



Physician Responses to Financial Incentives: Evidence from Hospital Discharge Data

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Summary

- Examines price sensitivity of insurer/physician/patient agent in choice of hospital.
 - Conditional Logit
 - Inequality Analysis
- Results: price sensitivity increases in the degree of capitation of the insurer.
 - Logit: holds for least sick patients only
 - Inequality: holds, on average, over all patients. (Small differences between less and more sick patients.)



Logit Results

- Variation in price sensitivity by sickness group
 - Sicker patients less price sensitive
- Variation in preferences or evidence of endogeneity bias?
- Rationale for the latter:
 - Insurer pays the price.
 - Insurer's willingness-to-pay for a fixed-util benefit shouldn't vary across patients.
- Responses:
 - Physician/patient preferences still matter.
 - The util benefit of quality may be fixed in the model, but probably not in the DGP.



Inequality Methodology

- Definition of Severity and Price groups
- Severity Groups
 - Refined enough to minimize endogeneity concerns
 - Maintain some price variation within groups
- Price Groups
 - Endogeneity, measurement concerns
 - Maintain some within-group variation.



Inequality Methodology

- Determining the right balance
- Does variation in comorbidities across price groups within severity groups explain choices?
 - Opinions of experts
 - ANOVA on outcomes
- Price Variation
 - Price groups explain an additional 12% of overall price variation.
- More detail in last paragraph of page 19.



Inequality Methodology

- “Variance” on bounds
 - CIGNA, smaller sample
 - Bounds are determined by a stochastic process
 - Bootstrap?
- Price Elasticity comparison to Logit
 - Why plug inequality bound into Logit model?
 - Different normalization: distance coefficient v. $\tau\pi / \sqrt{6}$.
 - Count the number of switches in (14)?



Price Variation

- Hospital, not Hospital-Insurer
- Do higher capitation insurers negotiate smaller discounts, all else equal?
 - Theory predicts, yes.
 - Hospitals should be compensated for bearing additional risk.
- Contradicted by regression results (p 25).
 - Omitted variable: relative bargaining position?