
*Kenneth Arrow and the Changing
Economics of Health Care*

In 1963, two years before the enactment of Medicare and Medicaid, *The American Economic Review* published the work of a leading economist that ultimately transformed the nascent discipline of health economics into a serious and respected field of economic inquiry.

The article that blazed this health economics trail was “Uncertainty and the Welfare Economics of Medical Care.”¹ Its author was Stanford University economics professor Kenneth J. Arrow, Ph.D., who in 1972 received the Nobel Prize in economics.

Thirty-six years after the paper’s publication, a group of scholars who had received Robert Wood Johnson Foundation (RWJF) Investigator Awards in Health Policy Research met to discuss the changing role of competition in health care. Three investigators - Deborah Haas-Wilson (Professor, Smith College), Peter Hammer (Assistant Professor, University of Michigan), and William Sage (Professor, Columbia University) - hit upon the notion of using the Arrow article, both its economic themes and its historic frame of reference, as a vehicle to explore the contemporary role of competition and regulation in health care markets. The end result was a special issue of the *Journal of Health Politics, Policy and Law* (JHPPL) focusing on Arrow’s seminal work and the questions it raised, as a point of departure for understanding the direction that health care markets and public policy concerns have taken since the early 1960s.

Haas-Wilson, Hammer, and Sage, who shaped and edited the volume, invited Kenneth Arrow and 23 leading members of the health economics and health policy community (including 15 others affiliated with the RWJF Investigator Awards program and 8 outside experts) to collaborate and write about a constellation of nationally relevant issues. The roster of authors includes distinguished senior economists, some of today’s leading new economists, several law professors, and seven other scholars willing to tackle difficult and often neglected economic questions concerning the role of social institutions, social norms, and professionalism.

“Our objective in this special issue was to bring a sweeping, comprehensive, and detailed evaluation of Arrow’s article from multiple and sometimes competing perspectives and to use it as a springboard for an equally encompassing exploration of the economic, market, and institutional themes he brought together, and in some instances launched, with its publication,” said Mark A. Peterson, Professor at UCLA and editor of JHPPL.

Through Arrow’s Lens

“While most of Arrow’s economic insights transcend time and can fit comfortably with modern economic theory, his institutional analysis of medical markets is layered in amber,” write Hammer, Haas-Wilson, and Sage in their introductory essay. “By offering a point of reference that only time and distance can provide, Arrow’s interpretation of medical markets circa 1960 affords an extraordinarily useful framework for understanding the health care economy and health care policy of today.”

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¹ Arrow, Kenneth J., Uncertainty and the Welfare Economics of Medical Care, *The American Economic Review*, Vol. LIII, No. 5, December 1963, pp. 941-973.

“By offering a point of reference that only time and distance can provide, Arrow’s interpretation of medical markets affords an extraordinarily useful framework for understanding the health care economy and health care policy,” write Hammer, Haas-Wilson, and Sage in their introductory essay.

“The introduction to health economics of the topic of moral hazard ignited a firestorm of interest in the impact of insurance on the process of care.”

Mark V. Pauly
1995 Awardee and Professor
at The Wharton School of the
University of Pennsylvania

Arrow targets several areas that are closely examined by the issue’s authors:

- The proper role of market competition in delivering health care services
- The implications of *moral hazard*—the notion that the widespread availability of health insurance increases the demand for health care services
- The *uncertainty* inherent in health care, from diagnosis to treatment efficacy
- The role of *non-market social institutions* (such as norms, ethics, and professionalism) or non-profit institutions, as a response to overcoming uncertainty and market failure
- The existence of extreme *information asymmetry*; that is, inequalities of information between the insurer on one hand and the physician and patient on the other, as well as between the doctor and patient
- The importance of trust in the doctor-patient relationship, given the existence of information asymmetry

The essays address significant policy issues of ongoing concern, including how to increase access to health care services, allocate scarce resources, promote patient safety, and minimize insurance risk. Other researchers assess the composition of the health care workforce and the impact of medical technology, while another group of authors explores the nature of insurance markets and the importance of nonprofit institutions. A number of investigators discuss the role of regulation and self-regulation in markets, with attention to shifting attitudes toward government and professional control.

Several important themes emerge from the issue’s collection of essays. Many of the authors depict how markets have changed since the early 1960s, shedding light on the ways in which private competition works and discussing market failures. They look at advances in technology, increased demand for services, physician supply, and rising health care costs.

The authors also discuss the changing nature of the doctor-patient relationship, the effects of information asymmetry, the erosion of trust, and patients’ continued reliance upon physician advice when making health care decisions. Other themes include the current degree of price competition, the evolution of public and private payers and their influence, the role of social institutions and medical professionals in assuring that patients receive adequate care, and the relationship between treatment choices and ability to pay.

Then and Now

In reflecting on his work and those of the contributors, Arrow himself restates his thesis in these words:

The role of moral hazard in medical insurance arises from inequalities of information between the insurer on the one hand and the physician and patient on the other. By itself, this phenomenon was well known in other kinds of insurance (where the term moral hazard arose) and was met by various devices, such as deductibles and ceilings. Direct controls came later, as I conjectured. I then came to the view that the same degree of asymmetric information also occurred in the relation between patients and providers. I proposed the hypothesis that many of the special features of the medical care market arose in an attempt to meet the inefficiencies created by this generalized moral hazard.

But as several authors note, the enactment of Medicare and Medicaid in 1965 had profound effects on the health care market. These public programs transformed a system dominated by solo physicians in private practice and charitable institutions into a growth industry now characterized by complex organizational and financing structures. Clark Havighurst of Duke University describes today’s health care system as a “huge and dynamic industry driven for better or for worse by competitive forces that were largely inoperative in the system when Arrow observed it.”

Many of the dilemmas that Arrow pointed out almost 40 years ago continue to concern scholars, policymakers, and the public. As Richard Kronick of the University of California, San Diego indicates, the search continues for “institutions that will allow widespread insurance to coexist with the physician-patient trust that Arrow correctly identified as an important response to uncertainties in the medical care market.”

The following Table of Contents summarizes the topics of all the scholars who contributed to this volume of the *Journal of Health Politics, Policy and Law*.

Special Issue: Kenneth Arrow and the Changing Economics of Health Care

- Editor’s Note *Mark A. Peterson*
- Foreword *Mark V. Pauly*
- Kenneth Arrow and the Changing Economics of Health Care: “Why Arrow? Why Now?”
Guest Editors Peter J. Hammer, Deborah Haas-Wilson, and William M. Sage
- Uncertainty and the Welfare Economics of Medical Care (*American Economic Review*, 1963)
Kenneth J. Arrow

Part 1: Supply, Demand, and Health Care Competition

- General Equilibrium and Marketability in the Health Care Industry
Michael Chernew
- Arrow’s Concept of the Health Care Consumer: A Forty-Year Retrospective
Frank A. Sloan
- Uncertainty and Technological Change in Medicine
Annetine C. Gelijns, Joshua Graff Zivin, and Richard R. Nelson
- Human Inputs: The Health Care Workforce and Medical Markets
Richard A. Cooper and Linda H. Aiken
- Health Care as a (Big) Business: The Antitrust Response
Clark C. Havighurst

Part 2: Risk, Insurance, and Redistribution

- Health Insurance and Market Failure Since Arrow
Sherry A. Glied
- Can Efficiency in Health Care Be Left to the Market?
Uwe E. Reinhardt
- Valuing Charity
Richard Kronick
- Medical Service Risk and the Evolution of Provider Compensation Arrangements
Gloria J. Bazzoli
- The Role of the Capital Markets in Restructuring Health Care
J.B. Silvers

Arrow’s article is a “landmark contribution to health economics that is required reading in health economics, health policy, and health law courses.”

*Hammer, Haas-Wilson,
and Sage*

“Arrow’s script is dated by the graceful prose then still customary among social scientists. It is, however, so richly laden and so compact that it demands from readers nothing less than the academic analogue of talmudic scholarship.”

*Uwe E. Reinhardt
Princeton University*

About the Investigators

Deborah Haas-Wilson, Ph.D., a professor of economics at Smith College in Northampton, Massachusetts, is a leading health economist who has authored *Managed Care and the Monopoly Power: The Antitrust Challenge*. As a recipient of a 1994 Robert Wood Johnson Foundation Investigator Award in Health Policy Research, she focused her research with co-investigator Martin Gaynor, Ph.D. on Antitrust Policy and the Transformation of Health Care Markets.



Peter J. Hammer, J.D., Ph.D. has been an assistant professor at the University of Michigan Law School since 1995 and specializes in the study of federal antitrust law and the legal issues surrounding changes in the health care industry. In 1998, he and co-investigator William Sage received an Investigator Award for a study entitled, *Competing on Quality of Care: Comparing Antitrust Law to Market Reality*.



William M. Sage, M.D., J.D., is a Professor of Law at Columbia University, where he teaches courses in health law, regulatory theory, and the professions. He is a nationally recognized researcher in managed care, medical malpractice, regulation of health care professionals, and insurance coverage determinations. Sage is a 1998 recipient of an Investigator Award in Health Policy Research and with Peter Hammer completed a project on *Competing on Quality of Care: Comparing Antitrust Law to Market Reality*.



About the Editor of JHPPL

Mark A. Peterson, Ph.D. has been the editor of the *Journal of Health Politics, Policy and Law* since 1993. He is a Professor of Policy Studies and Political Science and Acting Chair of the Department of Policy Studies at the UCLA School of Public Policy and Social Research. Peterson received an Investigator Award in 1994 for a study of *Dynamic Institutions and Health Care Policy Making*.



Part 3: Information, Knowledge, and Medical Markets

■ Arrow and the Information Market Failure in Health Care: The Changing Content and Sources of Health Care Information

Deborah Haas-Wilson

■ The End of Asymmetric Information

James C. Robinson

■ Managing Uncertainty: Intermediate Organizations as Triple Agents

Lawrence Casalino

■ Moral Hazard vs. Real Hazard: Quality of Care Post-Arrow

Michael L. Millenson

Part 4: Social Norms and Professionalism

■ Arrow's Analysis of Social Institutions: Entering the Marketplace with Giving Hands?

Peter J. Hammer

■ The Market for Medical Ethics

M. Gregg Bloche

■ The Role of Nonprofits in Health Care

Jack Needleman

■ Arrow on Trust

Mark A. Hall

■ From Trust to Political Power: Interest Groups, Public Choice, and Health Care

Mark A. Peterson

■ Regulating Health Care: From Self-Regulation to Self-Regulation?

Peter D. Jacobson

■ The Lawyerization of Medicine

William M. Sage

Part 5: Response by Professor Arrow

■ Reflections on the Reflections

Kenneth J. Arrow

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