How Does Consolidation Among Healthcare Providers Affect Patient Flows and Quality of Care?

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With Dr. Atul Gupta

Project Description

- Consolidation of healthcare providers
  - Annual American Hospital Association survey
  - SK&A database (physician practice surveys)
- Key outcome variables
  - Prices/Costs
  - Utilization
  - Patient quality
- Match integration status to Anthem insurance claims
  - 20 states of interest (14 Anthem + 6 large states)
  - General acute care hospitals

Relevance

"…we are intent on challenging every hospital merger that's going to produce anti-competitive effects, and we have a number in the pipeline." – FTC Commissioner Christine Wilson (January 16, 2020)

Types of Integration

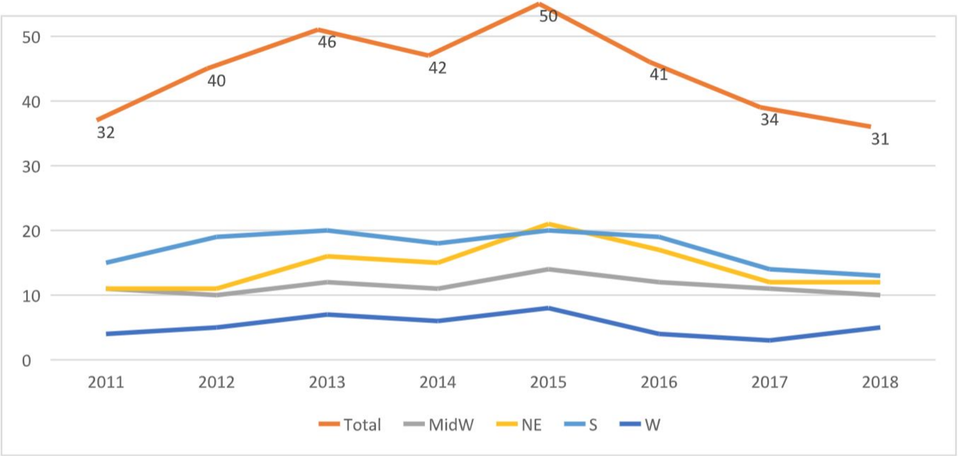
- Horizontal Integration
  - Hospitals/healthcare systems buying hospitals
  - Ex. Penn Medicine acquisition of Princeton HealthCare System in 2018
- Vertical Integration
  - Non-binary nature
  - Hospitals buying physician practices, directly employing physicians, etc.

Literature + Evidence

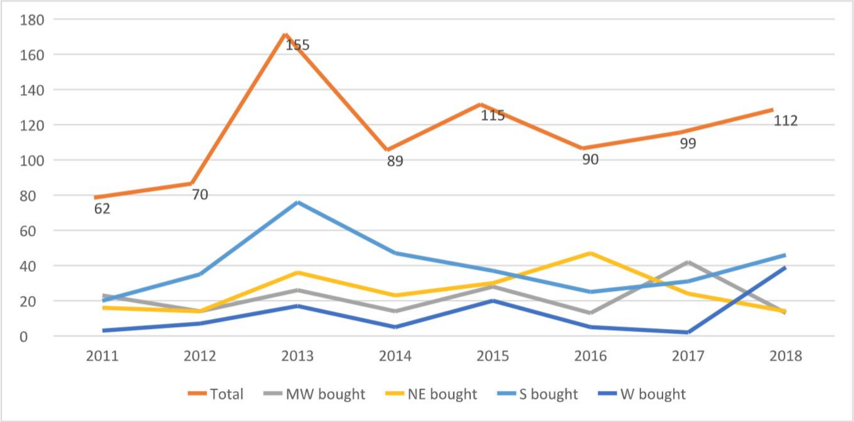
- Horizontal Integration
  - Hospital market concentration leads to price increases
  - Ambiguous quality effects
  - Bargaining Power
- Vertical Integration
  - Theoretical efficiencies of scale and scope
    - Generally not realized/ambiguous quality effects
  - Increased prices/spending
    - Medicare HOPD setting code billing

HI Trends

A1. Deals by year and region



A2. Hospitals acquired by year and region



Horizontal integration is quite common, particularly in the South.

HI Trends

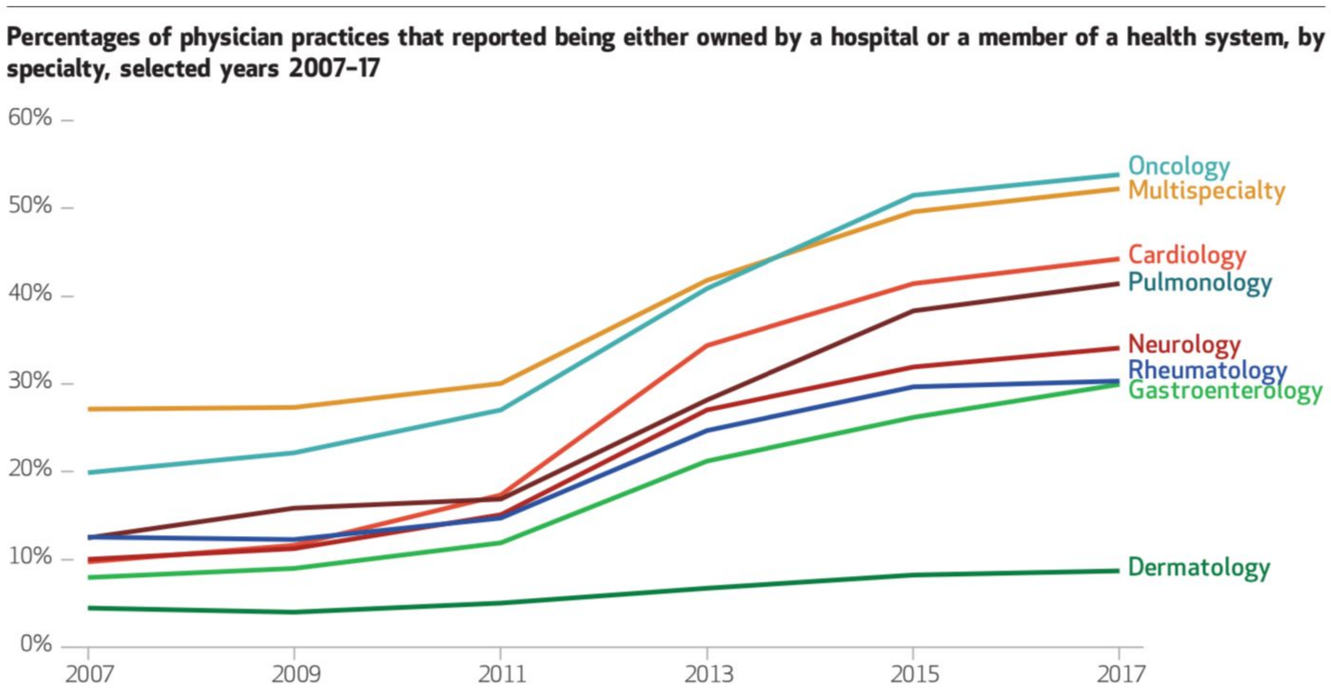
C1. Proportion of hospitals by deal acquisition status

	Prev. Acquired	Newly acquired		Total Acquired	Indep	N
		Ind to Sys	Sys to Sys			
2011		2%	1%	66%	34%	2,111
2012	67%	2%	1%	67%	33%	2,067
2013	68%	2%	6%	69%	31%	2,043
2014	71%	2%	3%	71%	29%	1,987
2015	72%	2%	3%	74%	26%	1,973
2016	73%	2%	3%	75%	25%	1,975
2017	75%	1%	4%	76%	24%	1,970
2018	76%	1%	5%	77%	23%	1,966
Total	**72%**	**2%**	**4%**	**73%**	**27%**	**16,092**

Note: Percentages do not sum to one due to divestments, closures, and entries.

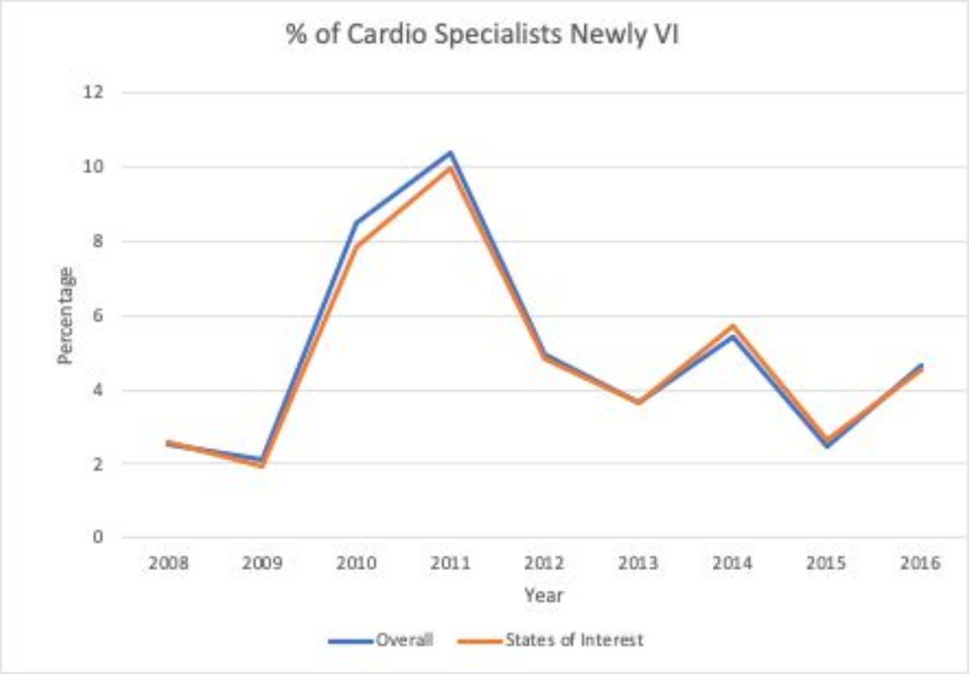
A declining number of “independent” hospitals; also falling number of hospitals overall.

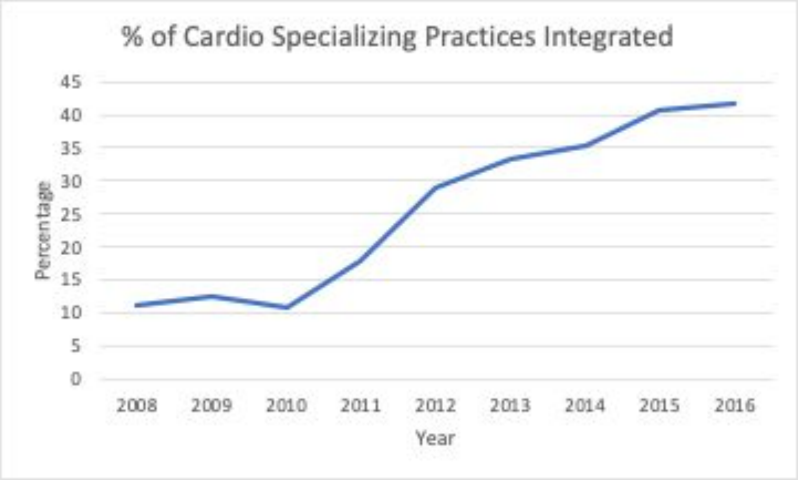
VI Trends



Nikpay, S., Richards, M., & Penson, D. (2018). Hospital-Physician Consolidation Accelerated In The Past Decade In Cardiology, Oncology. *Health Affairs 37*(7): 1123-1127.

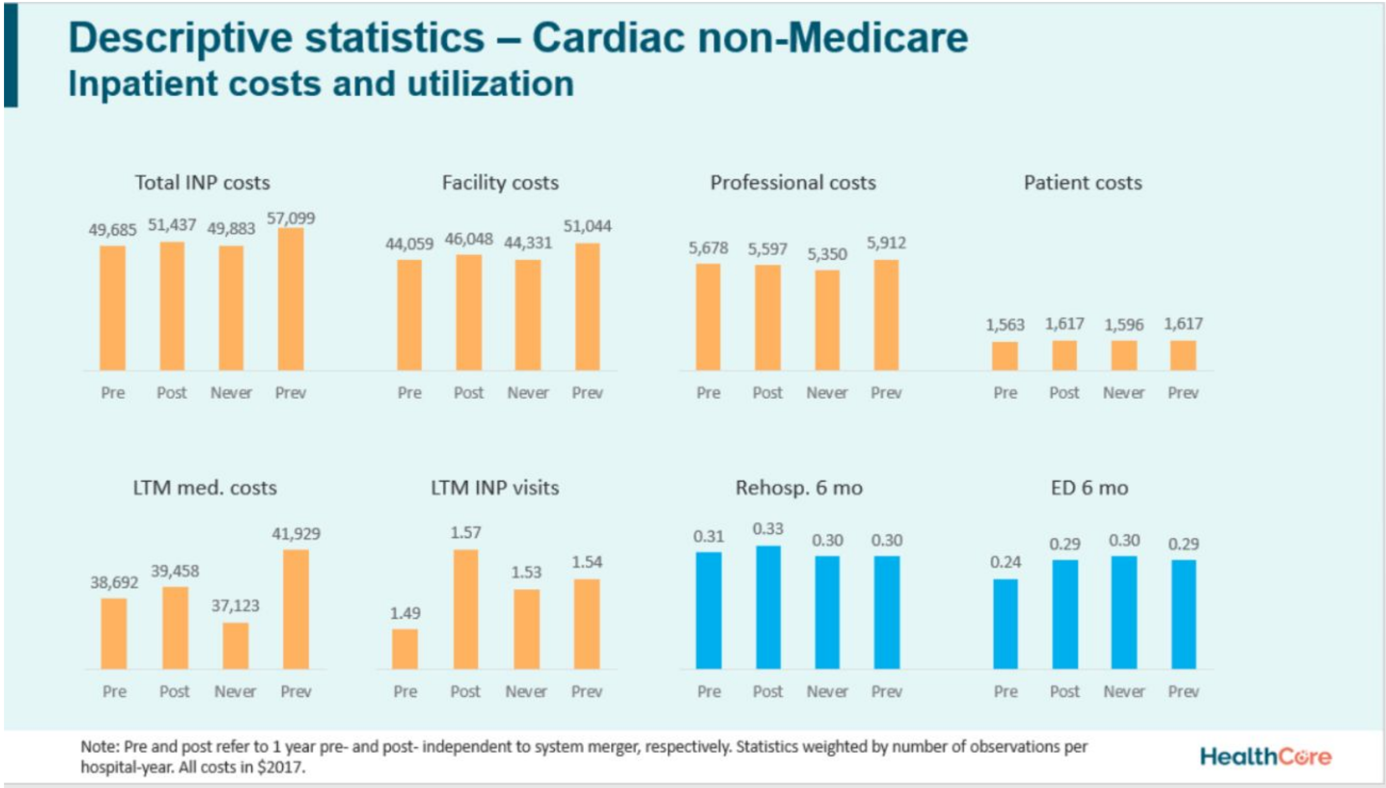
VI Trends





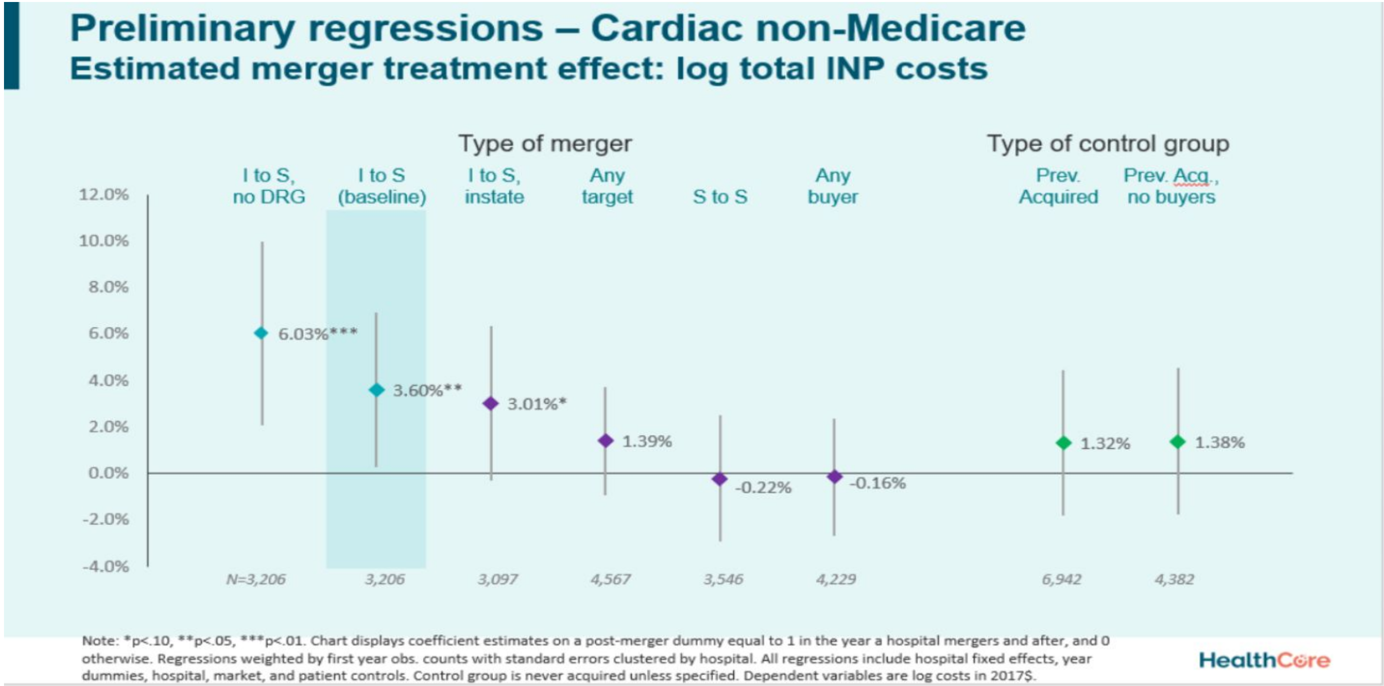
Increasing levels of vertical integration for cardiology specialists, both at the physician and practice level

Preliminary (HI) Results



Inpatient costs increase on average as a result of integration; utilization may increase.

Preliminary (HI) Results



Independent to system changes drive cost increases

My Role

- Literature Review (VI)
- Verifying AHA (horizontal mergers)
- Vertical Integration
  - Verifying SK&A
  - NPI populating, integration

9/3/2014

Community Memorial Hospital Joins Hospital Sisters Health System to Become HSHS St. Clare Memorial Hospital

Kindred to acquire Centerre Healthcare for $195M

Ascension, MCHS reach agreement on sale of three WI facilities

Community Health Systems, Inc. Announces Acquisition of Outstanding Interest in El Dorado, Arkansas Facility and Definitive Agreement to Acquire Wilkes-Barre, Pennsylvania Health System

Project Takeaways

- Integration of healthcare providers is occurring fairly rapidly
  - Dwindling number of independent hospitals and/or physician practices
- Data from Anthem indicate that horizontal integration leads to increased inpatient costs for cardiac non-Medicare patients, largely driven by independent-to-system changes and facility costs
- Horizontal integration may increase utilization (measured by inpatient and emergency department visits)
- Future work: continue improving VI information, constructing practice-level information, analysis with VI as a treatment

Thank you to Dr. Atul Gupta, Catherine Ishitani, and the rest of the Anthem mergers team; SUMR + LDI; and listeners!