

## SUMMARY OF GUEST SPEAKER PRESENTATION<sup>1</sup>

### Research Issues on Health Care Markets

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The health care industry comprises about one-fifth of the U.S. economy and is almost as large as the economy of France. Hospitals represent 5.6 percent, physician services 3.6 percent, and health insurance 1.0 percent of the U.S. Gross Domestic Product. In comparison, construction represents 3.6 percent, broadcasting and telecommunications 2.5 percent, and computer and electronic products 1.3 percent. Health insurance coverage expansion is at the heart and is a critical piece of the Patient Protection and Affordable Care Act (PPACA); however, it is important to understand that the entire health care system depends on functioning health care markets. The system will only work as well as the markets upon which it is built. The PPACA builds on—and does not replace—the existing health care system. For example, health care will be costly if the markets for hospital services are not functioning well even if the health care exchanges *are* functioning well.

### Market Structure

Policymakers and the popular media have been focused on coverage and population health. Less attention has been paid to issues regarding markets, and there are some causes for concern with respect to market structure. Market shares in the hospital industry are concentrated with a small number of firms. In general, fewer firms in the market results in less competition. There is insufficient data, particularly nationwide, on the market structure for physician practices. Researchers need access to basic information about organizational and contractual relationships for physicians, which are becoming more complex. The [Commonwealth of Massachusetts Health Policy Commission](#) is conducting an inventory of health care organizations in the state, which has been a monumental task. This project, once completed, might provide a decent snapshot of the market structure for physician practices in one state. Similarly, there is no comprehensive, national source of data on health insurance market structure. State-level data are not granular enough. There is some evidence that health insurance firms are highly concentrated in small group markets.

In summary, fundamental data and measurement issues prevent adequate analyses of health care market structure. There is insufficient data on physician and insurance markets. The

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identification of organizational boundaries is challenged by the blurring of the lines between hospitals, physician practices, and insurance companies. Consequently, there is a pressing need to invest in data infrastructure on health care organizations and markets. A national strategy and coordination of efforts focused on building this data infrastructure is needed to enable research.

## Prices

Strong research evidence demonstrates that hospital prices are higher in more concentrated markets (i.e., markets with fewer competitors). Mergers can lead to substantial price increases (e.g., 20 percent to greater than 50 percent). There is no real difference in price between not-for-profit and for-profit hospitals exercising market power. There is a lack of sufficient data and therefore research evidence concerning physician prices. Some evidence suggests physician prices are higher in more concentrated markets, but not to the extent that exists for hospitals. Little evidence is available to inform understanding of the effects of hospital-physician acquisitions or affiliations on price. Similarly, there is a lack of data to support research evidence on insurers, particularly small group, individual markets. Recent work has provided evidence that premiums are higher in more concentrated large employer markets. The new health insurance exchanges might provide an opportunity to learn more about this piece of the market structure, although it is unclear how the exchanges might be used for research purposes and what entity would monitor researcher use.

Health care services are not a standard commodity, which complicates price analyses. There is a “price” for a service, but the variables that determine differences in the cost to service provider versus the price paid by payer are not transparent. Much work has been conducted on models of bargaining between payers and providers, and the FTC uses a state-of-the-art bargaining model in its analysis of hospital merger cases.

## Quality

Data on hospital quality, as measured by inpatient risk-adjusted mortality, are available, particularly for frequent acute events, such as acute myocardial infarction and coronary artery bypass graft surgery. The strongest evidence comes from administered prices: risk-adjusted mortality rates are lower in less concentrated markets (i.e., markets with more competitors) where firms are not negotiating or setting prices (e.g., Medicare, National Health Service in the United Kingdom). Evidence for private insurance is mixed, but these data also suggest that hospital quality is higher in less concentrated markets. Work is being done to develop better outcomes and quality measures, but more research is needed. Inpatient risk-adjusted mortality is just one measure; a broader measure would be useful. Current research has demonstrated some causal mechanisms but cannot give insight into what the mechanisms are (i.e., *why* are mortality rates lower in less concentrated markets?). This is an area where careful qualitative case studies about organizations and management could provide a more nuanced understanding of some of the underlying reasons for higher or lower rates of risk-adjusted mortality.

Haaga noted that the literature in the 1970s on Certificates of Need tended to focus on quality measures for discrete acute episodes or surgery. Yet, for many NIH Institutes and Centers, chronic disease management (e.g., diabetes) is of great interest. It is possible that market concentration would have a different or opposite effect on quality of behavioral medicine and disease management.

### **Costs, Technology, Innovation**

There is a fair amount of data available to suggest the impact of market changes on hospital costs. Mergers do not lead to lower costs for hospitals in general but integration can lead to lower costs. Literature on scale economies and hospitals should be updated, and economists have contributed to literature on volume outcome relationships. As with other areas, data on market conditions for physicians and insurers and their effect on cost are lacking.

An older literature on technology has some limited recent evidence. What is missing from the literature is organizational innovation. There are many anecdotes about specific groups, but there is a great opportunity for systematic investigation of organizational innovation. In some ways, understanding the effects of organizational innovation is more critical than technological innovation. Electronic health records may allow for more nuanced investigations of how organizations are formed around new technological systems. It can take time for organizations to adapt to new technologies such as electronic health records.

### **Market Entry and Exit**

Evidence suggests that more hospitals in a market lead to intense competition, but substantial fixed costs make entry difficult. More research is needed on barriers to entry. The main finding from research on Certificates of Need is that the certificates do not block entry because the regulating bodies tend to be influenced by industry participants. There is very little data or research on market entry and exit of physicians, physician groups, and insurers.

### **Overarching Unanswered Questions and Future Opportunities**

Gaynor reviewed a nonexhaustive list of areas that are in need of further research:

- Physician services and insurance markets
- Cross-market integration, both horizontal and vertical (e.g., hospital-acquired physician practices or insurer-provider integration)
- Nonoverlapping markets (e.g., hospitals in different states do not compete, but the impact of large national hospital chains on competition is unknown)
- Markets for hospitals, physicians, and insurers are linked, and to date researchers have analyzed pieces for which data are available, making assumptions about or closing off other pieces. Missing is a comprehensive model, which will be computationally challenging because of its complexity.
  - Quality determination in provider markets
  - Price and network determination in provider markets
  - Premium determination in insurance markets

- Consumer choice in insurance markets
- Incentives and provider referral decisions/consumer utilization
- Asymmetric information (not in current models) such as physician agency
- Need to collect or estimate data on consumers' actual choice sets.

Opportunities exist to improve the comprehensiveness of health care data available to researchers. New private health insurance claims databases are available. For example, the Health Care Cost Institute has compiled a database of claims data with transaction prices from Aetna, Kaiser Permanente, United, and Humana. Truven sells market scan data and has claims data from a group of large employers. Electronic health records and the new health care exchanges are other possible sources of data and should be explored. Data from health care exchanges could provide information on insurance and provider markets, bargaining leverage, and Accountable Care Organizations. In short, a national health data infrastructure is needed.

## References

- Dranove, D. (2011). Health care markets, regulators, and certifiers. In M. V. Pauly, T. G. McGuire, & P. P. Barros (Eds.), *Handbook of Health Economics, Vol. 2* (pp. 639-690). Amsterdam: North-Holland.
- Gaynor, M., Ho, K., & Town, R. J. (2014 January). The industrial organization of health care markets. NBER Working Paper 19800. Retrieved February 5, 2014, from <http://www.nber.org/papers/w19800>.
- Gaynor, M., & Town, R. J. (2011). Competition in health care markets. In M. V. Pauly, T. G. McGuire, & P. P. Barros (Eds.), *Handbook of Health Economics, Vol. 2* (pp. 499-637). Amsterdam: North-Holland.
- Gaynor, M., & Town, R. J. (2012 June). The impact of hospital consolidation: Update. Princeton: Robert Wood Johnson Foundation. Retrieved February 5, 2014, from <http://www.rwjf.org/en/research-publications/find-rwjf-research/2012/06/the-impact-of-hospital-consolidation.html>.