Critical Thinking About Consolidation in Healthcare: The Curious Case of Hospital Systems

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Lehigh Valley Business Coalition on Healthcare
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What is “critical thinking” ?

Analysis and evaluation informed by evidence

The propensity to engage in creative thought with reflective skepticism

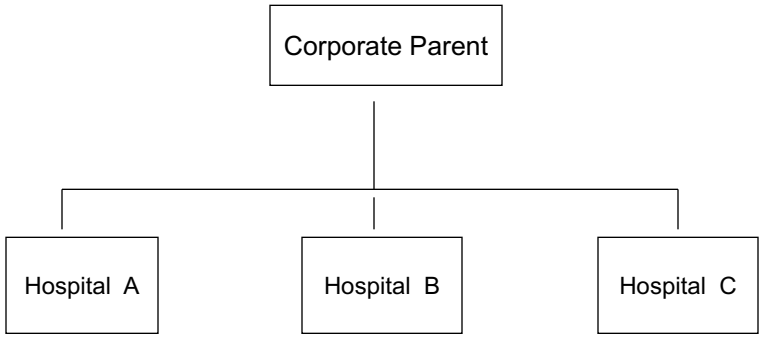
Primer on Consolidation

Types of "consolidation"
(from hospital standpoint)

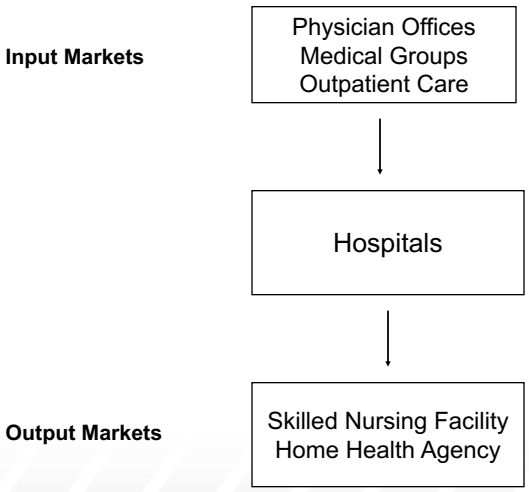
1.	*Horizontal integration*	multi-hospital system
2.	*Vertical integration*	employed physicians
3.	*Diversification*	owned health plan
4.	*All of the above*	be like Kaiser

The Old Days
Freestanding Community Hospital

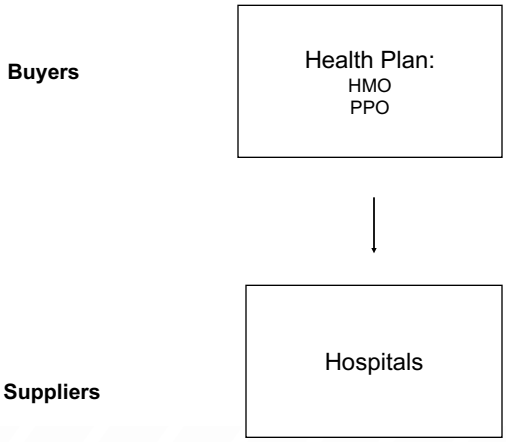
Horizontal Integration
into Hospital Systems



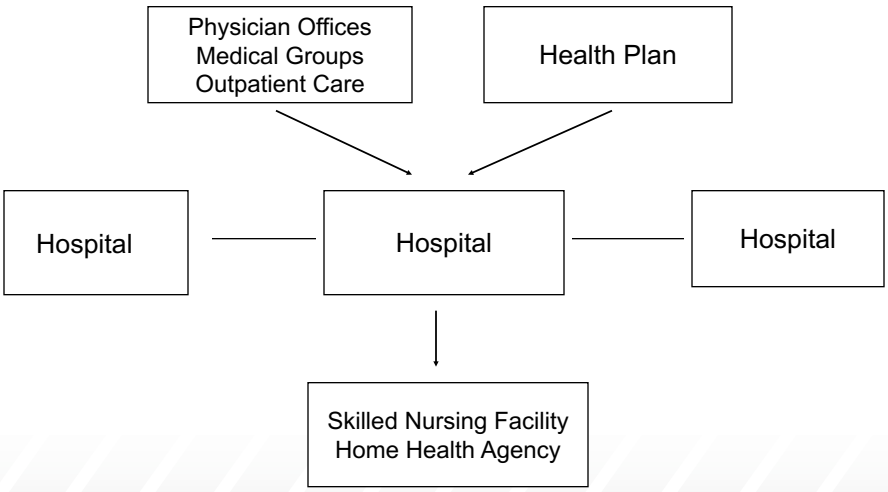
Vertical Integration into Ambulatory & Post-Acute Markets



Vertical Integration into Insurance/Providers



Diversification
All of the Above



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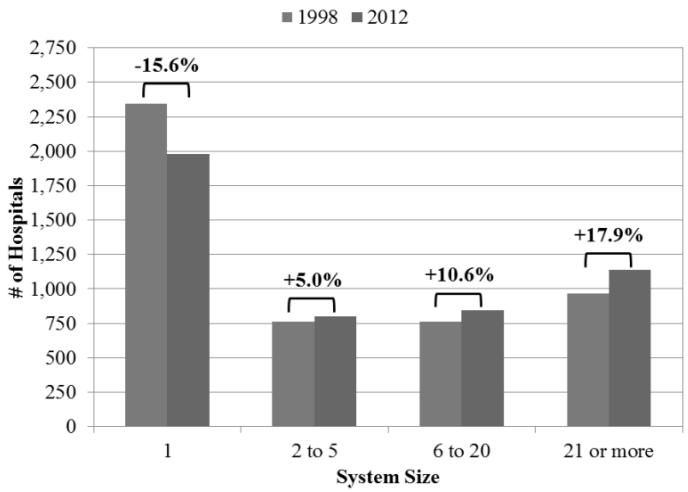
Hospitals consolidate into larger systems



Source: Dafny, Ho, Lee (2015); data from Irving Levin Associates and American Hosp Assoc

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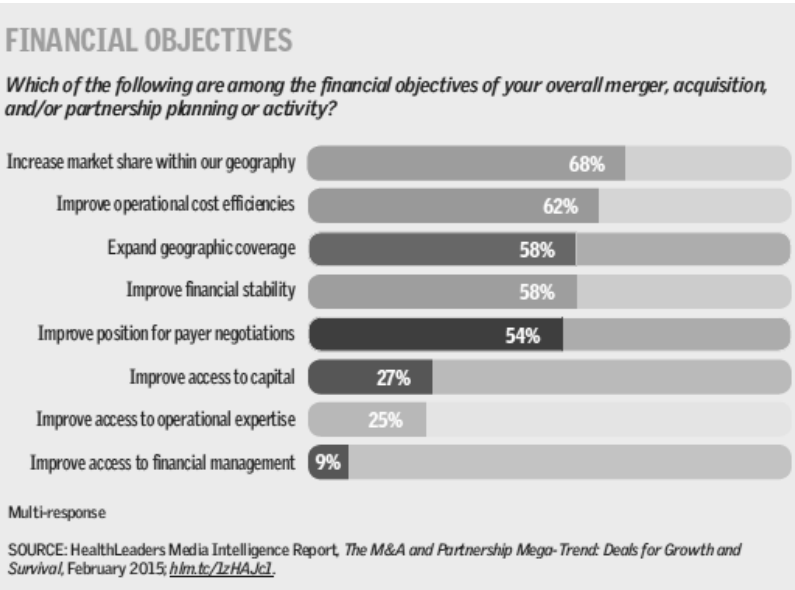
Consolidation Along the Value Chain

- 1960s — Investor-owned Hospital Systems
- 1970s — Nonprofit Hospital Systems
  Nursing Homes
- 1980s — Psychiatric Hospitals
  MD Groups
  Insurers
- 1990s — Hospitals, Physicians, Insurers (Again)
  Employer Purchasing Coalitions
  Wholesalers & Distributors
  Group Purchasing Organizations
  Manufacturers and Suppliers
- 2000s — Hospitals, Insurers (Again)
  Pharmacy Benefit Managers (PBMs)

Rationale for Consolidation

Objectives of Systems / M&A



Context of Healthcare Reform

- IOM's six aims:
  care that is safe, timely, effective, efficient, equitable, patient-centered
- Triple aim:
  population health, patient experience, per capita cost
- PPACA : ACOs and APMs
- Coordination of care for poly-chronics
- Care continuum to ⇩ readmissions and ⇧ patient transitions
- Need for centralized governance
- Belief that systems achieve scale economies

What Do We Get for Consolidation ?

CRA Charles River Associates

Hospital Merger Benefits: Views from Hospital Leaders and Econometric Analysis

Monica Noether, Ph.D. and Sean May, Ph.D.

January 2017

Hospital Execs Think Systems Work, Cite Three Benefits

Reduced cost of capital

- lower-cost debt
- more favorable ratings

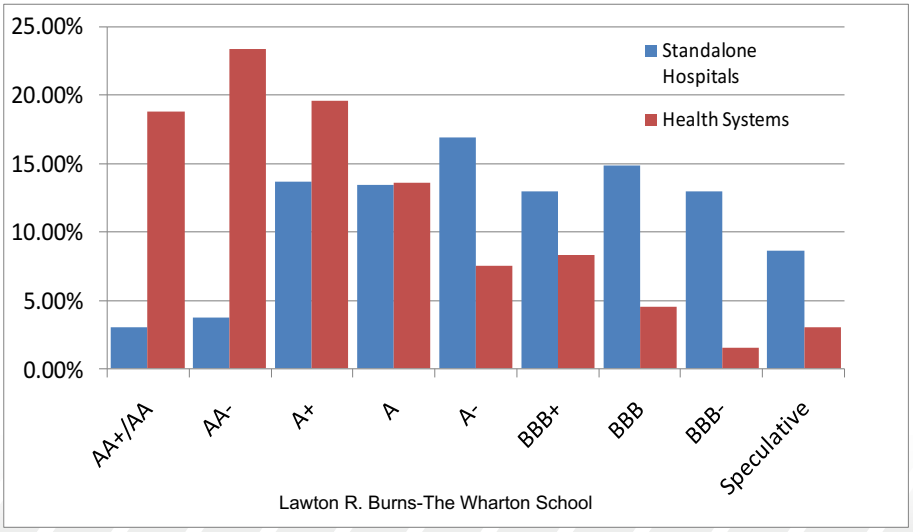
Scale economies : spread fixed costs over larger volumes

- supply chain
- IT
- back office overhead
- pharmacy and lab operations
- physical plant management

Clinical standardization : to reduce cost, improve quality

Systems Access Lower-cost Capital

2007 S&P Credit Ratings of Standalone Hospitals and Health Systems
(% of rated hospitals and health systems in each rating category)



Credit Agencies Weight Larger Systems More Favorably:

What gets rewarded gets done

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Systems Invest in Hospitals They Acquire

Original Research

INQUIRY: The Journal of Health Care Organization, Provision, and Financing
1–9

DOI: 10.1177/0046958015591570
inq.sagepub.com
SAGE

Capital Investment by Independent and System-Affiliated Hospitals

Nathan W. Carroll, PhD[1], Dean G. Smith, PhD[2], and John R. C. Wheeler, PhD[3]

Abstract

Capital expenditures are a critical part of hospitals' efforts to maintain quality of patient care and financial stability. Over the past 20 years, finding capital to fund these expenditures has become increasingly challenging for hospitals, particularly independent hospitals. Independent hospitals struggling to find ways to fund necessary capital investment are often advised that their best strategy is to join a multi-hospital system. There is scant empirical evidence to support the idea that system membership improves independent hospitals' ability to make capital expenditures. Using data from the American Hospital Association and Medicare Cost Reports, we use difference-in-difference methods to examine changes in capital expenditures for independent hospitals that joined multi-hospital systems between 1997 and 2008. We find that in the first 5 years after acquisition, capital expenditures increase by an average of almost $16 000 per bed annually, as compared with non-acquired hospitals. In later years, the difference in capital expenditure is smaller and not statistically significant. Our results do not suggest that increases in capital expenditures vary by asset age or the size of the acquiring system.

Freestanding Hospitals Face Survival Threat

Q&A

"Technology is a tool. If you don't have the right processes in place, and you don't have the right people in place … the technology by itself just won't work."

'The idea of the stand-alone hospital is gone'

Northwell Health, formerly known as North Shore-Long Island Jewish Health System, continues to pursue aggressive expansion moves throughout the New York City metropolitan area. CEO Michael Dowling is also stepping up the New Hyde Park, N.Y.-based system's investment in startup firms and innovative technologies that are launched in-house. Dave Barkholz, Modern Healthcare's Southern Bureau chief, caught up with Dowling at last month's J.P. Morgan Healthcare Conference in San Francisco. The following is an edited transcript.

Modern Healthcare: Does the New York market need additional consolidation?

Michael Dowling: I absolutely believe so, and I think everybody does. All the major players in New York are continuously trying to consolidate. There are some loose arrangements in New York that will have to be tightened. People with affiliations or partnerships or relationships over the next two to three years will come together in a real consolidated way.

There are smaller systems in the New York area that have broken apart because the systems, when they came together, didn't put their infrastructures together correctly. The individual hospitals that were parts of those systems went off by themselves, or the system broke down. Now those hospitals are looking to figure out who they can partner with.

What you're going to have in New York is three to four big systems. There are a couple of hospitals in play at the moment. The question you have to ask yourself is: If you don't take a gamble at working on one of them, then your opposition is going to get it. Opportunities never disappear. Somebody takes the ones that you miss.

On the physician side, there has been increasing consolidation. It wasn't that many years ago when in our area a hundred physicians in a group was huge. Today, there is a group about a half a block from my office that has almost 700 physicians, and it's expanding. Our full-time faculty, which was about a thousand doctors six or seven years ago, today has 4,000 and we're adding about 300 a year.

MH: New York used to be characterized by many independent practices.

Dowling: The idea of the stand-alone hospital is gone. The idea of the stand-alone physician, the small practice, where the person puts up his shingle in front, in most cases, is gone also. It's just not possible in the current economic climate.

MH: What's driving the physician consolidation?

Dowling: Economics is driving it. There is also the herd factor. You have physicians watching everybody else do it and they say, "Wait a second, I better jump on the bandwagon because if I don't do it, maybe I'll be left behind." People are finding that with increased regulation, enhanced micro-regulation, reduction in reimbursement and malpractice insurance, independence is not possible anymore. It's not possible anymore to be by yourself and afford the overhead.

When you come into a large group, you can share. People are also more and more interested in life-work balance, especially the older physicians. Their view of the world is a little bit different. They don't want to be available seven days a week, taking calls in the middle of the night on Saturday and having no time off.

Plus, more and more governments and payers are looking at improved quality metrics. The way that you can actually take advantage of that is to be part of a larger entity.

MH: Are you close to another hospital acquisition?

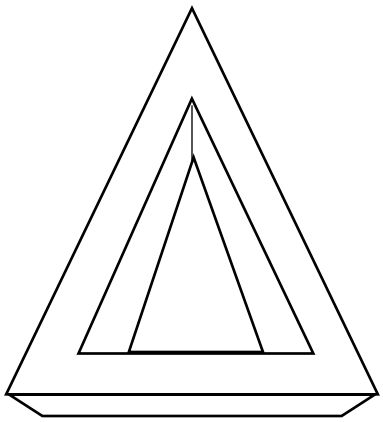
Dowling: I would say within the first quarter of 2017. There is a real possibility we could add one or two others.

MH: Multihospital systems?

Dowling: No, individual hospitals that were once part of other systems. Those

Systems Fail to Positively Impact the Iron Triangle of Health Care

Cost Containment



High Quality Care **Patient Access**

Is the System Really the Solution? Operating Costs in Hospital Systems

Medical Care Research and Review
1–26

DOI: 10.1177/1077558715583789
mcr.sagepub.com
SAGE

Lawton Robert Burns[1], Jeffrey S. McCullough[2], Douglas R. Wholey[2], Gregory Kruse[1], Peter Kralovec[3], and Ralph Muller[1]

Abstract

Hospital system formation has recently accelerated. Executives emphasize scale economies that lower operating costs, a claim unsupported in academic research. Do systems achieve lower costs than freestanding facilities, and, if so, which system types? We test hypotheses about the relationship of cost with membership in systems, larger systems, and centralized and local hub-and-spoke systems. We also test whether these relationships have changed over time. Examining 4,000 U.S. hospitals during 1998 to 2010, we find no evidence that system members exhibit lower costs. However, members of smaller systems are lower cost than larger systems, and hospitals in centralized systems are lower cost than everyone else. There is no evidence that the system's spatial configuration is associated with cost, although national system hospitals exhibit higher costs. Finally, these results hold over time. We conclude that while systems in general may not be the solution to lower costs, some types of systems are.

Robert Wood Johnson Foundation

THE SYNTHESIS PROJECT
NEW INSIGHTS FROM RESEARCH RESULTS

RESEARCH SYNTHESIS REPORT NO. 9
FEBRUARY 2006

William B. Vogt, Ph.D. and
Robert Town, Ph.D.

How has hospital consolidation affected the price and quality of hospital care?

See companion Policy Brief available at *www.policysynthesis.org*

Evidence on Hospital Consolidation

Physically merging two facilities into one …

lowers costs
can increase volumes
does not necessarily improve quality

But consolidating 2+ facilities under a system roof …

does not lower costs
may increase costs as systems get bigger
may increase costs as systems go regional
does not increase quality of care
does not lead to greater provision of charity care

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Economies of Scale – Often Discussed

Leadership & Management

From holding company to operating company: 4 experts on health system economies of scale

Written by Molly Gamble April 27, 2017 |

BECKER'S Hospital Review

Economies of Scale - No Empirical Evidence

JOURNAL OF APPLIED ECONOMETRICS
J. Appl. Econ. **30**: 398–421 (2015)
Published online 19 December 2013 in Wiley Online Library
(wileyonlinelibrary.com) DOI: 10.1002/jae.2371

ANALYSIS OF HOSPITAL PRODUCTION: AN OUTPUT INDEX APPROACH

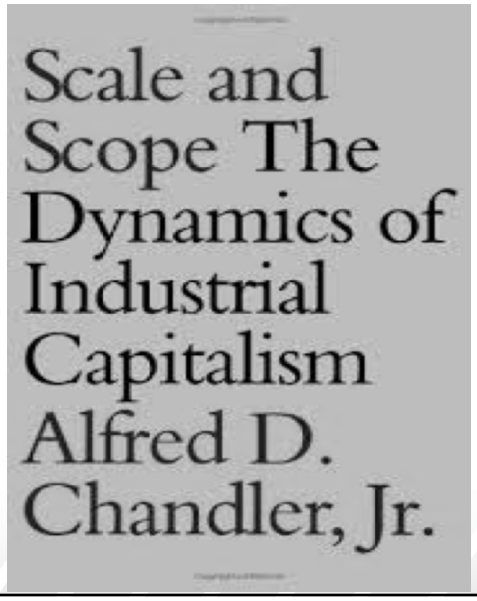
MARTIN S. GAYNOR[a,b,c,f], SAMUEL A. KLEINER[c,d]* AND WILLIAM B. VOGT[e]

[a] *Heinz College, Carnegie Mellon University, Pittsburgh, PA, USA*
[b] *Centre for Market and Public Organisation, University of Bristol, UK*
[c] *NBER, Cambridge, MA, USA*
[d] *Department of Policy Analysis and Management, Cornell University, Ithaca, NY, USA*
[e] *Department of Economics, Terry College of Business, University of Georgia, Athens, GA, USA*
[f] *Bureau of Economics, Federal Trade Commission, Washington, DC, USA*

SUMMARY

In this study, we develop and implement an output index approach to the estimation of hospital cost functions that reflects the differentiated nature of hospital care. The approach combines the estimation of an output index within a flexible functional form. We find, in an application to California hospitals, evidence of scope economies across specialties within primary care, and diseconomies of scope within secondary and tertiary care. Minimum efficient scale is reached at larger levels of output than would be estimated by conventional techniques. These results indicate the importance of accounting for firm output heterogeneity when estimating cost functions.

Your Bible on Scale & Scope Economies

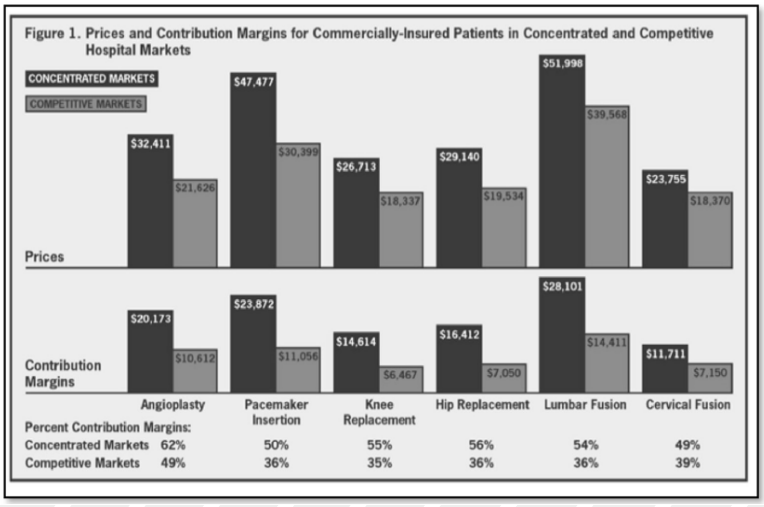


Why Hospital Systems & Mergers Fail to Achieve Scale Economies

- Integration restricted to administrative systems and group purchasing (small percentage of costs)
- Integration not yet achieved on clinical side (large percentage of costs)
- No effort to consolidate production capacity
- Hospital systems = “stuck in neutral”

Hospitals in Consolidated Markets Raise Prices to Private Payers

Chart 12 – Prices for Private Patient Procedures and Associated Contribution (“profit”) Margins for Providers in Concentrated and Less Concentrated Market Areas[72]



“Black Box” Opacity of Hospital Systems

Labor

Capital

Financials

Quality

Claims

Outcomes

Hospital System

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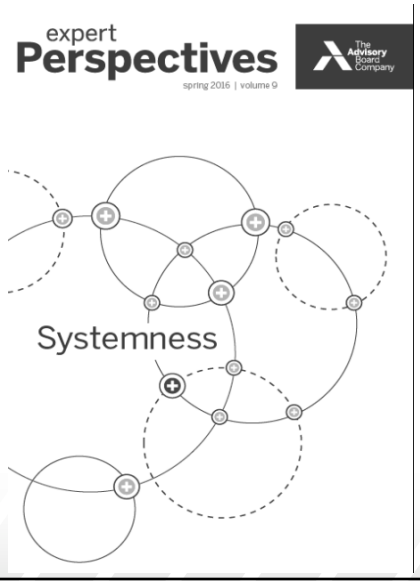
Hospital Systems - - In Search of “System-ness”



Hospitals Nationwide Take Financial Bath on EMR Installation

MD Anderson points to Epic implementation for 77% drop in adjusted income

Written by Akanksha Jayanthi (Twitter | Google+) | August 26, 2016 |

Houston-based MD Anderson Cancer Center reported a 76.9 percent drop in adjusted income for the 10 months ended June 30, a downfall it largely attributes to its Epic EHR implementation project.

In its agenda book and schedule of events for the University of Texas board of regents' meeting held Wednesday and Thursday, the health system reported a $405 million decrease in adjusted income as compared to the same time period the previous year.

"The $405.0 million (76.9 percent) decrease in adjusted income…was primarily attributable to an increase in expenses combined with a decrease in patient revenues as a result of the implementation of the new Epic Electronic Health Record system," according to the agenda book.

BECKER'S Hospital CFO

Hospitals Nationwide are Freezing New Hires

April 21, 2017

Hiring freeze at Advocate Health

By KRISTEN SCHORSCH

SHARE Facebook 164 Twitter LinkedIn 92 Google +

Photo by Associated Press

Advocate Illinois Masonic Medical Center

Advocate Health Care, the largest hospital network in the state, is putting hiring on hold until at least July 1.

CRAIN'S CHICAGO BUSINESS

Hospitals Nationwide are Downsizing

Brigham and Women's offers buyouts to 1,600 workers

The Boston Globe

Timothy Tai for The Boston Globe

By Priyanka Dayal McCluskey Globe Staff April 27, 2017

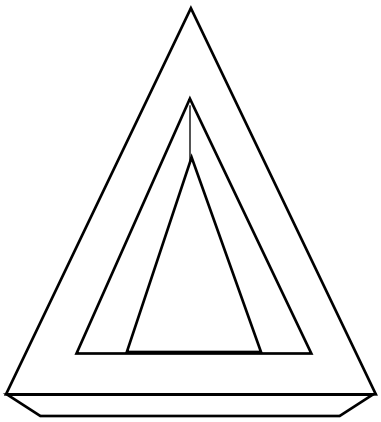
Brigham and Women's Hospital, one of Boston's largest employers, said Thursday that it is offering voluntary buyouts to 1,600 workers to rein in costs amid a challenging period

And yet, at the same time …

Hospitals Nationwide Asked to Achieve Triple Aim

The Triple Aim of Health Care

Per Capita Cost of Care



Individual's Experience of Care **Health of Population**

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Hospitals Nationwide Now Asked to Prepare for Changing Landscape

Current State –		***Future State –***
Producer-Centered	PRIVATE SECTOR	People-Centered
Volume Driven		Outcomes Driven
Unsustainable		Sustainable
Fragmented Care Systems	PUBLIC SECTOR	Coordinated Care Systems
FFS Payment Systems		New Payment Systems

- Value-based purchasing
- ACOs Shared Savings
- Episode-based payments
- Care Management Fees
- Data Transparency

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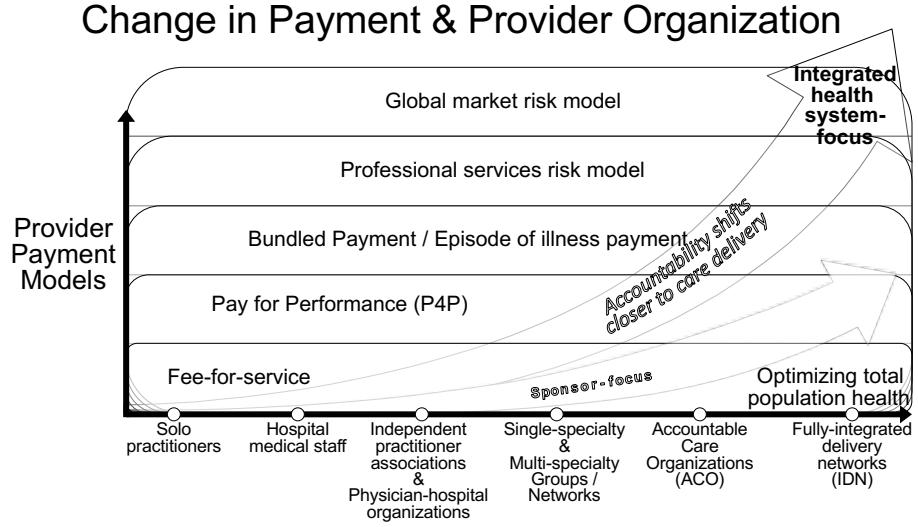
Hospitals Nationwide Now Asked to Transform Themselves

Transformation as Multi-Tasking : Simultaneous Change in Payment & Provider Organization



Provider Practice Models

The Transformation May be Bogus

Paul Levy: Value-based payment is an 'energy-sapping distraction'

Written by Emily Rappleye (Twitter | Google+) | April 11, 2017 | Print | Email

BECKER'S Hospital Review

ACO Paragons of Virtue
Facing Monumental Problems

BUSINESS DAY

Cornerstone: The Rise and Fall of a Health Care Experiment

By REED ABELSON DEC. 23, 2016

Patricia Britt, with her husband, John, in their home in High Point, N.C. Ms. Britt, who has multiple sclerosis and had a stroke in 2013, has received house calls from Cornerstone Health Care and has been in constant communication with the practice. Mike Belleme for The New York Times

HIGH POINT, N.C. — Cornerstone Health Care, a large physician group here, made a big bet a few years back: It would get paid based not on how many procedures its doctors performed, but on how effectively they treated their patients.

The New York Times

By John Hsu, Christine Vogeli, Mary Price, Richard Brand, Michael E. Chernew, Namita Mohta, Sreekanth K. Chaguturu, Eric Weil, and Timothy G. Ferris

Substantial Physician Turnover And Beneficiary 'Churn' In A Large Medicare Pioneer ACO

ABSTRACT **Alternative payment models, such as accountable care organizations (ACOs), attempt to stimulate improvements in care delivery by better alignment of payer and provider incentives. However, limited attention has been paid to the physicians who actually deliver the care. In a large Medicare Pioneer ACO, we found that the number of beneficiaries per physician was low (median of seventy beneficiaries per physician, or less than 5 percent of a typical panel). We also found substantial physician turnover: More than half of physicians either joined (41 percent) or left (18 percent) the ACO during the 2012–14 contract period studied. When physicians left the ACO, most of their attributed beneficiaries also left the ACO. Conversely, about half of the growth in the beneficiary population was because of new physicians affiliating with the ACO; the remainder joined after switching physicians. These findings may help explain the muted financial impact ACOs have had overall, and they raise the possibility of future gaming on the part of ACOs to artificially control spending. Policy refinements include coordinated and standardized risk-sharing parameters across payers to prevent any dilution of the payment incentives or confusion from a cacophony of incentives across payers.**

By Claudia L. Schur and Janet P. Sutton

DOI: 10.1377/hlthaff.2016.1427
HEALTH AFFAIRS 36,
NO. 4 (2017): 649–654

DATAWATCH

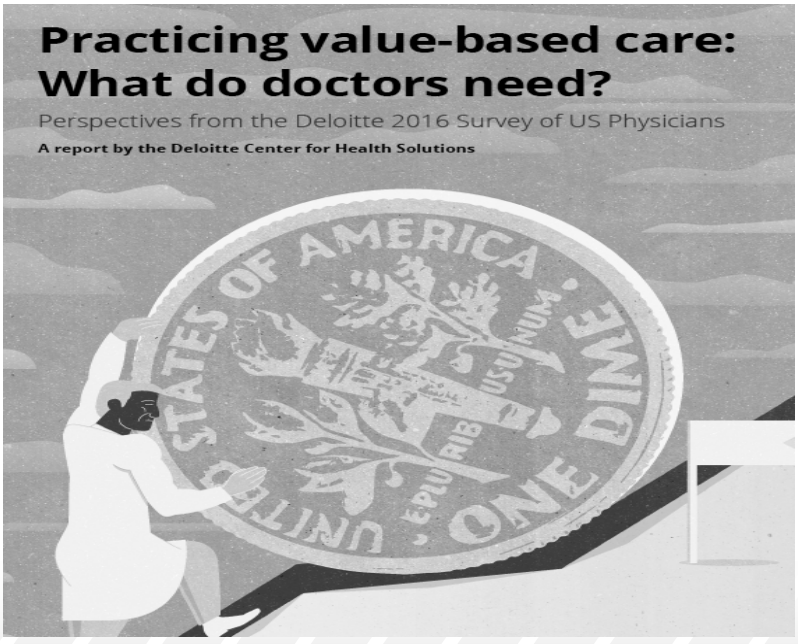
Physicians In Medicare ACOs Offer Mixed Views Of Model For Health Care Cost And Quality

Physicians' willingness to change how care is delivered is a key component of the ability of accountable care organizations (ACOs) to transform patient care. Yet physicians participating in Medicare ACOs are only moderately convinced that ACOs are an effective model for delivering cost-effective care.

The Affordable Care Act (ACA) launched a significant effort to refocus health care delivery and payment to reward providers for lowering costs and increasing the quality of care. One of the largest of these initiatives is the Medicare Accountable Care Organization (ACO) program. ACOs are groups of physicians and other health care providers who work together to provide high-quality, cost-effective, and financially accountable care for their patients. As of January 2017, the number of Medicare ACOs had grown to 562, with 10.5 million Medicare beneficiaries served since the program began in 2012.[1] Many ACOs are based in large health systems, while others are networks of physician practices. However, all of them rely on primary care physicians to elimi-

Claudia L. Schur (cschur@lmpolicyresearch.com) is senior research director at L&M Policy Research, LLC, in Washington, D.C.

Janet P. Sutton is principal research scientist at the Center for Health Research and Policy, Social & Scientific Systems, in Silver Spring, Maryland.



Kaisier-like Paragons of Virtue Show Signs of Retrenchment

Health Affairs Blog

Geisinger's Transformation: Balancing Growth And Risk

Jeff Goldsmith

March 8, 2017

Hospitals Nationwide Asked to Engage Physicians

We asked 13 physicians what they really think of their hospital

Written by Mackenzie Bean, Morgan Haefner, Emily Rappleye, Alyssa Rege and Tamara Rosin | August 02, 2016 |

The hospital-physician relationship is a delicate dance. If one steps on the other's toes, it can make or break success — particularly in an era of reform that calls for ever-closer collaboration. To learn more about what helps or hurts alignment, we asked 13 physicians for their unfiltered opinions about their hospitals and CEOs.

BECKER'S Hospital Review

10 prominent health system CEOs: Physician burnout is a public health crisis — here are 11 things we commit to do about it

Written by Tamara Rosin (Twitter | Google+) | March 28, 2017 | Print | Email

The CEOs of the nation's most prominent health systems authored an article in *Health Affairs* examining the widespread issue of physician burnout, its main contributors, leaders' role in responding to burnout and an 11-item call to action.

The authors of the article include:

- John Noseworthy, MD, president and CEO of Rochester, Minn.-based Mayo Clinic
- Delos "Toby" Cosgrove, MD, president and CEO of Cleveland Clinic
- Mitchell Edgeworth, CEO of Nashville, Tenn.-based Vanderbilt University Hospitals and Clinics
- Ed Eillison, MD, executive medical director and chairman of the board for the Southern California Permanente Medical Group in Pasadena, Calif.
- Sarah Krevans, president and CEO of Sacramento-based Sutter Health
- Paul Rothman, MD, CEO of Johns Hopkins Medicine in Baltimore
- Kevin Sowers, RN, president of Duke University Hospital in Durham, N.C.
- Steven Strongwater, MD, president and CEO of Atrius Health in Newton, Mass.
- David Torchiana, MD, president and CEO of Boston-based Partners HealthCare
- Dean Harrison, president and CEO of Evanston, Ill.-based Northwestern Memorial HealthCare

BECKER'S Hospital Review

NEJM Catalyst

Blog

Care Redesign 2016

Poor Care Is the Root of Physician Disengagement

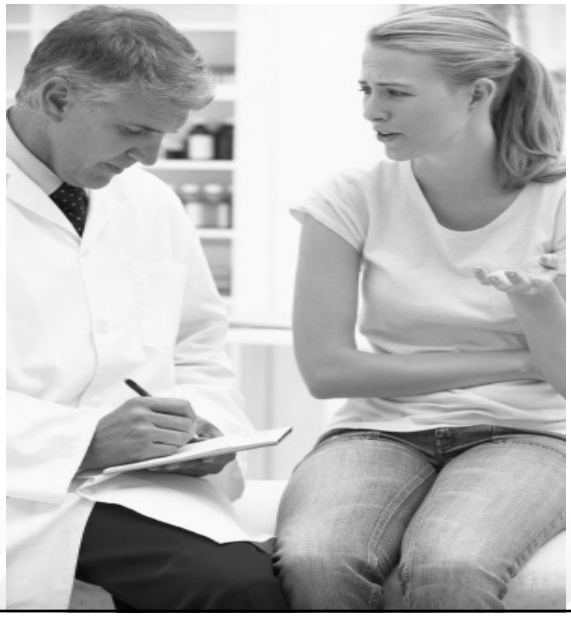
Blog Post · [illegible]

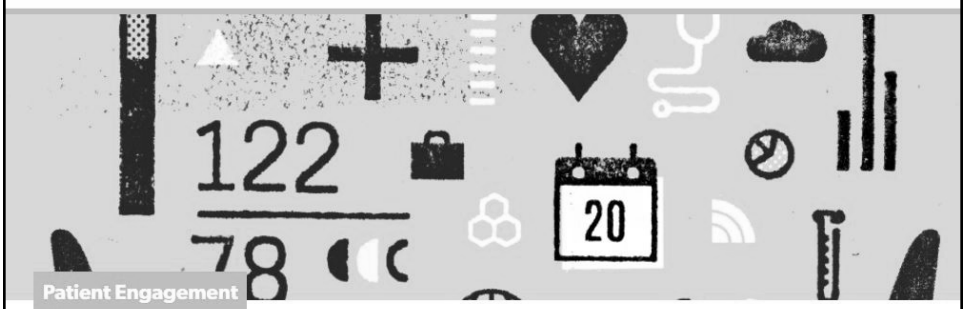
Richard Gunderman, MD, PhD

In many locales around the country, hospitals and health systems are scrambling to respond to poor physician engagement scores. Boards of directors are becoming exercised, task forces on "physician alignment" are being assembled, and managers are losing bonuses and even their jobs. But beneath this hubbub lie important truths about "engagement," many of which are just emerging into view.

The cause for concern is clear: disengaged physicians are bad for health care. They reduce recruitment and retention rates. They increase the frequency of errors. They lower rates of patient adherence to treatment recommendations and quality of care. Broadly speaking, disengagement undermines morale. Health care organizations at which physicians do not like to work are generally bad places to get care.

Providers Nationwide Asked to Engage Patients





Patient Engagement

Patient Engagement Survey: Far to Go to Meaningful Participation

Insights Report · September 8, 2016

Kevin Volpp, MD, PhD & Namita S. Mohta, MD

University of Pennsylvania

NEJM Catalyst; Brigham and Women's Hospital

So what can we conclude

about hospital systems ??

Thank you for listening