Journal of the American College of Cardiology
© 2012 by the American College of Cardiology Foundation
Published by Elsevier Inc.

Vol. 59, No. 18, 2012
ISSN 0735-1097/$36.00
doi:10.1016/j.jacc.2012.03.018

FROM THE ACC

President's Page: Working Toward the Triple Aim in Cardiovascular Health Care

William A. Zoghbi, MD, FACC
ACC President

Several years ago Donald Berwick, MD, and colleagues at the Institute for Healthcare Improvement articulated a vision for 21st-century health care. Their so-called "triple aim" focused on improving the experience of care, improving the health of populations, and reducing per capita costs of health care (1).

I think we all go into medicine with goals similar to the first 2 aims, but as physicians we give little thought to the third. We do not teach medical students about our larger health care systems or health policy, and training demands squeeze out the time to explore these issues unless an individual is particularly motivated. But because I believe we have an ethical responsibility to both our patients and our profession, and because cost is so intertwined with health and the experience of care, I am going to depart from usual practice in this President's Page and provide some background on the cost of health care. I hope this context will help engender better appreciation for some of the ways the American College of Cardiology (ACC) is seeking to address certain aspects of the current crisis and contribute reasonable solutions.

Medicine versus health care. The U.S. medical system has many strengths. Not only are training programs excellent, but academic medical centers are among the best in the world, and the system is prompt in providing care, even when it is highly specialized. We are also continually improving technology, diagnosis, and treatment. Cardiology alone has made exemplary progress in this regard, reducing morbidity and mortality from cardiovascular disease by more than 60% since 1950 (2).

The best medical-scientific expertise does not necessarily correlate with the best health care, however. It has become common knowledge that America is behind many other developed countries in a number of areas, including infant mortality rates and longevity, and that Americans often have less access to health resources (3–6). Yet health care in the United States costs more than it does in any other industrialized nation. In fact, while health care costs have risen around the world over the past 4 decades, the United States has been outspending other developed countries the whole time, and health care expenditure as a percent of the gross domestic product (GDP) has been consistently higher (3–7).

Factors in rising costs. Could it be that America is simply a wealthier country and so we simply choose to spend more on health care? Recent studies using 2008 data from the Organisation for Economic Co-operation and Development (OECD) indicate that there is, in fact, a strong relationship between a country's wealth and the amount it spends on health care (3–7). This makes sense, in that GDP per capita is a rough estimate of ability to pay, but it accounts for only some of the difference in health care expenditure. Even after adjusting for differences in GDP per capita, the United States still spent about 40% more than would be predicted (7).

If our health outcomes are not better, and we do not get better quality from our health system than other nations, then why are we spending so much? According to Princeton economist Uwe Reinhardt, there are 4 main factors contributing to "excess spending" in the United States (7):

Although the ACC is not going to come up with solutions to the health care cost problem all on its own, we can—and must—contribute to the policy debate with our accumulated experience, our best medical judgment, rigorous evidence, and a commitment to the integrity of our profession and of patient care.

JACC Vol. 59, No. 18, 2012
May 1, 2012:1655–7

1. we pay higher prices for the same goods and services;
2. we have greater administrative overhead;
3. we favor higher-cost, higher-tech procedures; and
4. we tend to practice defensive medicine.

The first 2 factors are structural, intrinsic to the ad hoc system of payers and price-setting that has evolved in the United States. A recent survey has shown that, of 23 different medical services and products ranging from atorvastatin to coronary bypass, 22 were significantly cheaper in other developed countries than in the United States (8,9). An angiogram costs about $35 in Canada, $123 in Spain, $320 in India, and $800 in the United States, while coronary artery bypass costs an average of $10,000 to $20,000 in various European countries, but $68,000 in the United States.

The domestic side of the story is equally astonishing. Prices within the United States vary by as much as 10-fold even among different hospitals in the same geographic region. This extraordinary range is due to pervasive price discrimination that reflects different degrees of market power among private insurers (10). This in turn contributes to the second major factor in the high cost of our health care—higher administrative costs than other countries with simpler health insurance systems. Just figuring out what to bill to whom, let alone negotiating these different prices, and trying to negotiate the care maze takes a tremendous amount of resources. Data from a McKinsey Global Institute study (11) suggests that the amount of excess spending just on administration for private insurers alone would have amounted to $150 billion in 2008, more than enough to finance universal health insurance that year.

It can be argued that large administrative overhead is not actually a bad thing because it provides employment for non-medical professionals or those not directly involved in care. This is true, of course, but the problem is that someone has to pay for these employees—either private insurance, individual patients, or the government—which brings us right back to the fundamentals of the health care debate. Even more important, such thinking fails to account for the incalculable cost of time, energy, resources, and frustration to patients and the care team who must navigate through a byzantine system to get precertification, reimbursement, appeal denials of care, and so forth.

Last but not least, cost pressures and the attempt to shoehorn medicine into an unsuitable factory model of production have placed great strain on the doctor–patient relationship, an essential component of good care. Most conspicuously, lack of time and less reliance on clinical judgment combined with (consciously or subconsciously) defensive medicine have led to a greater reliance on testing and state-of-the-art technology. While some of the newer diagnostic and therapeutic advances have certainly improved objectivity, accuracy, and outcome, some have had a similar effect but at a significantly higher cost—and some would not be performed nearly as frequently if our system rewarded physicians for spending time with patients, taking a careful history, and building the trust that helps patients make better medical decisions and discourages frivolous lawsuits. Duplicative testing and fragmented care are further byproducts of such a system.

What can we do? All these factors add to the cost of health care, but they also point to potential solutions.

The ACC is working on the following fronts to help cardiology achieve the triple aim:

1. Make the most of quality data and registries: The College has led the way in developing evidence-based guidelines, performance measures, and appropriate use criteria (AUC), and in putting these tools directly into the hands of cardiovascular professionals at the point of care. For example, the registries under the National Cardiovascular Data Registry (NCDR®) umbrella are useful tools for identifying gaps in care and improving practice standards. The use of NCDR data has already identified criteria to help guide the application of percutaneous coronary interventions (PCIs), implantable cardioverter-defibrillators (ICDs), coronary angiography, and cardiac catheterization. Pilot data on stress nuclear imaging, acquired in collaboration with United Health Care, prompted the Imaging in FOCUS initiative, which decreased inappropriate testing from 11% to 7% in its initial phase. The College is also using NCDR data to track and monitor cardiovascular-related hospital readmissions to help the ACC's Hospital to Home Initiative (H2H) shape more effective strategies for smooth recovery. Similarly, NCDR data played a major role in identifying variations in door-to-balloon (D2B) times. This resulted in the highly successful D2B Alliance and nationwide improvement in meeting the recommended D2B time of 90 min or less (12).

2. Test different models of payment reform: The College firmly believes that to reduce U.S. health care spending and maintain good quality care will require the alignment of payment incentives with improved, data-driven outcomes. Heath care professionals, payers, hospitals, and industry need to work collaboratively and align incentives for improved health and outcomes to achieve more sustainable health care systems that ultimately cover all individuals. Patients need to be engaged and accountable partners in this endeavor. Partnerships around health information technology are also critical in order to effec-

tively coordinate care, reduce administrative costs, eliminate duplicative and unnecessary testing and procedures, and better enable patient involvement and understanding of their disease and treatment options. The ACC is developing several progressive payment models for cardiovascular care which address documented clinical quality, resource use, and cost variation and which could be broadened to the larger health care arena if successful.

For example, the ACC's SMARTCare projects in Wisconsin and Florida would bundle payments for a variety of providers involved in the treatment of stable ischemic heart disease. Bundling could cover an entire episode of care or be broken into smaller bundles that reflect patient preferences for care. This model could help eliminate unnecessary procedures, reduce administrative burdens related to pre-authorization of individual services, and prompt health care teams to better coordinate patient care. It could also facilitate adherence to guidelines and AUC and encourage registry participation. The proof is in the data, however, and we will be tracking the response to bundling for the next few years before drawing robust conclusions.

Another option is population health management, or "comprehensive care" payment models for patients who receive primary care from specialists such as cardiologists. While recent Accountable Care Organization (ACO) regulations have focused on primary care patients, some patients with a significant illness, such as congestive heart failure, receive comprehensive care from a cardiologist. We can test the feasibility of the medical home model and the ACO model for this type of medically complex patient for application in specialty practices.

3. Make the right information more accessible to both patients and providers. Given the practice constraints most physicians labor under, taking the time to engage patients in their own care and help them make lifestyle changes can be challenging. The ACC's investment in CardioSmart signals the importance we attach to patient education, and our revision of the website this year should make engaging patients that much easier.

The ACC is equally committed to meeting the educational and professional needs of the entire cardiac care team. We want to make it as convenient as possible for cardiac care providers to stay up-to-date on the latest science and education and to be prepared to work together to treat a growing number of patients with cardiovascular disease. Our new generation of physicians and allied of the principles of cost-effective, quality care, and outcomes. This comprehensive approach to health care needs to be included and emphasized in the curriculum of various training programs.

There are no straightforward answers to the problems that beset our system; any solution is going to be temporarily painful to some constituency. One advantage of our byzantine and balkanized system, however, is that it affords us an opportunity to experiment. Although the ACC is not going to come up with solutions to the health care cost problem all on its own, we can—and must—contribute to the policy debate with our accumulated experience, our best medical judgment, rigorous evidence, and a commitment to the integrity of our profession and of patient care.

Address correspondence to:
William A. Zoghbi, MD, FACC
American College of Cardiology
2400 N Street NW
Washington, DC 20037
E-mail: president@acc.org

NOTES AND SUGGESTED READING

1. Berwick DM, Nolan JW, Whittington J. The triple aim: care, health, and cost. Health Aff (Millwood) 2008;27:759–69.
2. Centers for Disease Control, Achievements in Public Health, 1900–1999: Decline in Deaths from Heart Disease and Stroke—United States, 1900–1999. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4830a1.htm. Accessed March 26, 2012.
3. Anderson GF, Frogner BK, Johns RA, Reinhardt UE. Health Care Spending and Use of Information Technology in OECD Countries. Health Aff (Millwood) 2006;25:819–31.
4. Anderson GF, Squires DA. Measuring the U.S. Health Care System: A Cross-National Comparison, The Commonwealth Fund, June 2010. Available at: http://www.commonwealthfund.org/Content/Publications/Issue-Briefs/2010/Jun/Measuring-the-US-Health-Care.aspx. Accessed March 26, 2012.
5. Davis K, Schoen C, Stremikis K. Mirror, Mirror on the Wall: How the Performance of the U.S. Health Care System Compares Internationally, 2010 Update, The Commonwealth Fund, June 2010. Available at: http://www.commonwealthfund.org/Content/Publications/Fund-Reports/2010/Jun/Mirror-Mirror-Update.aspx. Accessed March 26, 2012.
6. Anderson GF, Markovich P. Multinational Comparisons of Health Systems Data, 2009, The Commonwealth Fund, November 2009. Available at: http://www.commonwealthfund.org/Content/Publications/Chartbooks/2009/Multinational-Comparisons-of-Health-Systems-Data-2009.aspx. Accessed March 26, 2012.
7. Reinhardt UE. Why Does U.S. Health Care Cost So Much? Available at: http://economix.blogs.nytimes.com/2008/11/14/why-does-us-health-care-cost-so-much-part-i/. Accessed March 26, 2012.
8. Klein E. Why an MRI costs $1,080 in America and $280 in France. Available at: http://www.washingtonpost.com/blogs/ezra-klein/post/why-an-mri-costs-1080-in-america-and-280-in-france/2011/08/25/gIQAVHztoR_blog.html. Accessed March 26, 2012.
9. Anderson GF, Reinhardt UE, Hussey PS, Petrosyan V. It's the prices, stupid: why the United States is so different from other countries. Health Aff (Millwood) 2003;22:89–105.
10. Reinhardt UE. Equalizing Payments for Medical Care. Available at: http://economix.blogs.nytimes.com/2011/11/11/equalizing-payments-for-medical-care/. Accessed March 26, 2012.
11. Reinhardt UE. Why does U.S. Healthcare Cost so Much? (Part II: Indefensible Administrative Costs). Available at: http://economix.blogs.nytimes.com/2008/11/21/why-does-us-health-care-cost-so-much-part-ii-indefensible-administrative-costs/. Accessed March 26, 2012.
12. Krumholz HM, Herrin J, Miller LE, et al. Improvements in door-to-balloon time in the United States, 2005 to 2010. Circulation 2011;124:1038–45.