Hospital Mergers and Efficiencies

Stuart Craig

University of Pennsylvania (Wharton)

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Given that mergers raise prices, why do we allow any to occur?

- Hospitals argue that larger systems benefit from “efficiencies”

- What are efficiencies?
  - Scale economies (integrating redundant departments)
  - Ability to make large capital investments
  - Clinical standardization (cheaper, high quality inputs)

- “Efficiencies” → higher quality and lower cost

- Hopefully, lower cost translates to lower prices for consumers
What do we know about mergers and costs?

- Evidence primarily based on “difference-in-difference” models, usually with matching
  [Schmitt 2017; Harrison 2010; Dranove & Lindrooth 2003; Prager & Schmitt 2019]

- Prior studies range in estimates from little-to-no effect to upwards of 7% savings

- Usually at least a sub-group that benefits from lower cost

- In most economic models, marginal cost reductions are necessary for price reductions
  - Data on truly marginal costs are difficult to obtain
  - Previous literature relies on aggregate cost data
Mergers and Marginal Costs
New Evidence on Hospital Buyer Power

Stuart Craig
University of Pennsylvania
The Wharton School

Matthew Grennan
University of Pennsylvania
The Wharton School
& NBER

Ashley Swanson
University of Pennsylvania
The Wharton School
& NBER
What we did

- Use data on purchase orders from hospital benchmarking service at the level of the stock-keeping-unit (SKU)
- Detailed information on price and quantity across many high spending/quantity product categories
- Look at prices for key inputs for over 100 merging hospitals, 2009-2015
- Similar difference-in-difference approach to prior studies
This is exactly where hospitals claim they will save money

“Standardization of purchases also results in substantial savings, due to the greater concentration of (and, therefore, larger) volume...

“Several systems, for example, noted their ability to substantially reduce the number of distinct types of implants that they purchase for joint replacement procedures. Such reductions produce savings by allowing greater volume discounts through negotiation with medical device manufacturers.”

— Noether and May (CRA report), 2017
Hospitals pay very different prices for the same stuff

Made-up merger $\rightarrow$ save 7%
What we found

- Small savings for targets (1.9%); no savings (-0.9%) for acquirers
  - Savings largest on hi-tech PPIs for targets
  - Some evidence of disruptive effect for large acquirers in the merger year
- No effect on standardization
- No effect on prices for non-PPIs
Findings: Physician Preference Items (PPIs)

### Targets

![Graph showing Post-Merger Price Effect $\beta_{\text{pr}}$ for targets.]

### Acquirers

![Graph showing Post-Merger Price Effect $\beta_{\text{pr}}$ for acquirers.]

- Months Relative to Dec Before Merger Year
Takeaways

- **Punchline**
  - Some evidence of savings among targets (1.9% overall)
  - No evidence of savings for acquirers (-0.9% overall)
  - Small fraction of potential savings! (7%)

- If savings are small here, where are they?
  - These are exactly the savings hospitals claim they obtain
  - Renegotiating contracts should be one of the cheaper ways to save money.
  - We look at the highest spending products for consummated mergers

Thanks!
Findings: non-PPIs

**Targets**

**Acquirers**