

Health Care Expenditures Reexamined

Concern about health care expenditures is not a new phenomenon. Seventy-five years ago, President Herbert Hoover appointed a committee to investigate the cost of medical care under the chairmanship of Ray Lyman Wilbur, MD, president of Stanford University (1). Thirty-eight years ago, John Gardner, Secretary of Health, Education, and Welfare, convened a national conference on medical care costs (2). Since then, not a year has passed without professional and lay periodicals addressing this subject. Most recently, *Annals* has published 4 articles by Thomas Bodenheimer on health care costs, the last of which, coauthored by Alicia Fernandez, appears in this issue (3–6). These articles provide valuable background material and address several key questions about expenditures from many different perspectives. Possible approaches to cost containment are discussed, with special emphasis on the potential role of physicians and with the caveat that this is “an overview of a complex topic, written by a non-economist for noneconomists” (3).

This editorial, written by an economist for physicians, emphasizes some critical distinctions and offers a somewhat different set of questions and answers. It differentiates sharply between levels of expenditures and their rates of growth, addresses the question of why either should be of concern for public policy, and discusses strategies for containing expenditures.

It is important to distinguish between high levels of expenditures and high rates of growth because the symptoms, diagnoses, and appropriate interventions all differ markedly. The level of health expenditures in the United States is very high relative to other countries: In 2001, the United States spent \$4887 per person, almost 50% more than the next highest-spending country, Switzerland. The median level of spending for the 30 countries belonging to the Organisation for Economic Cooperation and Development (OECD) was only \$2161 (7). By contrast, the rate of growth of expenditures in the United States was very similar to that in other countries from 1991 through 2001. The inflation-adjusted rate of growth in the United States, 3.0% per year, was exactly the same as the median of the OECD countries (7). In some periods U.S. expenditures grew faster than those in other countries, but sometimes the reverse was true. The reasons why U.S. expenditures are high relative to other countries are different from the reasons why health expenditures grow rapidly in all countries.

With respect to levels of health care spending, an analysis of differences between the United States and Canada concluded that the principal explanations for higher expenditures for physician services in the United States were greater administrative costs, higher physician incomes, more amenities, and low-capacity utilization of physicians and equipment for specialized diagnostic and therapeutic

procedures (8). More speculatively, U.S. care may be more intensive or, broadly defined, of higher quality: In the United States, specialists provide a higher proportion of visits for evaluation and management, and procedures are available without much queuing. For hospital costs, the principal explanations for the differences between the United States and Canada in real costs per adjusted admission are higher administrative costs, more amenities, and low-capacity utilization of specialized equipment and personnel in the United States (9).

In contrast, the rate of growth of expenditures over time in the United States and in other countries is driven primarily by new technology and new applications of old technology (4). When Medicare expenditures for physician services jumped 15% between 2003 and 2004, the Bush Administration cited longer and more intensive office visits, more laboratory tests, more frequent and complex imaging procedures, and greater use of in-office prescription drugs (10). Dr. J. James Rohack, chairman of the Board of Trustees of the American Medical Association, attributes some of the increase to new drugs and technology approved for coverage by Medicare and to government-encouraged screening for cancer and diabetes (10). Two other factors that affect expenditure growth over long periods are a country's rate of growth of gross domestic product and changes in the age structure of the population. All things being equal, health care expenditures grow more quickly the more rapidly the gross domestic product grows and the faster the population ages. Most of the time, however, changes in technology dominate changes in health care expenditures in all high-income countries, which is why percentage rates of growth tend to be similar.

What determines the pace and direction of technologic change in medicine, the main driver of rising expenditures? The advance of science is part of the answer, but the financial incentives and constraints facing drug companies, physicians, hospital administrators, and others are also very important. Most countries feel the impact of new technology, but many try to limit the diffusion of expensive new drugs and equipment by formularies and controls on capital spending. They also force physicians and hospitals to work within fixed budgets. Large buyers, such as the government or insurance funds, use their buying power to hold down drug prices and physicians' incomes. In the United States, where such cost-containment measures are absent or limited in scope, insured patients tend to demand drugs, tests, and procedures regardless of cost.

Other industries also have technologic change, but most face more imposing constraints: Technologic change must exceed a satisfactory benefit–cost threshold or it will not be undertaken. Consider, for example, development of a more fuel-efficient automobile engine. Potential buyers can and will compare the savings in fuel against the higher

cost of the engine. Knowing that buyers will make this comparison, automobile manufacturers make the calculation first and do not develop innovations that are not expected to be cost-effective. Moreover, research and development in most industries focus not only on better products but on innovations that lower production costs. Medical research and development focus primarily on better products that find a ready market regardless of cost.

Although technologic change in medicine usually results in greater expenditures, it also frequently brings benefits, such as extending life or improving the quality of life. Why should public policy be concerned with the level or rate of growth? Much is often made about the fact that the United States spends over 15% of the gross domestic product on health care while other high-income countries spend only 8% to 10%. But every country spends 100% of its gross domestic product on something; if other countries spend less on health care, they must spend more on cars or clothes or other goods and services. Is that bad for them and good for the United States? Not necessarily. It all depends on the value obtained by the spending. The main reason we should care about high health expenditures is because extra spending in the United States may not provide as much value in improved health or other sources of patient satisfaction as if those funds were used for education, housing, scientific research, environmental protection, or other private or public consumption and investment. Many investigators believe that even though the total value of health care is large relative to expenditures, a significant portion of spending is for health services of limited or zero value (11). This can occur for several reasons. Physicians and hospital administrators don't know what the benefits are because the information may not exist or may not have been adequately communicated. Fear of malpractice suits may induce interventions of limited value (12). Probably most important, financial incentives may be misaligned. Fully insured patients will want any care that might do them some good, regardless of cost. Physicians may feel obliged to provide that level of care. Not infrequently, the reimbursement system will be out of whack, with low-value interventions more richly rewarded than those of higher value.

Some writers claim that health care spending is important because high expenditures make U.S. companies less competitive in the global economy. That's incorrect. Health expenditures have no more relationship to competitiveness than do expenditures for hotels or haircuts. Employer contributions to health insurance are part of a total compensation package that includes basic wage rates, overtime premiums, and a wide variety of fringe benefits. If total compensation is high relative to productivity, the firm will not be competitive—that is obvious. But the form of compensation, such as wages, health insurance, or other benefits, is irrelevant. Food is much more expensive in Japan than in the United States, but no one claims that the high price of food has made Japan uncompetitive in the

global economy. The confusion stems in large part from the belief that employer-based insurance is paid out of corporate profits rather than being passed on to workers in lower wages. The facts suggest just the opposite. Over the past 40 years, health insurance premiums have skyrocketed, but inflation-adjusted corporate profits per worker have doubled. On the other hand, inflation-adjusted wages of production and nonsupervisory workers are lower now than they were 40 years ago (13).

There is no good reason why a country should set an arbitrary limit on the level or rate of growth of health care expenditures. That is not a sensible social goal any more than a limit on spending for education, food, housing, or any other good or service. What is sensible is to strive for a system of health care finance and delivery that results in incremental value commensurate with that provided by other sectors of the economy. That goal is reached when the last 1% of health care spending provides as much benefit as the same amount spent in some other way, such as enrolling an additional 2 million children in Head Start or increasing the number of police officers by 50%. Better information about the benefits and costs of medical interventions would help to achieve that goal, especially when combined with a reimbursement system that motivates physicians to consider benefits and costs when making decisions.

What public policies might bring about a better balance between incremental health care expenditures and benefits? To affect the *growth* of health expenditures—more important than levels in the long run—the focus must be on modifying the pace and direction of technologic change. The United States needs a large, independent organization to assess the benefits and costs of technologies and to make that information readily accessible to physicians and other decision makers (14). Several European countries have created such organizations; a highly successful model is the National Institute for Health and Clinical Excellence (NICE) in England (15). Better information alone, however, will not usher in an era of cost-effective technologic change. It must be combined with a payment system that rewards physicians and hospital administrators for using the information to make appropriate decisions about drugs, devices, and equipment. These decisions, in turn, will serve as signals to the suppliers of new technologies to keep potential benefits and costs in balance as they proceed with their research and development programs.

To affect the *level* of expenditures, the focus must be on physicians, whose decisions about drugs, tests, and hospitalization determine the bulk of health care costs at any given time. Bodenheimer reviews many recommendations about how better decision making by physicians could contribute to cost containment (6). Most of these recommendations are not new; that they have not yet been widely implemented suggests that the problem is systemic rather than attributable to individual negligence or indifference. One systemic problem is the scale of practice. Most physi-

cians are in practices that are too small to take full advantage of drug formularies, electronic patient records, more intensive use of physician extenders, and other innovations that contribute to effective and efficient care. A second systemic problem is the method of reimbursement. Given the ubiquity of third-party payment and the absence of direct government controls, responsibility for weighing costs and benefits falls to physicians. But the most widely used method of reimbursement, fee-for-service, does not provide the right incentives. Probably only comprehensive reform of health care finance—the way the funds are raised and the way they are paid out—can bring about the necessary organizational changes that will give physicians the information, infrastructure, and incentive to deliver cost-effective care to the entire population (16).

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Ann Intern Med. 2005;143:76-78.

References

1. **Report of the Committee on Cost of Medical Care.** Washington, DC: U.S. Government Printing Office; 1931.
2. **U.S. Department of Health, Education and Welfare.** Report of the National Conference on Medical Care Costs. Washington, DC: U.S. Government Printing Office; 1967.
3. **Bodenheimer T.** High and rising health care costs. Part 1: seeking an explanation. *Ann Intern Med.* 2005;142:847-54. [PMID: 15897535]
4. **Bodenheimer T.** High and rising health care costs. Part 2: technologic innovation. *Ann Intern Med.* 2005;142:932-7.
5. **Bodenheimer T.** High and rising health care costs. Part 3: the role of health care providers. *Ann Intern Med.* 2005;142:996-1002.
6. **Bodenheimer T, Fernandez A.** High and rising health care costs. Part 4: can costs be controlled while preserving quality? *Ann Intern Med.* 2005;143:26-31.
7. **Reinhardt UE, Hussey PS, Anderson GF.** U.S. health care spending in an international context. *Health Aff (Millwood).* 2004;23:10-25. [PMID: 15160799]
8. **Fuchs VR, Hahn JS.** How does Canada do it? A comparison of expenditures for physicians' services in the United States and Canada. *N Engl J Med.* 1990;323:884-90. [PMID: 2118594]
9. **Redelmeier DA, Fuchs VR.** Hospital expenditures in the United States and Canada. *N Engl J Med.* 1993;328:772-8. [PMID: 8437598]
10. **Pear R.** Medicare says '06 premiums will rise \$11. *The New York Times.* 1 April 2005:A12.
11. **Fuchs VR.** More variation in use of care, more flat-of-the-curve medicine. *Health Affairs Web Exclusive.* 2004;10.1377:104-7.
12. **Kessler DP, McClellan MB.** How liability law affects medical productivity. *J Health Econ.* 2002;21:931-55. [PMID: 12475119]
13. **Council of Economic Advisors.** Economic Report of the President. Tables B-47 and B-90. Washington, DC: U.S. Government Printing Office; 2005. Available at www.gpoaccess.gov/eop/.
14. **Fuchs VR, Garber AM.** Health and medical care. In: Aaron HJ, Lindsay JM, Nivola PS, eds. *Agenda for the Nation.* Washington, DC: The Brookings Institution Pr; 2003:145-81.
15. **Devlin N, Parkin D.** Does NICE have a cost-effectiveness threshold and what other factors influence its decisions? A binary choice analysis. *Health Econ.* 2004;13:437-52. [PMID: 15127424]
16. **Emanuel EJ, Fuchs VR.** Health care vouchers—a proposal for universal coverage. *N Engl J Med.* 2005;352:1255-60. [PMID: 15788504]

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