Provider Consolidation : Trends & Outcomes

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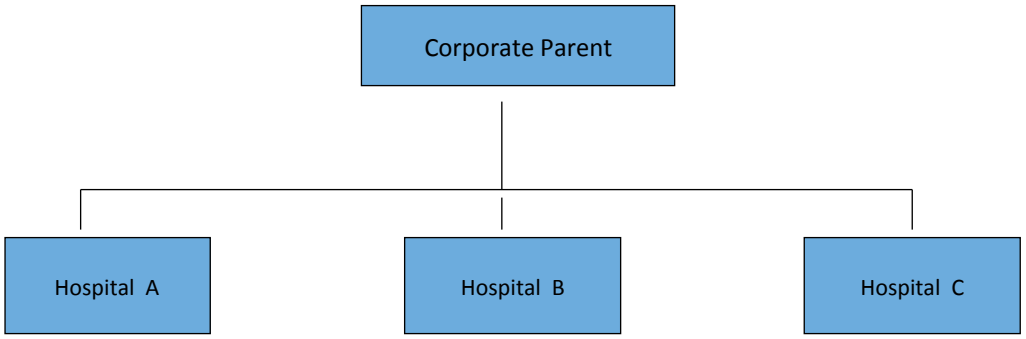
Two Topics

1. Horizontal consolidation of hospitals
2. Vertical integration of hospitals and physicians

Two Topics

1. *Horizontal consolidation of hospitals*
2. Vertical integration of hospitals and physicians

Horizontal Integration into Hospital Systems



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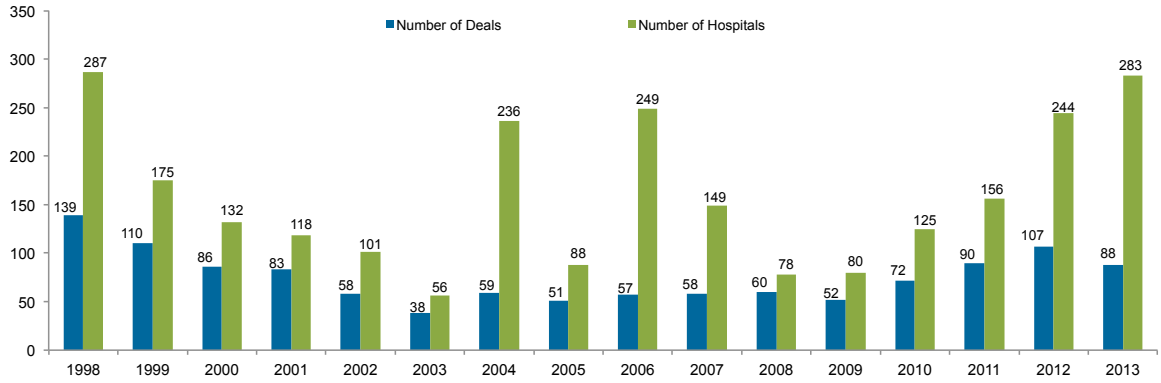
Trends in Hospital Consolidation

A lot of hospital consolidation

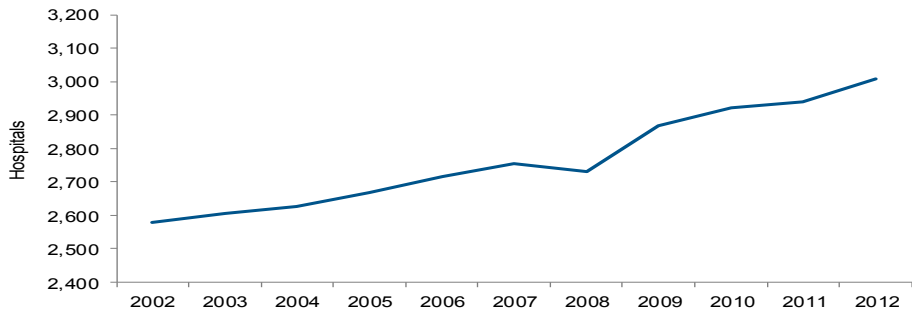
- 1,200+ deals since 1994
- 357 deals since 2010
- Most urban areas are now dominated by 1-3 large hospital systems
  - Partners (Boston), Sutter (Bay Area), UPMC (Pittsburgh)



Some enormous deals

Hospital Deal	# Hospitals	# States/Markets
• Community Health Systems & Health Mgmnt Associates	206	29
• Tenet Healthcare & Vanguard Health Systems	77	30
• Trinity Health & Catholic Health East	82	21
• Ascension Health & Alexian Brothers	80	21
• Trinity Health & Loyala University H.S.	47	10

Number of Hospitals in Health Systems, 2002 – 2012



Source: Avalere Health analysis of American Hospital Association Annual Survey data, 2012, for community hospitals.

(1) Hospitals that are part of a corporate body that may own and/or manage health provider facilities or health-related subsidiaries, as well as non-health-related facilities including freestanding and/or subsidiary corporations.

Theorized Benefits of Hospital Consolidation

- Scale economies : lower costs
- Ability to reduce unnecessary duplication
- Improved access to healthcare services / reduced distance
- Ability to handle risk contracts & alternative payment methods
- Investments in desired societal goals:
  - higher quality & lower cost of care
  - care coordination
  - population health / triple aim
  - patient safety

Literature on Hospital Consolidation

Burns, McCullough, Wholey et al., (2015), *Medical Care Research and Review*

Capps, David, & Carlton (2010), Working paper

Gaynor and Town (2012), *RWJF Update*

Gaynor, Kleiner, & Vogt (2015), *Journal of Applied Econometrics*

Tsai & Jha (2014), *JAMA*

Vogt & Town (2006), *RWJF Synthesis*

Evidence on Hospital Consolidation

- *Merging facilities* …

  lowers costs
  can increase volumes
  does not necessarily improve quality

- *Consolidating facilities under one system roof* …

  does not lower costs
  may increase costs as systems get bigger
  may increase costs as systems become more geographically dispersed
  may lead to greater ability to invest in quality measurement & improvement, but may lower quality of care
  does not lead to clinical integration (at least initially)
  does not lead to greater provision of charity care

Despite the lack of evidence for cost and quality gains, why the continuing trend toward hospital systems ??

- Increase size to gain leverage over payers (or at least match up in size)
- Gain heft & scale to succeed/survive under PPACA
- Increase size to concentrate procedures in high-volume centers
- Everybody else is getting bigger ➔ want to stay competitive
- Diversify market risk via geographic spread
- Increase capital and access to cheaper capital to expand, renovate
- Viewed favorably by credit rating agencies :
- "Too big to fail"
- Respond to risk-based contracting (P4P, VBP)
- Increase size to perform population health & coordinated care
- Continued erosion in commercial insurance
- Rise of insurance exchanges & possible steerage that might exclude small systems
- Dwindling inpatient care market ➔ try to keep patients inside the network

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

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.

Hospital Systems Can Engage in Strategies That …

- Promote efficiency: coordination, rationalization, standardization
- Ignore efficiency: prices, technology upgrades, hires, differentiation, feeders
- Retard efficiency: bureaucracy, complexity, governance, culture, dispersion

Two Topics

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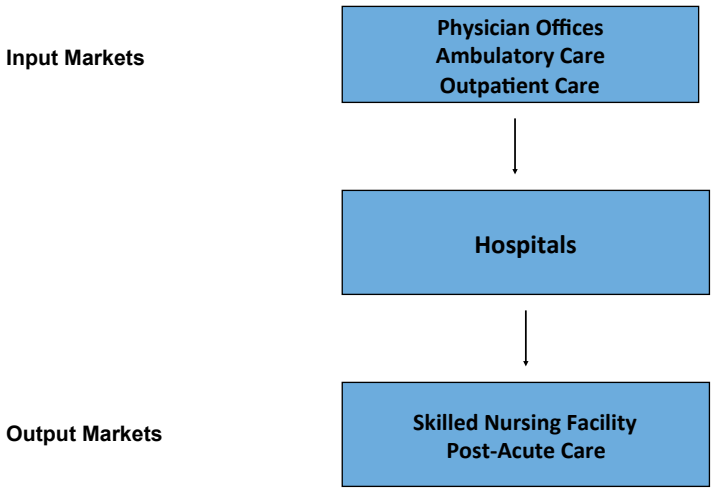
2. *Vertical integration of hospitals and physicians*

Vertical Integration
Physician and Hospital Linkages



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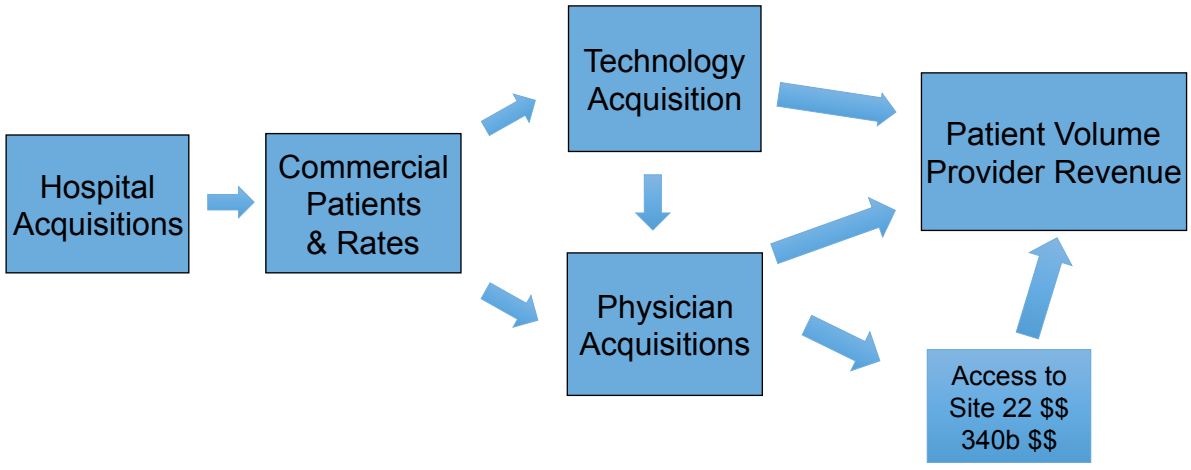
Horizontal & Vertical Integration : Possible Story Line



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Extent of physician-hospital consolidation

- *Alliance models* (PHO, MSO, IPA)

  dismal failures in 1990s
  - garnered few capitated lives from insurers
  - no impact on cost or quality
  - no impact on physician alignment
  - no infrastructure to manage risk

  on the wane ever since

  may make a comeback with PPACA

  can serve as the chassis for an ACO

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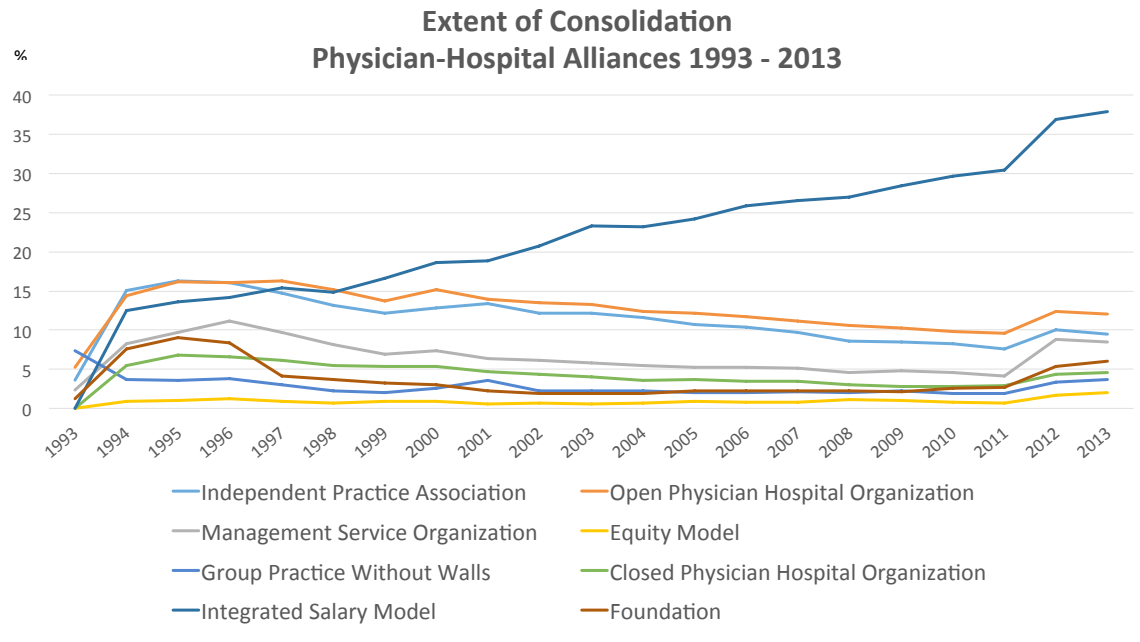

Source: AHA Database

Extent of physician-hospital consolidation

- *Hierarchy models* (employment)

more hospitals now employ physicians

not entirely sure how many physicians are employed by hospitals

lots of WAGs

lots of group think

get out your BS detector

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Extent of consolidation: Estimates

- Percent of Physicians Employed by Hospitals:

Credit Suisse (2013)	2/3 of physicians
WSJ (2014)	2/3 of physicians
Truven Health Analytics	2/5 - 1/2 of physicians – teaching hospitals
SK&A (2012)	1/4 of physicians
ACS (2012)	1/4 of cardiologists
AMA (2015)	1/4 of physicians
Neprash et al. (2015)	1/5 of physicians
AHA (2013)	1/7 of physicians
Truven Health Analytics	1/10 of physicians – community hospitals

- Percentages vary a lot by specialty

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HORIZONTAL AND VERTICAL INTEGRATION OF PHYSICIANS: A TALE OF TWO TAILS

Lawton Robert Burns, Jeff C. Goldsmith and Aditi Sen

ABSTRACT

Purpose Researchers recommend a reorganization of the medical profession into larger groups with a multispecialty mix. We analyze whether there is evidence for the superiority of these models and if this organizational transformation is underway.

Design/methodology approach We summarize the evidence on scale and scope economies in physician group practice, and then review the trends in physician group size and specialty mix to conduct survivorship tests of the most efficient models.

Findings The distribution of physician groups exhibits two interesting tails. In the lower tail, a large percentage of physicians continue to practice in small, physician-owned practices. In the upper tail, there is a small but rapidly growing percentage of large groups that have been organized primarily by non-physician owners.

Annual Review of Health Care Management: Revisiting the Evolution of Health Systems Organization
Advances in Health Care Management, Volume 15, 39117

ISSN: 1474-8231/doi:10.1108/S1474-8231(2013)0000015009

Drivers of consolidation

Hospital Goals

- Increase MD incomes
- Improve care processes & quality
- Share cost of clinical IT with physicians
- Prepare for ACOs and Triple Aim
- Increase leverage over payers
- Increase physician loyalty/alignment
- Minimize volume splitting
- Increase hospital revenues
- Capture outpatient market
- Mitigate competition with physicians
- Develop regional service lines
- Create entry barriers for key clinical services
- Recruit physicians in specialties with shortages
- Address medical staff pathologies

Physician Goals

- Stabilize / increase MD incomes
- Forestall / offset reimbursement cuts
- Integration = Income insurance policy
- Increase quality of service to patients
- Access to hospital's accumulated capital
- Access to new technology
- Uncertainty over health reform
- Low leverage over payers
- Escape administrative hassles of private practice
- Escape pressures of managed care
- Exit strategy for group's founding physicians
- Increase predictability of case load & income
- Increase physician control
- Increase career satisfaction & lifestyle

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Provider-based Status : Advantages

- Relationship that allows a hospital to treat another facility as part of the hospital for payment purposes
- Location can bill as part of the hospital to which it is based:
  - SOS 22 (hospital outpatient = professional & facility fee)
  - SOS 11 (physician office = professional fee)
- HOPD professional & technical claim amounts >> MD office claim amount
- Medicare payment differentials carry over to commercial payments
- Can partake in 340b savings
- Inclusion in hospital's third-party payer contracts

Economist Hypotheses Regarding Vertical Integration

Positive benefits

- Efficient production of hospital services
- Improved MD-hospital communication across sites
- Care coordination
- Possibly higher quality of care
- Prepare for risk contracting & APMs
- Increase referrals
- Meet challenges of accountable care
- Reduce wasteful duplication of tests
- Continuum of care / in-network care
- Substitute low-cost for high-cost sites
- Share best practices, IT
- Population health investments

Negative consequences

- Improved bargaining power w/ commercial payers
- Higher prices
- Higher costs
- Shift in site of care from SOS 11 ➔ SOS 22
- Higher volume
- Higher overall spending
- Potential to pay physicians covertly for referrals

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Evidence Base on Physician-Hospital Economic Integration

Recent Papers on Hospital-Physician Integration

Vertical Integration: Hospitals & MDs

Andes & Gans (2015), *MGMA*
Baker, Bundorf, & Kessler (2014), *Health Affairs*
Baker, Bundorf, & Kessler (2015), *NBER*
Capps, Dranove, & Ody (2015), *Northwestern Univ.*
Gans & Wolper (2013), *MGMA*
Neprash, Chernew, Hicks et al. (2015), *JAMA Internal Medicine*
Robinson and Miller (2014), *JAMA*
McWilliams, Chernew, et al. (2013), *JAMA Internal Medicine*
Huang & McCarthy (2015), *Emory Univ*

Site of Service: From MD Office to HOPD

Health Policy Brief (2014), *Health Affairs*
Song, Wallace, Neprash et al. (2015), *JAMA Internal Med*
Wynn, Hussey, Ruder (2011), *RAND Report*

Horizontal Integration: Specialty Concentration

Austin & Baker (2015), *Health Affairs*
Baker, Bundorf, Royalty, & Levin (2014)
Dunn & Shapiro (2012), *Bureau of Economic Analysis*
Schneider, Li, Klepser et al. (2008), *Int J Health Care Fin Econ*
Scheffler (2015), Presentation to FTC

Fully Integrated Models: Hospitals, MDs, Health Plan

Burns, Gimm, & Nicholson (2005), *Journal Healthcare Mgmnt*
Burns, Goldsmith, & Sen (2013), *Advances in Health Care Mgmt*
Frakt, Pizer, & Feldman (2013), *Health Services Research*
Goldsmith,. Burns, Sen et al. (2015), *NASI*

Recent Papers on Hospital-Physician Integration (2012-15)

- Shift care from MD office to HOPD
- Higher prices paid for physician services in HOPD
- Higher HOPD prices tied to concentrated MD markets, salaried models, hospital market share
- More impact on outpatient *prices* than on outpatient *volume*
- Little impact on *inpatient* prices or volume
- Higher total cost of care
- Lower quality: lower HEDIS scores, higher re-admissions
- Lower physician productivity (RVUs, $$ revenues per MD)
- Lower levels of office staffing by non-physician clinicians

Some Overall Issues

- Any reduction in volume or utilization ?
- Any evidence of care coordination efficiencies ?
- Are patients more likely to go to lower-cost, higher-quality hospitals (or just the opposite) ?
- Are price increases a function of (1) site of payment or (2) bargaining power over payers ?
- Effects on patient cost-sharing ?
- Lots of confounds and contingent effects:
- Are studies conducted in FFS environment or alternative payment methods environment ?

15. Hospital employment of physicians is a positive trend likely to enhance quality of care and decrease costs.

	2014	2012
Mostly agree	9.3%	4.6%
Somewhat agree	27.8%	19.9%
Somewhat disagree	28.8%	32.8%
Mostly disagree	34.1%	42.7%

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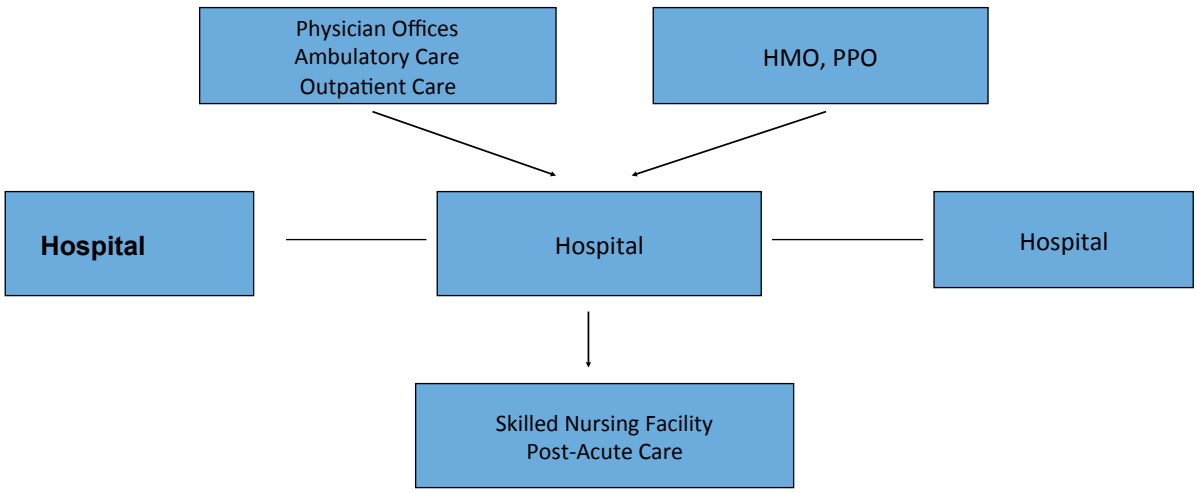
Multiple Treatment Interference



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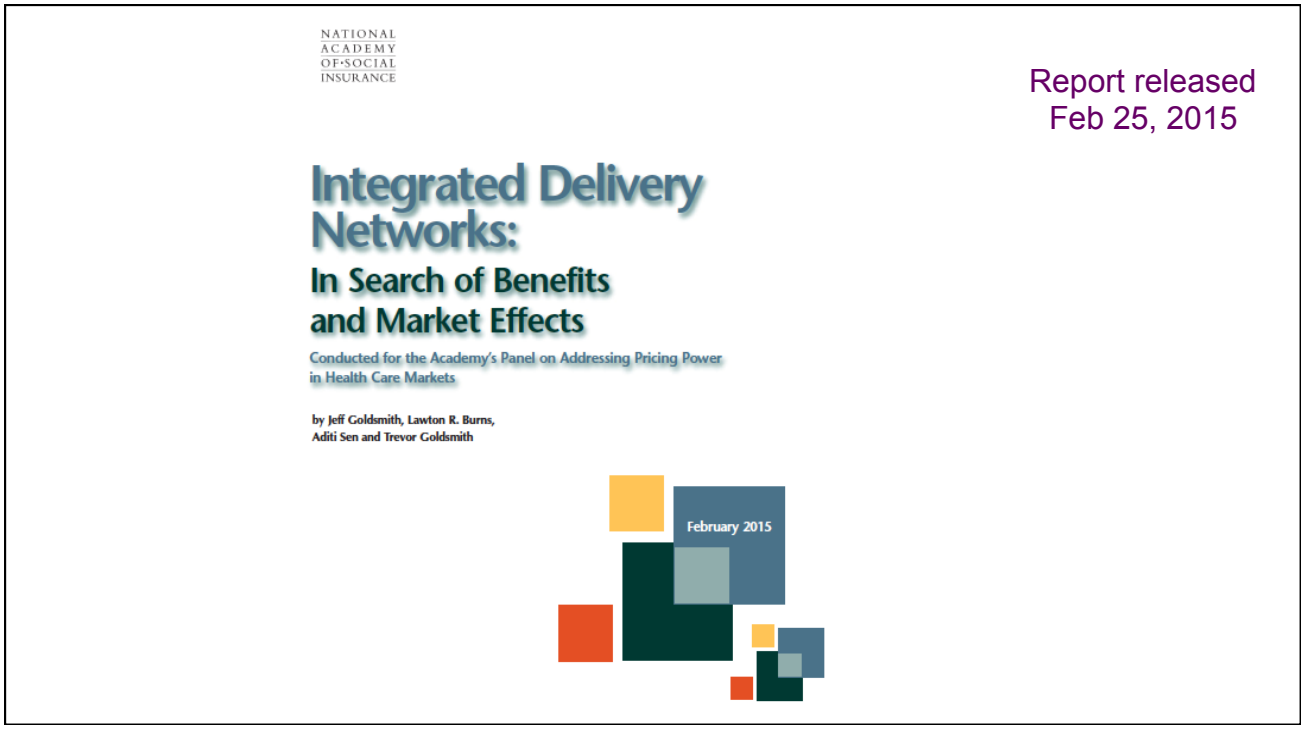

NASI Report Findings

- No relationship of IDN "revenue at risk" with
  - (a) IDN profitability
  - (b) IDN cost of care (adjusted for CMI)

- Comparing the *IDN flagship hospital* with its main in-market competitor:
  - (a) higher average cost per case in 10/14 sites
  - (b) more "revenue at risk" associated with higher Medicare spending in last 2 years of life
  - (c) no meaningful differences in clinical quality scores:
    - readmissions
    - infection rates
    - complication rates
  - (d) no meaningful differences in patient satisfaction scores or Leapfrog safety ratings

- NOT CLEAR that IDNs can coordinate care, lower costs, or deliver value

Thank you for listening