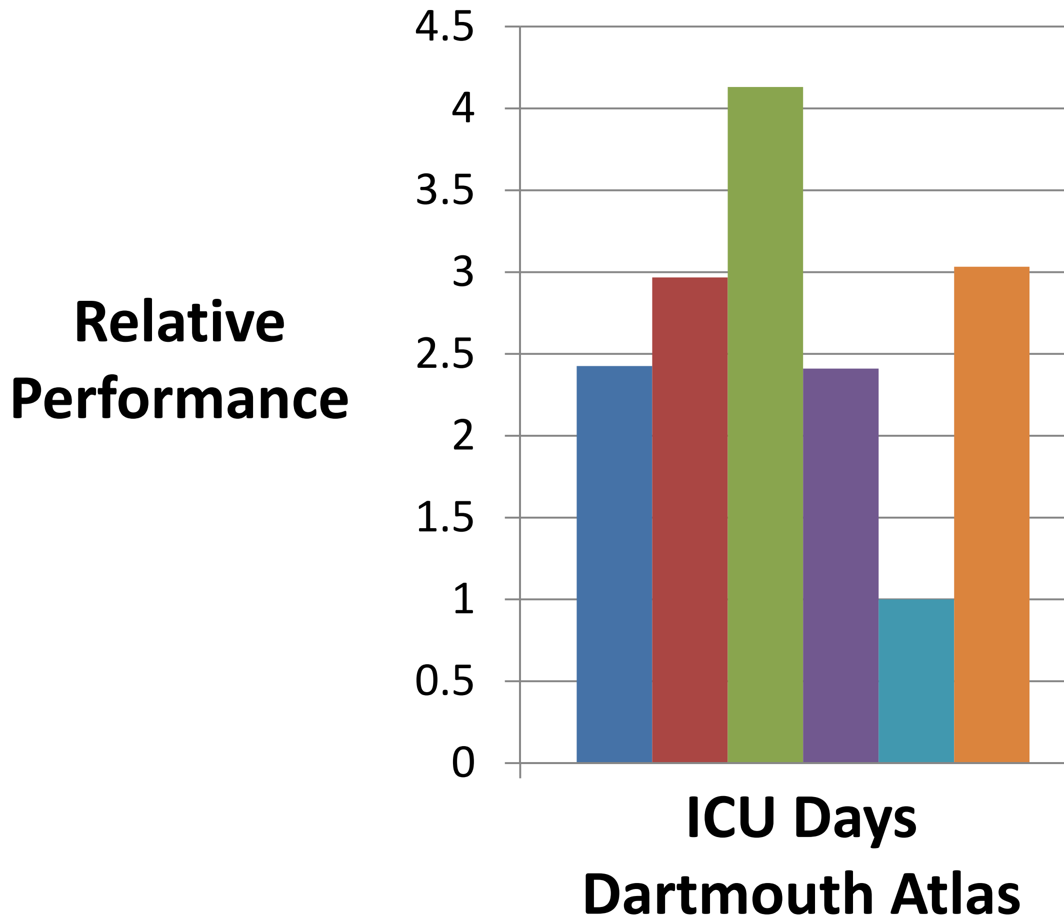
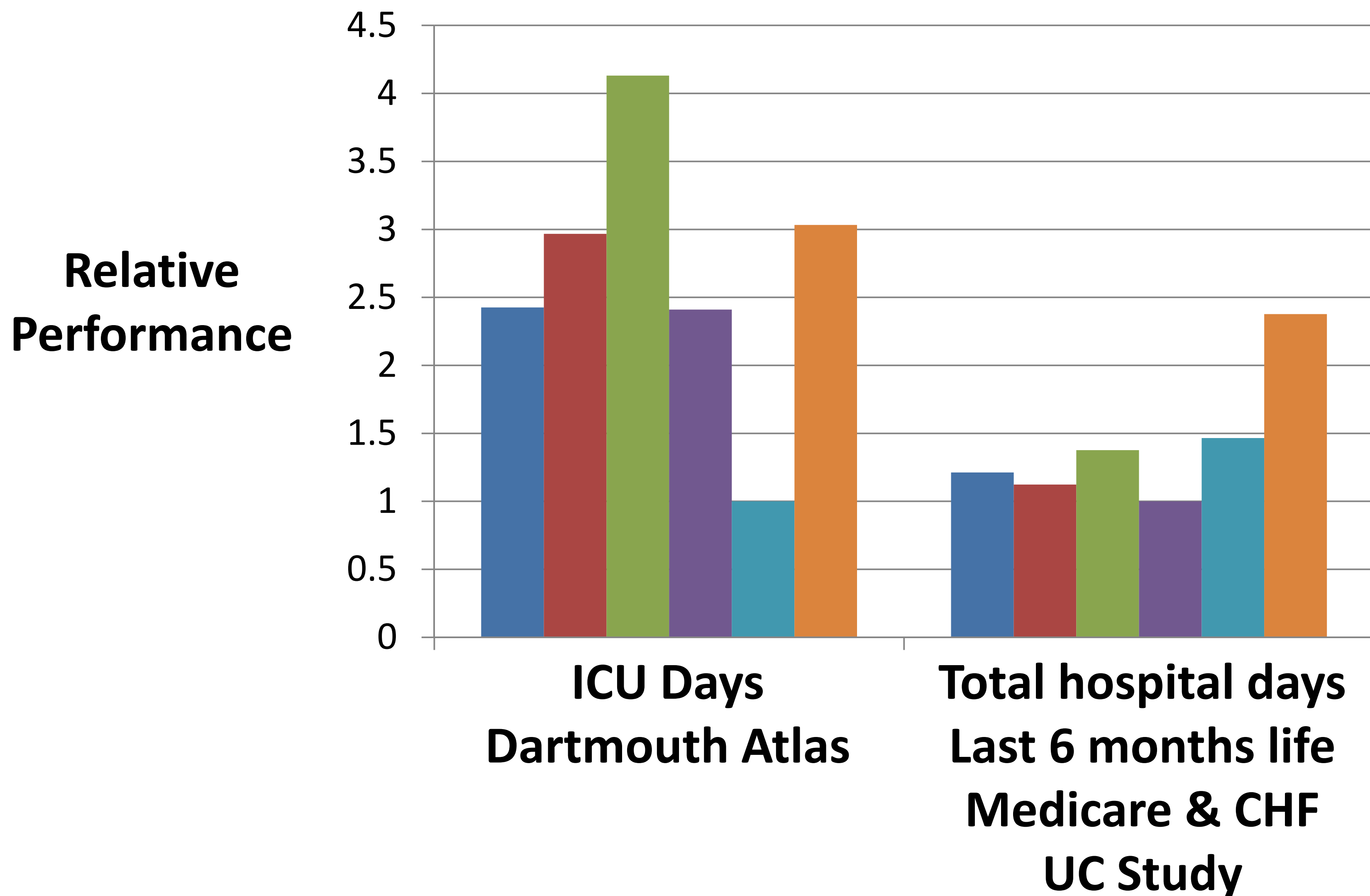
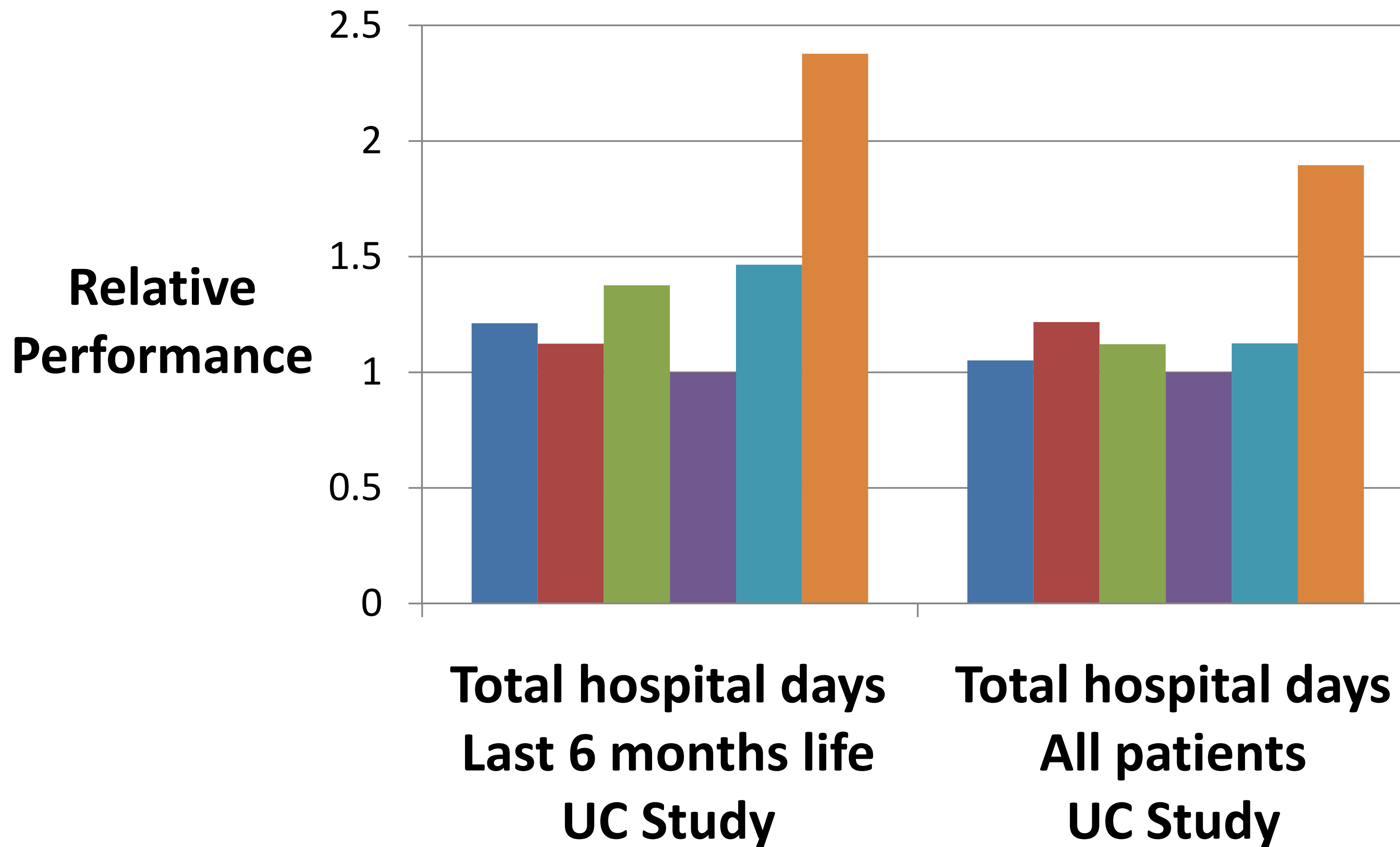
Dartmouth Atlas shows large variation between UC centers



Carefully risk adjusting death only cases reduces variation and changes the rank order among hospitals

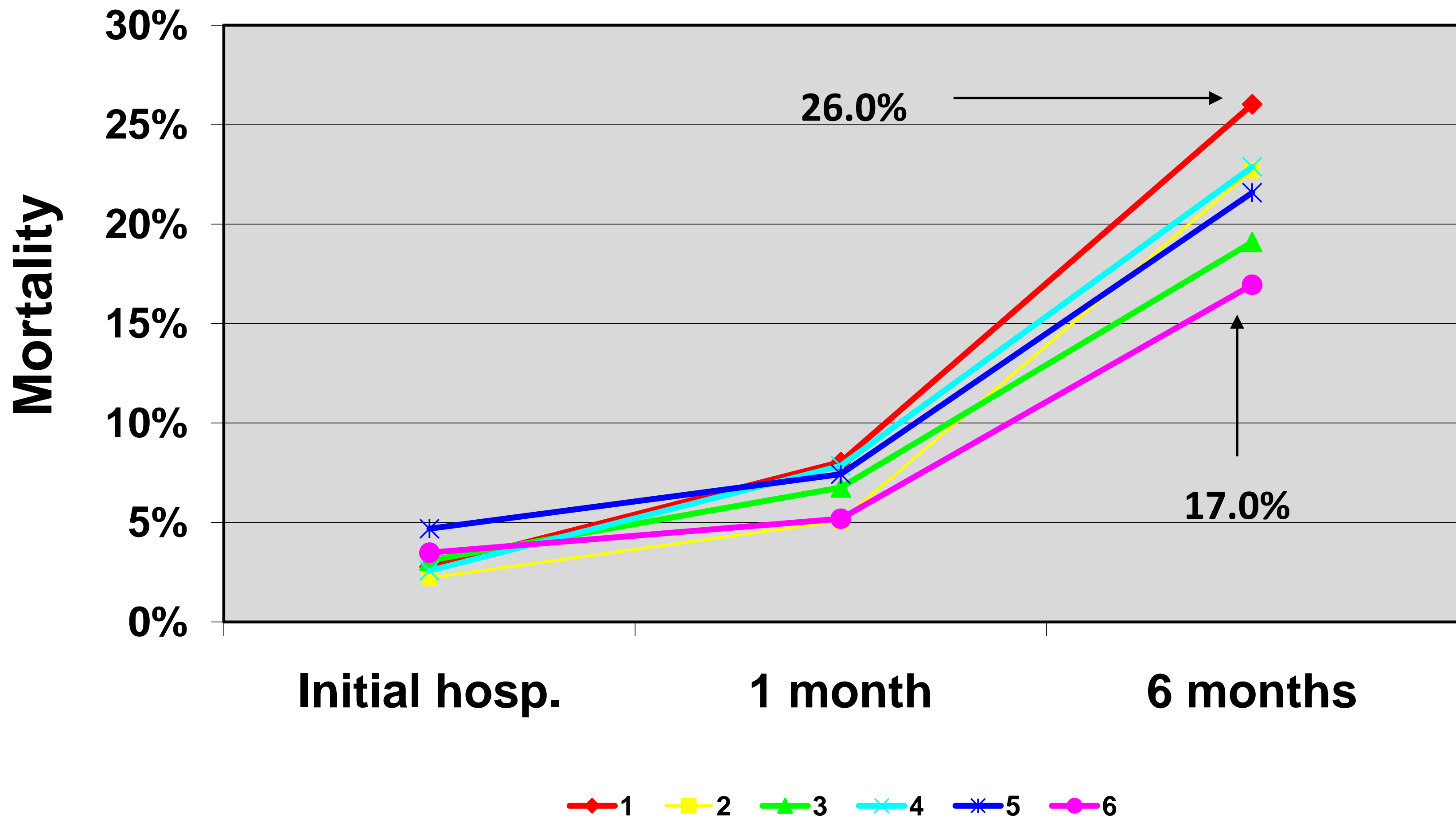


Considering all cases further reduces variation and changes the rank order among hospitals

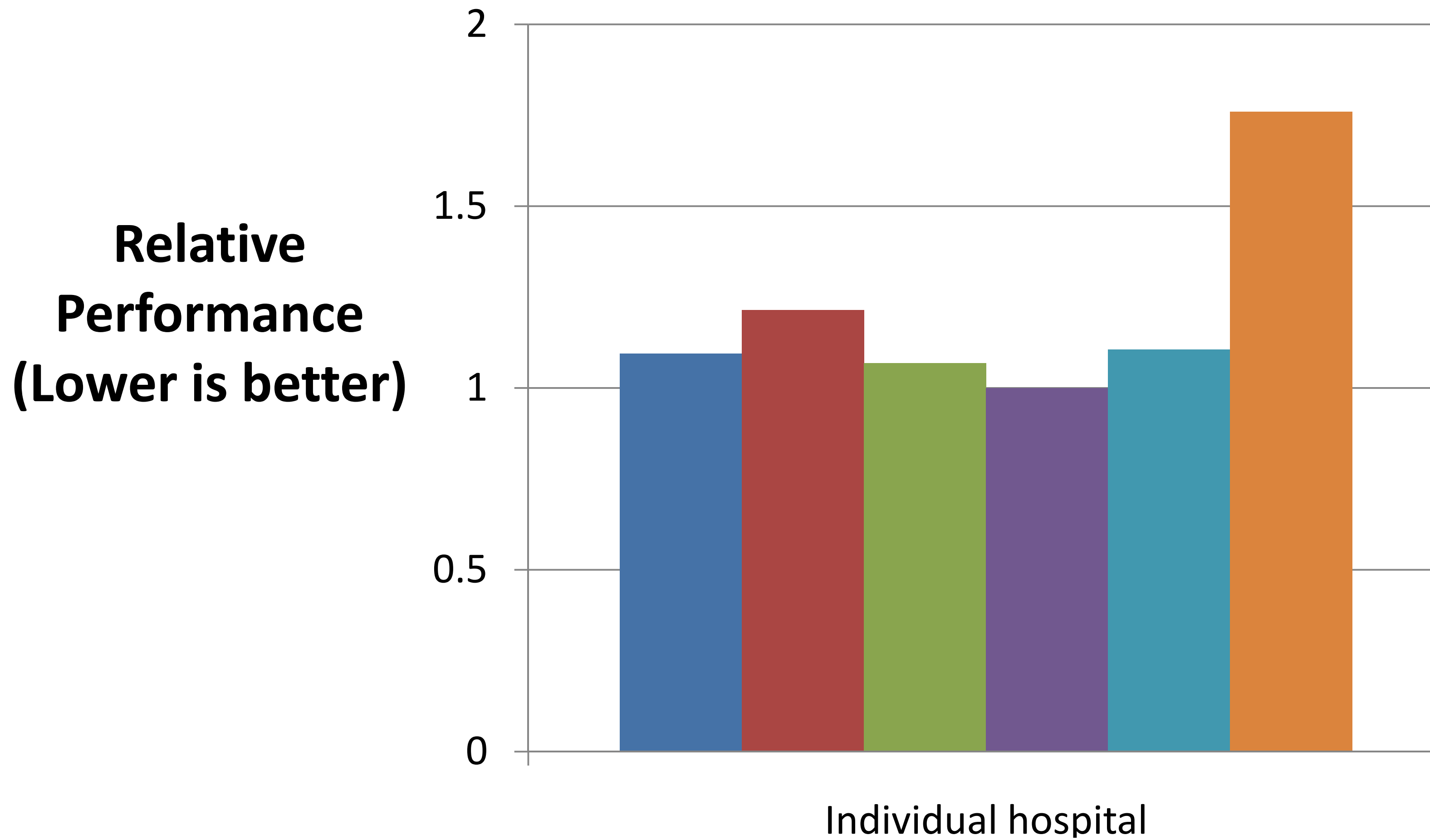


Lowest mortality is in highest utilization site

CHF Mortality



Efficiency comparison
Cost (LOS)/Outcome (survival)



AAMC/UHC/UC collaborative to study variation

UCSD	Johns Hopkins
UCLA	U. Minn. Fairview
UCI	NY Presbyterian
UCSF	NY Weill Cornell
UCD	U. Penn.
Cedars-Sinai	Lehigh Valley
Emory	Vanderbilt
Rush	Howard

Next steps

Intervention studies

Disease management program to improve efficiency (lower cost/improve outcomes)

End of life intervention to reduce unnecessary ICU admissions and improve palliative care for dying patients

Observations

- **Health care cost is important component of health policy.**

- **To compare efficiency, well defined cohorts including all patients with good risk adjustment and outcomes must be done & at an accountable level.**

- **This type of work is expensive; funding is in short supply; it requires collaboration of outcomes researchers & clinical leadership.**

- **Geographic variation in Medicare spending is not a good measure of efficiency; it has become heavily politicized; continued focus is a diversion from the essential tasks.**