

INTRODUCTION

CHING-TO ALBERT MA AND THOMAS G. MCGUIRE

*Department of Economics
Boston University
Boston, MA 02215*

In the time since the earlier special issue of *JEMS* on health care, the industry has continued its process of substantial change. The growth of managed care as a form of health-care delivery has overwhelmed that of traditional insurance and fee-for-service arrangements. Within the managed-care sector, for-profit health maintenance organizations have expanded relative to the nonprofit ones. The industry has undergone a process of consolidation; competition has led to larger health-care companies through mergers. While Congress did not pass a sweeping health-care program, it has put forward incremental health-care legislation. The research in this special issue addresses important economic issues that have arisen as a consequence of these fundamental changes in health-care markets.

The papers in this special issue, *The Industrial Organization of Health Care II*, were selected from those presented at a conference held in Boston, Massachusetts, September 17–19, 1995. All of the papers in this special issue underwent the full process of coediting and refereeing of the *Journal of Economics & Management Strategy*. The Second Industrial Organization of Health Care Conference was sponsored by the Management Science Group of the Veterans' Administration and the Industry Studies Program at Boston University. On behalf of all conference participants, we wish to thank Ted Stefos, director of the Management Science Group, for his commitment to encouraging economic research at the intersection of industrial organization and health care. Over the past five years, Ted has supported these (and other) conferences and provided direct research support to bring leading industrial organization specialists in contact with research problems in health care. Some papers at this conference are evidence of the payoff from this investment.

Esther Gal-Or, in "Exclusionary Equilibria in Health-Care Markets," identifies the foreclosure phenomenon among insurers and health-care providers. Vertical relationships between insurers and providers are at the heart of the structure of the health industry. Gal-Or's paper draws together the literatures of vertical integration and common agency, and applies them to the health market. Restricting customers'

access to specific providers may be profitable for an insurer because it allows the insurer to bargain for better contract terms. In a market setting, competing insurers may foreclose each other: each insurer may sign an exclusive contract with a provider.

There can be no doubt that market-wide changes, such as the Prospective Payment System or PPS studied by McClellan in this issue, or a health-care-reform-style change such as covering the uninsured, will have large effects extending over time on the hospital industry. Gautaum Gowrisankaran and Robert Town ("Dynamic Equilibrium in the Hospital Industry") explicitly model the entry process by both for-profit and nonprofit hospitals as a means of capturing important long-term effects. A health economist reading their paper will be impressed by the wealth of health institutions captured in their model. An industrial organization specialist will be interested in the combination of estimation and simulation used to derive results.

Two papers in the current special issue are concerned with the pharmaceutical industry. Recent legislation eased the entry barriers for generic drugs—drugs that are chemically equivalent to, and competing with, expensive patented medicines after the patent expiration. Simple demand theory predicts that entry of a very close substitute generic should drive the ex-patented drug's price down to the generic level. It doesn't happen. Richard Frank and David Salkever ("Generic Entry and the Pricing of Pharmaceuticals") study how the price of brand and generic drugs are affected by the entry of generics. Clearly the market does not regard generics as perfect substitutes for the branded drug, and as Frank and Salkever show, there is evidence that generics are not even perfect substitutes for one another. They propose and test a theory of why, in fact, the price of the branded drug might rise following generic entry.

Pharmaceuticals provide a lot of surplus, both to producers and consumers. Once a drug is developed, the price may exceed marginal production cost by very large amounts. Still, for the afflicted consumer, a drug may confer high net benefits over alternative therapies. With so much surplus up for grabs, it is not surprising that pricing of these drugs is given so much attention by buyers, sellers, and regulators. Drugs have a list price, but different buyers (government programs, private insurance, hospitals) pay quite different prices. Even within the same "class" of buyers, there is a good deal of price dispersion, as Fiona Scott Morton makes clear in her paper ("The Interaction between a Most-Favored Customer Clause and Price Dispersion: An Empirical Examination of the Medicaid Rebate Rules of 1990"). Among the largest buyers of drugs are the Medicaid programs for the poor administered by the states. The federal government pays a share of Medicaid costs,

and has recently enacted a most-favored-customer (MFC) clause in Medicaid regulations which (basically) requires drug companies to sell to the Medicaid programs at a best price. In exchange, states agree to keep an open list of eligible drugs in their Medicaid programs. Morton explicates the complicated effects on prices the MFC clause may have, and then tests if the regulation compresses prices in the way theory would predict.

Mark McClellan's work has changed the way many economists think about hospital payment under the federal Medicare program for the elderly ("Hospital Reimbursement Incentives: An Empirical Analysis"). The prospective payment system (PPS), based on diagnosis-related groups (DRGs) created by Medicare in 1983 to pay hospitals on a discharge basis, has a more complex set of incentives than is usually appreciated. By grouping DRGs into clinically related areas, McClellan (a physician as well as an economist) contends that hospitals have incentives to spend money on patients, and because of the ways the DRGs work, get some of that money back as patients are bumped into higher-paying DRGs. Measuring these incentives is the goal of his paper: finding out, for significant areas of hospital activity, just how prospective the "prospective" payment system really is.

In "Competition among Health Maintenance Organizations," William Encinosa and David Sappington use a positive approach. Health maintenance organizations, as vertically integrated firms, provide both insurance and medical care to their enrollees. Furthermore, in contrast to many other markets in which firms compete simply by setting prices, health maintenance organizations use complicated insurance and care contracts. Finally, health maintenance organizations face an adverse selection problem: their enrollees have superior information about their health status. Encinosa and Sappington analyze the market equilibria under both complete and incomplete information, and investigate the feasibility of cross subsidization and efficiency properties.

The paper by Yeon-Koo Che and Ian Gale ("Buyer Alliances and Managed Competition") studies the design of institutions in competitive health-care markets. Major insurers, employers, and public payers influence the way providers interact through the selection process and the terms of health coverage to their enrollees. Adapting from common oligopolistic competition models, Che and Gale formalize managed competition. The paper provides a theoretical framework to examine the organization of health insurance and provider markets, and to compare welfare properties of various market structures. Che and Gale's characterization of the optimal format of competition—whether firms are allowed to use pricing or quality dimensions to compete for customers—and the number of firms allowed in the market generates very

important insights. Thus, in contrast to Encinosa and Sappington, Che and Gale take a more normative approach. Together these two papers represent significant contributions to the study of the design and equilibria of the health market.

We thank all participants at the conference who contributed to the lively interchanges, which stimulated the authors to improve their papers, and led to new research by many attendees. We want to give special mention to Mike Riordan from our Department at Boston University who helped select the papers and cochaired the conference. We are planning a third conference in September 1997. Interested researchers are encouraged to contact Ma, McGuire, or Riordan at the above address.