Competition and Antitrust in Healthcare

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Disclaimer

- The views presented here are my own and do not necessarily represent the views of the organizations I am affiliated with.
- In particular, these views do not necessarily represent those of the FTC or any of its commissioners.

A Review

- Of the economics literature relevant to antitrust (brief and partial)
- Chapter co-written with Martin Gaynor, Carnegie Mellon & NBER
- “Antitrust” in the *Handbook of Health Economics*, Culyer, A.J. and Newhouse, J.P. eds. North-Holland, 2000

Outline

- Hospital Mergers
  - Results
  - Not-for-profit status
  - Efficiencies
  - Structure-Conduct-Performance studies
  - Event studies
- HMO mergers
- Monopsony
- Vertical Restraints & Integration

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Mergers: Analysis

- Product market definition
- Geographic market definition
- Identification of competitors
- Calculation of concentration pre/post merger
- Consideration of mitigating/exacerbating factors

Mergers: Results

Case	Winner	Reason
Poplar Bluff	Hospitals	Geo market
Long Island	Hospitals	Prod market
Grand Rapids	Hospitals	NFP, efficiencies
Dubuque	Hospitals	Geo market
Joplin	Hospitals	Geo mkt, NFP
Ukiah	Hospitals	Geo mkt
Augusta (District)	Hospitals	NFP

Mergers: Changes in HHI

Case	Post share	Post HHI	Chg HHI
Poplar Bluff	84%	6000-7000	2700-3200
Grand Rapids	65-70%	4506-5079	1675-2001
Joplin	24%	1624	222
Augusta	43%	3200	>630
Rockford	72%	5647	2621
Chattanooga	18.2%	2495	151
Sn Ls Obispo	87%	7775	3405

Mergers: why the gvt lost

- Not-for-profit as a mitigating factor
  - Grand Rapids
  - Joplin
  - Augusta, at the District level
- Efficiencies: Grand Rapids
- Market definition
  - All other losses
  - Usually on geographic, product in Long Island

Relevant Economic Research

- Are not-for-profits different?
- Are there important efficiencies?
- Are hospital prices higher & quality lower where there is little competition?
- Do hospital prices rise after a merger?

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Are Not-For-Profits Different?

- Do NFP organizations, in general, behave differently?
- Do NFP hospitals, in general, behave differently?
- Do NFP hospitals behave differently in a way relevant for antitrust purposes?
- Frank Sloan's NFP chapter in the *Handbook of Health Economics*

NFP hospitals different, generally?

- Costs?
- Pricing?
- Charity care?
- Technology?
- Quality?
- Conversions?
- Other sectors (non-hospital)?
- Pricing and Competition?

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Are there efficiencies?

- Are there economies of scale?
  - Related but not identical question
  - Comparing hospitals of different sizes

Efficiencies: Economics Literature

- Older literature (pre 1983)
  - Difficult to draw firm conclusions
  - Scale economies for small hospitals
  - Scale economies mostly exhausted by 200 beds
- Newer literature
  - Again difficult to draw firm conclusions
  - Some studies find scale economies, some do not

Efficiencies: Economics Literature

- Problems with the literature
  - Compare hospitals of different sizes
  - Omitted variables: can't control for case mix properly
    - Cremieux & Ouellette (2001) *J of Health Economics and* Carey (1997) *Rev of Econ and Stat*
    - Omitting case mix & other unmeasured differences has large effect on scale economies measure

Efficiencies: Economics Literature

- Service level integration
  - Hospitals often do not close down one campus
  - Efficiencies said to come from integration
    - Laundry
    - Administration
    - Etc
  - Dranove (1998) *J of Health Economics*
    - Scale economies exist
    - Exhausted around 200 beds

Do Mergers Raise Prices?

- Structure-Conduct-Performance
  - Compare hospitals in concentrated and unconcentrated markets
  - Do hospitals in concentrated markets have higher prices, controlling for other factors
- Event Studies
  - Look at hospitals before and after mergers
  - Compare prices, costs, etc

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SCP: Merger Effect

Study	Price Effect	Data Year	Data Place
LN	-3%	1995	MI
KMZ	+6%	1994	CA
SS	+10%	1993	CA
BDW	+2%	1988-92	CA
DL	+17%	1989	CA
Lynk	-1%	1989	CA
DSW	+5%	1988	CA

SCP: Merger Effect, 2

Study	Price Effect	Data Year	Data Place
MZBP	+2%	1987	CA
SUD	+2%	1983	IN
Noether	-1%	1977,8	US

Are there NFP differences?

Study	FP effect	NFP effect	Gvt effect
Lynk	+17%	-1%	+7%
LN		-3%	
KMZ	+16%	+6%	+9%
SS	+9%	+10%	+8-9%
DL		+17%	

Effects of managed care?

- Managed care makes hospital markets more like other markets?
  - Notice California effect in standard merger
  - Managed care
    - Motivated shopper
    - Able to direct patients
- Several studies
  - Managed care reduces prices, costs
  - Managed care increases association between price and HHI

Concentration and quality

- “Medical Arms Racing”
  - Substantial literature in the 1980s
  - More concentrated markets have:
    - Fewer advanced technologies
    - Lower costs
- Mortality
  - A few recent papers
  - Kessler & McClellan: monopoly kills
  - Town & Gowrisankaran: monopoly kills except for Medicare

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Event Studies

- Krishnan (2001) *J of Health Economics*
  - Examined mergers in OH involving 22 hosps in 1994/5
  - Used “case-control” method
    - Treatment: DRGs where merging parties gained 20% or more market share
    - Control: DRGs where merging parties gained less than 5% market share
  - Roughly 9% price increase from merger
  - Confirmed by multiple other analyses

Event Studies

- Vita (2001) *J of Industrial Economics*
  - Examined the hospital merger in Santa Cruz
  - Market went from 3 to 2 hospitals, using FTCs alleged market
  - Acquirer, remaining competitor NFPs
  - P = average net revenue per discharge or per day for privately insured patients
  - “Case-control” method: control group of similar hospitals
  - Price increase of about 10% at competitor
  - Price increase of about 25% at acquirer

Event Studies

- Several papers by Connor, Feldman, Dowd, Radcliff
- Examine 122 mergers from 1986-94
- Findings
  - Relative price decrease among merging hosps
  - Looking only at concentrated markets, this finding was reversed
  - No detectable effect on competitors' prices
  - HHI actually decreased in merging markets, relatively

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HMO Mergers

- A series of papers by Christianson, Engberg, Feldman, & Wholey
- HMO mergers 1985-1993
- No detectable effect mergers on premiums
- Premiums higher in markets with few HMOs
- Mergers seem to realize (slight) scale economies
- States with more anti-merger regulations saw fewer mergers and more failures

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Monopsony: plans and hospitals

- Moderately sized literature with significant problems
- Typical findings:
  - Higher Blue Cross/Blue Shield market share associated with lower hospital prices
  - Higher BC/BS hospital share associated with lower hospital prices

Bilateral Monopoly: plans and hospitals

- Melnik et al (1992) *J of Health Econ*
  - High BC/BS market share yields lower price
  - High BC/BS hospital share yields lower price
  - High hospital BC/BS share yields higher price
- Brooks et al (1997) *J of Health Econ*
  - Hospitals have “more” bargaining power than insurers
  - More hospital concentration confers more power on hospitals
  - More managed care penetration confers more power on hospitals

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Vertical Restraints

- Most-favored-nation clauses
- Physician-hospital organizations

Vertical Restraints: MFN

- Scott-Morton (1997) RAND J of Econ
  - MFN Theory
  - Effective 1991, Congress imposed MFN clause for Medicaid drugs
  - Finds a small price increase from MFN in drug markets where it provides greatest incentives for price increase

Vertical Restraints: integration physicians & hosps

- Cuellar & Gertler (2002) working paper
  - Theory
  - Data from AZ, FL, WI (94-98)
  - Integration no effect on costs
  - Closed but not open organizations about 30% increase in managed care price
  - Closed and open about 10% increase in volume
  - Some evidence larger effects in more concentrated markets
  - Some evidence of quality improvements, but not larger in more concentrated markets

Conclusions

- Hospital mergers
  - Robust price-concentration relationship, especially when managed care penetration is strong
  - Mixed evidence on efficiencies
  - Balance of evidence that NFPs are not different

Conclusions, 2

- HMO mergers
  - Some evidence price-concentration relationship
  - Weak evidence of merger effects
  - Some evidence of scale economies

Conclusions, 3

- Monopsony
  - Weak evidence of insurance plan monopsony power
- Vertical restraints
  - Preliminary evidence of anti-competitive MFN
  - Preliminary evidence of anti-competitive vertical integration, but also quality enhancement

Prospects

- Hospital Mergers
  - Product market
    - Is bundle of services a good method?
    - Are different procedures substitutes in production and/or consumption
    - Are different hospital “types” substitutes in consumption
  - Geographic market
    - How far can people be shifted by managed care?
    - How does this vary by product market and other consumer characteristics?

Prospects

- Hospital Mergers
  - Efficiencies
    - Generating reliable measures of scale economies: dealing with case mix and other potentially omitted variables
    - Generating estimates of efficiencies realized without closing a hospital
    - Generating estimates of merger-specific efficiencies

Prospects

- Horizontal restraints
  - How important are IPAs in negotiating price?
  - How concentrated are physician markets, accounting for IPAs
  - Do IPAs often have market power?
  - How big / what contracting characteristics must they have to have market power

Prospects

- Vertical restraints
  - How common are MFN, bundling in contracts with providers and what effects?
  - How common are exclusive contracts between plans/providers and among providers of different types and what effects?
  - What effects vertical integration?

Prospects

- Insurance
  - Vertical restraints/integration?
  - Monopsony power?
  - Monopoly power?