Introduction

This volume contains papers presented at the fourth Frontiers in Health Policy Research Conference held in Arlington, Virginia, on June 14, 2000. Frontiers in Health Policy Research is an annual conference that brings together academic economists investigating topics in health policy with journalists, researchers, legislative staff, and other government officials whose work concerns health policy. The papers in this volume are intended to be impartial and rigorous yet directly relevant to current health policy issues.

The topics covered here include the costs of cigarette smoking and the impact of regulations designed to limit smoking, the costs that the federal government bears in financing long-term care, the construction of price indexes for medications, and the role of intensive treatments in end-of-life health expenditures. By offering novel perspectives on longstanding problems, each of the articles helps bring into sharper focus issues that are at the heart of current public policy debates.

Two articles in this volume address aspects of cigarette smoking. Although the toll of cigarette smoking has been well studied for many years, most estimates have focused on the costs that smokers themselves bear. Litigation against tobacco companies has prompted several studies of the overall costs of smoking, including costs borne by insurers. Picone and Sloan add to this literature by carrying out a longitudinal study of the impact of smoking on utilization of medical services, including hospital care, physicians' services, and nursing home care. Focusing on the "near-elderly" and adjusting for the type of health insurer, they find that smoking increases expenditures on health services, although the impact is different for different insurers. Private insurers bore little extra costs for smoking, but government payers such as the Department of Veterans Affairs, Medicare, and Medicaid bore much larger costs.
Another perspective on smoking appears in the article by Moore and Hughes. They note that, because cigarette smoking increases health care costs, restrictions on smoking are expected to lower costs. The chain of reasoning leading to the expectation that restrictions lower health costs depends upon a causal relationship between smoking and health care use, and between regulatory restrictions and smoking. Moore and Hughes seek to test these relationships by estimating the effects of cigarette tax increases on health care costs.

After replicating findings from other authors that cigarette smoking is associated with increased utilization of health care and that higher taxes are associated with less cigarette smoking, they directly estimate the effects of tobacco taxes on health care. They find that smoking cessation produces larger-than-expected health benefits, although they find only a weak relationship between tax increases and quit rates. According to their results, increases in cigarette taxes can help reduce health care costs by discouraging smoking, and they also provide a revenue source to fund excess health care costs attributable to smoking.

Long-term care poses daunting problems for the elderly, their families, and policy makers. Lakdawalla and Philipson note that the challenges are becoming more difficult, in part reflecting demographic and economic change: a growing number of disabled elderly, growth in subsidies for long-term care services, and a diminishing supply of "informal caregivers" due to declining fertility rates and rising employment of women. They ask how public subsidies of long-term care, in the context of these forces, have determined the demand for and supply of such services.

After documenting a dramatic increase in public expenditures for long-term care, they distinguish between the share of growth due to changes in eligibility for public programs or in the magnitude of subsidies, and the share attributable to private sector forces. They report the effects of rising private demand for long-term care on the incentive to become eligible for public programs like Medicaid. They argue that private demand pressures raise long-term care prices and thereby the incentive to qualify for Medicaid, and that this trend may be responsible for much of the increase in Medicaid expenditures for nursing homes and other long-term care.

The other major federal program for health care financing, Medicare, has also experienced rapid cost growth. Among the most widely recognized groups of patients who contribute disproportionately to Medicare expenditures are beneficiaries near the ends of their lives. Ac-
cording to Barnato, Garber, Kagay, and McClellan, nearly one-third of Medicare’s expenditures for the elderly are devoted to the 5 percent of beneficiaries over the age of 65 who die each year. This proportion has remained roughly constant, despite the growth in the use of putatively lower-cost end-of-life services such as hospice and home health care. To understand how end-of-life care has changed over time, and in particular how the use of intensive procedures among dying Medicare beneficiaries has changed, Barnato and colleagues study the use of nearly fifty intensive procedures among Medicare beneficiaries in 1985, 1990, and 1995.

They find that decedents are more likely to undergo intensive procedures than survivors and that expenditures associated with hospitalizations in which these procedures were performed grew faster than overall inpatient expenditures. Rising intensity of treatment has outpaced changes in demographics and disease incidence, and may explain why increases in the use of hospice and home health care have not been sufficient to lower the rate of growth of expenditures for the care of decedents.

Ongoing controversies about the measurement of price inflation, particularly for the consumer price index, are fueled by uncertainty about the best way to account for technological change. When the quality of products or services varies over time, part of the price change may reflect changing characteristics rather than a change in the price of an unchanging item. The rapid pace of technological change in medical care generally, and in pharmaceutical products particularly, makes it essential to account for quality change. Antidepressant medications represent a class of drugs that changed dramatically in recent years with the introduction of an important new class of drugs that appeared to be highly effective for this serious and costly psychiatric condition. The mix of antidepressant medications and psychotherapy used to treat patients with depression has also changed, with an increased use of medications and a diminished emphasis on psychotherapy. Busch, Berndt, and Frank analyze alternative indexes for measuring price change in antidepressant medications and seek valid methods to accommodate quality change.

Using two distinct approaches, and judging quality in part by adherence to clinical guidelines for treating depression and in part by an expert panel’s ratings of alternative treatment approaches for specific clinical circumstances, they report that treatment quality has improved over time and that the quality-adjusted price of depression treatment
declined by nearly 3 percent between 1991 and 1996. Standard Bureau of Labor Statistics methods for measuring price change, in contrast, result in an estimated 2.6 percent *increase* in price. The large discrepancy between the two sets of estimates demonstrates how critical it is to account for quality in constructing price indexes.