

considerations, and partisan divisions. But given Congress's extreme partisan and ideological polarization, the ongoing fight over the ACA, the legacy of mythic "death panels," and recriminations over Medicare reform, the IPAB's rough start should not be surprising. This is not the sort of political environment in which an independent board charged with making controversial decisions about one of America's most popular social programs is likely to thrive. These dynamics are unlikely to recede soon, which means that the IPAB is stuck in purgatory, neither operational nor canceled — an institution designed to be above politics that cannot escape the political binds holding it back.

The longer-term picture is, as always, cloudier. Perhaps President Obama will pursue recess appointments. A new president and Congress could, in 2017 and

beyond, unshackle the IPAB in response to deficit pressures and the search for Medicare savings. And if Medicare spending growth accelerates, the IPAB's role could expand. Yet a new president could also refuse to appoint any members or enforce the spending targets, and Congress could repeal the IPAB in 2017. The IPAB's demise would, in that scenario, deal a symbolic blow to health care reform and cost containment. But the impact on Medicare expenditures and national health spending would be negligible. For all the hype, the Congressional Budget Office currently forecasts no savings from the IPAB over the next decade.

Regardless of the IPAB's future, one thing is clear: rather than removing politics from Medicare, the board's difficult early journey has underscored just how entrenched politics are in health care policy.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

From the University of North Carolina, Chapel Hill.

This article was published on May 29, 2013, at NEJM.org.

1. Newman D, Davis CM. The Independent Payment Advisory Board. Washington, DC: Congressional Research Service, 2010 (http://assets.opencrs.com/rpts/R41511_20101130.pdf).
2. Jost TS. The Independent Payment Advisory Board. *N Engl J Med* 2010;363:103-5.
3. Ebeler J, Neuman T, Cubanski J. The Independent Payment Advisory Board: a new approach to controlling Medicare spending. Washington, DC: Henry J. Kaiser Family Foundation, 2011 (<http://kaiserfamilyfoundation.files.wordpress.com/2013/01/8150.pdf>).
4. Orszag PR, Emanuel EJ. Health care reform and cost control. *N Engl J Med* 2010;363:601-3.
5. Aaron HJ. The Independent Payment Advisory Board — Congress's "good deed." *N Engl J Med* 2011;364:2377-9.

DOI: 10.1056/NEJMp1306051

Copyright © 2013 Massachusetts Medical Society.

The Gross Domestic Product and Health Care Spending

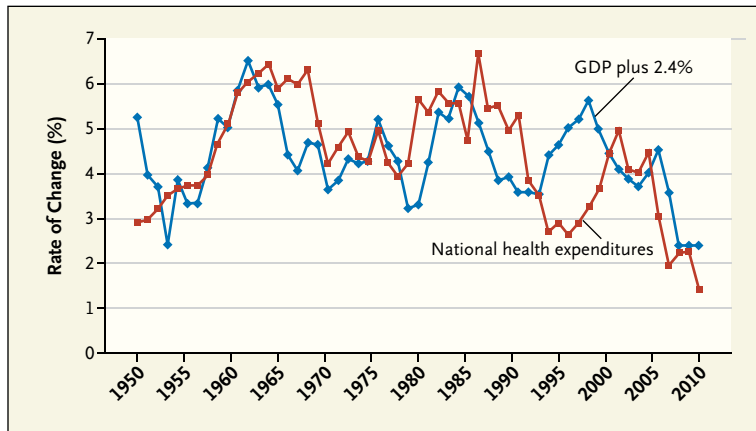
Victor R. Fuchs, Ph.D.

How much will the United States spend on health care during the next decade or two? The answer matters greatly to physicians, federal and state governments, businesses, and the general public. The answer will determine the type and extent of care that physicians can provide to their patients, as well as the amount of physicians' take-home pay. It will also determine how much everyone else can consume or invest in other goods and services. Unfortunately, forecasting health care spending is extremely difficult. Future spending depends in part on developments within the health care

sector and in part on developments in the economy as a whole. The former include changes in the prevalence of health problems such as obesity, infectious diseases, and dementia, as well as changes in medical technology such as new drugs, imaging devices, and surgical procedures. The economy as a whole includes variables such as the unemployment rate, trends in average wages, and prices of securities and housing.

The 2013 Economic Report of the President takes an optimistic view of future national health care expenditures, which is based on the slowdown in the rate of growth

of those expenditures in recent years.¹ Like most commentators, the report notes that one possible explanation is the recent recession, but it argues that this was not a major factor relative to improved efficiency in hospitals and physician groups, payment reforms, and early responses to the Affordable Care Act. If the United States is entering a new era of modest growth in health care spending, the current pressure for radical changes in funding, modes of payment, organization, and delivery of care would abate. On the other hand, if the current slowdown is primarily attributable to the most severe recession since the



Annual Percentage Rate of Change in National Health Care Expenditures Per Capita and the Gross Domestic Product (GDP) Per Capita Plus 2.4% (Inflation-Adjusted 5-Year Moving Averages).

1930s, or to one-time changes that are not relevant to future trends, then rapid growth in health care expenditures is likely to return when the economy becomes more robust. In that case, the heavy lifting to control cost growth remains to be done.

An examination of data from the past 60 years for the economy as a whole and for health care expenditures indicates that there has been a robust relationship between the two. It seems premature to dismiss the sluggish economy as the major explanation for the spending slowdown of recent years. In the line graph, the economy is represented by the gross domestic product (GDP),² which is the total value of all goods and services produced in a given year or its equivalent, the total income received by all contributors to production (e.g., labor, management, and capital). The GDP and national health care expenditures³ are adjusted for population growth and general inflation.² Between 1950 and 2011, real GDP per capita grew at an average of 2.0% per year, while real national health care expenditures per capita grew at 4.4% per year. The gap between

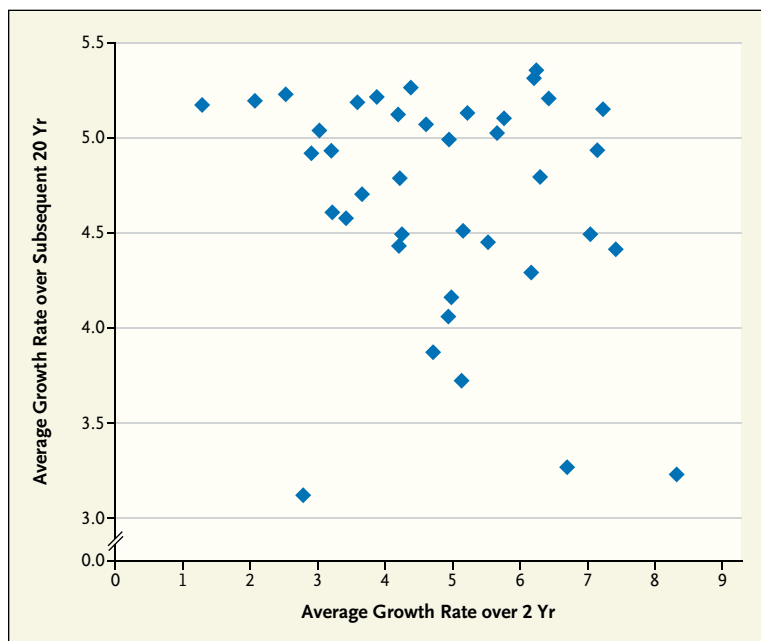
the two rates of growth — 2.4% per year — resulted in the share of the GDP related to health care spending increasing from 4.4% in 1950 to 17.9% in 2011. Most experts believe that a gap of close to this magnitude over many future years would have catastrophic consequences for the federal government and the U.S. economy.⁴

In order to observe whether fluctuations in national health care expenditures are related to fluctuations in the GDP, annual data for each series are smoothed with a 5-year moving average (to increase reliability), and the GDP value for each year is increased by 2.4% (the average gap) to facilitate visual comparison of short-term movements in the two series. The correlation is not perfect, but over a period of 60 years, most sharp increases (and decreases) in the GDP have been accompanied by similar movements in health care expenditures. Note the long acceleration in both series in the 1960s, the slowdown around 1980, the subsequent acceleration in the late 1980s, and the recent sharp deceleration when both national health care expenditures and GDP

rates of growth fell by more than 2.0% annually in just a few years.

The one big exception to the correlation is the mid-1990s, when growth of real national health care expenditures per capita was below 3% per year even though real GDP per capita was accelerating. This was precisely the period during which managed care became widespread. Prior to the 1990s, most insured patients could choose freely among providers, physicians were paid on a fee-for-service basis, and their decisions were rarely questioned by insurers. Under managed care, insurance companies selectively contracted with hospitals and physicians, fees and prices were negotiated in advance, physician decisions were subject to outside review, patients faced financial penalties if they obtained care “out of plan,” and providers sometimes shared in the insurance risk. A backlash from patients and providers followed, accompanied by a large increase in health care spending.

The spread of managed care in the 1990s, however, seems to have had an effect on long-term trends in expenditures as well as on short-term changes. Between 1950 and 1995, real health care expenditures per capita grew at an average annual rate of 4.7%, while real GDP per capita grew at 2.1%. Between 1995 and 2011, the average rates were 3.1% for real health care expenditures per capita and 1.4% for real GDP per capita. Thus, the average gap fell from 2.6% in the pre-1995 period to 1.7% in the post-1995 period. Resumption of the 60-year gap of 2.4% per year until 2040 would result in health care’s absorbing 30% of the GDP, as compared with the current 18%. Continuation of a 1.7% gap until 2040



Average Rate of Growth of National Health Care Expenditures over 2 Years and over the Subsequent 20 Years.

would result in health care's absorbing 26% of the GDP, a level that would still pose problems for the economy and especially the federal budget.

Some observers place great emphasis on the particularly slow growth of national health care expenditures in 2010 and 2011. How useful is the experience of growth over a period of 2 years in predicting the growth rate over the next 20 years? The answer seems to be not at all. The scatterplot shows 2-year growth rates on the horizontal axis and the corresponding subsequent 20-year growth rates on the vertical axis. The period covered is 1950

to 1991 (the last year for which we have 20 subsequent years of observations). The correlation between the 2-year and 20-year rates is actually negative, -0.22 , but not statistically significant.

When speculating about future growth of health care spending, it is also important to note that some of the reasons for the slow growth in the past 2 years, such as the switch from brand-name drugs to generics and the reductions in hospital readmissions, are one-time gains, not alterations in such determinants of long-term growth as new medical technology and the aging of the population.

In conclusion, the rate of growth of national health care expenditures in the past appears to have been substantially related to the growth of the GDP. There has been some slowing of the growth of health care spending relative to the GDP, but it began not just a few years ago, but in the 1990s, for reasons that remain to be determined. One possibility is that the movement to managed care in the 1990s resulted in long-term slowing of health care spending, an effect temporarily obscured by the increase in spending during the backlash.

Disclosure forms provided by the author are available with the full text of this article at NEJM.org.

From the Departments of Economics and Health Research and Policy, Stanford University, Stanford, CA.

This article was published on May 22, 2013, at NEJM.org.

1. Reducing costs and improving the quality of health care. In: Economic Report of the President, Washington, DC: Government Printing Office, 2013.
2. Centers for Medicare & Medicaid Services. National health expenditures by type of service and source of funds, CY 1960-2011 (<http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html>).
3. Council of Economic Advisers. Economic report of the President. Appendix B, table B1. 2013 (http://www.whitehouse.gov/sites/default/files/docs/erp2013/ERP2013_Appendix_B.pdf).
4. Chernew ME, Baicker K, Hsu J. The specter of financial Armageddon — health care and federal debt in the United States. *N Engl J Med* 2010;362:1166-8.

DOI: 10.1056/NEJMp1305298

Copyright © 2013 Massachusetts Medical Society.