The Evolution of Physician Practice in the US: Trends, Outlook and Policy Priorities

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Washington, DC
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Today's talk

- Pressures on physicians:
  - increased physician employment by hospitals and health insurers
- Prices and consolidation.
- Incentives for physicians and for organizations.

Increased physician employment by hospitals and health insurers

- Shelter from the storm – buffering physicians from the turbulent environment.
- Anecdotally, employment is accelerating.
  - Estimates of employment vary quite a bit: probably around 33%
  - with rate of increase ~25% over last four years (see appendix slides).
- MACRA will accelerate the demise of small practices.

MACRA

- final rule tries to accommodate small/medium physician practices
- but complexity, uncertainty of MIPS and guaranteed 5% bonus in APMs likely to result in many practices becoming acquired by hospitals or health insurers.

Tremendous pressure even on large physician-owned medical groups and IPAs

- lack of capital
- tired leaders after years of struggle
- rank-and-file resistance to investing in improvement
- opportunity to cash out (in some cases)
- competition with hospitals in recruiting physicians

Large Independent Primary Care Medical Groups

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ABSTRACT

PURPOSE In the turbulent US health care environment, many primary care physicians seek hospital employment. Large physician-owned primary care groups are an alternative, but few physicians or policy makers realize that such groups exist. We wanted to describe these groups, their advantages, and their challenges.

METHODS We identified 21 groups and studied 5 that varied in size and location. We conducted interviews with group leaders, surveyed randomly selected group physicians, and interviewed external observers—leaders of a health plan, hospital, and specialty medical group that shared patients with the group. We triangulated responses from group leaders, group physicians, and external observers to identify key themes.

Independent practice associations: Advantages and disadvantages of an alternative form of physician practice organization

Lawrence P. Casalino [a,*], Norman Chenven [b]

Physician employment by hospitals is good?

- Large organizations can:
  - systematically engage in quality improvement, risk stratification, and population health improvement
  - reduce unwarranted variations in care
  - accept high-powered incentives (e.g. more risk)
  - have sufficient sample size to be measured on outcomes (e.g. ambulatory care sensitive admissions)

Physician employment by hospitals is not good?

- Impact on physician motivation, professionalism?
- Loss of human scale and close relationship among physicians, patients, staff?
- Incentive to fill inpatient beds?
  - contrast physician-owned ACOs
- Higher prices?

Evidence

- Hospital-owned practices have higher rates of ambulatory care sensitive admissions (Casalino)
- Prices paid to physicians increase after acquisition by a hospital (Capps)
- Hospital-owned groups have higher total costs of care and higher readmission rates (McWilliams)
- Hospital-owned groups have higher total cost of care (Robinson)
- No improvement in quality over 4 years for hospital-acquired physicians (Scott)
- Physicians more likely to admit to acquiring hospital, even if high cost/low quality (Baker)
- Vertical integration leads to higher outpatient prices (Neprash)
- No change in hospital prices after physician practice acquisition (Cilberto)

These results might improve over time . . .

- Can large organizations combine the advantages of scale and scope with the advantages of a human scale practice environment?
  - IPAs as one attempt to do this – but there are relatively few successful IPAs.
- Can hospitals integrate physicians as medical groups rather than as individuals?
- Can hospitals engage physicians as equals?

Integrated Leadership for Hospitals and Health Systems: Principles for Success

We need to know:

- What types of organization, given what types of incentives, get better outcomes?
- Some research into what types of process work, but little into what kinds of organization work. PCORI rarely funds this type of research.

Prices and antitrust

- High prices, not high utilization is the primary driver of higher health care expenditures in the U.S. compared to other developed countries.

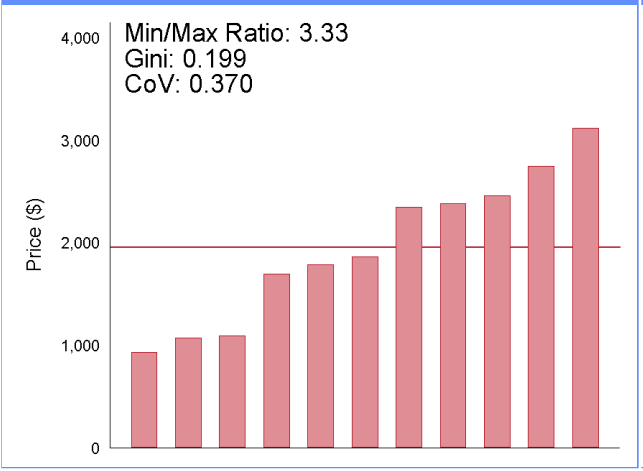
"It's the Price, Stupid"- JAMA by Uwe Reinhardt

Unit Prices for Hospital and Physician Services

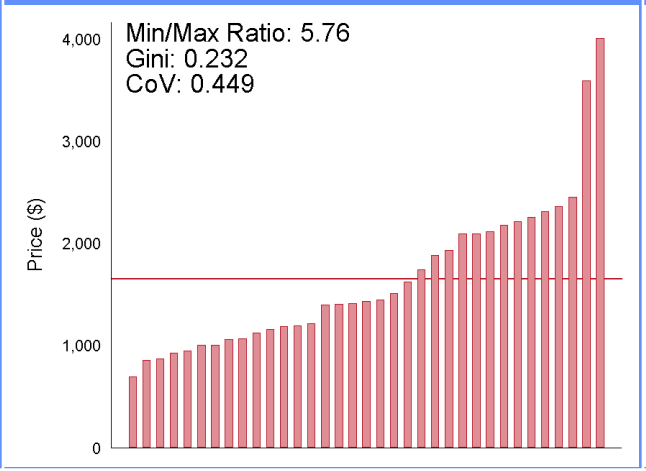
	Total hospital and physician costs, 2013[a]		Diagnostic imaging prices, 2013[a]		Price comparison for in-patent pharmaceuticals, 2010 (U.S. set to 100)[b]
	Bypass surgery	Appendectomy	MRI	CT scan (abdomen)	
Australia	$42,130	**$5,177**	$350	$500	49
Canada	—	—	—	**$97**	50
France	—	—	—	—	61
Germany	—	—	—	—	95
Netherlands	**$15,742**	$4,995	$461	$279	—
New Zealand	$40,368	$6,645	$1,005	$731	—
Switzerland	$36,509	$9,845	$138	$432	88
United Kingdom	—	—	—	—	**46**
United States	**$75,345**	**$13,910**	**$1,145**	**$896**	**100**

Colonoscopy Facility Prices

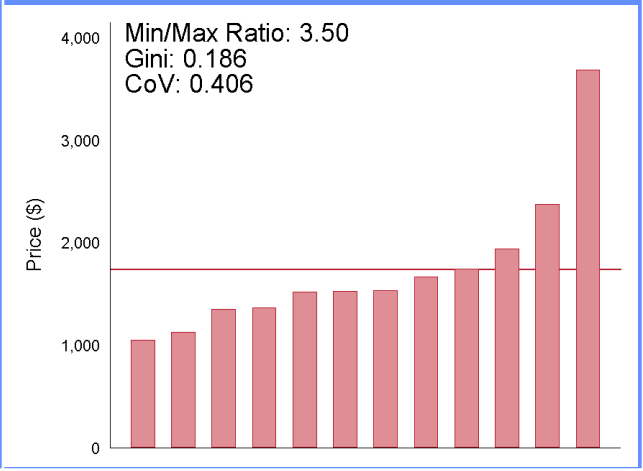
Denver, CO



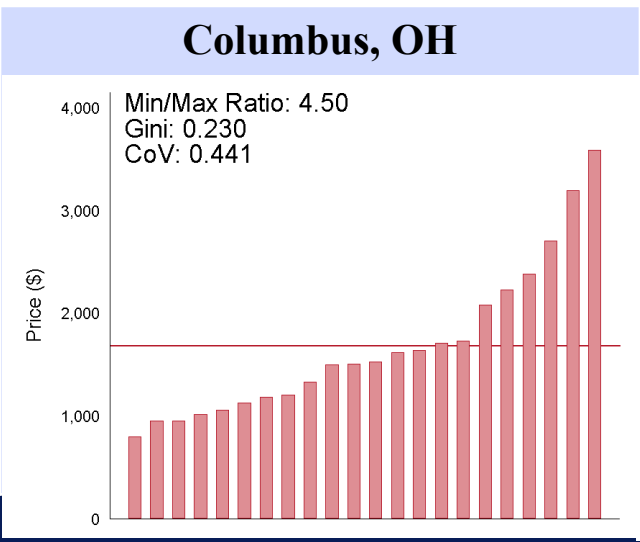
Atlanta, GA



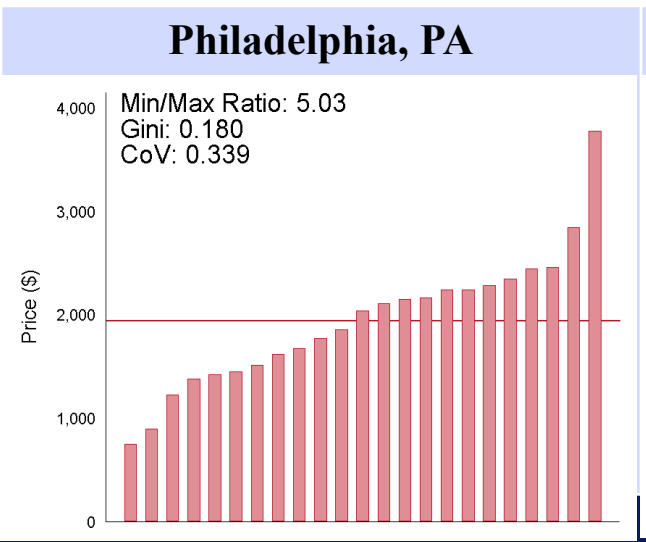
Manhattan, NY



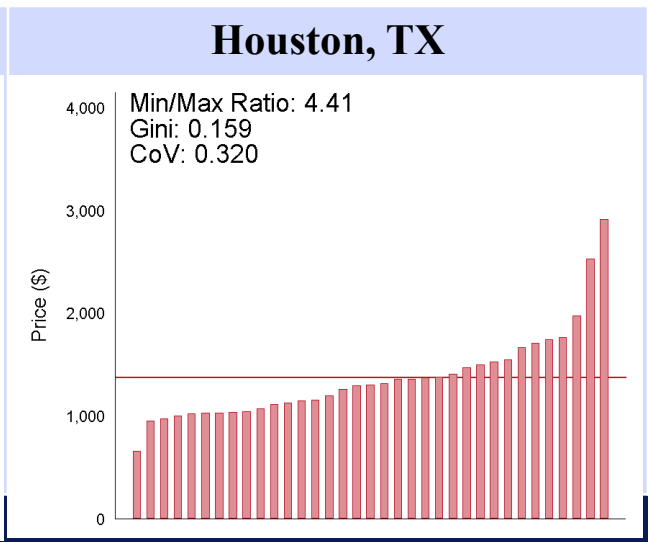
Columbus, OH



Philadelphia, PA



Houston, TX



Note: Each column is a hospital. Prices are regression-adjusted, measured from 2008 – 2011, and presented in 2011 dollars.

Which investment will generate more net income for your organization?

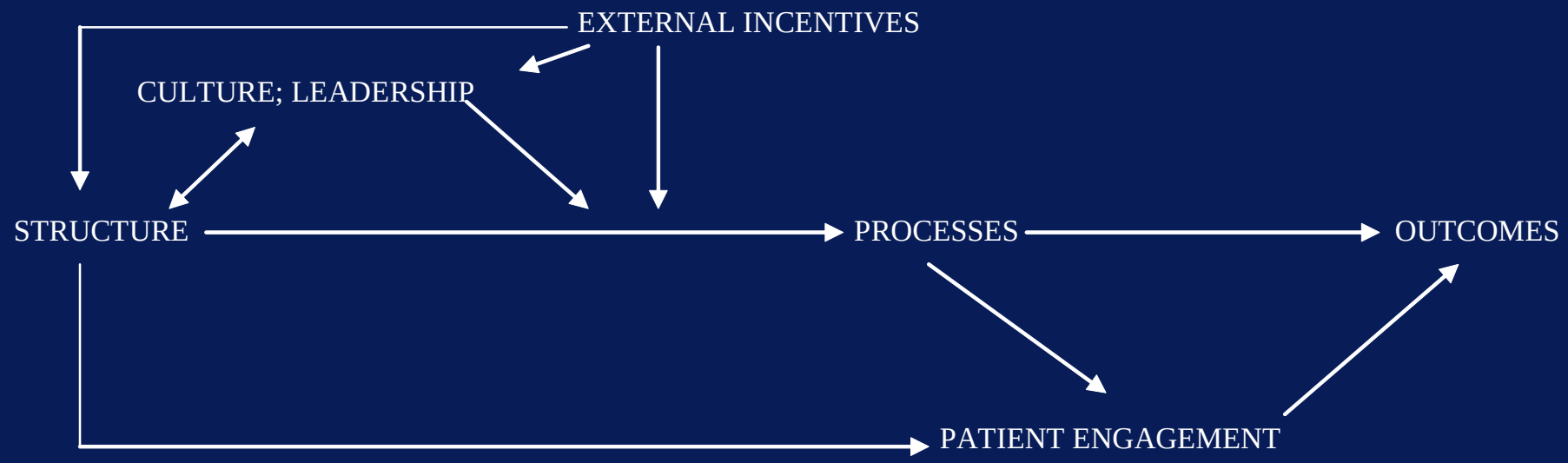
- Mergers/acquisitions to grow to negotiate higher payment rates?

- Investing in improving quality and controlling costs in order to receive shared savings and/or quality incentives?

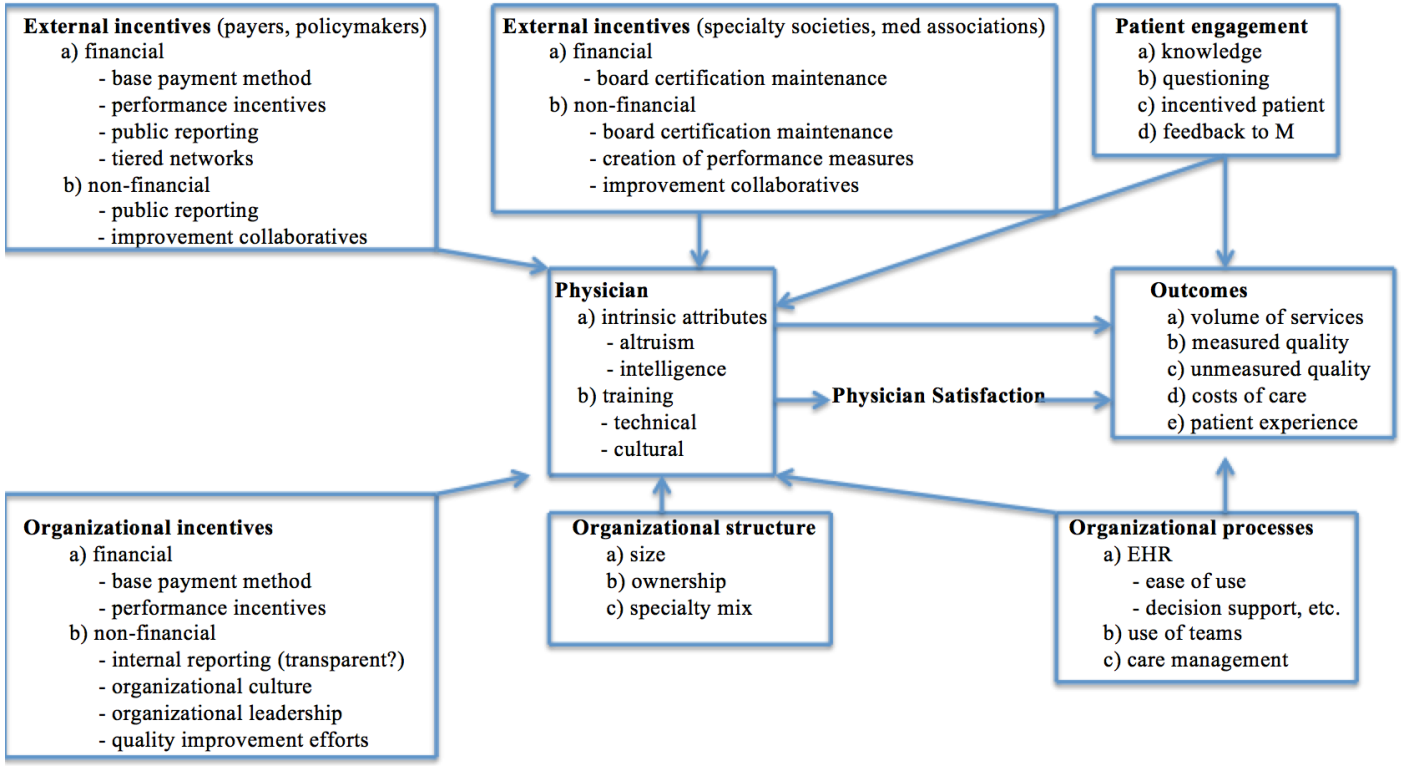
Two key antitrust debates:

- Does vertical integration lead to:
  - higher prices?
  - higher total expenditures?
  - higher quality?
- Will bilateral monopoly and/or oligopoly (health insurers vs. provider organizations) lead to higher or lower prices, expenditures, and quality?

Generic model of an organization and its incentives



Generic model of a physician (or other health care worker) and incentives



Note: the arrows in this model are intended to show primarily impacts on the physician, not, for example, the impact of organizational incentives on outcomes that are not mediated through the physician.

Key points on incentives:

- Strong financial incentives may:
  - reduce physicians' intrinsic motivation/altruism/professionalism
  - lead to unintended consequences
- More attention should be given to non-financial incentives that reinforce intrinsic motivation, for example:
  - transparent internal reporting of physician performance
  - internal and external quality improvement collaboratives
  - patient narrative feedback
  - creating a culture that puts patients first.
- Agency theory and behavioral economics provide very important concepts for devising incentives for physicians and for organizations.

Unintended consequences of strong financial incentives

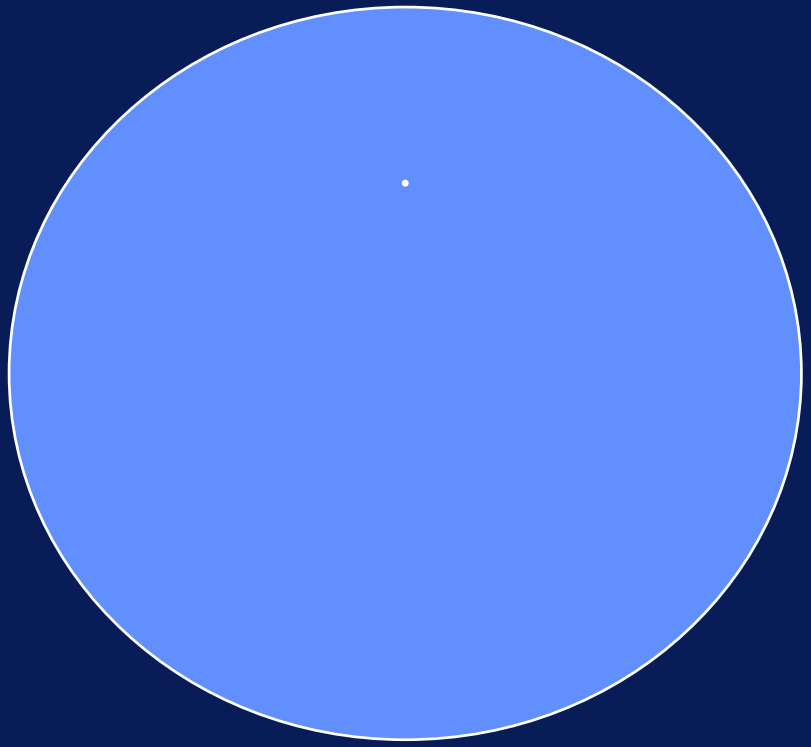
- decreased attention to important but unmeasured areas of quality
- gaming
- avoiding patients perceived likely to lower providers' performance scores
- increasing SES and racial/ethnic disparities in care

Professionalism matters

"If an employee is expected to devote time and effort to some activity for which performance cannot be measured at all, then incentive pay cannot be effectively used for other activities."

P. Milgrom. *Economics, Organization, and Management*. 1992.

Professionalism Matters: Measured vs. Unmeasured Quality (Individual Physician)



Intrinsic motivation/altruism/professionalism

- Critical to:
  - minimize unintended consequences
    - especially physician efforts to provide good care in areas where performance is not measured
  - maximize physician satisfaction

Jing Li altruism studies

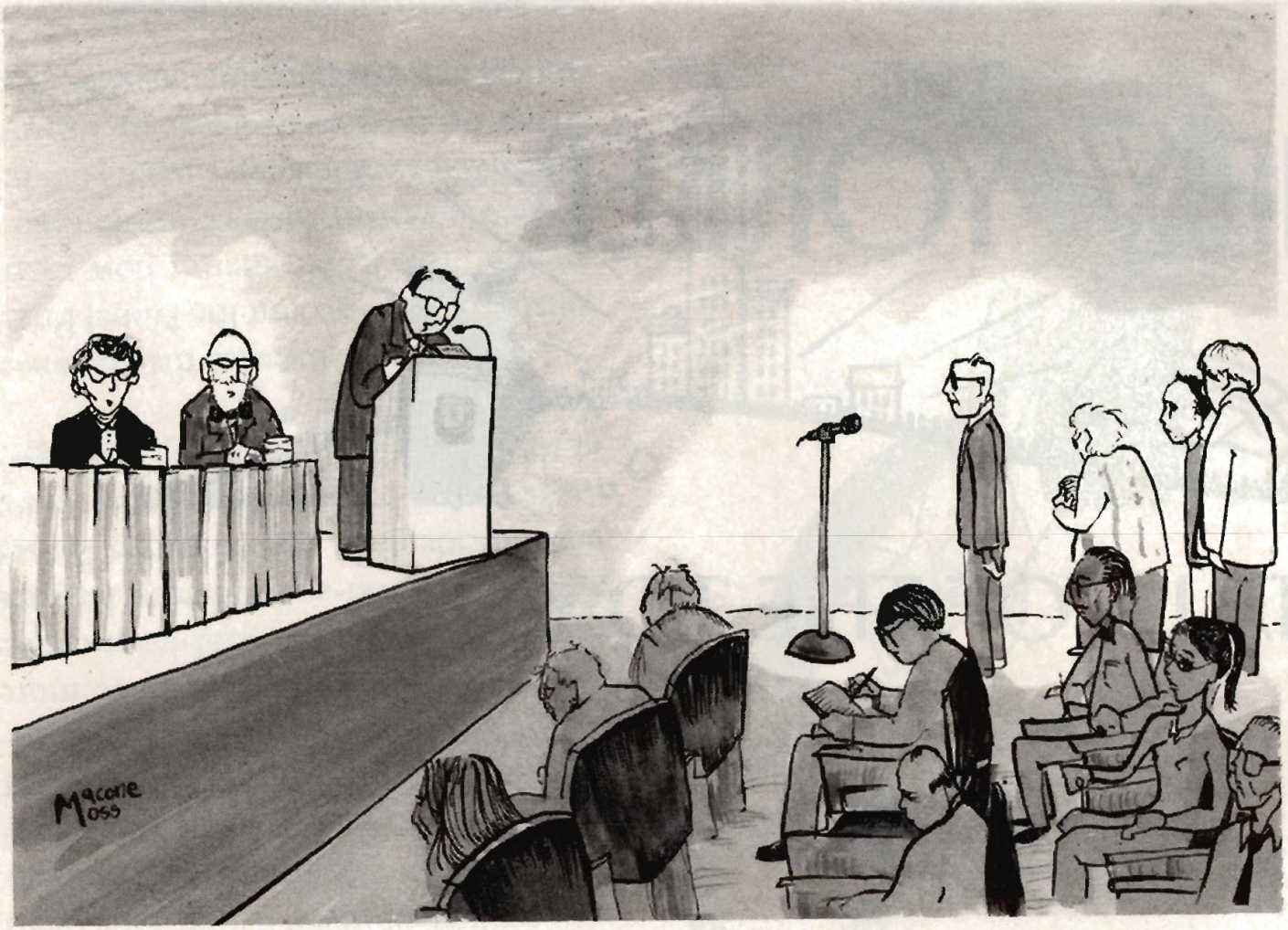
- law students are less altruistic than the general population
- law students planning to enter corporate law are less altruistic than students planning to work of nonprofits
- medical students planning to enter high paying specialties are less altruistic than other medical students
- medical students are less altruistic than the general population

Patient narratives about their care

- feasible for provider organizations to collect on-line in large numbers
- may provide important information about unmeasured but important areas of quality
- give specific information on areas in which a physician or organization might improve
- are publicly available for University of Utah physicians

Provider organizations can deploy incentives in ways that payers cannot

- internal data and knowledge of physicians
- can experiment with measures and use for improvement rather than reward
- can involve physicians in selection of measures
- physicians can appeal their scores
- can use patient narratives



"We'd now like to open the floor to shorter speeches disguised as questions."

• •

Appendix slides follow

AMA
AMERICAN MEDICAL ASSOCIATION

Policy Research Perspectives

Updated Data on Physician Practice Arrangements: Inching Toward Hospital Ownership

By Carol K. Kane, PhD

Introduction

Using data from the American Medical Association's (AMA's) Physician Practice Benchmark Surveys, this Policy Research Perspective (PRP) describes the practice arrangements of physicians in 2014 and the changes in practice that occurred between 2012 and 2014. Where possible, the current data are compared to that from 30 years ago to offer a long term perspective.

DOI: 10.1377/hlthaff.2014.0445
HEALTH AFFAIRS 33,
NO. 9 (2014): 1672–1679

By Michael F. Furukawa, Jennifer King, Vaishali Patel, Chun-Ju Hsiao, Julia Adler-Milstein, and Ashish K. Jha

Despite Substantial Progress In EHR Adoption, Health Information Exchange And Patient Engagement Remain Low In Office Settings

PAI
PHYSICIANS ADVOCACY INSTITUTE

Physician Practice Acquisition Study:
National and Regional Employment Changes

September 2016

Institute for Policy Research
Northwestern University
Working Paper Series

WP-15-02

The Effect of Hospital Acquisitions of Physician Practices on Prices and Spending

Cory Capps
Partner, Bates White Economic Consulting

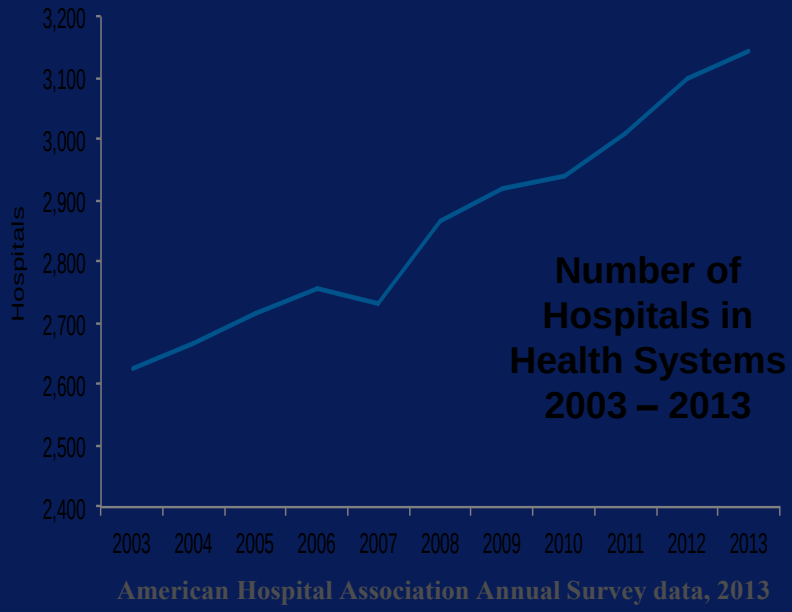
David Dranove
Walter J. McNerney Professor of Health Industry Management
Faculty Associate, Institute for Policy Research
Kellogg School of Management, Northwestern University

Christopher Ody
Research Assistant Professor of Strategy
Kellogg School of Management, Northwestern University

Estimates of physician employment by hospitals

Percentage employed	Rate of increase
•33 (AMA)	• 13 (2012-2014)
•28 (Furukawa/NAMCS)	• ?
•38 (Avalere/PAI)	• 50 (2012-2015)
•? (Capps)	• 50 (2007-2013)
•35 (ACC – cardiologists)	218 (2003-2013)

Market Trends – Hospital and Payer Consolidation; Physician Employment

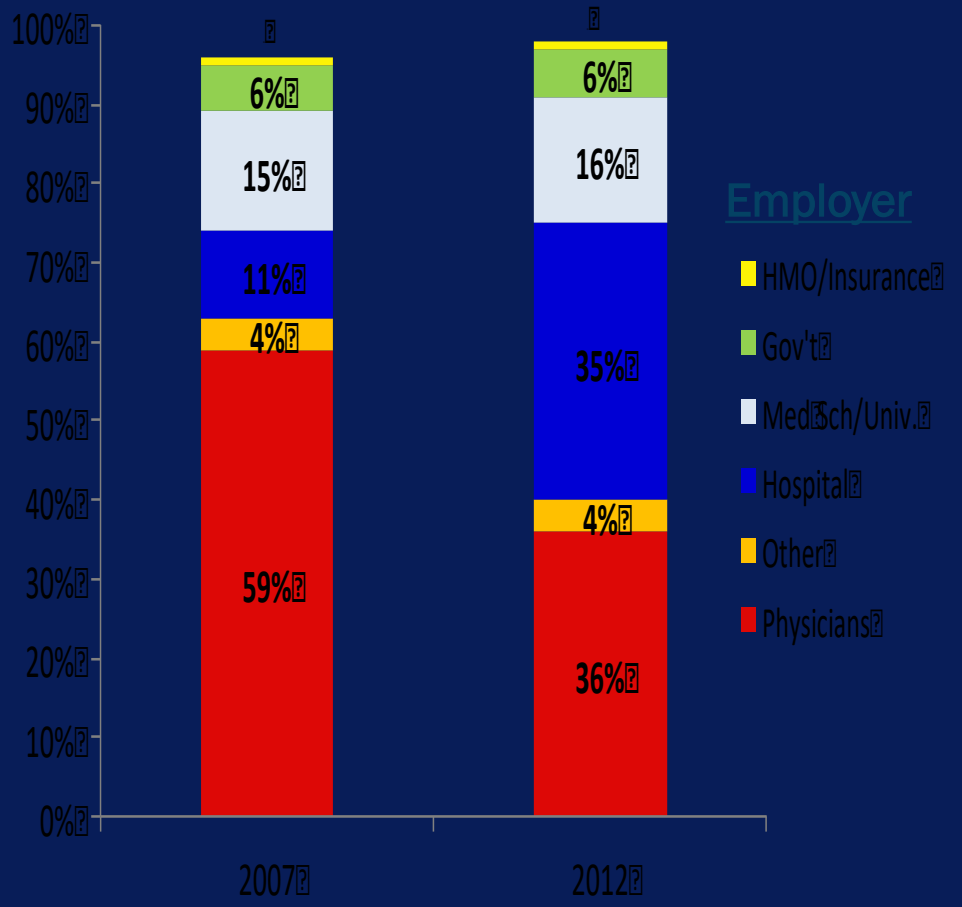


American Hospital Association Annual Survey data, 2013

Hospital and health system consolidation;

Increased employment of physicians

ACC Survey of 21,373 Cardiologists



By Lawrence P. Casalino, Michael F. Pesko, Andrew M. Ryan, Jayme L. Mendelsohn, Kennon R. Copeland, Patricia Pamela Ramsay, Xuming Sun, Diane R. Rittenhouse, and Stephen M. Shortell

DOI: 10.1377/hlthaff.2014.04
HEALTH AFFAIRS 33,
NO. 9 (2014): –

Small Primary Care Physician Practices Have Low Rates Of Preventable Hospital Admissions

Changes in Hospital–Physician Affiliations in U.S. Hospitals and Their Effect on Quality of Care

Kirstin W. Scott, MPhil, PhD; E. John Orav, PhD; David M. Cutler, PhD; and Ashish K. Jha, MD, MPH

Background: Growing evidence shows that hospitals are increasingly employing physicians.

Objective: To examine changes in U.S. acute care hospitals that reported employment relationships with their physicians and to determine whether quality of care improved after the hospitals switched to this integration model.

Design: Retrospective cohort study of U.S. acute care hospitals between 2003 and 2012.

Setting: U.S. nonfederal acute care hospitals.

Participants: 803 switching hospitals compared with 2085 nonswitching control hospitals matched for year and region.

Intervention: Hospitals' conversion to an employment relationship with any of their privileged physicians.

Measurements: Risk-adjusted hospital-level mortality rates, 30-day readmission rates, length of stay, and patient satisfaction scores for common medical conditions.

Results: In 2003, approximately 29% of hospitals employed members of their physician workforce, a number that rose to 42% by 2012. Relative to regionally matched controls, switching hospitals were more likely to be large (11.6% vs. 7.1%) or major teaching hospitals (7.5% vs. 4.5%) and less likely to be for-profit institutions (8.8% vs. 19.9%) (all *P* values <0.001). Up to 2 years after conversion, no association was found between switching to an employment model and improvement in any of 4 primary composite quality metrics.

Limitations: The measure of integration used depends on responses to the American Hospital Association annual questionnaire, yet this measure has been used by others to examine effects of integration. The study examined performance up to 2 years after evidence of switching to an employment model; however, beneficial effects may have taken longer to appear.

Conclusion: During the past decade, hospitals have increasingly become employers of physicians. The study's findings suggest that physician employment alone probably is not a sufficient tool for improving hospital care.

Primary Funding Source: Agency for Healthcare Research and Quality and National Science Foundation Graduate Research Fellowship.

Ann Intern Med. doi:10.7326/M16-0125 **www.annals.org**
For author affiliations, see end of text.
This article was published at www.annals.org on 20 September 2016.

Changes in Hospital–Physician Affiliations in U.S. Hospitals and Their Effect on Quality of Care

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For author affiliations, see end of text.
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Total Expenditures per Patient in Hospital-Owned and Physician-Owned Physician Organizations in California

James C. Robinson, PhD, MPH; Kelly Miller, BA

Changes in Hospital–Physician Affiliations in U.S. Hospitals and Their Effect on Quality of Care

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For author affiliations, see end of text.
This article was published at www.annals.org on 20 September 2016.

ELSEVIER Journal of Health Economics 25 (2006) 29–38
www.elsevier.com/locate/econbase

The effect of physician–hospital affiliations on hospital prices in California

Federico Ciliberto [a,*], David Dranove [b]

The Effect of Hospital/Physician Integration on Hospital Choice
Laurence C. Baker, M. Kate Bundorf, and Daniel P. Kessler
NBER Working Paper No. 21497
August 2015
JEL No. I11

ABSTRACT

In this paper, we estimate how hospital ownership of physicians' practices affects their patients' hospital choices. We match data on the hospital admissions of Medicare beneficiaries, including the identity of their admitting physician, with data on the identity of the owner of the admitting physician's practice. We find that a hospital's ownership of an admitting physician's practice dramatically increases the probability that the physician's patients will choose the owning hospital. We also find that patients are more likely to choose a high-cost, low-quality hospital when their admitting physician's practice is owned by that hospital.

Association of Financial Integration Between Physicians and Hospitals With Commercial Health Care Prices

Hannah T. Neprash, BA; Michael E. Chernew, PhD; Andrew L. Hicks, MS; Teresa Gibson, PhD; J. Michael McWilliams, MD, PhD

Delivery System Integration and Health Care Spending and Quality for Medicare Beneficiaries

J. Michael McWilliams, MD, PhD; Michael E. Chernew, PhD; Alan M. Zaslavsky, PhD; Pasha Hamed, MA; Bruce E. Landon, MD, MBA, MSc

Alexander Pepper and Julie Gore

Behavioral agency theory: new foundations for theorizing about executive compensation

Multitasking and mixed systems for provider payment

Karen Eggleston[a,b,*]

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[b] *Kennedy School of Government, Harvard University, 79 John F. Kennedy Street, Cambridge, MA 02138, USA*

Accepted 1 August 2004
Available online 30 October 2004

Abstract

The problem of multitasking refers to the challenge of designing incentives to motivate appropriate effort across multiple tasks when the desired outcomes for some tasks are more difficult to measure than others. Multitasking is pervasive in health care. I use a simple model to show that the problem of multitasking further strengthens conventional arguments for mixed payment systems such as partial capitation. When pay-for-performance metrics are imperfect for rewarding service-specific quality efforts, using mixed payment helps to balance incentives for quality effort across services.

Using Behavioral Economics to Design Physician Incentives That Deliver High-Value Care

Ezekiel J. Emanuel, MD; Peter A. Ubel, MD; Judd B. Kessler, PhD; Gregg Meyer, MD, MSc; Ralph W. Muller, MA; Amol S. Navathe, MD, PhD; Pankaj Patel, MD, MSc; Robert Pearl, MD; Meredith B. Rosenthal, PhD; Lee Sacks, MD; Aditi P. Sen, PhD; Paul Sherman, MD; and Kevin G. Volpp, MD, PhD

Behavioral economics provides insights about the development of effective incentives for physicians to deliver high-value care. It suggests that the structure and delivery of incentives can shape behavior, as can thoughtful design of the decision-making environment. This article discusses several principles of behavioral economics, including inertia, loss aversion, choice overload, and relative social ranking. Whereas these principles have been applied to motivate personal health decisions, retirement planning, and savings behavior, they have been largely ignored in the design of physician incentive programs. Applying these principles to physician incentives can improve their effectiveness through better alignment with performance goals. Anecdotal examples of successful incentive programs that apply behavioral economics principles are provided, even as the authors recognize that its application to the design of physician incentives is largely untested, and many outstanding questions exist. Application and rigorous evaluation of infrastructure changes and incentives are needed to design payment systems that incentivize high-quality, cost-conscious care.

Ann Intern Med. 2016;164:114-119. doi:10.7326/M15-1330 **www.annals.org**
For author affiliations, see end of text.
This article was published at www.annals.org on 24 November 2015.

New England Journal of Medicine Volume 341 Number 15
Casalino, Lawrence P

The Unintended Consequences of Measuring Quality on the Quality of Medical Care

Lawrence P. Casalino, Arthur Elster, Andy Eisenberg, Evelyn Lewis, John Montgomery and Diana Ramos
Will Pay-For-Performance And Quality Reporting Affect Health Care Disparities?
Health Affairs, 26, no.3 (2007):w405-w414

Taking Patients' Narratives about Clinicians from Anecdote to Science

Mark Schlesinger, Ph.D., Rachel Grob, Ph.D., Dale Shaller, M.P.A., Steven C. Martino, Ph.D., Andrew M. Parker, Ph.D., Melissa L. Finucane, Ph.D., Jennifer L. Cerully, Ph.D., and Lise Rybowski, M.B.A.

N Engl J Med 2015; 373:675-679 | August 13, 2015 | DOI: 10.1056/NEJMsb1502361