



# High and rising health care costs: Demystifying U.S. health care spending

By Sarah Goodell, M.A. and Paul B. Ginsburg, Ph.D., based on a research synthesis by Ginsburg

## SUMMARY OF KEY FINDINGS

- > Health insurance is becoming increasingly difficult for workers—and their employers—to afford. Premiums increased 114 percent between 1999 and 2007, while workers' earnings increased only 27 percent.
- > U.S. spending on health care—as a percentage of GDP—is more than six percentage points higher than the average for other developed countries.
- > Technology—not demographics or medical malpractice—is the key driver of health spending, accounting for an estimated half to two-thirds of spending growth.
- > Other important drivers of health care spending include health status (particularly obesity) and low productivity gains in the health care sector.

## Why is this issue important to policy-makers?

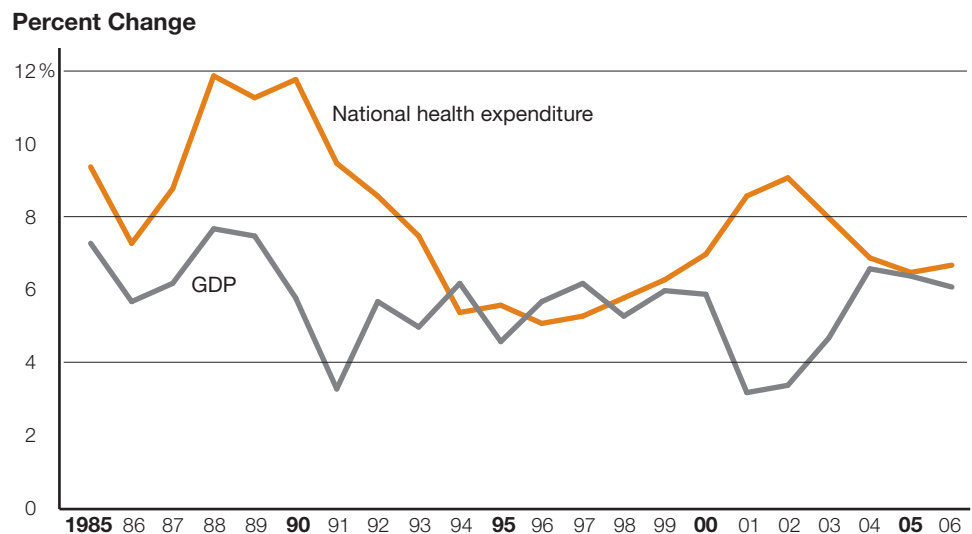
- In 2006, the United States spent \$2.1 trillion, or 16 percent of gross domestic product (GDP), on health care. This translates to \$7,026 per person annually (Reference 1).
- U.S. spending on health care is greater than that of any other developed country, yet unlike other countries, which provide near-universal coverage, 16 percent of Americans are uninsured (Reference 2).
- Without steps to restrain growth, increases in health care spending will eventually consume almost the entire GDP.

## What are the historical data on health spending?

**Between 1985 and 2006, health care spending increased by an average of 7.7 percent per year, while GDP increased 5.6 percent per year (Figure 1).**

The data on health spending are from the National Health Expenditure Accounts (NHEA) maintained by the Centers for Medicare and Medicaid Services (CMS) Office of the Actuary (Reference 3). The NHEA are considered the gold standard for U.S. spending data.

Figure 1. Annual Growth Rate of Health Spending and GDP, 1985–2006



Source: Centers for Medicare and Medicaid Services (Reference 3)

**Hospital care and physician and clinical services are by far the largest components of spending.** Hospital care accounted for 31 percent and physician and clinical services accounted for 21 percent of overall health care spending in 2006. Prescription drugs accounted for only 10 percent of overall spending, although that is 40 percent higher than its share in 1970 (Reference 4).

Prices, efficiency and insurance administration are the most important reasons U.S. spending is higher than spending in other countries.

#### HEALTH CARE SPENDING: KEY CONCEPTS

**Costs.** Costs can mean the cost of a unit of service, the price of that service or the cost or price of all services an individual or a nation uses annually. This brief focuses on spending, which combines unit costs and rates of use, both in the aggregate and by component, such as hospital care, physician services, prescription drugs and other services.

**Cost trends vs. premium trends.** Costs trends and health insurance premium trends are often mistakenly used interchangeably—the two are distinct but linked. Over time, trends in spending on health care services covered by insurance drive premium trends, but the premium trend can diverge from the cost trend during any given period.

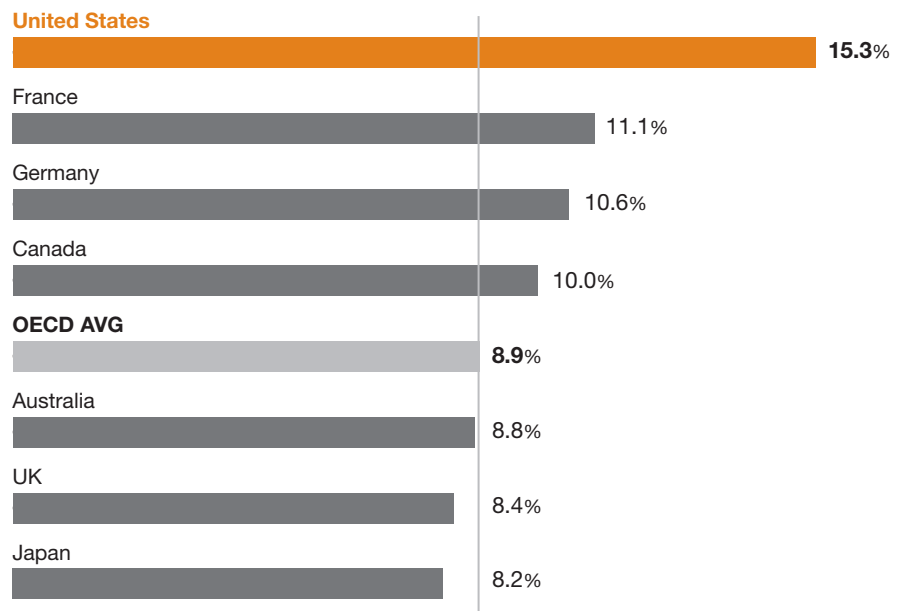
**Per capita health care spending increases each year.** Although the rate of spending growth may decrease or increase from one year to the next, total health care spending always increases annually.

**Level of spending vs. trends in spending over time.** A given factor may contribute to health spending being high at a moment in time but may not be a major driver of spending growth over time.

#### How does U.S. health care spending compare with other countries?

**U.S. spending on health care as a percent of GDP is more than six percentage points higher than the average for other developed countries (Figure 2).** The average health expenditures as a percent of GDP for other developed countries is just below 9 percent compared with more than 15 percent for the United States (Reference 5).

Figure 2. Health expenditures as a share of GDP, 2006



Source: Organization for Economic Co-operation and Development, 2008 (Reference 5)

Note: While the OECD data for the United States is based on NHEA data, adjustments are made to be comparable to data on other nations resulting in lower figures.

**Prices, efficiency and insurance administration are the most important reasons U.S. spending is higher than spending in other countries.** One study estimated that relative to OECD countries the U.S. pays 70 percent higher prices for drugs, has substantial excess capacity and low productivity in outpatient facilities, and spends six times more on insurance administration (Reference 6).

**Although U.S. spending on health care is higher overall, there is some disagreement on whether the rate of growth is higher as well.** Several researchers have concluded that the growth trends are similar (Reference 7). A more recent study casts doubt on that conclusion, finding that between 1985 and 2002 “excess” growth (growth not attributed to demographics or growth in income) in health care spending was 0.6 percent for OECD countries compared with 2.0 percent for the United States (Reference 8).

# Medical technology, not aging or medical liability, is driving U.S. health care spending growth.

## What is driving health care spending growth?

**Medical technology is the driving force behind the growth in U.S. health care spending.** Estimates of the contribution of medical technology to health care spending growth range from 38 percent to more than 65 percent (Reference 13). Technology drives spending both through the substitution of higher cost services for lower cost services and the expansion of available treatments (Reference 14). Because technology is often measured as a residual, that is, what remains after all other factors are measured, its contribution to spending growth can be overstated if other factors are not accurately measured, however.

**Obesity is a significant factor driving health spending, accounting for an estimated 12 percent of the growth in recent years (Reference 15).** Reducing obesity or improving overall health status can save money in the short and intermediate term, but some of the savings will be offset by increased longevity and the cost of diseases that are most prevalent during old age. Studies that do not take into account the increased longevity may exaggerate the contribution of health status to spending growth (Reference 16).

**The increase in the percentage of people with health insurance accounted for approximately 10 percent to 13 percent of the historical growth in spending (Reference 17).** With increases in the uninsured over the last decade, however, insurance coverage has not contributed to the recent growth in health spending and will not be a driver in the future unless policies change to increase the number of people with insurance.

**Demographics account for a very small percentage of the growth in spending (Reference 19).** Despite differences in methodologies, studies consistently conclude that aging has not been a major factor in driving health care spending and will not become one, despite aging baby boomers.

**Productivity gains in the health care sector have probably been lower than in other industries.** This may be a result in part from little price competition among health care providers because of extensive third-party payment and to payment policies that reward more units of service rather than efficient care for an episode of illness.

**Medical malpractice is not a major driver of spending trends (Reference 20).** Premiums for liability coverage and defensive medicine do contribute to health spending at any moment in time, but they are not a large factor nor are they a significant factor in the overall growth of health care spending.

## ARE HEALTH CARE COSTS TOO HIGH?

There are several concerns about the high and rising health care costs in the United States, including the affordability of insurance and stresses on government budgets from commitments to provide insurance. In addition, there is concern about a lack of value for the resources devoted to health care.

**Affordability:** Premiums increased 114 percent between 1999 and 2007 while workers' earnings increased only 27 percent (References 9 and 10). Health insurance is unaffordable to many workers and their employers. One study estimates that almost all of the increase in the uninsured is a result of health spending growing more rapidly than income (Reference 11). Governments also face the strain of health care spending growing more rapidly than their revenue base.

**Competitiveness in the Global Economy:** U.S. businesses argue that they cannot be competitive with their foreign counterparts because of the high cost of employee health benefits. Economists tend to dismiss this concern, arguing that employers pass on increases in premiums to their employees. One study disputes this theory by showing that during periods of rapid health spending growth, fully shifting premium increases to workers would require wages to decline even before adjusting for inflation—a rare event (Reference 12).

**Value:** Studies have estimated very high value—improved outcomes in relation to costs—for selected medical technologies, but these results are sensitive to the choice of technologies and the period studied. Many technologies that have high value for some patients are applied too broadly, yielding little benefit to many patients.

# Policy Implications

**Policy-makers have a number of options available to restrain health care spending growth, none of which are easy. With research consistently showing that medical technology is the largest cost driver, applying technology more selectively to patients needs to be an element of any long-term approach. To accomplish this, policy-makers could:**

- > **Increase funding for research on effectiveness.** This is the beginning of an approach that supports the appropriate application of medical technology to the patients likely to receive the highest benefit.
- > **Reform provider payment systems.** Distortions between payments and costs of services lead to undesirable provider incentives to emphasize the most profitable services. These unintended incentives tend to favor services incorporating new technologies.
- > **Increase use of consumer financial incentives and support.** To the degree that consumers bear some of the financial risk of medical spending, they are likely to be judicious concerning the use of technologies with low value to them as patients. For this to work as intended, however, patients must be provided information on treatment alternatives and their effectiveness, and on the quality of different providers of care, and must face incentives to favor more efficient providers. Use of this approach is limited by the need to maintain adequate financial protection for the costs of illness or injury.

**THE SYNTHESIS PROJECT** (Synthesis) is an initiative of the Robert Wood Johnson Foundation to produce relevant, concise, and thought-provoking briefs and reports on today's important health policy issues.

## PROJECT CONTACTS

David C. Colby, Ph.D., the Robert Wood Johnson Foundation  
Brian C. Quinn, Ph.D., the Robert Wood Johnson Foundation  
Sarah Goodell, M.A., Synthesis Project

## SYNTHESIS ADVISORY GROUP

Linda T. Bilheimer, Ph.D., National Center for Health Statistics  
Jon B. Christianson, Ph.D., University of Minnesota  
Paul B. Ginsburg, Ph.D., Center for Studying Health System Change  
Jack Hoadley, Ph.D., Georgetown University Health Policy Institute  
Haiden A. Huskamp, Ph.D., Harvard Medical School  
Julia A. James, Independent Consultant  
Judith D. Moore, National Health Policy Forum  
William J. Scanlon, Ph.D., Health Policy R&D  
Michael S. Sparer, Ph.D., Columbia University  
Joseph W. Thompson, M.D., M.P.H., Arkansas Center for Health Improvement  
Claudia H. Williams, Markle Foundation

## REFERENCES

- 1 Catlin A, Cowan C, Hartman M, Heffler S. "National Health Spending in 2006: A Year of Change for Prescription Drugs." *Health Affairs*, vol. 27, no. 1, January/February 2008.
- 2 DeNavas-Walt C, Proctor BD, Smith J, U.S. Census Bureau. *Income, Poverty, and Health Insurance Coverage in the United States: 2006*. Current Population Reports, P60-233. Washington, DC: U.S. Government Printing Office, 2007.
- 3 Centers for Medicare and Medicaid Services. "NHE Summary Including Share of GDP, CY 1960-2006." 2008 [Available at: [http://www.cms.hhs.gov/NationalHealthExpendData/02\\_NationalHealthAccountsHistorical.asp](http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp)].
- 4 Centers for Medicare and Medicaid Services. "National Health Expenditures by Type of Service and Source of Funds, CY 1960-2006." 2008 [Available at: [http://www.cms.hhs.gov/NationalHealthExpendData/02\\_NationalHealthAccountsHistorical.asp](http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp)].
- 5 Organization for Economic Co-operation and Development, "OECD Health Data 2008: Statistics and Indicators for 30 Countries." June 2008.
- 6 Angrisano C, Farrell D, Laboissiere M, Parker S. "Accounting for the High Cost of Health Care in the United States." McKinsey Global Institute, 2007 [Available at [http://www.mckinsey.com/mgi/reports/pdfs/healthcare/MGI\\_US\\_HC\\_fullreport.pdf](http://www.mckinsey.com/mgi/reports/pdfs/healthcare/MGI_US_HC_fullreport.pdf)]
- 7 Glied S. *Chronic Condition: Why Health Reform Fails*. Cambridge, MA: Harvard University Press, 1997.
- 8 White C. "Health Care Spending Growth: How Different Is the United States from the Rest of the OECD?" *Health Affairs*, vol. 26, no. 1, January/February 2007.
- 9 Kaiser Family Foundation and Health Research and Educational Trust. "Employer Health Benefits: 2007 Annual Survey." 2007 [Available at: <http://www.kff.org/insurance/7672/upload/76723.pdf>].

- 10 U.S. Department of Labor, Bureau of Labor Statistics. *Current Employment Statistics. Average Hourly Earnings, Not Seasonally Adjusted, 1999–2007* [Available at: <http://www.bls.gov/ces/#tables>].
- 11 Kronick R, Gilmer T. "Explaining the Decline in Health Insurance Coverage: 1979–1995." *Health Affairs*, vol. 18, no. 2, March/April 1999.
- 12 Nichols LM, Axeen S. *Employer Health Costs in a Global Economy: A Competitive Disadvantage for U.S. Firms*. Washington, DC: New America Foundation, May 2008.
- 13 Newhouse JP. "Medical Care Costs: How Much Welfare Loss?" *Journal of Economic Perspectives*, vol. 6, no. 3, Summer 1992.; Peden EA, Freeland MS. "A Historical Analysis of Medical Spending Growth, 1960–1993." *Health Affairs*, vol. 14, no. 2, Summer 1995.; Cutler DM. "Technology, Health Costs, and the NIH." Paper prepared for the National Institute of Health Economics Roundtable on Biomedical Research, September 1995.
- 14 Cutler DM, McClellan M. "Is Technological Change in Medicine Worth it?" *Health Affairs*, vol. 20, no. 5, September/October 2001.
- 15 Thorpe KE, Florence CS, Howard DH, Joski P. "Trends: The Impact of Obesity on Rising Medical Spending." *Health Affairs*, Web Exclusive, October 20, 2004.; Congressional Budget Office. *Technological Change and the Growth of Health Care Spending* (No. 2764). Washington, DC: Congressional Budget Office, January 2008.
- 16 Van Baal PHM, Polder JJ, de Wit GA, Hoogenveen RT, Feenstra TL, Boshuizen HC, Engelfriet PM, Brouwer WBF. "Lifetime Medical Costs of Obesity: Prevention No Cure for Increasing Health Expenditure." *PLoS Medicine*, vol. 5, no. 2, February 2008.
- 17 Congressional Budget Office. *Technological Change and the Growth of Health Care Spending* (No. 2764). Washington, DC: Congressional Budget Office, January 2008.
- 18 Ibid.
- 19 Strunk BC, Ginsburg PB. "Aging Plays Limited Role in Health Care Cost Trends." Center for Studying Health System Change Data Bulletin No. 23, 2002.; Seshamani M, Gray A. "Time to Death and Health Expenditure: An Improved Model for the Impact of Demographic Change on Health Care Costs." *Age and Ageing*, vol. 33, no. 6, November 2004.; Cutler DM, Sheiner L. "Demographics and Medical Care Spending: Standard and Nonstandard Effects." National Bureau of Economics Research Working Paper No. 6886, 1998.
- 20 Sloan FA, and Chepke L. "From Medical Malpractice to Quality Assurance." *Issues in Science and Technology*, Spring 2008.



Robert Wood Johnson Foundation

## THE SYNTHESIS PROJECT

NEW INSIGHTS FROM RESEARCH RESULTS

POLICY BRIEF NO. 16  
OCTOBER 2008

The Synthesis Project  
The Robert Wood Johnson Foundation  
Route 1 & College Road East  
P.O. Box 2316  
Princeton, NJ 08543-2316  
E-Mail: [synthesisproject@rwjf.org](mailto:synthesisproject@rwjf.org)  
Phone: 888-719-1909

[www.policysynthesis.org](http://www.policysynthesis.org)