Networks vs. Networks: Analyzing Hospital Mergers

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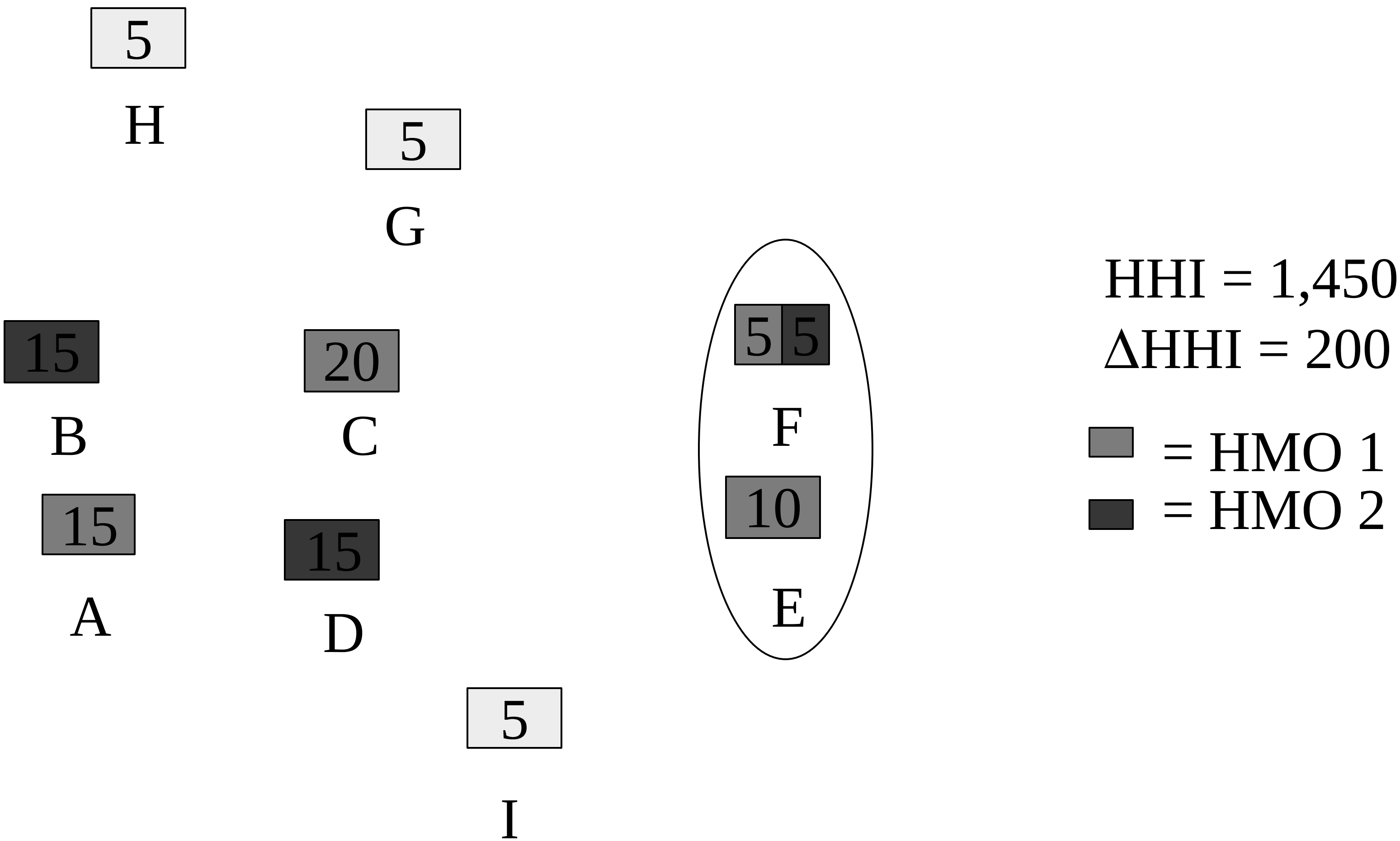
Introduction

- Purpose:
  - Articulate a method for analyzing hospital mergers.
    - Focus on pricing impacts.
    - Quality may be more important
      - Kessler and McClellan (2000)
      - Gowrisankaran and Town (2003?)
  - Highlight some potential pitfalls.

Who are the buyers of hospital services and what do they do?

- Medicare, Medicaid & Managed Care.
- What do HMOs do?
  - Selectively contract with providers.
  - Selective contracting does two things:
    1. Gives HMOs bargaining power
       - Town and Vistnes, 1999 *Journal of Health Economics*
       - Cutler, McClellan and Newhouse, 2000 *Rand Journal of Economics*
    2. Utilization management and quality control.

A Merger in a Hypothetical Medium Sized City



Likely Price Impacts—Increases Hospital Bargaining Power

Post-merger Price:

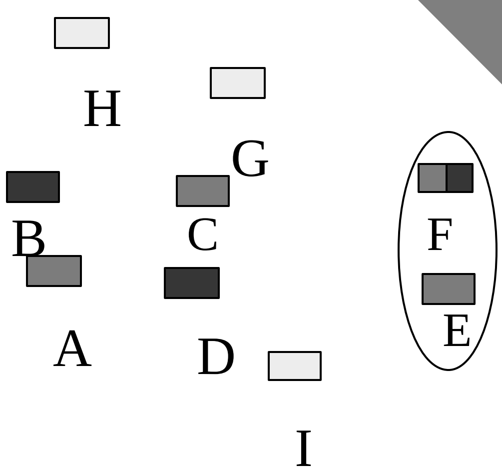
P_{1F}= f(Value of current network- Value of network w/o F)

= f(Value (A+B+E+F)- Value(A+B+E+I))

Post-merger Price:

P_{1F} = f(Value of current network- Value of network w/o F&E)

= f(Value (A+B+E+F)- Value(A+B+I))



Two tough problems to solve

1. Estimating the value of alternative networks

- Consumer Surplus implied by inpatient preferences.

  Town and Vistnes, 1999 "Hospital competition in HMO networks," *Journal of Health Economics*

- Other Possibilities.

2. What is the f(·) function?

- Ideally, the f(·) would fall out of an equilibrium bargaining model.
- The role current pricing data & HMO contracting personnel

Price Increases in Merger Example

- Typical (non-*Guideline)* Elzinga-Hogarty analysis would suggest little harm from the merger.
- Using the estimates from Town and Vistnes (1999), prices would increase by roughly 10%.
- LA simulation: 15% of hospital mergers with next best substitute lead to price increases greater than 5%.

Important Points

- It is important to account for product, quality and geographic differentiation
- Restricted HMO networks (or its threat) are important mechanisms by which insurers maintain lower provider payments.
- Actual patient “flows” may have no obvious relationship to market power.
- The impact of a given hospital merger on the price of in/out-patient services will depend upon the structure of HMO networks