

Quality and Competition in Health Care

What Do We Know?

What Don't We Know?

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Introduction

- Outline
 - ◆ Competition and Health Care Markets
 - ◆ Quality and Competition
 - ◆ Why Is This Important?
 - ◆ What Do We Know?
 - ◆ Conclusion

General Issues on Competition and Health Care Markets

- Is health care different?

(Pauly, Dranove & Satterthwaite, Gaynor, Gaynor & Vogt)

- ◆ Health care is not like a perfectly competitive textbook market
 - ✦ Almost nothing is
- ◆ All markets are different
 - ✦ The markets for computer operating systems and cement are very different.
 - Implies different economic and antitrust analysis and treatment

Competition and Health Care Markets

- Health care has some specific characteristics that we must take account of in economics and antitrust.
 - ◆ At one level, this is consistent with a standard antitrust view of case specific analysis.
 - ◆ Quality assumes particular prominence in health care.

Competition and Health Care Markets

- Can Markets Give Us What We Want in Health Care?
 - ◆ At present the U.S. relies on a market system for health care.
 - ✦ Unlikely to change anytime soon.
 - ◆ The presumption of antitrust is that (unregulated) monopoly is bad.
 - ◆ Is this true in health care markets?

Competition and Health Care Markets

- What's the alternative?
 - ◆ No regulation at all.
 - ✦ Unchecked monopoly is clearly bad.
 - ◆ Self-regulation.
 - ✦ How likely is this to give us what we want?
 - ✦ It's very hard for market participants to self-regulate in a way that promotes social welfare.

Competition and Health Care Markets

- Where firms' goals conflict with those of society, which will win?
 - ◆ Experience in medicine is not very reassuring.
 - ✦ Medical errors
 - ✦ Antitrust violations
- Self-regulating efforts important, but not sufficient. Need market incentives.
 - ◆ Markets and self-regulation complementary.

Competition and Health Care Markets

- Conclusion - antitrust enforcement is a critical element of health policy. It preserves the functioning of markets on which our system is based.
 - ◆ Relevant for public payers (Medicare, Medicaid) as well as private payers.

Quality and Competition in Health Care

- Why Is This Important?
 - ◆ Quality is one of the aspects that is particularly prominent in health care.
 - ✦ A lot of variation.
 - ✦ Consequences of variation can matter a *great* deal.

What Do We Know?

- Economic Theory
 - ◆ General
 - ◆ Competition - Fixed Prices
 - ◆ Competition - Variable Prices
 - ◆ Buyer Power
- Empirical Evidence
 - ◆ Fixed Prices
 - ◆ Variable Prices

Theory - General

- Does competition have to result in lower prices and higher quality to be a good thing?
 - ◆ No - some people may be willing to accept lower quality if price is low enough, and some people may be willing to pay more if the quality is high enough.

Theory - Fixed Prices

- ◆ Competition is over non-price aspects of the product (i.e., quality).
- ◆ Competition leads to more quality.
 - ◆ Quality will vary with the price.
 - Can be too high, too low, or just right.
- ◆ Monopoly results in insufficient quality.

(see Allen & Gertler; Held & Pauly, Mankiw & Whinston; Pope; Schmalensee; Tirole, Dranove & Satterthwaite for surveys)

Theory - Variable Prices

- ◆ If firms choose both price and quality, anything can happen.
 - ✦ Monopoly can under or over produce quality
 - ✦ Competition - same
- (see Spence, Dixit & Stiglitz, Shaked & Sutton, Tirole for an overview)

Theory - Monopsony

- Buyer Market Power (Monopsony)
 - ◆ “Countervailing power” unlikely to improve matters.
 - ◆ Increasing the market power of sellers when buyers have market power will make things worse under most circumstances.
 - ◆ Impacts on quality?
 - We’d expect monopsony to make things worse.
 - No results, to my knowledge.

Empirical Evidence

- Evidence comes from econometric/statistical studies using secondary data.
 - ◆ Not a lot of evidence at this point.
 - ◆ Entirely on hospitals.
 - ◆ I'll divide the studies into those of markets where prices are fixed and studies where prices are variable.
(see Gaynor & Vogt for overview)

Evidence - Fixed Prices

- Medicare Enrollees with AMI
(Kessler & McClellan)
 - ◆ All non-rural Medicare beneficiaries with AMI, 1985-94
 - ◆ Risk-adjusted 1 yr. mortality significantly higher in more concentrated markets.
 - ✦ Patients in most concentrated markets had 1.46 percentage points higher mortality than those in least concentrated markets; 4.4% difference.
 - ◆ Medicare costs lower in more concentrated markets before 1991, higher after 1991.

Evidence - Fixed Prices

- Medicare Enrollees with AMI, Pneumonia
(Gowrisankaran & Town)
 - ◆ Risk-adjusted mortality significantly lower in more concentrated parts of Los Angeles county.
 - ◆ AMI – 1991-93
 - ◆ Pneumonia – 1989-92

Evidence - Fixed Prices

- Dialysis facilities (Held & Pauly)
 - ◆ Fewer dialysis machines per patient in more concentrated markets.
 - ◆ “Medical Arms Race”
 - ✦ Prior to mid-1980s
 - ✦ Hospital costs, LOS, service offerings, excess capacity higher in less concentrated markets
(Robinson & Luft; Dranove et al.; Joskow)
 - ✦ Over by early 90s

Evidence - Variable Prices

- Effect of # of hospitals on profits, quantity in the market.
(Abraham, Gaynor & Vogt)
 - ◆ Isolated markets in U.S., 1990
 - ◆ Quantity increases with the # of hospitals in the market; profits decrease.
 - ◆ Why? Quality and price changed in a way that made people want to consume more, not less - better off.

Evidence - Variable Prices

- ◆ Hospital mergers (Hamilton & Ho)
 - ✦ California, 1992-95 - 130
 - No detectable impact on heart attack or stroke inpatient mortality.
 - Some mergers increase readmission rates for heart attack patients and early discharge of newborns.
- ◆ Patients receiving PTCA, CABG (Huckman)
 - ✦ NY State, 1992-99
 - ✦ Risk-adjusted mortality lower as a result of hospital acquisition where acquiring hospital provided PTCA or CABG, and target did not.
 - ✦ 28 such acquisitions

Evidence - Variable Prices

- All AMI patients (Volpp & Waldfogel)
 - ◆ New Jersey vs. New York, 1990-96
 - ◆ Risk-adjusted inpatient mortality increased in New Jersey relative to New York after rate deregulation (1992).
- HMO enrollees with AMI and pneumonia. (Gowrisankaran & Town)
 - ◆ Risk-adjusted mortality significantly lower in more concentrated parts of Los Angeles county.

Evidence - Variable Prices

- All PTCA patients
(Sohn & Rathouz)
 - ◆ 116 California hospitals, 1995
 - ✦ Excess mortality lower for PTCA patients in less concentrated markets.
 - Effect stronger for lower volume hospitals.

Evidence - Volume/Outcome

- A positive relationship between volume and outcome has long been observed.
 - ◆ Hard to identify causal relationship
- PTCA, California, 1984-96 (Ho)
 - ◆ Outcomes: In-hospital mortality, emergency CABG
 - ◆ All hospitals achieved substantial improvements in outcomes over time.
 - ◆ Small effect of annual volume on outcome

Summary

- What Do We Know?
 - ◆ Evidence only for hospital markets
 - ✦ Empirical evidence is mixed.
 - Strongest evidence thus far is that quality is higher in less concentrated hospital markets.
 - There are conflicting results across studies.

Summary

- What Don't We Know?
 - ◆ How does competition affect both quality and price?
 - ◆ Non-mortality aspects of quality
 - ◆ Evidence on other markets
 - ✦ Physicians
 - ✦ Insurers

Conclusions

- Quality is an important aspect of performance in health care markets.
 - ◆ It should be considered in economic and antitrust analyses of competition.
- Presumption in antitrust is that monopoly is bad, competition is good.
 - ◆ The scientific evidence at this point is not sufficient to reverse that presumption with regard to quality.
 - ◆ Quality should be considered in assessing competitive impacts.

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