

Part 3: Understanding Competition

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# Central Empirical Issues

At least 2 related issues in studying hospital competitiveness:

- 1. How do we measure "competitiveness"?
- 2. What is the effect of competition?

# Measuring competitiveness

- ullet Common measure is Herfindahl-Hirschman Index (HHI),  $\sum_{i=1}^N s_i^2$ .
  - 2,500 is considered highly concentrated
  - 1,800 is considered unconcentrated
- "Willingness to pay" is more recent measure (theoretically supported)
- Both require a measure of the geographic market

# Defining the market

Lots of subjectivity...

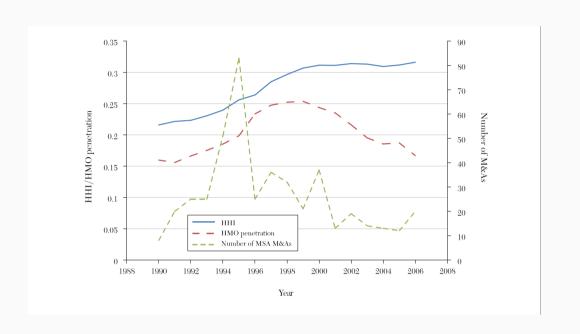
- Radius around a hospital?
- Concentric circles to define "catchment" areas?
- Patient/physician referrals?
- At what product-level do hospitals compete?

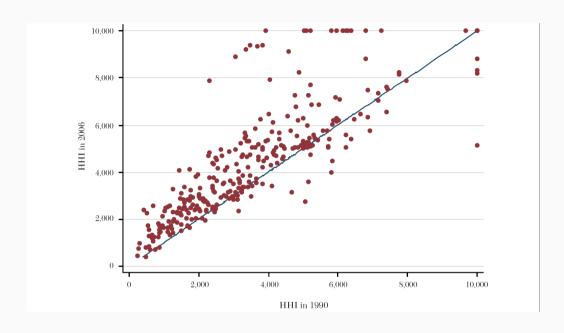
### Trends in competitiveness

Almost any way you define it, hospital markets are more and more concentrated (less competitive) in recent decades.

- 1990: 65% of MSAs highlgy concentrated, 23% unconcentrated
- 2006: 77% highly concentrated, 11% unconcentrated

#### Hospital concentration over time





Source: Gaynor, Ho, and Town (2015). The Industrial Organization of Health Care Markets. Journal of Economic Literature.

### Hospital concentration over time

- More data and interactive report from the Health Care Cost Institute.
- Presentation from the National Institute for Health Care Management

### Why?

Historical perception of hospital competition as "wasteful" and assumption that more capacity means more (unnecessary) care:

- Limit public spending by limiting competition
- Prevalence of certificate of need (CON) laws

### Effects of reduced competition

- 1. Higher prices
- 2. Lower quality, 2020 NEJM Paper
- 3. Maybe lower costs (but not passed on to lower prices)

Effects for both "in-market" and "out-of-market" mergers

# Modeling competition and prices

TBD