

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: *Frontiers in Health Policy Research, Volume 3*

Volume Author/Editor: Alan M. Garber, editor

Volume Publisher: MIT Press

Volume ISBN: 0-262-57141-2

Volume URL: <http://www.nber.org/books/garb00-1>

Publication Date: January 2000

Chapter Title: Introduction to "Frontiers in Health Policy Research, Volume 3"

Chapter Author: Alan M. Garber

Chapter URL: <http://www.nber.org/chapters/c9827>

Chapter pages in book: (p. -5 - 0)

Introduction

This volume contains papers presented at the third Frontiers in Health Policy Research Conference held on June 17, 1999, in Bethesda, Maryland. This conference series brings academic economists investigating topics in health policy together with journalists, researchers, legislative staff, and other government officials whose work directly affects health policy. The conferences are designed to promote discussion and communication among these groups and to ensure that the results of ongoing research conducted by leading health economists will be known to a broader community who can incorporate the information into health policy. The papers (articles) in this volume cover a diverse set of current health policy issues, ranging from expenditures in employer-sponsored health plans to rating the quality of health care providers, to larger issues of variation in expenditures and the consequences of technological innovation in the treatment of low-birthweight infants.

Despite the large public sector role in health insurance in the United States, in the working age population, private health insurance predominates heavily. Private insurance, in turn, is strongly linked to employment. Premiums, expenditures, and plan characteristics vary greatly from one plan to another and often from one employer to another. This observation leads to the question, What characteristics of employment-based health insurance account for the variation in health expenditures across firms?

Eichner, McClellan, and Wise provide preliminary answers to this question by decomposing the variation in per employee (or per family) expenditures. They use a unique set of data on insurance claims from eight health plans. These claims represent all inpatient and outpatient claims filed by employees and their dependents in self-insured plans.

They find that a substantial fraction of the expenditure variation is attributable to demographic characteristics of the enrollees and to the

prevalence of various diagnoses. Treatment cost, however, is also important in explaining cost variation. Among these plans, average cost differs by \$838. The demographic mix of plan enrollees accounts for wide differences in cost (\$649). But perhaps the most noticeable feature of the results is that, after adjusting for demographic mix, the difference in expenditures accounted for by the treatment costs given diagnosis (\$807) is almost as wide as the unadjusted range in expenditures (\$838). Differences in cost due to the different mixes of illness that are treated, after adjusting for demographic mix, also account for large differences in cost (\$626).

The authors have also provided an approximate decomposition of the "variation" in expenditures across firms. Although outpatient care accounts for almost 50 percent of expenditures on average, it accounts for only about 20 percent of the variation in expenditures across firms. Inpatient care accounts for about 34 percent of expenditures on average, but almost 59 percent of the variation in expenditures.

These findings imply that variation in high-cost inpatient treatments is a principal cause of the substantial cost variation across firms. (A "residual" group accounts for about 16 percent of expenditures and about 20 percent of variation in expenditures across firms). The most important component of variation is the diagnosis rate, which accounts for about 52 percent of variation across firms. Treatment cost differences, given treatment, account for about 40 percent, with the remainder accounted for by the "interaction" between the two. Additional investigation of the causes of variation in plan expenditures may enable employers to design insurance arrangements that are effective yet less costly.

Cutler and Meara address an important issue in the evaluation of overall health system performance. The United States is the wealthiest nation in the world and the one that spends the most per capita—by a wide margin—on health care. Yet life expectancy at birth in the United States is shorter than that of several other nations. The difference in life expectancy is largely attributable to high perinatal mortality rates, which in turn are associated with low birthweight. Much of the progress to be made in increasing life expectancy comes from the prevention of low birthweight and from interventions to improve survival in low-birthweight infants.

Treatment of low-birthweight infants, particularly those who are tiny, occurs in intensive care units and is costly. On average, the cost of treating a low-birthweight infant costs tens of thousands of dollars,

and not uncommonly runs to hundreds of thousands of dollars. Cutler and Meara ask whether the complex treatment is worth its high costs. They study trends in survival of low-birthweight infants as measured by United States and Massachusetts vital statistics data. In the period from 1952 to 1990, there has been a dramatic decline in neonatal mortality. Although they find that the cost of caring for very low birthweight infants remains high, the dramatic improvements in outcomes seem to make it highly cost-effective. Their cost-benefit calculations suggest that advances in the treatment of low-birthweight infants, particularly those who have very low birthweight, is a good investment.

The future of the Medicare program is a perennial topic of policy concern, bringing together the dual concerns of rising per-capital health expenditures and the projected growth of the number of elderly Americans. Medicare provides near-universal health insurance for elderly Americans and is truly a national program. One would expect that participants in a health insurance program that operates under the same rules from Maine to Hawaii would be treated more or less the same throughout the nation. Not so, according to the work of Skinner and Wennberg. They argue that regional variation in per-beneficiary Medicare expenditures is strikingly large and that such variation has important policy implications. At the very least, policies need to take into account local variation in wages, prices for goods and services, and the health of the community. But these factors account for only part of the variation in expenditures. After discussing possible causes of variation, Skinner and Wennberg describe the budgetary implications of reducing regional differences in per-capita Medicare expenditures. For example, a reduction in expenditures in high-expenditure areas could result in a 10 percent reduction in overall Medicare expenditures, enough to fund some versions of a Medicare drug benefit or to extend the solvency of the Medicare Part A trust fund.

Managed care has been among the forefront of policy concerns in recent years, and interest in managed care is intensifying. Complaints about managed care figure predominantly in the popular press, while legislation to protect enrollees in managed care plans seems to be an irresistible temptation for politicians in Washington and in state legislatures. Any serious discussion of managed care, of course, presupposes a common understanding of what managed care is. Yet health care plans described as "managed care" represent a wide range of forms of organization of care and payment mechanisms, including everything

from traditional health maintenance organizations (HMOs), which operate under pure capitation, to modifications of indemnity (fee-for-service) insurance plans that include some features to control utilization and/or choice of providers. Given such diversity, generalizations about managed care are hazardous, and it is important to ensure that any policies are directed appropriately.

To improve our understanding of the essential features of managed care, Laurence Baker analyzes household survey data that includes information about HMO market share, the "stage of managed care development" in the local market, and limitations on provider choice in each plan. He contrasts more sophisticated and detailed measures of managed care with simple measures, like HMO market share, and assesses how the measurement of HMO activities affects estimates of managed care effects. He finds that traditional measures of HMO market share are positively correlated with the presence of strong restrictions on patient choices of providers. But traditional measures of HMO market share do not reflect the weaker sets of restrictions on patient choices found in some managed care plans like open-ended HMOs and PPOs. These findings suggest that existing studies using HMO market share should be interpreted as reflecting the effects of relatively strong plans. They may not predict the effects of expansions of less restrictive plans. The results also suggest that more refined and specific measures of managed care are needed. Policy responses to perceived shortcomings of managed care are likely to be more effective if they are targeted toward specific managed care features, like provider restrictions, not the broad concept of managed care.

From many perspectives, the quality of health care is one of the most important unresolved issues for health policy. Before health plans can select high-quality providers with whom to contract and before patients can choose high-quality hospitals and physicians to care for them, it is necessary to be able to measure quality. Yet in practice, quality measurement in health care poses daunting challenges. Because quality is multidimensional, accurate measures must seemingly be complex. Also, meaningful measures of provider quality require repeated observations of health outcomes for each provider, which means that it is impossible to measure quality even at the hospital level for the care of health conditions that are uncommon. For these and other reasons, most quality measurements have focused on simple aspects of quality and on procedures and other forms of medical care that are provided to large numbers of patients. For example, the widely

used National Commission on Quality Assurance ratings focus on measures like the rates at which preventive procedures, such as Pap smears and cholesterol measurement, are performed because nearly all adult patients are candidates for these forms of care. But this leaves out care for specific medical conditions, including almost all serious conditions that involve hospital care, even though such conditions are frequently fatal or disabling and generate greater expenditures.

McClellan and Staiger propose new methods for measuring the quality of hospital care. Their methods overcome much of their complexity of quality measurement and the problems of small sample sizes by using techniques that combine observations on multiple dimensions of quality of care over several years. Using a statistical technique called vector autoregression that is an improvement over more complex statistical methods, they generate predictions of health outcomes that are surprisingly precise. They show how these methods can be used to understand the relationship between hospital volume and procedure outcomes and to address other issues in the measurement of quality. If successful, methodological advances in quality measurement like these have the potential to transform the delivery of health care by laying the groundwork for identifying the best hospitals and physicians.

These articles reveal the considerable areas of uncertainty in assessing the potential effects of changes in health policy. As they strongly imply, however, health policy research can point to areas in which policy intervention is likely to be most effective, and it can lead to a better understanding of the limitations of current policies and the functioning of health care markets.

