Willingness to Pay and Healthcare

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Grad IO

Healthcare and IO

In recent years, IO has made inroads into questions related to healthcare:

- How do hospital (systems) and insurers interact?
- What is the value of adding a hospital to an insurer's network?
- What determines the market power of insurers? hospitals?
- Can steering incentives (in network/out of network) be effective in reducing costs?

Today's Reading:

In recent years, IO has made inroads into questions related to healthcare:

- Capps, Dranove, Satterthwaite (2003)
- Ho AER (2012)

CDS(2003): Motivation

The Government keeps losing hospital mergers (basically all of them):

- Some people travel enormous distances to get treatment at hospitals (Mayo Clinic, Cleveland Clinic, Johns Hopkins, Mass General, etc.)
- These cases are lost at the stage of market definition under the hypothetical monopolist test.
  - Recall: SSNIP of 5% price increase for all products. If this is not profitable – include next closest substitute. Continue adding products to define relevant market.
  - Resulting markets are so large (and unconcentrated) that mergers always lead to negligible changes in market power
- What if we could measure relevant markets better?

CDS(2003): Ex-Ante and Ex-Post WTP

What is the value that i places on having hospital j included in network G?

$$\begin{aligned} U_{ij} &= \alpha R_j + H_j' \Gamma X_i + \tau_1 T_{ij} + \tau_2 T_{ij} \cdot X_i + \tau_3 T_{ij} \cdot R_j - \gamma\left(Y_i, Z_i\right) P_j\left(Z_i\right) + \varepsilon_{ij} \\ &= U\left(H_j, X_i, \lambda_i\right) - \gamma\left(X_i\right) P_j\left(Z_i\right) + \varepsilon_{ij} \end{aligned}$$

- $H_j = [R_j, S_j]$ is partitioned into generic R and diagnosis specific S characteristics.
- $X_i = [Y_i, Z_i]$ is partitioned into demographic Y and diagnosis specific Z characteristics.
- $T_{ij} = T_j\left(\lambda_i\right)$ distance from i's home to hospital j
- This paper: ignore $\gamma\left(X_i\right) P_j\left(Z_i\right)$ since $P_{j'}(Z_i) \approx P_j(z_i)$